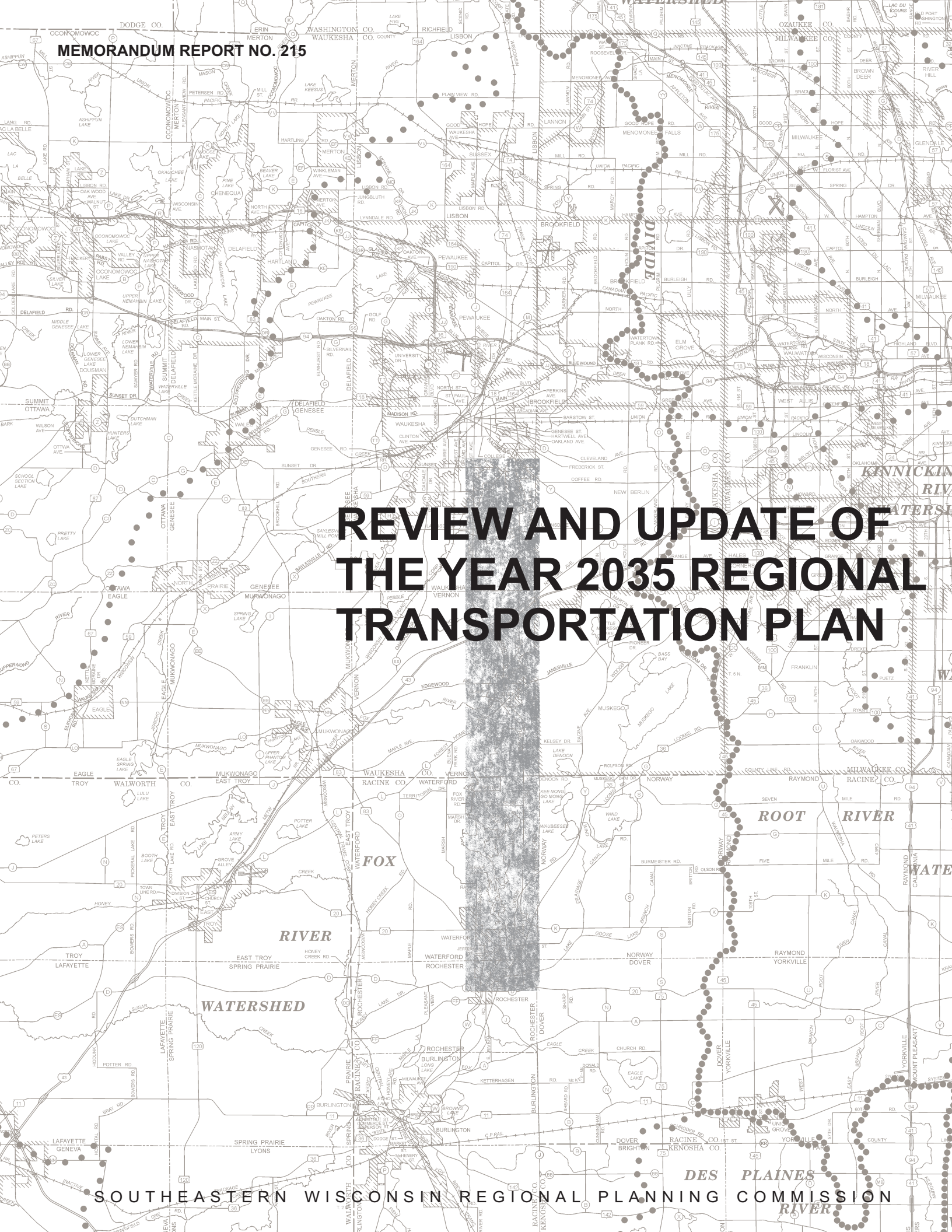
MEMORANDUM REPORT NO. 215

REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN



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RESOLUTION NO. 2014-10

RESOLUTION OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION ENDORSING THE URBAN TRANSPORTATION PLANNING PROCESS IN SOUTHEASTERN WISCONSIN, REAFFIRMING AND AMENDING THE ADOPTED YEAR 2035 REGIONAL TRANSPORTATION PLAN, AND REAFFIRMING THE 2013-2016 TRANSPORTATION IMPROVEMENT PROGRAM FOR SOUTHEASTERN WISCONSIN AS AMENDED TO DATE

WHEREAS, the Southeastern Wisconsin Regional Planning Commission is charged with the responsibility of carrying out a long-range comprehensive planning program for the seven counties in the Southeastern Wisconsin Region and, as a part of that program, is presently engaged in a continuing, comprehensive, and cooperative areawide land use-transportation planning process pursuant to the provisions of the Federal Aid Highway Act of 1962 and the Federal Urban Mass Transportation Act of 1964, as amended; and

WHEREAS, the Southeastern Wisconsin Regional Planning Commission has been designated by the Governor of the State of Wisconsin as the official cooperative, comprehensive, continuing areawide transportation planning agency (Metropolitan Planning Organization, or MPO) under the rules and regulations promulgated by the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration, with respect to the Kenosha, Milwaukee, Racine, West Bend, and Wisconsin portion of the Round Lake Beach urbanized areas, such rules and regulations being found in the Federal Register, dated Wednesday, February 14, 2007; and

WHEREAS, the aforesaid rules and regulations promulgated by the U.S. Department of Transportation Federal Highway Administration and Federal Transit Administration, require that the MPO shall develop and update a regional transportation plan and transportation improvement program (TIP) in cooperation with State and local officials, transit operators, and other affected agencies and individuals; and

WHEREAS, by Resolution 2006-11, the Southeastern Wisconsin Regional Planning Commission adopted the design year 2035 regional transportation plan documented in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035* and by Resolution 2007-12 amended the year 2035 regional transportation plan; and

WHEREAS, by Resolution 2010-09, the Southeastern Wisconsin Regional Planning Commission reaffirmed and amended the adopted year 2035 regional transportation plan as set forth in SEWRPC Memorandum Report No. 197, *Review, Update, and Reaffirmation of the Year 2035 Regional Transportation Plan;* and

WHEREAS, the Southeastern Wisconsin Regional Planning Commission by Resolution 2011-16, Resolution 2012-06, Resolution 2012-14, and Resolution 2012-15 amended the adopted year 2035 regional transportation plan, and

WHEREAS, by Resolution 2012-12 the Southeastern Wisconsin Regional Planning Commission prepared in cooperation with concerned State and local official officials, transit operators and other interested parties and adopted, *A Transportation Improvement Program for Southeastern Wisconsin: 2013-2016*, identifying transportation improvements recommended for advancement during the period 2013-2016, providing for a staging of improvements over the period 2013-2016 consistent with the regional transportation system plan, including estimates of costs and revenues for the period 2013-2016, and relating the improvements recommended in the program to the adopted transportation plan for the Region, and amended this transportation improvement program to date as needed; and

WHEREAS, the Advisory Committee on Regional Transportation System Planning approved the reaffirmation and amendment of the year 2035 regional transportation plan at its meeting held on April 23, 2014; and

WHEREAS, the transportation improvement program and the year 2035 regional transportation system plan have been determined to conform with the 2006 24-hour fine particulate standard and the existing State of Wisconsin Air Quality Redesignation and Maintenance plan for the 2006 24-hour fine particulate standard, and the 2008 eight-hour ozone standard and the baseline year 2011 emissions test as required by the Federal Clean Air Act Amendments of 1990.

NOW, THEREFORE, BE IT RESOLVED:

FIRST: That in accordance with 23 CFR 450.334(a), the Southeastern Wisconsin Regional Planning Commission hereby certifies that the regional transportation planning process is addressing the issues of the metropolitan planning area, and is being conducted in accordance with all applicable Federal laws, regulations, and requirements, including:

RESOLUTION NO. 2014-10

1. 23 U.S.C. 134 and 49 U.S.C. 5303, and this subpart;
2. In non-attainment and maintenance areas, Sections 174 and 176 (c) and (d) of the Clean Air Act as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93;
3. Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21;
4. 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;
5. Sections 1101(b) of the Moving Ahead for Progress in the 21st Century Act (MAP-21) (P.L. 112-141) and 49 CFR Part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;
6. 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;
7. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) and 49 CFR Parts 27, 37, and 38;
8. The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;
9. Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and
10. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

SECOND: That the design year 2035 regional transportation plan, being a part of the master plan for the physical development of the Region and set forth in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*, published in June 2006, and amended on June 20, 2007, hereby is reaffirmed and amended as set forth in SEWRPC Memorandum Report No. 215, *Review and Update of the Year 2035 Regional Transportation Plan.*

THIRD: That the document entitled, *A Transportation Improvement Program for Southeastern Wisconsin: 2013-2016*, as amended to date be, and hereby is, endorsed as the transportation improvement program for the seven-county Southeastern Wisconsin Region.

FOURTH: That, in order to obviate the need to reconsider the transportation improvement program in the event that the air quality conformity findings for the new regional transportation system plan and the TIP lapse, a revised program of projects would then be comprised of the projects identified in Appendix A of the aforereferenced document identified as "Exempt," as well as those projects that have either: 1) completed the NEPA process at such time as the air quality conformity finding lapses, or 2) are identified in the Code of Federal Regulations (Table 3, 40 CFR 51.462).

The foregoing resolution, upon motion duly made and seconded, was regularly adopted at the meeting of the Southeastern Wisconsin Regional Planning Commission held on the 18th day of June 2014, the vote being: Ayes 13, Nays 0.

David L. Stroik, Chairman

ATTEST:

Kenneth R. Yunker, Deputy Secretary

MEMORANDUM REPORT
NUMBER 215

REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

Prepared by the

Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, Wisconsin 53187-1607
www.sewrpc.org

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June 2014

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INTRODUCTION

INTRODUCTION

The year 2035 regional transportation system plan was adopted by the Regional Planning Commission in June 2006, and was the result of a major review and reevaluation of the year 2020 regional transportation plan (see SEWRPC Planning Report Number 49, "*A Regional Transportation System Plan for Southeastern Wisconsin: 2035*"). This major review and reevaluation was timed to utilize the data which becomes available at the beginning of each decade, including at that time the year 2000 U.S. Census of population, year 2000 regional aerial photography, year 2000 regional land use inventory, and year 2000-2002 regional travel surveys. The major reevaluation included preparation of new and extended (from the year 2020 to the year 2035) population and employment forecasts, and a new and extended regional land use plan. Major review and reevaluation of the regional transportation plan is typically conducted every 10 years as new population, employment, land use, and travel data is only available every 10 years.

Every four years, the Commission conducts an interim review and update of the regional transportation plan, in part to address Federal requirements. The last interim review and update was completed in 2010 (see SEWRPC Memorandum Report Number 197, "*Review, Update, and Reaffirmation of the Year 2035 Regional Transportation Plan*"). Even though VISION 2050—a major review and reevaluation of regional land use and transportation plans has been initiated and is well underway, there is a need to conduct an interim review and update of the regional transportation plan to be completed in 2014. This interim plan update and review will include an assessment of the implementation to date of the year 2035 regional transportation plan, a review of the year 2035 forecasts underlying the plan, and a monitoring of current transportation system performance. The review will also examine whether it remains reasonable for the recommendations in the year 2035 to be accomplished over the next 20 years, given the implementation of the plan to date and available and anticipated funding.

This interim review and update will be documented in the following chapters of this report:

- Chapter 2, "Year 2035 Regional Transportation Plan"
- Chapter 3, "Review of Year 2035 Plan Forecasts"
- Chapter 4, "Review of Transportation System Performance"
- Chapter 5, "Review of Implementation to Date of Year 2035 Regional Transportation Plan"
- Chapter 6, "Update of Year 2035 Regional Transportation Plan"

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Chapter 2

YEAR 2035 REGIONAL TRANSPORTATION PLAN

INTRODUCTION

The year 2035 regional transportation plan for the seven-county Southeastern Wisconsin Region was completed and adopted by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) in June, 2006. The year 2035 regional transportation plan was developed under the guidance of the Advisory Committee on Regional Transportation System Planning, which unanimously approved the plan in May, 2006. The Advisory Committee included representatives of the seven counties and 147 municipalities of the Region, and representatives from the Wisconsin Departments of Transportation and Natural Resources. In addition, representatives from the U.S. Department of Transportation and the U.S. Environmental Protection Agency served on the Committee as non-voting members. The Advisory Committee was responsible for proposing to the Commission, after careful study and evaluation, a recommended regional transportation system plan. The Advisory Committee structure was intended to promote intergovernmental and interagency coordination, and to serve as direct liaisons between the Commission planning effort and the local and State governments that will be responsible for implementing the recommended plans. Since its adoption in 2006, the year 2035 regional transportation plan was amended on five occasions:

- In June 2007, the plan was amended at the request of the Southeastern Wisconsin Regional Transit Authority and an Intergovernmental Partnership of the Cities and Counties of Kenosha, Milwaukee, and Racine, the Wisconsin Department of Transportation (WisDOT), and the Commission to add the Kenosha-Racine-Milwaukee commuter rail line following the completion of a transit alternative analysis corridor study/draft environmental impact statement.

- In June 2010, the Commission completed an interim review, update, and reaffirmation of the year 2035 regional transportation system plan, as documented in SEWRPC Memorandum Report No. 197, *Review, Update, and Reaffirmation of the Year 2035 Regional Transportation Plan*, which included amendments to the regional transportation plan. These amendments included the addition to the plan of the Milwaukee downtown streetcar line, the high-speed rail line, and amendments attendant to completed Washington and Walworth County jurisdictional highway system plans. This interim review, update, and reaffirmation also included an assessment of the implementation to date of the regional transportation plan, a review of the forecasts underlying the plan, and a monitoring of transportation system performance. The review also examined whether it remains reasonable for the recommendations in the year 2035 plan to be accomplished over the next 30 years, given implementation of the plan to date and available and anticipated funding.

- In September 2011, the plan was amended at the request of WisDOT to incorporate the improvement from six to eight traffic lanes of STH 100 (North 108th Street/North Mayfair Road) between IH 94 and Watertown Plank Road based on the conclusions of the preliminary engineering and environmental impact analysis for the reconstruction of the Zoo Interchange.

- In September 2012, two amendments to the plan were approved by the Commission. The first amendment involved adding the widening of STH 50 from two to four traffic lanes between CTH F (south) and STH 67, as requested by WisDOT and the Town of Delavan based on the conclusions of the preliminary engineering and environmental impact analysis for the reconstruction of STH 50 between IH 43 and STH 67. The second amendment involved the addition of Mound Road between STH 11 and STH 67 to the planned Walworth County arterial street and highway system.

- In December 2012, two amendments to the plan were approved by the Commission. The first amendment involved the addition of an extension of the Lake Parkway (STH 794) as a four-lane surface arterial facility from its current terminus at Edgerton Avenue to STH 100 in Milwaukee County. This amendment was requested by the Milwaukee County Board of Supervisors and Executive based on the results of the Lake Parkway extension study conducted by the Commission staff. This study was guided by an Advisory Committee composed primarily of elected officials that was responsible for making final study recommendations. The second amendment involved the addition of the widening of USH 45/STH 100 from four to six traffic lanes between Drexel Avenue and Rawson Avenue in Milwaukee County that was requested by WisDOT based on the conclusions of the preliminary engineering and environmental impact analysis for the reconstruction of USH 45/STH 100 between St. Martins Road and College Avenue.

The process for the development of the year 2035 regional transportation plan began by considering the forecast growth of the Region to the year 2035 in terms of employment, population and households. Trends in land use development, travel, and transportation system development were reviewed, as well as the implementation to date of the previous regional transportation plan. A guiding vision, principles, and goals and objectives for transportation in the Region were then defined. Land use pattern alternatives were considered and a preliminary recommended year 2035 regional land use plan was developed. Regional transportation plan alternatives were then prepared and evaluated, and a preliminary recommended year 2035 regional transportation plan was proposed. Public comment on the preliminary recommended plan was considered and a final year 2035 regional transportation plan was recommended. Throughout the plan development process, extensive efforts were made to inform and obtain input from the public, in order to shape plan alternatives and the preliminary and final recommended plans. These efforts included four series of public meetings and hearings throughout Southeastern Wisconsin; a series of newsletters and summary brochures prepared throughout the study process; and the Commission website (www.sewrpc.org) containing comprehensive information regarding the study, including notifications of meetings, draft plan materials, and Advisory Committee rosters, agendas, and minutes. The website also provided the opportunity to submit comments on the plans. The Commission staff also provided briefings and presentations, and conducted outreach to provide information about, and obtain input on, the regional plans and the planning process to minority and low-income populations, business and industry groups, freight transportation interests, and Federal and State environmental resource agencies.

YEAR 2035 REGIONAL TRANSPORTATION PLAN

The development of the year 2035 regional transportation system plan for Southeastern Wisconsin was guided by the following vision for the transportation system of Southeastern Wisconsin:

A multimodal transportation system with high quality public transit, bicycle and pedestrian, and arterial street and highway elements which add to the quality of life of Region residents and support and promote expansion of the Region's economy, by providing for convenient, efficient, and safe travel by each mode, while protecting the quality of the Region's natural environment, minimizing disruption of both the natural and manmade environment, and serving to support implementation of the regional land use plan, while minimizing the capital and annual operating costs of the transportation system.

The development of each plan element of the recommended regional transportation system plan for the year 2035—public transit, bicycle and pedestrian, travel demand management, transportation system management, and arterial streets and highways—built upon the previous regional transportation plan, which had a design year of 2020, recognizing the successful implementation of approximately 15 to 20 percent of each element of the year 2020 plan since the adoption of that plan in 1997.

The recommended year 2035 regional transportation system plan was designed to serve, and to be consistent with, the year 2035 regional land use plan. Future needs for public transit, street and highway, and other transportation improvements considered in the regional transportation planning process were derived from the projected travel based upon the regional land use plan. In addition, the consistency of the regional transportation and land use plans was evaluated by comparing the accessibility provided under the recommended transportation plan and the location of improvements proposed under the recommended transportation plan to the location of land use development and redevelopment proposed under the land use plan.

The process for the development of the recommended year 2035 regional transportation plan began with consideration and development of the travel demand management, transportation systems management, bicycle and pedestrian, and public transit elements of the plan. Arterial street and highway improvement and expansion was then considered only to address the residual highway traffic volumes and attendant traffic congestion which could not be expected to be alleviated by travel demand management, transportation systems management, bicycle and pedestrian facilities, and public transit.

Discussed in the remainder of this chapter are the public transit, bicycle and pedestrian facilities, transportation systems management, travel demand management, and arterial street and highway elements of the year 2035 regional transportation plan as amended. Also discussed are the safety and security elements that were created in 2011, under the guidance of the Advisory Committee on Regional Transportation System Planning, as refinements to the year 2035 regional transportation plan.

PUBLIC TRANSIT ELEMENT

The public transit element of the plan envisioned significant improvement and expansion of public transit in Southeastern Wisconsin, including development within the Region of a high-speed rail line, rapid transit and express transit system, improvement of existing local bus service, and the integration of local bus service with the recommended rapid and express transit services. Map 1 displays the transit system proposals for each of the three transit system components. Altogether, service on the regional transit system would be increased from service levels existing in 2005 by about 100 percent measured in terms of revenue transit vehicle-miles of service provided, from about 69,000 vehicle-miles of service on an average weekday in the year 2005 to 137,300 vehicle-miles of service in the year 2035 (see Table 1).

The recommended expansion of public transit was considered essential in Southeastern Wisconsin for many reasons:

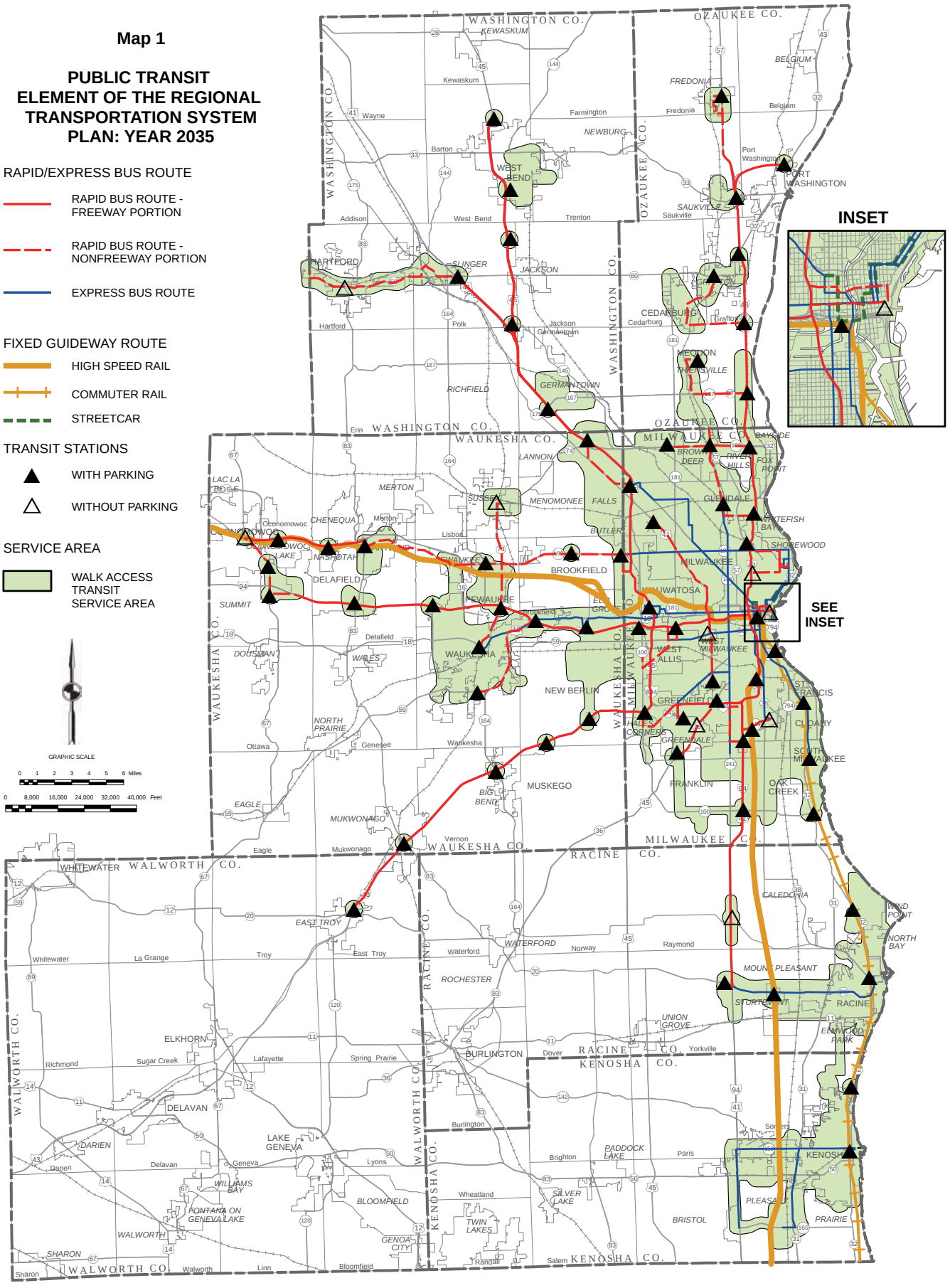
- Public transit is essential to provide an alternative mode of travel in heavily traveled corridors within and between the Region's urban areas, and in the Region's densely developed urban communities and activity centers. It is not desirable, and not possible, in the most heavily traveled corridors, dense urban areas, or the largest and densest activity centers of the Region to accommodate all travel by automobile with respect to both demand for street traffic carrying capacity and parking. To attract travel to public transit, service must be available throughout the day and evening at convenient service frequencies, and at competitive and attractive travel speeds.

- Public transit also supports and encourages higher development density and infill land use development and redevelopment, which results in efficiencies for the overall transportation system and other public infrastructure and services.

- Public transit also contributes to efficiency in the transportation system, including reduced air pollution and energy consumption.

Map 1

PUBLIC TRANSIT ELEMENT OF THE REGIONAL TRANSPORTATION SYSTEM PLAN: YEAR 2035



Source: SEWRPC.

Table 1

PUBLIC TRANSIT ELEMENT OF FINAL RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN (AS AMENDED FOR KENOSHA-RACINE-MILWAUKEE COMMUTER RAIL SERVICE)

Average Weekday Transit Service Characteristics	Existing 2005[a]	Recommended Plan 2035	Planned Increment	
			Number	Percent Change
Revenue Vehicle-Miles				
Rapid				
Bus	7,900[b]	21,100	13,200	167.1
Commuter Rail	- -	2,200	2,200	- -
Subtotal	7,900	23,300	15,400	194.9
Express	- -	17,000	17,000	- -
Local	61,100	97,000	43,200	58.8
Total	69,000	137,300	76,200	99.0
Revenue Vehicle-Hours				
Rapid				
Bus	350[b]	1,000	650	177.8
Commuter Rail	- -	100	100	- -
Subtotal	350[b]	1,100	750	214.3
Express	- -	1,100	1,100	- -
Local	4,750	8,900	4,150	87.4
Total	5,100	11,100	6,000	117.6

[a]*Estimated.*

[b]*Includes the existing commuter bus route operated in the Kenosha-Milwaukee-Racine corridor. While portions of this route operate with express stop spacing, the long trips served by, and average operating speeds of, this route are typical of those for rapid service.*

Source: SEWRPC.

- Public transit permits choice in transportation, enhancing the Region's quality of life and economy. A portion of the Region's population and businesses would prefer to have public transit alternatives available and to travel by public transit. High quality public transit helps provide a high quality of life and contributes to the maintenance and enhancement of the Region's economy.

- Public transit is essential in the Region to meet the travel needs of persons unable to use personal automobile transportation. In the year 2000, approximately 80,000 households, or 11 percent of the Region's households, did not have a personal vehicle available and were dependent upon public transit for travel. The accessibility of this portion of the Region's population to the metropolitan area—jobs, health care, shopping and education—is almost entirely dependent upon the extent to which public transit is available, and is reasonably fast, convenient, and affordable.

High-Speed Rail Service

The planned high-speed rail line between Chicago, Milwaukee, and Madison will be developed and overseen by WisDOT, which received Federal funding for the project in January 2010. The planned high-speed rail line is intended to be part of an initial phase in the development of a Midwest high-speed rail network, planned in partnership with other Midwest states and Amtrak. Implementation of the planned Chicago-Milwaukee-Madison high-speed rail service will include improvements to Amtrak's existing Hiawatha Service operating between Chicago and Milwaukee and infrastructure improvements to allow service to continue to Madison, with trains reaching maximum speeds of 110 miles per hour between Milwaukee and Madison.

Rapid Transit Service
The recommended rapid transit service was to principally consist of buses operating over freeways connecting the Milwaukee central business district, the urbanized areas of the Region, and the urban centers and outlying counties of the Region. Rapid transit bus service would be provided south to Racine, southwest to Mukwonago and East Troy, west to Waukesha and Oconomowoc, northwest to West Bend and Hartford, and north to Cedarburg, Grafton, Saukville, and Port Washington. The proposed rapid transit system would have the following characteristics:

- The rapid transit service would be provided by buses with commuter seating and amenities, and would operate in both directions during all time periods of the day and evening providing both traditional commuter and reverse-commute service.

- The rapid transit service would operate with some intermediate stops spaced about three to five miles apart to increase accessibility to employment centers and to increase accessibility for reverse-commute travel from residential areas within central Milwaukee County. The stops would provide connections with express transit service, local transit service, or shuttle bus or van service to nearby employment centers.

- The service would operate throughout the day. 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.

The recommended rapid transit service also included a commuter rail line connecting Milwaukee, Racine, and Kenosha, as well as the Chicago area through existing Chicago-Kenosha Metra commuter rail. The commuter rail would operate similar to the rapid transit bus service, providing service at convenient frequencies in both directions throughout the day and evening with stops spaced about three to five miles apart.

An approximate tripling in rapid transit service was recommended as measured by daily vehicle-miles of bus service, from the 7,900 vehicle-miles of such service provided on an average weekday in the year 2005, to 23,300 vehicle-miles in the plan design year 2035 (see Table 1).

Express Transit Service
The recommended express transit service was to consist of a grid of limited-stop, higher-speed routes located largely within Milwaukee County connecting major employment centers and shopping areas, other major activity centers such as General Mitchell International Airport, tourist attractions and entertainment centers, and residential areas. The express routes would replace existing major local bus routes. Stops would typically be spaced about one-quarter mile apart. It was envisioned that this system of limited-stop express service routes would initially consist of buses operating over arterial streets in mixed traffic, and would be upgraded over time to buses operating on reserved street lanes with priority treatment at traffic signals.

As envisioned under the plan:

- The express service would operate in both directions during all periods of the day and evening providing both traditional and reverse-commute service.

- The service would generally operate with a stop spacing of about one-quarter mile with one-half mile stop spacing in outlying portions of Milwaukee County and the Milwaukee urbanized area.

- The frequency of service provided would be about every 10 minutes during weekday peak periods, and about every 20 to 30 minutes during weekday off-peak periods and on weekends.

- The overall travel speed provided would be about 16 to 18 miles per hour, a significant improvement over the average 12 miles per hour speed provided by the existing local bus transit service.

- No express transit service existed in the Region in 2005. As proposed, about 17,000 vehicle-miles of express transit service would be provided on an average weekday in the Region in the year 2035 (see Table 1).

- The recommended express service also includes the City of Milwaukee downtown streetcar line.

Table 2

FREQUENCY OF LOCAL BUS SERVICE UNDER THE RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN

Area	Average Weekday Headways on Local Bus Service (minutes)		
	Morning and Afternoon Peak Periods	Midday Off-Peak Period	Evening Off-Peak Period
Within Milwaukee County			
Central Milwaukee County	5-15	10-20	15-20
Remainder of Milwaukee County	15-20	20-30	20-60
Outside Milwaukee County	15-30	30-60	30-60

Source: SEWRPC.

Local Transit Service

The improvement and expansion of local bus transit service over arterial and collector streets, with frequent stops throughout the Kenosha, Milwaukee, and Racine urbanized areas was also recommended. Service would be provided on weekdays, and during weekday evenings, Saturdays, and Sundays. An approximately 59 percent increase in local bus service was recommended from the 61,100 vehicle-miles of local bus service provided in 2005 on an average weekday to 97,000 vehicle-miles in the plan design year 2035 (see Table 1). The recommendations included expansion of service area and hours, and significant improvements in the frequency of local transit service provided, particularly on major local routes. The recommended frequency of local bus service is shown in Table 2.

Paratransit Service

Paratransit service was recommended to be provided consistent with the Federal Americans with Disabilities Act (ADA) of 1990. Under the provisions of this Act, all transit vehicles that provide conventional fixed-route transit service must be accessible to persons with disabilities, including those persons using wheelchairs. All public entities operating fixed-route transit systems must also continue to provide paratransit service to those disabled persons within local transit service areas who are unable to use fixed-route transit services consistent with federally specified eligibility and service requirements. The complementary paratransit services must serve any person with a permanent or temporary disability who is unable independently to board, ride, or disembark from an accessible vehicle used to provide fixed-route transit service; who is capable of using an accessible vehicle, but one is not available for the desired trip; or who is unable to travel to or from the boarding or disembarking location of the fixed-route transit service. The planned paratransit service must be available during the same hours and on the same days as the fixed-route transit service, be provided to eligible persons on a "next-day" trip-reservations basis, not limit service to eligible persons based on restrictions or priorities to trip purpose, and not be operated under capacity constraints which might limit the ability of eligible persons to receive service for a particular trip. The paratransit service fares must be no more than twice the applicable public transit fare per one-way trip for curb-to-curb service.

Upgrading to Rail Transit or Bus Guideways

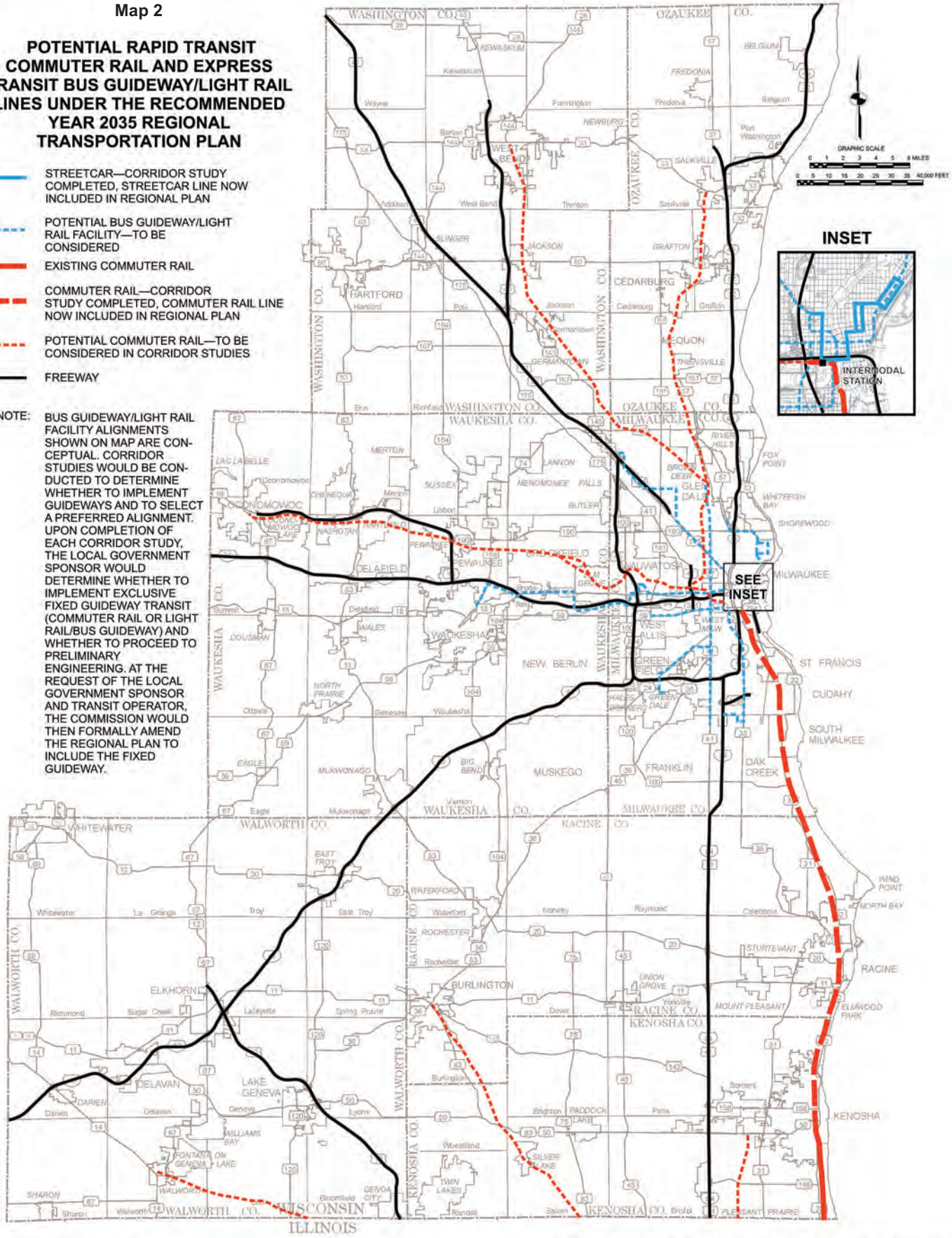
Rapid and express transit service is recommended to initially be provided with buses. This bus service would ultimately be upgraded to commuter rail in six corridors for rapid transit service and to bus guideway or light rail in six corridors for express transit service, as shown on Map 2. Public transit cannot offer convenient accessibility or provide an attractive alternative to the automobile in heavily traveled corridors and dense urban activity centers if it is caught in traffic congestion and its travel times are not comparable to those of automobile travel. Upgrading to exclusive guideway transit may also be expected to promote higher density land development and redevelopment at and around the stations of the exclusive guideway transit facilities, promoting implementation of the regional land use plan. The plan recommends that corridor studies be conducted for each potential rapid and

Map 2

POTENTIAL RAPID TRANSIT COMMUTER RAIL AND EXPRESS TRANSIT BUS GUIDEWAY/LIGHT RAIL LINES UNDER THE RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN

- STREETCAR—CORRIDOR STUDY COMPLETED, STREETCAR LINE NOW INCLUDED IN REGIONAL PLAN
- POTENTIAL BUS GUIDEWAY/LIGHT RAIL FACILITY—TO BE CONSIDERED
- EXISTING COMMUTER RAIL
- COMMUTER RAIL—CORRIDOR STUDY COMPLETED, COMMUTER RAIL LINE NOW INCLUDED IN REGIONAL PLAN
- POTENTIAL COMMUTER RAIL—TO BE CONSIDERED IN CORRIDOR STUDIES
- FREEWAY

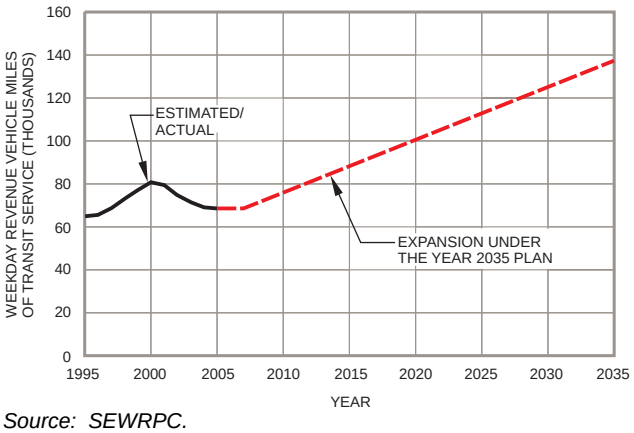
NOTE: BUS GUIDEWAY/LIGHT RAIL FACILITY ALIGNMENTS SHOWN ON MAP ARE CONCEPTUAL. CORRIDOR STUDIES WOULD BE CONDUCTED TO DETERMINE WHETHER TO IMPLEMENT GUIDEWAYS AND TO SELECT A PREFERRED ALIGNMENT. UPON COMPLETION OF EACH CORRIDOR STUDY, THE LOCAL GOVERNMENT SPONSOR WOULD DETERMINE WHETHER TO IMPLEMENT EXCLUSIVE FIXED GUIDEWAY TRANSIT (COMMUTER RAIL OR LIGHT RAIL/BUS GUIDEWAY) AND WHETHER TO PROCEED TO PRELIMINARY ENGINEERING. AT THE REQUEST OF THE LOCAL GOVERNMENT SPONSOR AND TRANSIT OPERATOR, THE COMMISSION WOULD THEN FORMALLY AMEND THE REGIONAL PLAN TO INCLUDE THE FIXED GUIDEWAY.



Source: SEWRPC.

Figure 1

HISTORIC AND PLANNED VEHICLE-MILES OF PUBLIC TRANSIT SERVICE ON AN AVERAGE WEEKDAY IN THE SOUTHEASTERN WISCONSIN REGION: 1995-2035



Source: SEWRPC.

express transit guideway corridor. The corridor studies would be conducted by the transit operator concerned, or jointly by the multiple transit operators concerned, to determine whether to implement a fixed guideway transit alternative in each corridor, and to refine the conceptual guideway alignments shown in the regional plan. At the conclusion of each corridor study, the transit operator would determine whether to implement fixed guideway transit, and identify the preferred alignment within the corridor that should proceed into preliminary engineering. The Commission would then, at the request of the transit operator(s), revise and amend the regional plan to include the fixed guideway.

There were two efforts underway in Southeastern Wisconsin at the time of regional plan adoption considering upgrading to fixed guideway transit. Milwaukee County, the City of Milwaukee, and the Wisconsin Center District were conducting the Milwaukee downtown connector study which was evaluating a streetcar line in the central portion of the City of Milwaukee and an express bus transit line in Milwaukee County. The other was a study of a commuter rail line connecting the Kenosha, Racine, and Milwaukee areas. These corridor level studies for the streetcar and commuter rail line were completed, and the regional plan was amended to include the streetcar line and the commuter rail line.

Summary and Conclusions—Public Transit

The recommended expansion of public transit in Southeastern Wisconsin in the year 2035 plan represented a near doubling of transit service in Southeastern Wisconsin by the year 2035. As shown in Figure 1, this entailed about a 2.3 percent annual increase in transit service to the year 2035, less than the level of annual increase which occurred between 1995 and 2000. Significant implementation of the year 2020 plan occurred between 1997 and 2000 as transit service expanded by over 25 percent. However, due to State and local budget problems, transit service was significantly reduced from 2000 to 2005.

Implementation of this recommended expansion was envisioned in the year 2035 plan to be dependent upon the continued commitment of the State to be a partner in the maintenance, improvement and expansion, and attendant funding of public transit. The State had historically funded 40 to 45 percent of transit operating costs, and had increased funding to address inflation in the cost of providing public transit, and to provide for transit improvement and expansion. State transit funding to the Milwaukee County Transit System increased by 29 percent from 1995 to 2000 and by 70 percent for all other transit systems in the Region, but only by 7 percent between 2000 and 2005 for the Milwaukee County Transit System and by 12 percent for all other transit systems. An annual 4 to 5 percent increase was envisioned in the plan to be essential to address rising costs, including inflation and real increases in fuel costs, and to support system improvement and expansion.

Implementation of the recommended expansion of public transit in Southeastern Wisconsin was also envisioned in the 2035 plan to be dependent upon attaining dedicated local funding for public transit. In the absence of dedicated local funding, the recommended expansion may not be expected to be implemented, and continued reductions in transit service may be expected. The local share of funding of public transit in Southeastern Wisconsin is provided through county or municipal budgets, and represents about 15 percent of the total operating costs and 20 percent of total capital costs of public transit. Thus, the local share of funding public transit is largely provided by property taxes, and public transit must annually compete with mandated services and projects. Increasingly, due to the constraints in property tax based funding, counties and municipalities have found it difficult to provide funding to address transit needs, and to respond to shortfalls in Federal and State funding. Most public transit systems nationwide have dedicated local funding, typically a sales tax of 0.25 to 1.0 percent. A sales tax provides funding which should increase with inflation and area growth, thereby addressing funding needs attendant to inflation in the costs of providing public transit and transit system expansion.

A regional transit authority was also envisioned in the 2035 plan to assist in implementing the recommended transit system expansion. A number of the proposed transit services extend across city and county boundaries. A regional transit authority could assist in the implementation of these proposed services.

BICYCLE AND PEDESTRIAN FACILITY ELEMENT

The bicycle and pedestrian facility element of the recommended plan was intended to promote safe accommodation of bicycle and pedestrian travel, and encourage bicycle and pedestrian travel as an alternative to personal vehicle travel. The plan envisioned that as the surface arterial street system of about 3,300 miles in the Region is resurfaced and reconstructed segment-by-segment, the provision of accommodation for bicycle travel would be considered and implemented, if feasible, through bicycle lanes, widened outside travel lanes, widened shoulders, or separate bicycle paths. The surface arterial street system of the Region provides a network of direct travel routes serving virtually all travel origins and destinations within Southeastern Wisconsin. Arterial streets and highways—particularly those with high-speed traffic or heavy volumes of truck or transit vehicle traffic—require improvements such as extra-wide outside travel lanes, paved shoulders, bicycle lanes, or a separate bicycle path in order to safely accommodate bicycle travel. Land access and collector streets, because of low traffic volumes and speeds, are capable of accommodating bicycle travel with no special accommodation for bicycle travel.

The level and unit of government responsible for constructing and maintaining the surface arterial street or highway should have responsibility for constructing, maintaining, and funding the associated bicycle facility. A detailed evaluation of the alternatives for accommodation of bicycles on surface arterial streets or highways should necessarily be conducted by the responsible level and unit of government as part of the engineering for the resurfacing, reconstruction, and new construction of each segment of surface arterial.

The plan also recommends that a system of off-street bicycle paths be provided between the Kenosha, Milwaukee, and Racine urbanized areas and the cities and villages within the Region with a population of 5,000 or more located outside these three urbanized areas. This system of off-street bicycle paths was initially also proposed in the adopted park and open space plans prepared by the Commission for each of the seven counties of the Region. These off-street bicycle paths would be located in natural resource and utility corridors would be intended to provide reasonably direct connections between the Region's urbanized and small urban areas on safe and aesthetically attractive routes with separation from motor vehicle traffic. Some on-street bicycle connections would be required to connect segments of this system of off-street paths. These connections if provided over surface arterials would include some type of bicycle accommodation—paved shoulders, extra-wide outside travel lanes, bicycle lanes, or separate parallel bicycle paths—or if provided over a nonarterial collector or land access street would require no special accommodation. The proposed system of on- and off-street bicycle facilities is shown on Map 3, and includes 548 miles of off-street bicycle paths with 168 miles of surface arterial and 89 miles of nonarterial connections. Approximately 203 miles of the planned 548 miles of off-street bicycle paths were in existence in 2005 during the preparation of the plan. Also shown on Map 3 is the surface arterial street and highway system within the Region proposed to be provided with bicycle accommodation.

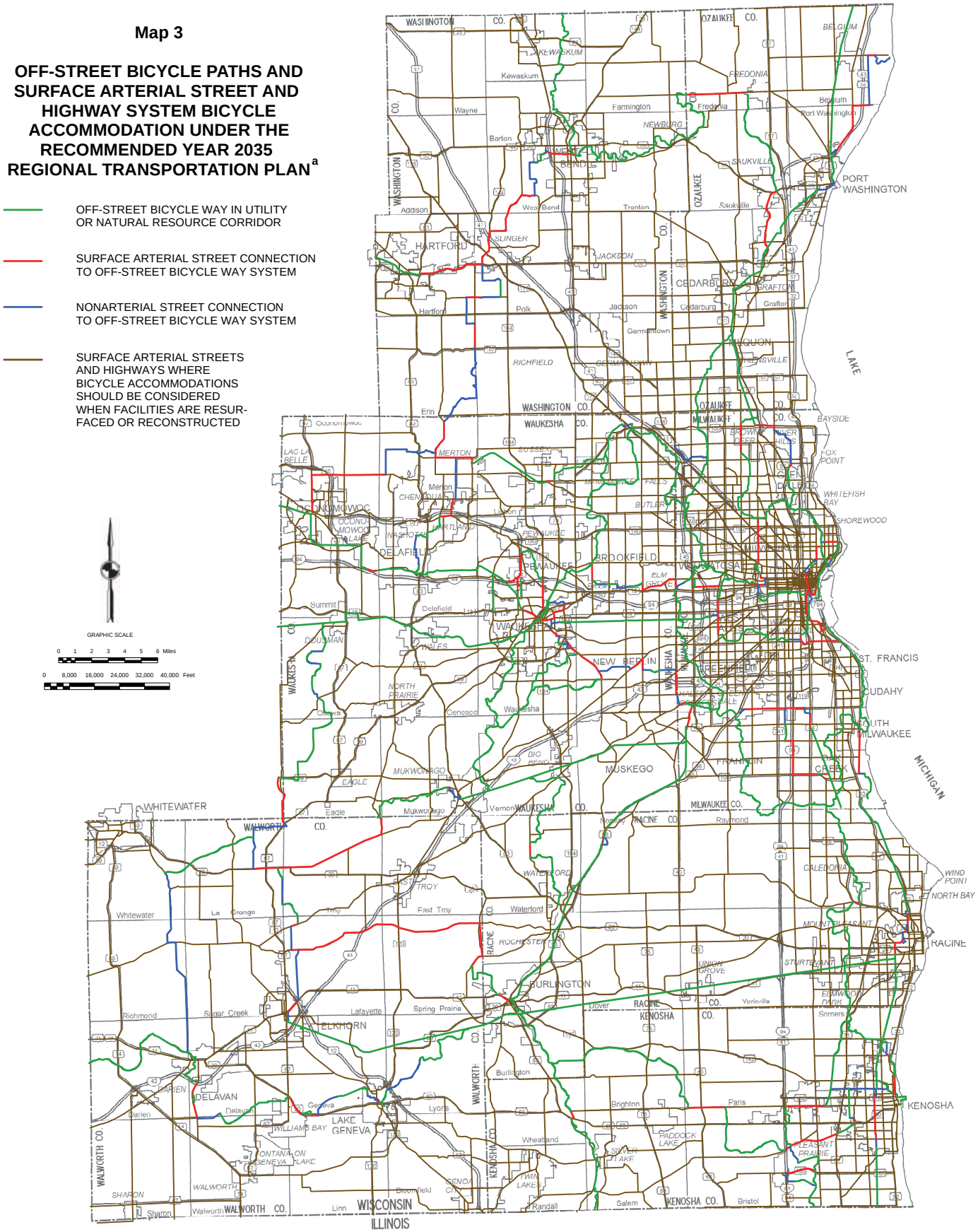
The pedestrian facilities portion of the recommended bicycle and pedestrian facilities plan element was envisioned as a policy plan, rather than a system plan. It recommended that the various units and agencies of government responsible for the construction and maintenance of pedestrian facilities in Southeastern Wisconsin adopt and follow a series of recommended standards and guidelines with regard to the development of those facilities, particularly within planned neighborhood units. These standards included the provision of sidewalks in the urban portions of the Region.

TRANSPORTATION SYSTEMS MANAGEMENT

The transportation systems management element of the recommended year 2035 regional transportation plan included measures intended to manage and operate existing transportation facilities to their maximum carrying capacity and travel efficiency, including: freeway traffic management, surface arterial street and highway traffic management, and major activity center parking management and guidance.

Map 3

OFF-STREET BICYCLE PATHS AND SURFACE ARTERIAL STREET AND HIGHWAY SYSTEM BICYCLE ACCOMMODATION UNDER THE RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN[a]



[a] *This map shows the envisioned location of off-street bicycle paths as proposed in the Year 2035 Regional Transportation Plan and County Parks and Open Space Plans. Since the completion of the review and update of the Year 2035 Regional Transportation Plan in 2010, the Walworth County Board of Supervisors adopted the Walworth County Park and Open Space Plan recommending revised locations for a number of bicycle paths in Walworth County. The bicycle path element of the regional transportation plan was thus revised to incorporate all of the revised bicycle path locations included in the adopted Walworth County Parks and Open Space Plan.*

Source: SEWRPC.

Freeway Traffic Management

Recommended measures to improve the operation and management of the regional freeway system included operational control, advisory information, and incident management measures, as well as a traffic operations center supporting these measures. Essential to achieving freeway operational control, advisory information, and incident management is the WisDOT traffic operations center (TOC) in the City of Milwaukee. At the TOC all freeway segments in the Milwaukee area are monitored, freeway operational control and advisory information is determined, and incident management detection and confirmation is conducted. The TOC is important to the safe and efficient operation of the regional freeway system and is in operation 365 days a year, 24 hours a day.

Operational Control

Measures to improve freeway operation—both during average weekday peak traffic periods and during minor and major incidents—through monitoring of freeway operating conditions and control of entering freeway traffic were envisioned to include traffic detectors, freeway on-ramp-meters, and ramp-meter control strategy. Traffic detectors measure the speed, volume, and density of freeway traffic, and are used for operational control, advisory information, and incident management. Existing freeway system traffic detectors in 2006 consisted of detectors embedded in the pavement at one-half mile intervals on the freeways in Milwaukee County and on IH 94 in Waukesha County, and at about one- to two-mile intervals on IH 94 in Kenosha and Racine Counties. The data collected from these traffic detectors was monitored by WisDOT at the TOC for the purposes of detecting freeway system travel speed and time, traffic congestion, traffic flow breakdowns, and incidents. Freeway ramp meter traffic entry rates could be modified based upon the traffic volume and congestion indicated by the traffic detectors. Travel information on traffic congestion and delays were provided to freeway system users through the WisDOT website and on variable message signs. Traffic speeds and congestion indicated by traffic detectors could instantaneously identify the presence of a freeway incident. It was recommended that existing freeway system traffic detectors be maintained, and that traffic detectors be installed on the freeway system throughout the Region at one-half mile intervals as the freeway system was reconstructed. The only exceptions for installing detectors on freeway segments were identified as those segments with current and expected future traffic volumes which would be substantially less than freeway traffic carrying design capacity, including IH 43 north of STH 57 in Ozaukee County, USH 45 north of the Richfield Interchange, USH 41 north of STH 60 in Washington County, and IH 43 and USH 12 in Walworth County.

Ramp-meters are traffic signals located on freeway entrance ramps or, in some cases, freeway-to-freeway entrance ramps, and are used to control the rate of entry of vehicles onto a freeway segment to achieve more efficient operation of the adjacent freeway segment and the downstream freeway system. To encourage ridesharing and transit use, preferential access for high-occupancy vehicles is provided at ramp-meter locations to allow the high-occupancy vehicles to bypass traffic waiting at a ramp-metering signal. In 2006 there were 120 freeway on-ramps currently in the Milwaukee area equipped with ramp-meters. Buses and high-occupancy vehicles received preferential access at 62 of the 120 on-ramp-meter locations. It was recommended that as the freeway system is reconstructed, ramp-meters be installed on all freeway on-ramps within the Region, with high-occupancy vehicle preferential access provided at these metered ramps, particularly those which would be used by existing and planned public transit. The only exception for ramp-meter installation would be those freeway segments identified above which would be expected to carry current and future traffic volumes below their design capacity.

Another element of freeway operational control was the strategy used in the operational control of ramp-meters. The existing ramp-meters on the Southeastern Wisconsin freeway system were controlled in two ways. Some were controlled in a "pre-timed" mode, operating during specified peak traffic hours of the weekday at specified release rates of vehicles. Others were controlled as well during specified peak traffic hours of the weekday, but the vehicle release rates were based upon adjacent freeway system traffic volume and congestion. It was recommended that the strategy of controlling ramp-meters through consideration of adjacent congestion be expanded throughout the freeway system, and that an operational control strategy be considered which would consider downstream freeway traffic congestion and seek to minimize total travel delay on the freeway system while providing for equitable average and maximum delays at each ramp-meter, and avoiding the extension of vehicle queues onto surface streets. It was also recommended that the need for expanded vehicle storage on freeway on-ramps be considered, and addressed, during the reconstruction of the regional freeway system.

Advisory Information Measures

Providing advisory information to motorists was envisioned as an integral part of providing an efficient street and highway system. By providing information on current travel conditions, motorists could choose travel routes which were more efficient for their travel, and the result is a more efficient transportation system. Advisory information measures included permanent variable message signs (VMS), the WisDOT website, and provision of information to the media. WisDOT used the permanent VMS to provide real time information to travelers about downstream freeway traffic conditions, such as current travel times to selected areas, information about lane and ramp closures, and where travel delays begin and end. In 2006 there were 23 permanent VMS located on the freeway system, primarily in the Milwaukee area, and 13 on surface arterials which connected with the freeway system primarily located in western Milwaukee County. It was recommended that variable message signs be provided on the entire freeway system as the freeway system is reconstructed, and on surface arterials leading to the most heavily used freeway system on-ramps.

WisDOT also provided substantial information about current freeway system traffic conditions on a website using data collected from freeway system traffic detectors. The information included maps depicting the current level of freeway traffic congestion and the locations of confirmed incidents, views of freeway system traffic available from the freeway system closed circuit television camera network, and current travel times and delays on the major freeway segments in the Milwaukee area. The data on the website was also available to the media and used in daily radio and television broadcasts. It was recommended that WisDOT continue to enhance and expand the information provided on its website and to the media, and consider deployment of a regional 511 traveler information system which would allow the public to dial "511" and receive automated messages about current travel conditions along their desired route through a series of predetermined automated menus.

Incident Management Measures

Incident management measures have as their objective the timely detection, confirmation, and removal of freeway incidents. As noted earlier, the WisDOT freeway system TOC and freeway system traffic volume detectors were identified as essential to incident management, as well as freeway operational control and advisory information. Other incident management measures recommended were closed circuit television, enhanced freeway location reference markers, freeway service patrols, crash investigation sites, the Traffic Incident Management Enhancement Program, ramp closure devices, and alternate route designations.

Closed-circuit television (CCTV) cameras provided live video images to WisDOT and the Milwaukee County Sheriff's Department which allow for the rapid confirmation of congested areas and the presence of an incident, and immediate determination of the appropriate response to the incident and direction of the proper equipment to be deployed in response to the incident. In 2006 there were 83 closed-circuit television cameras on the Southeastern Wisconsin freeway system, covering Milwaukee County freeways, IH 94 and USH 41/45 in eastern Waukesha County, and IH 94 in Kenosha and Racine Counties. It was recommended that the CCTV camera network be provided on the entire regional freeway system as the freeway system is reconstructed, with the possible exception of the freeway segments identified earlier which carry existing and future traffic volumes well below their design capacity.

Enhanced reference markers assist motorists in identifying specific locations along a freeway segment when reporting incidents. These markers are typically small signs provided at one-tenth mile intervals along the freeway system which typically display the highway shield and mile marker. Enhanced reference markers were provided in 2006 in Milwaukee County in the freeway median at each one-tenth mile on USH 45 from the Zoo Interchange to the Milwaukee-Waukesha County line, and on IH 94 from the Mitchell Interchange to the Illinois-Wisconsin State line, including the freeway segments of IH 94 in Kenosha and Racine Counties. It was recommended that enhanced reference markers be provided on the entire regional freeway system as the freeway system is reconstructed.

Freeway service patrols provide for rapid removal of disabled vehicles and initial response to clearing incidents. Freeway service patrols consist of specially equipped vehicles designed to assist disabled motorists and assist in clearance of incidents. Freeway service patrol vehicles may be equipped to provide limited towing assistance, as well as minor services such as fuel, oil, water, and minor mechanical repairs. In 2006, freeway service patrols operated in a limited role on the Milwaukee County freeway system and on IH 94 in Kenosha, Racine, and

Waukesha Counties. In each of these four counties, service patrols operated during weekday peak traffic periods. In Milwaukee County service patrols also operated all day during weekdays, and in Kenosha and Racine Counties, service patrols also operated all day during weekends. In Kenosha, Racine, and Waukesha Counties, one service patrol vehicle served 12 to 15 miles of freeways, and in Milwaukee County one service patrol vehicle served 70 miles of freeways. Expansion of the freeway service patrol was recommended to serve the entire regional freeway system, and to provide greater coverage including all day weekday and weekend service, evening service, and increased vehicle coverage of one vehicle per 12 to 15 miles of freeway.

Crash investigation sites are designated safe zones for distressed motorists to relocate to if they are involved in a crash or an incident on the freeway. In 2006 there were 35 crash investigation sites on the Southeastern Wisconsin freeway system, with the largest concentration—24 of the 35, or about 69 percent—located on the system in Milwaukee County. It was recommended that as the freeway system is reconstructed, WisDOT evaluate the extent of use and attendant benefits of existing crash investigation sites, and consider expansion as needed to serve the entire regional freeway system.

The Traffic Incident Management Enhancement (TIME) Program, sponsored by WisDOT, has served to bring together, and coordinate, the transportation engineering, law enforcement, media, emergency responders, transit, tow and recovery, and other freeway system operational interests at monthly meetings. The goals of the TIME program are to improve and enhance freeway incident management, improve freeway safety, and enhance the quality and efficiency of freeway travel. It was recommended that the TIME program continue to be operated and sponsored by WisDOT.

Ramp closure devices were deployed in 2006 on IH 94 in Kenosha, Racine, and Waukesha Counties. The ramp closure devices were either Type III barricades or swing arm gates. These ramp closure devices allow for the closure of freeway on-ramps during planned and unplanned major incidents, such as special events and severe inclement weather. It was recommended that WisDOT evaluate the use and attendant benefits of existing ramp closure devices, and consider their application throughout the Region.

Alternate routes are designated, clearly marked and signed surface arterial street and highway routes which generally parallel freeway segments. These routes would be intended to be used by motorists during major freeway incidents and ramp closures and during particularly extreme congestion. Motorists would be directed through advisory information to these routes during major incidents and periods of particularly extreme congestion. It was recommended that WisDOT and the Regional Planning Commission, together with the concerned and affected local governments, examine the potential for the designation of alternative routes, and consider implementation of a pilot effort in a designated corridor.

Surface Arterial Street and Highway Traffic Management

This group of recommended transportation system management measures would attempt to improve the operation and management of the regional surface arterial street and highway network, and include improved traffic signal coordination, intersection traffic engineering improvements, curb lane parking restrictions, access management, and advisory information.

Coordinated traffic signal systems provide for the efficient progression of traffic along arterial streets and highways, allowing motorists to travel through multiple signalized intersections along an arterial route at the speed limit and minimizing or eliminating the number of stops at signalized intersections. In the Region, coordinated traffic signal systems generally ranged from systems comprising two traffic signals to systems comprising about 100 traffic signals. Approximately 1,100 of the 1,700 traffic signals in the Region, or about 65 percent, were part of a coordinated signal system in 2006. It was recommended that Commission staff work with State and local government to document existing and planned arterial street and highway system traffic signals and traffic signal systems, and develop recommendations for improvement and expansion of coordinated signal systems.

It was also recommended that State and local governments aggressively consider and implement needed individual arterial street and highway intersection improvements, such as adding right- and/or left-turn lanes; improvements in the type of traffic control deployed at the intersection, including two- or four-way stop control,

roundabouts, or signalization; or improvements in signal timing at individual signalized intersections. This measure proposed that State, county, and municipal governments each prepare a prioritized short-range (two- to six-year) program of arterial street and highway intersection improvements under their jurisdiction, pursue aggressive implementation of the programs, and review and update the programs every two to five years.

It was also recommended that local governments consider implementation of curb-lane parking restrictions during peak traffic periods in the peak traffic direction as traffic volumes and congestion increase. These parking restrictions would be implemented rather than the widening with additional lanes or construction of new arterial streets.

Access management was also recommended to improve transportation systems operations and provide for full use of roadway capacity. Access management involves applying standards for the location, spacing, and operation of driveways, median openings, and street connections. It was proposed that State, county, and municipal governmental units with arterial streets and highways under their jurisdiction adopt access management standards, consider and implement these standards as development takes place along arterials under their jurisdiction, and prepare and implement access management plans along arterials which currently are developed and have access which violates these standards.

Advisory information should also be provided to motorists concerning the surface arterial street and highway network in the Region. It was recommended that the WisDOT improve and expand the data provided on its website (travel times, congestion maps, and camera images) concerning freeway travel to include surface arterial street and highway travel, beginning with the pilot route designated as an alternative route to a segment of the freeway system.

Major Activity Center Parking Management and Guidance

Another recommended transportation system management measure would attempt to improve traffic operation conditions by reducing the traffic circulation of motorists seeking parking in major activity centers. The City of Milwaukee in 2006 had an initiative to construct a Summerfest shuttle bus parking management and guidance system. This initiative would provide static and dynamic signing indicating the location of parking structures and the availability of parking in those structures for a number of parking structures in the central business district (CBD) which are near Summerfest shuttle bus routes. This recommended measure supported the City of Milwaukee initiative and proposed expansion of parking management and guidance systems to incorporate all of the Milwaukee CBD at all times of the year.

Regional Transportation Operations Program

The plan also recommended that WisDOT, in cooperation with SEWRPC and all transportation system operators in the Region, work to prepare a Regional Transportation Operation Program (RTOP). It was envisioned that the RTOP would program high priority short-range (three to five year) operational improvement projects for implementation, in part based upon the transportation systems management recommendations in the regional transportation system plan.

TRAVEL DEMAND MANAGEMENT ELEMENT

The travel demand management measures included in the recommended year 2035 regional transportation plan included measures intended to reduce personal and vehicular travel or to shift such travel to alternative times and routes, allowing for more efficient use of the existing capacity of the transportation system. These measures were in addition to the public transit and pedestrian and bicycle plan elements previously described.

Seven categories of travel demand management measures were recommended for inclusion in the year 2035 plan: high-occupancy vehicle preferential treatment, park-ride lots, transit pricing, personal vehicle pricing, travel demand management promotion, transit information and marketing, and detailed site-specific neighborhood and major activity center land use plans.

High-Occupancy Vehicle Preferential Treatment
This group of recommended travel demand management measures would attempt to provide preferential treatment for transit vehicles, vanpools, and carpools on the existing arterial street and highway system. The recommended preferential treatment category consisted of four specific travel demand management measures: the provision of high-occupancy vehicle (HOV) queue bypass lanes at metered freeway on-ramps; reserved bus lanes along congested surface arterial streets and highways; transit priority signal systems; and preferential carpool and vanpool parking.

The provision of HOV queue bypass lanes at metered freeway on-ramps existed at 62 of the 120 metered freeway on-ramp locations within the Milwaukee area. The recommended travel demand management measure recommended that consideration be given during freeway system reconstruction to providing HOV bypass lanes at all metered freeway on-ramps within the Region, dependent upon right-of-way and on-ramp geometric design constraints. For this measure to be truly effective, strict enforcement of HOV bypass lanes would be required.

Reserved bus lanes similar to those along Blue Mound Road in Waukesha County allow transit vehicles to bypass vehicle queues attendant to traffic signals on congested arterial streets and highways. These reserved lanes may be expected to reduce transit travel times and improve transit travel time reliability during peak travel periods. This recommended travel demand management measure would expand the use of reserved bus lanes throughout the Region on the congested surface arterial streets and highways which currently, or may be expected in the future, to accommodate express and major local transit routes, and on the surface arterial portion of rapid transit routes. The third recommended travel demand management measure within the high-occupancy vehicle preferential treatment category was transit priority signal systems. This recommended measure would allow transit vehicles to extend the end of the green phase of traffic signals as they approach a signalized intersection. This recommended measure would include transit priority signal systems along all express and major local transit routes, and the surface arterial portion of rapid transit routes within the Region.

The fourth recommended travel demand management measure within the high-occupancy vehicle preferential treatment category was preferential carpool and vanpool parking. This recommended measure was voluntary and proposed that employers providing free/subsidized parking for their employees consider providing and enforcing preferential parking for those employees who carpool or vanpool to the employment site. This recommended measure may reduce vehicle trips by encouraging ridesharing.

Park-Ride Lots
To promote carpooling and the resultant more efficient use of the Region's transportation system, a network of park-ride lots are recommended to facilitate carpooling. Map 4 shows the recommended system of park-ride lots including existing park-ride lots and those recommended to be served by public transit. Park-ride lots are recommended along all major routes at their major intersections and interchanges where sufficient demand may be expected to warrant provision of an off-street parking facility.

Transit Pricing
This group of recommended travel demand management measures would build upon existing transit pricing programs conducted by the transit operators in the Region. The recommended transit pricing category consisted of three travel demand management measures: annual transit pass programs, monthly or weekly pass programs, and vanpool programs.

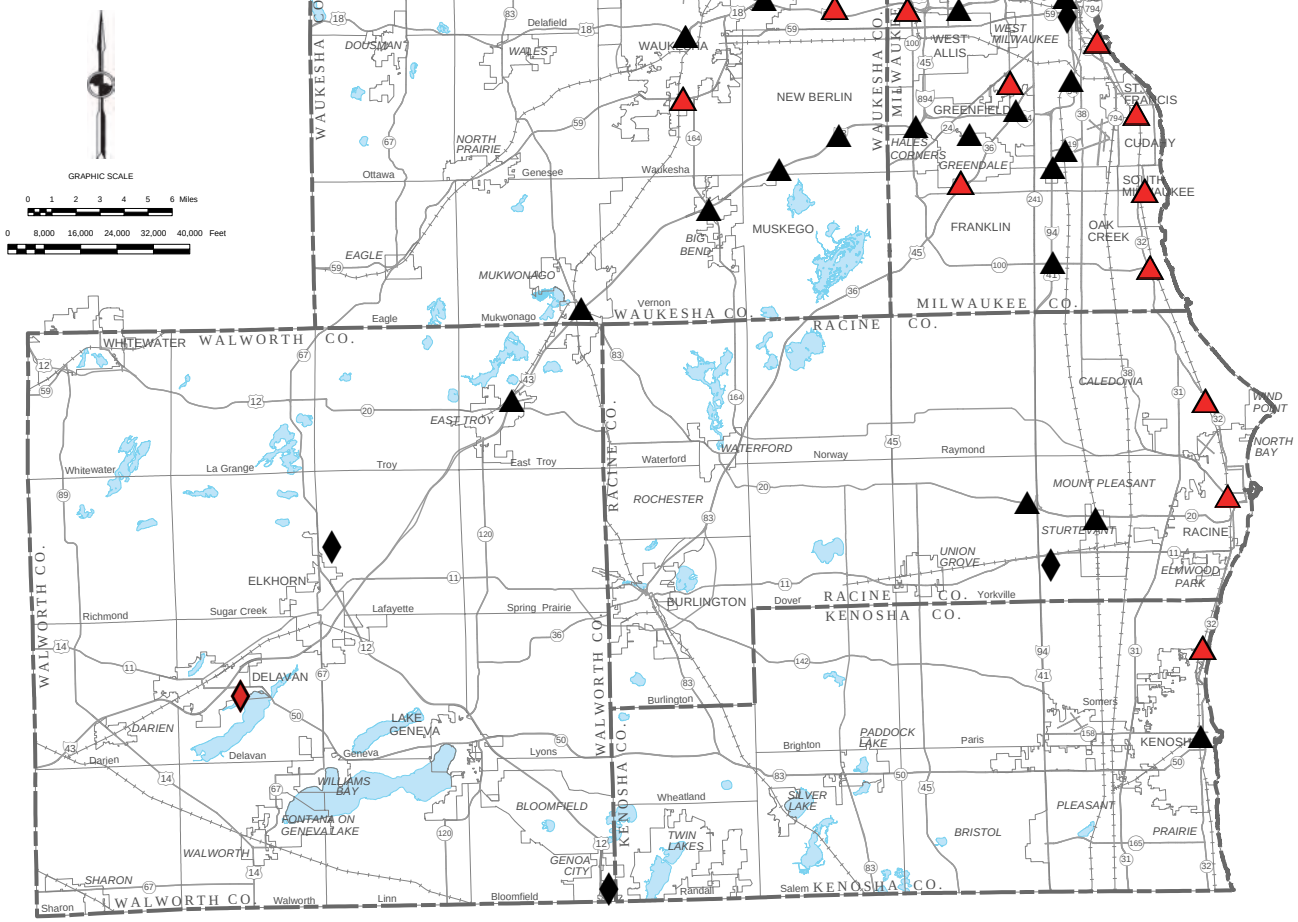
The Milwaukee County Transit System had implemented a pass system at four colleges and universities which provided for free transit use with a reduced fee included in student tuition and fees. This annual transit pass program was envisioned to be expanded to include the other local public transit operators in the Region and additional colleges and universities within the Region. This annual pass program would also be expanded to employers, with the Region's transit operators negotiating an annual fee with individual employers, which would allow those employers to provide each employee with an annual transit pass.

Monthly or weekly discount pass programs existed for three of the Region's public transit operators—the Milwaukee County Transit System, the Racine Belle Urban System, and the Waukesha Metro Transit System. This recommended monthly or weekly pass program allowed employers to offer their employees discounted monthly or weekly passes, where the employer and the transit operator have negotiated an agreement in which they both agreed to subsidize a portion of the monthly or weekly pass.

Map 4

RECOMMENDED PARK-RIDE LOTS WITHIN SOUTHEASTERN WISCONSIN UNDER THE RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN

- EXISTING PARK-RIDE LOT AS OF 2005--SERVED BY EXISTING OR PROPOSED PUBLIC TRANSIT
- EXISTING PARK-RIDE LOT AS OF 2005--NOT SERVED BY EXISTING OR PROPOSED PUBLIC TRANSIT
- PROPOSED PARK-RIDE LOT--SERVED BY PROPOSED PUBLIC TRANSIT
- PROPOSED PARK-RIDE LOT--NOT SERVED BY PROPOSED PUBLIC TRANSIT



Source: SEWRPC

The third proposed travel demand management measure within the transit pricing category was expansion of vanpool programs, in which a group of employees who live in the same general area split the operation, maintenance, and a portion of the capital costs of a van. The Milwaukee County Transit System operated a vanpool program with about 20 vanpools, with vanpool users paying 20 percent of the capital costs of a van. The Milwaukee County Transit System vanpool program required one end of the work trip to be in Kenosha, Milwaukee, Ozaukee, Racine, Washington, or Waukesha Counties, and that one end of the work trip was outside the regular Milwaukee County Transit System service area.

Personal Vehicle Pricing

The recommended personal vehicle pricing group of travel demand management measures proposed to allocate a larger percentage of the full costs of construction, maintenance, and operation of street and highway facilities and services directly on the users of the system. The proposed personal vehicle pricing category consisted of two specific travel demand management measures—cash-out of employer-paid parking, and auto pricing.

Cash-out of employee paid parking would recommend that employers currently providing free/subsidized parking to employees would voluntarily begin charging their employees the market value of parking. Employers could offset the additional cost of parking through cash payment or salary increases to employees. This recommended measure would potentially reduce vehicle-trips and vehicle-miles of travel through the increased use of transit, ridesharing, walking, and bicycling, as some employees may "pocket" the cash payment and use other modes of travel.

The second recommended travel demand management measure within the personal vehicle pricing category encouraged the continued and expanded use of user fees to pay the costs of construction, maintenance, and operation of street and highway facilities and services. Currently, user fees primarily include the Federal and State motor fuel tax and vehicle registration fees. These user fees currently fund 100 percent of the costs associated with State highways and about 20 to 25 percent of the costs associated with county and municipal streets and highways. There is substantial and growing opposition to increases in motor fuel taxes. In addition, there is the potential in the future for technological advances, such as increased fuel efficiency and alternative fuels, to render the current motor fuel tax obsolete. However, there is merit in having the users of the transportation system pay the actual costs of constructing, maintaining, and operating the transportation system. Travel behavior is affected by the cost of travel, and user fees can encourage more efficient travel.

Travel Demand Management Promotion

A region-wide program to aggressively promote transit use, bicycle use, ridesharing, pedestrian travel, telecommuting, and work-time rescheduling, including compressed work weeks was recommended to encourage alternatives to drive alone personal vehicle travel. The program would include education, marketing, and promotion elements.

Transit Information and Marketing

Recommended transit information and marketing measures would include the continuation and expansion of the joint marketing efforts of the transit operators within Southeastern Wisconsin. It was also recommended that a single website be developed in which transit users could access all necessary information for each transit system in Southeastern Wisconsin. This recommended website would allow a potential transit user to enter such information as beginning and ending addresses of a desired trip within the Region, and then would display the most feasible transit routing of the desired trip including all fares, transfers, and schedules.

The third recommended transit information and marketing measure was real-time travel information. This recommended measure would utilize global positioning system (GPS) data to provide real-time transit information to transit riders at transit centers and transit stops, including transit vehicle arrival times, and real-time maps, showing where on the route a transit vehicle is currently located.

Detailed Site-Specific Neighborhood and Major Activity Center Land Use Plans

The preparation and implementation by local governmental units of detailed, site-specific neighborhood and major activity center plans to facilitate travel by transit, bicycle, and pedestrian movement and reduce dependence on automobile travel was recommended, and was also recommended in the regional land use plan.

ARTERIAL STREET AND HIGHWAY ELEMENT

The arterial street and highway element of the recommended year 2035 regional transportation plan as amended totaled 3,662 route-miles. Approximately 88 percent, or 3,209 of these route-miles, were recommended to be resurfaced and reconstructed to their same capacity. Approximately 360 route-miles, or 10 percent of the total recommended year 2035 arterial street and highway system, were recommended for widening upon reconstruction to provide additional through traffic lanes, including 127 miles of freeways. The remaining 93 route-miles, or about 2 percent of the total arterial street mileage, were proposed new arterial facilities. Thus, the plan recommendations envisioned over the next 30 years 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 30 years.

Map 5 displays the recommended year 2035 regional transportation plan arterial street preservation, improvement, and expansion by county. Highway improvements were recommended to address the residual congestion which may not be expected to be alleviated by recommended land use, systems management, demand management, bicycle and pedestrian facilities, and public transit measures in the recommended plan. Each recommended arterial street and highway improvement, expansion, and preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies would consider alternatives and impacts, and final decisions as to whether and how a planned project will proceed to implementation would be made by the responsible State, county, or municipal government at the conclusion of preliminary engineering.

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 by WisDOT. 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 would a determination be made as to how the freeway would be reconstructed.

SAFETY AND SECURITY ELEMENTS

In 2011, two additional elements of the plan were created under the guidance of the Advisory Committee on Regional Transportation System Planning to specifically address transportation safety and security. These elements provide a refinement of the adopted plan, along with specific recommendations to enhance the safety and security of the Region's transportation system.

Safety

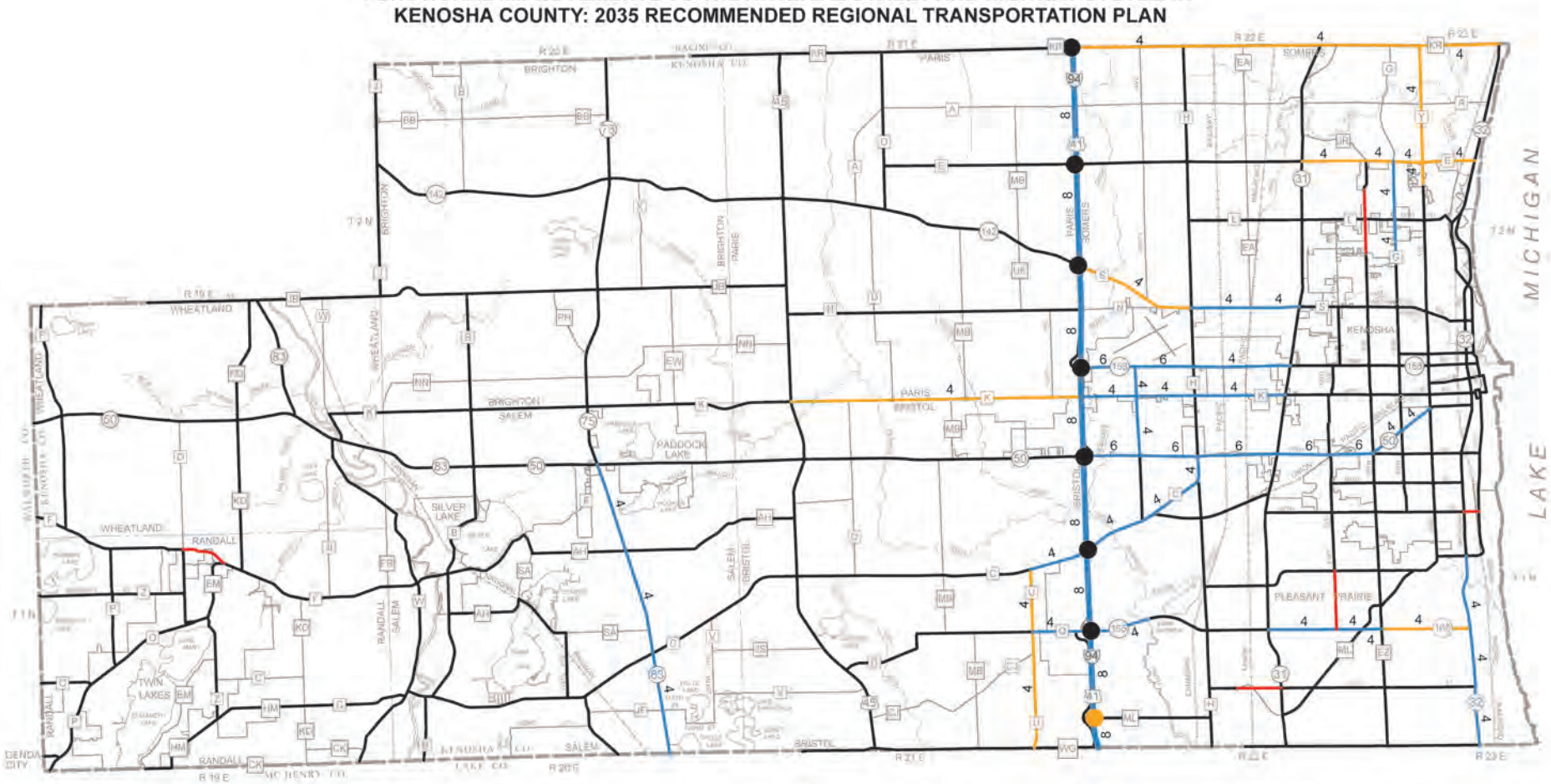
The safety element contained a review of the transportation safety objectives, principles, and standards documented in the year 2035 regional transportation plan adopted in 2006, along with presenting a proposed expanded set of transportation safety objectives, principles, and standards. The safety element also included listing and discussion of the recommendations of the year 2035 regional transportation plan which advance transportation safety. In addition, the element included recommendations for improved traffic crash and safety data, and recommendations for further study and improvements on those roadway segments with the most severe safety problems.

Security

The security element provided an overview of transportation security, and considered security-related issues and efforts that are ongoing to protect transportation networks and facilities at the Federal, State, and regional levels. The element specifically addressed security, which is distinguished from safety by being concerned with protecting against intentional attacks against people, facilities, modes of travel, and important transportation infrastructure. The element detailed the efforts being undertaken by various Federal, State, regional, and local agencies to enhance the security of the Region's transportation system. No specific projects were included, but the element provided affirmation of the Commission's role in regional coordination of transportation security-related projects, along with the incorporation of security considerations into future transportation system preservation, improvement, or expansion projects.

Map 5

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN KENOSHA COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- EXISTING
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (POTENTIAL NEW INTERCHANGE)

GRAPHIC SCALE
0 1 2 MILES
0 4,000 8,000 12,000 16,000 FEET

Source: SEWRPC

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

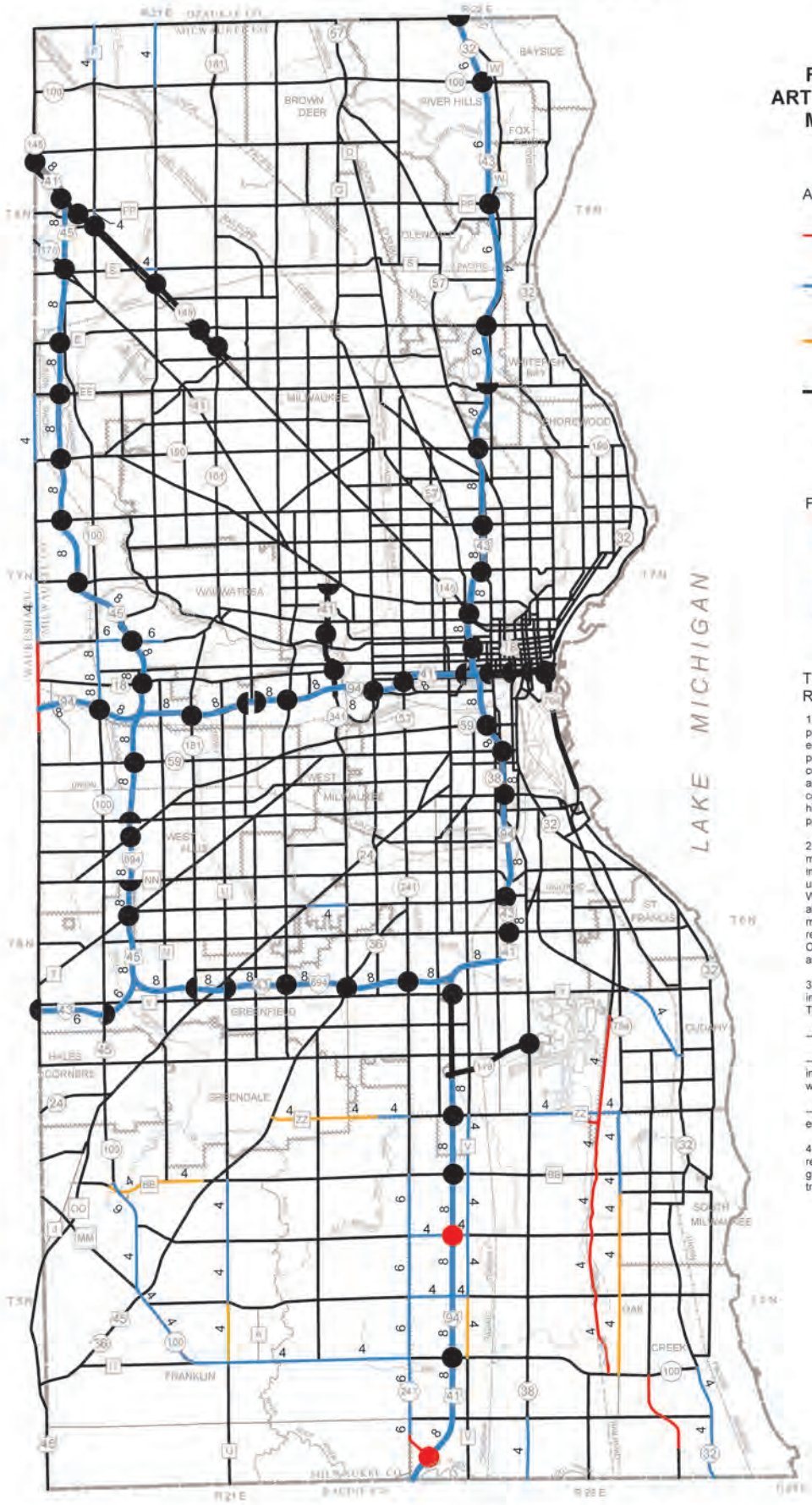
2. The 127 miles of freeway widening proposed in the plan, and in particular the 19 miles of widening in the City of Milwaukee (IH 94 between the Zoo and Marquette interchanges and IH 43 between the Mitchell and Silver Spring interchanges), will undergo preliminary engineering and environmental impact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

3. The plan recommends that the Wisconsin Department of Transportation during its preliminary engineering for IH 94 consider the provision of an interchange with CTH K in Kenosha County, including the alternative of collector-distributor roadways connecting CTH K, STH 50, and STH 158, and an additional potential new future freeway interchange at CTH ML with IH 94. Should the preliminary engineering study conclude with a recommendation to construct one or both of the interchanges, the Regional Planning Commission, upon request of the concerned local governments and the Wisconsin Department of Transportation, would take action to amend the regional plan to recommend the construction of the interchange.

4. Sufficient right-of-way should be reserved along STH 158 from CTH H to STH 31 to accommodate its ultimate improvement to six travel lanes.

5. Sufficient right-of-wayshould be reserved along CTH K from IH 94 to STH 31 to accommodate its ultimate improvement to six travel lanes.

Map 5 (continued)



FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN MILWAUKEE COUNTY: 2035 REGIONAL TRANSPORTATION SYSTEM PLAN

ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 NUMBER OF LANES (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- NEW
- HALF NEW
- EXISTING

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. The plan also provides further recommendations with respect to freeway half-interchanges. The plan recommends that the Wisconsin Department of Transportation, during the reconstruction of the freeway system:

–Convert the S. 27th Street with IH 94 interchange to a full interchange;

–Consider as an alternative (where conditions permit) combining selected half-interchanges into one full interchange. (For example, STH 100 and S. 124th Street with IH 43.)

–Retain all other existing half-interchanges and examine during preliminary engineering the improvement of connection between adjacent interchanges.

4. The plan also recommends that during preliminary engineering for the reconstruction of STH 100 from W. Forest Home Avenue to IH 43, consideration be given to alternatives without additional traffic lanes, alternatives with additional traffic lanes or auxiliary lanes, and alternatives with frontage roads.

N

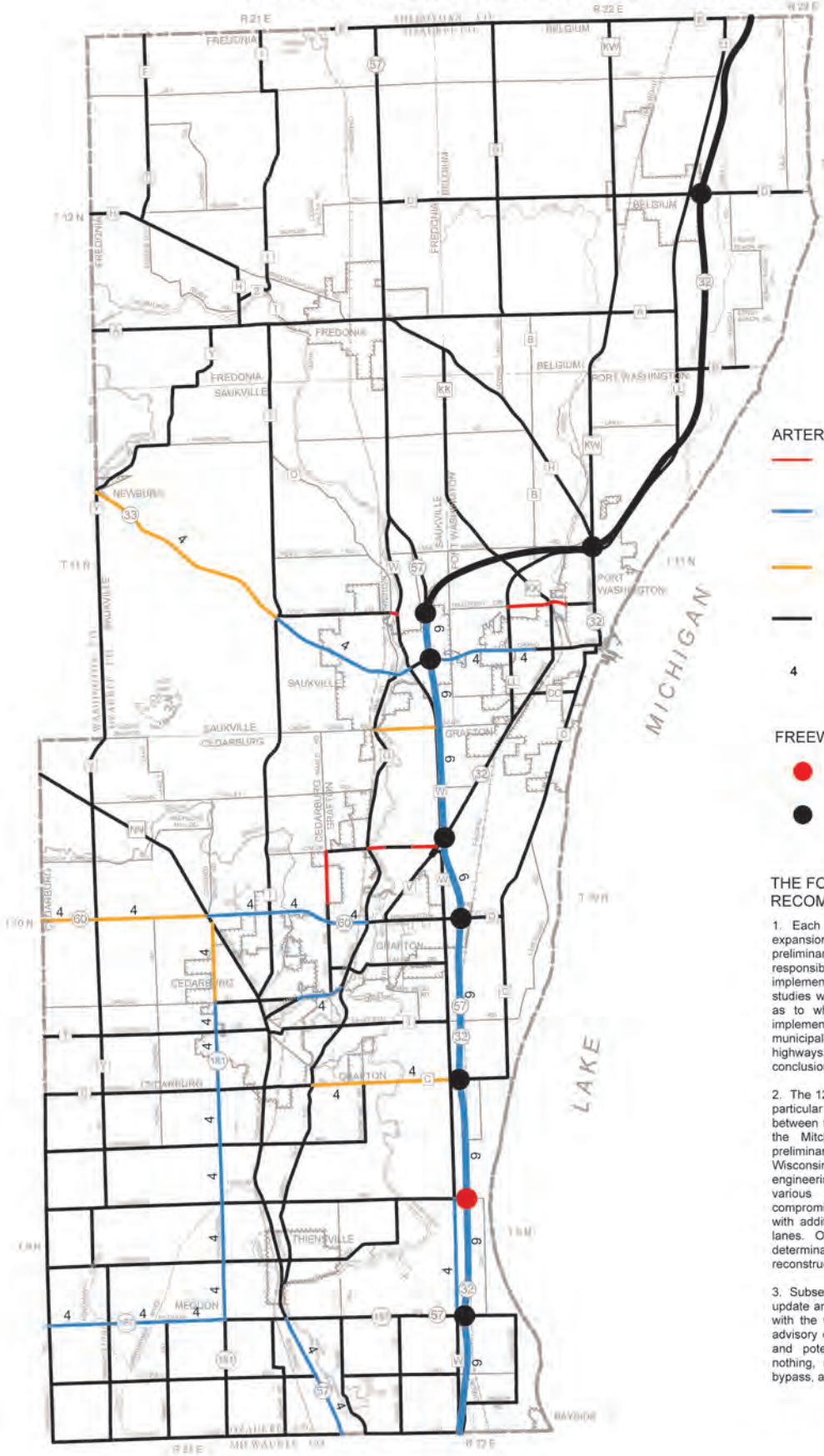
GRAPHIC SCALE

0 1 2 MILES

0 4,000 8,000 12,000 16,000 FEET

Map 5 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN OZAUKEE COUNTY: 2035 REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF LANES (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- NEW
- EXISTING

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

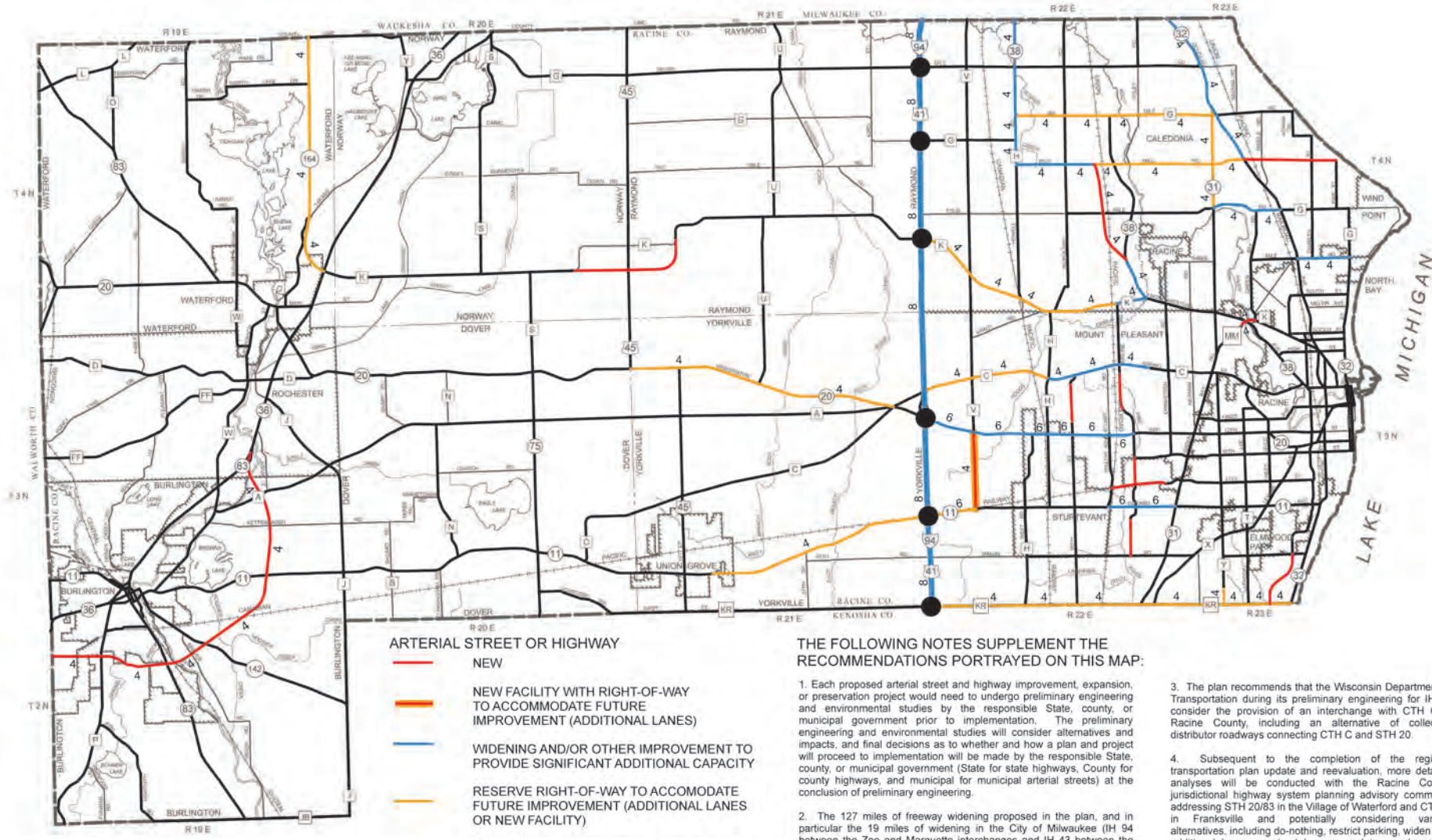
1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Ozaukee County jurisdictional highway system planning advisory committee addressing STH 33 in the Village of Saukville and potentially considering various alternatives including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.

Map 5 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN RACINE COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- NEW FACILITY WITH RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES)
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- EXISTING

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. The plan recommends that the Wisconsin Department of Transportation during its preliminary engineering for IH 94 consider the provision of an interchange with CTH C in Racine County, including an alternative of collector-distributor roadways connecting CTH C and STH 20.

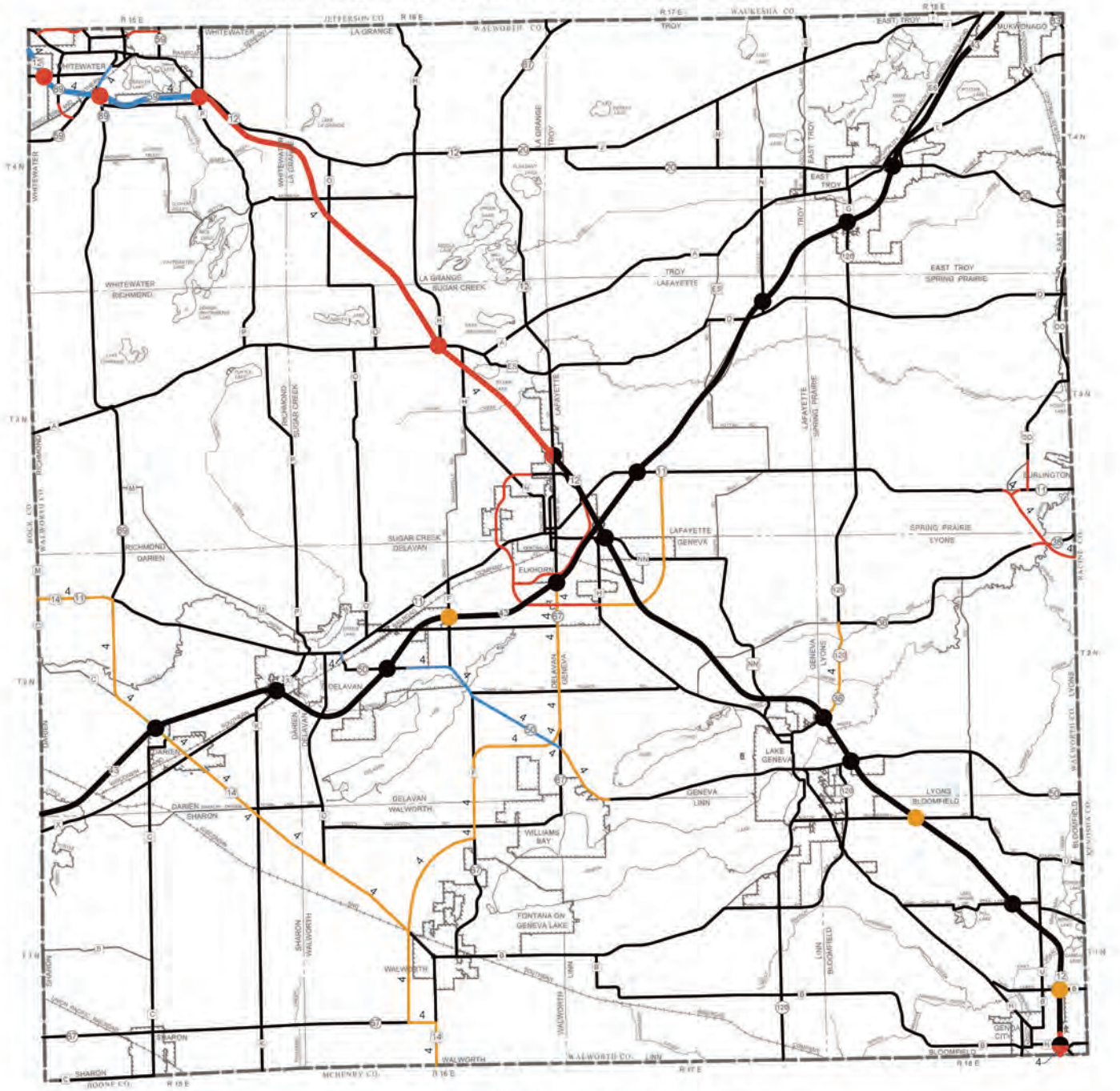
4. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Racine County jurisdictional highway system planning advisory committee addressing STH 20/83 in the Village of Waterford and CTH K in Franksville and potentially considering various alternatives, including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.

N

GRAPHIC SCALE
0 1 2 MILES
0 4,000 8,000 12,000 16,000 FEET

Map 5 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WALWORTH COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 WHERE UNNUMBERED)

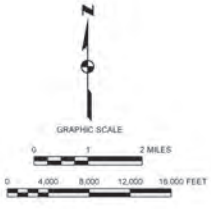
FREEWAY INTERCHANGE

- NEW
- NEW HALF
- EXISTING
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (POTENTIAL) NEW INTERCHANGE)

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

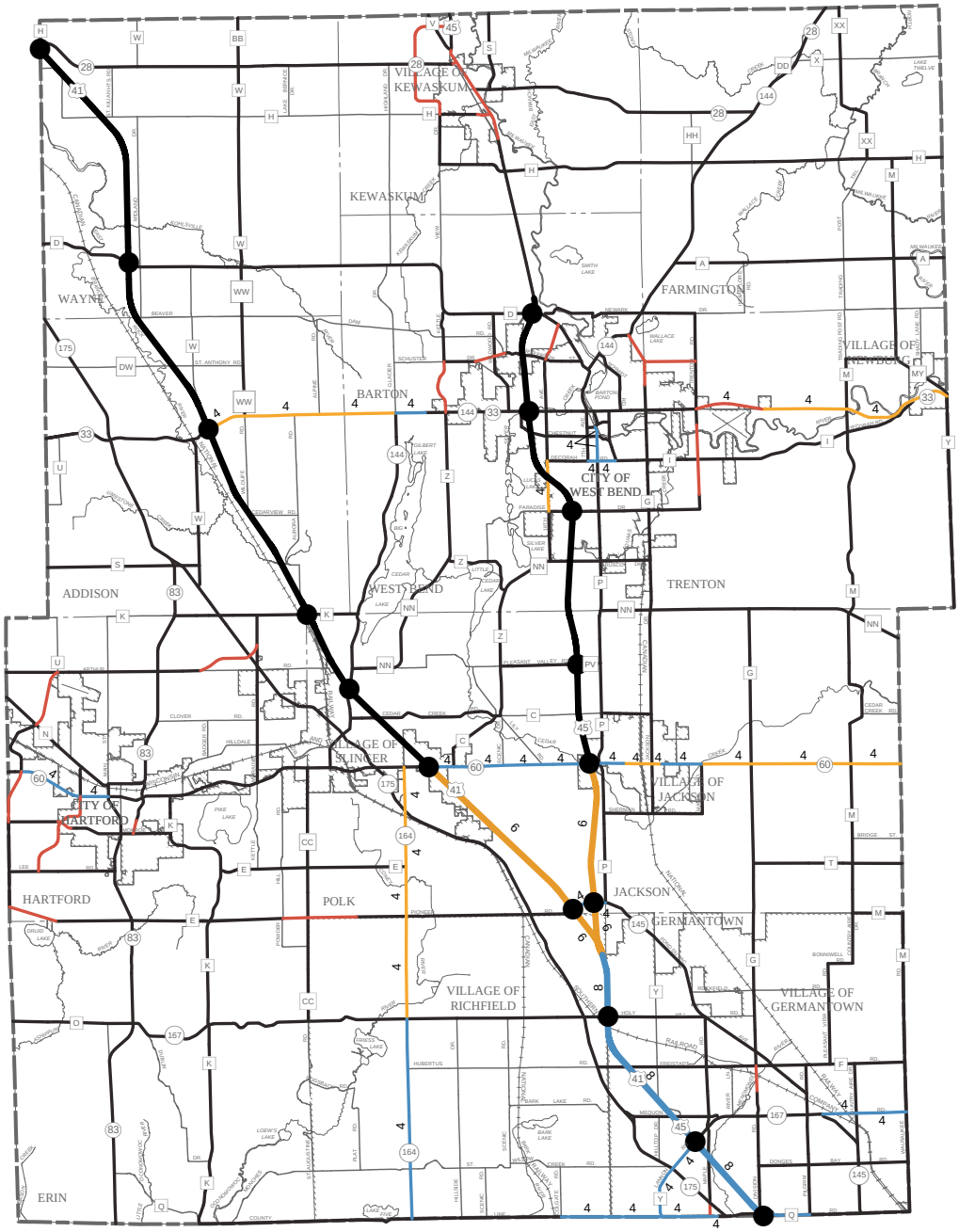
1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.



Map 5 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WASHINGTON COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF LANES (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- EXISTING

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

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N

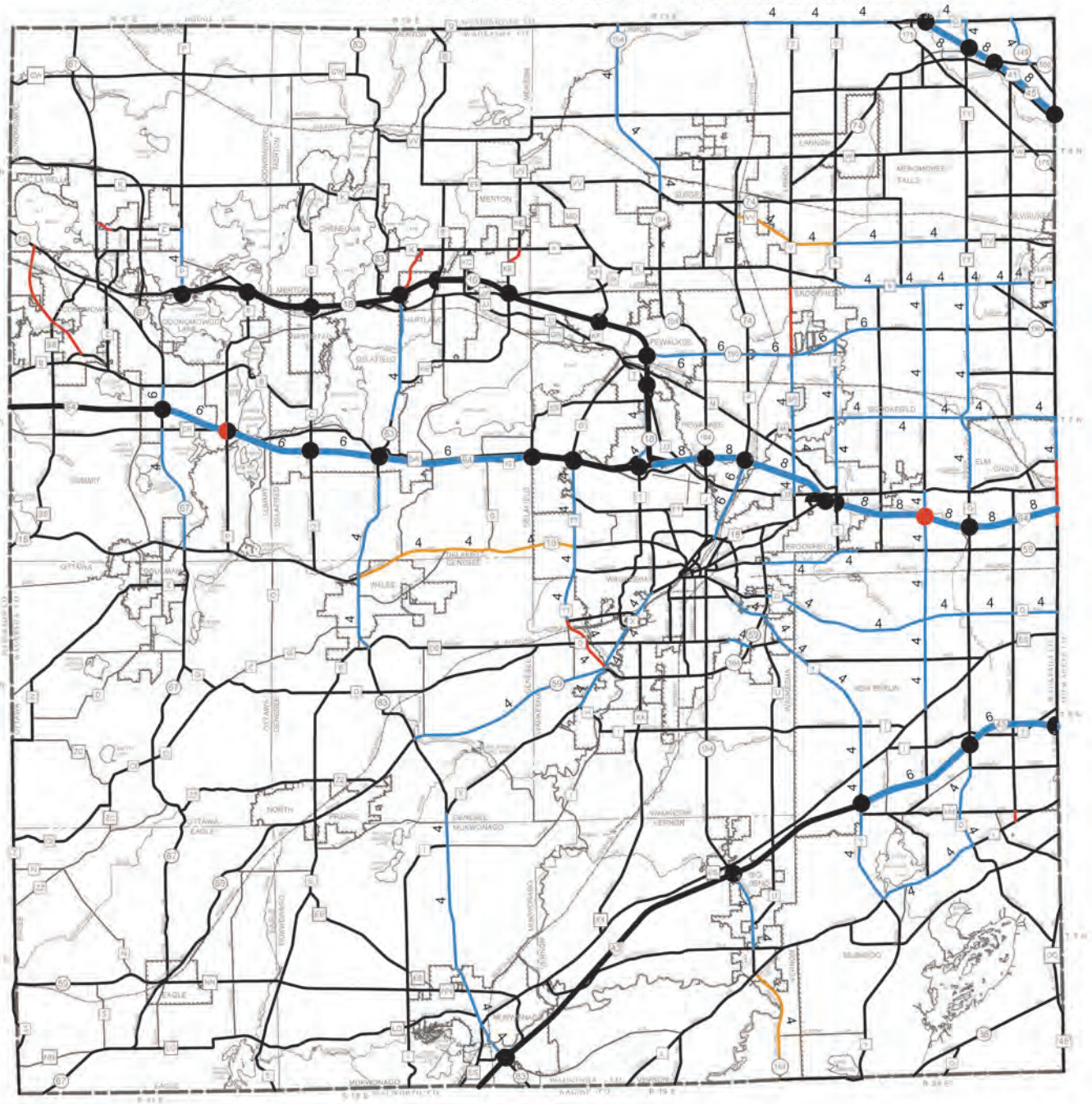
GRAPHIC SCALE

0 1 2 3 MILES

0 4,000 8,000 12,000 16,000 20,000 FEET

Map 5 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WAUKESHA COUNTY: 2035 RECOMMENDED REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- NEW
- NEW HALF
- EXISTING

GRAPHIC SCALE

0 1 2 MILES

0 4,000 8,000 12,000 16,000 FEET

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

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3. The plan also provides further recommendations with respect to freeway half-interchanges. The plan recommends that the Wisconsin Department of Transportation during the reconstruction of the freeway system:

– Convert the CTH P with IH 94 interchange to a full interchange.

– Consider as an alternative (where conditions permit) the combination of selected half-interchanges into one full interchange; and

– Retain all other existing half-interchanges and examine during preliminary engineering the improvement of connection between adjacent interchanges.

4. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analysis will be conducted with the Waukesha County jurisdictional highway system planning advisory committee addressing STH 164 in the Village of Big Bend and potentially considering various alternatives, including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.

SUMMARY AND CONCLUSIONS

The year 2035 regional transportation system plan as amended since it was completed in 2006 was designed to address the projected growth in population, households, and employment (and attendant travel), and to serve, be consistent with, and promote implementation of, the year 2035 regional land use plan. The regional transportation plan provided the vision for the needed improvement and expansion of the transportation system to serve the Region through the year 2035. The potential of more efficient land use and expanded public transit, systems management, bicycle and pedestrian facilities, and demand management was considered first to alleviate traffic congestion. Arterial street and highway improvements were only then considered to address any residual congestion. Each element of the regional transportation plan was considered to be of equal priority, and each element needed to be implemented to provide a comprehensive, multi-modal, balanced, high quality transportation system in Southeastern Wisconsin. Implementation of the year 2035 regional transportation system plan was envisioned as necessary to avoid a doubling of traffic congestion over the next 30 years and embodied the following vision for transportation system improvement and development within the Region to the year 2035:

- Public transit service in the Region would double from 69,000 to 137,300 vehicle-miles of service on an average weekday, including the development of a high-speed rail line and true rapid and express transit systems;

- Consideration would be given through corridor studies to the upgrading of bus rapid transit service to commuter rail service and of express bus transit service to bus guideway or light rail service;

- Bicycle accommodation would be considered and implemented as the approximately 3,300-mile surface arterial street and highway system is resurfaced, reconstructed, and newly constructed through such means as bicycle lanes, widened outside travel lanes, paved and widened shoulders, and separate parallel bicycle paths;

- A system of 586 miles of off-street bicycle/pedestrian paths would be developed primarily within natural resource and utility corridors to provide reasonably direct connections between the Region's urbanized and small urban areas;

- Efforts to operate and manage the existing arterial street and highway system as efficiently as possible, obtaining the maximum capacity from that system would be continued and expanded, including expansion of the existing freeway traffic management system and expansion of existing surface arterial street and highway management efforts;

- Efforts to encourage reductions in personal and vehicular travel would be continued and expanded, including expansion of the existing number of park-ride lots within the Region, provision of exclusive high-occupancy bypass lanes at freeway on-ramps, provision of surface arterial street and highway express bus reserved lanes, and provision of transit signal priority systems;

- Widening with additional lanes to provide additional traffic carrying capacity would be considered on 360 miles of the existing 3,500 miles of arterial streets and highways in the Region, including 127 miles of freeways; and

- Construction of new arterial streets and highways would be considered consisting of about 93 miles of the planned year 2035 arterial street and highway system in the Region.

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Chapter 3

REVIEW OF YEAR 2035 PLAN FORECASTS

INTRODUCTION

In this chapter the forecasts prepared under the year 2035 regional transportation plan are reviewed for their continued validity, including demographic and economic forecasts of population, households, and employment; and travel, traffic, and related forecasts including regional vehicle-miles of travel, transit system ridership, and personal vehicle availability.

DEMOGRAPHIC AND ECONOMIC FORECASTS

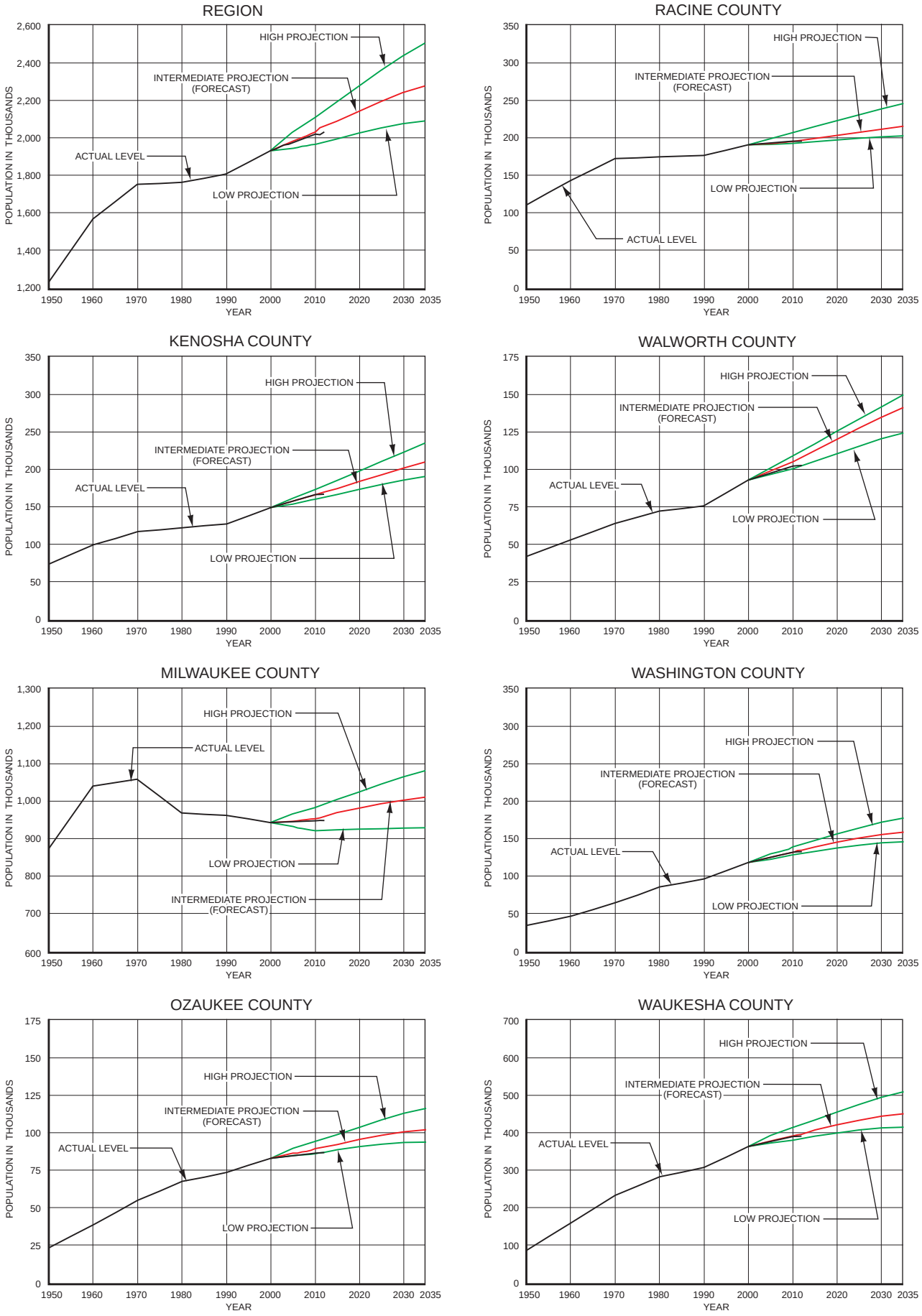
Figures 2 through 4 document for the Region and each of the seven counties the historic growth and change in population, employment, and households over the last 30 to 50 years through the year 2000, the base year for the development of the demographic and economic forecasts for the year 2035 regional transportation plan. Also shown are the population, household, and employment forecasts for the year 2035 upon which the year 2035 regional transportation plan is based, the plan being specifically based on the intermediate growth projection. And, also shown are the trends in the growth and change in population, households, and employment in the Region and in each of the seven counties from the year 2000 through the year 2012. Tables 3 through 5 specifically compare year 2012 estimated actual employment, population, and households, to the 2012 forecasts for the Region and each of the seven counties. Comparison of estimated current year 2012 population, household, and employment levels to forecast (intermediate growth) levels indicate that the forecasts remain valid for long-range planning at both regional and county levels. Estimates of population and households have been closely following forecasts with estimates at the regional and county levels generally being within 2 to 4 percent of forecasts. Estimates of employment are lagging forecasts by about 5 percent, as a result of the economic downturn that has been experienced in the Region since 2008.

PERSONAL-USE VEHICLE AND COMMERCIAL TRUCK AVAILABILITY FORECASTS

The number of personal-use vehicles—that is, automobiles, trucks, and vans used by residents of the Region for personal transportation—in 2012 totaled about 1.38 million (see Table 6). Over the past 50 years, there has been a

Figure 2

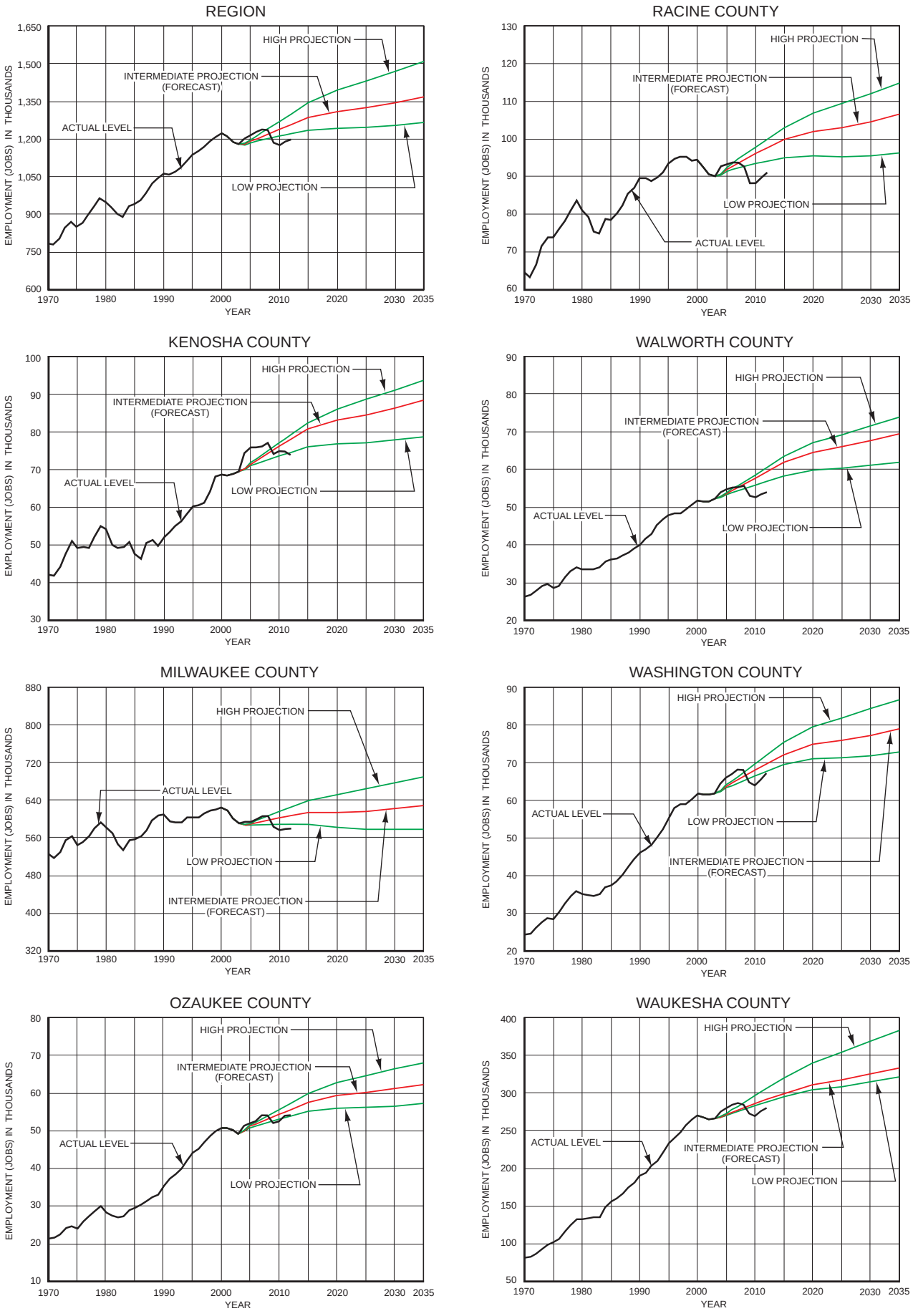
ACTUAL AND PROJECTED REGIONAL AND COUNTY POPULATION LEVELS: 1950-2035



Source: U.S. Bureau of the Census, Wisconsin Department of Administration, and SEWRPC.

Figure 3

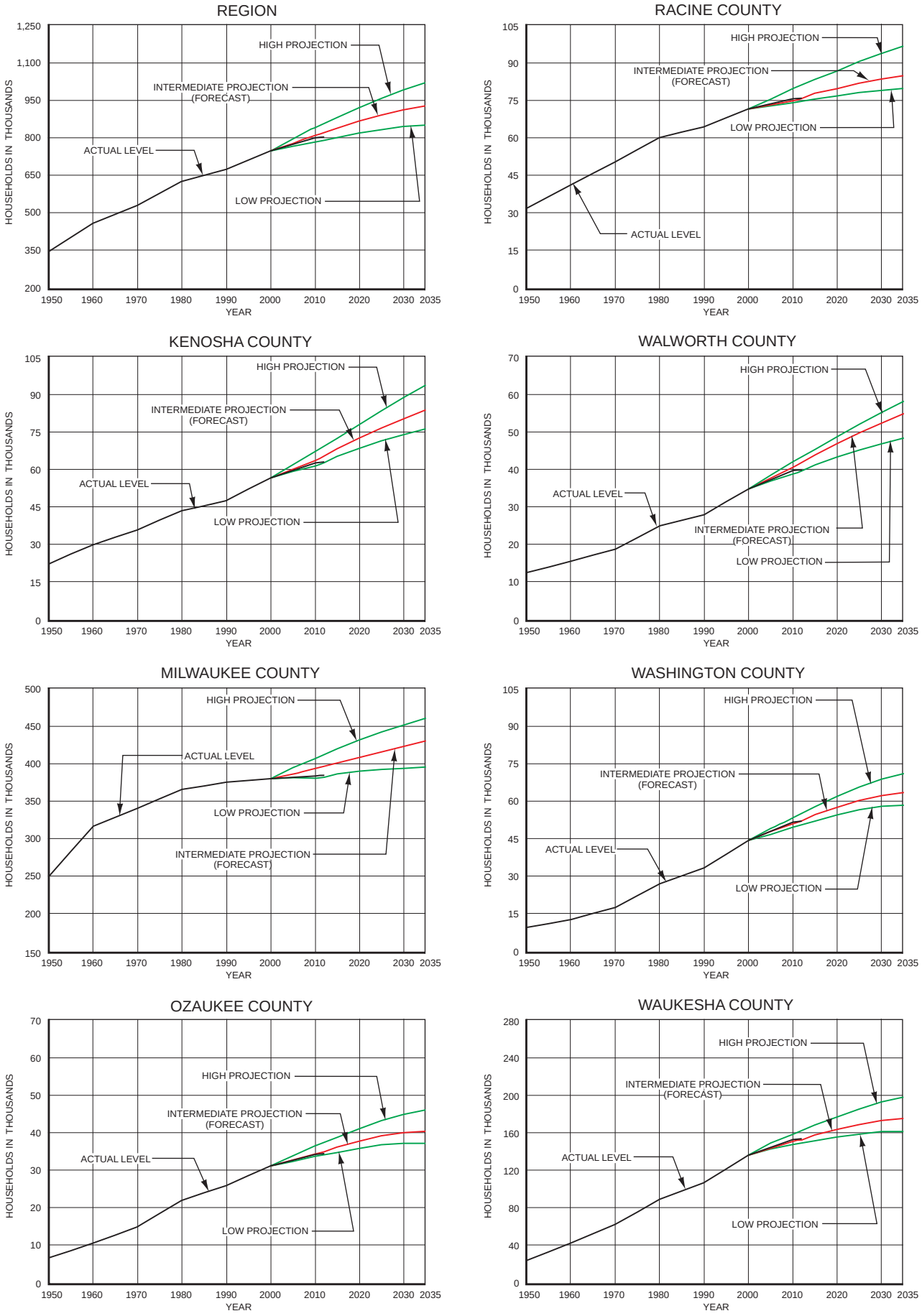
ACTUAL AND PROJECTED REGIONAL AND COUNTY EMPLOYMENT LEVELS: 1970-2035



Source: U.S. Bureau of Economic Analysis and SEWRPC.

Figure 4

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



Source: U.S. Bureau of the Census, Wisconsin Department of Administration, and SEWRPC.

Table 3

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

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

Source: SEWRPC.

Table 4

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

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

Source: SEWRPC.

Table 5

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

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

Source: SEWRPC.

Table 6

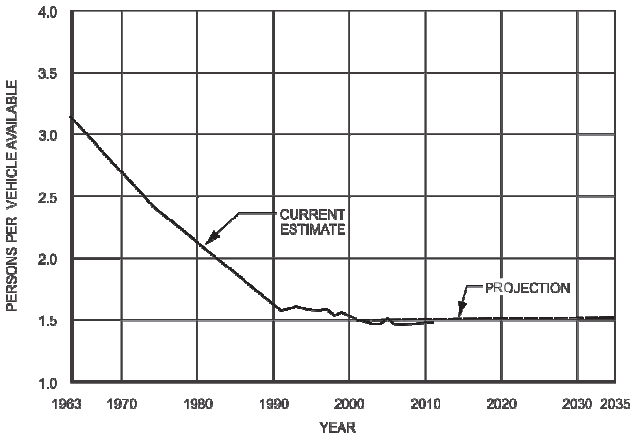
PERSONAL-USE VEHICLE AVAILABILITY IN THE REGION

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

Source: SEWRPC.

Figure 5

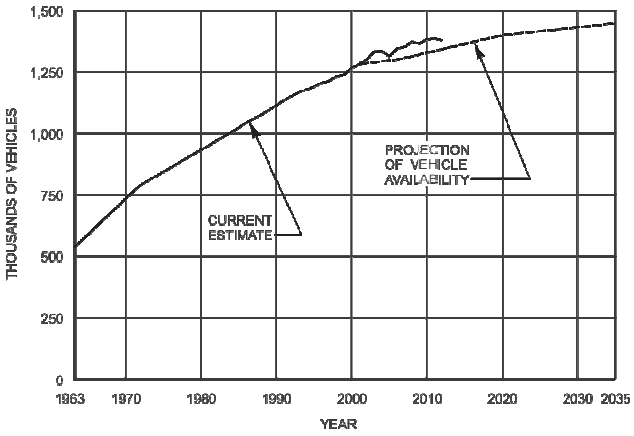
PERSONS PER PERSONAL-USE VEHICLE



Source: SEWRPC.

Figure 6

PERSONAL-USE VEHICLE AVAILABILITY



Source: SEWRPC.

generally steady, long-term trend of continued increase in the number of personal-use vehicles available to residents of the Region. The average annual rate of growth in personal-use vehicle availability within the Region from 1963 through 2012 was 2 percent.

The number of persons per personal-use vehicle within the Region was estimated to be 1.47 in 2012, as shown in Figure 5. The number of persons per personal-use vehicle has been relatively stable for over a decade, with minor fluctuations. The forecast under the year 2035 plan of the number of persons per personal-use vehicle expected long term stability as well. The forecast of total personal-use vehicle availability developed under the long-range regional transportation system plan, is shown in Figure 6, along with historic annual personal-use vehicle availability. The estimated 2012 regional personal-use vehicle availability level was about 3 percent higher than the personal-use vehicle availability level envisioned under the regional transportation system plan.

The number of commercial and municipal trucks available in the Region during 2012 totaled about 121,400 or about 11,600 or 9.6 percent less than the forecast level of 133,000 in 2012 envisioned under the year 2035 regional transportation plan (see Table 7 and Figure 7).

Table 7

COMMERCIAL TRUCK AVAILABILITY IN THE REGION[a]

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

Source: SEWRPC.

Table 8

REPORTED PUBLIC TRANSIT REVENUE RIDERSHIP IN THE REGION

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

[a] *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.*

[b] *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.*

[c] *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.*

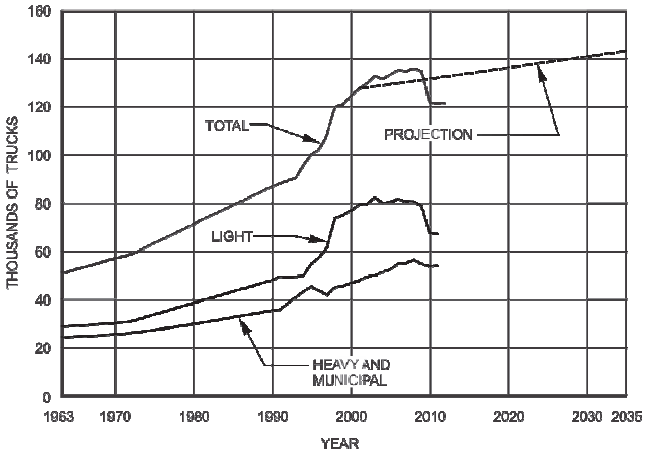
Source: SEWRPC.

PUBLIC TRANSIT RIDERSHIP FORECASTS

Public transit service was provided in the Region in 2012 through 10 intracounty systems and five intercounty systems. Table 8 shows the total reported revenue ridership for each public transit system in the Region. Figure 8 shows the long term trend in public transit ridership in the Region. Between 2000 and 2004 public transit ridership declined by about 13 percent. Between 2004 and 2008 ridership remained somewhat stable with annual fluctuations. Following a decline of transit ridership by about 9 percent in 2009, ridership has remained relatively stable between 2010 and 2012.

Figure 7

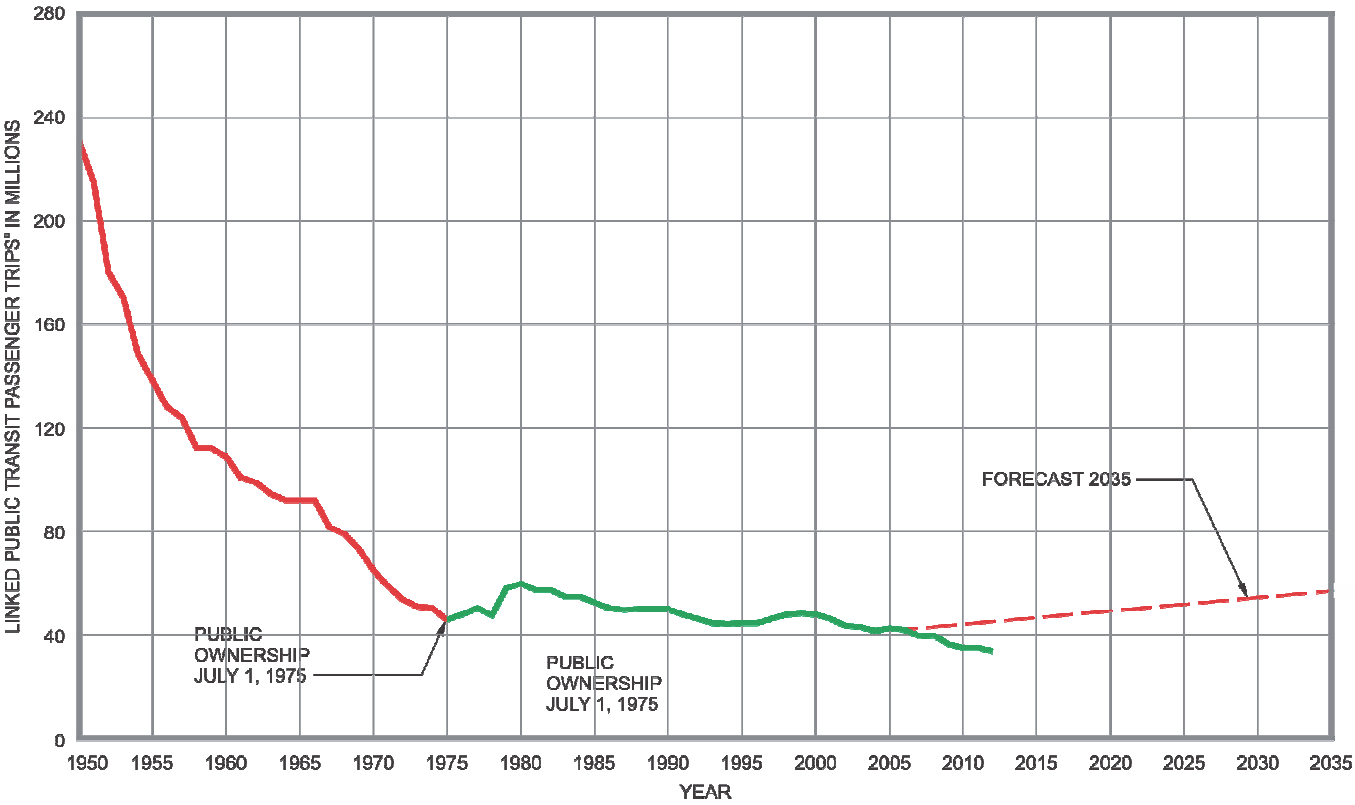
COMMERCIAL USE TRUCK AVAILABLITY



Source: SEWRPC.

Figure 8

HISTORICAL ANNUAL TREND IN TRAVEL BY PUBLIC TRANSIT IN THE REGION



[a]LINKED TRANSIT PASSENGER TRIPS APPROXIMATE THE NUMBER OF ONE-WAY TRIPS MADE ON THE TRANSIT SYSTEM BETWEEN SPECIFIC ORIGINS AND DESTINATIONS. PASSENGERS ARE COUNTED ONLY ONCE FOR EACH ORIGIN AND DESTINATION, AND TRANSFERS BETWEEN ROUTES ARE NOT COUNTED AS THEY ARE A CONTINUATION OF A SINGLE TRIP. THE ANNUAL LINKED TRANSIT PASSENGER FIGURES REPRESENTED IN THIS GRAPH DIFFER SOMEWHAT FROM THE ANNUAL REVENUE RIDERSHIP FIGURES REPORTED TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION BY THE PUBLIC TRANSIT OPERATORS IN THE REGION AS SHOWN IN TABLE 8. THE RIDERSHIP SHOWN IN TABLE 8 FOR THE URBAN BUS SYSTEMS FOR 1991 AND SUBSEQUENT YEARS INCLUDES A LIMITED NUMBER OF PASSENGERS THAT USED A TRANSIT PASS INSTEAD OF TRANSFER SLIP TO TRANSFER BETWEEN BUS ROUTES. CONSEQUENTLY, THE BUS RIDERSHIP FIGURES SHOWN IN TABLE 8 FOR 1991, 2001, 2011, AND 2012 ARE SOMEWHAT HIGHER THAN THE ESTIMATES OF LINKED TRANSIT PASSENGER TRIPS SHOWN IN THIS FIGURE.

Source: SEWRPC.

Table 9

AVERAGE ANNUAL GROWTH RATE OF AVERAGE WEEKDAY VEHICLE-MILES OF TRAVEL IN SOUTHEASTERN WISCONSIN

	Time Period	Annual Growth Rate
Historic	1960's	4.9
	1970's	2.7
	1980's	2.6
	1990's	1.9
	2001-2005	1.5
	2005-2011	-0.5
Forecast	2000-2007	1.5
	2007-2020	1.0
	2020-2035	0.6

Source: SEWRPC.

Table 10

ARTERIAL VEHICLE-MILES OF TRAVEL WITHIN THE REGION ON AN AVERAGE WEEKDAY

	Year	Vehicle-Miles of Travel (millions)
Estimated Historic	1963	13.1
	1972	20.1
	1991	33.1
	2001	39.7
	2005	42.4
	2011	40.9
Forecast	2011	43.5
	2035	54.0

Source: SEWRPC.

VEHICLE-MILES OF TRAVEL FORECASTS

Table 9 presents the historic and forecast future (under the year 2035 plan) average annual growth rate in vehicle-miles of travel in the Southeastern Wisconsin Region. Table 10 presents historic and forecast future levels in vehicle-miles of travel in the Region. The average annual growth rate in vehicle-miles of travel in the Region has declined over the past 50 years, and is forecast under the year 2035 regional transportation plan to continue to decline.

The base year for the year 2035 plan forecasts of vehicle-miles of travel was 2001, the year of the regional travel and traffic inventories conducted as part of the 2035 plan. Estimates of regional vehicle-miles of travel are prepared approximately every 3 to 5 years using traffic counts conducted by the Wisconsin Department of Transportation (WisDOT). WisDOT conducts traffic counts in about one-third of the Region's counties on an annual basis. The latest regional vehicle-miles of travel estimate is for the year 2011, using WisDOT traffic counts in the Region for the years 2010 through 2012. Forecast year 2011 vehicle-miles of travel in the Region under the year 2035 regional transportation plan totaled 43.5 million arterial system vehicle-miles of travel on an average weekday, approximately 2.6 million vehicle-miles, or 6.4 percent greater than the estimated 40.9 million arterial system vehicle-miles of travel on an average weekday in 2011.

SUMMARY AND CONCLUSIONS

Review of forecasts attendant to the year 2035 regional transportation plan including population, households, employment, vehicle availability, public transit ridership, and vehicle miles-of-travel indicate that these forecasts remain valid for long-range transportation planning.

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Chapter 4

REVIEW OF TRANSPORTATION SYSTEM PERFORMANCE

INTRODUCTION

In this chapter the current performance of the transportation system is assessed and is compared to historic system performance, as data permits. Transportation system performance is reviewed with respect to pavement condition, bridge condition, traffic congestion, traffic crash history, arterial highway and transit travel time, and transportation system air pollutant emissions.

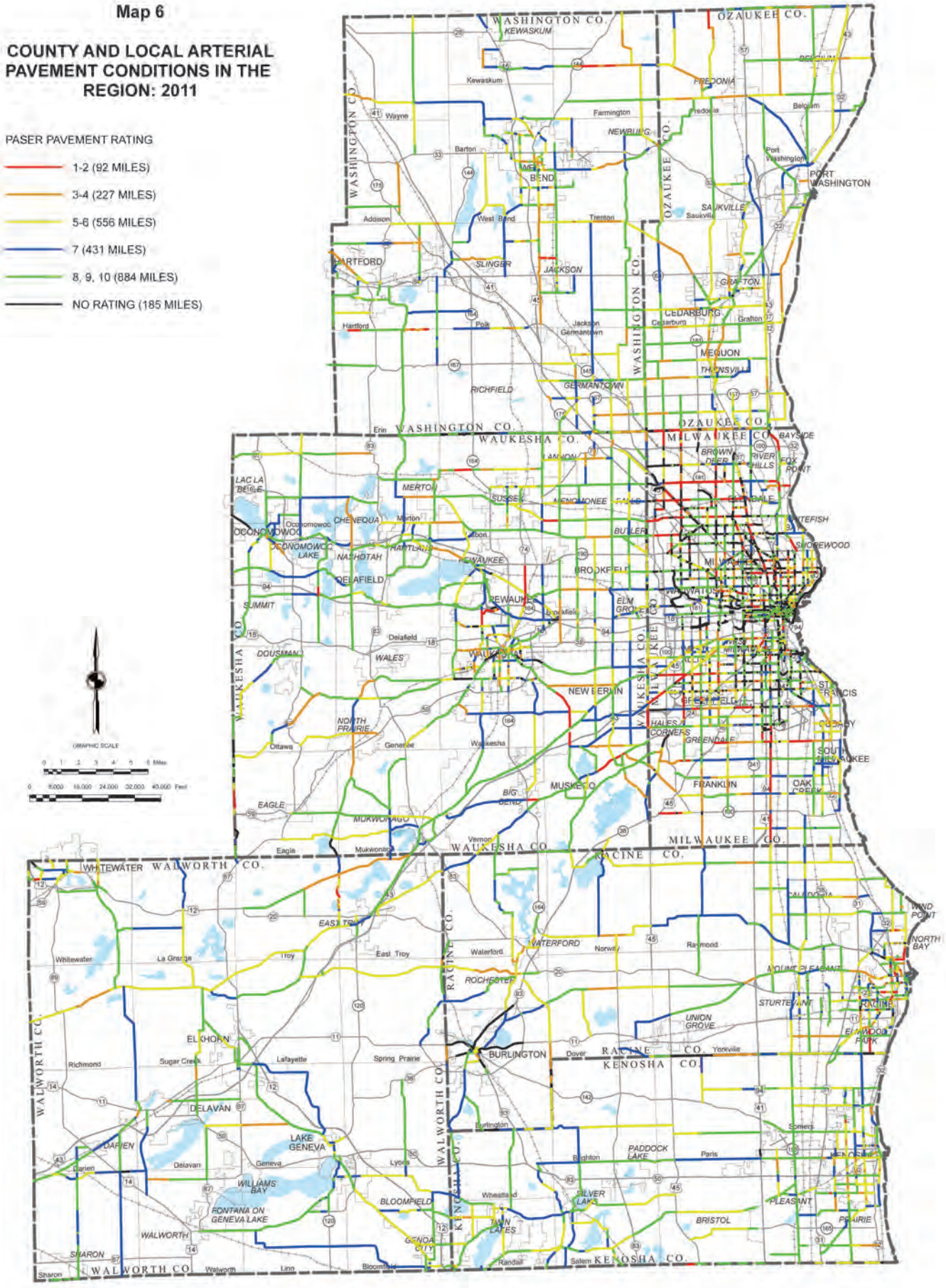
PAVEMENT AND BRIDGE CONDITION

The assessment of existing pavement condition in Southeastern Wisconsin is typically accomplished through one of two pavement evaluation techniques. The *Pavement Surface Evaluation and Rating (PASER)* technique is used for county and municipal roads. The PASER system is a rating system which employs visual inspection techniques to assess pavement condition. Pavement ratings range from 1 (which is a failed roadway that needs total reconstruction) to 10 (which is a pavement in excellent condition and typically reflects new construction). In general, the rating system is such that those pavements rated 8 through 10 require little to no maintenance; a rating of 7 indicates a pavement that requires routine maintenance such as crack filling; ratings of 5 or 6 indicate a pavement where preservative treatments such as sealcoating or overlays are considered; ratings of 3 or 4 indicate a pavement where structural improvement such as recycling or overlay is required; and ratings of 1 or 2 indicate a pavement which is severely deteriorated and requires reconstruction. In Southeastern Wisconsin the PASER system is used by County and local governments to evaluate the condition of the roads under their jurisdiction every two years as required under State Statute. Map 6 documents the pavement condition of the county and local arterial streets and highways in the Region under the PASER system for the year 2011. As shown in Table 11, pavement condition of the county and local arterial street system in the Region remained about the same between 2005 and 2011.

The Wisconsin Department of Transportation (WisDOT) uses the International Roughness Index (IRI) to assess pavement condition and the quality of riding comfort of state highways, including Interstate Highways, United States Highways, and State Trunk Highways. WisDOT uses special equipment which physically measures the profile of a roadway along the traveled way. The IRI is measured on a scale of 0 to 12, with pavements with a 0 to 2.5 rating having no ride problems, a 2.5 to 2.75 rating having minor ride problems, a 2.75 to 3.0 having moderate ride problems, and greater than 3.0 having severe ride problems. Map 7 documents the IRI rating of the arterial streets and highways in the Region under State jurisdiction for the year 2012. Pavement condition of state highways in the Region remained about the same between 2006 and 2012, as shown in Table 12.

Map 6

COUNTY AND LOCAL ARTERIAL PAVEMENT CONDITIONS IN THE REGION: 2011



Source: Wisconsin Department of Transportation and SEWRPC.

Table 11

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

PASER Pavement Rating	2005		2007		2011	
	Local and County Arterial (Miles)	Percent of Total	Local and County Arterial (Miles)	Percent of Total	Local and County Arterial (Miles)	Percent of Total
1 and 2	132	5.7	81	3.5	92	3.9
3 and 4	233	10.2	212	9.2	227	9.6
5 and 6	431	18.8	561	24.5	556	23.4
7	376	16.4	423	18.4	431	18.1
8, 9, and 10	907	39.5	846	36.9	884	37.2
No Rating	215	9.4	171	7.5	185	7.8
Total	2,294	100.0	2,294	100.0	2,375	100.0

Source: Wisconsin Department of Transportation and SEWRPC.

WisDOT also maintains an assessment of the sufficiency of the bridge structures within Southeastern Wisconsin. Bridge sufficiency ratings are calculated using four separate factors to obtain a numeric value which, when combined, provide the overall sufficiency rating. The four factors are (1) structural adequacy and safety; (2) serviceability and functional obsolescence (including consideration of number of lanes, average daily traffic, approach roadway width, and bridge roadway width); (3) essentiality for public use; and (4) special reductions. Bridge structure sufficiency ratings range from 0 to 100, with 0 being a failing structure and 100 being a structure in perfect condition. Generally, the structure sufficiency ratings relate to need, and prioritization of funding for bridge rehabilitation and replacement. WisDOT considers a bridge structure with a bridge sufficiency rating between 80 and 100 as not in need of rehabilitation. A bridge structure is in need of rehabilitation if its sufficiency rating is between 50 and 79. A bridge structure is in need of replacement if its sufficiency rating is less than 50.

Table 13 displays the number of bridge structures in Southeastern Wisconsin within each of the above mentioned ranges of sufficiency rating for the years 2006, 2010, and 2012. Map 8 displays the 2012 sufficiency ratings for bridge structures in Southeastern Wisconsin. Some improvement in bridge sufficiency is apparent between 2006 and 2012.

TRAFFIC CONGESTION

Traffic congestion on the arterial street and highway system may be categorized as moderate, severe, or extreme with each level described by travel speed, operating conditions, and level of service, as shown in Table 14. Freeway system traffic congestion can be further described and quantified. The freeway system represents less than 10 percent of total arterial system mileage, but carries nearly 40 percent of total regional average weekday vehicle-miles of travel. A much greater proportion of the freeway system—as compared to the surface arterial street system—experiences extreme and severe peak hour traffic congestion, and experiences traffic congestion during hours of the weekday other than the peak traffic hours. The additional measurement of traffic congestion on the freeway system identifies for each segment of the freeway system the number of hours of congestion experienced on an average weekday at each level of congestion: extreme, severe, and moderate.

Assessment of Historic and Existing Traffic Congestion

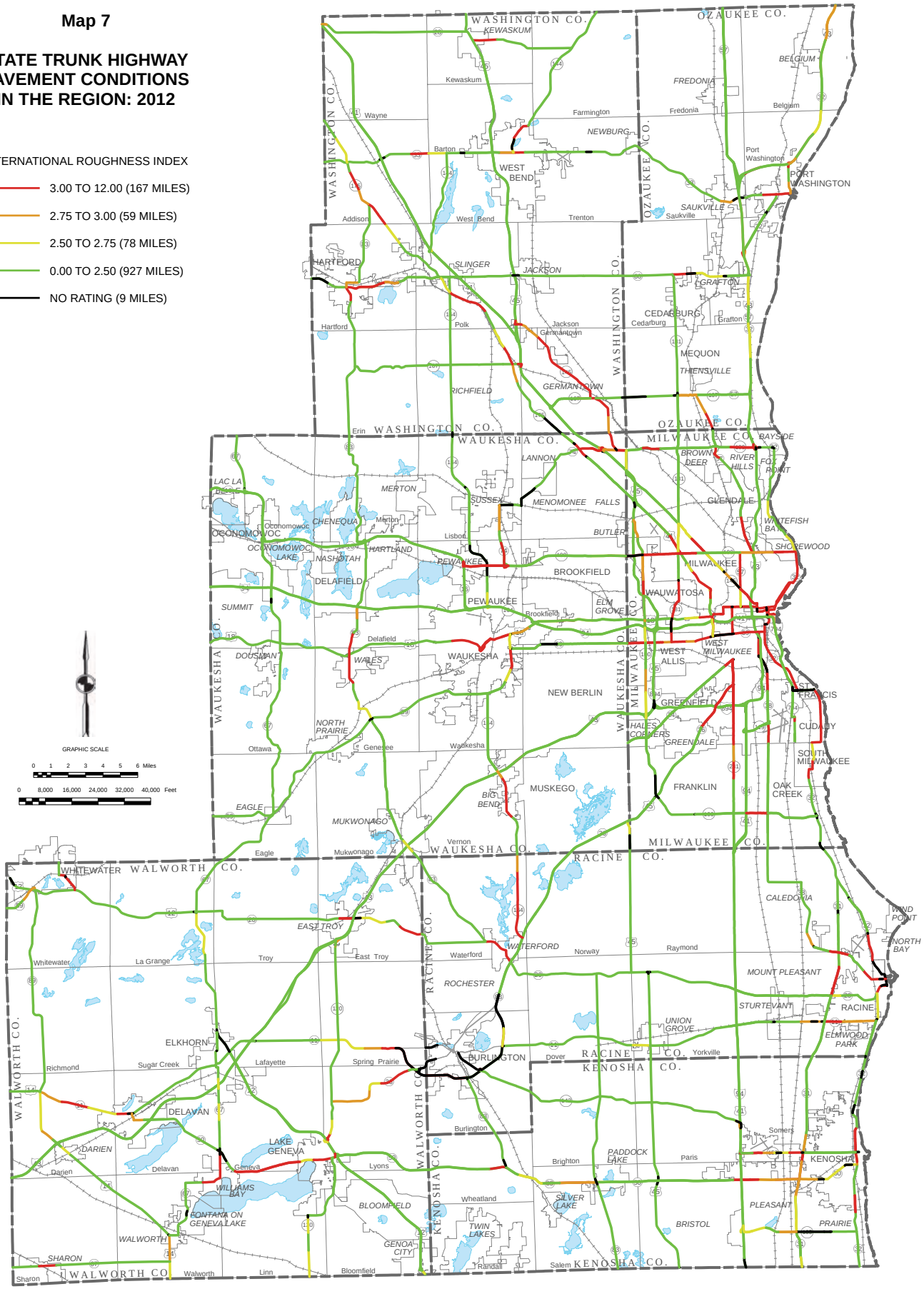
The recurring existing and historic traffic congestion on the arterial street and highway system was estimated during the preparation of the year 2035 regional transportation plan, and is documented in Chapter III, "Inventory of Transportation Facilities and Services," of SEWRPC Planning Report No. 49. Table 15 and Map 9 present the existing level of traffic congestion experienced in the year 2011 on the arterial street and highway system, and

Map 7

STATE TRUNK HIGHWAY PAVEMENT CONDITIONS IN THE REGION: 2012

INTERNATIONAL ROUGHNESS INDEX

- 3.00 TO 12.00 (167 MILES)
- 2.75 TO 3.00 (59 MILES)
- 2.50 TO 2.75 (78 MILES)
- 0.00 TO 2.50 (927 MILES)
- NO RATING (9 MILES)



Source: Wisconsin Department of Transportation and SEWRPC.

Table 12

STATE TRUNK HIGHWAY PAVEMENT CONDITION IN THE REGION: 2006, 2009, and 2012

International Roughness Index	2006		2009		2012	
	State Trunk Highway (Miles)	Percent of Total	State Trunk Highway (Miles)	Percent of Total	State Trunk Highway (Miles)	Percent of Total
0.00 to 2.50	916	74.2	883	71.4	927	74.8
2.50 to 2.75	76	6.2	89	7.2	78	6.3
2.75 to 3.00	61	4.9	64	5.2	59	4.8
3.00 to 12.00	161	13.0	176	14.2	166	13.4
No Rating	20	1.6	25	2.0	9	0.7
Total	1,234	100.0	1,237	100.0	1,239	100.0

Source: Wisconsin Department of Transportation and SEWRPC.

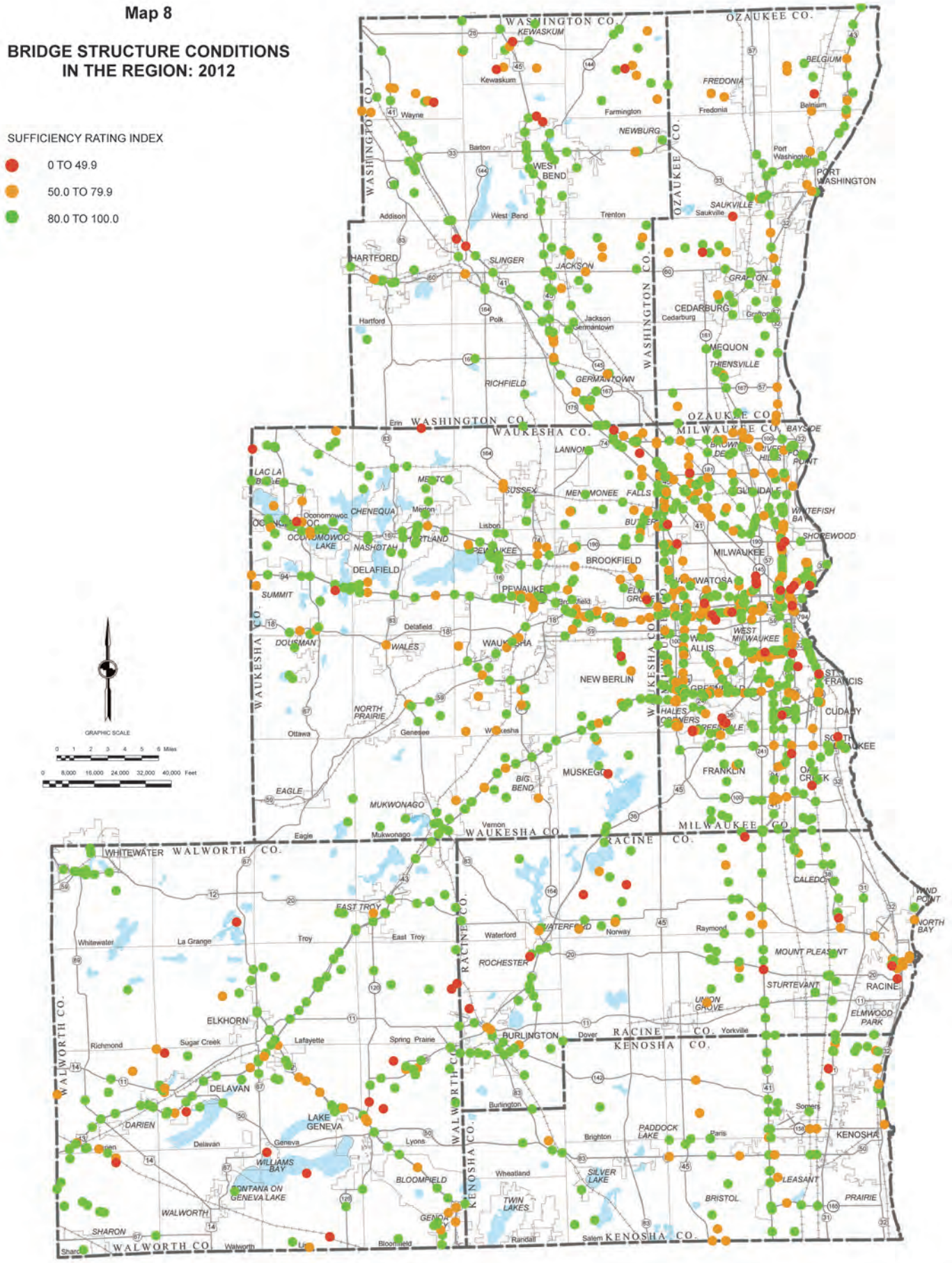
compare that level of congestion to the level experienced in 2001. Traffic congestion did not significantly change between 2001 and 2011. (Traffic congestion is estimated approximately every three to five years, as WisDOT conducts traffic counts of the arterial street and highway system on a cycle of approximately three years.).

Table 16 and Figure 9 compare the estimated change in traffic congestion on the arterial street and highway system over the years 1963, 1972, 1991, 2001, and 2011. The miles of arterials experiencing traffic congestion declined from 217 miles in 1963 to 160 miles in 1972, even though traffic grew 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 grew during that period by nearly 65 percent, as regional employment and households increased by about 30 percent, and vehicle occupancy and carpooling significantly declined. The decline in vehicle occupancy from an average of 1.39 persons per vehicle to 1.22 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, followed by a decrease to an estimated 274 miles in 2011. From 1991 to 2001, traffic is estimated to have increased by about 21 percent. However, traffic is estimated to have decreased from 2001 and 2011 by about 3 percent. The modest decrease in congested segments of the arterial street and highway system from 2001 to 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 between 2001 and 2011.

While the extent of congestion on the Milwaukee area freeway system is estimated to have increased between 2001 and 2011, some segments of the freeway system have experienced a decrease in the severity of congestion. This decrease in severity of congestion is likely attributed to the requisite maintenance and reconstruction of the freeway system. Most notably in 2011, traffic volumes on IH 894 between the Hale Interchange and Zoo Interchange, IH 43/894 between the Hale Interchange and Mitchell Interchange, IH 43/94 between the Mitchell Interchange and Zoo Interchange, and USH 45 south of W. Hampton Avenue were likely impacted by the necessary lane closures attendant to the resurfacing of IH 94 generally between STH 16 and the Stadium Interchange and the reconstruction and reconfiguration of the Mitchell Interchange in Milwaukee County. It is anticipated that traffic volume estimates on various segments of the Milwaukee area freeway system will continue to be impacted as the Milwaukee area freeway system is reconstructed segment by segment.

Map 8

BRIDGE STRUCTURE CONDITIONS IN THE REGION: 2012



Source: Wisconsin Department of Transportation and SEWRPC.

Table 13

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

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

[a]*Sufficiency ratings for bridges ranges from 0 to 100 and are used to prioritize funding for improvement of a particular bridge. WisDOT considers a bridge to be eligible for rehabilitation when its sufficiency rating is less than 80 and to be eligible for replacement funding when its sufficiency rating is less than 50.*

Source: Wisconsin Department of Transportation and SEWRPC.

Table 14

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.

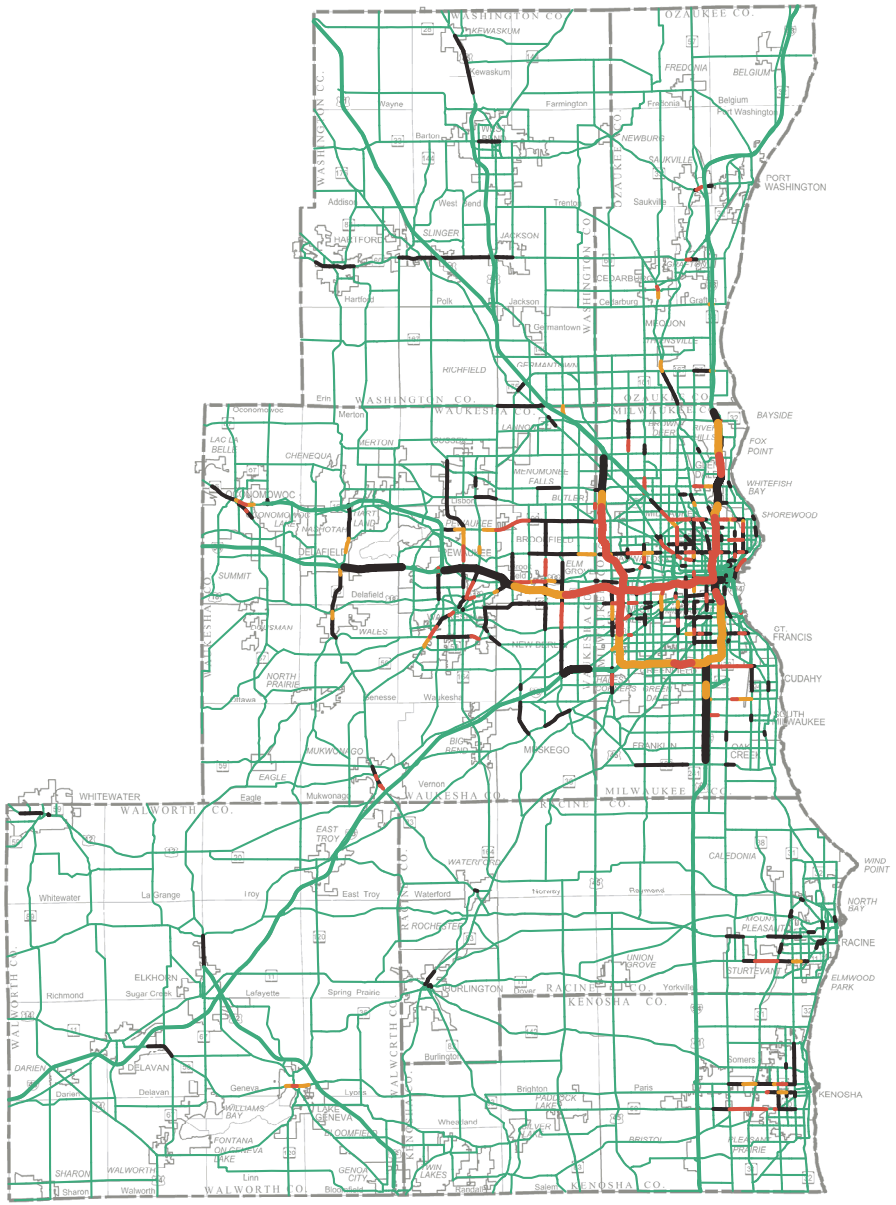
Surface Arterial			
Level of Traffic Congestion	Level of Service	Average Speed	Operating Conditions
None	A and B	70 to 100 percent of free-flow speed	Ability to maneuver within traffic stream is unimpeded. Control delay at signalized intersections is minimal.
None	C	50 to 100 percent of free-flow speed	Restricted ability to maneuver and change lanes at mid-block 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.

Source: SEWRPC.

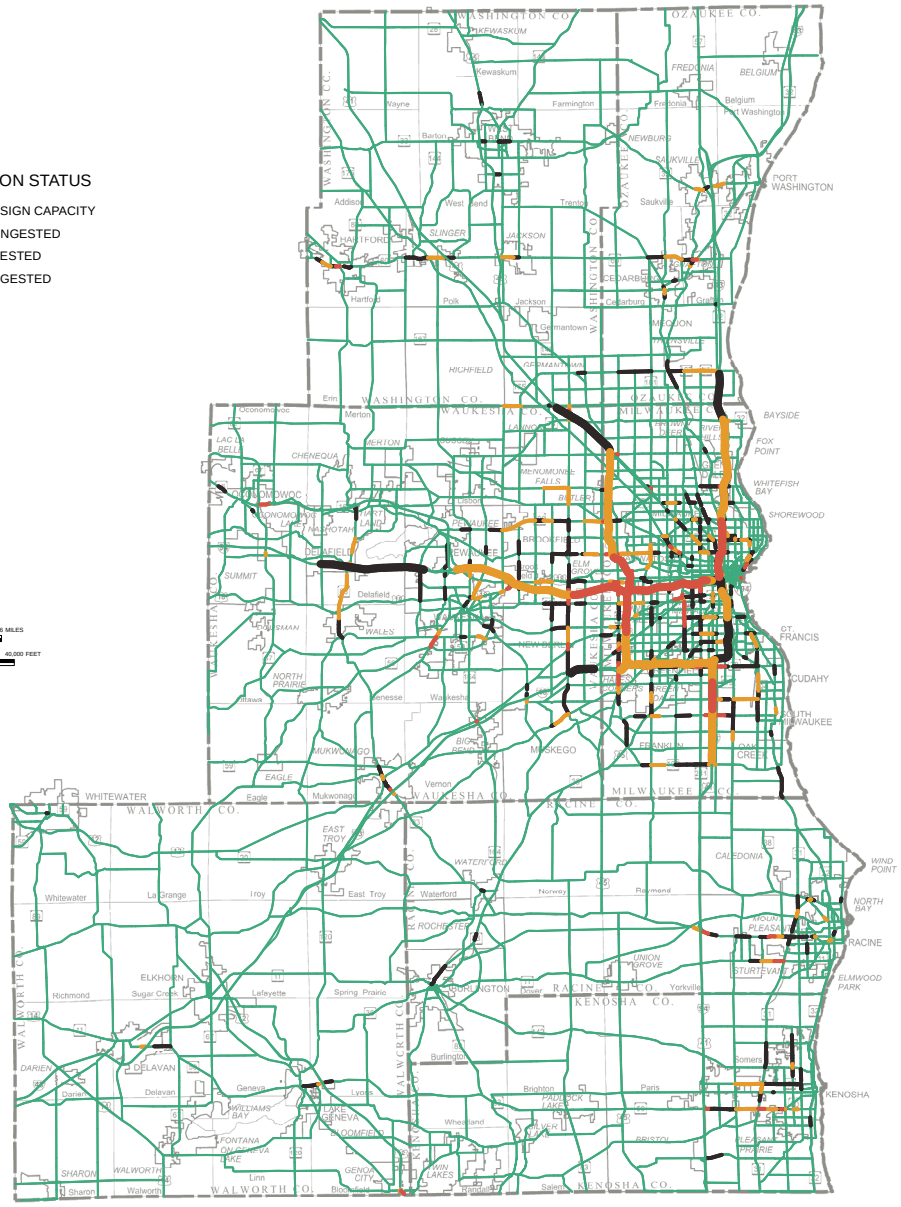
Map 9

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

2001



2011[a]



FACILITY CONGESTION STATUS

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

GRAPHIC SCALE

0 2 4 6 MILES

0 10,000 20,000 30,000 40,000 FEET

Source: SEWRPC.

[a] 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 15

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

2001									
	Under or At Design Capacity		Over Design Capacity						
			Moderate Congestion		Severe Congestion		Extreme Congestion		
County	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Total Mileage
Kenosha	303.2	95.5	9.9	3.1	1.5	0.5	3.0	0.9	317.6
Milwaukee	641.1	82.0	72.1	9.2	24.7	3.2	43.4	5.6	781.3
Ozaukee	244.2	97.4	4.3	1.7	1.5	0.6	0.8	0.3	250.8
Racine	341.3	96.8	9.4	2.7	0.5	0.1	1.4	0.4	352.6
Walworth	430.1	98.4	5.1	1.2	1.1	0.3	0.3	0.1	436.6
Washington	391.1	96.2	15.4	3.8	- -	- -	- -	- -	406.5
Waukesha	650.9	87.2	70.7	9.5	11.4	1.5	13.4	1.8	746.4
Region	3,001.9	91.2	186.9	5.7	40.7	1.2	62.3	1.9	3,291.8

2011									
	Under or At Design Capacity		Over Design Capacity						
			Moderate Congestion		Severe Congestion		Extreme Congestion		
County	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Mileage	Percent of Total	Total Mileage
Kenosha	303.2	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

Source: SEWRPC.

Table 16

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

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

Source: SEWRPC.

Table 17

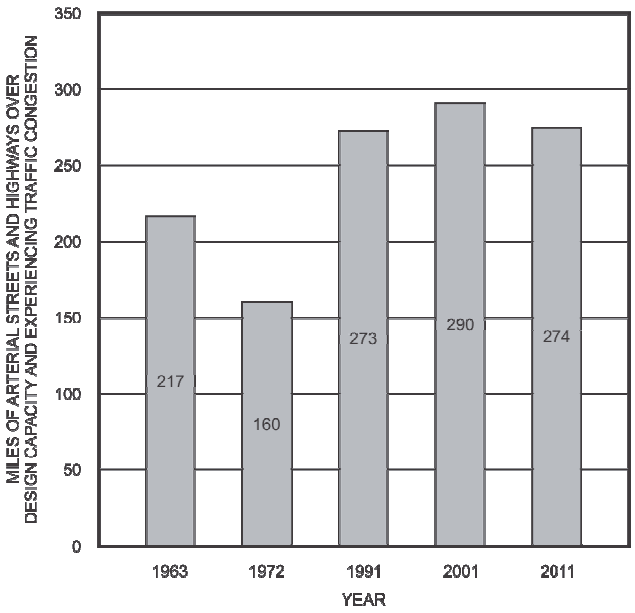
ESTIMATED EXISTING SOUTHEASTERN WISCONSIN FREEWAY SYSTEM TRAFFIC CONGESTION ON AN AVERAGE WEEKDAY: 1972, 1991, 2001, 2005, and 2011

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	- -	- -	- -	- -

Source: SEWRPC.

Figure 9

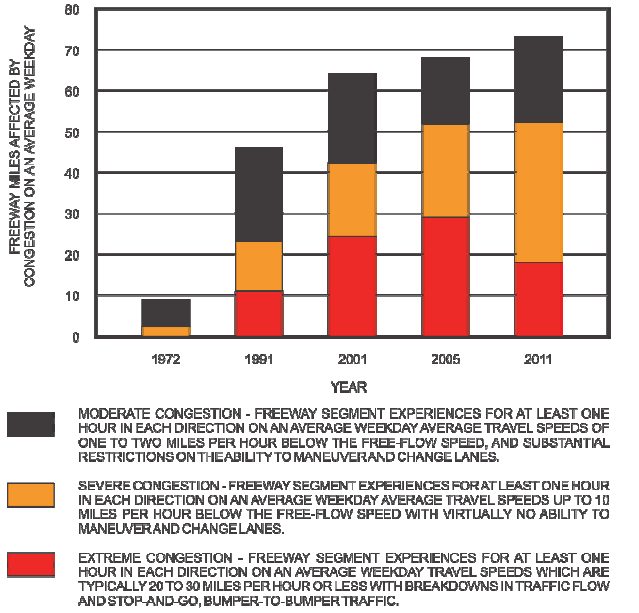
TRAFFIC CONGESTION ON THE ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: 1963, 1972, 1991, 2001, AND 2011



Source: SEWRPC.

Figure 10

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



Source: SEWRPC.

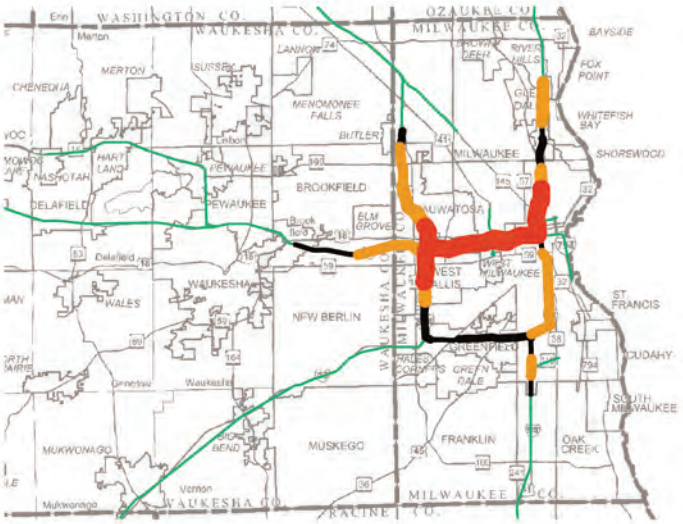
Map 10

HISTORIC TRAFFIC CONGESTION ON THE SOUTHEASTERN WISCONSIN FREEWAY SYSTEM

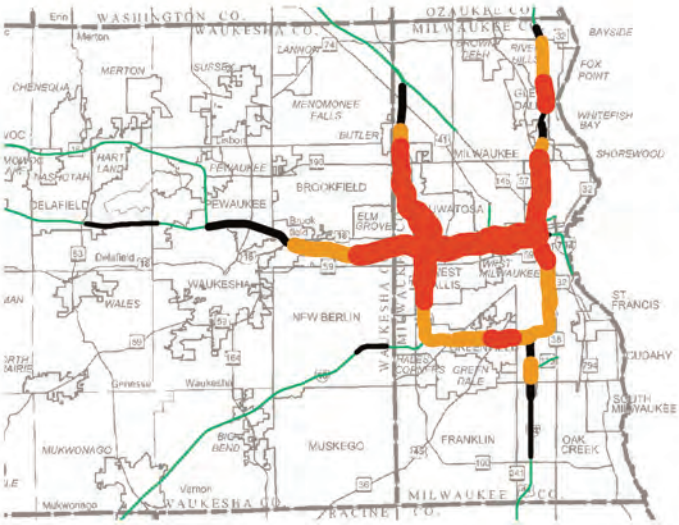
1972

1980

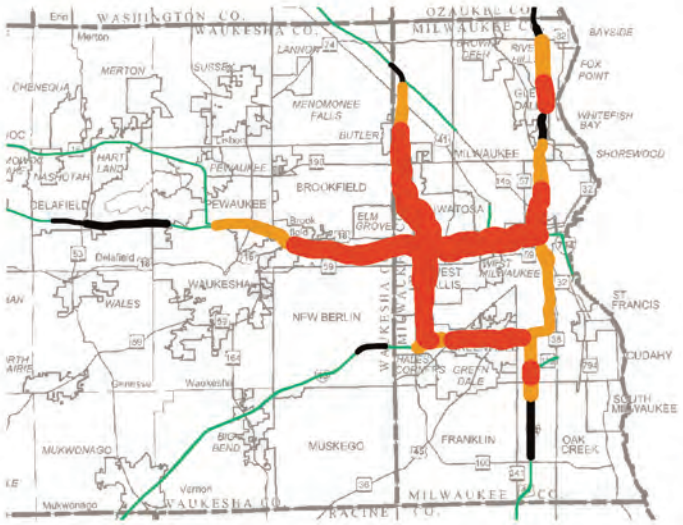
1991



2001

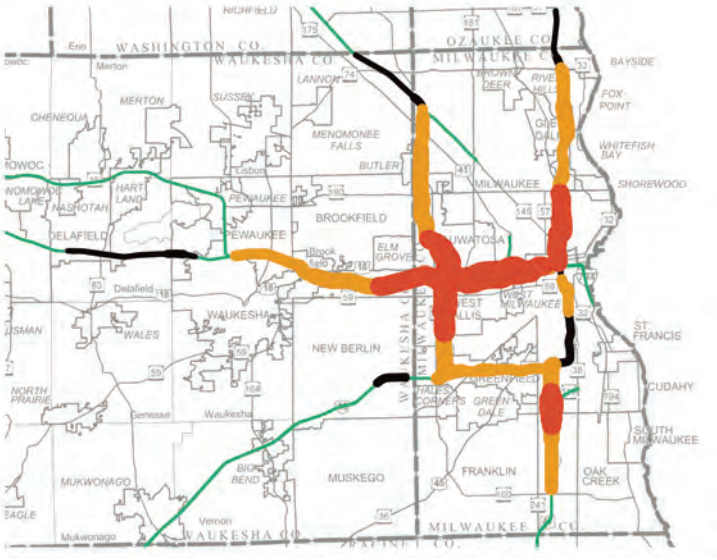


2005



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	–	–	–
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

2011[a]



[a] 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.

Source: Wisconsin Department of Transportation and SEWRPC.

Table 18

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			Total Mileage
		Moderate Congestion	Severe Congestion	Extreme Congestion	
2001	1,114	119	32	51	1,316
2011	1,126	98	76	31	1,331

Source: Wisconsin Department of Transportation and SEWRPC.

Table 17, Figure 10, and Map 10 present more detail on existing and historic congestion on the freeway system, including the number of hours of congestion experienced on congested freeway segments on an average weekday.

Congestion on Designated Truck Routes and National Highway System

Table 18 and Map 11 present the existing level of traffic congestion experienced on designated truck routes and the National Highway System in the year 2011 and compared to the congestion level experience in 2001. The State of Wisconsin maintains a truck operations map that identifies streets and highways for operation of vehicles and combination of vehicles for which the overall lengths cannot be limited. In addition, the truck operators map identifies restricted truck routes where the overall lengths are limited. The National Highway System includes highways important to the nation's economy, defense, and mobility. The coverage of these two systems illustrates the ability of freight to move throughout the region. The miles of designated truck routes and National Highway System carrying traffic volumes exceeding their design capacity increased from 202 miles in 2001 to 205 miles in 2011, or by about 1.5 percent. As congestion on these roadways increase, the travel time of freight movement is adversely affected.

VEHICLE TRAFFIC CRASHES

Vehicular crashes in the Region totaled about 35,600 in 2012, representing a nearly 27 percent decline over the 18-year period 1994-2012 (see Figure 11).[1] Crashes involving an injury or a fatality, which represent about one-third of all crashes, have decreased by about 35 percent over the period of 1994-2012. Property damage only crashes decreased over the same time period by about 24 percent to about 24,200 crashes, representing the remaining two-thirds of all crashes. The overall decrease in vehicular crashes since 1994 is particularly significant given the increase in annual vehicle miles traveled over that same period of about 17 percent.

Fatal Crashes

There were 140 vehicular crashes in the Region in 2012 that resulted in 156 fatalities. As shown in Figure 12, roadway crash fatalities over the period 1994-2005 dropped from a peak of 190 in 2005 to a low of 130 fatalities in 2009, and then rose again by about 20 percent over the period 2009-2012. Figure 13 presents selected characteristics of vehicle crash related fatalities in the Region during 2012. Alcohol was cited as a contributing factor in about 40 percent of all fatalities in 2012.

Serious Injury Crashes

There were in 2012 about 830 vehicle crashes in the Region that resulted in at least one serious injury. While serious injury vehicular crashes increased by about 3 percent since 2011 as shown in Figure 14, such injury crashes have declined significantly—about 62 percent—since 1994.

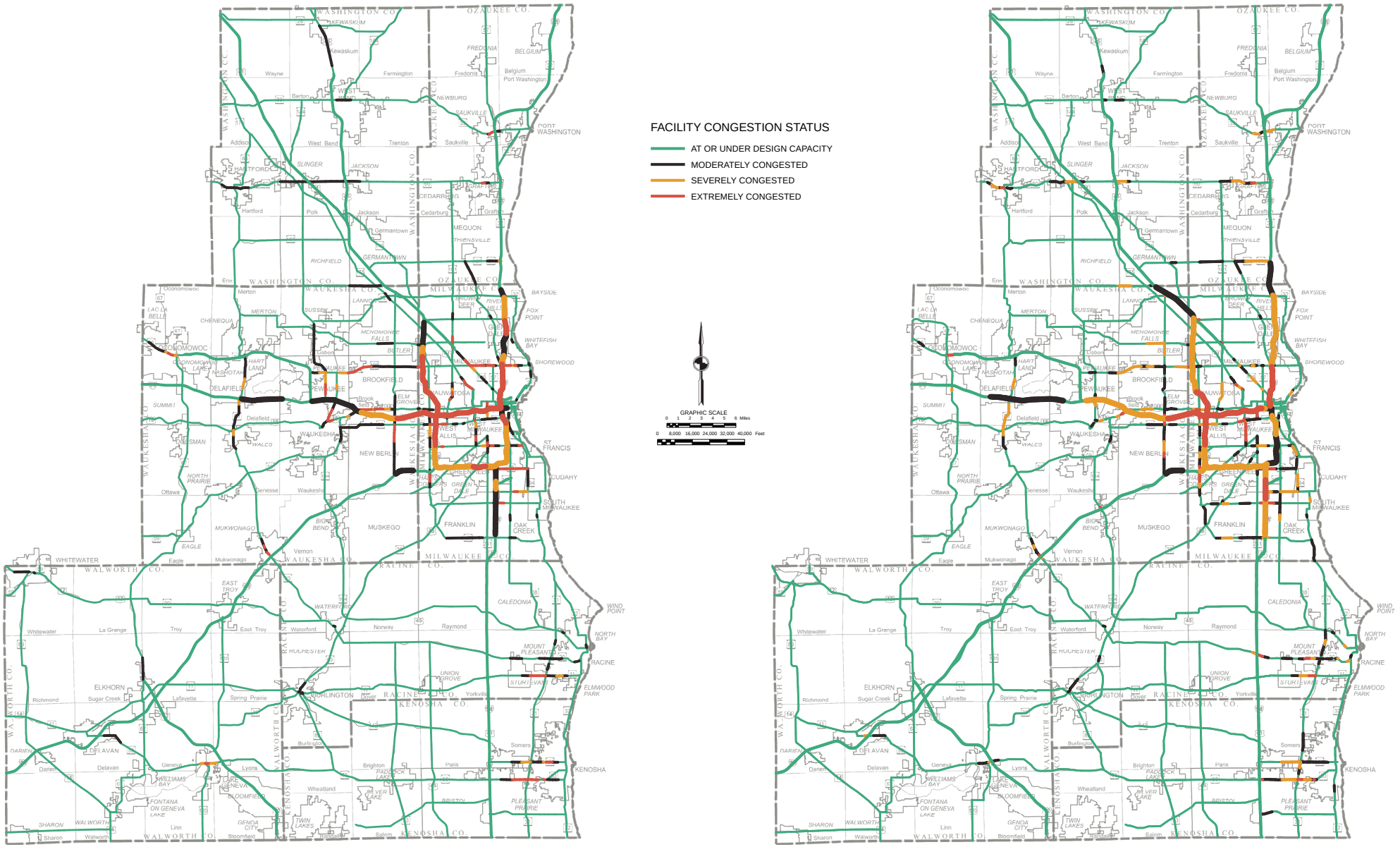
[1] *A reportable crash is any crash resulting in: 1) an injury to or death of any person; 2) damage to government-owned, non-vehicle property to an apparent extent of $200 or more: and, 3) damage to a government-owned vehicle or to property owned by any one person to an apparent extent of $1,000 or more.*

Map 11

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

2001

2011[a]

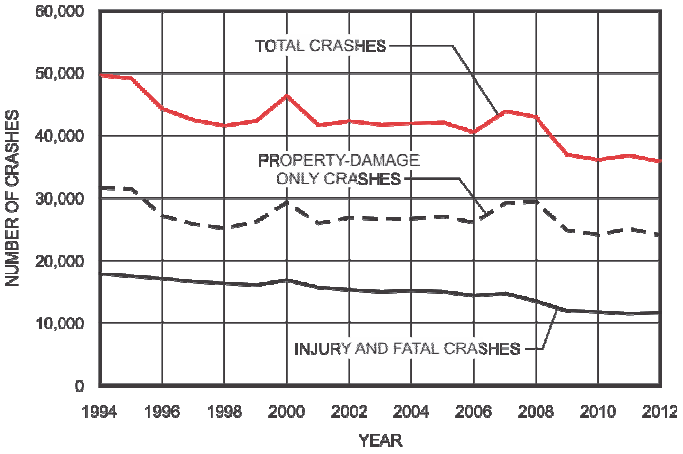


Source: SEWRPC.

[a] 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.

Figure 11

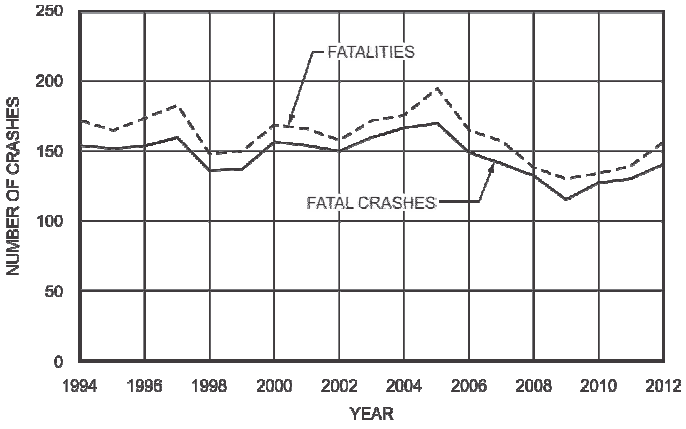
TOTAL, PROPERTY-DAMAGE ONLY, AND INJURY AND FATAL VEHICULAR CRASHES REPORTED IN THE REGION: 1994-2012



Source: Wisconsin Traffic Operations & Safety Laboratory, University of Wisconsin and SEWRPC.

Figure 12

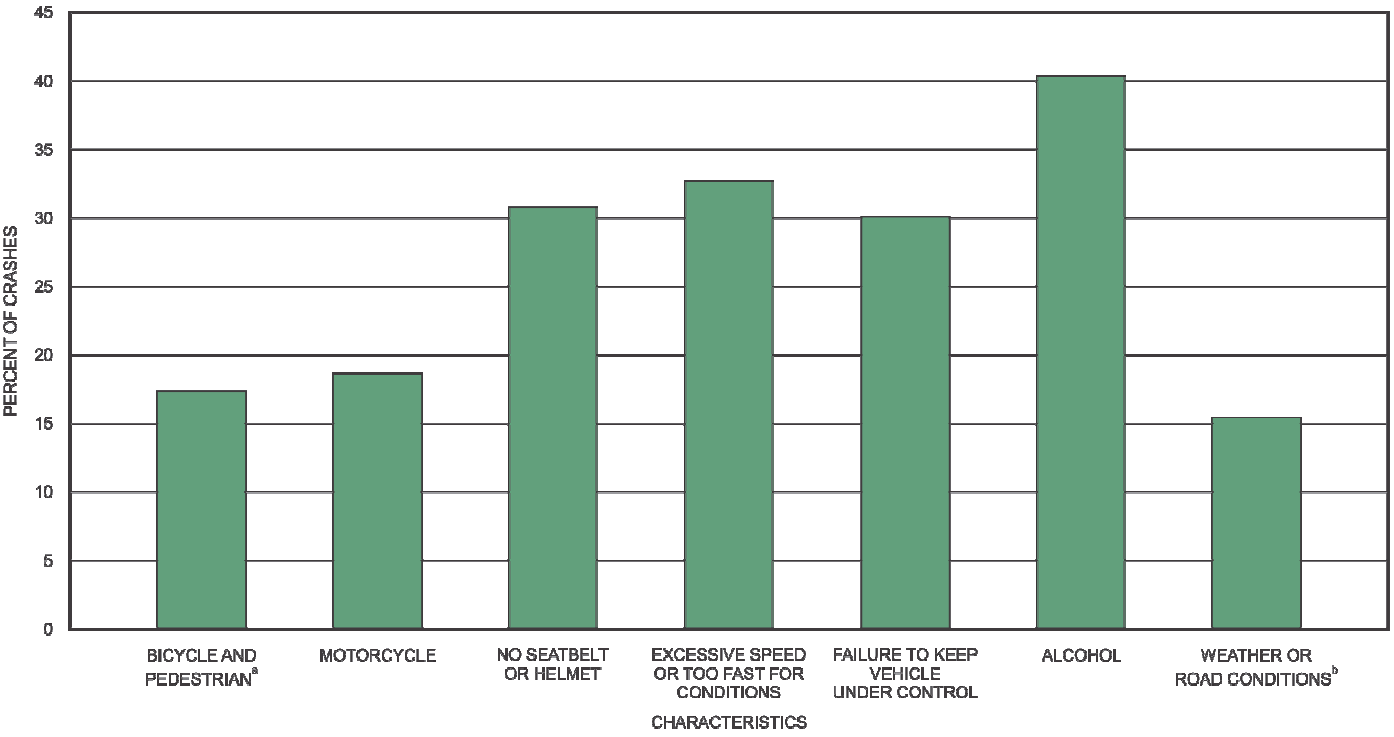
FATAL VEHICULAR CRASHES AND FATALITIES REPORTED IN THE REGION: 1994-2012



Source: Wisconsin Traffic Operations & Safety Laboratory, University of Wisconsin and SEWRPC.

Figure 13

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



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

[b]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.

Source: Wisconsin Traffic Operations & Safety Laboratory, University of Wisconsin and SEWRPC.

Table 19

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

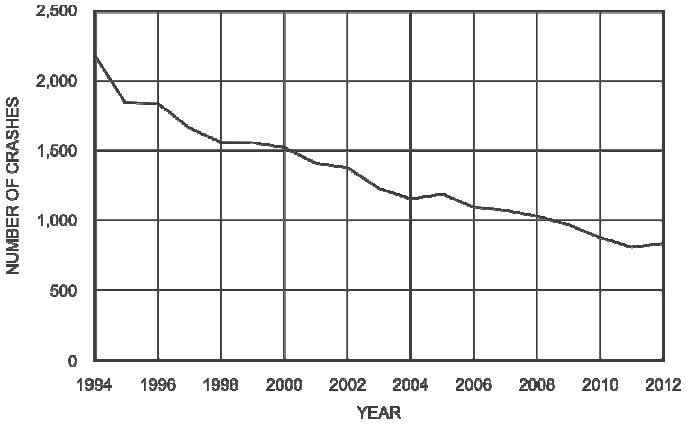
County	Crash Rate per 100 Million Vehicle Miles			
	Freeways		Standard Arterials	
	2005-2009	2008-2012	2005-2009	2008-2012
Kenosha	45.8	45.7	298.4	255.6
Milwaukee	126.0	120.2	408.1	372.8
Ozaukee	41.9	41.0	146.9	119.0
Racine	40.3	33.7	296.8	234.9
Walworth	42.4	38.3	151.6	139.2
Washington	47.9	43.3	231.5	215.0
Waukesha	57.1	53.7	234.1	222.4
Region	79.9	72.5	297.1	265.0
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

Source: Wisconsin Department of Transportation and SEWRPC.

Figure 14

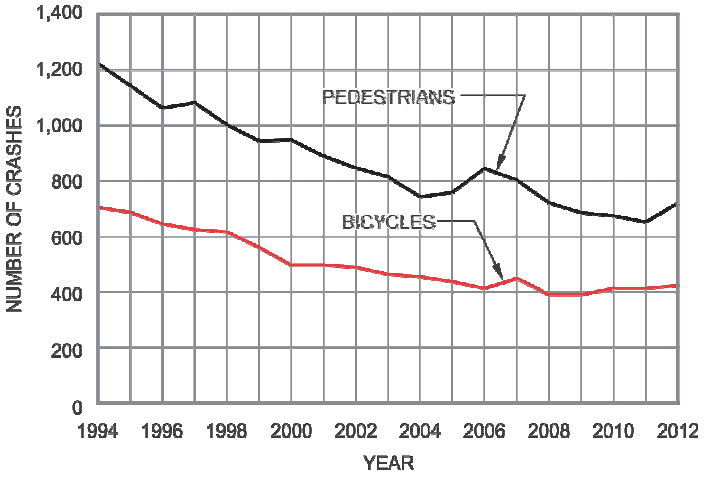
TOTAL NUMBER OF CRASHES RESULTING IN A SERIOUS INJURY REPORTED IN THE REGION: 1994-2012



Source: Wisconsin Traffic Operations & Safety Laboratory, University of Wisconsin and SEWRPC.

Figure 15

TOTAL NUMBER OF VEHICULAR CRASHES INVOLVING BICYCLES FOR PEDESTRIANS AS REPORTED IN SOUTHEASTERN WISCONSIN: 1994-2012



Source: Wisconsin Traffic Operations & Safety Laboratory, University of Wisconsin and SEWRPC.

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 19 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, declined on both the Region's freeway system and the State Trunk Highway portion of the Region's standard arterial system.

Bicycle and Pedestrian Crashes

Figure 15 shows the total vehicular crashes involving either a bicycle or a pedestrian over the 19-year time period of 1994 through 2012. Following about a 44 percent decline in the number of reported vehicular crashes involving a bicycle from 1994 to a low of 391 crashes in 2008, the number of such crashes has increased since 2008 by

Table 20

COMPARISON OF TRANSIT CRASHES AND PASSENGER INJURIES: 2006 - 2011

Characteristic	2006	2007	2008	2009	2010	2011
Crashes[a]	73	69	68	40	64	46
Crashes[a] per 100,000,000 Revenue Miles	261	247	224	145	236	179
Passenger Injuries[b]	158	199	109	100	80	36
Passenger Injuries[b] per 100,000,000 Revenue Miles	564	711	395	363	295	140

[a]*Includes only crashes that resulted in more than $5,000 in property damage.*

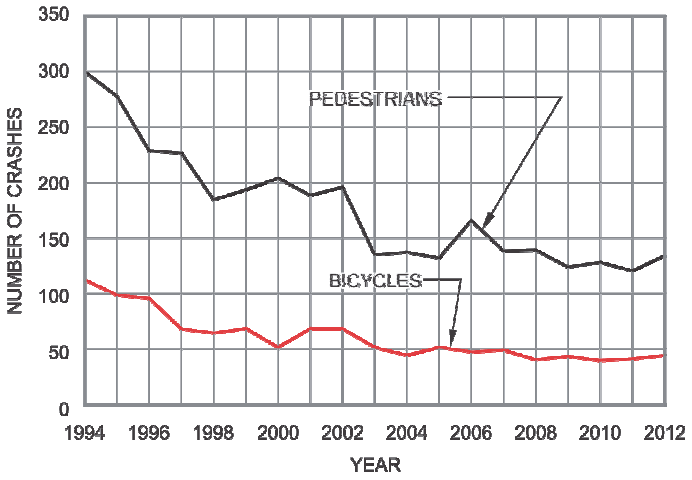
[b]*Includes only passenger injuries that required medical attention.*

Source: National Transit Database and SEWRPC.

about 8 percent, to 424 crashes in 2012. While the number of reported vehicular crashes involving pedestrians increased to 723 crashes in 2012 from the 19-year low of 653 crashes in 2011, such crashes have declined by about 37 percent from 1994 through 2012.

Figure 16

TOTAL NUMBER OF VEHICULAR CRASHES INVOLVING BICYCLES FOR PEDESTRIANS RESULTING IN A FATALITY OR A SERIOUS INJURY AS REPORTED IN SOUTHEASTERN WISCONSIN: 1994-2012



Source: Wisconsin Traffic Operations & Safety Laboratory, University of Wisconsin and SEWRPC.

While the number of reported vehicular crashes involving either a bicycle or a pedestrian accounted for only three percent of all vehicular crashes in the Region in 2012, they accounted for 17 percent of vehicular crashes resulting in a fatality (as shown on Figure 13) and 18 percent of vehicular crashes resulting in a serious injury. Map 12 shows the location of the reported vehicular crashes involving a bicycle or a pedestrian that resulted in either a fatality or serious injury. The number of reported vehicular crashes involving a bicycle that resulted in either a fatality or a serious injury declined between 1994 and 2000 by 56 percent. As shown on Figure 16, following an increase between 2000 and 2002 of about 33 percent, such crashes have only slightly decreased—35 percent—between 2003 and 2012, to 44 crashes. Four of these 44 crashes reported in 2012 resulted in a fatality, consistent with the 19-year annual average of four vehicular crashes involving a bicycle that resulted in a fatality. Figure 16 also shows that the number of reported vehicular crashes involving a pedestrian that resulted in either a fatality or a serious injury decreased between 1994 and 2003 by 59 percent. Except for an increase in 2006, the number has remained steady between 2003 and 2012, with 134 such crashes reported in 2012. Of these 134 crashes, 23 crashes resulted in a fatality, which is slightly above the 19-year annual average of 22 vehicular crashes involving a pedestrian that resulted in a fatality each year.

Transit Crashes and Passenger Injuries

Table 20 provides a comparison of the number and rate of transit crashes resulting in property damage and the number of passenger injuries for the six-year period 2006-2011. The rate of transit crashes have decreased from 261 crashes per 100,000,000 revenue miles in 2006 to 179 crashes per 100,000,000 revenue miles in 2011, or a decrease of about 31 percent over that time period. Following an increase in the rate of passenger injuries from 564 passenger injuries per 100,000,000 revenue miles in 2006 to 711 passenger injuries per 100,000,000 revenue

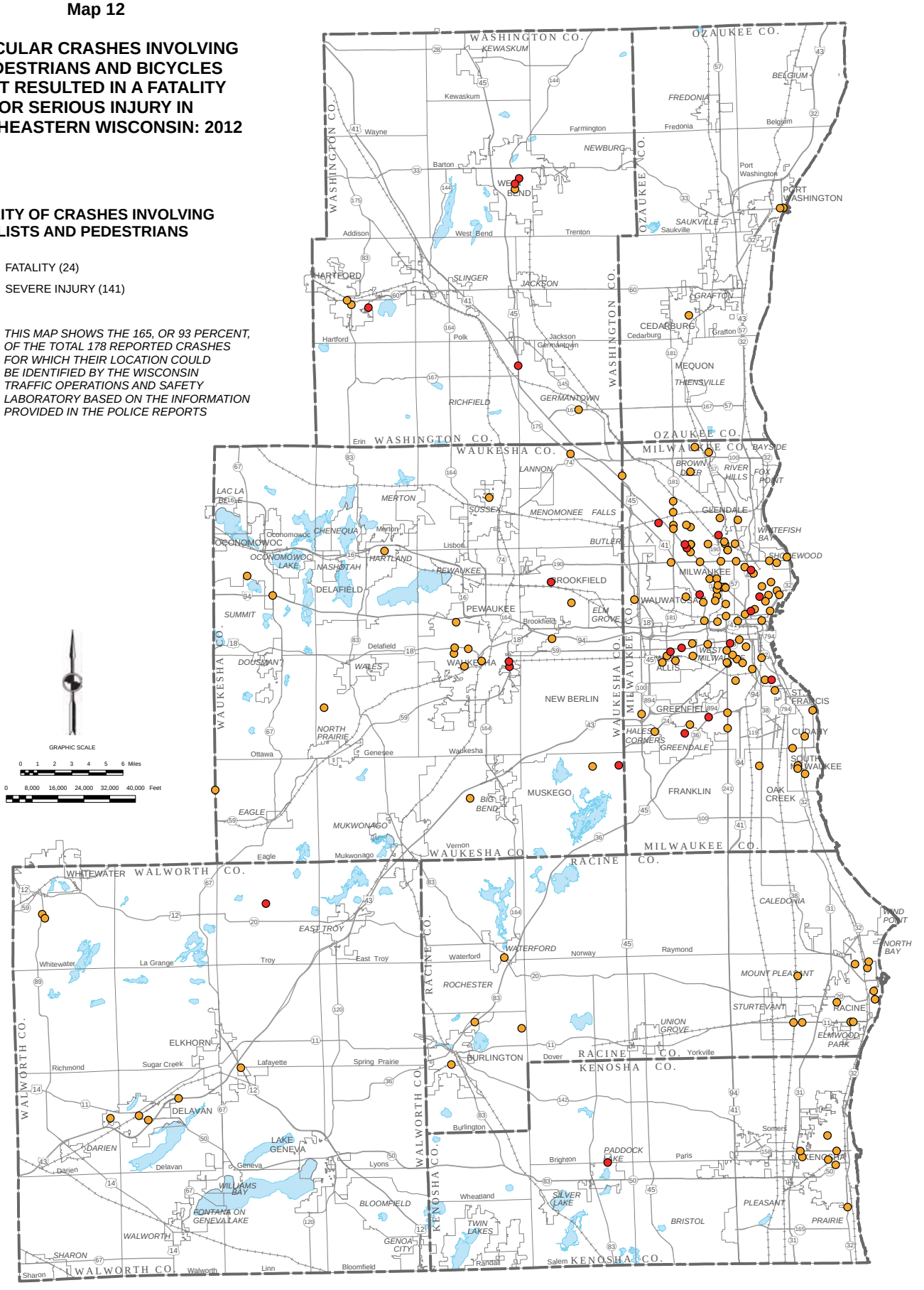
Map 12

VEHICULAR CRASHES INVOLVING PEDESTRIANS AND BICYCLES THAT RESULTED IN A FATALITY OR SERIOUS INJURY IN SOUTHEASTERN WISCONSIN: 2012

SEVERITY OF CRASHES INVOLVING BICYCLISTS AND PEDESTRIANS

- FATALITY (24)
- SEVERE INJURY (141)

NOTE: THIS MAP SHOWS THE 165, OR 93 PERCENT, OF THE TOTAL 178 REPORTED CRASHES FOR WHICH THEIR LOCATION COULD BE IDENTIFIED BY THE WISCONSIN TRAFFIC OPERATIONS AND SAFETY LABORATORY BASED ON THE INFORMATION PROVIDED IN THE POLICE REPORTS



Source: Wisconsin Traffic Operations and Safety Laboratory and SEWRPC

miles in 2007, the rate of passenger injuries decreased in each of the following years to 140 passenger injuries per 100,000,000 revenue miles in 2011.

ARTERIAL HIGHWAY AND TRANSIT TRAVEL TIMES

Map 13 compares the year 2001 and 2011 estimated peak hour travel speeds for selected freeway and surface arterial street segments. Map 14 compares estimated peak hour arterial street and highway travel time contours for years 2001 and 2011 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.

Map 15 presents the ratio of total overall transit travel time to and automobile travel time between selected locations during the weekday morning peak period and midday off-peak period in 2011. Transit travel time is longer than automobile travel time, because it includes not only the time spent in the transit vehicle, but also includes the time spent walking to a bus stop, waiting for a bus, transferring between routes including waiting for another bus, and walking to a destination. Much of the transit out-of-vehicle time is related to waiting time for each bus used. Automobile travel time includes the time spent in vehicle parking and walking between parking location and trip origin and destination.

The travel time ratios developed for travel between the selected locations indicate that the lowest ratios—and most competitive transit travel times—are for short transit trips made between areas within and adjacent to downtown Milwaukee, and the highest ratios—and least 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 2001; however, the travel time ratios from 2001 likely have not changed significantly.

TRANSPORTATION AIR POLLUTANT AND AIR TOXIC EMISSIONS

Table 21 presents the estimated transportation system air pollutant and air toxic emissions and motor fuel consumption within Southeastern Wisconsin for the years 2001 and 2010. Estimated air pollutant and air toxic emissions declined between 2001 and 2010. In particular, volatile organic compounds and nitrogen oxides have been in decline due to cleaner, more efficient vehicles and lower sulfur fuels. The exception to the historic trend in emissions reductions has been carbon dioxide emissions, which are estimated to have increased from 2001 to 2010 as fuel consumption has increased over these years.

PARK-RIDE FACILITIES AND TRANSIT STATIONS

Of the 52 existing park-ride lots and transit stations, 39 were served by transit service and 13 were used exclusively by carpoolers (see Map 16). Eight of the 52 park-ride lots and transit stations were shared-use facilities that were not specifically constructed to serve as a park-ride lot, such as a parking lot at a private retail business or a municipal parking lot or garage.

Table 22 provides data on both the number of parking spaces available and the number of parking spaces used on an average weekday in 2012 at all park-ride lots and transit stations. The total number of spaces available at park-ride lots in the Region was 7,565 in 2012, including 6,875 at park-ride lots served by transit, and 690 at the lots not served by transit.

Of the 6,875 spaces available at the 39 park-ride lots served by transit, 2,756 spaces were used on an average weekday during 2012, a utilization rate on average of about 40 percent. Of the 690 spaces available at the lots not

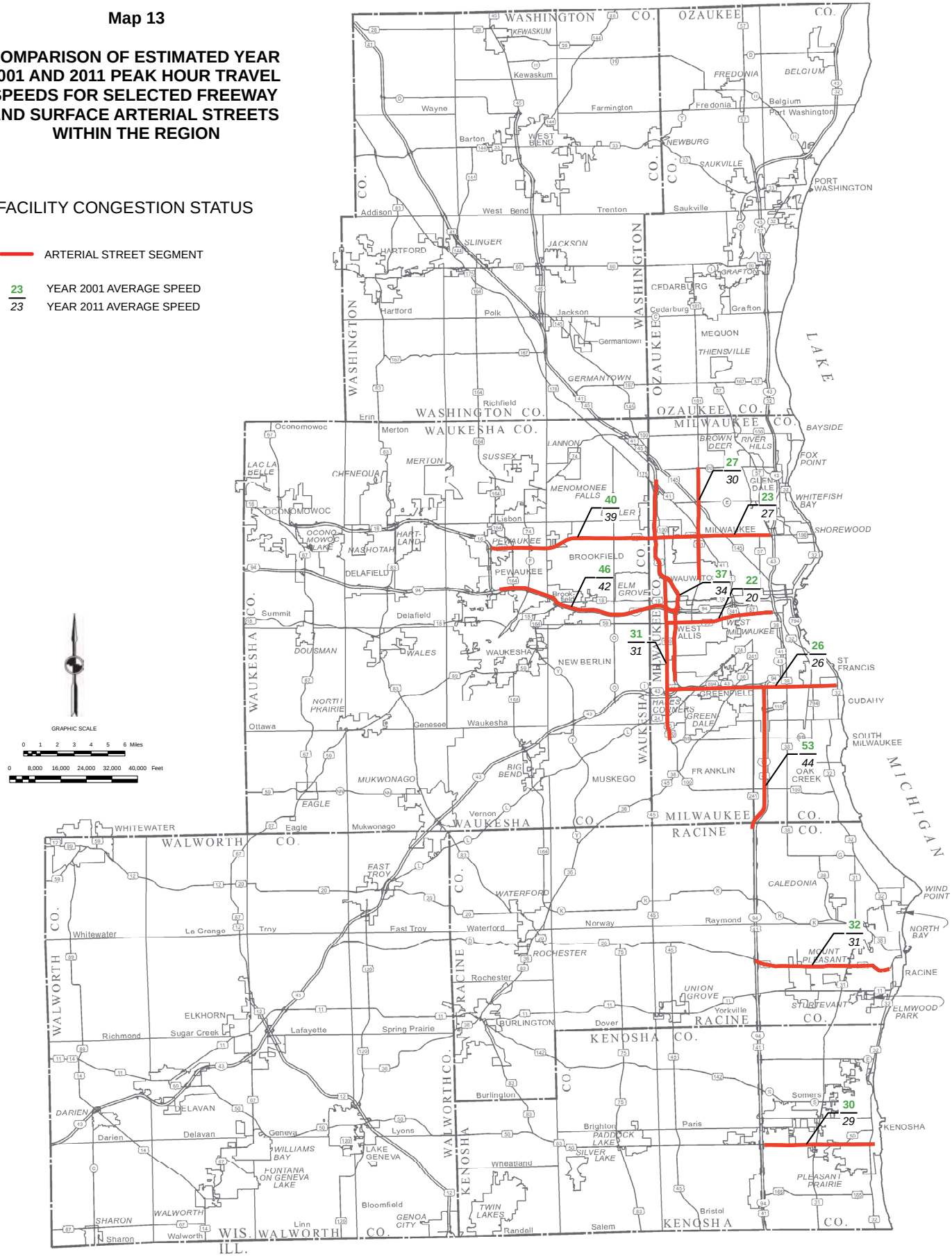
Map 13

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



GRAPHIC SCALE

0 1 2 3 4 5 6 Miles

0 8,000 16,000 24,000 32,000 40,000 Feet

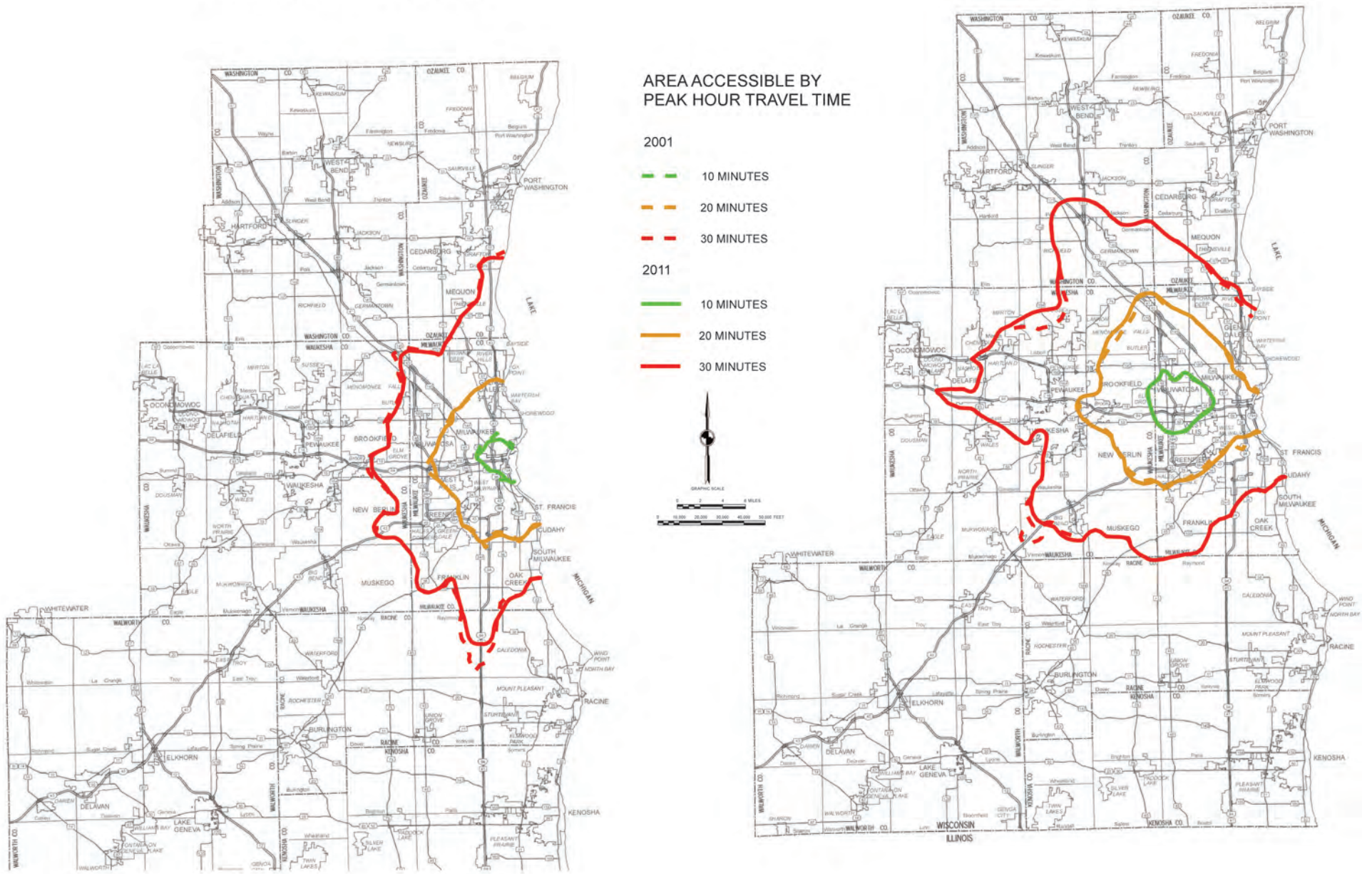
Source: Wisconsin Department of Transportation and SEWRPC.

Map 14

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

MILWAUKEE CENTRAL BUSINESS DISTRICT

MILWAUKEE REGIONAL MEDICAL CENTER

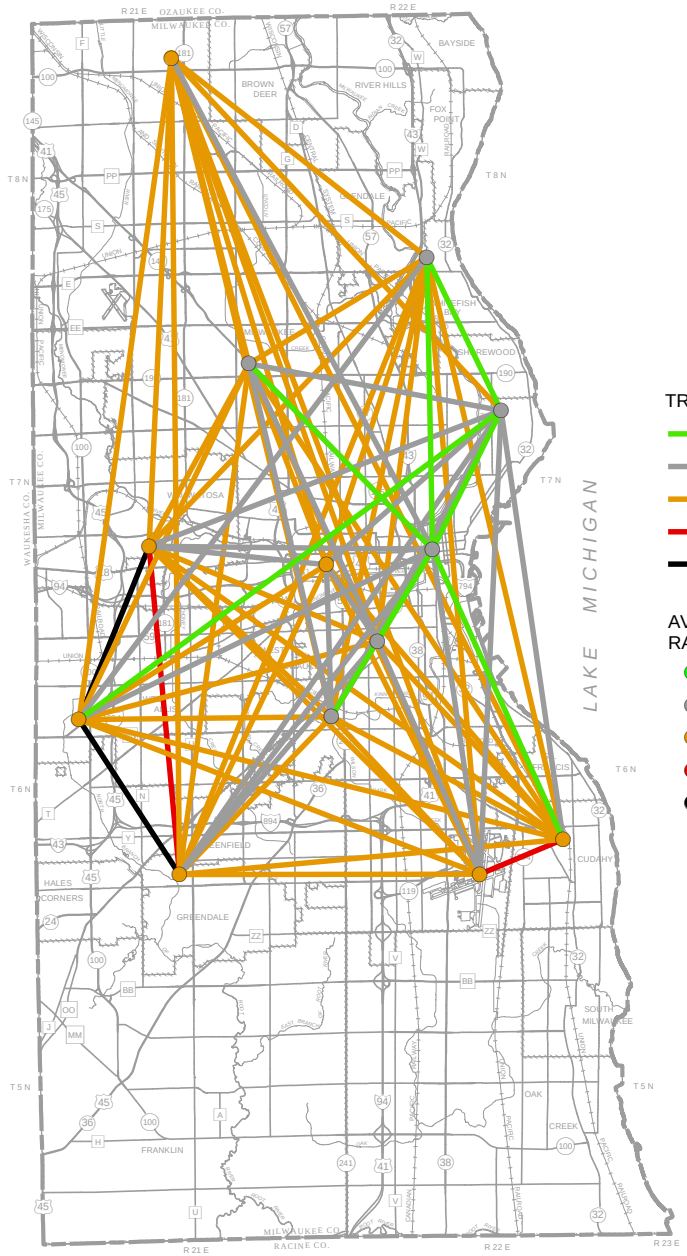


Source: SEWRPC

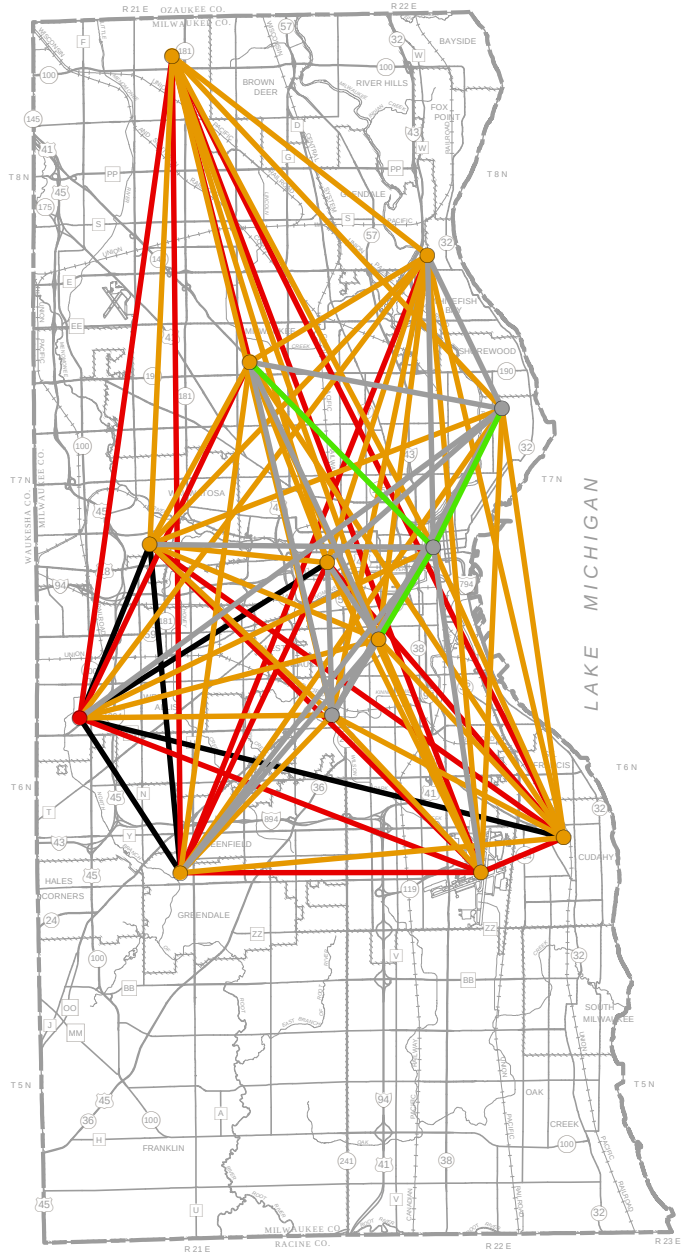
Map 15

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

GRAPHIC SCALE

0 1 2 3 MILES

0 4,000 8,000 12,000 16,000 20,000 FEET

Source: SEWRPC.

Table 21

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

Year	Estimated Air Pollutant/Air Toxic Emissions (Tons per Weekday[a])												Estimated Fuel Consumption (Gallons per Average Weekday)
	Volatile Organic Compounds[b]	Nitrogen Oxides[b]	Carbon Monoxide	Carbon Dioxide	Fine Particulate Matter	Sulfur Dioxide	Ammonia	Butadiene	Acetaldehyde	Acrolein	Benzene	Formaldehyde	
2001	50.03	114.23	592.48	18,050	1.77	2.77	4.84	0.20	0.43	0.03	1.40	0.63	1,805,000
2010	27.30	60.92	358.29	18,500	1.18	0.51	5.62	0.09	0.20	0.01	0.66	0.30	1,865,000

[a]*The estimated emissions are representative emissions on a hot summer weekday, with the exception of fine particle matter which is representative of a cold winter weekday.*

[b]*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.*

Source: SEWRPC.

Table 22

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

Number on Map 16	Location	Served by Transit	Not served by Transit	Shared Use	Available Parking Spaces	Autos Parked on an Average Weekday: 2012	Percent of Spaces Used
	Kenosha County						
1	Metra Station (Kenosha)	X		X	145	- -[a]	- -[a]
	Ozaukee County						
2	STH 57 and CTH H (Fredonia)		X		60	10	17
3	IH 43 and STH 32-CTH H (Port Washington)	X			50	21	42
4	Wal-Mart (Saukville)	X		X	50	13	26
5	IH 43 and CTH V (Grafton)	X			85	30	35
6	IH 43 and CTH C (Grafton)	X			65	87	134
	Milwaukee County						
7	Kohl's (Brown Deer)	X		X	130	57	44
8	Brown Deer (River Hills)	X			360	98	27
9	W. Good Hope Road (Milwaukee)	X			135	36	27
10	Timmerman Field (Milwaukee)		X		140	6	4
11	North Shore (Glendale)	X			195	98	50
12	W. Watertown Plank Road (Wauwatosa)	X			240	90	38
13	State Fair Park (Milwaukee)	X			285	186	65
14	Downtown Milwaukee Intermodal Amtrak Station	X			240	- -[a]	- -[a]
15	Milwaukee County Transit System Downtown Transit Center (Milwaukee)	X		X	- -[b]	- -[a]	- -[a]
16	National Avenue and IH 43/94 (Milwaukee)	X		X	55	- -[a]	- -[a]
17	W. Holt Avenue (Milwaukee)	X			235	87	37
18	Whitnall (Hales Corners)	X			360	205	57
19	W. Loomis Road (Greenfield)	X			410	75	18
20	Southridge (Greendale)	X		X	170	57	34
21	W. College Avenue (Milwaukee)	X			650	257	40
22	Mitchell Airport Amtrak Station (Milwaukee)	X			280	178	64
23	W. Ryan Road (Oak Creek)	X			305	164	54
	Racine County						
24	Racine Metro Transit Center (Racine)	X			120	- -[a]	- -[a]
25	IH 94 and STH 20 (Ives Grove)	X			75	65	87
26	IH 94 and STH 11 (Mount Pleasant)		X		60	48	80
27	Sturtevant Amtrak Station (Sturtevant)	X			180	- -[a]	- -[a]
	Walworth County						
28	East Troy Municipal Airport (East Troy)		X		40	7	18
29	USH 12 and STH 67 (Elkhorn)		X		40	13	33
30	USH 12 and CTH P (Genoa City)		X		40	10	25
	Washington County						
31	USH 41 and STH 33 (Allenton)		X		35	48	137
32	USH 41 and CTH K (Addison)		X		50	11	22
33	USH 45 and Paradise Drive (West Bend)	X			100	123	123
34	STH 60 and CTH P (Jackson)		X		30	10	33
35	USH 41 and Pioneer Road (Richfield)	X			280	75	27
36	USH 41 and Lannon Road (Germantown)	X			155	132	85
	Waukesha County						
37	Pilgrim Road (Menomonee Falls)	X			70	36	51
38	STH 67 and Lang Road (Oconomowoc)		X		35	6	17
39	Collins Street Parking Lot (Oconomowoc)	X		X	- -[b]	- -[a]	- -[a]
40	STH 16 and CTH P (Oconomowoc)	X			45	9	20
41	STH 16 and CTH C (Nashotah)	X			60	13	22
42	STH 67 and CTH DR (Summit)	X			100	56	56
43	IH 94 and CTH C (Delafield)		X		30	25	83
44	IH 94 and STH 83 (Delafield)	X			200	70	35
45	IH 94 and CTH G/CTH SS (Pewaukee)	X			245	69	28
46	IH 94 and CTH F (Pewaukee)		X		85	35	41
47	Goerke's Corners (Brookfield)	X			315	216	69
48	Waukesha Metro Transit Downtown Transit Center (Waukesha)	X		X	- -[b]	- -[a]	- -[a]
49	IH 43 and Moorland Road (New Berlin)	X			175	33	19
50	IH 43 and CTH Y (New Berlin)		X		45	19	42
51	IH 43 and STH 164 (Big Bend)	X			145	54	37
52	IH 43 and STH 83 (Mukwonago)	X			165	66	40
- -	**Total**	- -	- -	- -	**7,565**	**3,004**	**40**

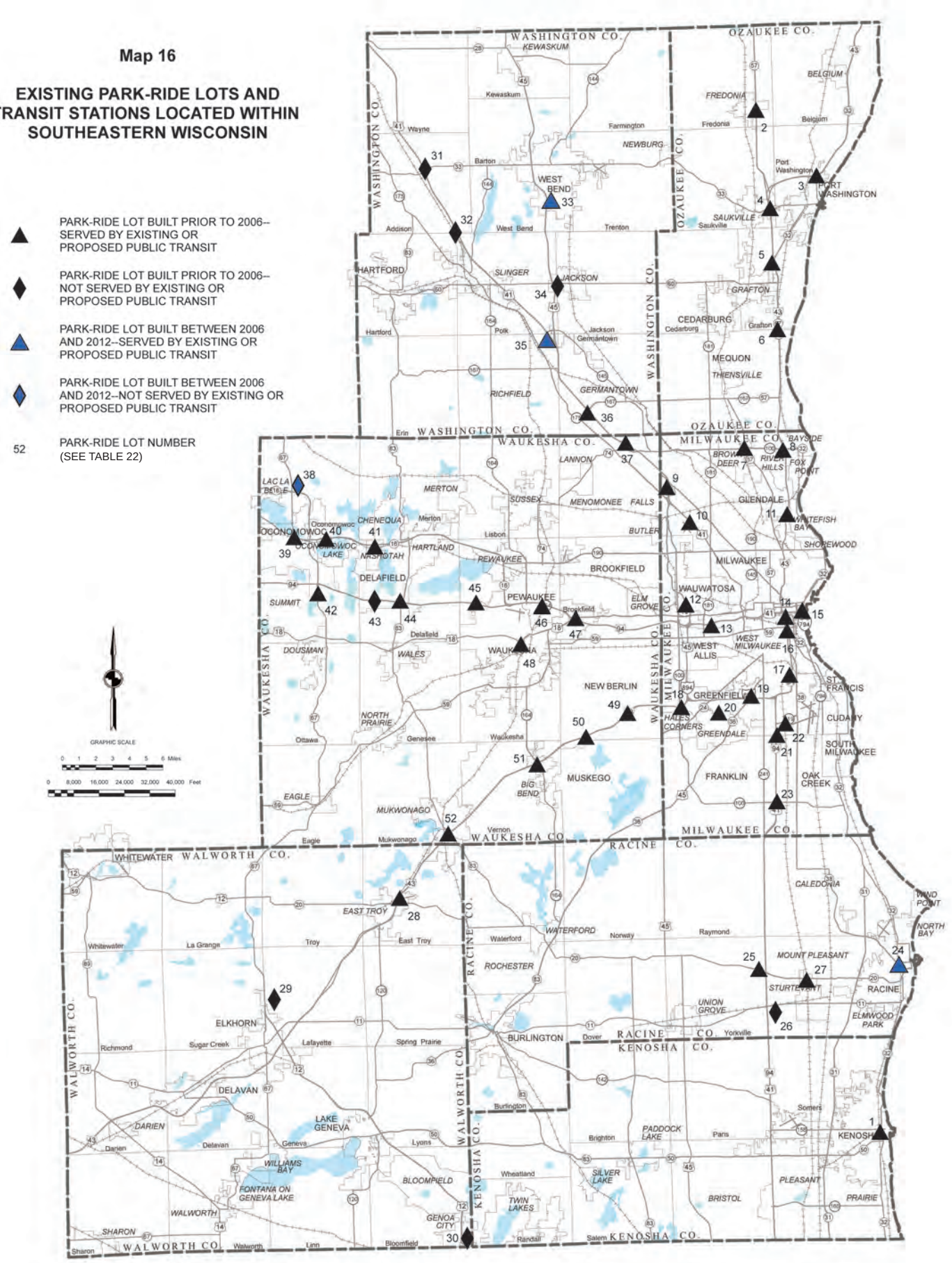
[a]*Data not available.*

[b]*Parking available within larger public lot or structure.*

Source: Wisconsin Department of Transportation and SEWRPC.

Map 16

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



Source: SEWRPC.

served by transit, 248 spaces were utilized during 2012, a utilization rate on average of about 36 percent. Three lots had utilization rates on average of 100 percent or higher, indicating they were at or over their design capacity.

TRANSIT SERVICE RELIABILITY

In 2011, the average age of revenue vehicles operated by transit operators in the Region was 7.7 years, compared to 6.5 years in 2006. The average annual number of transit service calls for revenue vehicles within the Region increased from 2,983 in 2006 to 3,283 in 2011. Over the same period of time, the average revenue vehicle-miles travelled between service calls decreased from 7,065 in 2006 to 6,000 in 2011. A service call is defined as any repair made to a revenue vehicle correcting a mechanical failure that either prevents the vehicle from completing a scheduled revenue trip or prevents the vehicle from starting its next scheduled revenue trip because actual movement is limited, because of safety concerns, or because of transit operator policy.

SUMMARY AND CONCLUSIONS

This review of transportation system performance indicates little change in pavement and bridge condition (2011 and 2012 compared to 2005 and 2006), traffic congestion (2011 compared to 2001), arterial street and highway travel speeds and times (2011 compared to 2001), and transit travel times (2008 compared to 2005). Some reduction in all air pollutant emissions is estimated (from 2001 to 2010), particularly for ozone-related emissions, with the exception being an increase in greenhouse gas-related emissions and ammonia. Over the same time period there was some reduction as well in vehicle crashes (from 2005 to 2011).

Chapter 5

REVIEW OF IMPLEMENTATION TO DATE OF YEAR 2035 REGIONAL TRANSPORTATION PLAN

INTRODUCTION

This chapter reviews the implementation to date of the year 2035 regional transportation plan. The plan was adopted by the Commission in June, 2006, and, therefore, implementation is measured from that date. In evaluating the implementation to date of the plan, it must be recognized that the plan is an ambitious long-range plan extending over about 30 years, and any implementation over the first seven to eight years of this period will necessarily be limited. Also, the extent of plan implementation which has occurred in this short term has been affected by the economic downturn beginning in 2008, and the lingering effects of the economic downturn beginning in 2001. The review of plan implementation is presented in the chapter by plan element: public transit, bicycle and pedestrian facilities, transportation system management, travel demand management, and, arterial streets and highways.

PUBLIC TRANSIT

The regional plan proposed the significant expansion of public transit, a doubling of transit service by the year 2035. The plan recognized that this expansion would require State legislation to create local dedicated transit funding and a renewal of adequate annual State financial assistance to transit. The plan also recognized that this expansion would benefit from the creation of a regional transit authority (RTA). As such action typically only occurs as part of a State biennial budget, the plan assumed no expansion may occur until 2008 upon passage of the State 2007-2009 biennial budget in mid-2007, the first budget following plan adoption. In November 2008, an advisory referendum passed in Milwaukee County approving a one percent sales tax, including a half percent sales tax for public transit. In the 2009-2011 State budget, then-Governor Doyle proposed an RTA with a half percent sales tax local dedicated funding, but the State Legislature rejected his proposal, and it was not included in the adopted budget. The State Legislature did include half percent sales tax dedicated funding for the Milwaukee County Transit System, but then-Governor Doyle vetoed this dedicated funding. The budget also created a Kenosha-Racine-Milwaukee (KRM) commuter rail authority with vehicle rental fee dedicated funding. Another attempt was made to pass RTA legislation in April of 2010 during the regular session of the State biennial Legislature. The legislation came very close to passing, but was not adopted into State law. The 2011-2013 State budget eliminated the transit authority established to implement the KRM commuter rail line, and reduced state transit funding for the year 2012 by about 10 percent. Between 2005 and 2011, State transit operating funding to Southeastern Wisconsin did increase by 4 percent annually. However, Federal transit

operating funding—which historically has represented about 20 percent of the total annual transit operating funding—increased by less than 1 percent annually, and local transit operating funding—which also has represented about 20 percent of total annual public operating funding—slightly decreased over the same period. Without legislation for dedicated local transit funding or more substantial increases in State funding, the expansion of public transit service recommended in the regional plan may not be expected to be implemented, and transit service is likely to continue to decline.

Table 23

PUBLIC TRANSIT VEHICLE-MILES OF SERVICE: YEARS 2006 TO 2012

Annual Revenue Vehicle Miles of Service[a]		
Service Type	2006	2012
Fixed-Route (Bus)	21.07 million	19.62 million
Demand-Response (Shared Ride Taxi).....	2.41 million	2.82 million
Total	23.48 million	22.44 million

[a]*Service for the general public.*

Source: SEWRPC.

As shown in Table 23, the amount of transit service in Southeastern Wisconsin has declined from the time of plan adoption in 2006 to 2012, including a decrease of almost 7 percent in fixed-route bus service. However, demand-responsive service has increased over the period by 17 percent. The amount of transit service increase envisioned by 2012 in the recommended plan was about 12 percent.

The regional plan also recommended that public transit fare increases not exceed the rate of general price inflation. Table 24 shows the fares for the Region's transit systems for the years 2006 through 2012 and for the years 2000 to 2005. Fare increases from 2006 to 2012 ranged from 15 to 60 percent, exceeding general price inflation experienced over this time period of about 16 percent.

Some progress has been made in implementing fixed guideway and express transit. The Milwaukee downtown connector study was completed. The study evaluated a range of alternative routes and technologies including express buses, guided electric powered buses, and streetcars. The City of Milwaukee has now completed planning and preliminary engineering for a downtown streetcar line. In a March 2009 split of $91.5 million in Interstate Cost Estimate (ICE) funding, $54.9 million was provided to implement the streetcar line. The City of Milwaukee is now conducting final engineering and design for the streetcar line. In 2012, Milwaukee County initiated three express transit services with Federal Congestion Mitigation and Air-Quality Improvement Program (CMAQ) funding.

Implementation of WisDOT's planned Chicago-Milwaukee-Madison high-speed rail line was indefinitely postponed following withdrawal of the majority of the Federal funding awarded to the project by the U.S. Department of Transportation (USDOT) in December 2010. Despite its postponement, this proposed service remains a part of WisDOT's long-range state rail plan scheduled to be completed in 2014, as well, WisDOT is continuing efforts to increase service and improve travel times of Amtrak's existing Hiawatha Service operating between Chicago and Milwaukee.

BICYCLE AND PEDESTRIAN FACILITIES

Accommodation of Bicycles on the Arterial Street and Highway System

The regional plan envisioned that as each segment of the surface arterial street system of about 3,300 miles in the Region was constructed, resurfaced, and reconstructed, the provision of accommodation for bicycle travel would be considered and implemented—if feasible—through bicycle lanes, widened outside travel lanes widened shoulders, or separate bicycle paths. Wisconsin State Statutes and Federal policy now require that bicycle accommodations be provided in all new highway construction and reconstruction projects funded with State or Federal funds, unless it is demonstrated that such accommodation is prohibitive.

On arterial streets and highways with a rural cross-section, bicycles may be accommodated with a four-foot paved shoulder and six-foot gravel shoulder on a two traffic-lane facility, and with an eight-foot paved shoulder on a four-traffic lane facility. On arterial streets with an urban cross section, bicycles may be accommodated with

Table 24

FARES CHARGED ON THE PUBLIC BUS SYSTEMS IN THE REGION: 2000-2012

Fare Category	Year												
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
City of Kenosha Area Transit System													
Base Adult Cash Fare	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.25	$1.25	$1.50	$1.50
Monthly Pass	$22.00	$22.00	$22.00	$22.00	$28.00	$28.00	$28.00	$28.00	$28.00	$34.00	$34.00	$40.00	$40.00
Western Kenosha County Transit													
Base Adult Cash Fare	- -	- -	- -	- -	- -	- -	- -	$2.00-$3.00	$2.00-$3.00	$2.00-$3.00	$2.00-$3.00	$2.00-$3.00	$2.00-$3.00
11-Ride Punch Card	- -	- -	- -	- -	- -	- -	- -	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
Monthly Pass	- -	- -	- -	- -	- -	- -	- -	$10.00	$10.00	$10.00	$10.00	$20.00	$20.00
Kenosha-Racine-Milwaukee Commuter Bus													
Base Adult Cash Fare	$1.00-$4.00	$1.00-$4.00	$1.00-$4.00	$1.00-$4.00	$1.00-$4.00	$1.00-$4.00	$1.00-$4.00	$1.00-$4.00	$1.25-$4.25	$1.25-$4.25	$1.25-$4.25	$1.25-$4.25	$1.25-$4.25
Book of 10 Tickets	$9.00-$36.00	$9.00-$36.00	$9.00-$36.00	$9.00-$36.00	$9.00-$36.00	$9.00-$36.00	$9.00-$36.00	$9.00-$36.00	$11.25-$38.25	$11.25-$38.25	$11.25-$38.25	$11.25-$38.25	$11.25-$38.25
Milwaukee County Transit System													
Base Adult Cash Fare	$1.35	$1.50	$1.50	$1.50	$1.75	$1.75	$1.75	$1.75	$2.00	$2.00	$2.25	$2.25	$2.25
Freeway Flyer Cash Fare	$1.60	$1.80	$1.80	$1.80	$2.05	$2.05	$2.25	$2.25	$2.75	$3.00	$3.25	$3.25	$3.25
Weekly Pass	$10.50	$11.00	$12.00	$12.00	$13.00	$13.00	$14.00	$16.00	$16.00	$16.50	$17.50	$17.50	$17.50
Upass	$31.00	$33.00	$35.00	$35.00	$38.00	$38.00	$38.00	$41.00	$41.00	$42.00	$45.00	$45.00	$45.00
MCTS Commuter Value Pass (employee portion)	$15.00	$16.00	$17.00	$17.00	$19.00	$19.00	$25.67	$29.50	$29.50	$30.50	$32.50	$32.50	$32.50
Ozaukee County Express Bus													
Base Adult Cash Fare	$2.00	$2.00	$2.00	$2.25	$2.25	$2.25	$2.25	$2.25	$3.00	$3.00	$3.25	$3.25	$3.25
City of Racine Belle Urban System													
Base Adult Cash Fare	$1.00	$1.00	$1.00	$1.25	$1.25	$1.25	$1.25	$1.50	$1.50	$1.50	$1.50	$1.50	$2.00
Monthly Pass	$30.00	$30.00	$30.00	$40.00	$40.00	$40.00	$40.00	$50.00	$50.00	$50.00	$50.00	$50.00	$65.00
Washington County Commuter Express													
Base Adult Cash Fare	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$2.50	$3.25	$3.25	$3.25	$3.25	$3.25	$3.75
Book of 10 Tickets	$21.25	$21.25	$21.25	$21.25	$21.25	$21.25	$21.25	$27.50	$27.50	$27.50	$27.50	$27.50	$32.50
City of Waukesha Metro Transit System													
Base Adult Cash Fare	$1.00	$1.00	$1.25	$1.25	$1.25	$1.50	$1.50	$1.75	$1.75	$2.00	$2.00	$2.00	$2.00
Monthly Pass	$24.00	$24.00	$38.00	$38.00	$38.00	$38.00	$38.00	$40.00	$40.00	$44.00	$44.00	$44.00	$44.00
Waukesha County Transit System													
Base Adult Cash Fare	$1.00-$2.50	$1.00-2.50	$1.00-2.50	$2.25-2.75	$2.25-2.75	$2.50-3.00	$2.50-3.00	$2.50-3.00	$2.75-$3.25	$3.25-$4.00	$3.25-$4.00	$3.25-$4.00	$3.25-$4.00
Book of 10 Tickets	$9.00-$22.50	$9.00-$22.50	$9.00-$22.50	$20.25-$24.75	$20.25-$24.75	$22.50-$27.00	$22.50-$27.00	$22.50-$27.00	$24.75-$29.25	$29.25-$36.00	$29.25-$36.00	$29.25-$36.00	$29.25-$36.00

Source: SEWRPC.

bicycle lanes five to six feet in width, or with a widened outside lane of 14 feet. Accommodations may also be provided on urban and rural arterials with parallel, physically separate paths of eight to 12 feet in width (five to six feet for one-way paths) and 10 feet of separation from the travel lanes. Map 17 identifies those arterial streets and highways which provided bicycle accommodations through paved shoulders, bicycle lanes, or separate paths in 2012. The mileage of arterial streets and highways that provided bicycle accommodations through paved shoulders, bicycle lanes, or separate paths increased from about 633 miles in 2004 to about 824 miles in 2013, or about a 30 percent increase. Data is not currently available to identify those urban arterials with outside lanes of 14 feet in width which also accommodate bicycles.

Off-Street Bicycle Path System
The plan also recommended that a system of off-street bicycle paths be provided between the Kenosha, Milwaukee, and Racine urbanized areas, and between all the cities and villages within the Region with a population of 5,000 or more. Some on-street bicycle connections would be required to connect segments of this system of off-street paths. Map 18 shows the proposed system of off-street bicycle facilities, which includes 548 miles of off-street bicycle paths. Approximately 203 miles of the planned 548 miles of off-street bicycle paths existed in 2006, and another 47 miles of the planned paths have since been constructed.

A number of local and county plans have been completed or are in development that will help to implement the recommendations of the regional plan's bicycle and pedestrian element. Examples include the Kenosha County Comprehensive Bike Plan completed in July 2013, City of Waukesha Bicycle and Facility Plan completed in September 2012, and a bicycle plan for the City of Milwaukee that recommends a broad range of measures to improve conditions for bicycling in Milwaukee.

TRANSPORTATION SYSTEMS MANAGEMENT

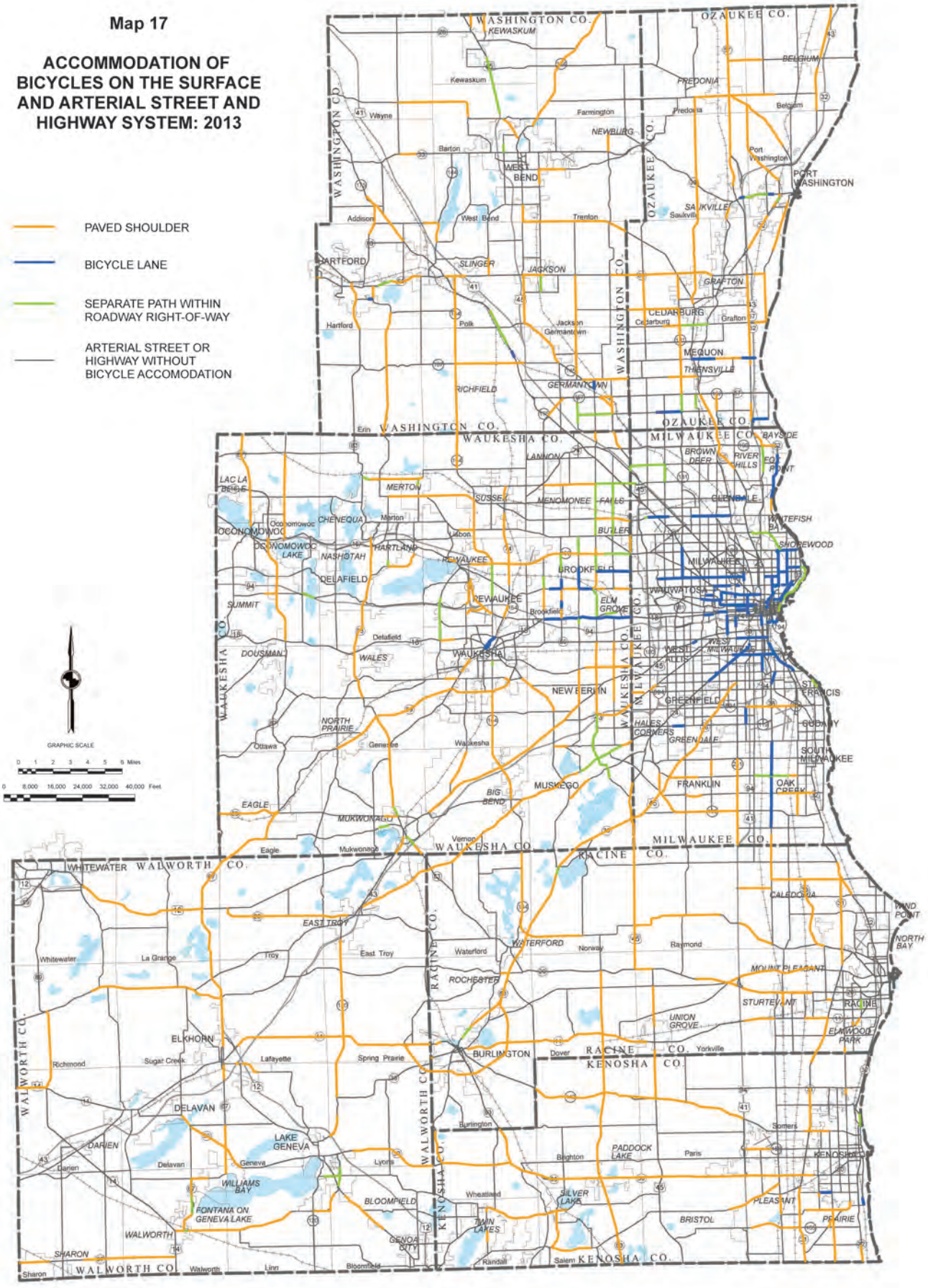
Recommended transportation system management measures include freeway traffic management, surface arterial management, and major activity center parking guidance.

Freeway Traffic Management
Expansion of freeway traffic management was envisioned as being implemented as the freeway system was reconstructed segment-by-segment. The following measures have been implemented since the regional transportation plan was adopted:

- Maintenance of Traffic Operations Center in operation on a 365 days a year, 24 hours per day basis.
- Expansion of ramp-meters from 120 in 2004 to 121 locations in 2013 (See Map 19 and Table 25).
- Expansion of freeway variable message signs from 21 in 2004 to 31 locations in 2013 (See Map 20 and Table 26).
- Implementation of 511 regional travel information system.
- Expansion of freeway closed-circuit television cameras from 83 in 2004 to 159 locations in 2013 (See Map 20 and Table 27).
- Continuation of Traffic Incident Management Enhancement Program (TIME).
- Expansion of deployment of ramp closure devices to Ozaukee, Walworth, Washington, and Waukesha Counties. In addition, ramp closure devices will be installed along IH 94 within Kenosha and Racine Counties as part of the project to reconstruct IH 94 between the Mitchell Interchange and the Wisconsin State line that is expected to be completed in 2021.
- Expansion of freeway service patrols in Milwaukee County to weekday evenings. However, the freeway service patrols are no longer provided in Kenosha, Racine, and Waukesha Counties.

Map 17

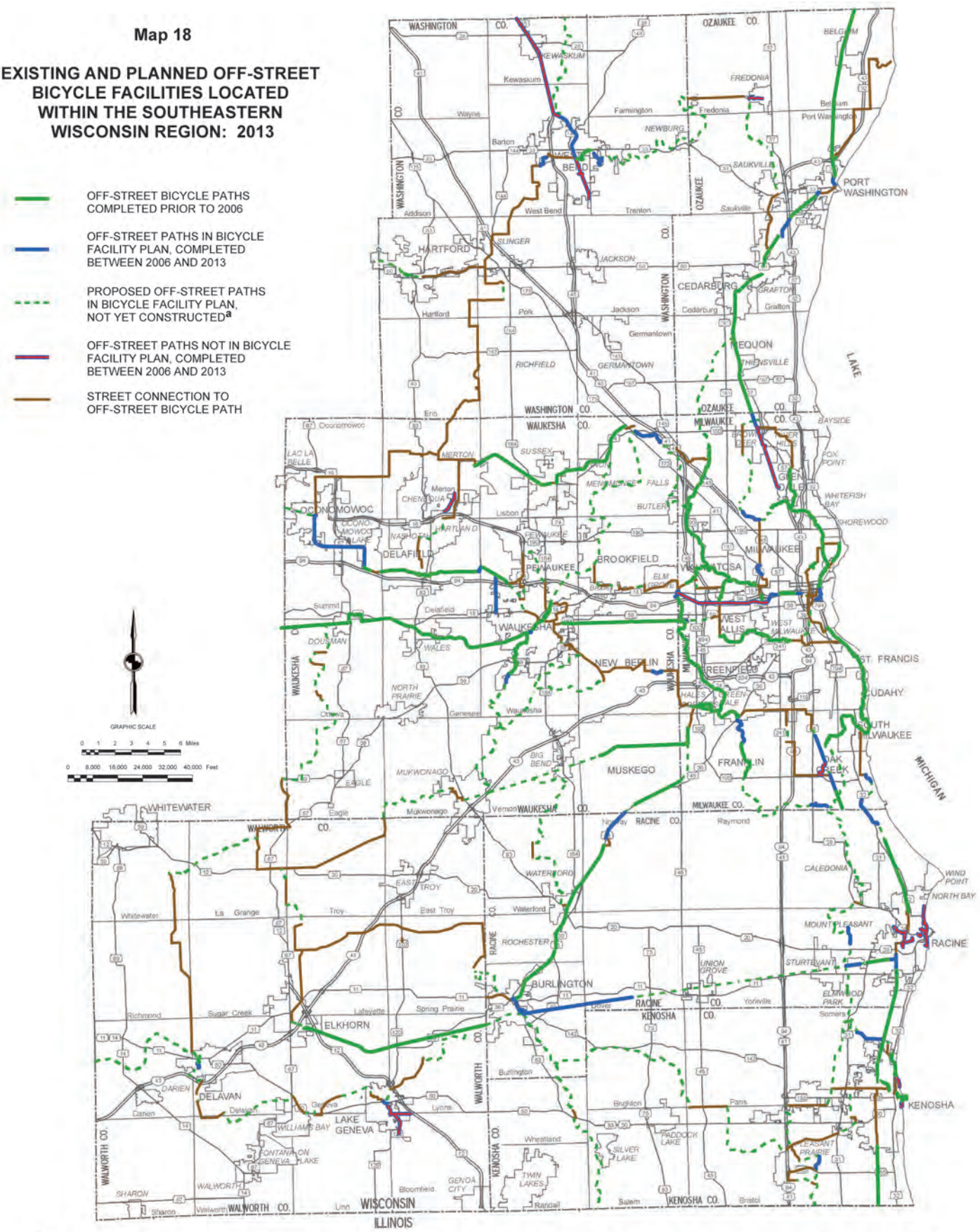
ACCOMMODATION OF BICYCLES ON THE SURFACE AND ARTERIAL STREET AND HIGHWAY SYSTEM: 2013



Source: SEWRPC.

Map 18

EXISTING AND PLANNED OFF-STREET BICYCLE FACILITIES LOCATED WITHIN THE SOUTHEASTERN WISCONSIN REGION: 2013



[a] *This map shows the envisioned location of off-street bicycle paths as proposed in the year 2035 regional transportation plan and County Parks and Open Space Plans. The Walworth County Parks and Open Space Plan currently under preparation is recommending revised locations for a number of these paths within Walworth County. Upon adaption of the County Parks and Open Space Plan by the Walworth County Board of Supervisors, this bicycle path element of the regional transportation plan will be revised to incorporate all revised bicycle path locations in the adopted Walworth County Parks and Open Space Plan.*

Source: SEWRPC.

Table 25

LOCATION OF RAMP METERS ON THE EXISTING FREEWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013

Reference Number (See Map 19)	Ramp Meter Location
IH 94 East-West Corridor	
1	Westbound at CTH G
2	Westbound at CTH T (Grandview Boulevard)
3	Eastbound at CTH T (Grandview Boulevard)
4	Eastbound at STH 164 / CTH J
5	Eastbound at STH 83
6	Westbound at CTH JJ
7	Eastbound at USH 18
8	Eastbound at Barker Road
9	Westbound at CTH O (Moorland Road)
10	CTH O (Moorland Road) Southbound to Eastbound IH 94
11	CTH O (Moorland Road) Northbound to Eastbound IH 94
12	Westbound at STH 100 (S. 108th Street)
13	Eastbound at STH 100 (S. 108th Street)
14	Westbound at STH 181 (N. 84th Street)
15	Eastbound at STH 181 (N. 84th Street)
16	Westbound at N. 70th Street
17	Eastbound at N. 68th Street
18	Westbound at Hawley Road
19	Eastbound at Hawley Road
20	Eastbound at Mitchell Boulevard
21	Westbound at Mitchell Boulevard
22	USH 41 Southbound to Westbound IH 94
23	USH 41 Southbound to Eastbound IH 94
24	STH 341 Northbound to Eastbound IH 94
25	STH 341 Northbound to Westbound IH 94
26	Westbound at N. 35th Street
27	Eastbound at N. 35th Street
28	Westbound at N. 28th Street
29	Eastbound at N. 25th Street
30	Westbound at W. Tory Hill Street and N. 11th Street
31	Westbound at N. 7th Street and W. Clybourn Avenue
32	Northbound/Southbound at N. 2nd Street and W. Clybourn Avenue
IH 94 South Corridor	
33	Northbound at S. 6th Street and Mineral Street
34	Southbound at S. 9th Street and Mineral Street
35	Southbound at Lapham Boulevard (C-D)
36	Southbound at Lapham Boulevard
37	Northbound at Lapham Boulevard
38	Southbound at Becher Street
39	Southbound at Holt Avenue
40	Northbound at Holt Avenue
41	Southbound at W. Howard Avenue
42	Northbound at W. Howard Avenue
43	Northbound at CTH Y (W. Layton Avenue)
44	Southbound at CTH Y (W. Layton Avenue)
45	STH 119 Westbound to Northbound IH 94
46	Southbound at CTH ZZ (W. College Avenue)
47	Northbound at CTH ZZ (W. College Avenue)
48	Southbound at CTH BB (W. Rawson Avenue)
49	Westbound CTH BB (W. Rawson Avenue) to Northbound IH 94
50	Eastbound CTH BB (W. Rawson Avenue) to Northbound IH 94
51	Southbound at Drexel Avenue
52	Northbound at Drexel Avenue
53	Southbound at STH 100 (W. Ryan Road)
54	NB at STH 100 (W. Ryan Road)

Reference Number (See Map 19)	Ramp Meter Location
IH 43 North Corridor	
55	Southbound at STH 57/167 (Mequon Road)
56	Southbound at Milwaukee—Ozaukee County Line Road
57	Eastbound STH 100 (W. Brown Deer Road) to Southbound IH 43
58	Westbound STH 100 (W. Brown Deer Road) to Southbound IH 43
59	Southbound at CTH PP (W. Good Hope Road)
60	Southbound at W. Silver Spring Drive
61	Southbound at W. Hampton Avenue
62	Southbound at Green Bay Avenue
63	Southbound at N. 9th Street and W. Abert Place
64	Northbound at Atkinson Avenue
65	Southbound at W. Keefe Avenue
66	Southbound at W. Locust Street
67	Northbound at W. Locust Street
68	Southbound at W. North Avenue
69	Northbound at W. North Avenue
70	Southbound at W. Fond du Lac Avenue (W. McKinley Avenue)
71	Northbound at W. Fond du Lac Avenue
72	Northbound at W. Highland Avenue and W. Kilbourn Avenue
73	Southbound at W. Wisconsin Avenue
IH 43 South Corridor	
74	Northbound at STH 100 (S. 108th Street)
75	Northbound at Moorland Road Northbound
76	Northbound at Moorland Road Southbound
IH 894 Corridor	
77	Northbound at STH 59 (W. Greenfield Avenue)
78	Southbound at STH 59 (W. Greenfield Avenue)
79	Northbound at W. Lincoln Avenue
80	Southbound at W. National Avenue
81	Northbound at W. National Avenue
82	Northbound at CTH NN (W. Oklahoma Avenue)
83	Northbound at W. Beloit Road
84	Southbound at W. Beloit Road
85	Westbound at S. 84th Street
86	Eastbound at W. Forest Home Avenue
87	Eastbound at S. 76th Street
88	Westbound at S. 60th Street
89	Eastbound at S. 60th Street
90	Westbound at STH 36 (S. Loomis Road)
91	Eastbound at STH 36 (S. Loomis Road)
92	Southbound WIS 241 (S. 27th Street) to Westbound IH 894
93	Northbound WIS 241 (S. 27th Street) to Westbound IH 894
94	Southbound at STH 241 (S. 27th Street) to Eastbound IH 894
USH 45 Corridor	
95	Southbound at Lannon Road
96	Southbound at CTH Q (Washington—Waukesha County Line Road)
97	Southbound at Pilgrim Road
98	Southbound at STH 74 (Main Street)
99	Northbound at STH 74 (Main Street)
100	Northbound at N. 124th Street (Waukesha—Milwaukee County Line)
101	Southbound at N. 124th Street (Waukesha—Milwaukee County Line)

Table 25 (continued)

Reference Number (See Map 19)	Ramp Meter Location
USH 45 Corridor—continued	
102	Northbound STH 145 to Northbound USH 45
103	Westbound CTH PP (W. Good Hope Road) to Southbound USH 45
104	Northbound at CTH PP (W. Good Hope Road)
105	Eastbound CTH PP (W. Good Hope Road) to Southbound USH 45
106	Northbound at USH 41 (W. Appleton Avenue)
107	Southbound at STH 175 (W. Appleton Avenue)
108	Southbound at CTH E (W. Silver Spring Drive)
109	Northbound at CTH E (W. Silver Spring Drive)
110	Southbound at CTH EE (W. Hampton Avenue)
111	Northbound at CTH EE (W. Hampton Avenue)
112	Southbound at STH 190 (W. Capitol Drive)
113	Northbound at STH 190 (W. Capitol Drive)
114	Southbound at W. Burleigh Street
115	Northbound at W. Burleigh Street
116	Southbound at W. North Avenue
117	Northbound at W. North Avenue
118	Southbound at Watertown Plank Road
119	Northbound at Watertown Plank Road
120	Southbound at N. 97th Street and W. Wisconsin Avenue
121	Northbound at W. Wisconsin Avenue

Source: Wisconsin Department of Transportation and SEWRPC.

Surface Arterial Street and Highway Traffic Management
Implementation includes the following:

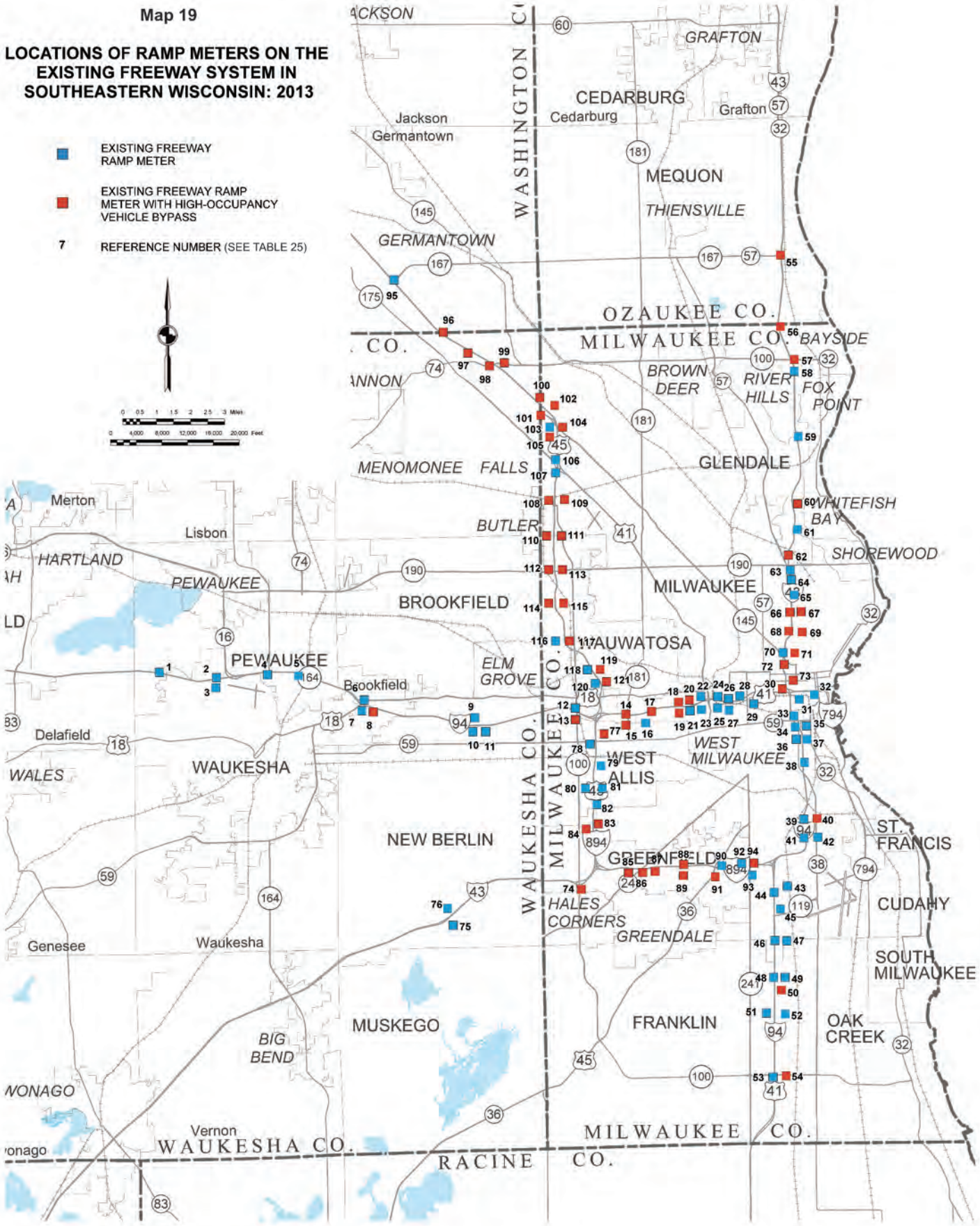
- Expansion of variable message signs from 13 in 2004 to 19 locations in 2013 (See Map 21 and Table 28).
- Expansion of closed-circuit television cameras from 13 in 2004 to 22 locations in 2013 (see Map 21 and Table 29).
- Expansion of signal coordination and interconnection, as well as improvement through signal optimization, through 12 funded FHWA Congestion Mitigation and Air Quality Improvement Program (CMAQ) projects.

Major Activity Center Parking Management and Guidance
The City of Milwaukee is about to enter the implementation and installation phase of the envisioned central business district parking structure guidance system. The system will provide motorists with real-time information about available parking in the downtown area through signs located throughout the central business district, freeway dynamic message signs, a website, and a telephone line. A data source will also be available to allow real-time parking information applications to be created for mobile devices or websites.

Regional Transportation Operations Plan
The regional transportation system plan also recommended that a regional transportation operation plan (RTOP) be prepared to program high priority short-range (three- to five-year) operational improvement projects for implementation, principally drawing these projects from the transportation systems management recommendations in the regional transportation system plan. The RTOP was completed in 2012 identifying candidate corridor and intersection transportation management system projects prioritized for implementation and funding, particularly with respect to Federal Highway Administration Congestion Mitigation and Air Quality Improvement Program funding.

Map 19

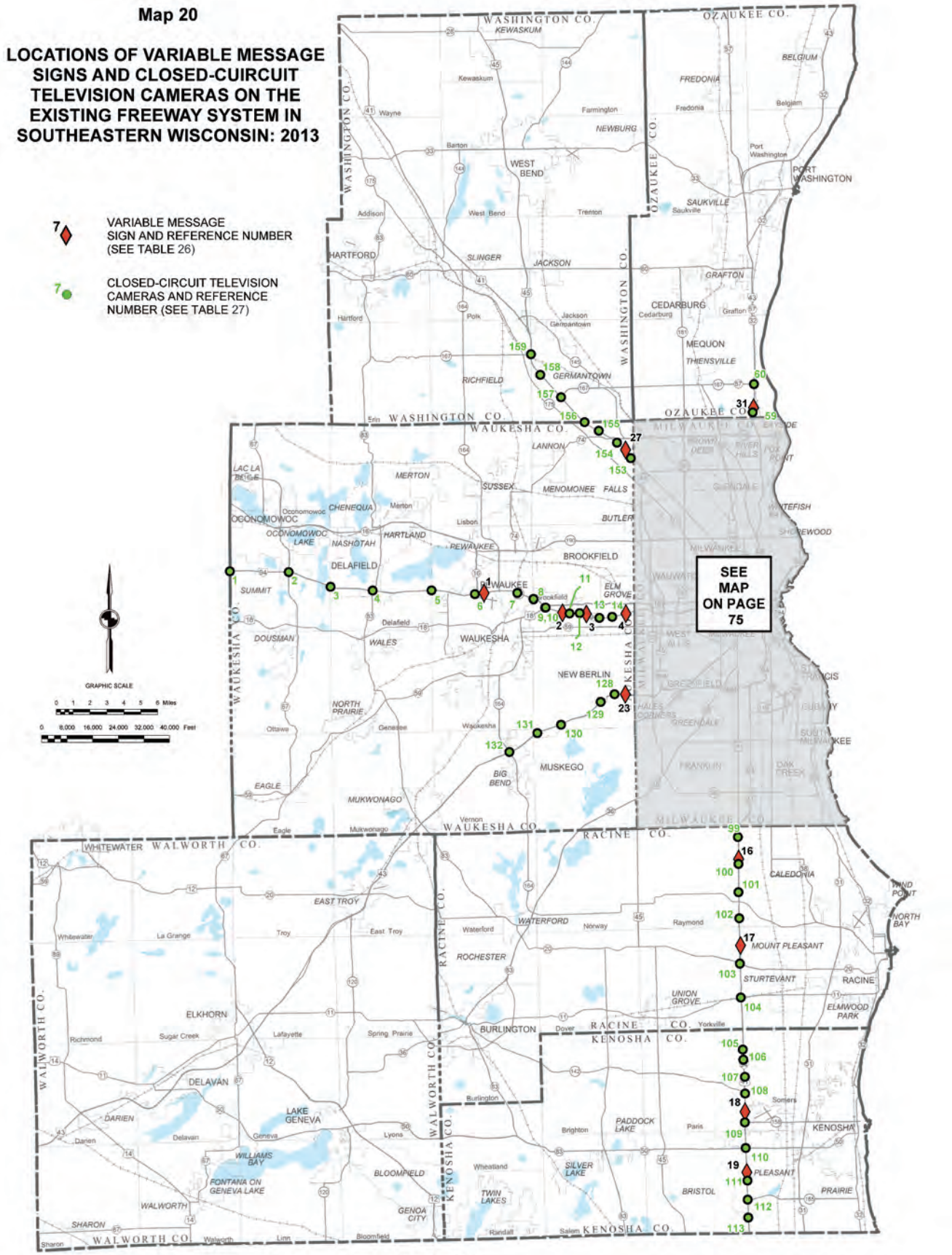
LOCATIONS OF RAMP METERS ON THE EXISTING FREEWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013



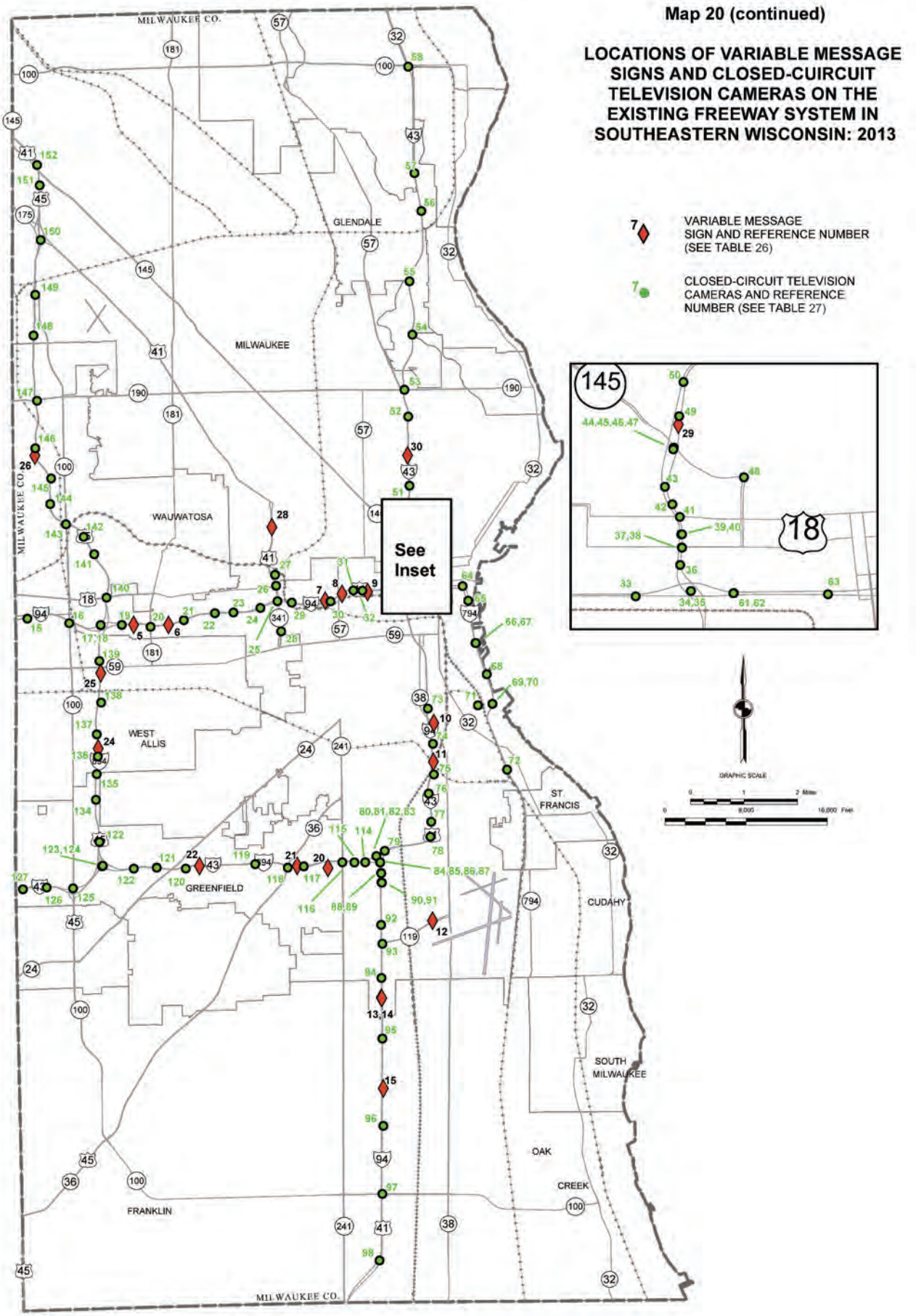
Source: Wisconsin Department of Transportation and SEWRPC.

Map 20

LOCATIONS OF VARIABLE MESSAGE SIGNS AND CLOSED-CUIRCUIT TELEVISION CAMERAS ON THE EXISTING FREEWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013



Source: Wisconsin Department of Transportation and SEWRPC.



Source: Wisconsin Department of Transportation and SEWRPC.

Table 26

LOCATIONS OF VARIABLE MESSAGE SIGNS ON THE EXISTING FREEWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013

Reference Number (See Map 20)	Variable Message Sign Locations
1	IH 94 eastbound at STH 16 (Silvernail Road)
2	IH 94 eastbound at Brookfield Road
3	IH 94 westbound at Calhoun Road
4	IH 94 eastbound at Elm Grove Road
5	IH 94 eastbound at S. 89th Street
6	IH 94 eastbound at N. 76th street
7	IH 94 eastbound at N. 30th Street
8	IH 94 westbound at N. 27th Street
9	IH 94 westbound at N. 22nd Street
10	IH 43 and IH 94 northbound at Kinnickinnic River
11	IH 43 and IH 94 southbound at Oklahoma Avenue
12	STH 119 westbound at Mitchell Airport
13	IH 94 southbound at CTH ZZ (W. College Avenue)
14	IH 94 northbound at CTH ZZ (W. College Avenue)
15	IH 94 northbound at W. Drexel Avenue
16	IH 94 northbound at CTH G
17	IH 94 southbound at STH 20
18	IH 94 southbound at STH 158 (52nd Street)
19	IH 94 northbound at CTH C
20	IH 43 and IH 894 eastbound at S. 35th Street
21	IH 43 and IH 894 westbound at STH 36 (W. Loomis Road)
22	IH 894 eastbound at S. 72nd Street
23	IH 43 northbound at CTH T (W. Beloit Road)
24	IH 894 northbound at Cleveland Avenue
25	IH 894 and USH 45 southbound at STH 59 (W. Greenfield Avenue)
26	USH 45 southbound at W. Burleigh Street
27	USH 41 and USH 45 southbound at STH 145
28	STH 41 southbound at W. Cherry Street
29	IH 43 northbound at W. Walnut Street
30	IH 43 southbound at W. Locust Avenue
31	IH 43 southbound at Ozaukee - Milwaukee County Line Road

Source: Wisconsin Department of Transportation and SEWRPC.

Table 27

LOCATIONS OF CLOSED-CIRCUIT TELEVISION CAMERAS ON THE EXISTING FREEWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013

Reference Number (See Map 20)	Closed-Circuit Television Camera Locations
1	IH 94 at CTH F
2	IH 94 at STH 67 (Summit Avenue)
3	IH 94 at CTH P (N. Sawyer Road)
4	IH 94 at STH 83
5	IH 94 at CTH SS
6	IH 94 at CTH T
7	I-94 at STH 164 (Pewaukee Road)
8	IH 94 at Springdale Road
9	IH 94 at USH 18 (Blue Mound Road)
10	IH 94 at Moorland Road
11	IH 94 west of N. Brookfield Road
12	IH 94 at Calhoun Road
13	IH 94 at Sunnyslope Road
14	IH 94 at Elm Grove Road
15	IH 94 at S. 121st Street
16	IH 94 at STH 100 (N. 108th Street)
17	IH 94 at IH 894 and USH 45 (Zoo Interchange) Upper
18	IH 94 at IH 894 and USH 45 (Zoo Interchange) Lower
19	IH 94 at S. 92nd Street
20	IH 94 at STH 181 (N. 84th Street)
21	IH 94 at S. 76th Street
22	IH 94 at N. 68th Street
23	IH 94 at Hawley Road
24	IH 94 at Mitchell Boulevard
25	IH 94 at USH 41
26	USH 41 at USH 18 (W. Bluemound Road)
27	USH 41 at W. Wells Street
28	STH 341 (Miller Park Way) at Stadium Pedestrian Bridge
29	IH 94 at N. 39th Street
30	IH 94 at N. 30th Street
31	IH 94 at N. 25th Street
32	IH 94 at N. 20th Street
33	IH 94 at N. 13th Street
34	IH 43 Northwest Ramp Northwest
35	IH 43 Northwest Ramp North
36	IH 43 at W. Wisconsin Avenue
37	IH 43 Southbound at W. Wells Street
38	IH 43 at Northbound at W. Wells Street
39	IH 43 at W. Kilbourn Avenue tunnel Exit
40	IH 43 at W. Kilbourn Avenue tunnel Entrance
41	IH 43 at STH 18 (W. State Street)
42	IH 43 at W. Highland Avenue
43	IH 43 at W. Juneau Avenue
44	IH 43 at STH 145 SW (W. Fond Du Lac Avenue)
45	IH 43 at STH 145 E (W. Fond Du Lac Avenue)
46	IH 43 at STH 145 NE (W. Fond Du Lac Avenue)
47	IH 43 at STH 145 W (W. Fond Du Lac Avenue)
48	USH 145 at McKinely Avenue
49	IH 43 at W. Walnut Street
50	IH 43 at W. Brown Street

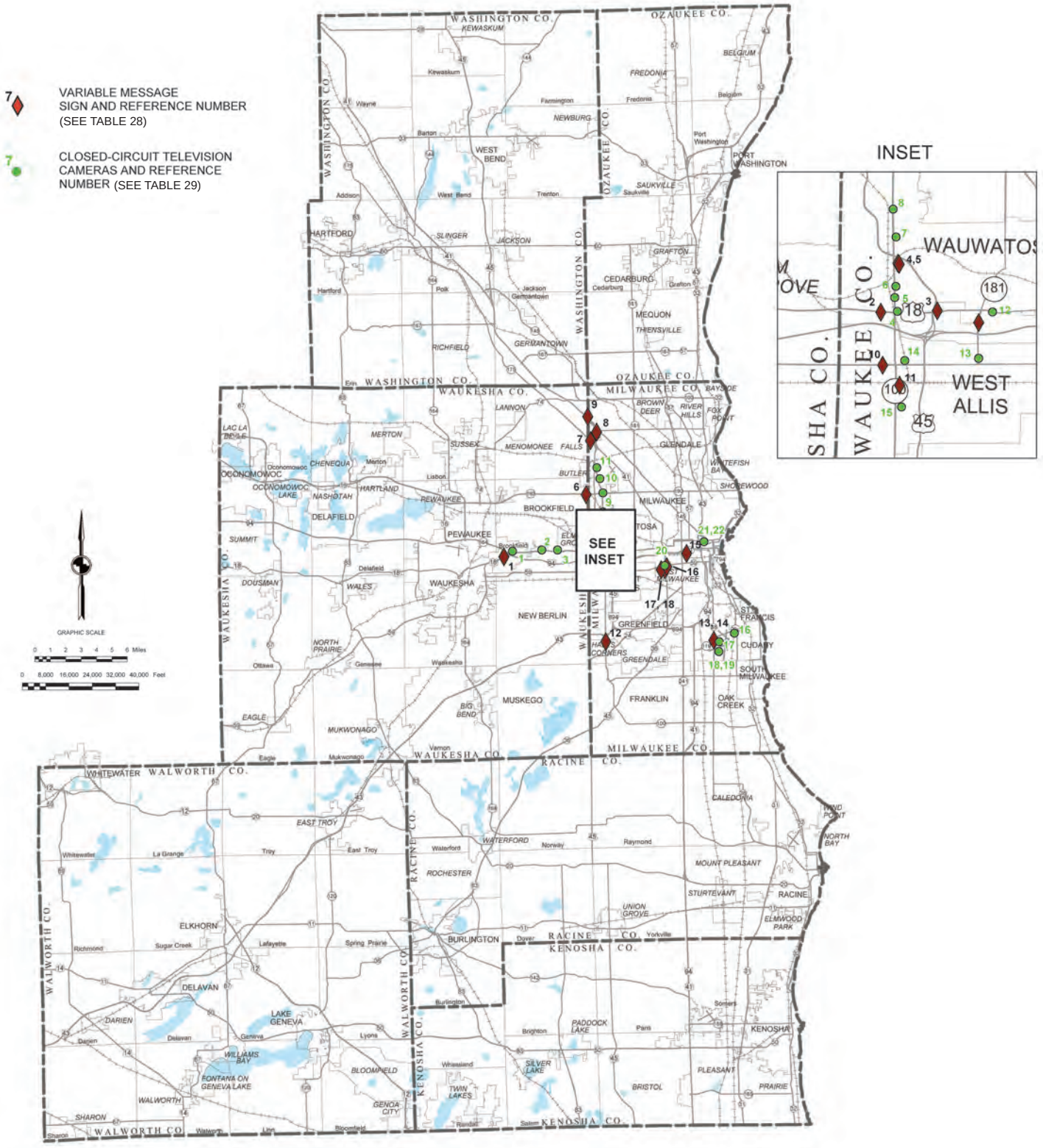
Table 27 (continued)

Reference Number (See Map 20)	Closed-Circuit Television Camera Locations
51	IH 43 at W. Wright Street
52	IH 43 at W. Keefe Avenue
53	IH 43 at STH 190 (W. Capitol Drive)
54	IH 43 at W. Hampton Avenue
55	IH 43 at W. Silver Spring Drive
56	IH 43 at W. Daphne Road
57	IH 43 at CTH PP (W. Good Hope Road)
58	IH 43 at STH 100 (W. Brown Deer Road)
59	IH 43 at County Line Road
60	IH 43 at STH 167 and STH 57 (Mequon Road)
61	IH 794 at N. 7th Street (James Lovell Boulevard) Upper
62	IH 794 at N. 7th Street (James Lovell Boulevard) Lower
63	IH 794 at N. 2nd Street/Plankington Avenue
64	IH 794 at Lincoln Memorial Drive (Lake Interchange)
65	IH 794 at north end of Daniel W. Hoan Bridge
66	IH 794 at south end of Daniel W. Hoan Bridge (Upper)
67	IH 794 at south end of Daniel W. Hoan Bridge (Lower)
68	IH 794 at Lake Pier
69	IH 794 at S. Carferry Drive (Upper)
70	IH 794 at S. Carferry Drive (Lower)
71	IH 794 at E. Bay Street
72	STH 794 at E. Oklahoma Avenue
73	IH 94 and IH 43 at W. Mitchell Street
74	IH 94 and IH 43 at STH 38 (Chase Avenue)
75	IH 94 and IH 43 at W. Oklahoma Avenue
76	IH 94 and IH 43 at W. Holt Avenue
77	IH 94 and IH 43 at W. Howard Avenue
78	IH 94 and IH 43 at W. Plainfield Avenue
79	IH 894 and IH 43 at 19th Street
80	IH 94 West-North Ramp #1
81	IH 94 West-North Ramp #2
82	IH 94 North-West Ramp #1
83	IH 94 North-West Ramp #2
84	I-43 East Entrance Tunnel
85	I-43 East Exit Tunnel
86	I-43 West Entrance Tunnel
87	I-43 West Exit Tunnel
88	IH 94 and IH 894 South-West Exit Tunnel
89	IH 94 and IH 894 South-West Entrance Tunnel
90	IH 94 at CTH Y (W. Layton Avenue)
91	IH 94 at CTH Y (W. Layton Avenue) Tunnel Signs
92	IH 94 at Grange Avenue
93	IH 94 at STH 119 (Airport Interchange)
94	IH 94 at CTH ZZ (W. College Avenue)
95	IH 94 at CTH BB (W. Rawson Avenue)
96	IH 94 at W. Drexel Avenue
97	IH 94 at S. STH 100 (W. Ryan Road)
98	IH 94 at W. Oakwood Road
99	IH 94 at Seven Mile Road
100	IH 94 at CTH G
101	IH 94 at CTH K
102	IH 94 at CTH E (W. 27th Street)
103	IH 94 at STH 20 (Washington Avenue)
104	IH 94 at STH 11 (W. Durand Avenue)
105	IH 94 at CTH A (W. 7th Street)
106	IH 94 at CTH KR (County Line Road)
107	IH 94 at CTH E (W. 12th Street)
108	IH 94 at STH 142 (Burlington Road)
109	IH 94 at STH 158 (W. 52nd Street)
110	IH 94 at STH 50 (W. 75th Street)
111	IH 94 at CTH C (Spring Street)
112	IH 94 at STH 165 (W. 104th Street)
113	IH 94 at CTH ML (Springbrook Road)
114	IH 894 and IH 43 at S. 20th Street
115	IH 894 and IH 43 at S. 22nd Street Tunnel Signs
116	IH 894 and IH 43 at USH 41 (S. 27th Street)
117	IH 894 and IH 43 at S. 35th Street
118	IH 894 and IH 43 at STH 36 (W. Loomis Road)
119	IH 894 and IH 43 at S. 60th Street
120	IH 894 and IH 43 at CTH U (S. 76th Street)
121	IH 894 and IH 43 at S. 84th Street
122	IH 894 and IH 43 at CTH N (S. 92nd Street)
123	IH 43 and IH 94 at Mitchell Interchange (NE)
124	IH 43 at Mitchell Interchange (SW)
125	IH 43 at STH 100 (S. 108th Street)
126	IH 43 at S. 116th Street
127	IH 43 at S. 124th Street
128	IH 43 at S. Sunnyslope Road
129	IH 43 at S. Moorland Road
130	IH 43 at CTH Y (S. Racine Avenue)
131	IH 43 at Crowbar Road
132	IH 43 at STH 164 (Big Bend Road)
133	IH 894 and USH 45 at Cold Spring Road
134	IH 894 and USH 45 at CTH T (W. Beloit Road)
135	IH 894 and USH 45 at CTH NN (W. Oklahoma Avenue)
136	IH 894 and USH 45 at W. Cleveland Avenue
137	IH 894 and USH 45 at W. Lincoln Avenue
138	IH 894 and USH 45 at STH 59 (W. National Avenue)
139	IH 894 and USH 45 at STH 59 (W. Greenfield Avenue)
140	USH 45 at USH 18 (W. Bluemound Road)
141	USH 45 at W. Watertown Plank Road
142	USH 45 at Swan Boulevard
143	USH 45 at STH 100 (N. Mayfair Road)
144	USH 45 at W. North Avenue
145	USH 45 at W. Center Street
146	USH 45 at W. Burleigh Road
147	USH 45 at STH 190 (W. Capitol Drive)
148	USH 45 at W. Hampton Avenue
149	USH 45 at CTH E (W. Silver Spring Drive)
150	USH 45 and STH 100 at USH 41 (W. Appleton Avenue)
151	USH 41 and USH 45 at CTH PP (W. Good Hope Road)
152	USH 41 and USH 45 at W. Park Place
153	USH 41 and USH 45 at Waukesha—Milwaukee County Line (W. 124th Street)
154	USH 41 and USH 45 at Leon Road
155	USH 41 and USH 45 at Pilgrim Road
156	USH 41 and USH 45 at CTH Q (Washington—Waukesha County Line Road)
157	USH 41 and USH 45 at STH 167 (Lannon Road)
158	USH 41 and USH 45 at CTH F (Freistadt Road)
159	USH 41 and USH 45 at STH 167 (Holy Hill Road)

Source: Wisconsin Department of Transportation and SEWRPC.

Map 21

LOCATIONS OF VARIABLE MESSAGE SIGNS AND CLOSED-CIRCUIT TELEVISION CAMERAS ON THE EXISTING STANDARD ARTERIAL STREET AND HIGHWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013



Source: Wisconsin Department of Transportation and SEWRPC.

Table 28

LOCATIONS OF VARIABLE MESSAGE SIGNS ON THE EXISTING STANDARD ARTERIAL STREET AND HIGHWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013

Reference Number (See Map 21)	Variable Message Sign Locations
1	USH 18 (E. Moreland Road) eastbound at IH 94 (Goerke's Corners)
2	STH 100 (N. 108th Street) southbound at USH 18 (W. Bluemound Road)
3	USH 18 (W. Bluemound Road) eastbound at 114th Street
4	STH 100 (N. 108th Street) northbound at Watertown Plank Road
5	STH 100 (N. 108th Street) southbound at W. Walnut Street
6	STH 190 (W. Capitol Drive) eastbound at N. 124th Street
7	STH 175 (Appleton Avenue) eastbound at STH 100 (N. 108th Street)
8	CTH PP (W. Good Hope Road) westbound at USH 41/45
9	STH 145 (N. 124th Street) southbound at W. Bradley Road
10	STH 59 (W. Greenfield Avenue) eastbound at 111th Street
11	STH 100 (N. 108th Street) northbound at W. Lapham Street
12	STH 100 (N. 108th Street) northbound at Edgerton Road
13	Mitchell International Airport at Airport Parking Ramp Exit
14	Mitchell International Airport at Airport Drop-off Exit
15	W. Canal Street westbound at 25th Street
16	Miller Park Way northbound at STH 59 (W. National Avenue)
17	STH 59 (W. National Avenue) westbound at Miller Park Way
18	STH 59 (W. National Avenue) eastbound at Miller Park Way
19	84th Street southbound at North IH 94

Source: Wisconsin Department of Transportation and SEWRPC.

Table 29

LOCATIONS OF CLOSED-CIRCUIT TELEVISION CAMERAS ON THE EXISTING STANDARD ARTERIAL STREET AND HIGHWAY SYSTEM IN SOUTHEASTERN WISCONSIN: 2013

Reference Number (See Map 21)	Closed-Circuit Television Camera Locations
1	USH 18 (W. Bluemound Road) at CTH Y (Barker Road)
2	USH 18 (W. Bluemound Road) at Calhoun Road
3	USH 18 (W. Bluemound Road) at CTH O (Moorland Road)
4	STH 100 (N. 108th Street) at USH 18 (W. Bluemound Road)
5	STH 100 (N. 108th Street) at Research Drive
6	STH 100 (N. 108th Street) at Watertown Plank Road
7	STH 100 (N. 108th Street) at W. North Avenue
8	STH 100 (N. 108th Street) at W. Burleigh Avenue
9	STH 100 (N. 108th Street) at STH 190 (W. Capitol Drive)
10	STH 100 (N. 108th Street) at CTH EE (W. Hampton Avenue)
11	STH 100 (N. 108th Street) at CTH E (W. Silver Spring Drive)
12	USH 18 (E. Bluemound Road) at 80th Street
13	STH 181 (S. 84th Street) at STH 59 (W. Greenfield Avenue)
14	STH 100 (N. 108th Street) at STH 59 (W. Greenfield Avenue)
15	STH 100 (N. 108th Street) at W. Lincoln Avenue
16	USH 794 (Lake Parkway) at E. Layton Avenue
17	USH 38 (S. Howell Avenue) at north Airport Tunnel
18	USH 38 (S. Howell Avenue) at south Airport Tunnel
19	USH 119 at USH 38 (S. Howell Avenue)
20	USH 341 (Miller Parkway) at STH 59 (W. National Avenue)
21	Kilbourn Avenue at Tunnel Entrance
22	Kilbourn Avenue at Tunnel Exit

Source: Wisconsin Department of Transportation and SEWRPC.

TRAVEL DEMAND MANAGEMENT

Implementation to date includes the following:

- Three park-ride lots of the 26 additional park-ride lots proposed under the 2035 plan have been provided to encourage transit use and carpooling, and a fourth park-ride lot has been constructed which was not in the year 2035 plan as adopted in 2006 (See Map 22). However, three park-ride lots that were built prior to 2006 have since been removed.

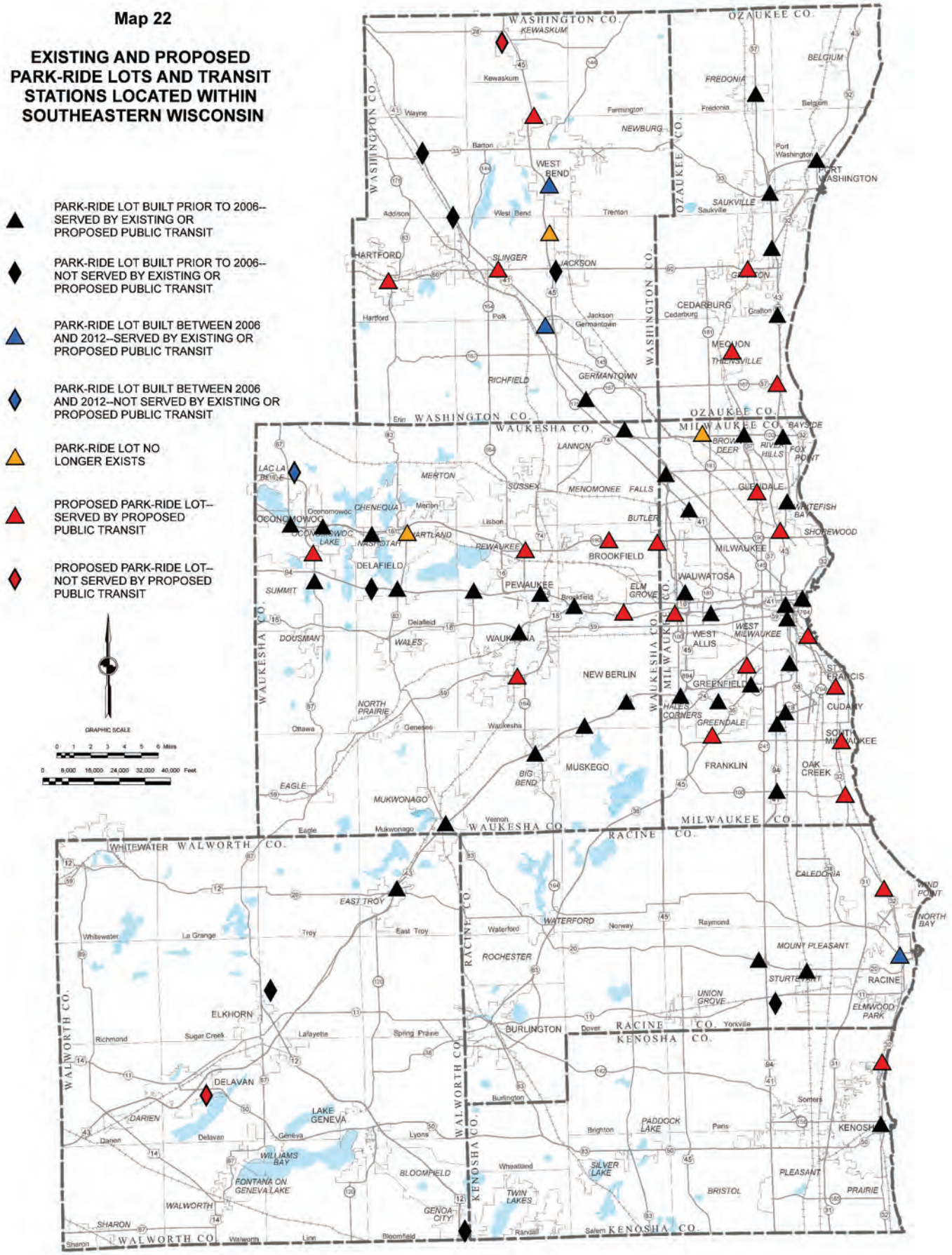
- Internet trip planners are provided by the Milwaukee County, Ozaukee County, and City of Kenosha transit systems, and will be made available for the Waukesha County transit system in the summer of 2014 and for the City of Waukesha transit system by the end of 2014.

- Automatic vehicle location systems are now used by the Milwaukee County, City of Waukesha, City of Racine, and Western Kenosha County transit systems and will soon be provided on Ozaukee and Washington County transit systems. Milwaukee County Transit System has initiated implementation of "next bus" information technology that is expected to be completed in 2014.

- The Milwaukee County, Ozaukee County, and City of Kenosha transit systems have equipped all of their buses with bike racks. While not a specific recommendation of the year 2035 regional transportation system plan, the installation of the bike racks on buses would promote the use of transit and bicycle modes of transportation.

Map 22

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



Source: SEWRPC

- Detailed site-specific neighborhood plans encouraging higher density, mixed use, transit-oriented development were prepared for the neighborhoods surrounding the nine KRM commuter rail stations. With the exception of one community, the plans have been endorsed by each community, with each community indicating that they will incorporate the plans into their comprehensive plans, should commuter rail proceed to implementation.

ARTERIAL STREETS AND HIGHWAYS

The arterial street and highway element of the recommended year 2035 regional transportation plan totaled 3,662 route-miles. Approximately 88 percent, or 3,209 of these route-miles, were recommended to be resurfaced and reconstructed to their same capacity. Approximately 360 route-miles—less than 10 percent of the total recommended year 2035 arterial street and highway system—were recommended for widening to provide additional through traffic lanes, including 127 miles of freeways. The remaining 93 route-miles—about 2 percent of the total arterial street mileage—were proposed new arterial facilities. Over the next 30 years, the plan envisioned capacity expansion of about 12 percent of the total arterial system and about a 10 percent expansion in added lane miles of arterials.

Since the completion and adoption of the regional transportation plan in 2006, approximately 14.7 miles of planned new arterial facilities, and 50.1 miles of arterial facilities planned to be widened to carry additional traffic lanes have been constructed and are open to traffic (See Map 23). These 64.8 miles of arterial facilities represent about 14 percent of the total planned new and widened arterial facilities under the regional plan. Currently under construction are 30 miles of reconstruction of IH 94 with additional traffic lanes between the Mitchell Interchange in Milwaukee County and the Wisconsin-Illinois State line planned to be open to traffic in 2021. Reconstruction of the Mitchell Interchange and the portion of IH 94 from the Wisconsin-Illinois State line to STH 50 in Kenosha County has been completed by 2012. With respect to the other major freeway-to-freeway interchanges in Southeastern Wisconsin, reconstruction of the largest and most complicated interchange, the Marquette Interchange, was completed in 2008. Reconstruction of the Zoo Interchange began in 2013 and is planned to be completed in 2018.

SUMMARY AND CONCLUSIONS

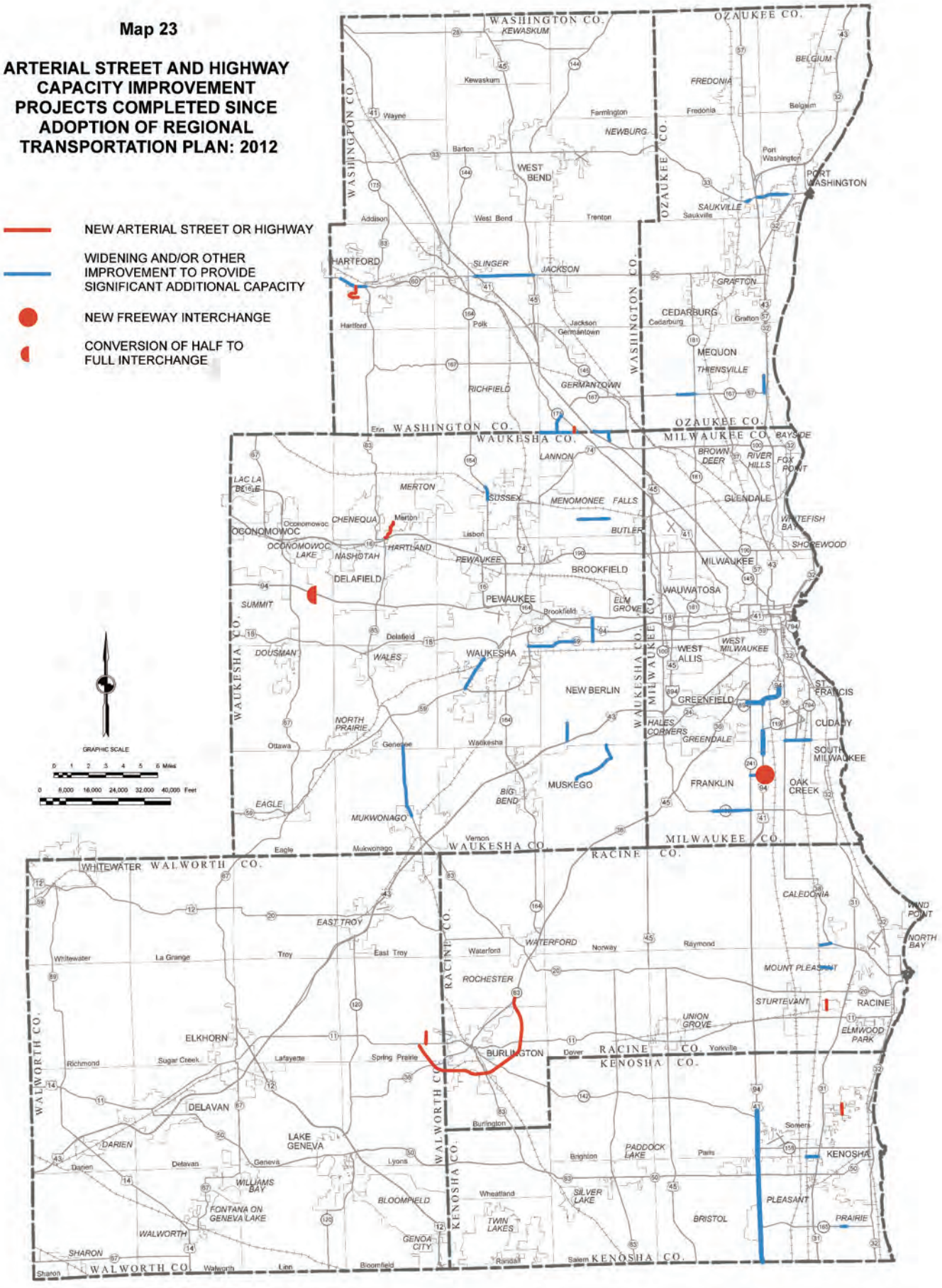
About seven years have passed since the completion and adoption of the year 2035 regional transportation plan, representing about 23 percent of the plan's 30-year planning period. Some implementation of each element of the plan's recommendations has occurred:

- Public Transit: Since adoption of the regional transportation plan in 2006, the amount of transit service has declined by about 4 percent (7 percent decrease in fixed route bus service and 17 percent increase in shared-ride taxi service), and transit fares have increased by amounts greater than general price inflation. The plan envisioned transit service increases beginning in 2008 at an annual rate of about 2 percent through the year 2035, and transit fare increases at the general rate of price inflation. It was recognized, however, that these plan recommendations may only occur upon achieving State legislation for dedicated funding and a regional transit authority. State legislation was enacted in mid-2009 creating a commuter rail authority with dedicated local funding, and State legislation for a regional transit authority with dedicated local funding was considered but not adopted in 2009 and again in 2010. In 2011, the regional authority responsible for implementing the commuter rail line was dissolved. In addition, implementation of the planned high-speed rail line was indefinitely postponed following withdrawal of Federal funding in December 2010, although high-speed rail remains a part of WisDOT's long-range state rail plan.

- Bicycle and Pedestrian Facilities: Of the 345 additional proposed miles of the recommended 548-mile off-street bicycle and pedestrian path system, 47 miles have been constructed since 2006. Also, with respect to recommended accommodation of bicycle travel on the regional arterial street system, WisDOT and FHWA now require such consideration during preliminary engineering conducted for State, county, and local arterial construction and reconstruction using Federal funds.

Map 23

ARTERIAL STREET AND HIGHWAY CAPACITY IMPROVEMENT PROJECTS COMPLETED SINCE ADOPTION OF REGIONAL TRANSPORTATION PLAN: 2012



Source: SEWRPC.

- Transportation Systems Management: Modest to significant implementation of the recommended freeway and surface arterial street and highway traffic management measures has occurred since 2004. Specifically, freeway traffic management implementation has included the expansion of freeway ramp-meters (increasing by about 1 percent), variable message signs (increasing by about 48 percent), and closed circuit television cameras (increasing by about 92 percent), and the installation of a 511 travel information system. Implementation of the recommended surface arterial street and highway traffic management measures has included additional traffic signal interconnection and coordination, and expansion of variable message signs (increasing by about 42 percent) and closed circuit television cameras (increasing by about 69 percent).

- Travel Demand Management--Implementation has included expansion of park-ride lots, transit system internet trip planners, and automatic bus location systems, and development of site-specific transit-oriented development neighborhood plans for the nine KRM commuter rail station areas.

- Arterial Streets and Highways: About 64.8 miles, or 14 percent of the plan-recommended 453 miles of arterial capacity expansion have been completed and are open to traffic as of 2012. Also, currently under construction are 30 miles of reconstruction of IH 94 with additional traffic lanes between the Mitchell Interchange in Milwaukee County and the Wisconsin-Illinois State line that is planned to be open to traffic in 2021. Reconstruction of the Mitchell Interchange and the portion of IH 94 from the Wisconsin-Illinois State line to STH 50 in Kenosha County has been completed by 2012. With respect to the other major freeway-to-freeway interchanges in Southeastern Wisconsin, reconstruction of the largest and most complicated interchange, the Marquette Interchange, was completed in 2008. Reconstruction of the Zoo Interchange began in 2013 and is planned to be completed in 2018.

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Chapter 6

UPDATE OF YEAR 2035 REGIONAL TRANSPORTATION PLAN

INTRODUCTION

The review of the year 2035 regional transportation plan presented in the previous chapters of this report indicates the following:

- Forecasts to the year 2035 upon which the plan is based, including population, households, employment, vehicle availability, and vehicle-miles of travel, remain valid.

- Transportation system performance has not changed significantly since the 2035 plan base year of 2006, including pavement and bridge condition, traffic congestion, highway and transit travel times, and travel safety.

- The regional plan is a little over seven years, or about 23 percent, into its 30-year implementation period from 2006 to 2035. Plan implementation has lagged modestly to significantly depending upon the plan element concerned. About 7 percent of plan recommended on-street bicycle accommodation, about 12 percent of off-street bicycle and pedestrian paths, and about 13 percent of arterial street and highway system capacity improvements have been implemented. With respect to public transit, the plan had envisioned that about a 12 percent expansion would have been implemented to date; however, fixed route bus service has been reduced by 7 percent, with demand-responsive transit service increased by 17 percent. This lagging in plan implementation is a result of significantly constrained transportation funding. The indexing of the State motor fuel tax to inflation—the principal source of State transportation funding—ended as the regional transportation plan was being completed. State funding for transit has not kept up with inflation. Legislative efforts to create a regional transit authority (RTA) have not progressed since 2010. As transportation capital and operating funding lags, capital improvements are deferred or delayed (street and highway and bicycle and pedestrian improvements) and transit service is reduced (as transit service is largely dependent on State operating funding).

The Commission has undertaken VISION 2050, which is well underway and which constitutes a major reevaluation and extension of the regional transportation plan to a new design year 2050. This effort is scheduled to be completed in June 2015, and potential major changes will be considered to the regional transportation plan under this effort. As a result, under this interim plan review and update, the only plan amendments to the regional transportation plan which will be considered will be amendments resulting from completed, or about to be completed, preliminary engineering. There is only one such amendment and it is a result of the preliminary

engineering for the reconstruction of IH 43 between Silver Spring Drive and STH 60. The amendment is the addition to the regional plan of the conversion of the County Line Road interchange on IH 43 from a half to a full interchange.

Also, based on the progress of plan implementation, and the changes in transportation funding since the last plan review in 2010, there is a need to examine funding and its implications for regional transportation plan implementation. The next section of this chapter compares updated estimates of year 2035 regional transportation plan costs with updated estimates of reasonably expected to be available revenues.

COMPARISON OF 2035 PLAN COSTS TO REASONABLY EXPECTED REVENUES

Tables 30 and 31 compare estimated 2035 plan costs to reasonably expected to be available revenues. Table 30 provides this comparison based on year 2012 constant dollars, and Table 31 based on year of expenditure dollars (For the year of expenditure comparison, costs have been inflated by 2.5 percent annually, and revenues have been projected to increase generally by about 2 to 3 percent annually based on 5-to-10 year historic trends). Appendix A of this report presents more details with respect to estimated plan costs and revenues.

With respect to reasonably expected to be available revenues, estimates need to take into account existing and reasonably expected limitations on funding. For example, existing limitations which dictate that funding can be used only for capital projects as opposed to covering operating costs. As another example, funds may be restricted to a specific travel mode, program, or geographic area.

The conclusions reached in 2005, when the 2035 plan was initially adopted, and again in 2010 when that plan was first reviewed and updated, was that the plan recommendations were reasonably consistent with existing and reasonably expected to be available revenues. This conclusion is no longer possible given the elimination of motor fuel tax indexing and the failure of RTA legislation, as is apparent from a review of Tables 30 and 31. In 2012 constant dollars, the funding shortfall approximates 22 percent and in year of expenditure dollars about 27 percent. As a result, in order to meet Federal regulations, the original year 2035 plan is now considered to be a "vision" plan, outlining the desirable transportation system improvements believed to be necessary to address the current and future transportation needs of the Region. In addition, it is necessary to identify a "fiscally constrained" year 2035 regional transportation plan which includes those elements of the 2035 plan which likely can be achieved within the restrictions of the amounts and limitations of existing and reasonably expected to be available revenues. What follows, then is a summary description of the 2035 Regional Transportation Vision Plan, followed by a description of the 2035 Fiscally Constrained Regional Transportation Plan expressed largely in terms of: 1) those highway projects identified in the 2035 Vision Plan that are being deferred until after 2035; and, 2) probable level of service reductions and fare increases in transit.

YEAR 2035 REGIONAL TRANSPORTATION PLAN: VISION

The year 2035 regional transportation plan as reviewed and reaffirmed in 2010, and modified with minor amendments to date, now represents a desirable future vision of a future regional transportation system enabling convenient transit service frequencies with efficient travel times, the safe and efficient accommodation of both bicycle travel and personal vehicle travel, and the avoidance of a continued decline in mobility and increase in congestion which has occurred in recent years.

The elements of this year 2035 Regional Transportation Plan–Vision are as follows:

Public Transit Element
The public transit element of the plan envisions significant improvement and expansion of public transit in Southeastern Wisconsin, including development within the Region of a high-speed rail line, rapid transit and express transit system, improvement of existing local bus service, and the integration of local bus service with the recommended rapid and express transit services. Map 24 displays the transit system proposals for each of the

Table 30

AVERAGE ANNUAL COSTS AND REVENUES ASSOCIATED WITH THE YEAR 2035 VISION REGIONAL TRANSPORTATION SYSTEM PLAN[a] IN 2012 CONSTANT DOLLARS: 2015 THROUGH 2035[b]

Cost or Revenue Item	2035 Plan
Transportation System Cost (average annual 2015-2035 expressed as millions of dollars)[c]	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	$ 488
Other	372
Subtotal	$ 861
Operating	80
Subtotal	$ 940
Transit System	
Capital	$ 57
Operating[d]	230
Subtotal	$ 287
Total	$1,227
Transportation System Revenues (average annual 2015-2035 expressed as millions of dollars)[c]	
Highway Capital (Federal/State/Local)	
Freeway Reconstruction	$ 275
Other	401
Subtotal	$ 676
Highway Operating (State/Local)	76
Subtotal	$ 752
Transit Capital	
Federal	$ 17
Local	5
Subtotal	$ 22
Transit Operating	
Federal	$ 30
State	125
Local	31
Subtotal	$ 186
Subtotal	$ 208
Total	$ 960

[a]*The costs and revenues associated with the Kenosha-Racine-Milwaukee commuter rail service have not been included in this analysis, but rather, are set forth in Chapter Eight ("Local Financial Commitment") of the Request to Initiate Preliminary Engineering for the proposed Kenosha-Racine-Milwaukee (KRM) Commuter Rail Project. While included in the adopted 2035 regional transportation plan, the KRM project was excluded from the analysis because it would be constructed and operated with funding sources over and above the normal and usual funding sources.*

[b]*All cost and revenue figures in this table are expressed in constant 2012 dollars.*

[c]*The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system, such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the plan. Freeway system capital costs include the estimated cost to resurface the existing freeway system, as needed, and the estimated cost to rebuild 255 miles of the existing freeway system not already modernized to modern design standards, estimated at $8.1 billion or $386 million per year; the estimated incremental cost to rebuild 114 miles of the freeway system with additional lanes at $1.58 billion or $75 million per year; the estimated cost of two new freeway interchanges and the conversion of two half interchanges to full interchanges at $132 million; and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater at $417 million. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,114 miles of surface arterials which will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 192 miles of surface arterials, and the estimated costs of new construction of 66 miles of surface arterials. The estimated costs of resurfacing and reconstruction are based on the estimated lifecycle of existing surface arterials, and includes reconstruction of about 30 percent of surface arterials, two resurfacings of about 25 percent of surface arterials, and one resurfacing of about 45 percent of surface arterials. Unit costs for surface arterial resurfacing, reconstruction, widening, and new construction vary by cross-section from $0.3 to $14 million per mile (rural or urban, divided or undivided, and number of traffic lanes) and are based upon actual project costs over the past several years. The estimated capital cost of surface arterials is $303 million per year, including $244 million for preservation (resurfacing and reconstruction) and $59 million for new arterials and arterials reconstructed with additional traffic lanes. The major arterial capacity expansion projects presented in Table A-6 represent about 60 percent or $39.7 million of the total $67 million annual cost of planned surface arterial capacity expansion. Transit system capital costs include preservation of the existing transit system including bus replacement on a 12 to 15 year schedule and replacement of fixed facilities, and costs of system improvement and expansion including needed additional buses and facility expansion.*

Highway system operating (and maintenance) costs are based on estimated actual state and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the proposed increase in the plan in arterial highway system lane-miles. Transit system operating (and maintenance) costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours. Planned transit system operating costs are increased from existing system operating costs based on the planned increase in transit service vehicle-miles and vehicle-hours.

Highway Federal, state, and local capital and operating revenues are based on estimated Federal, state, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State continuing its program of funding approximately 42 percent of transit operating costs.

[d]*Net operating cost (total operating costs less fare-box revenue).*

Source: SEWRPC.

Table 31

AVERAGE ANNUAL COSTS AND REVENUES ASSOCIATED WITH THE YEAR 2035 VISION REGIONAL TRANSPORTATION SYSTEM PLAN[a] BASED ON YEAR OF EXPENDITURE: 2015 THROUGH 2035

Cost or Revenue Item	2035 Plan
Transportation System Cost (average annual 2015-2035 expressed as millions of dollars)[b]	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	$ 681
Other	519
Subtotal	$1,200
Operating	111
Subtotal	$1,311
Transit System	
Capital	$ 83
Operating[c]	334
Subtotal	$ 416
Total	$1,727
Transportation System Revenues (average annual 2015-2035 expressed as millions of dollars)[b]	
Highway Capital (Federal/State/Local)	
Freeway Reconstruction	$ 351
Other	531
Subtotal	$ 882
Highway Operating (State/Local)	97
Subtotal	$ 979
Transit Capital	
Federal	$ 25
Local	7
Subtotal	$ 32
Transit Operating	
Federal	$ 39
State	176
Local	39
Subtotal	$ 254
Subtotal	$ 286
Total	$1,265

[a]The costs and revenues associated with the Kenosha-Racine-Milwaukee commuter rail service have not been included in this analysis, but rather, are set forth in Chapter Eight ("Local Financial Commitment") of the Request to Initiate Preliminary Engineering for the proposed Kenosha-Racine-Milwaukee (KRM) Commuter Rail Project. While included in the adopted 2035 regional transportation plan, the KRM project was excluded from the analysis because it would be constructed and operated with funding sources over and above the normal and usual funding sources.

[b]The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the plan. Freeway system capital costs include the estimated cost to rebuild the existing freeway system to modern design standards, the estimated incremental cost to rebuild 113 miles of the freeway system with additional lanes, the estimated cost of two new freeway interchanges and the conversion of two half interchanges to full interchanges, and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,119 miles of surface arterials which will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 193 miles of surface arterials, and the estimated costs of new construction of 64 miles of surface arterials. The capital cost of the plan was based on equal annual expenditures of funds, in constant dollars, over the 21-year period. The operating costs for both the arterial street and highway system and transit system were based on equally increasing annual costs, in constant dollars, over the 21-year period. The conversion of year 2012 constant dollar cost to year of expenditure cost is based upon a price inflation of 2.5 percent.

Highway Federal, state, and local capital and operating revenues are based on estimated Federal, state, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State continuing its program of funding approximately 42 percent of transit operating costs.

[c]Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC.

three transit system components. Altogether, service on the regional transit system would be increased from service levels existing in 2012 by about 125 percent measured in terms of revenue transit vehicle-miles of service provided, from about 61,000 vehicle-miles of service on an average weekday in the year 2012 to 137,300 vehicle-miles of service in the year 2035 (see Table 32).

The recommended expansion of public transit was considered essential in Southeastern Wisconsin for many reasons:

- Public transit is essential to provide an alternative mode of travel in heavily traveled corridors within and between the Region's urban areas, and in the Region's densely developed urban communities and activity centers. It is not desirable, and not possible, in the most heavily traveled corridors, dense urban areas, or the largest and densest activity centers of the Region to accommodate all travel by automobile with respect to both demand for street traffic carrying capacity and parking. To attract travel to public transit, service must be available throughout the day and evening at convenient service frequencies, and at competitive and attractive travel speeds.

- Public transit also supports and encourages higher development density and infill land use development and redevelopment, which results in efficiencies for the overall transportation system and other public infrastructure and services.

- Public transit also contributes to efficiency in the transportation system, including reduced air pollution and energy consumption.

- Public transit permits choice in transportation, enhancing the Region's quality of life and economy. A portion of the Region's population and businesses would prefer to have public transit alternatives available and to travel by public transit. High quality public transit helps provide a high quality of life and contributes to the maintenance and enhancement of the Region's economy.

- Public transit is essential in the Region to meet the travel needs of persons unable to access or use personal automobile transportation. In the year 2000, approximately 80,000 households, or 11 percent of the Region's households, did not have a personal vehicle available and were dependent upon public transit for travel. The accessibility of this portion of the Region's population to the metropolitan area—jobs, health care, shopping and education—is almost entirely dependent upon the extent to which public transit is available, and is reasonably fast, convenient, and affordable.

High-Speed Rail Service

The planned high-speed rail line between Chicago, Milwaukee, and Madison would be developed and overseen by WisDOT. This project had received Federal funding in January 2010, but the majority of the Federal funding was withdrawn in December 2010 as a result of the newly elected Governor's opposition to using the funding for a high-speed rail line. Without Federal funding, the project was indefinitely postponed. Despite its postponement, this proposed service remains a part of WisDOT's long-range state rail plan completed in March 2014. As well, WisDOT is continuing efforts to increase service and improve travel times of Amtrak's existing Hiawatha Service operating between Chicago and Milwaukee. The planned high-speed rail line is intended to be part of an initial phase in the development of a Midwest high-speed rail network, planned in partnership with other Midwest states and Amtrak. Implementation of the planned Chicago-Milwaukee-Madison high-speed rail service will include improvements to Amtrak's existing Hiawatha Service operating between Chicago and Milwaukee and potential infrastructure improvements to allow service to continue to Madison.

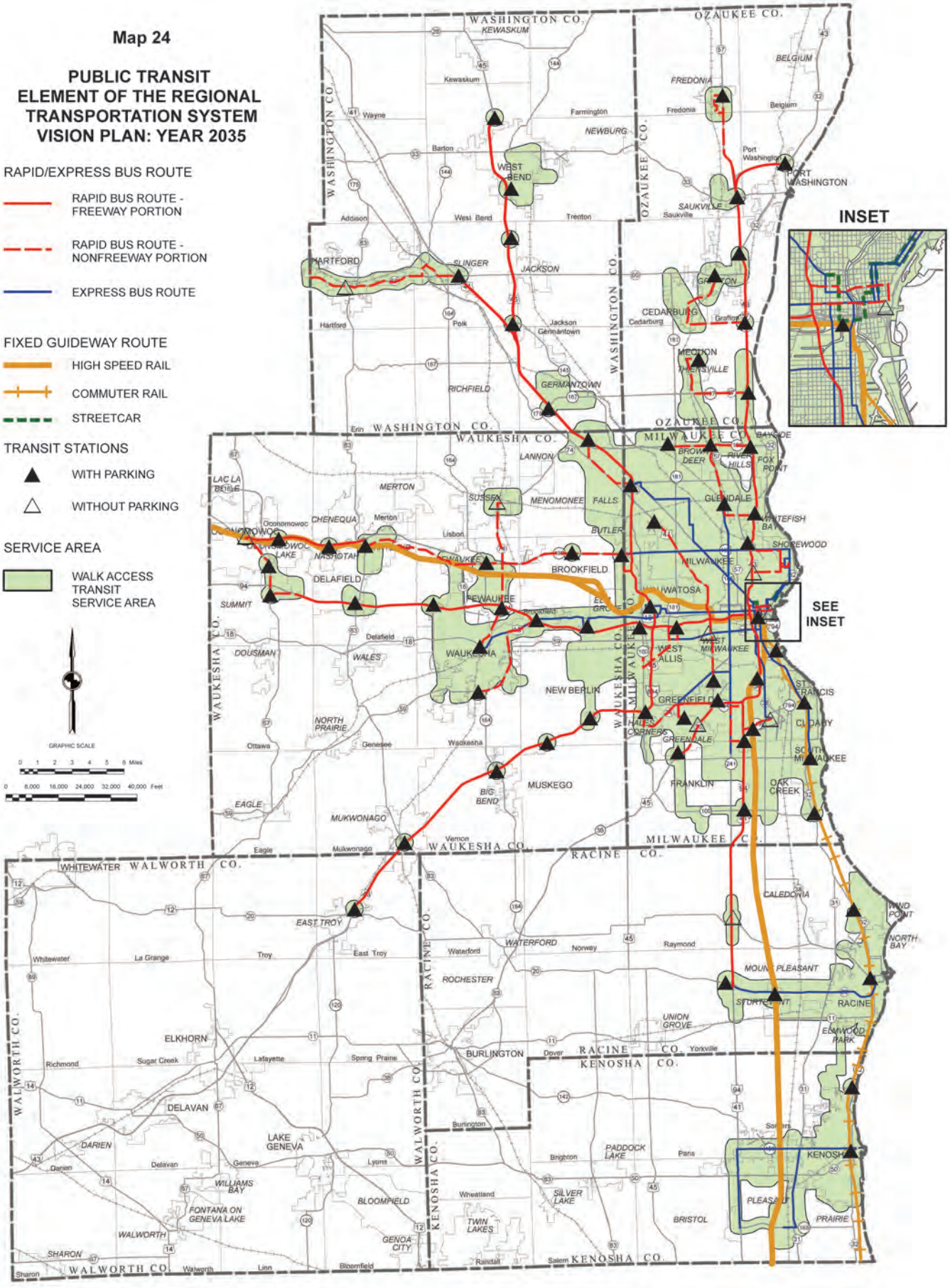
Rapid Transit Service

The recommended rapid transit service would principally consist of buses operating over freeways connecting the Milwaukee central business district, the urbanized areas of the Region, and the urban centers and outlying counties of the Region. Rapid transit bus service would be provided south to Racine, southwest to Mukwonago and East Troy, west to Waukesha and Oconomowoc, northwest to West Bend and Hartford, and north to Cedarburg, Grafton, Saukville, and Port Washington. The proposed rapid transit system would have the following characteristics:

- The rapid transit service would be provided by buses with commuter seating and amenities, and would operate in both directions during all time periods of the day and evening providing both traditional commuter and reverse-commute service.

Map 24

PUBLIC TRANSIT ELEMENT OF THE REGIONAL TRANSPORTATION SYSTEM VISION PLAN: YEAR 2035



Source: SEWRPC.

Table 32

PUBLIC TRANSIT ELEMENT OF FINAL RECOMMENDED YEAR 2035 REGIONAL TRANSPORTATION PLAN

Average Weekday Transit Service Characteristics	Existing 2012[a]	Planned Increment		
		Recommended Plan 2035	Number	Percent Change
Revenue Vehicle-Miles				
Rapid				
Bus	7,700[b]	21,100	13,400	174.0
Commuter Rail	- -	2,200	2,200	- -
Subtotal	7,700[b]	23,300	15,600	202.6
Express	5,000	17,000	12,000	240.0
Local	48,300	97,000	48,700	100.8
Total	61,000	137,300	76,300	125.1
Revenue Vehicle-Hours				
Rapid				
Bus	350[b]	1,000	650	177.8
Commuter Rail	- -	100	100	- -
Subtotal	350[b]	1,100	750	214.3
Express	400	1,100	700	175.0
Local	3,950	8,900	4,950	125.3
Total	4,700	11,100	6,400	136.2

[a]*Estimated.*

[b]*Includes the existing commuter bus route operated in the Kenosha-Milwaukee-Racine corridor. While portions of this route operate with express stop spacing, the long trips served by, and average operating speeds of, this route are typical of those for rapid service.*

Source: SEWRPC.

- The rapid transit service would operate with some intermediate stops spaced about three to five miles apart to increase accessibility to employment centers and to increase accessibility for reverse-commute travel from residential areas within central Milwaukee County. The stops would provide connections with express transit service, local transit service, or shuttle bus or van service to nearby employment centers.

- The service would operate throughout the day. 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.

The recommended rapid transit service also includes a commuter rail line connecting Milwaukee, Racine, and Kenosha, as well as the Chicago area through the existing Chicago-Kenosha Metra commuter rail. The commuter rail would operate similar to the rapid transit bus service, providing service at convenient frequencies in both directions throughout the day and evening with stops spaced about three to five miles apart.

An approximate tripling in rapid transit service is recommended as measured by daily vehicle-miles of bus service, from the 7,700 vehicle-miles of such service provided on an average weekday in the year 2012, to 23,300 vehicle-miles in the plan design year 2035 (see Table 32).

Table 33

FREQUENCY OF LOCAL BUS SERVICE UNDER THE YEAR 2035 VISION REGIONALTRANSPORTATION PLAN

Area	Average Weekday Headways on Local Bus Service (minutes)		
	Morning and Afternoon Peak Periods	Midday Off-Peak Period	Evening Off-Peak Period
Within Milwaukee County			
Central Milwaukee County	5-15	10-20	15-20
Remainder of Milwaukee County	15-20	20-30	20-60
Outside Milwaukee County	15-30	30-60	30-60

Source: SEWRPC.

Express Transit Service

The recommended express transit service would consist of a grid of limited-stop, higher-speed routes located largely within Milwaukee County connecting major employment centers and shopping areas, other major activity centers such as General Mitchell International Airport, tourist attractions and entertainment centers, and residential areas. The express routes would replace existing major local bus routes. Stops would typically be spaced about one-quarter mile apart. It is envisioned that this system of limited-stop express service routes would initially consist of buses operating over arterial streets in mixed traffic, and would be upgraded over time to buses operating on reserved street lanes with priority treatment at traffic signals.

As envisioned under the plan:

- The express service would operate in both directions during all periods of the day and evening providing both traditional and reverse-commute service.
- The service would generally operate with a stop spacing of about one-quarter mile with one-half mile stop spacing in outlying portions of Milwaukee County and the Milwaukee urbanized area.
- The frequency of service provided would be about every 10 minutes during weekday peak periods, and about every 20 to 30 minutes during weekday off-peak periods and on weekends.
- The overall travel speed provided would be about 16 to 18 miles per hour, a significant improvement over the average 12 miles per hour speed provided by the existing local bus transit service.
- An approximately 240 percent increase in express transit service is recommended from the 5,000 vehicle-miles of express transit service provided in 2012 on an average weekday to 17,000 vehicle-miles in the plan design year 2035 (see Table 32).
- The recommended express service also includes the City of Milwaukee downtown streetcar line.

Local Transit Service

The improvement and expansion of local bus transit service over arterial and collector streets, with frequent stops throughout the Kenosha, Milwaukee, and Racine urbanized areas is also recommended. Service would be provided on weekdays, and during weekday evenings, Saturdays, and Sundays. An approximate doubling of local bus service is recommended from the 48,300 vehicle-miles of local bus service provided in 2012 on an average weekday to 97,000 vehicle-miles in the plan design year 2035 (see Table 32). The service improvements and expansion proposed includes expansion of service area and hours, and significant improvements in the frequency of local transit service provided, particularly on major local routes. The recommended frequency of local bus service is shown in Table 33.

Paratransit Service

Paratransit service is recommended to be provided consistent with the Federal Americans with Disabilities Act (ADA) of 1990. Under the provisions of this Act, all transit vehicles that provide conventional fixed-route transit service must be accessible to persons with disabilities, including those persons using wheelchairs. All public entities operating fixed-route transit systems must also continue to provide paratransit service to those disabled persons within local transit service areas who are unable to use fixed-route transit services consistent with federally specified eligibility and service requirements. The complementary paratransit services must serve any person with a permanent or temporary disability who is unable independently to board, ride, or disembark from an accessible vehicle used to provide fixed-route transit service; who is capable of using an accessible vehicle, but one is not available for the desired trip; or who is unable to travel to or from the boarding or disembarking location of the fixed-route transit service. The planned paratransit service must be available during the same hours and on the same days as the fixed-route transit service, be provided to eligible persons on a "next-day" trip-reservations basis, not limit service to eligible persons based on restrictions or priorities to trip purpose, and not be operated under capacity constraints which might limit the ability of eligible persons to receive service for a particular trip. The paratransit service fares must be no more than twice the applicable public transit fare per one-way trip for curb-to-curb service.

Upgrading to Rail Transit or Bus Guideways

Rapid and express transit service is recommended to initially be provided with buses. This bus service would ultimately be upgraded to commuter rail in six corridors for rapid transit service and to bus guideway or light rail in six corridors for express transit service, as shown on Map 25. Public transit cannot offer convenient accessibility or provide an attractive alternative to the automobile in heavily traveled corridors and dense urban activity centers, or provide a true choice for travel, if it is caught in traffic congestion and its travel times are not comparable to those of automobile travel. Upgrading to exclusive guideway transit may also be expected to promote higher density land development and redevelopment at and around the stations of the exclusive guideway transit facilities, promoting implementation of the regional land use plan.

There was one effort underway in Southeastern Wisconsin during the review and update of the regional plan considering upgrading to fixed guideway transit. The City of Milwaukee has completed planning and preliminary engineering for a streetcar line to operate in the central portion of the City of Milwaukee, and is currently working to complete the final design of the project.

Summary and Conclusions—Public Transit

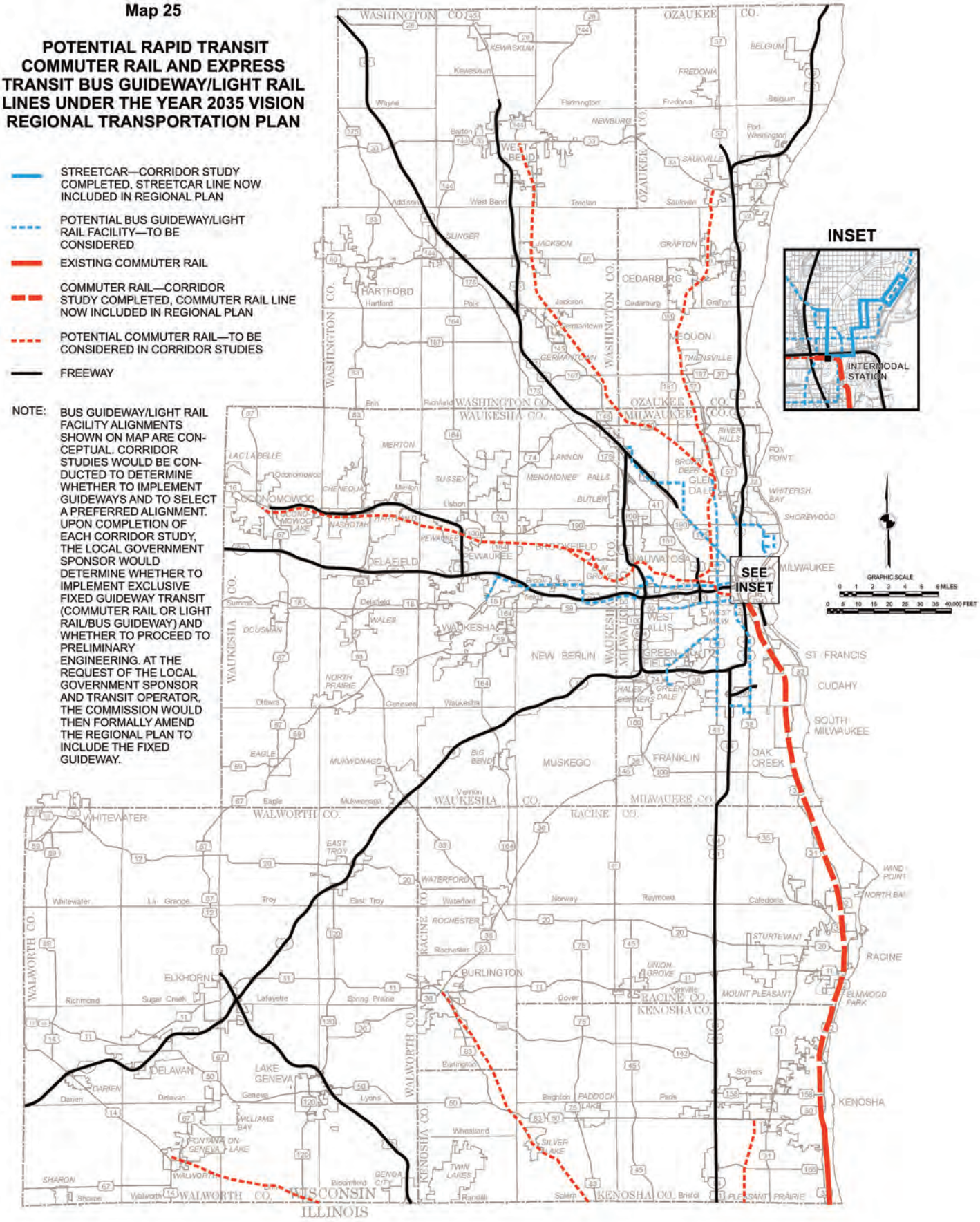
The recommended expansion of public transit in Southeastern Wisconsin represented a near doubling of transit service in Southeastern Wisconsin by the year 2035 from the base year—2005—of the regional transportation plan, and now represents a somewhat more than doubling from current year 2012 regional transit service levels, given the reductions in transit service in the Region between 2005 and 2012. As shown in Figure 17, this entails about a 4.2 percent annual increase in transit service to the year 2035, slightly higher than the annual increase which occurred between 1995 and 2000. Significant implementation of the year 2020 plan occurred between 1997 and 2000 as transit service expanded by over 25 percent. However, due to State and local budget problems, transit service was significantly reduced from 2000 to 2012.

Implementation of this recommended expansion would be dependent upon the continued commitment of the State to be a partner in the maintenance, improvement and expansion, and attendant funding of public transit. The State had historically funded 40 to 45 percent of transit operating costs, and had increased funding to address inflation in the cost of providing public transit, and to provide for transit improvement and expansion.

Implementation of the recommended expansion of public transit in Southeastern Wisconsin would also be dependent upon attaining dedicated local funding for public transit. In the absence of dedicated local funding, the recommended expansion may not be expected to be implemented, and continued reductions in transit service may be expected. The local share of funding of public transit in Southeastern Wisconsin is provided through county or municipal budgets, and represents about 15 percent of the total operating costs and 20 percent of total capital costs of public transit. Thus, the local share of funding public transit is largely provided by property taxes, and public

Map 25

POTENTIAL RAPID TRANSIT COMMUTER RAIL AND EXPRESS TRANSIT BUS GUIDEWAY/LIGHT RAIL LINES UNDER THE YEAR 2035 VISION REGIONAL TRANSPORTATION PLAN



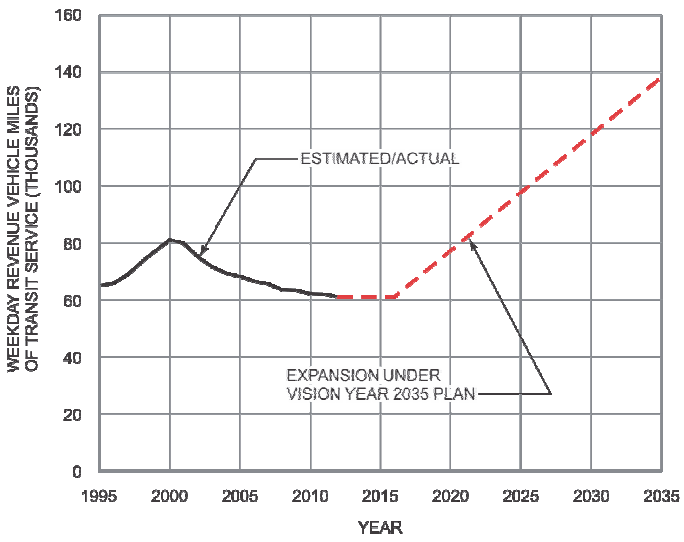
Source: SEWRPC.

transit must annually compete with mandated services and projects. Increasingly, due to the constraints in property tax based funding, counties and municipalities have found it difficult to provide funding to address transit needs, and to respond to shortfalls in Federal and State funding. Most public transit systems nationwide have dedicated local funding, typically a sales tax of 0.25 to 1.0 percent. A sales tax provides funding which should increase with inflation and area growth, thereby addressing funding needs attendant to inflation in the costs of providing public transit and transit system expansion.

A regional transit authority was also envisioned in the 2035 plan to assist in implementing the recommended transit system expansion. A number of the proposed transit services extend across city and county boundaries. A regional transit authority could assist in the implementation of these proposed services.

Figure 17

HISTORIC AND PLANNED VEHICLE-MILES OF PUBLIC TRANSIT SERVICE ON AN AVERAGE WEEKDAY IN THE SOUTHEASTERN WISCONSIN REGION: 1995-2035



Source: SEWRPC.

Bicycle and Pedestrian Facility Element

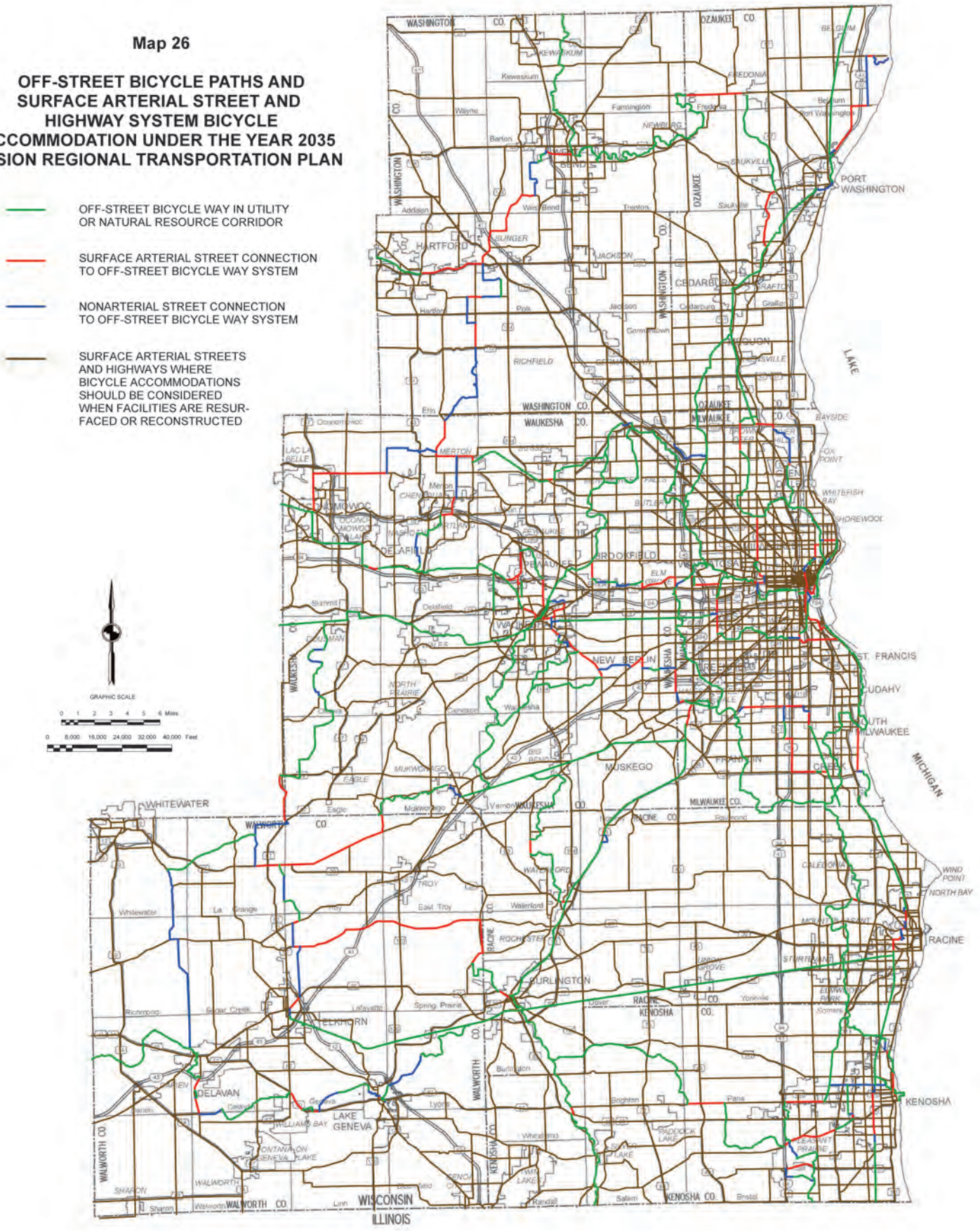
The bicycle and pedestrian facility element of the recommended plan is intended to promote safe accommodation of bicycle and pedestrian travel, and encourage bicycle and pedestrian travel as an alternative to personal vehicle travel. The plan envisions that as the surface arterial street system of about 3,300 miles in the Region is resurfaced and reconstructed segment-by-segment, the provision of accommodation for bicycle travel would be considered and implemented, if feasible, through bicycle lanes, widened outside travel lanes, widened shoulders, or separate bicycle paths. The surface arterial street system of the Region provides a network of direct travel routes serving virtually all travel origins and destinations within Southeastern Wisconsin. Arterial streets and highways—particularly those with high-speed traffic or heavy volumes of truck or transit vehicle traffic—require improvements such as extra-wide outside travel lanes, paved shoulders, bicycle lanes, or a separate bicycle path in order to safely accommodate bicycle travel. Land access and collector streets, because of low traffic volumes and speeds, are capable of accommodating bicycle travel with no special accommodation for bicycle travel.

The level and unit of government responsible for constructing and maintaining the surface arterial street or highway should have responsibility for constructing, maintaining, and funding the associated bicycle facility. A detailed evaluation of the alternatives for accommodation of bicycles on surface arterial streets or highways should necessarily be conducted by the responsible level and unit of government as part of the engineering for the resurfacing, reconstruction, and new construction of each segment of surface arterial.

The plan also recommends that a system of off-street bicycle paths be provided between the Kenosha, Milwaukee, and Racine urbanized areas and the cities and villages within the Region with a population of 5,000 or more located outside these three urbanized areas. This system of off-street bicycle paths was initially also proposed in the adopted park and open space plans prepared by the Commission for each of the seven counties of the Region. These off-street bicycle paths would be located in natural resource and utility corridors would be intended to provide reasonably direct connections between the Region's urbanized and small urban areas on safe and aesthetically attractive routes with separation from motor vehicle traffic. Some on-street bicycle connections would be required to connect segments of this system of off-street paths. These connections if provided over surface arterials would include some type of bicycle accommodation—paved shoulders, extra-wide outside travel lanes, bicycle lanes, or separate parallel bicycle paths—or if provided over a nonarterial collector or land access street would require no special accommodation. The proposed system of on- and off-street bicycle facilities is

Map 26

OFF-STREET BICYCLE PATHS AND SURFACE ARTERIAL STREET AND HIGHWAY SYSTEM BICYCLE ACCOMMODATION UNDER THE YEAR 2035 VISION REGIONAL TRANSPORTATION PLAN



Source: SEWRPC.

shown on Map 26, and includes 548 miles of off-street bicycle paths with 168 miles of surface arterial and 89 miles of nonarterial connections. Approximately 250 miles of the planned 548 miles of off-street bicycle paths were in existence in 2013 during the preparation of the plan update. Also shown on Map 26 is the surface arterial street and highway system within the Region proposed to be provided with bicycle accommodation.

Pedestrian Facilities

The pedestrian facilities portion of the recommended bicycle and pedestrian facilities plan element is a policy plan, rather than a system plan. It recommends that the various units and agencies of government responsible for the construction and maintenance of pedestrian facilities in Southeastern Wisconsin adopt and follow a series of recommended standards and guidelines with regard to the development of those facilities, particularly within planned neighborhood units. These standards included the provision of sidewalks in the urban portions of the Region.

Community Bicycle and Pedestrian Plans

The plan also recommends that local units of government prepare community bicycle and pedestrian plans to supplement the regional plan. The local plans should provide for facilities to accommodate bicycle and pedestrian travel within neighborhoods, providing for convenient travel between residential areas and shopping centers, schools, parks, and transit stops within or adjacent to the neighborhood. It also recommends that local units of government consider the preparation and implementation of land use plans that encourage more compact and dense development patterns in order to facilitate pedestrian and bicycle travel.

Transportation Systems Management

The transportation systems management element of the recommended year 2035 regional transportation plan includes measures intended to manage and operate existing transportation facilities to their maximum carrying capacity and travel efficiency, including: freeway traffic management, surface arterial street and highway traffic management, and major activity center parking management and guidance.

Freeway Traffic Management

Recommended measures to improve the operation and management of the regional freeway system include operational control, advisory information, and incident management measures, as well as a traffic operations center supporting these measures. Essential to achieving freeway operational control, advisory information, and incident management is the WisDOT traffic operations center (TOC) in the City of Milwaukee. At the TOC all freeway segments in the Milwaukee area are monitored, freeway operational control and advisory information is determined, and incident management detection and confirmation is conducted. The TOC is important to the safe and efficient operation of the regional freeway system and is in operation 365 days a year, 24 hours a day.

Operational Control

Measures to improve freeway operation—both during average weekday peak traffic periods and during minor and major incidents—through monitoring of freeway operating conditions and control of entering freeway traffic includes traffic detectors, freeway on-ramp-meters, and ramp-meter control strategy. Traffic detectors measure the speed, volume, and density of freeway traffic, and are used for operational control, advisory information, and incident management. Existing freeway system traffic detectors in 2013 consisted of detectors embedded in the pavement at one-half mile intervals on the freeways in Milwaukee County and on IH 94 in Waukesha County, and at about one- to two-mile intervals on IH 94 in Kenosha and Racine Counties. The data collected from these traffic detectors was monitored by WisDOT at the TOC for the purposes of detecting freeway system travel speed and time, traffic congestion, traffic flow breakdowns, and incidents. Freeway ramp meter traffic entry rates could be modified based upon the traffic volume and congestion indicated by the traffic detectors. Travel information on traffic congestion and delays were provided to freeway system users through the WisDOT website and on variable message signs. Traffic speeds and congestion indicated by traffic detectors could instantaneously identify the presence of a freeway incident. It is recommended that existing freeway system traffic detectors be maintained, and that traffic detectors be installed on the freeway system throughout the Region at one-half mile intervals as the freeway system is reconstructed. The only exceptions for installing detectors on freeway segments may be those segments with current and expected future traffic volumes which would be substantially less than

freeway traffic carrying design capacity, including IH 43 north of STH 57 in Ozaukee County, USH 45 north of the Richfield Interchange, USH 41 north of STH 60 in Washington County, and IH 43 and USH 12 in Walworth County.

Ramp-meters are traffic signals located on freeway entrance ramps or, in some cases, freeway-to-freeway entrance ramps, and are used to control the rate of entry of vehicles onto a freeway segment to achieve more efficient operation of the adjacent freeway segment and the downstream freeway system. To encourage ridesharing and transit use, preferential access for high-occupancy vehicles is provided at ramp-meter locations to allow the high-occupancy vehicles to bypass traffic waiting at a ramp-metering signal. In 2013 there were 121 freeway on-ramps currently in the Milwaukee area equipped with ramp-meters. Buses and high-occupancy vehicles received preferential access at 51 of the 121 on-ramp-meter locations. It is recommended that as the freeway system is reconstructed, ramp-meters be installed on all freeway on-ramps within the Region, with high-occupancy vehicle preferential access provided at these metered ramps, particularly those which would be used by existing and planned public transit. The only exception for ramp-meter installation would be those freeway segments identified above which would be expected to carry current and future traffic volumes below their design capacity.

Another element of freeway operational control is the strategy used in the operational control of ramp-meters. The existing ramp-meters on the Southeastern Wisconsin freeway system were controlled in two ways. Some were controlled in a "pre-timed" mode, operating during specified peak traffic hours of the weekday at specified release rates of vehicles. Others were controlled as well during specified peak traffic hours of the weekday, but the vehicle release rates were based upon adjacent freeway system traffic volume and congestion. It is recommended that the strategy of controlling ramp-meters through consideration of adjacent congestion be expanded throughout the freeway system, and that an operational control strategy be considered which would consider downstream freeway traffic congestion and seek to minimize total travel delay on the freeway system while providing for equitable average and maximum delays at each ramp-meter, and avoiding the extension of vehicle queues onto surface streets. It is also recommended that the need for expanded vehicle storage on freeway on-ramps be considered, and addressed, during the reconstruction of the regional freeway system.

Advisory Information Measures

Providing advisory information to motorists is an integral part of providing an efficient street and highway system. By providing information on current travel conditions, motorists could choose travel routes which were more efficient for their travel, and the result is a more efficient transportation system. Advisory information measures included permanent variable message signs (VMS), the WisDOT website, and provision of information to the media. WisDOT uses the permanent VMS to provide real time information to travelers about downstream freeway traffic conditions, such as current travel times to selected areas, information about lane and ramp closures, and where travel delays begin and end. In 2013 there were 31 permanent VMS located on the freeway system, primarily in the Milwaukee area, and 19 on surface arterials which connected with the freeway system primarily located in western Milwaukee County. It is recommended that variable message signs be provided on the entire freeway system as the freeway system is reconstructed, and on surface arterials leading to the most heavily used freeway system on-ramps.

WisDOT also provides substantial information about current freeway system traffic conditions on a website using data collected from freeway system traffic detectors. The information included maps depicting the current level of freeway traffic congestion and the locations of confirmed incidents, views of freeway system traffic available from the freeway system closed circuit television camera network, and current travel times and delays on the major freeway segments in the Milwaukee area. The data on the website is also available to the media and used in daily radio and television broadcasts. It is recommended that WisDOT continue to enhance and expand the information provided on its website and to the media, and consider deployment of a regional 511 traveler information system which would allow the public to dial "511" and receive automated messages about current travel conditions along their desired route through a series of predetermined automated menus.

Incident Management Measures

Incident management measures have as their objective the timely detection, confirmation, and removal of freeway incidents. As noted earlier, the WisDOT freeway system TOC and freeway system traffic volume detectors are essential to incident management, as well as freeway operational control and advisory information. Other incident management measures recommended were closed circuit television, enhanced freeway location reference markers, freeway service patrols, crash investigation sites, the Traffic Incident Management Enhancement Program, ramp closure devices, and alternate route designations.

Closed-circuit television (CCTV) cameras provide live video images to WisDOT and the Milwaukee County Sheriff's Department which allow for the rapid confirmation of congested areas and the presence of an incident, and immediate determination of the appropriate response to the incident and direction of the proper equipment to be deployed in response to the incident. In 2013 there were 159 closed-circuit television cameras on the Southeastern Wisconsin freeway system, covering Milwaukee County freeways, IH 94 and USH 41/45 in eastern Waukesha County, and IH 94 in Kenosha and Racine Counties. It is recommended that the CCTV camera network be provided on the entire regional freeway system as the freeway system is reconstructed, with the possible exception of the freeway segments identified earlier which carry existing and future traffic volumes well below their design capacity.

Enhanced reference markers assist motorists in identifying specific locations along a freeway segment when reporting incidents. These markers are typically small signs provided at one-tenth mile intervals along the freeway system which typically display the highway shield and mile marker. Enhanced reference markers were provided in 2013 in Milwaukee County in the freeway median at each one-tenth mile on USH 45 from the Zoo Interchange to the Milwaukee-Waukesha County line, and on IH 94 from the Mitchell Interchange to the Illinois-Wisconsin State line, including the freeway segments of IH 94 in Kenosha and Racine Counties. It is recommended that enhanced reference markers be provided on the entire regional freeway system as the freeway system is reconstructed.

Freeway service patrols provide for rapid removal of disabled vehicles and initial response to clearing incidents. Freeway service patrols consist of specially equipped vehicles designed to assist disabled motorists and assist in clearance of incidents. Freeway service patrol vehicles may be equipped to provide limited towing assistance, as well as minor services such as fuel, oil, water, and minor mechanical repairs. In 2013, freeway service patrols operate in a limited role on the Milwaukee County freeway system. The patrol service is operated by the Milwaukee County Sheriff’s Department and consists of a special fleet of two vehicles dedicated to handling and clearing incidents on weekdays from 6:00 a.m. to 10 p.m. In 2006, patrols were as well used in Kenosha, Racine, and Waukesha Counties, but by 2013 those services were eliminated due to budgetary reasons. Temporary service patrols were also operated in addition to the Milwaukee County patrol services along segments of freeway that were under construction during 2013, such as the Hoan bridge, portions of IH 94 in Kenosha County, and segments of IH 94 and USH 45 as part of the Zoo Interchange project. Such service is expected to be part of future freeway construction projects. Expansion of the freeway service patrol is recommended to serve the entire regional freeway system, and to provide greater coverage including all day weekday and weekend service, evening service, and increased vehicle coverage of one vehicle per 12 to 15 miles of freeway.

Crash investigation sites are designated safe zones for distressed motorists to relocate to if they are involved in a crash or an incident on the freeway. In 2013 there were 32 crash investigation sites on the Southeastern Wisconsin freeway system, with the largest concentration—24 of the 32, or about 75 percent—located on the system in Milwaukee County. It is recommended that as the freeway system is reconstructed, WisDOT evaluate the extent of use and attendant benefits of existing crash investigation sites, and consider expansion as needed to serve the entire regional freeway system.

The Traffic Incident Management Enhancement (TIME) Program, sponsored by WisDOT, has served to bring together, and coordinate, the transportation engineering, law enforcement, media, emergency responders, transit, tow and recovery, and other freeway system operational interests at monthly meetings. The goals of the TIME program are to improve and enhance freeway incident management, improve freeway safety, and enhance the quality and efficiency of freeway travel. It is recommended that the TIME program continue to be operated and sponsored by WisDOT.

Ramp closure devices were deployed in 2013 at interchanges on IH 94 in Kenosha, Milwaukee, Racine, and Waukesha Counties, on IH 43 in Milwaukee, Waukesha, and Walworth Counties, and on IH 794 and on IH 894 in Milwaukee County. The ramp closure devices were typically swing arm gates. These ramp closure devices allow for the closure of freeway on-ramps during planned and unplanned major incidents, such as special events and severe inclement weather. It is recommended that WisDOT evaluate the use and attendant benefits of existing ramp closure devices, and consider their application throughout the Region.

Alternate routes are designated, clearly marked and signed surface arterial street and highway routes which generally parallel freeway segments. These routes would be intended to be used by motorists during major freeway incidents and ramp closures and during particularly extreme congestion. Motorists would be directed through advisory information to these routes during major incidents and periods of particularly extreme congestion. It is recommended that WisDOT and the Regional Planning Commission, together with the concerned and affected local governments, examine the potential for the designation of alternative routes, and consider implementation of a pilot effort in a designated corridor.

Surface Arterial Street and Highway Traffic Management

This group of recommended transportation system management measures would attempt to improve the operation and management of the regional surface arterial street and highway network, and include improved traffic signal coordination, intersection traffic engineering improvements, curb lane parking restrictions, access management, and advisory information.

Coordinated traffic signal systems provide for the efficient progression of traffic along arterial streets and highways, allowing motorists to travel through multiple signalized intersections along an arterial route at the speed limit and minimizing or eliminating the number of stops at signalized intersections. In the Region, coordinated traffic signal systems generally ranged from systems comprising two traffic signals to systems comprising about 100 traffic signals. Approximately 1,200 of the 1,700 traffic signals in the Region, or about 71 percent, were part of a coordinated signal system in 2013. It is recommended that Commission staff work with State and local government to document existing and planned arterial street and highway system traffic signals and traffic signal systems, and develop recommendations for improvement and expansion of coordinated signal systems.

It is also recommended that State and local governments aggressively consider and implement needed individual arterial street and highway intersection improvements, such as adding right- and/or left-turn lanes; improvements in the type of traffic control deployed at the intersection, including two- or four-way stop control, roundabouts, or signalization; or improvements in signal timing at individual signalized intersections. This measure proposed that State, county, and municipal governments each prepare a prioritized short-range (two- to six-year) program of arterial street and highway intersection improvements under their jurisdiction, pursue aggressive implementation of the programs, and review and update the programs every two to five years.

It is also recommended that local governments consider implementation of curb-lane parking restrictions during peak traffic periods in the peak traffic direction as traffic volumes and congestion increase. These parking restrictions would be implemented rather than the widening with additional lanes or construction of new arterial streets.

Access management is also recommended to improve transportation systems operations and provide for full use of roadway capacity. Access management involves applying standards for the location, spacing, and operation of driveways, median openings, and street connections. This measure recommends that State, county, and municipal governmental units with arterial streets and highways under their jurisdiction adopt access management standards, consider and implement these standards as development takes place along arterials under their jurisdiction, and prepare and implement access management plans along arterials which currently are developed and have access which violates these standards.

Advisory information should also be provided to motorists concerning the surface arterial street and highway network in the Region. It is recommended that the WisDOT improve and expand the data provided on its website (travel times, congestion maps, and camera images) concerning freeway travel to include surface arterial street and highway travel, beginning with the pilot route designated as an alternative route to a segment of the freeway system.

Major Activity Center Parking Management and Guidance

Another recommended transportation system management measure would attempt to improve traffic operation conditions by reducing the traffic circulation of motorists seeking parking in major activity centers. The City of Milwaukee in 2013 was about to construct and implement a central business parking management and guidance system. This initiative would provide motorists with real-time information about available parking in the downtown area through signs located throughout the business district, freeway dynamic message signs, a website, and a telephone line. The year 2035 vision plan supports the City of Milwaukee initiative.

Regional Transportation Operations Program

The regional transportation system plan also recommends that a regional transportation operation plan (RTOP) be prepared to program high priority short-range (three- to five-year) operational improvement projects for implementation, principally drawing these projects from the transportation systems management recommendations in the regional transportation system plan. The current RTOP was completed in 2012 identifying candidate corridor and intersection transportation management system projects prioritized for implementation and funding, particularly with respect to Federal Highway Administration Congestion Mitigation and Air Quality Improvement Program funding. An update of the RTOP is expected to occur in 2016.

Travel Demand Management Element

The travel demand management measures included in the recommended year 2035 regional transportation plan include measures intended to reduce personal and vehicular travel or to shift such travel to alternative times and routes, allowing for more efficient use of the existing capacity of the transportation system. These measures were in addition to the public transit and pedestrian and bicycle plan elements previously described.

Seven categories of travel demand management measures are recommended in the year 2035 plan: high-occupancy vehicle preferential treatment, park-ride lots, transit pricing, personal vehicle pricing, travel demand management promotion, transit information and marketing, and detailed site-specific neighborhood and major activity center land use plans.

High-Occupancy Vehicle Preferential Treatment

This group of recommended travel demand management measures would attempt to provide preferential treatment for transit vehicles, vanpools, and carpools on the existing arterial street and highway system. The recommended preferential treatment category consisted of four specific travel demand management measures: the provision of high-occupancy vehicle (HOV) queue bypass lanes at metered freeway on-ramps; reserved bus lanes along congested surface arterial streets and highways; transit priority signal systems; and preferential carpool and vanpool parking.

The provision of HOV queue bypass lanes at metered freeway on-ramps existed at 51 of the 121 metered freeway on-ramp locations within the Milwaukee area. The recommended travel demand management measure recommends that consideration be given during freeway system reconstruction to providing HOV bypass lanes at all metered freeway on-ramps within the Region, dependent upon right-of-way and on-ramp geometric design constraints. For this measure to be truly effective, strict enforcement of HOV bypass lanes would be required.

Reserved bus lanes similar to those along Blue Mound Road in Waukesha County allow transit vehicles to bypass vehicle queues attendant to traffic signals on congested arterial streets and highways. These reserved lanes may be expected to reduce transit travel times and improve transit travel time reliability during peak travel periods. This recommended travel demand management measure would expand the use of reserved bus lanes throughout the

Region on the congested surface arterial streets and highways which currently, or may be expected in the future, to accommodate express and major local transit routes, and on the surface arterial portion of rapid transit routes.

The third recommended travel demand management measure within the high-occupancy vehicle preferential treatment category was transit priority signal systems. This recommended measure would allow transit vehicles to extend the end of the green phase of traffic signals as they approach a signalized intersection. This recommended measure would include transit priority signal systems along all express and major local transit routes, and the surface arterial portion of rapid transit routes within the Region.

The fourth recommended travel demand management measure within the high-occupancy vehicle preferential treatment category was preferential carpool and vanpool parking. This recommended measure would be voluntary and proposed that employers providing free/subsidized parking for their employees consider providing and enforcing preferential parking for those employees who carpool or vanpool to the employment site. This recommended measure may reduce vehicle trips by encouraging ridesharing.

Park-Ride Lots

To promote carpooling and the resultant more efficient use of the Region's transportation system, a network of park-ride lots are recommended to facilitate carpooling. Map 27 shows the recommended system of park-ride lots including existing park-ride lots and those recommended to be served by public transit. Park-ride lots are recommended along all major routes at their major intersections and interchanges where sufficient demand may be expected to warrant provision of an off-street parking facility.

Transit Pricing

This group of recommended travel demand management measures would build upon existing transit pricing programs conducted by the transit operators in the Region. The recommended transit pricing category consisted of three travel demand management measures: annual transit pass programs, monthly or weekly pass programs, and vanpool programs.

The Milwaukee County Transit System has implemented a pass system at four colleges and universities which provided for free transit use with a reduced fee included in student tuition and fees. This annual transit pass program should be expanded to include the other local public transit operators in the Region and additional colleges and universities within the Region. This annual pass program should also be expanded to employers, with the Region's transit operators negotiating an annual fee with individual employers, which would allow those employers to provide each employee with an annual transit pass.

Quarterly, monthly or weekly discount pass programs existed for three of the Region's public transit operators—the Milwaukee County Transit System, the Racine Belle Urban System, and the Waukesha Metro Transit System. This recommended quarterly, monthly, or weekly pass program allowed employers to offer their employees discounted quarterly, monthly, or weekly passes, where the employer and the transit operator have negotiated an agreement in which they both agreed to subsidize a portion of the quarterly, monthly, or weekly pass.

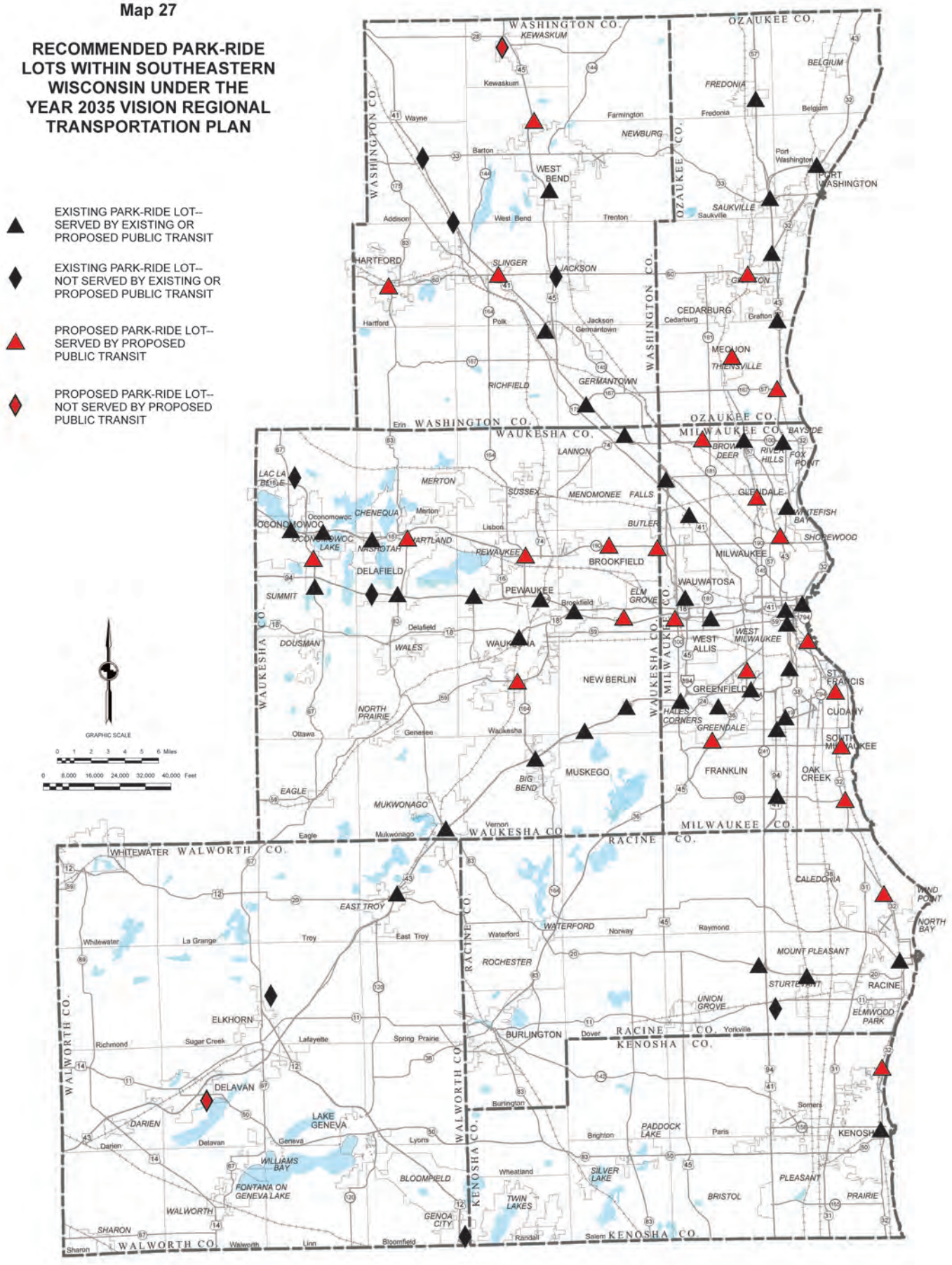
The third proposed travel demand management measure within the transit pricing category was expansion of vanpool programs, in which a group of employees who live in the same general area split the operation, maintenance, and a portion of the capital costs of a van. A vanpool program that was being operated by the Milwaukee County Transit System in 2006—the year the plan was adopted—but was terminated by the County prior to 2013.

Personal Vehicle Pricing

The recommended personal vehicle pricing group of travel demand management measures proposed to allocate a larger percentage of the full costs of construction, maintenance, and operation of street and highway facilities and services directly on the users of the system. The proposed personal vehicle pricing category consisted of two specific travel demand management measures—cash-out of employer-paid parking, and auto pricing.

Map 27

RECOMMENDED PARK-RIDE LOTS WITHIN SOUTHEASTERN WISCONSIN UNDER THE YEAR 2035 VISION REGIONAL TRANSPORTATION PLAN



Source: SEWRPC.

Cash-out of employee paid parking would recommend that employers currently providing free/subsidized parking to employees would voluntarily begin charging their employees the market value of parking. Employers could offset the additional cost of parking through cash payment or salary increases to employees. This recommended measure would potentially reduce vehicle-trips and vehicle-miles of travel through the increased use of transit, ridesharing, walking, and bicycling, as some employees may "pocket" the cash payment and use other modes of travel.

The second recommended travel demand management measure within the personal vehicle pricing category encourages the continued and expanded use of user fees to pay the costs of construction, maintenance, and operation of street and highway facilities and services. Currently, user fees primarily include the Federal and State motor fuel tax and vehicle registration fees. These user fees currently fund 100 percent of the costs associated with State highways and about 20 to 25 percent of the costs associated with county and municipal streets and highways. There is substantial and growing opposition to increases in motor fuel taxes. In addition, there is the potential in the future for technological advances, such as increased fuel efficiency and alternative fuels, to render the current motor fuel tax obsolete. However, there is merit in having the users of the transportation system pay the actual costs of constructing, maintaining, and operating the transportation system. Travel behavior is affected by the cost of travel, and user fees can encourage more efficient travel.

Travel Demand Management Promotion

A region-wide program to aggressively promote transit use, bicycle use, ridesharing, pedestrian travel, telecommuting, and work-time rescheduling, including compressed work weeks is recommended to encourage alternatives to drive alone personal vehicle travel. The program would include education, marketing, and promotion elements.

Transit Information and Marketing

Recommended transit information and marketing measures would include the continuation and expansion of the joint marketing efforts of the transit operators within Southeastern Wisconsin. The plan also recommends that a single website be developed and maintained in which transit users could access all necessary information for each transit system in Southeastern Wisconsin. As of 2013, such a website has been developed for all of the fixed-route transit systems, except for the Kenosha Area Transit system, which allows a potential transit user to enter such information as beginning and ending addresses of a desired trip within the Region, and then displays the most feasible transit routing of the desired trip including all fares, transfers, and schedules.

The third recommended transit information and marketing measure was real-time travel information. This recommended measure would utilize global positioning system (GPS) data to provide real-time transit information to transit riders at transit centers and transit stops, including transit vehicle arrival times, and real-time maps, showing where on the route a transit vehicle is currently located. The Milwaukee County Transit System is currently implementing a project that would make real-time transit information available to transit riders via text messaging and the internet. There are currently no plans to place real-time transit information at transit centers and stops.

Detailed Site-Specific Neighborhood and Major Activity Center Land Use Plans

The preparation and implementation by local governmental units of detailed, site-specific neighborhood and major activity center plans to facilitate travel by transit, bicycle, and pedestrian movement and reduce dependence on automobile travel was recommended, and is also recommended in the regional land use plan.

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 to date, totals 3,662 route-miles. Approximately 89 percent, or 3,274 of these route-miles, were recommended to be resurfaced and reconstructed to their same capacity. Approximately 310 route-miles, or 9 percent of the total recommended year 2035 arterial street and highway system, were recommended for widening upon reconstruction to provide additional through traffic lanes, including 114 miles of freeways. The remaining 78 route-miles, or about 2 percent of the total arterial street

mileage, were proposed new arterial facilities. Thus, the plan recommendations envisioned over the next 20 years capacity expansion of 11 percent of the total arterial system, and viewed in terms of added lane-miles of arterials only about a 9 percent expansion over the next 20 years.

Map 28 displays the recommended year 2035 regional transportation plan arterial street preservation, improvement, and expansion by county. Highway improvements were recommended to address the residual congestion which may not be expected to be alleviated by recommended land use, systems management, demand management, bicycle and pedestrian facilities, and public transit measures in the recommended plan. Each recommended arterial street and highway improvement, expansion, and preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies would consider alternatives and impacts, and final decisions as to whether and how a planned project will proceed to implementation would be made by the responsible State, county, or municipal government at the conclusion of preliminary engineering.

The 114 miles of freeway widening proposed in the plan, and in particular the 18 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 by WisDOT. 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 would a determination be made as to how the freeway would be reconstructed.

Safety and Security Elements

In 2011, two additional elements of the plan were created under the guidance of the Advisory Committee on Regional Transportation System Planning to specifically address transportation safety and security. These elements provide a refinement of the adopted plan, along with specific recommendations to enhance the safety and security of the Region's transportation system.

Safety

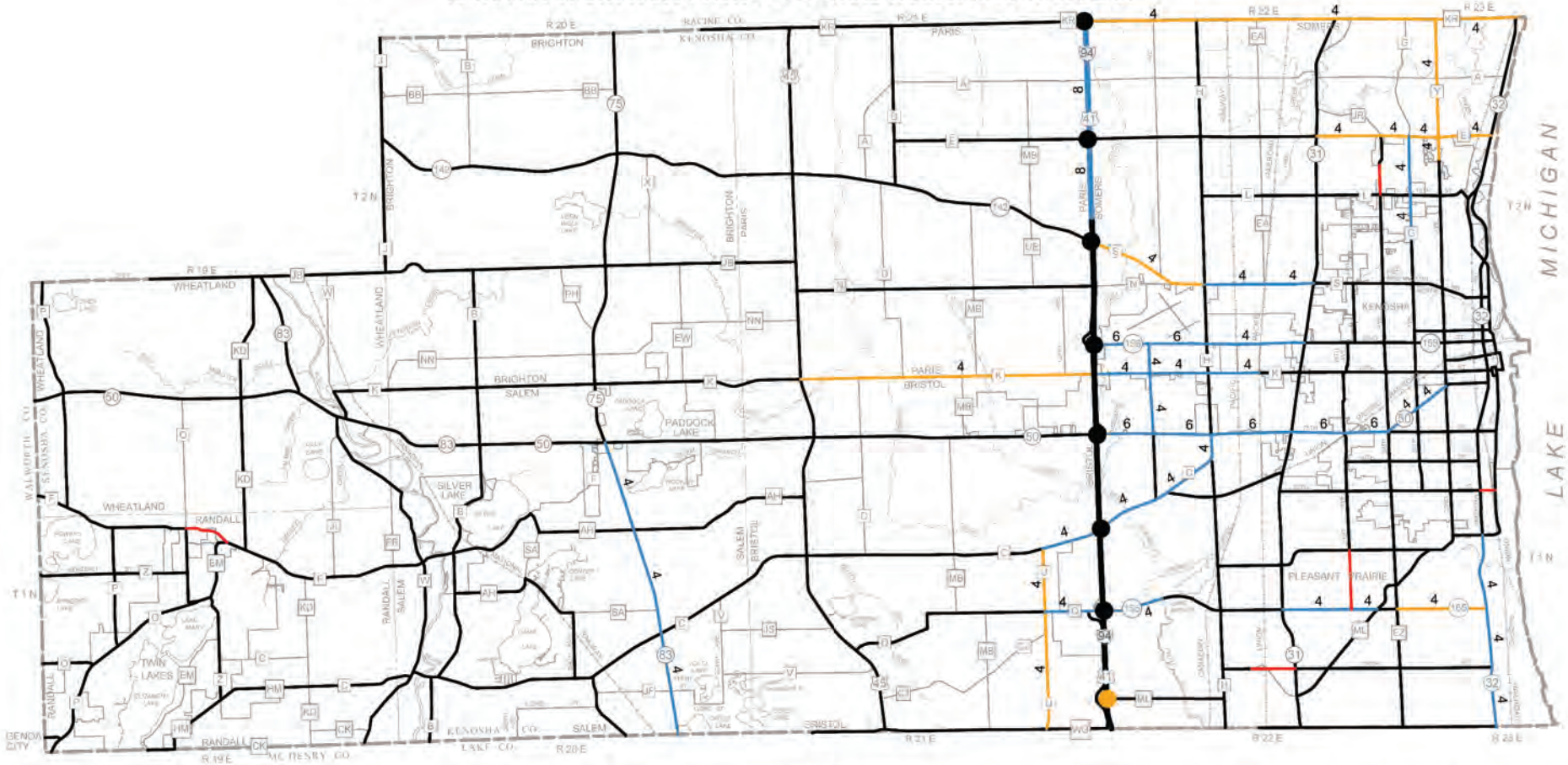
The safety element included a review of the transportation safety objectives, principles, and standards documented in the year 2035 regional transportation plan adopted in 2006, along with presenting a proposed expanded set of transportation safety objectives, principles, and standards. The safety element also included listing and discussion of the recommendations of the year 2035 regional transportation plan which advance transportation safety. In addition, the element included recommendations for improved traffic crash and safety data, and recommendations for further study and improvements on those roadway segments with the most severe safety problems. A summary document prepared for the safety element of the plan can be viewed on the Commission's website (www.sewrpc.org).

Security

The security element provided an overview of transportation security and considered security-related issues and efforts that are ongoing to protect transportation networks and facilities at the Federal, State, and regional levels. The element specifically addressed security, which is distinguished from safety by being concerned with protecting against intentional attacks against people, facilities, modes of travel, and important transportation infrastructure. The element detailed the efforts being undertaken by various Federal, State, regional, and local agencies to enhance the security of the Region's transportation system. No specific projects were included, but the element provided affirmation of the Commission's role in regional coordination of transportation security-related projects, along with the incorporation of security considerations into future transportation system preservation, improvement, or expansion projects. A summary document prepared for the security element of the plan can be viewed at the Commission's website (www.sewrpc.org).

Map 28

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN KENOSHA COUNTY: 2035 VISION REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- EXISTING
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (POTENTIAL NEW INTERCHANGE)

GRAPHIC SCALE
0 1 2 MILES
0 4,000 8,000 12,000 16,000 FEET

Source: SEWRPC

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

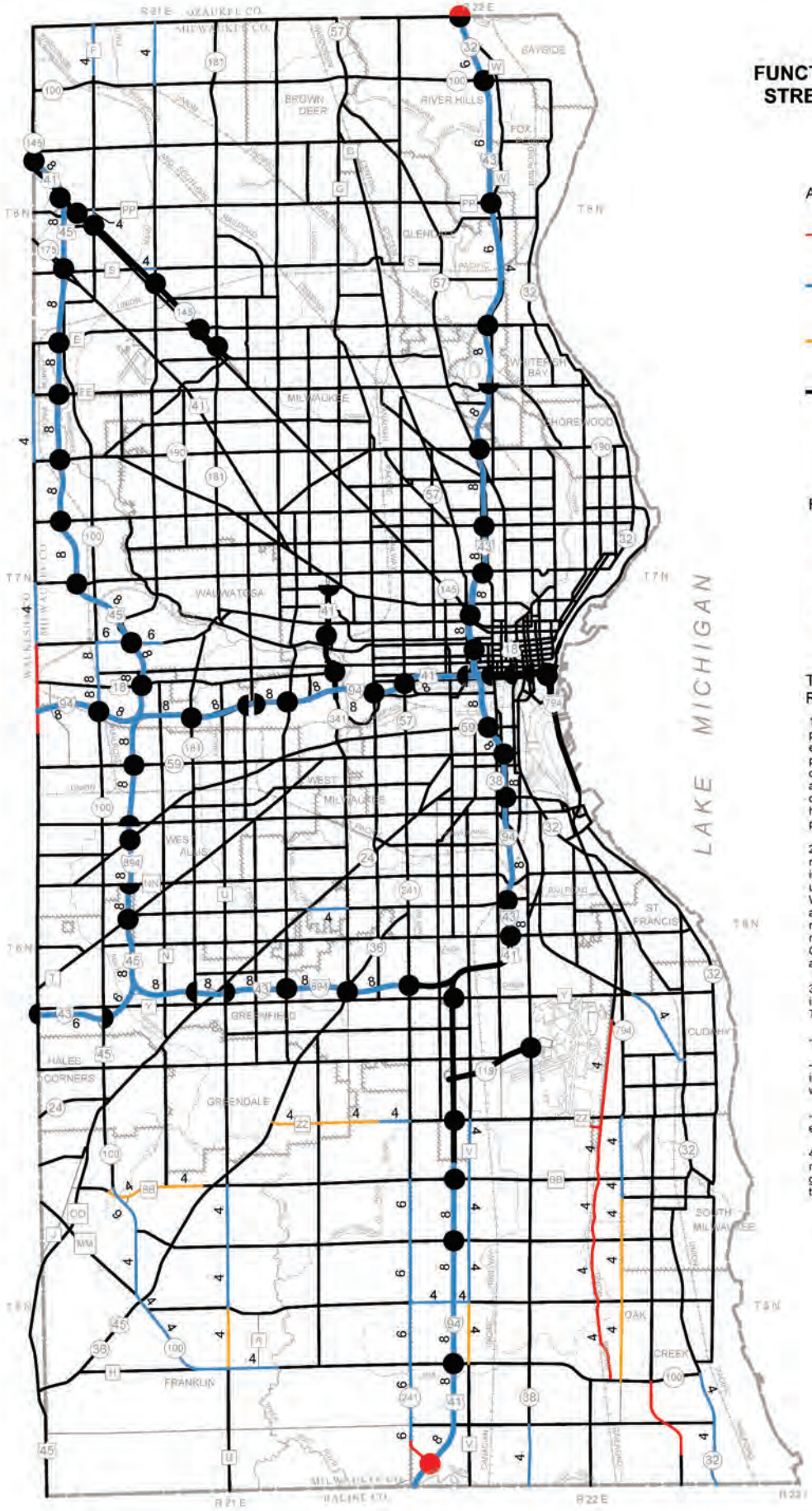
1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. The 114 miles of freeway widening proposed in the plan, and in particular the 18 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. The plan recommends that the Wisconsin Department of Transportation during its preliminary engineering for IH 94 consider the provision of an interchange with CTH K in Kenosha County, including the alternative of collector-distributor roadways connecting CTH K, STH 50, and STH 158, and an additional potential new future freeway interchange at CTH ML with IH 94. Should the preliminary engineering study conclude with a recommendation to construct one or both of the interchanges, the Regional Planning Commission, upon request of the concerned local governments and the Wisconsin Department of Transportation, would take action to amend the regional plan to recommend the construction of the interchange.

4. Sufficient right-of-way should be reserved along STH 158 from CTH H to STH 31 to accommodate its ultimate improvement to six travel lanes.

5. Sufficient right-of-wayshould be reserved along CTH K from IH 94 to STH 31 to accommodate its ultimate improvement to six travel lanes.



Map 28 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN MILWAUKEE COUNTY: 2035 VISION REGIONAL TRANSPORTATION PLAN

ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF LANES (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- NEW
- HALF NEW
- EXISTING

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. The 114 miles of freeway widening proposed in the plan, and in particular the 18 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. The plan also provides further recommendations with respect to freeway half-interchanges. The plan recommends that the Wisconsin Department of Transportation, during the reconstruction of the freeway system:

--Convert the S. 27th Street with IH 94 interchange to a full interchange,

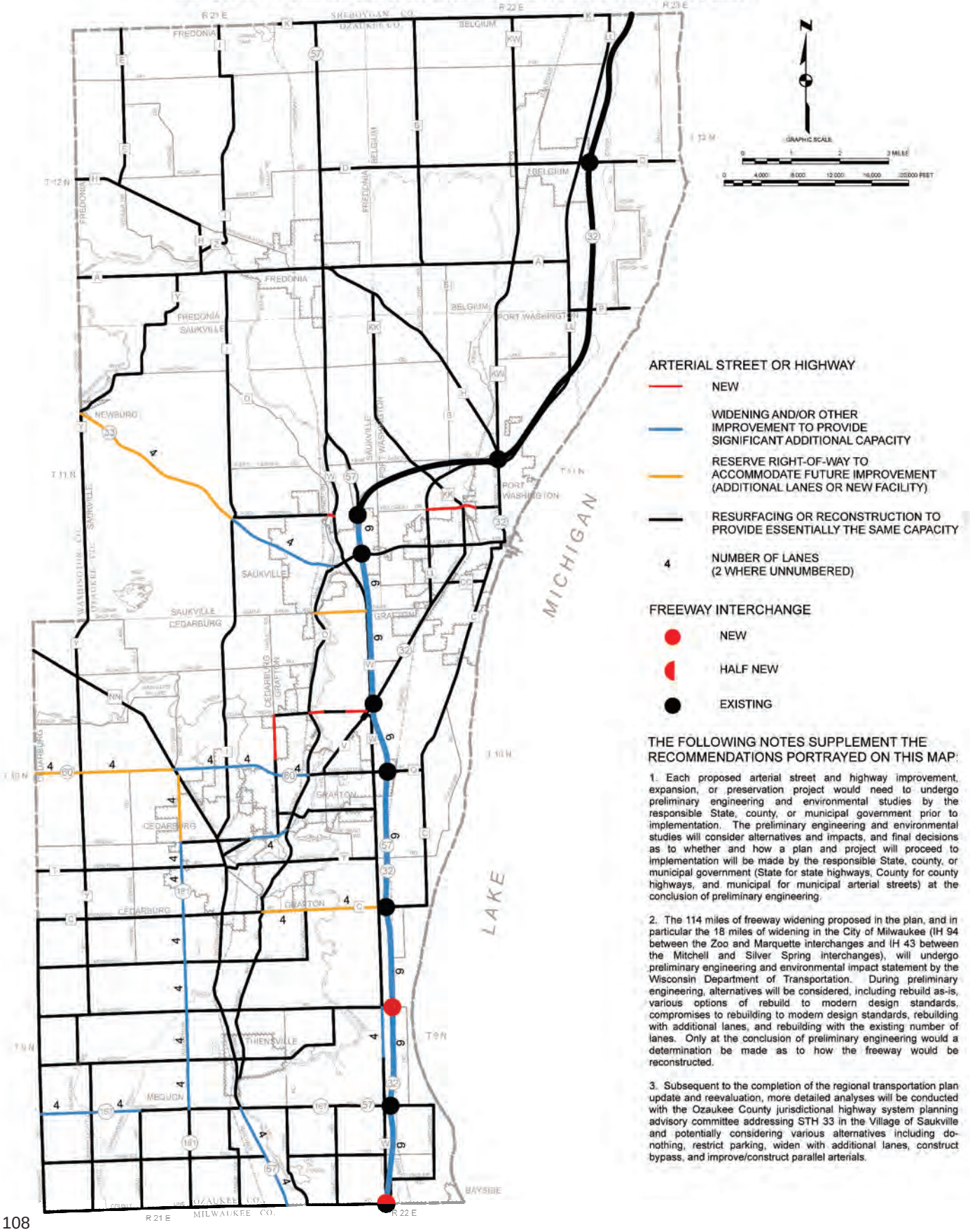
--Consider as an alternative (where conditions permit) combining selected half-interchanges into one full interchange. (For example, STH 100 and S. 124th Street with IH 43.)

--Retain all other existing half-interchanges and examine during preliminary engineering the improvement of connection between adjacent interchanges.

4. The plan also recommends that during preliminary engineering for the reconstruction of STH 100 from W. Forest Home Avenue to IH 43, consideration be given to alternatives without additional traffic lanes, alternatives with additional traffic lanes or auxiliary lanes, and alternatives with frontage roads.

Map 28 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN OZAUKEE COUNTY: 2035 VISION REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 NUMBER OF LANES (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- NEW
- HALF NEW
- EXISTING

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

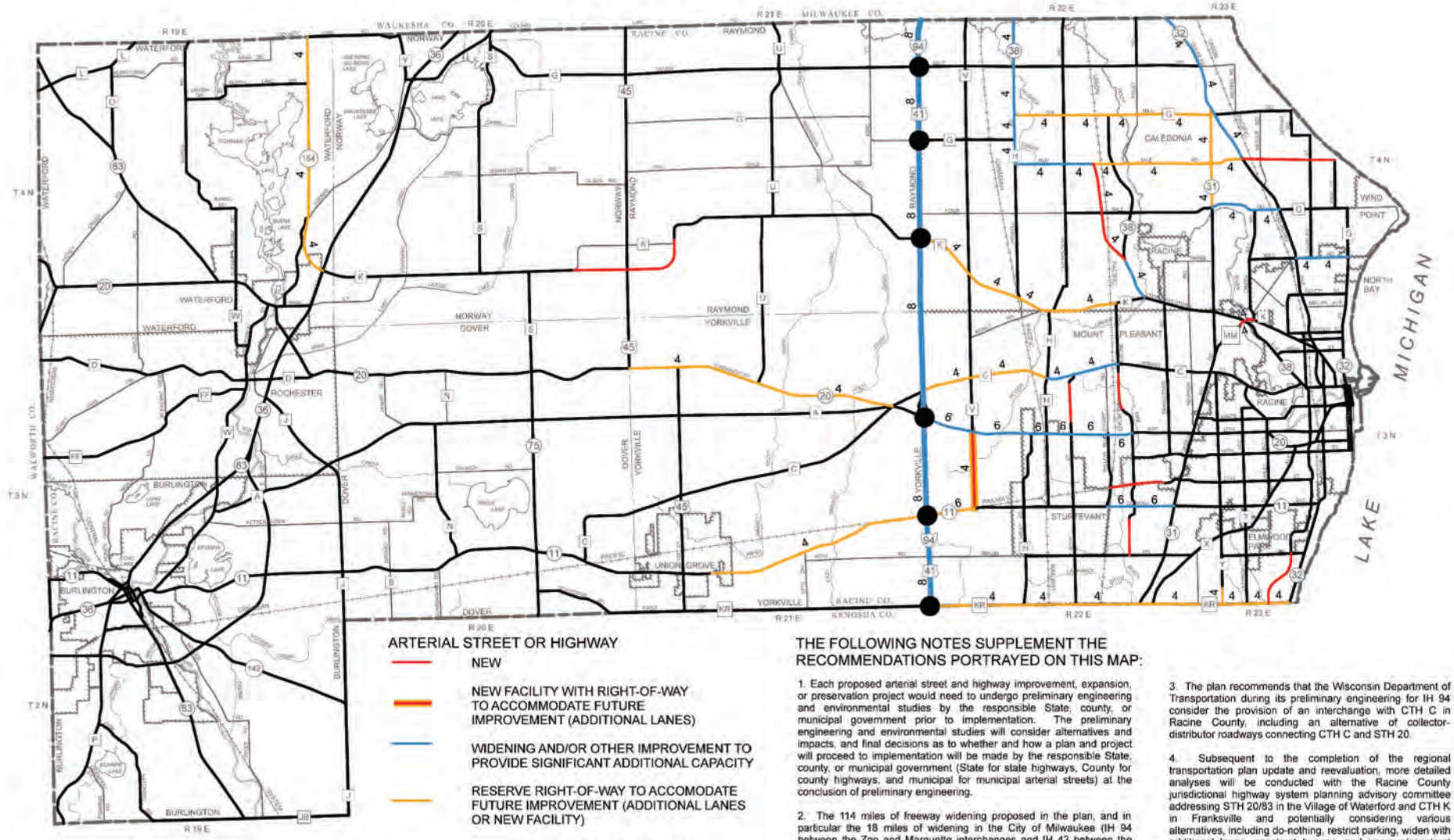
1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. The 114 miles of freeway widening proposed in the plan, and in particular the 18 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Ozaukee County jurisdictional highway system planning advisory committee addressing STH 33 in the Village of Saukville and potentially considering various alternatives including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.

Map 28 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN RACINE COUNTY: 2035 VISION REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- NEW FACILITY WITH RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES)
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- EXISTING

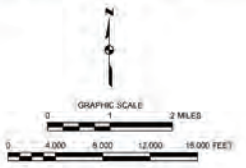
THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

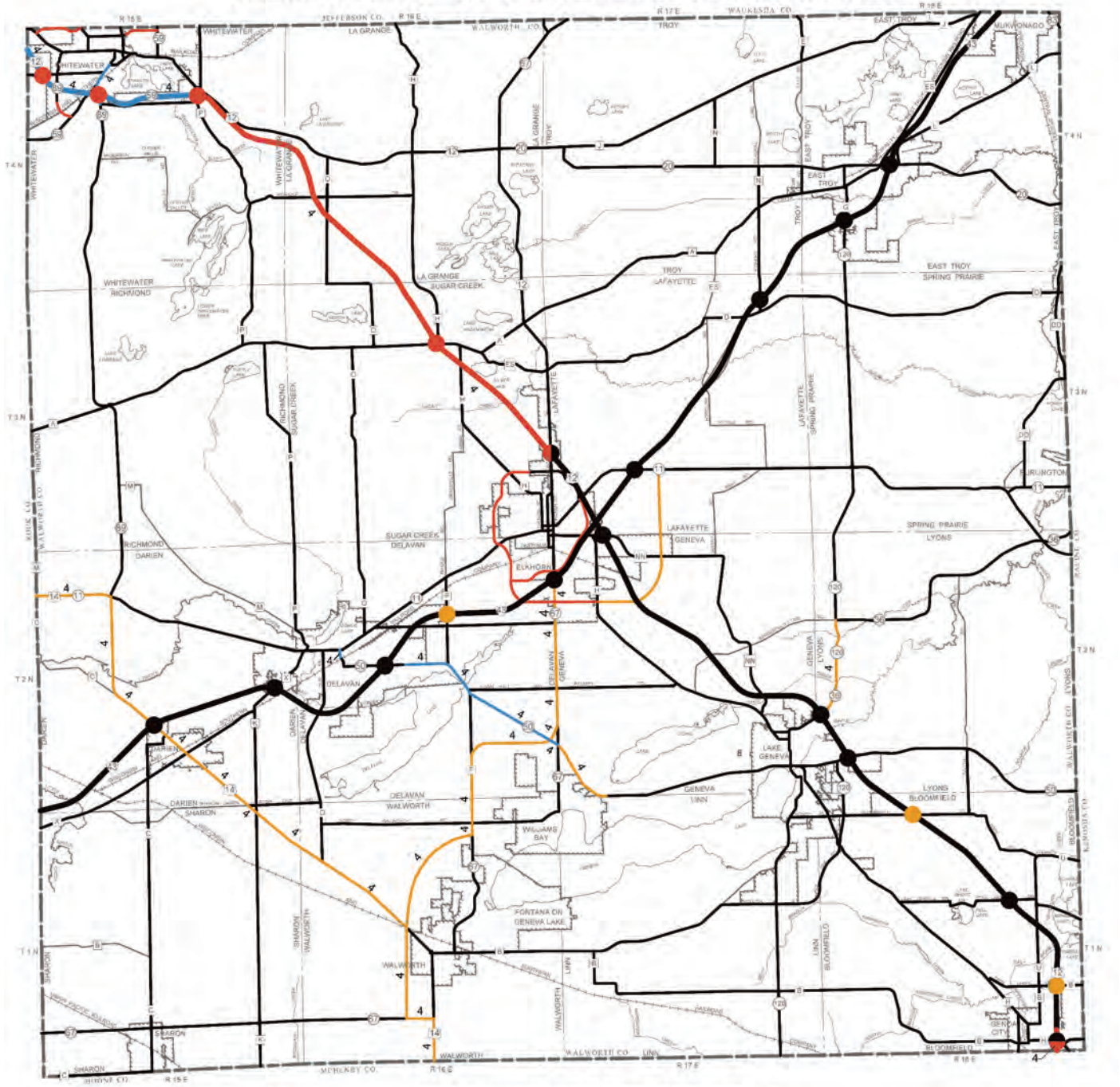
2. The 114 miles of freeway widening proposed in the plan, and in particular the 18 miles of widening in the City of Milwaukee (IH 94 between the Zoo and Marquette interchanges and IH 43 between the Mitchell and Silver Spring interchanges), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. The plan recommends that the Wisconsin Department of Transportation during its preliminary engineering for IH 94 consider the provision of an interchange with CTH C in Racine County, including an alternative of collector-distributor roadways connecting CTH C and STH 20.

4. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Racine County jurisdictional highway system planning advisory committee addressing STH 20/83 in the Village of Waterford and CTH K in Franksville and potentially considering various alternatives, including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.



FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WALWORTH COUNTY: 2035 VISION REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 WHERE UNNUMBERED)

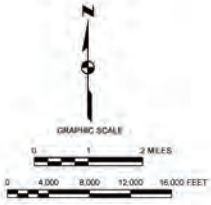
FREEWAY INTERCHANGE

- NEW
- NEW HALF
- EXISTING
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (POTENTIAL) NEW INTERCHANGE)

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

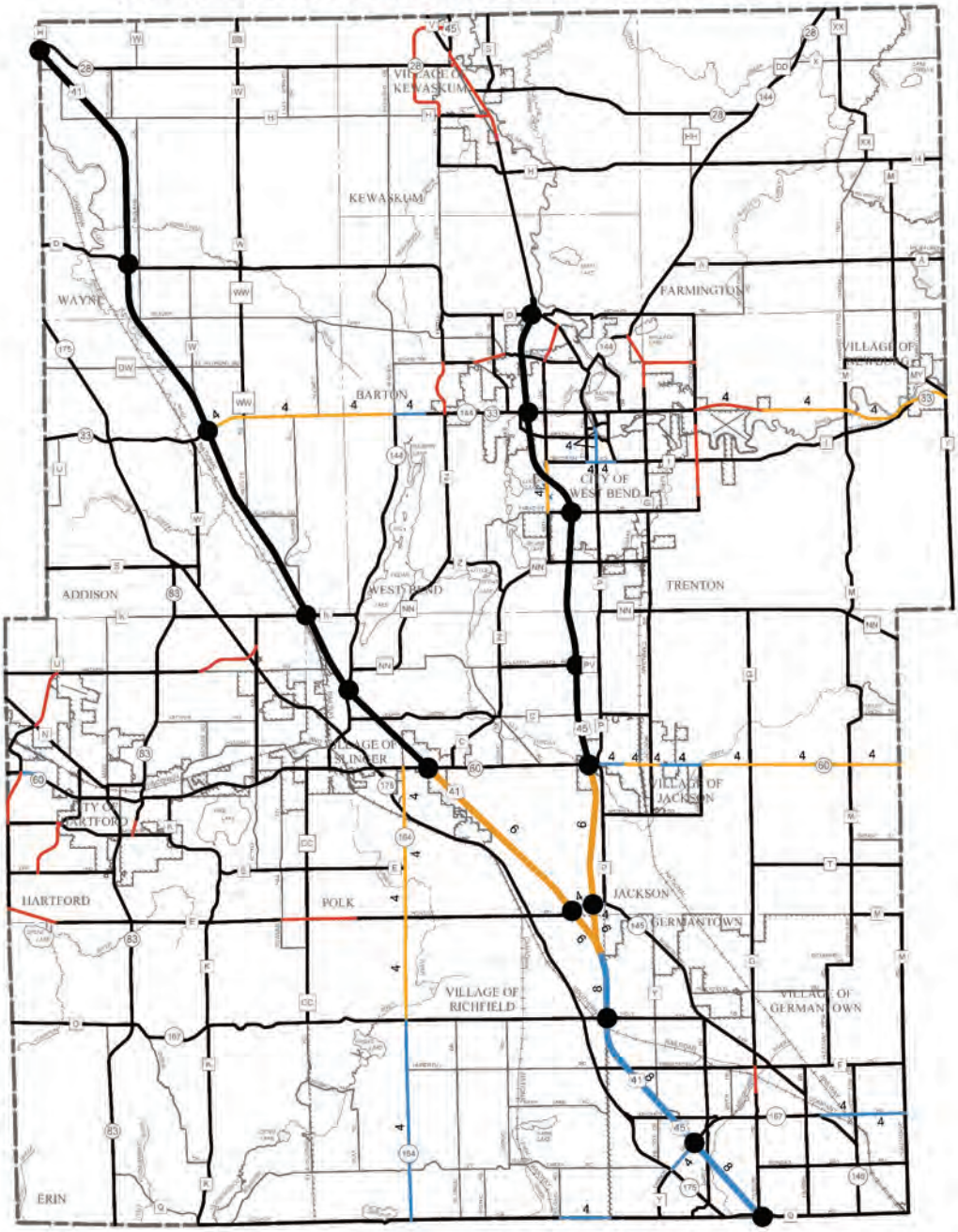
1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. The 114 miles of freeway widening proposed in the plan, and in particular the 18 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.



Map 28 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WASHINGTON COUNTY: 2035 VISION REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 NUMBER OF LANES (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- EXISTING

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. The 114 miles of freeway widening proposed in the plan, and in particular the 18 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

N

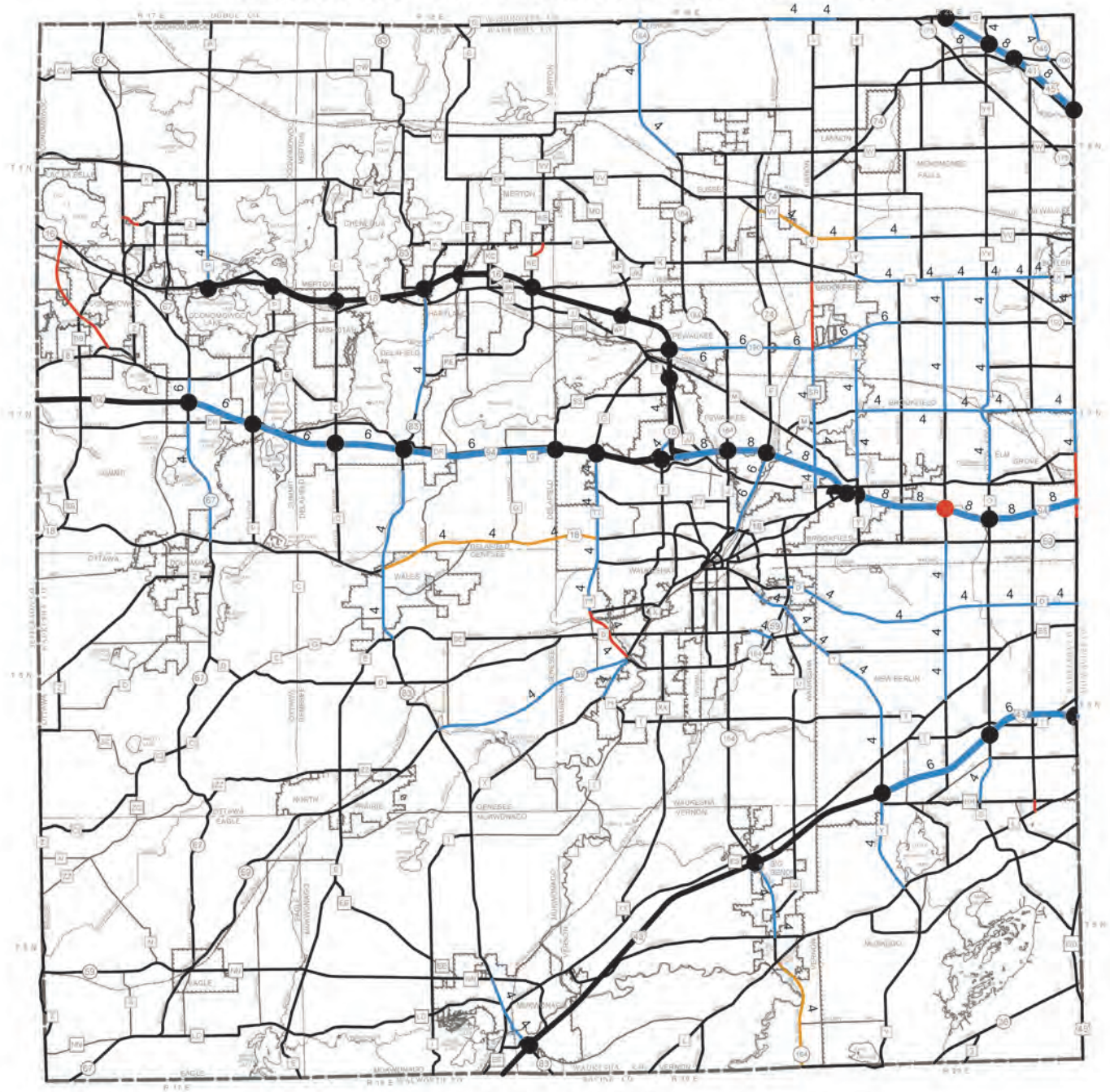
GRAPHIC SCALE

0 1 2 3 MILES

0 4,000 8,000 12,000 16,000 20,000 FEET

Map 28 (continued)

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WAUKESHA COUNTY: 2035 VISION REGIONAL TRANSPORTATION PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- 4 — NUMBER OF LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 WHERE UNNUMBERED)

FREEWAY INTERCHANGE

- NEW
- NEW HALF
- EXISTING

GRAPHIC SCALE
0 1 2 MILES
0 4,000 8,000 12,000 16,000 FEET

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement, expansion, or preservation project would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government (State for state highways, County for county highways, and municipal for municipal arterial streets) at the conclusion of preliminary engineering.

2. The 114 miles of freeway widening proposed in the plan, and in particular the 18 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), will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild as-is, various options of rebuild 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 preliminary engineering would a determination be made as to how the freeway would be reconstructed.

3. The plan also provides further recommendations with respect to freeway half-interchanges. The plan recommends that the Wisconsin Department of Transportation during the reconstruction of the freeway system:

-- Consider as an alternative (where conditions permit) the combination of selected half-interchanges into one full interchange; and

-- Retain all other existing half-interchanges and examine during preliminary engineering the improvement of connection between adjacent interchanges.

4. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analysis will be conducted with the Waukesha County jurisdictional highway system planning advisory committee addressing STH 164 in the Village of Big Bend and potentially considering various alternatives, including do-nothing, restrict parking, widen with additional lanes, construct bypass, and improve/construct parallel arterials.

YEAR 2035 REGIONAL TRANSPORTATION PLAN: FISCALLY CONSTRAINED

Table 34

ESTIMATED GAP BETWEEN YEAR 2035 REGIONAL TRANSPORTATION PLAN: VISION COSTS AND EXISTING AND RESONABLY EXPECTED AVAILABLE REVENUE

Constant Year 2012 Dollars (Average Annual through Year 2035)	
Arterial Street and Highway	
Capital	$185 million
Operating	$4 million
Public Transit	
Capital	$35 million
Operating	$44 million

Year of Expenditure Dollars (Average Annual through Year 2035)	
Arterial Street and Highway	
Capital	$318 million
Operating	$14 million
Public Transit	
Capital	$51 million
Operating	$80 million

Source: SEWRPC.

As noted earlier, the estimated costs of implementing the Year 2035 Regional Transportation Plan: Vision exceeds the existing and reasonably expected revenues available to implement the plan. This gap in funding is shown in Table 34, and affects implementation of both highway and transit projects identified in the 2035 Plan: Vision. The implications of the funding gap for the highway element of the 2035 Plan: Vision differs from the transit element as highway expenditures are largely capital expenditures and transit expenditures are largely operating expenditures. The effect on the highway element is a deferral or delay in capital projects being implemented, specifically a reduction in the amount of freeway that can be reconstructed and the amount of surface arterials that can be reconstructed with additional traffic lanes or newly constructed by the year 2035. The principal effect on the transit element is a lack of the transit improvement and expansion identified under the 2035 Plan: Vision, and as well reductions in current transit service and an increase in transit fares above inflation. Table 35 identifies those 2035 Plan: Vision projects which have been excluded from the fiscally constrained plan.

Under the Year 2035 Regional Transportation Plan – Fiscally Constrained, 90 miles of freeway reconstruction, including 87 miles of freeway widening, recommended under the Year 2035 Regional Transportation Plan – Vision would not be expected to be implemented by the year 2035 based on the cost of these improvements compared to existing and future reasonably to be expected available revenue. Map 29 shows the segment of the freeway system that would be expected to be reconstructed by the year 2035 based on existing and reasonably expected revenues, and the segments of freeway that would be expected to be deferred until beyond 2035. Additionally, all of the surface arterial capacity expansion recommended in the Year 2035 Plan – Vision is included in the fiscally constrained plan, with the exception of the planned extension of the Lake Parkway between Edgerton Avenue and STH 100 in Milwaukee County. These reductions would result in approximately 90 percent, or 3,301 of the total 3,656 route-miles, of the planned arterial street and highway system being recommended to be resurfaced and reconstructed to their same capacity under the Year 2035 Plan – Fiscally Constrained. Approximately 283 route-miles, or 8 percent of the total year 2035 arterial street and highway system are recommended for widening as part of their reconstruction to provide additional through traffic lanes. The remaining 72 route-miles, or about 2 percent of the total arterial system mileage, are proposed new arterial facilities. The proposed arterial street and highway capacity improvements—both freeway and surface arterial—under the recommended fiscally constrained regional transportation plan are shown in Map 30.

At the April 23, 2014, meeting of the Commission's Advisory Committee on Regional Transportation System Planning, City of Milwaukee representatives suggested that the fiscally constrained plan be amended to remove the rebuilding to modern design standards and widening of the 18 miles of freeway in the City. They expressed opposition to rebuilding to modern design standards and widening any freeway segment within the City, citing that there would be significant impacts associated with those widenings due to the densely populated neighborhoods immediately adjacent to those freeway segments. The City representatives as well suggested that any funding made available due to reconstructing-as-is these 18 miles of freeway could be used to avoid deferral of some of the 166 miles of freeway reconstruction that would not be implemented by the year 2035 due to constraints of existing and reasonably expected available funding.

Table 35

YEAR 2035 REGIONALTRANSPORTATION PLAN: VISION PROJECTS NOT INCLUDED IN REGIONAL TRANSPORTATION PLAN: FISCALLY CONSTRAINED

Freeway Reconstruction • Reconstruction of IH 94 between STH 16 and the Waukesha/Jefferson County Line, including the planned reconstruction with additional lanes of IH 94 between STH 83 and CTH SS • Reconstruction of IH 43 between STH 60 and the Ozaukee/Sheboygan County Line, including the planned reconstruction with additional lanes of IH 43 between STH 60 and the IH 43/STH 57 interchange • Reconstruction of IH 43 between Moorland Road (CTH O) and the Walworth/Rock County Line, including the planned reconstruction with addition lanes of IH 43 between Moorland Road (CTH O) and Racine Avenue (CTH Y) • Reconstruction of the IH 794 Lake Interchange • Reconstruction with additional traffic lanes of USH 41/USH 45 between the North Interchange and the Richfield Interchange • Reconstruction of USH 41 between the Richfield Interchange and the Washington/Dodge County Line • Reconstruction of USH 41 between the Stadium Interchange and Lisbon Avenue • Reconstruction of USH 45 between the Richfield Interchange and CTH D • Reconstruction of STH 16 between IH 94 and STH 67 • Reconstruction of STH 145 between USH 45 and Hampton Avenue
Arterial Capacity Expansion • Extension of Lake Parkway from Edgerton Avenue to STH 100
Public Transit • Expansion of rapid transit service beyond 2012 levels • Expansion of express bus service beyond 2012 levels without corresponding cuts in local transit service • Potential reduction (with the exception of the implementation of the Milwaukee streetcar project), rather than improvement and expansion, to local transit service • Increase of transit fares above inflation

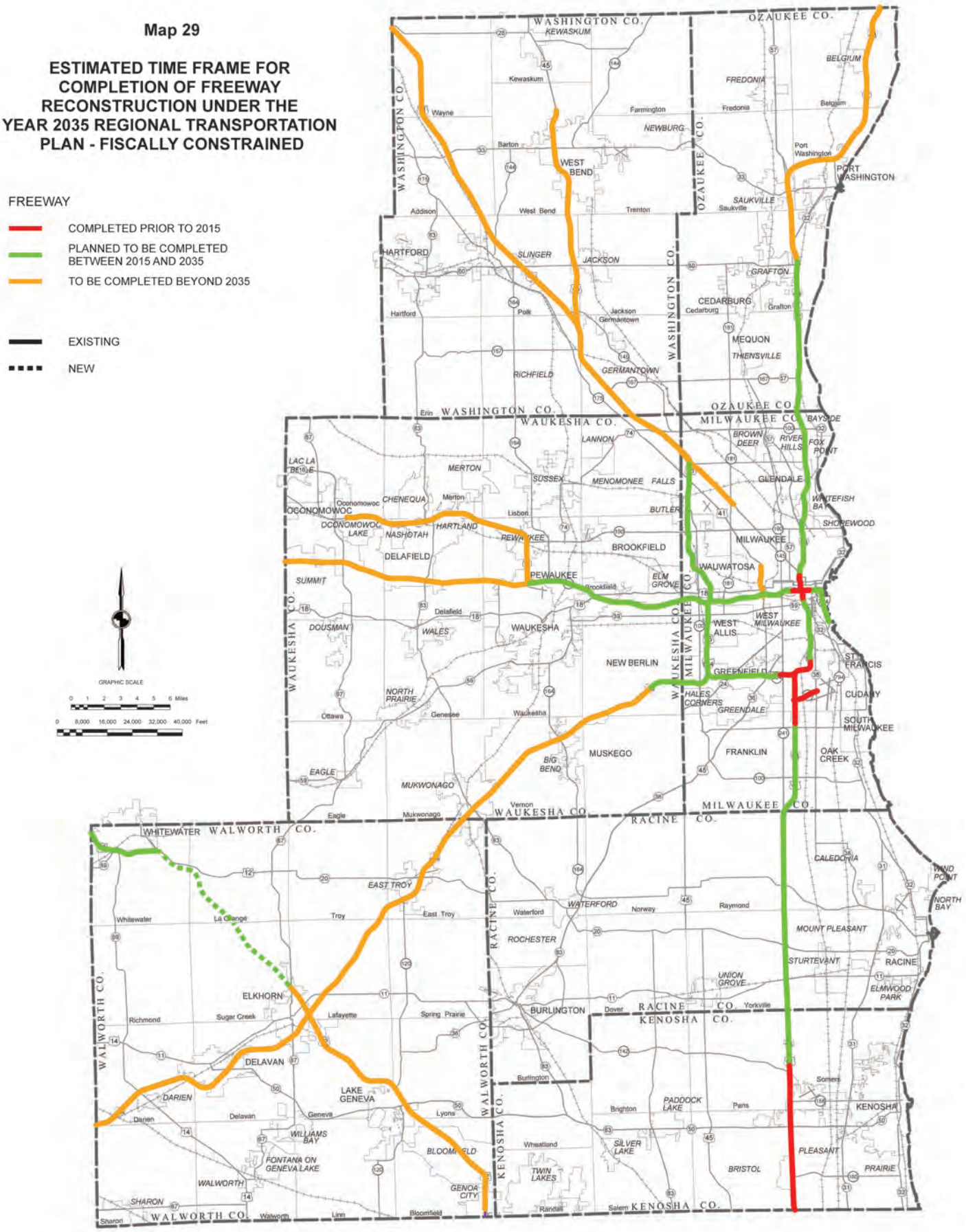
Source: SEWRPC.

The expected funding gap between the estimated costs of the transit recommendations of the Year 2035 Regional Transportation Plan – Vision and the existing and reasonably expected revenues available to implement the plan is expected to result in a lack of implementation of the improvement and expansion of public transit proposed in the Vision plan, and as well reductions in the current transit service and a potential increase in transit fares above the rate of inflation. There has been already a reduction in transit service levels from the 69,000 vehicle-miles of transit operating on average weekday in existing year 2005 (the base year of the adopted year 2035 regional transportation plan) to 61,000 vehicle-miles of transit operating in 2012, a reduction of about 11 percent. Based on the fiscally-constrained plan, it would be expected that there would be about an 11 percent further reduction in transit service from 2012 service levels to 54,100 vehicle-miles of transit operating by the year 2035. Further, the fiscally-constrained transit plan assumed that transit fares would increase at about 3.5 percent annually, somewhat greater than the current rate of inflation of 2.5 percent experienced from 2006—the year the plan was adopted—to 2012. The reduction in transit service levels of about 11 percent from existing service levels would be expected to be achieved through reductions in service frequency. Map 31 shows the existing year 2012 routes and service areas for the public transit systems in Southeastern Wisconsin, which now represent the transit system in the Year 2035 Regional Transportation Plan – Fiscally Constrained.

Tables 36 and 37 compare the estimated costs of the Year 2035 Regional Transportation Plan: Fiscally Constrained to estimated existing and reasonably expected revenues.

Map 29

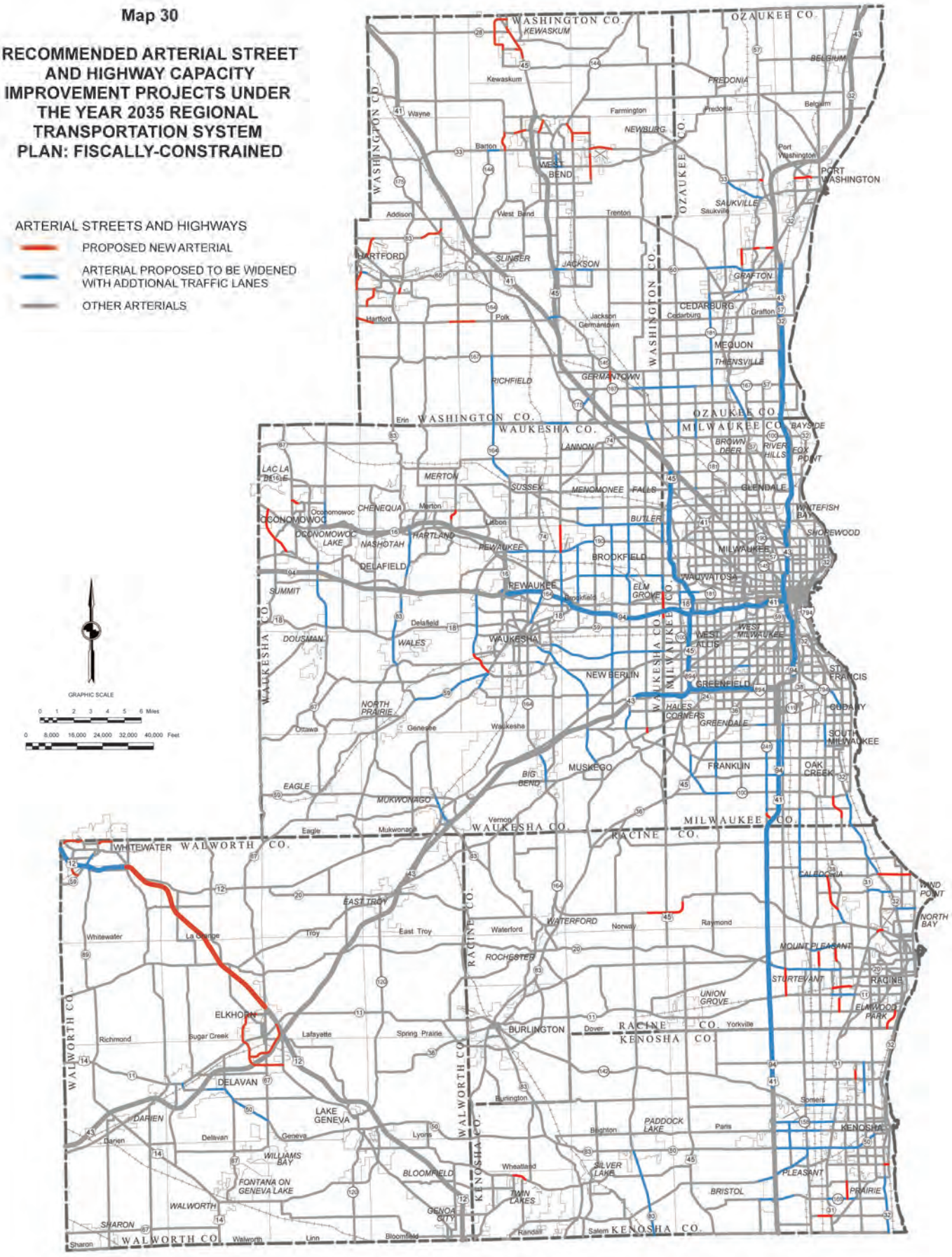
ESTIMATED TIME FRAME FOR COMPLETION OF FREEWAY RECONSTRUCTION UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY CONSTRAINED



Source: Wisconsin Department of Transportation and SEWRPC

Map 30

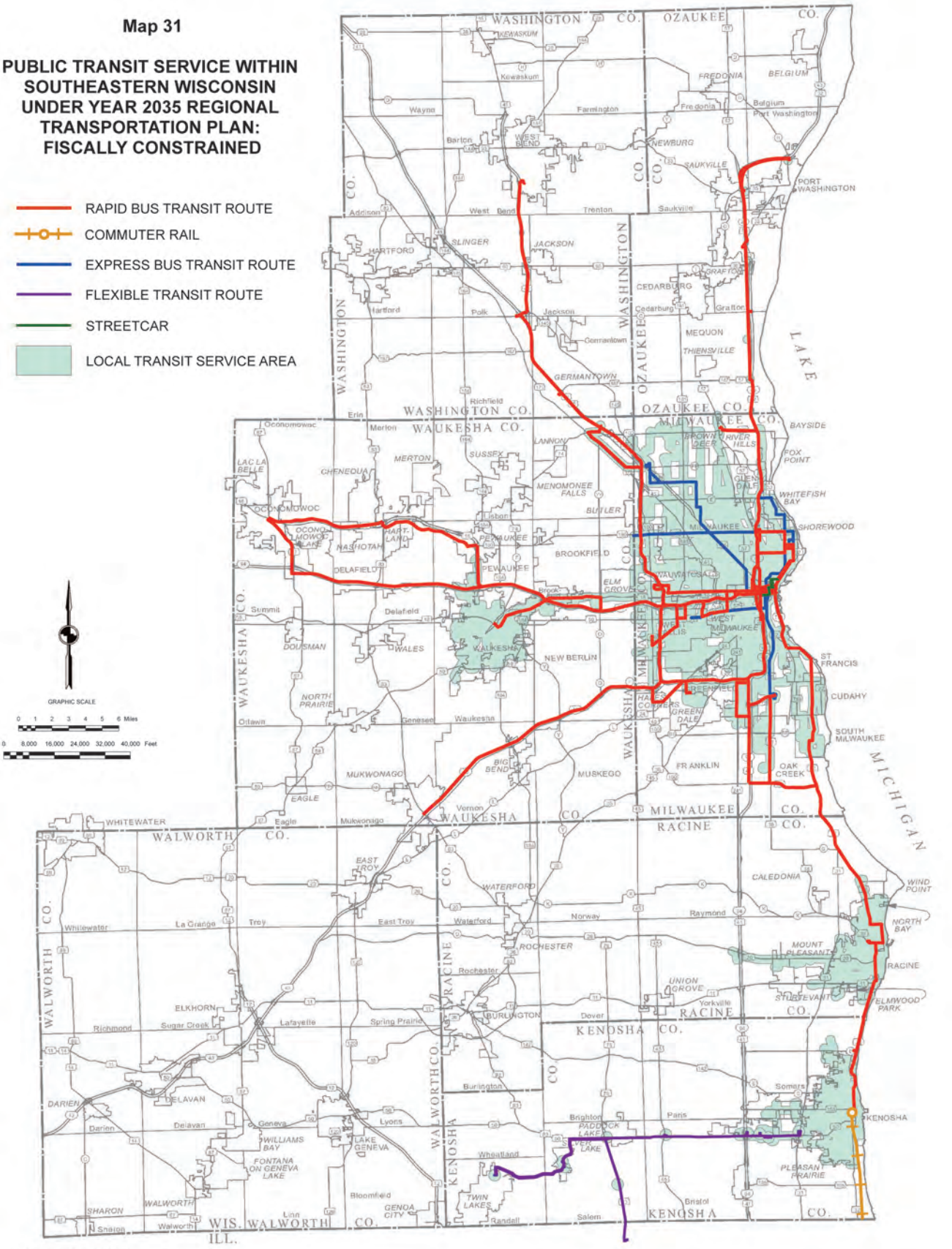
RECOMMENDED ARTERIAL STREET AND HIGHWAY CAPACITY IMPROVEMENT PROJECTS UNDER THE YEAR 2035 REGIONAL TRANSPORTATION SYSTEM PLAN: FISCALLY-CONSTRAINED



Source: SEWRPC.

Map 31

PUBLIC TRANSIT SERVICE WITHIN SOUTHEASTERN WISCONSIN UNDER YEAR 2035 REGIONAL TRANSPORTATION PLAN: FISCALLY CONSTRAINED



Source: SEWRPC

Table 36

AVERAGE ANNUAL COSTS AND REVENUES ASSOCIATED WITH THE YEAR 2035 FISCALLY CONSTRAINED REGIONAL TRANSPORTATION SYSTEM PLAN IN 2012 CONSTANT DOLLARS: 2015 THROUGH 2035[a]

Cost or Revenue Item	2035 Plan
Transportation System Cost (average annual 2015-2035 expressed as millions of dollars)[b]	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	$285
Other	362
Subtotal	$647
Operating	80
Subtotal	$727
Transit System	
Capital	$ 22
Operating[c]	118
Subtotal	$140
Total	$867
Transportation System Revenues (average annual 2015-2035 expressed as millions of dollars)[b]	
Highway Capital (Federal/State/Local)	
Freeway Reconstruction	$275
Other	401
Subtotal	$676
Highway Operating (State/Local)	76
Subtotal	$752
Transit Capital	
Federal	$ 18
Local	4
Subtotal	$ 22
Transit Operating	
Federal	$ 16
State	78
Local	24
Subtotal	$118
Subtotal	$140
Total	$892

[a]*All cost and revenue figures in this table are expressed in constant 2012 dollars.*

[b]*The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the plan. The fiscally constrained freeway system capital costs include the estimated cost to resurface the existing freeway system, as needed, and the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2035 and within the within reasonably expected revenues available, as shown in Table A-3, to modern design standards, estimated at $4.5 billion or $214 million per year; the estimated incremental cost to rebuild 87 miles of the freeway system with additional lanes at $964 million or $46 million per year; the estimated cost of two new freeway interchanges and the conversion of two half interchanges to full interchanges at $132 million; and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater at $417 million. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,114 miles of surface arterials which will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 192 miles of surface arterials, and the estimated costs of new construction of 60 miles of surface arterials. The estimated costs of resurfacing and reconstruction are based on the estimated lifecycle of existing surface arterials, and includes reconstruction of about 30 percent of surface arterials, two resurfacings of about 25 percent of surface arterials, and one resurfacing of about 45 percent of surface arterials. Unit costs for surface arterial resurfacing, reconstruction, widening, and new construction vary by cross-section from $0.3 to $14 million per mile (rural or urban, divided or undivided, and number of traffic lanes) and are based upon actual project costs over the past several years. The estimated capital cost of surface arterials is $303 million per year, including $244 million for preservation (resurfacing and reconstruction) and $59 million for new arterials and arterials reconstructed with additional traffic lanes. The major arterial capacity expansion projects presented in Table A-4 represent about 52 percent, or $29.1 million of the total $56 million annual cost of planned surface arterial capacity expansion. Transit system capital costs include preservation of the existing transit system, including bus replacement on a 15 year schedule, and replacement of fixed facilities, and costs of system improvement and expansion including needed additional buses and facility expansion.*

Highway system operating (and maintenance) costs are based on estimated actual state and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the proposed increase in the plan in arterial highway system lane-miles. Transit system operating (and maintenance) costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours. Planned transit system operating costs have been decreased from existing system operating costs based on the requisite decrease in in transit service vehicle-miles and vehicle-hours to match reasonably expected revenues available.

Highway Federal, state, and local capital and operating revenues are based on estimated Federal, state, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2015 funding levels through the year 2035 with inflation at 2.5 percent.

[d]*Net operating cost (total operating costs less fare-box revenue).*

Source: SEWRPC.

Table 37

AVERAGE ANNUAL COSTS AND REVENUES ASSOCIATED WITH THE YEAR 2035 FISCALLY CONSTRAINED REGIONAL TRANSPORTATION SYSTEM PLAN BASED ON YEAR OF EXPENDITURE: 2015 THROUGH 2035

Cost or Revenue Item	2035 Plan
Transportation System Cost (average annual 2015-2035 expressed as millions of dollars)[a]	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	$ 366
Other	504
Subtotal	$ 870
Operating	111
Subtotal	$ 981
Transit System	
Capital	$ 29
Operating[b]	118
Subtotal	$ 147
Total	$1,129
Transportation System Revenues (average annual 2015-2035 expressed as millions of dollars)[a]	
Highway Capital (Federal/State/Local)	
Freeway Reconstruction	$ 351
Other	531
Subtotal	$ 882
Highway Operating (State/Local)	97
Subtotal	$ 979
Transit Capital	
Federal	$ 25
Local	4
Subtotal	$ 29
Transit Operating	
Federal	$ 18
State	105
Local	30
Subtotal	$ 153
Subtotal	$ 182
Total	$1,161

[a]*The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the plan. The fiscally constrained freeway system capital costs include the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2035 and within the within reasonably expected revenues available, as shown in Table A-3, to modern design standards, the estimated incremental cost to rebuild 87 miles of the freeway system with additional lanes, the estimated cost of two new freeway interchanges and the conversion of two half interchanges to full interchanges, and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,114 miles of surface arterials which will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 192 miles of surface arterials, and the estimated costs of new construction of 60 miles of surface arterials. The capital cost of the plan was based on equal annual expenditures of funds, in constant dollars, over the 21-year period. The operating costs for both the arterial street and highway system and transit system were based on equally increasing annual costs, in constant dollars, over the 21-year period. The conversion of year 2012 constant dollar cost to year of expenditure cost is based upon a price inflation of 2.5 percent.*

Highway Federal, state, and local capital and operating revenues are based on estimated Federal, state, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2015 funding levels through the year 2035 with inflation at 2.5 percent.

[b]*Net operating cost (total operating costs less fare-box revenue).*

Source: SEWRPC.

Principal Differences between Year 2035 Regional Transportation Plan: Vision and Fiscally Constrained Plans

These are three principal differences between Vision and Fiscally Constrained 2035 plans.

- Amount of freeway system reconstruction accomplished by year 2035
  - Vision Plan – 254 miles (including the widening of 114 miles of the existing freeway system in Southeastern Wisconsin).

- Fiscally Constrained Plan - 90 miles (including the widening of 87 miles of the existing freeway in Southeastern Wisconsin).

Under the Vision Plan, the entire freeway system would be reconstructed by 2035.

- Amount of surface arterials to be reconstructed with additional traffic lanes or newly constructed by the year 2035.
  - Vision Plan – 262 miles.
  - Fiscally Constrained Plan – 256 miles.

- Public Transit Improvement and Expansion
  - Vision Plan – 76,300 additional weekday vehicle-miles of transit service representing a 125 percent expansion from year 2012 service levels.
  - Fiscally Constrained Plan – the reduction of 6,900 weekday vehicle-miles of service representing an 11 percent decline from 2012 service levels.

CONSEQUENCES OF NOT BEING ABLE TO IMPLEMENT THE YEAR 2035 REGIONAL TRANSPORTATION PLAN DUE TO CURRENT FISCAL CONSTRAINTS

Not implementing the year 2035 regional transportation plan due to the limitations of current transportation revenues may have negative consequences for Southeastern Wisconsin:

- Traffic congestion and travel delays may be expected to increase, and travel reliability may decrease, as highway capacity improvements are deferred and delayed and public transit is not improved and expanded in the Region's most heavily travelled corridors, urban areas, and activity centers.

- Transportation-related energy consumption and air pollutant emissions may be greater as a result of increased traffic congestion and a lack of improvement and expansion of public transit.

- Emergency repairs and inefficient pavement maintenance may be required on the freeway system as segments of freeway and freeway bridges reach the end of their service life and funding does not permit their reconstruction.

- For the estimated 10 percent of Region residents who are unable to use, or cannot afford an automobile, mobility and access to the Region may be limited, including with respect to jobs, health care, education, grocery shopping, and other basic travel needs.

- Costs of public infrastructure and services, and the taxes necessary to support them, may be higher as improved and expanded public transit would not be available to support and promote more efficient higher density development.

All of these consequences of not implementing the year 2035 regional transportation plan may negatively impact economic growth in Southeastern Wisconsin and the quality of life of its residents. Future projections indicate that soon the Region will no longer be able to support economic growth with internal growth of the Region's labor force. Rather, there will be a need for population and labor force to in-migrate, or choose to locate in Southeastern Wisconsin if the Region is to experience even a modest growth in jobs. More severe traffic congestion, an inability to sustain and expand public transit service, and inefficient transportation and infrastructure expenditures may be obstacles to attracting labor force and business growth to Southeastern Wisconsin. This points to the need to achieve the transportation funding necessary to achieve the year 2035 regional transportation plan. The Commission's VISION 2050 effort may be expected to further address transportation needs and funding in Southeastern Wisconsin.

APPENDICES

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Appendix A

YEAR 2035 REGIONAL TRANSPORTATION PLAN: FISCALLY CONSTRAINED ESTIMATED COSTS AND ATTENDANT REVENUES

INTRODUCTION

The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs, such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the fiscally constrained plan. Table 36 and 37 of this report—and repeated as Table A-1 and A-2 of this appendix—present a comparison of the estimated costs attendant to implementation of the fiscally constrained regional transportation plan, and the estimated revenues available to fund plan implementation. As noted in Chapter VI, the estimated costs of implementing the Year 2035 Regional Transportation Plan: Vision exceeds the existing and reasonably expected revenues available to implement the plan (Tables 30 and 31).

The gap in funding significantly affects implementation of both highway and transit projects identified in the Year 2035 Regional Transportation Plan: Vision. The implications of the funding gap for the highway element of the plan differs from the transit element as highway expenditures are largely capital expenditures and transit expenditures are largely operating expenditures. The effect on the highway element is a deferral or delay in capital projects being implemented, primarily a reduction in the amount of the freeway system that can be reconstructed by the year 2035. The principal effect on the transit element is not only a lack of the transit improvement and expansion identified in the plan, but reductions in current transit service as well and continued increases in transit fares above inflation rates. This appendix provides detail attendant to those estimated costs and revenues for the fiscally constrained year 2035 regional transportation plan (Tables A-1 and A-2).

FISCALLY CONSTRAINED PLAN CAPITAL COSTS

A principal element of the plan cost is the construction, or capital, cost of major projects in the fiscally constrained plan. Major projects for the arterial street and highway system are defined as projects of higher cost (shown on Map A-1). These major projects include those segments of the freeway system as shown in Table A-3 and new surface arterial construction and existing surface arterial reconstruction of four or more miles in length, as shown in Table A-4, which can be implemented within reasonably expected revenues available.

Table A-1

AVERAGE ANNUAL COSTS AND REVENUES ASSOCIATED WITH THE YEAR 2035 FISCALLY CONSTRAINED REGIONAL TRANSPORTATION SYSTEM PLAN IN 2012 CONSTANT DOLLARS: 2015 THROUGH 2035[a]

Cost or Revenue Item	2035 Plan
Transportation System Cost (average annual 2015-2035 expressed as millions of dollars)[b]	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	$285
Other	362
Subtotal	$647
Operating	80
Subtotal	$727
Transit System	
Capital	$ 22
Operating[c]	118
Subtotal	$140
Total	$867
Transportation System Revenues (average annual 2015-2035 expressed as millions of dollars)[b]	
Highway Capital (Federal/State/Local)	
Freeway Reconstruction	$275
Other	401
Subtotal	$676
Highway Operating (State/Local)	76
Subtotal	$752
Transit Capital	
Federal	$ 18
Local	4
Subtotal	$ 22
Transit Operating	
Federal	$ 16
State	78
Local	24
Subtotal	$118
Subtotal	$140
Total	$892

[a] *All cost and revenue figures in this table are expressed in constant 2012 dollars.*

[b] *The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the plan. The fiscally constrained freeway system capital costs include the estimated cost to resurface the existing freeway system, as needed, and the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2035 and within the within reasonably expected revenues available, as shown in Table A-3, to modern design standards, estimated at $4.5 billion or $214 million per year; the estimated incremental cost to rebuild 87 miles of the freeway system with additional lanes at $964 million or $46 million per year; the estimated cost of two new freeway interchanges and the conversion of two half interchanges to full interchanges at $132 million; and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater at $417 million. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,114 miles of surface arterials which will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 192 miles of surface arterials, and the estimated costs of new construction of 60 miles of surface arterials. The estimated costs of resurfacing and reconstruction are based on the estimated lifecycle of existing surface arterials, and includes reconstruction of about 30 percent of surface arterials, two resurfacings of about 25 percent of surface arterials, and one resurfacing of about 45 percent of surface arterials. Unit costs for surface arterial resurfacing, reconstruction, widening, and new construction vary by cross-section from $0.3 to $14 million per mile (rural or urban, divided or undivided, and number of traffic lanes) and are based upon actual project costs over the past several years. The estimated capital cost of surface arterials is $303 million per year, including $244 million for preservation (resurfacing and reconstruction) and $59 million for new arterials and arterials reconstructed with additional traffic lanes. The major arterial capacity expansion projects presented in Table A-4 represent about 52 percent, or $29.1 million of the total $56 million annual cost of planned surface arterial capacity expansion. Transit system capital costs include preservation of the existing transit system, including bus replacement on a 15 year schedule, and replacement of fixed facilities, and costs of system improvement and expansion including needed additional buses and facility expansion.*

Highway system operating (and maintenance) costs are based on estimated actual state and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the proposed increase in the plan in arterial highway system lane-miles. Transit system operating (and maintenance) costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours. Planned transit system operating costs have been decreased from existing system operating costs based on the requisite decrease in in transit service vehicle-miles and vehicle-hours to match reasonably expected revenues available.

Highway Federal, state, and local capital and operating revenues are based on estimated Federal, state, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2015 funding levels through the year 2035 with inflation at 2.5 percent.

[d] *Net operating cost (total operating costs less fare-box revenue).*

Source: SEWRPC.

Table A-2

AVERAGE ANNUAL COSTS AND REVENUES ASSOCIATED WITH THE YEAR 2035 FISCALLY CONSTRAINED REGIONAL TRANSPORTATION SYSTEM PLAN BASED ON YEAR OF EXPENDITURE: 2015 THROUGH 2035

Cost or Revenue Item	2035 Plan
Transportation System Cost (average annual 2015-2035 expressed as millions of dollars)[a]	
Arterial Street and Highway System	
Capital	
Freeway Reconstruction	$ 366
Other	504
Subtotal	$ 870
Operating	111
Subtotal	$ 981
Transit System	
Capital	$ 29
Operating[b]	118
Subtotal	$ 147
Total	$1,129
Transportation System Revenues (average annual 2015-2035 expressed as millions of dollars)[a]	
Highway Capital (Federal/State/Local)	
Freeway Reconstruction	$ 351
Other	531
Subtotal	$ 882
Highway Operating (State/Local)	97
Subtotal	$ 979
Transit Capital	
Federal	$ 25
Local	4
Subtotal	$ 29
Transit Operating	
Federal	$ 18
State	105
Local	30
Subtotal	$ 153
Subtotal	$ 182
Total	$1,161

[a]*The estimated arterial street and highway system and transit system costs include all capital costs and operating and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system such as arterial street resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under the plan. The fiscally constrained freeway system capital costs include the estimated cost to rebuild those segments of the existing freeway system, which can be expected to be completed by the year 2035 and within the within reasonably expected revenues available, as shown in Table A-3, to modern design standards, the estimated incremental cost to rebuild 87 miles of the freeway system with additional lanes, the estimated cost of two new freeway interchanges and the conversion of two half interchanges to full interchanges, and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater. Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,114 miles of surface arterials which will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 192 miles of surface arterials, and the estimated costs of new construction of 60 miles of surface arterials. The capital cost of the plan was based on equal annual expenditures of funds, in constant dollars, over the 21-year period. The operating costs for both the arterial street and highway system and transit system were based on equally increasing annual costs, in constant dollars, over the 21-year period. The conversion of year 2012 constant dollar cost to year of expenditure cost is based upon a price inflation of 2.5 percent.*

Highway Federal, state, and local capital and operating revenues are based on estimated Federal, state, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. State transit revenues are based on the State maintaining estimated year 2015 funding levels through the year 2035 with inflation at 2.5 percent.

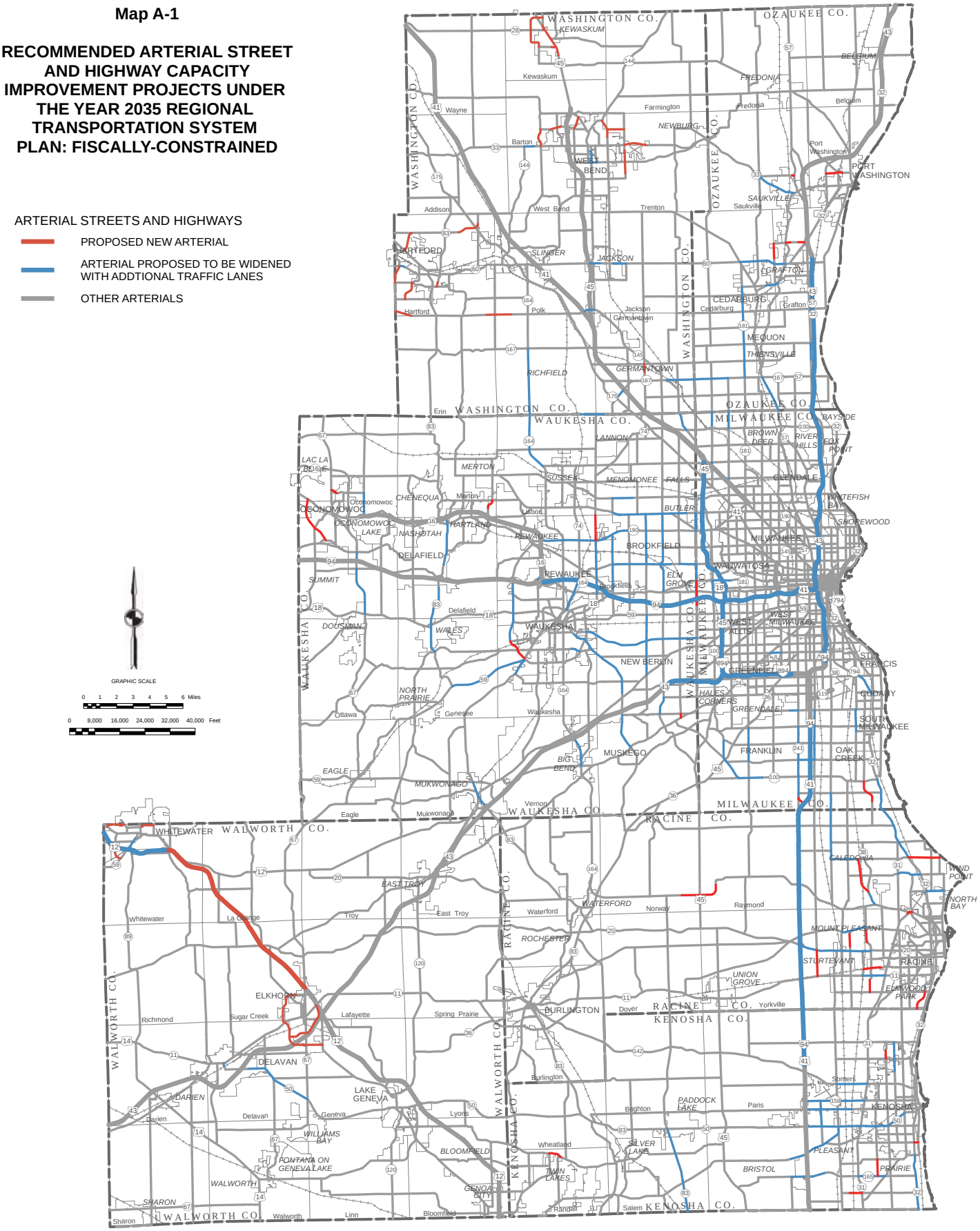
[b]*Net operating cost (total operating costs less fare-box revenue).*

Source: SEWRPC.

The fiscally constrained freeway system capital costs (in year of expenditure dollars) include the estimated cost to resurface the existing freeway system, as needed, and the estimated cost to rebuild 90 miles, or approximately 35 percent of the 254 miles of freeway system reconstruction included in the Year 2035 Regional Transportation Plan: Vision. The 90 miles of the freeway system reconstruction identified in Table A-3 are those segments which can reasonably be expected to be completed by the year 2035 and within the within reasonably expected revenues available. Reconstruction of the 90 miles of freeway system to modern design standards is estimated at $5.4 billion or $256 million per year; the estimated incremental cost to reconstruct 87 miles of the freeway system with additional lanes at $2.2 billion or $104 million per year; the estimated cost of two new freeway interchanges and the conversion of two half interchanges to full interchanges at $175 million; and the estimated cost of the extension of the USH 12 freeway from Elkhorn to Whitewater at $594 million.

Map A-1

RECOMMENDED ARTERIAL STREET AND HIGHWAY CAPACITY IMPROVEMENT PROJECTS UNDER THE YEAR 2035 REGIONAL TRANSPORTATION SYSTEM PLAN: FISCALLY-CONSTRAINED



Source: SEWRPC

Table A-3

ESTIMATED COST AND POTENTIAL SCHEDULE OF FREEWAY RECONSTRUCTION WITHIN SOUTHEASTERN WISCONSIN: 2015-2035[a]

Period Completed and Open to Traffic	Facility	Limits of Project	Estimated Cost		Estimated Funding—Year of Expenditure Dollars (millions)
			Year 2012 Constant Dollars (millions)[b]	Year of Expenditure Dollars (millions)[b]	
2015 to 2020	IH 794[c]	Lake Interchange to Carferry Dr. (Including Lakefront Gateway Interchange Reconfiguration)	56.9	58.4	
	Zoo Interchange[c]	124th St. to 70th St. & Lincoln Ave. to North Ave.	904.3	986.9	
	Subtotal		961.2	1,045.3	1,804.8
2021 to 2025	IH 94[c]	Illinois to Mitchell Interchange	512.1	580.5	
	IH 94	70th Street to 16th Street (Including Stadium Interchange)	1,054.7	1,252.6	
	IH 43	Silver Spring Dr. to STH 60	463.8	558.6	
	Subtotal		2,030.6	2,391.7	1,676.8
2026 to 2030	IH 43, IH 43/894, & IH 894	Lincoln Avenue to 27th Street, Moorland Road to Hale Interchange (Including Hale Interchange)	826.6	1,068.5	
	IH 43	Howard to Marquette Interchange	499.6	697.8	
	IH 43	Marquette Interchange to Silver Spring	439.5	620.5	
	USH 12	STH 67 to Rock County Line	417.3	597.4	
	Subtotal		2,183.0	2,984.2	1,851.3
2031 to 2035	IH 94	STH 16 to 124TH	442.8	673.2	
	USH 45	Burleigh to North Interchange	377.0	593.8	
	Subtotal		819.8	1,267.0	2,044.0
Total			5,994.6	7,688.5	7,376.9

[a]Projects beyond the year 2021 are subject to change based on a freeway prioritization effort currently being conducted by the Wisconsin Department of Transportation.

[b]Constant dollar and year of expenditure cost estimates for projects are reported in the period that the project is expected to be completed and open to traffic. Actual project expenditures will occur over multiple years and could extend over multiple periods dependent on the scope and complexity attendant to each project.

[c]Project is currently underway. Only those construction costs programmed for years 2015 through 2035 included.

Source: Wisconsin Department of Transportation and SEWRPC.

Surface arterial capital costs include the costs of the estimated necessary resurfacing and reconstruction of the 3,114 miles of surface arterials which will require preservation of capacity over the plan design period, the estimated costs of reconstruction and widening with additional traffic lanes of about 192 miles of surface arterials, and the estimated costs of new construction of 60 miles of surface arterials. The estimated costs of resurfacing and reconstruction are based on the estimated lifecycle of existing surface arterials, and includes reconstruction of about 30 percent of surface arterials, two resurfacings of about 25 percent of surface arterials, and one resurfacing of about 45 percent of surface arterials. Unit costs for surface arterial resurfacing, reconstruction, widening, and new construction vary by cross-section from $0.3 to $14 million (2012 dollars) per mile (rural or urban, divided or undivided, and number of traffic lanes) and are based upon actual project costs over the past several years. The estimated capital cost (in year of expenditure dollars) of surface arterials is $419 million per year, including $341 million for preservation (resurfacing and reconstruction) and $78 million for new arterials and arterials reconstructed with additional traffic lanes. The major arterial capacity expansion projects presented in Table A-4 represent about 48 percent or $37 million of the total $78 million annual cost of planned surface arterial capacity expansion.

Table A-4

ESTIMATED COST AND POTENTIAL SCHEDULE OF MAJOR SURFACE ARTERIAL CONSTRUCTION AND RECONSTRUCTION PROJECTS[a,c]

Period Completed and Open to Traffic	County	Facility	Limits of Project	Cost (Millions 2012 Dollars)[b]	Cost (Millions Year of Expenditure Dollars)	Mileage
2015 to 2020	Milwaukee	STH 241	College Ave. to Racine County Line	63.3	- -	6.0
	Waukesha	Pilgrim Road	USH 18 to Lisbon Rd.	31.3	- -	4.8
	Waukesha	Springdale Rd./Town Line Rd. extension	CTH JJ to Weyer Rd.	30.4	- -	4.7
	Waukesha	CTH Y	CTH L to College Avenue and Hickory Trail to Downing Dr.	25.9	- -	6.0
	Waukesha	STH 83 (part)	CTH DE to USH 18	8.3	- -	1.8
	Waukesha	STH 164 (part)	Howard Lane to CTH Q	16.2	- -	3.5
	Waukesha	STH 190	STH 16 to Brookfield Rd.	28.7	- -	5.4
	Waukesha	Waukesha West Bypass	IH 94 to STH 59	33.1	- -	5.1
	Subtotal			237.3	272.1	37.3
2021 to 2025	Kenosha	STH 50	IH 94 to 39th Ave.	53.2	- -	4.8
	Milwaukee	USH 45/STH 100	Rawson Avenue to 60th St.	33.4	- -	4.8
	Ozaukee and Washington	STH 167	STH 181 to STH 145	21.1	- -	4.6
	Ozaukee	STH 181	STH 167 to Bridge Street	25.9	- -	5.5
	Racine	STH 20	IH 94 to Oaks Rd.	29.0	- -	4.5
	Waukesha	STH 83 (part)	Mariner Dr. to STH 16	16.6	- -	3.6
	Waukesha	CTH D (part)	Milwaukee County line to Calhoun Rd.	19.5	- -	3.0
	Waukesha	STH 83 (part)	USH 18 to Phylis Pkwy.	11.1	- -	2.4
	Subtotal			209.8	275.5	33.2
2026 to 2030	Kenosha	STH 83	STH 50 to Illinois State line	30.0	- -	5.1
	Milwaukee and Racine	STH 32	STH 100 to Five Mile Rd.	22.7	- -	5.1
	Walworth	STH 50	IH 43 to CTH F (south)	27.6	- -	4.3
	Waukesha	CTH D (part)	Calhoun Rd. to STH 59/164	15.7	- -	3.8
	Subtotal			95.9	142.5	18.3
2031 to 2035	Kenosha	STH 50 (part)	39th Ave. to 63rd St.	7.8	- -	1.5
	Milwaukee and Racine	STH 38 (part)	Oakwood Rd. to Six Mile Rd. and Five Mile Rd. to CTH K	30.0	- -	6.1
	Racine	STH 38	Six Mile Road to UP Railroad	14.2	- -	2.6
	Washington	STH 164 (part)	CTH Q to STH 167	16.6	- -	4.0
	Subtotal			68.6	92.2	14.20
Total				611.6	782.2	103.00

[a]*Major projects include those projects involving new construction or widening with a cumulative length of four or miles.*

[b]*Cost of Construction does not include the cost of right-of-way required for the project.*

[c]*The schedule shown in this table represents an estimate of the timing of construction and reconstruction for the purposes of comparison of costs and revenues, and is not a recommendation for the schedule of construction and reconstruction. Such a schedule can only be developed by the responsible implementing agency and will necessarily entail frequent updating, for example, due to pavement and structure condition.*

Source: SEWRPC.

With regard to the planned transit system included in the fiscally constrained regional transportation plan, future reasonably expected revenues available do not support the costs of the existing transit service levels and, as such, transit system capital costs are based on an 11 percent reduction in transit service vehicle-miles and vehicle hours from existing year 2012 transit service levels (necessary to balance estimated costs to reasonably expected revenue estimates), bus replacement on a 15 year schedule, and replacement of fixed facilities. The only major project for transit included in the fiscally constrained year regional transportation plan is the City of Milwaukee streetcar project. The streetcar project costs (in year of expenditure dollars) and revenues included in the fiscally constrained plan are based on capital and operating costs identified in an environmental assessment completed in October 2011. The estimated construction cost for the streetcar project is $65 million.

FISCALLY CONSTRAINED PLAN OPERATING COSTS

Existing highway system operating (and maintenance) costs are based on estimated actual state and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the proposed increase in the plan in arterial highway system lane-miles. Transit system operating (and maintenance) costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours. Planned transit system operating costs have been decreased from existing system operating costs based on the requisite decrease in in transit service vehicle-miles and vehicle-hours to match reasonably expected revenues available. The only major project for transit included in the fiscally constrained year regional transportation plan is the City of Milwaukee streetcar project. The streetcar estimated average annual net operating cost for the streetcar project is $2.4 million.

REGIONAL TRANSPORTATION PLAN REVENUES: FISCALLY CONSTRAINED

Highway Federal, state, and local capital and operating revenues are based on estimated Federal, state, and local expenditures over the last several years. Transit Federal capital and operating revenues are based on historic expenditures over the last several years, and assessment of available Federal formula and program funds. Tables A-5 and A-6 present the estimates of revenue and the basis for those estimates.

With regard to the Milwaukee Streetcar project, the estimated construction cost of $65 million would be utilizing 85 percent Federal Interstate Cost Estimate funding with the remaining 15 percent covered by City of Milwaukee Tax Incremental Finance funding. The estimated average annual net operating cost of $2.4 million for the Milwaukee Streetcar project is expected to use approximately 21 percent Federal funding and the remaining 79 percent would use a combination of streetcar sponsorships and City of Milwaukee parking revenues.

Table A-5

ESTIMATE OF YEAR 2035 PLAN ARTERIAL STREET AND HIGHWAY REVENUES

Federal and State Capital Funding

Assessment of Historic Statewide Funding

- Major Highway Development
  - 2013 - $372 million
  - 2008-2013 – 5.7 percent annual increase
  - 2003-2013 – 4.5 percent annual increase
- State Highway Rehabilitation
  - 2013 - $824 million
  - 2008-2013 – 4.0 percent annual increase
  - 2003-2013 – 3.9 percent annual increase
- Local Roads and Bridges
  - 2013 - $181 million
  - 2008-2013 – 0.7 percent annual increase
  - 2003-2013 – no change
- Southeastern Wisconsin Freeway Megaproject
  - 2013-2015 State budget provides an annual $275 million
  - 2008-2013 $260 million annual average
  - 2003-2013 - $245 million average annual funding

The 2011 Wisconsin Act 32 eliminated the Southeastern Wisconsin freeway rehabilitation program and initiated the Southeast Wisconsin Freeway Megaproject program.

Conclusion – 2035 Plan

	2013 Constant Dollar Funding	Year of Expenditure Average Annual Increase
Major Highway Development	$ 370 million	2.5 percent
State Highway Rehabilitation	820	2.5 percent
Local Roads and Bridges	180	1 percent
Southeastern Wisconsin Freeway Megaproject	275	2 percent
Total	$1,645 million	

The average annual increase is based on Wisconsin Department of Transportation assumptions of future transportation revenues.

Southeastern Wisconsin Share of State Revenues

Southeastern Wisconsin represents approximately 35 percent of the State in population, employment, income, and assessed value, and about 30 percent of vehicle-miles of travel. In the years after freeway system construction, and before freeway system reconstruction, Southeastern Wisconsin received about 25 to 30 percent of all State highway system revenues. To estimate Southeastern Wisconsin's share of State revenues, Option 1 allocates all Southeast Freeway Rehabilitation funds to Southeast Wisconsin and 25 percent of all other funds to Southeastern Wisconsin. Option 2 allocates 30 percent of all funds to Southeastern Wisconsin.

Option 1

$275 + ($1,370 x 0.25) = $618 million

Option 2

$1,645 x 0.30 = $493 million

Conclusion

- $618 million Federal and State annual highway revenue in 2013 constant dollars (2.0 percent annual increase year of expenditure)

Local Capital

- Estimate of annual revenue based upon local arterial highway annual expenditure – $43 million (2 percent annual increase year of expenditure)

Local Transportation Aids (Capital)

- Estimate of annual general transportation aids Attendant to estimated local highway capital expenditure – $15 million (2.5 percent annual increase year of expenditure)

Operating and Maintenance Funding

State

Assessment of Historic Funding

- $41 million annually

Conclusion – 2035 Plan

- $41 million annually (2 percent annual increase year of expenditure)

Local

Assessment of Historic Funding

- $34 million annually

Conclusion – 2035 Plan

- $34 million annually (2 percent annual increase year of expenditure)

Source: Transportation Budget Trends – 2012-2013 (Wisconsin Department of Transportation) and SEWRPC.

Table A-6

ESTIMATE OF YEAR 2035 PLAN TRANSIT REVENUES (FIXED ROUTE BUS SYSTEMS)

ESTIMATE OF YEAR 2012 CONSTANT DOLLAR ANNUAL FUNDING

Federal

Assessment of Historic Funding

- Operating - $27.1 million (2011)
  $29.5 million – (2007-2011)
- Capital - $13.0 million (2007-2011)

Assessment of Funding Sources

- Milwaukee Section 5307 formula funds - $19.4 – 20.9 million (2001-2013)
- Racine and Kenosha 5307 operating funds - $2.3 - $4.8 million (2001-2013)
- Other – (FTA 5310 - $2 million
  FTA 5339 - $3 million
  FHWA CMAQ - $6 million)
- Planned increase in bus miles of service and ridership could result in additional $11 million of FTA 5307 and 5339 formula funds by 2035
- City of Milwaukee Streetcar
  - Capital
    - $55 million Federal Interstate Cost Estimate funding ($2.6 million average annual)
  - Operating
    - CMAQ - $3.2 million ($152,000 average annual)
    - FTA 5307 – $270,500 beginning in 2019 ($191,000 average annual)
    - FTA 5337- $143,600 beginning in 2024 ($64,000 average annual)

Conclusion

2035 Vision Plan

- $30 million operating
- $17 million capital

2035 Fiscally Constrained Plan

- $16 million operating
- $18 million capital

State

Assessment of Historic Operating Funding

- 44.1 percent of operating cost - $78 million (2013)
- 45.7 percent of total operating cost (2011) - $87.8 million
- 41.6 percent of total operating cost (average 2007-2011) - $78.83 million

Conclusion

2035 Vision Plan

- 42 percent of total operating cost

2035 Fiscally Constrained Plan

- $78 million operating

Local

Assessment of Operating Funding

- $22.7 million (2011)
- $25.2 million (average 2007-2011)
- $1.3 million average annual parking revenue – City of Milwaukee Streetcar

Conclusion

2035 Vision Plan

- $31 million operating

Fiscally Constrained Plan

- $24 million operating

Assessment of Capital Funding

- $3.2 million (2011)
- $2.0 million (average 2007-2011)
- $10 million tax incremental finance funds ($437,000 average annual) – City of Milwaukee Streetcar

Conclusion

2035 Vision Plan

- $5 million capital

2035 Fiscally Constrained Plan

- $3.6 million capital

Table A-6 (continued)

ESTIMATE OF ANNUAL INCREASE IN FUNDING FOR YEAR OF EXPENDITURE REVENUES

Federal

Assessment of Historic Funding

FTA Section 5307 Milwaukee Area

- 0.7 percent annual increase (2001-2011)
- 2 percent annual increase (2007-2011)

FTA Section 5307 Kenosha and Racine

- 7.5 percent annual increase (2001-2011)
- 2.2 percent annual increase (2007-2011)

Conclusion

- 2 percent annual increase

State

Assessment of Historic Operating Funding

- 45.7 percent of total operating cost (2011)
- 41.6 percent of total operating cost (average 2007-2011)

Conclusion

2035 Vision Plan

- 42 percent of total operating cost

2035 Fiscally Constrained Plan

- $78 million (2.5 percent annual increase year of expenditure

Local

Assessment of Historic Funding

- 1.0 percent annual increase (2001-2011 operating)
- -2.5 percent annual increase (2007-2011 operating)

Conclusion

- 1.5 percent annual increase

Average Fares

- 4.7 percent annual increase (2001-2012)
- 3.0 percent annual increase (2006-2012)

Conclusion

2035 Vision Plan

- 2.5 percent increase (rate of inflation)

2035 Fiscally Constrained Plan

- 3.5 percent increase

Source: SEWRPC.

Appendix B

EVALUATION OF THE IMPACTS OF THE FISCALLY-CONSTRAINED PLAN ON MINORITY AND LOW-INCOME POPULATIONS IN SOUTHEASTERN WISCONSIN

As part of this review and update of the year 2035 regional transportation plan to be completed in 2014, the estimated 2035 plan costs were compared to revenues expected to be available over the remaining 20 years of the plan. In 2014, the existing, and outlook for future, available revenue is far more constrained than in 2005 during development of the year 2035 regional transportation plan and in 2010 during its first update. As a result, it was no longer possible to conclude with this plan update that the year 2035 regional transportation plan was reasonably consistent with existing and reasonably expected to be available revenues, and the current limitations on the use of those revenues. As such, it was necessary to consider the year 2035 plan as a "vision" plan, outlining the desirable transportation plan to address the current and future needs of the Region. It was further necessary to identify a "fiscally constrained" year 2035 regional transportation plan which includes those elements of the 2035 plan which can be achieved within the restrictions of the amounts and limitations of existing and reasonably expected to be available revenues. This appendix to this report provides an evaluation of whether the minority and low-income populations within Southeastern Wisconsin receive a disproportionate share of the estimated impacts—both costs and benefits—of the year 2035 Regional Transportation Plan –Fiscally-Constrained Plan.[1]

ASSESSMENT OF THE IMPACTS OF THE FISCALLY-CONSTRAINED PLAN ON MINORITY AND LOW-INCOME POPULATIONS

The expected funding gap between the estimated cost of the Year 2035 Regional Transportation Plan: Vision and the existing and reasonably expected revenues available to implement the plan affects implementation of both highway and transit projects identified in the Vision plan. The implications of the funding gap for the highway

[1]During the development of the year 2035 regional transportation plan adopted in 2006, an evaluation was conducted to determine whether the minority and low-income populations within Southeastern Wisconsin receive a disproportionate share of the estimated impacts—both costs and benefits—of the recommended regional transportation plan. This evaluation is documented in Appendix H of the year 2035 regional transportation system plan titled, "Evaluation of the Impacts of the Recommended Year 2035 Regional Transportation System Plan on Minority and Low-Income Populations in Southeastern Wisconsin."

Table B-1

POPULATION BY RACE AND HISPANIC ETHNICITY IN THE REGION BY COUNTY: 2010

County	White alone, Non-Hispanic		Minority										Total Population
			Black/African-American		American Indian and Alaska Native		Asian and Pacific Islander		Other Race		Hispanic		
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	
Kenosha.....	129,892	78.0	13,336	8.0	1,849	1.1	3,549	2.1	9,160	5.5	19,592	11.8	166,426
Milwaukee.....	514,958	54.3	269,246	28.4	13,729	1.4	38,642	4.1	58,663	6.2	126,039	13.3	947,735
Ozaukee.....	80,689	93.4	1,518	1.8	467	0.5	1,957	2.3	597	0.7	1,956	2.3	86,395
Racine.....	145,414	74.4	24,471	12.5	1,806	0.9	2,898	1.5	11,363	5.8	22,546	11.5	195,408
Walworth.....	88,690	86.8	1,436	1.4	738	0.7	1,215	1.2	5,098	5.0	10,578	10.3	102,228
Washington....	124,348	94.3	1,740	1.3	798	0.6	1,889	1.4	1,327	1.0	3,385	2.6	131,887
Waukesha.....	353,114	90.6	6,528	1.7	2,205	0.6	12,852	3.3	4,955	1.3	16,123	4.1	389,891
Region	1,437,105	71.1	318,275	15.8	21,592	1.1	63,002	3.1	91,163	4.5	200,219	9.9	2,019,970

NOTE: As part of the 2010 Federal census, individuals could be reported as being of more than one race. In addition, persons of Hispanic ethnicity can be of any race or combination of races. The figures on this table indicate the number of persons reported as being white alone and non-Hispanic (non-minority) and those of a given minority race or Hispanic ethnicity (as indicated by the column heading), including those who were reported as that race exclusively and those who were reported as that race and one or more other races. Accordingly, the population figures by race and Hispanic ethnicity sum to more than the total population for each County and the Region.

Source: U.S. Bureau of the Census and SEWRPC.

element of the 2035 Plan: Vision differs from the transit element as highway expenditures are largely capital expenditures and transit expenditures are largely operating expenditures. The effect on the highway element is a deferral or delay in capital projects being implemented, specifically a reduction in the amount of freeway that can be reconstructed by the year 2035 and the deferring of the planned extension of the Lake Parkway between Edgerton Avenue and STH 11 in Milwaukee County. The principal effect on the transit element is a lack of the transit improvement and expansion identified under the 2035 Plan: Vision, along with about an 11 percent reduction from current transit service levels and an estimated average annual increase in transit fares of about 3.5 percent, somewhat above the inflation rate of 2.5 percent experienced since the adoption of the regional transportation plan in 2006.

Estimates of the magnitude and location of the minority and low-income populations in the Region were obtained from data available from the most recent year 2010 decennial U.S. Census of population. Based upon the year 2010 Census, the magnitude and location of minority populations in the Region are shown in Maps B-1 through B-6 and in Table B-1. The magnitude and the location of the low-income populations within Southeastern Wisconsin, based upon the 2008-2012 U.S. Census American Community Survey, is shown on Map B-7 and summarized in Tables B-2 and B-3. The low-income population was defined as families with income below Federally-defined poverty levels.

The minority population utilizes public transit at a higher percentage relative to other modes of travel than the white population of the Region, although the automobile is by far the dominant mode of travel for the minority population. The mode of travel reported in the year 2008-2012 U.S. Census American Community Survey for travel to and from work for minority and white populations of the Region is shown—as such information is available for the categories of race—on Table B-4. In Milwaukee County, between 4 and 13 percent of the minority population uses public transit to travel to and from work, with the highest proportion—13 percent—by the African-American population. Only about 3 percent of the white population uses public transit for work travel. However, in Milwaukee County, minority populations use the automobile for 81 to 88 percent of their travel to and from work. This compares to 88 percent of the white population. Data is not available for mode of travel for trips other than work within Southeastern Wisconsin by race and ethnicity. Data for all urban areas in the State of Wisconsin is available from the 2009 National Household travel survey and shows a similar pattern as for work trips in Southeastern Wisconsin. The Wisconsin urban area minority population utilizes public transit for more of its travel across all types of trips—8 percent—compared to the Wisconsin urban area white population—

Map B-1

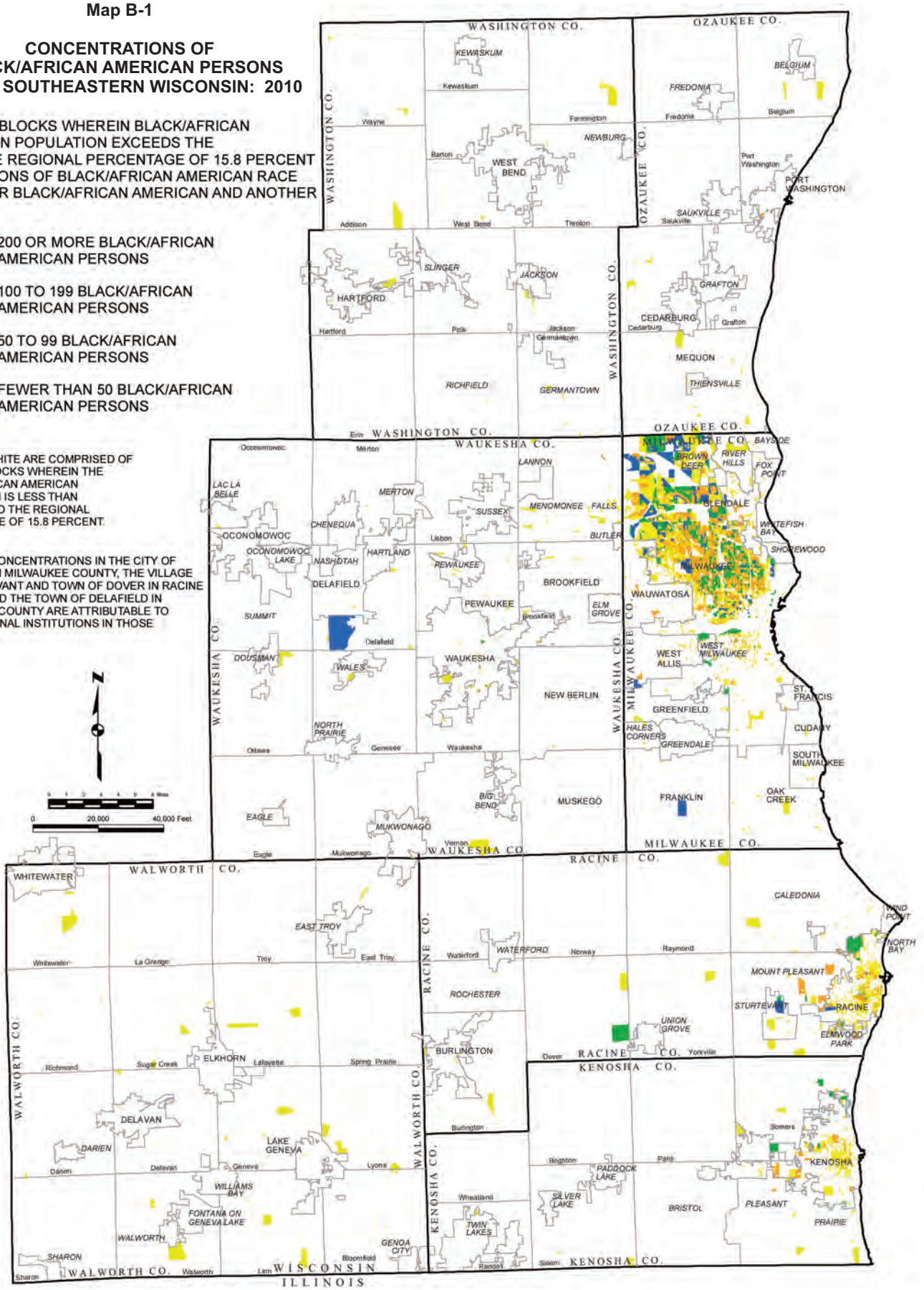
CONCENTRATIONS OF BLACK/AFRICAN AMERICAN PERSONS WITHIN SOUTHEASTERN WISCONSIN: 2010

CENSUS BLOCKS WHEREIN BLACK/AFRICAN AMERICAN POPULATION EXCEEDS THE AVERAGE REGIONAL PERCENTAGE OF 15.8 PERCENT OF PERSONS OF BLACK/AFRICAN AMERICAN RACE ALONE OR BLACK/AFRICAN AMERICAN AND ANOTHER RACE

- 200 OR MORE BLACK/AFRICAN AMERICAN PERSONS
- 100 TO 199 BLACK/AFRICAN AMERICAN PERSONS
- 50 TO 99 BLACK/AFRICAN AMERICAN PERSONS
- FEWER THAN 50 BLACK/AFRICAN AMERICAN PERSONS

NOTE:
AREAS IN WHITE ARE COMPRISED OF CENSUS BLOCKS WHEREIN THE BLACK/AFRICAN AMERICAN POPULATION IS LESS THAN OR EQUAL TO THE REGIONAL PERCENTAGE OF 15.8 PERCENT.

NOTE:
MINORITY CONCENTRATIONS IN THE CITY OF FRANKLIN IN MILWAUKEE COUNTY, THE VILLAGE OF STURTEVANT AND TOWN OF DOVER IN RACINE COUNTY, AND THE TOWN OF DELAFIELD IN WAUKESHA COUNTY ARE ATTRIBUTABLE TO CORRECTIONAL INSTITUTIONS IN THOSE LOCATIONS.



Source: U.S. Bureau of the Census and SEWRPC.

Map B-2

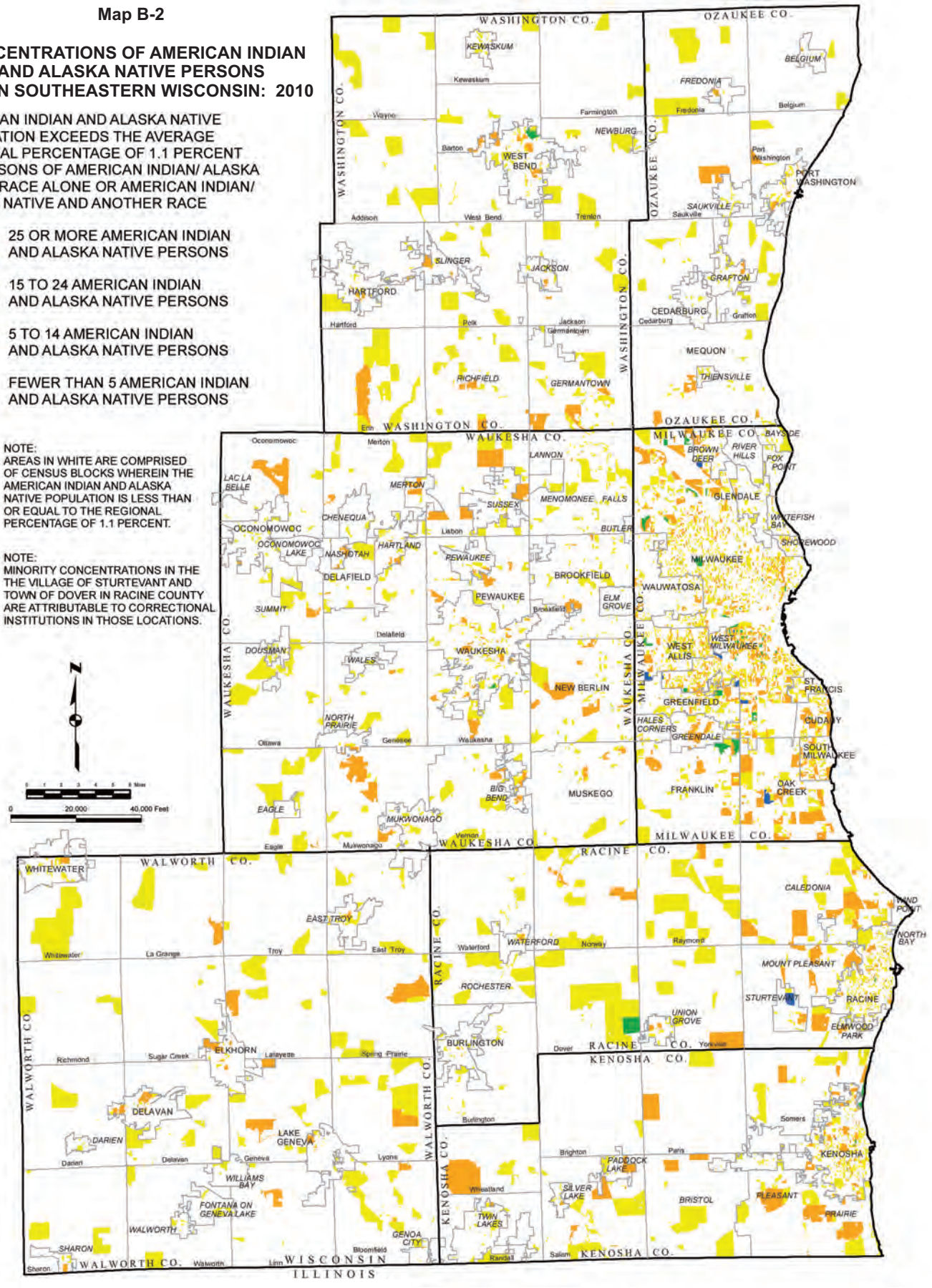
CONCENTRATIONS OF AMERICAN INDIAN AND ALASKA NATIVE PERSONS WITHIN SOUTHEASTERN WISCONSIN: 2010

AMERICAN INDIAN AND ALASKA NATIVE POPULATION EXCEEDS THE AVERAGE REGIONAL PERCENTAGE OF 1.1 PERCENT OF PERSONS OF AMERICAN INDIAN/ ALASKA NATIVE RACE ALONE OR AMERICAN INDIAN/ ALASKA NATIVE AND ANOTHER RACE

- 25 OR MORE AMERICAN INDIAN AND ALASKA NATIVE PERSONS
- 15 TO 24 AMERICAN INDIAN AND ALASKA NATIVE PERSONS
- 5 TO 14 AMERICAN INDIAN AND ALASKA NATIVE PERSONS
- FEWER THAN 5 AMERICAN INDIAN AND ALASKA NATIVE PERSONS

NOTE:
AREAS IN WHITE ARE COMPRISED OF CENSUS BLOCKS WHEREIN THE AMERICAN INDIAN AND ALASKA NATIVE POPULATION IS LESS THAN OR EQUAL TO THE REGIONAL PERCENTAGE OF 1.1 PERCENT.

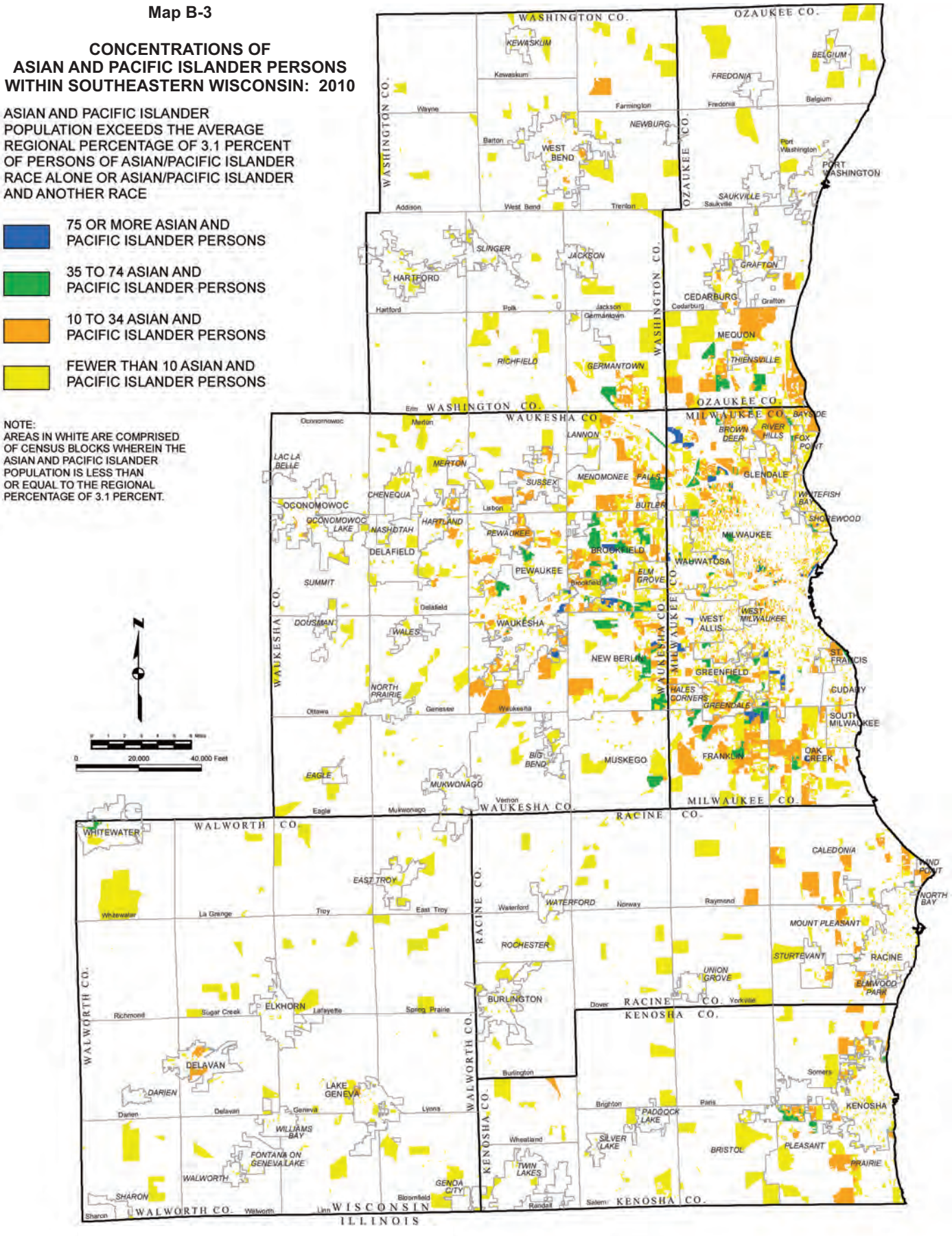
NOTE:
MINORITY CONCENTRATIONS IN THE THE VILLAGE OF STURTEVANT AND TOWN OF DOVER IN RACINE COUNTY ARE ATTRIBUTABLE TO CORRECTIONAL INSTITUTIONS IN THOSE LOCATIONS.



Source: U.S. Bureau of the Census and SEWRPC.

Map B-3

CONCENTRATIONS OF ASIAN AND PACIFIC ISLANDER PERSONS WITHIN SOUTHEASTERN WISCONSIN: 2010



Source: U.S. Bureau of the Census and SEWRPC.

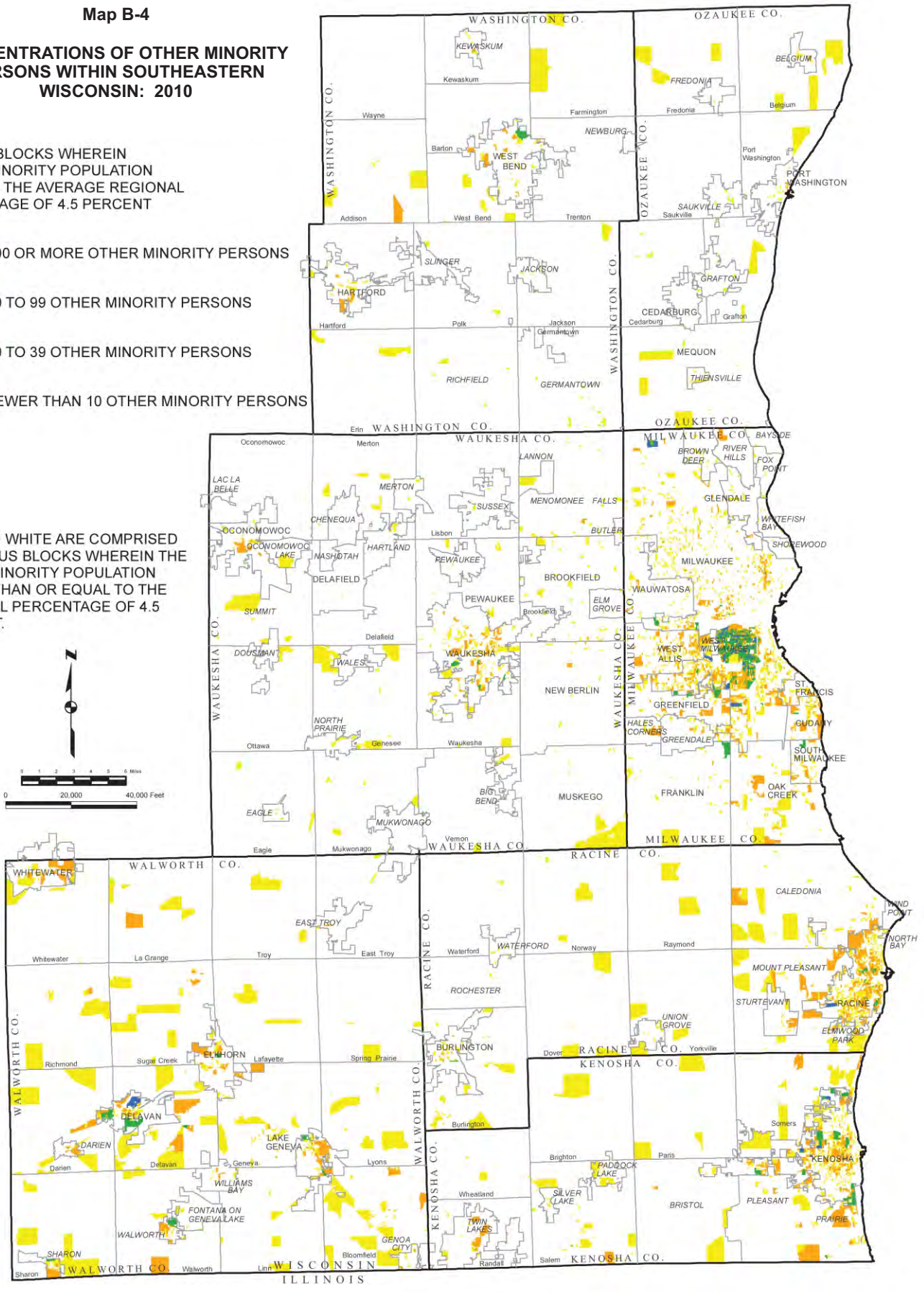
Map B-4

CONCENTRATIONS OF OTHER MINORITY PERSONS WITHIN SOUTHEASTERN WISCONSIN: 2010

CENSUS BLOCKS WHEREIN OTHER MINORITY POPULATION EXCEEDS THE AVERAGE REGIONAL PERCENTAGE OF 4.5 PERCENT

- 100 OR MORE OTHER MINORITY PERSONS
- 40 TO 99 OTHER MINORITY PERSONS
- 10 TO 39 OTHER MINORITY PERSONS
- FEWER THAN 10 OTHER MINORITY PERSONS

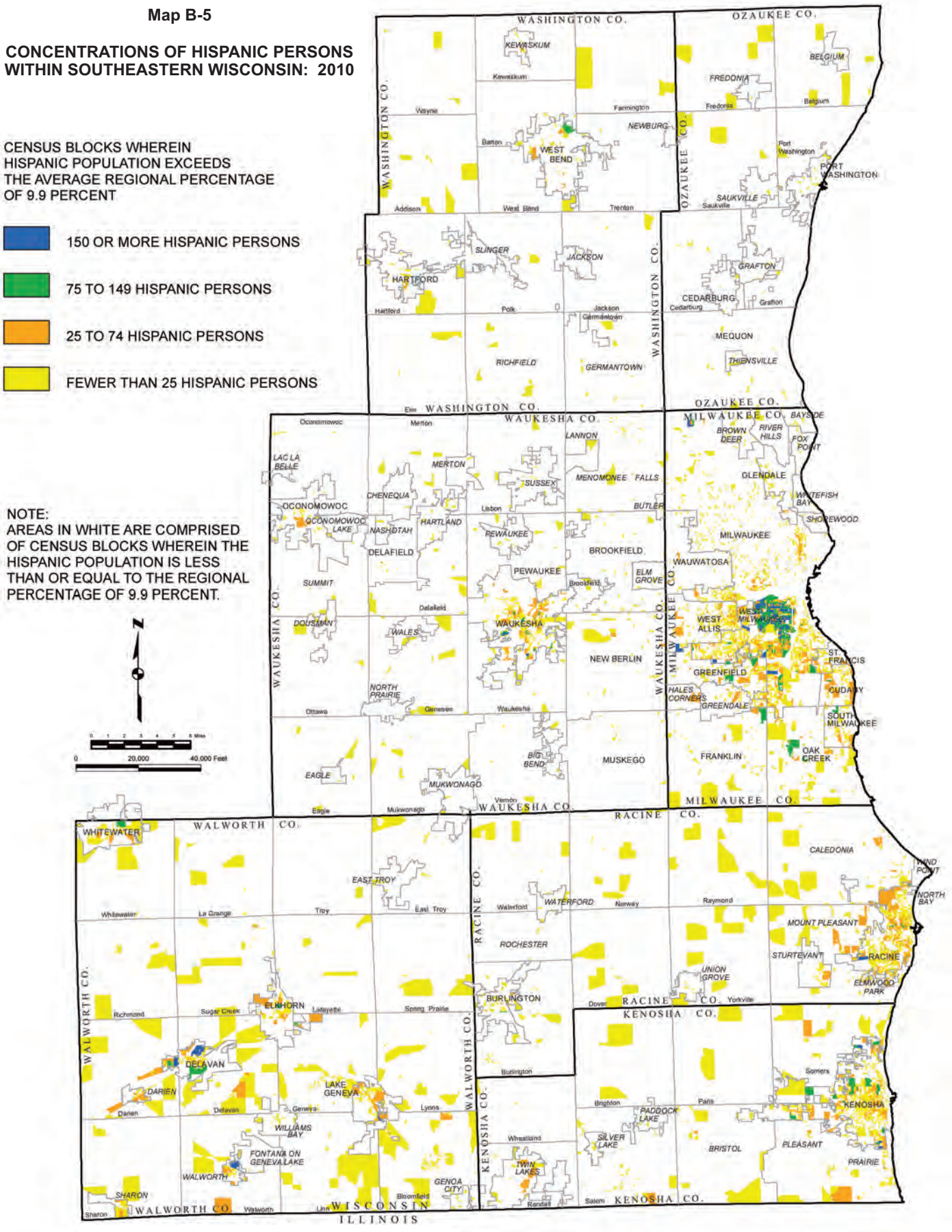
NOTE:
AREAS IN WHITE ARE COMPRISED OF CENSUS BLOCKS WHEREIN THE OTHER MINORITY POPULATION IS LESS THAN OR EQUAL TO THE REGIONAL PERCENTAGE OF 4.5 PERCENT.



Source: U.S. Bureau of the Census and SEWRPC.

Map B-5

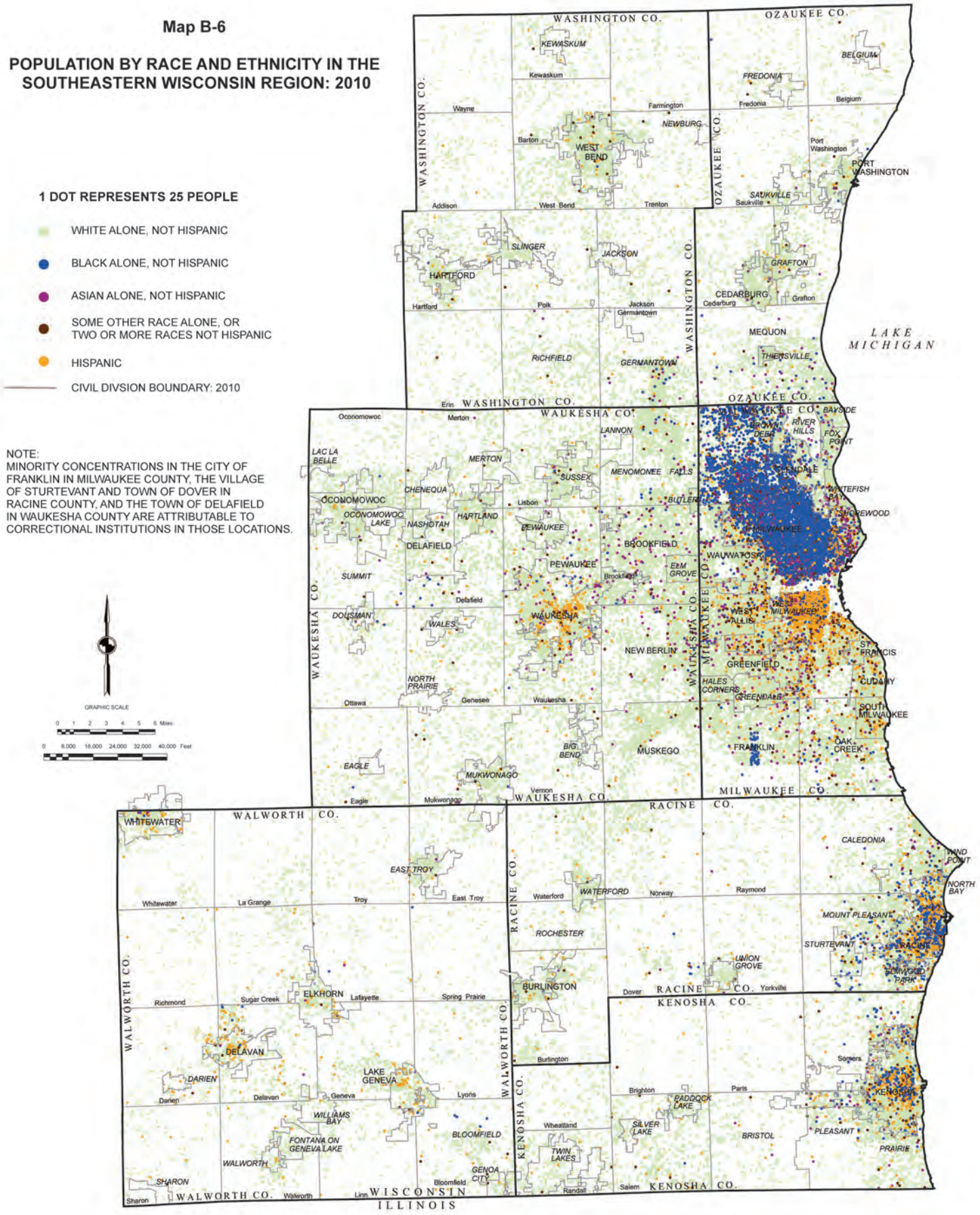
CONCENTRATIONS OF HISPANIC PERSONS WITHIN SOUTHEASTERN WISCONSIN: 2010



Source: U.S. Bureau of the Census and SEWRPC.

Map B-6

POPULATION BY RACE AND ETHNICITY IN THE SOUTHEASTERN WISCONSIN REGION: 2010



Source: U.S. Bureau of the Census and SEWRPC.

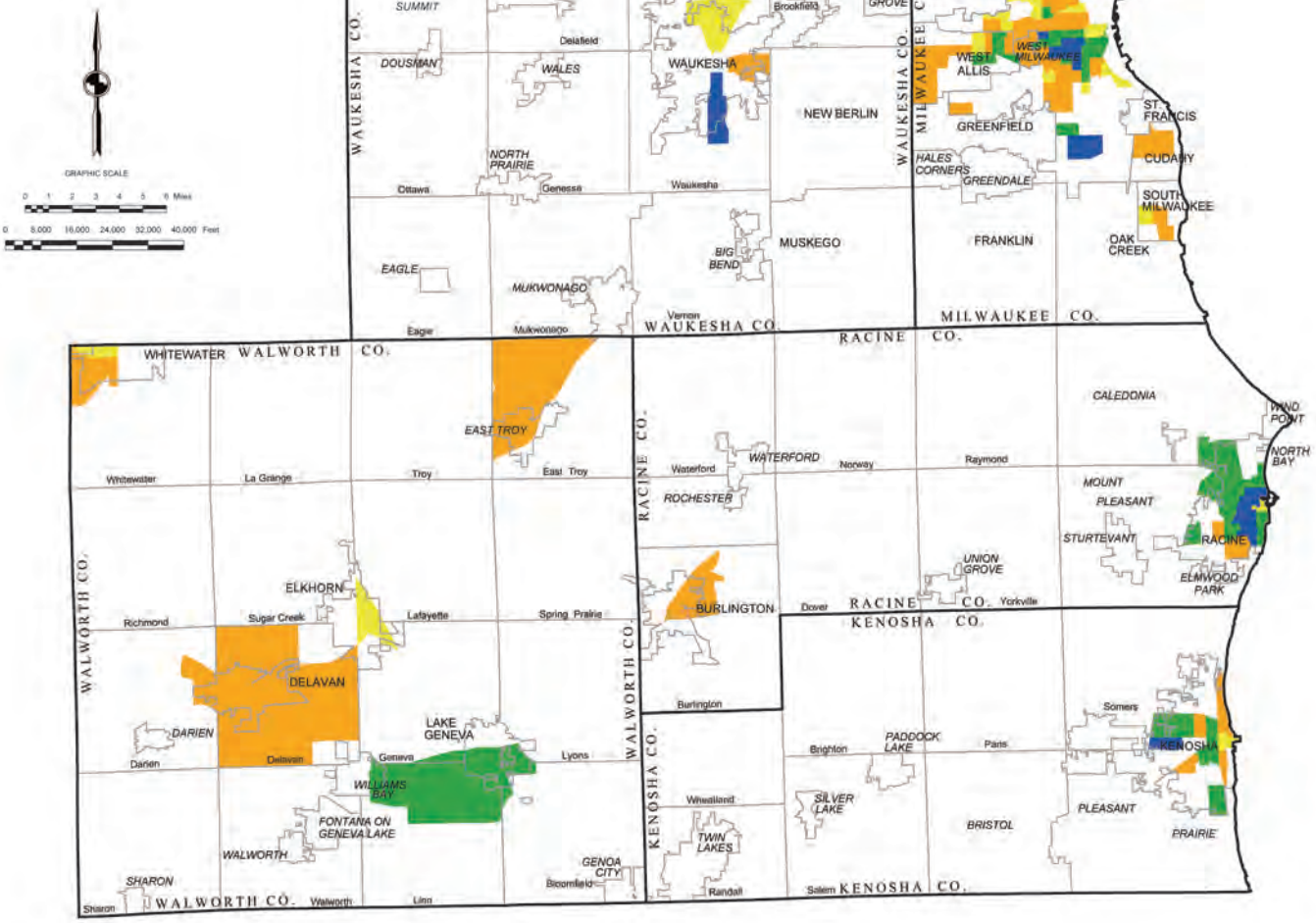
Map B-7

CONCENTRATIONS OF FAMILIES IN POVERTY WITHIN SOUTHEASTERN WISCONSIN: 2008-2012

CENSUS TRACTS WHEREIN THE FAMILIES IN POVERTY EXCEEDS THE AVERAGE REGIONAL PERCENTAGE OF 10.3 PERCENT

- FEWER THAN 100 FAMILIES IN POVERTY
- 100-199 FAMILIES IN POVERTY
- 200-299 FAMILIES IN POVERTY
- 300 OR MORE FAMILIES IN POVERTY

NOTE:
AREAS IN WHITE ARE COMPRISED OF CENSUS TRACTS WHEREIN THE FAMILIES IN POVERTY IS LESS THAN OR EQUAL TO THE REGIONAL PERCENTAGE OF 10.3 PERCENT.



Source: U.S. Bureau of the Census, American Community Survey, and SEWRPC.

Table B-2

FAMILIES WITH INCOME BELOW THE POVERTY LEVEL IN THE REGION BY COUNTY: 2008-2012

County	Families with Income Below the Poverty Level		
	Total Families	Number	Percent of Families
Kenosha	42,167	4,02	9.5
Milwaukee	218,244	35,962	16.5
Ozaukee	24,344	642	2.6
Racine	50,148	4,630	9.2
Walworth	26,268	2,102	8.0
Washington	37,757	1,388	3.7
Waukesha	108,845	3,586	3.3
Region	507,773	52,334	10.3

Source: U.S. Bureau of the Census, American Community Survey, and SEWRPC.

Table B-3

POVERTY THRESHOLDS BY SIZE OF FAMILY AND NUMBER OF CHILDREN UNDER 18 YEARS OF AGE: 2010 AVERAGE

Size of Family Unit	Related Children Under 18 Years							
	None	One	Two	Three	Four	Five	Six	Seven
One person (unrelated Individual)								
Under 65 years	$11,344	- -	- -	- -	- -	- -	- -	- -
65 years and over	10,458	- -	- -	- -	- -	- -	- -	- -
Two persons								
Householder under 65 years	14,602	$15,030	- -	- -	- -	- -	- -	- -
Householder 65 years and over	13,180	14,973	- -	- -	- -	- -	- -	- -
Three persons	17,057	17,552	$17,568	- -	- -	- -	- -	- -
Four Persons	22,491	22,859	22,113	$22,190	- -	- -	- -	- -
Five Persons	27,123	27,518	26,675	26,023	$25,625	- -	- -	- -
Six Persons	31,197	31,320	30,675	30,056	29,137	$28,591	- -	- -
Seven Persons	35,896	36,120	35,347	34,809	33,805	32,635	$31,351	- -
Eight Persons	40,146	40,501	39,772	39,133	38,227	37,076	35,879	$35,575
Nine Persons or more	48,293	48,527	47,882	47,340	46,451	45,227	44,120	43,845

Source: U.S. Bureau of the Census and SEWRPC.

less than one percent. Automobile travel is the dominant mode of travel for all trips by both the Wisconsin urban area minority population—76 percent—and white population—86 percent, as is the case for Southeastern Wisconsin travel for work purposes. The minority population represents a greater proportion of total transit ridership than it does of total population, as shown in Table B-5.

The County-to-County commuting patterns of the minority and white populations in the Region are very similar, as shown in Table B-6.

Table B-4

DISTRIBUTION OF EMPLOYED PERSONS BY COUNTY OF RESIDENCE, RACE, AND MODE OF TRAVEL TO WORK: 2008-2012

Race	Mode of Travel	County of Residence						
		Kenosha	Milwaukee	Ozaukee	Racine	Walworth	Washington	Waukesha
White alone, NonHispanic	Drive alone	85.2	80.1	83.8	86.6	81.4	86.0	86.4
	Carpool	8.2	8.1	6.5	7.0	8.1	7.4	6.4
	Bus	0.9	3.4	0.5	0.9	0.8	0.5	0.6
	Other	3.0	5.6	3.4	2.7	4.9	2.8	2.1
	Work at Home	2.7	2.8	5.8	2.8	4.8	3.3	4.5
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Black or African American alone	Drive alone	81.7	69.2	84.0	70.4	86.4	78.1	75.6
	Carpool	7.8	11.5	11.9	15.9	4.9	13.6	15.3
	Bus	4.2	13.4	0.0	8.3	1.4	0.2	3.1
	Other	4.3	3.6	4.1	2.7	7.3	2.7	4.7
	Work at Home	2.0	2.3	0.0	2.7	0.0	5.4	1.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Asian alone	Drive alone	76.4	71.9	67.4	88.3	93.3	77.0	84.4
	Carpool	11.9	15.6	28.5	6.2	0.0	19.1	12.0
	Bus	2.7	3.9	0.0	2.2	0.0	0.9	1.2
	Other	1.9	6.7	0.0	0.0	0.0	0.0	1.1
	Work at Home	7.1	1.9	4.1	3.3	6.7	3.9	1.3
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Other race alone or two or more races	Drive alone	81.2	69.7	76.6	79.4	68.9	77.3	78.5
	Carpool	10.4	17.3	11.3	11.0	20.5	13.3	12.0
	Bus	1.0	6.7	0.2	2.0	0.1	0.3	2.1
	Other	1.8	5.1	7.4	7.1	6.4	9.1	2.6
	Work at Home	5.6	1.2	4.5	0.5	4.1	0.0	4.8
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hispanic	Drive alone	79.4	66.4	73.3	79.7	73.6	66.8	76.3
	Carpool	14.6	21.6	6.1	12.8	17.4	29.0	16.3
	Bus	1.3	6.4	0.1	1.5	0.1	0.2	2.4
	Other	2.0	4.3	11.6	5.8	7.2	2.6	2.3
	Work at Home	2.7	1.3	8.9	0.2	1.7	1.4	2.7
	Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: U.S. Bureau of the Census American Community Survey, and SEWRPC.

Arterial Street and Highway Element of the Fiscally Constrained Regional Transportation Plan

Under the Year 2035 Regional Transportation Plan – Fiscally Constrained, 90 miles of freeway reconstruction, including 87 miles of freeway widening, would be expected to be implemented by the year 2035 based on the cost of these improvements compared to existing and future reasonably to be expected available revenue. Map B-8 shows the segments of the freeway system that would be expected to be reconstructed by the year 2035 based on existing and reasonably expected revenues, and the 164 miles of freeway that would be expected to have reconstruction deferred until after 2035. Additionally, all of the surface arterial capacity expansion within the Vision plan would remain in the fiscally constrained plan, with the exception of the Lake Parkway extension between Edgerton Avenue and STH 100 in Milwaukee County. Thus, the fiscally constrained plan would consist

Table B-5

COMPARISON OF THE PERCENTAGES OF MINORITY POPULATIONS AND MINORITY POPULATION TRANSIT RIDERSHIP IN MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES, AND THE CITIES OF KENOSHA, RACINE, AND WAUKESHA

Location of Transit Operations	Year 2010 Percent Minority Population	Year 2011 Percent Minority Transit Ridership
Milwaukee County	46	60
Ozaukee County Commuter Service	7	14
Ozaukee County Shared Ride-Taxi	7	10
Washington County Commuter Service	6	7
Washington County Shared-Ride Taxi Service	6	2
Waukesha County	9	13
City of Kenosha	31	58
City of Racine	47	61
City of Waukesha	20	32

Source: U.S. Bureau of the Census and SEWRPC.

Table B-6

PERCENTAGE DISTRIBUTION OF EMPLOYED REGION RESIDENTS BY COUNTY OF RESIDENCE, COUNTY OF WORK, AND RACE: 2006-2010

Race	County of Residence	County of Work								
		Kenosha	Milwaukee	Ozaukee	Racine	Walworth	Washington	Waukesha	Other	Total
Total Minority	Kenosha	59.3	3.0	0.0	8.1	0.1	0.0	1.3	28.3	100.0
	Milwaukee	0.3	84.3	1.8	0.5	0.1	1.2	10.5	1.3	100.0
	Ozaukee	0.2	44.9	42.2	0.0	0.0	2.5	5.4	4.9	100.0
	Racine	9.1	10.5	0.1	74.1	0.9	0.0	1.4	3.8	100.0
	Walworth	3.2	5.6	0.0	3.2	67.8	1.4	3.7	15.2	100.0
	Washington	0.0	19.0	9.2	0.0	0.0	51.9	16.3	3.7	100.0
	Waukesha	0.0	32.6	1.3	1.2	0.1	1.3	60.3	3.1	100.0
White	Kenosha	52.8	4.4	0.1	10.3	1.5	0.0	1.3	29.6	100.0
	Milwaukee	0.5	78.9	1.8	1.4	0.2	0.9	14.6	1.7	100.0
	Ozaukee	0.1	32.1	50.6	0.2	0.1	4.4	7.2	5.2	100.0
	Racine	6.9	18.1	0.1	63.1	1.9	0.2	5.9	3.7	100.0
	Walworth	2.3	5.4	0.1	4.3	62.7	0.0	8.0	17.2	100.0
	Washington	0.1	20.4	6.5	0.3	0.0	49.0	18.9	4.7	100.0
	Waukesha	0.3	30.5	0.8	1.0	0.7	1.8	62.1	2.9	100.0

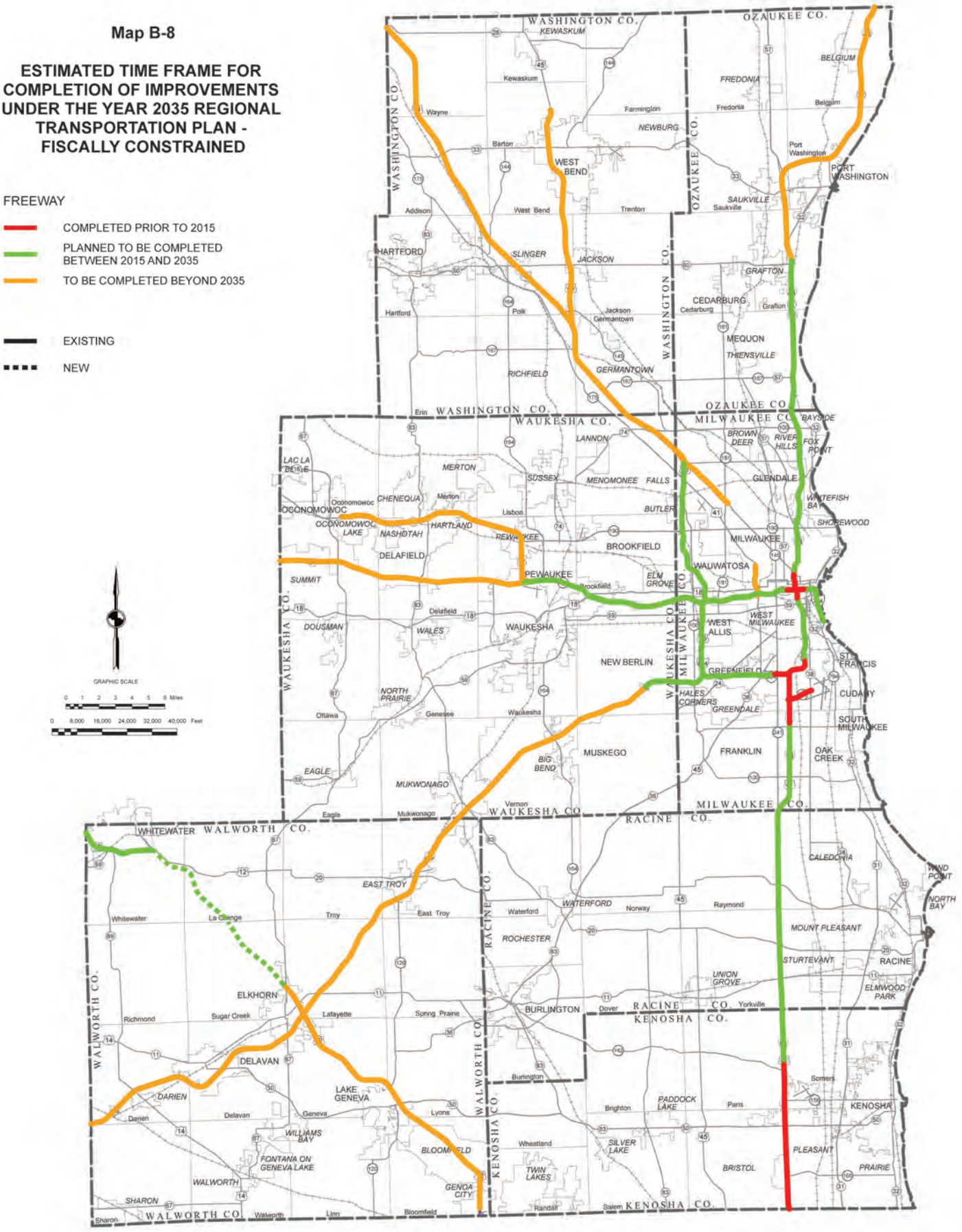
Source: U.S. Census Transportation Planning Package based on 2006-2008 American Community Survey data, and SEWRPC.

of approximately 90 percent, or 3,301 of the total 3,656 route-miles, of the planned arterial street in highway system being recommended to be resurfaced and reconstructed to their same capacity, approximately 283 route-miles, or 8 percent of the total year 2035 arterial street and highway system are recommended for widening as part of their reconstruction to provide additional through traffic lanes, and approximately 72 route-miles, or about 2 percent of the total arterial system mileage, are proposed to be constructed as new arterial facilities.

The proposed arterial street and highway capacity improvements under the recommended fiscally-constrained regional transportation plan are shown on Map B-9. An assessment was conducted to determine whether the arterial street and highway capacity improvements under the Year 2035 Plan – Fiscally Constrained were disproportionately located in areas of the Region with concentrations of minority and low-income populations.

Map B-8

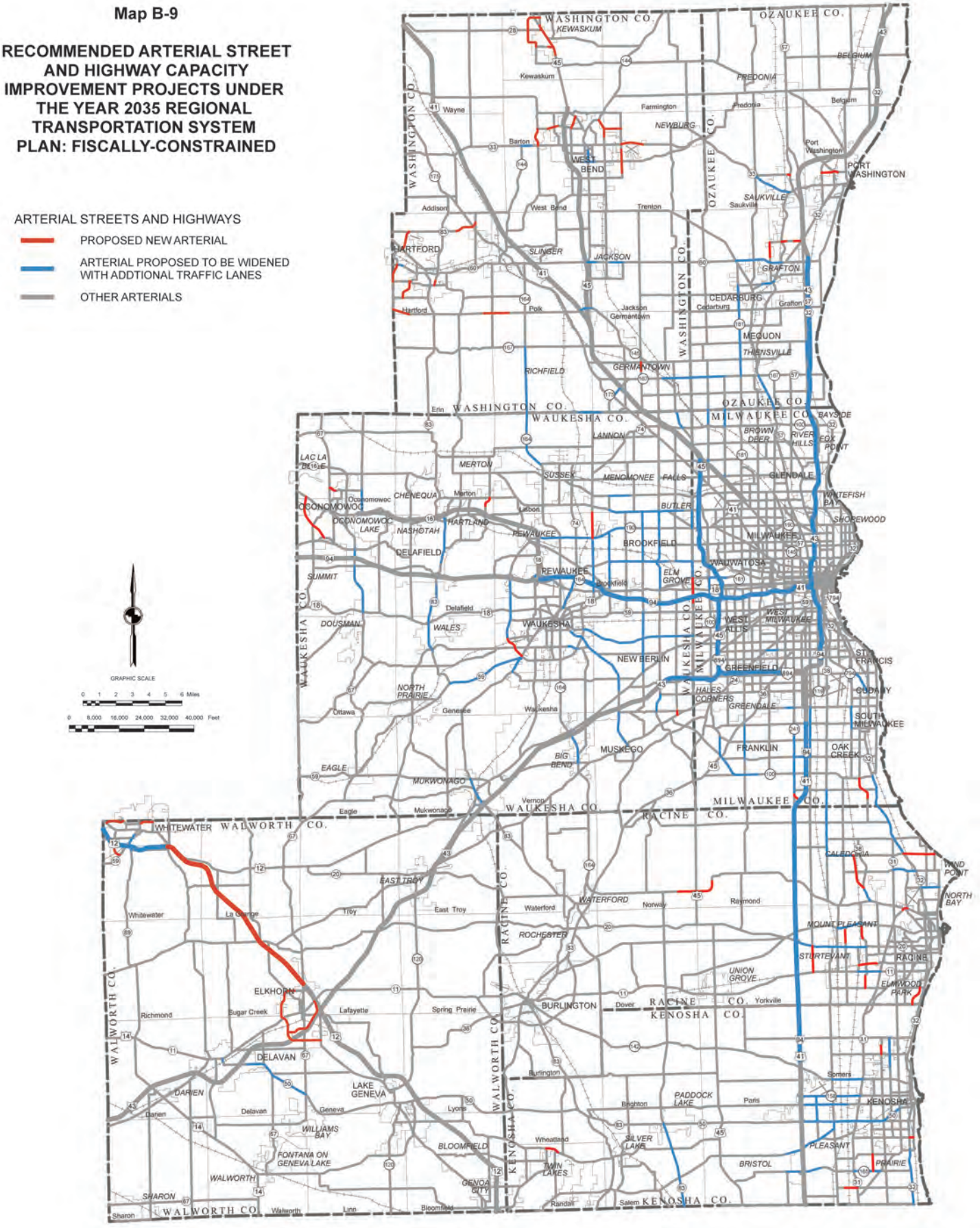
ESTIMATED TIME FRAME FOR COMPLETION OF IMPROVEMENTS UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY CONSTRAINED



Source: Wisconsin Department of Transportation and SEWRPC.

Map B-9

RECOMMENDED ARTERIAL STREET AND HIGHWAY CAPACITY IMPROVEMENT PROJECTS UNDER THE YEAR 2035 REGIONAL TRANSPORTATION SYSTEM PLAN: FISCALLY-CONSTRAINED



Source: SEWRPC.

Maps B-10 and B-11 compare the location of the proposed arterial capacity expansion projects under the fiscally constrained plan to the location of minority and low-income populations. This comparison indicates that no area of the Region, or minority or low-income community, disproportionately bears the impact of the proposed street and highway capacity improvements.

Map B-12 shows the location of freeways, including those proposed to be widened under the Year 2035 Plan – Fiscally Constrained to the locations of areas with concentrations of minority populations. Map B-13 shows the location of concentrations of low-income families within Southeastern Wisconsin in comparison to the freeway system, including the segments of the freeway system proposed to be widened under the fiscally constrained plan. While some segments of the freeway system, including those proposed to be widened, are located adjacent to minority and low-income populations, the vast majority of the freeway system and the freeway segments proposed to be widened under the Year 2035 Plan – Fiscally Constrained are not located adjacent to minority populations, and the vast majority of census blocks identified as having an above average concentration of a minority population are not located adjacent to a freeway or a freeway proposed to be widened under the fiscally constrained plan.

As the segments of freeway proposed to be widened during reconstruction under the Year 2035 Plan – Fiscally Constrained would directly serve areas of minority and low-income populations, these populations would benefit from the expected improvement in arterial street and highway accessibility to employment associated with the proposed freeway widening. Maps B-14 and B-15 show the results of an analysis to identify the traffic analysis zones (TAZs) with a minority or low-income population greater than the regional average that utilize the IH 94 freeway between 70th Street and 16th Street within the TAZ. Maps B-16 and B-17 show the results of a similar analysis for the IH 43 freeway between the Marquette Interchange and Silver Spring Drive. These analyses showed that the zones identified on these four maps account for about 45 percent of the trips that utilize these two freeway segments, indicating that minority and low-income populations located near these two freeway segments would likely experience some benefit from the expected improvement in arterial street and highway accessibility associated with the proposed freeway reconstruction.

Additionally, as rear-end collision rates are historically 5 to 15 times higher on congested freeways (with the highest rear-end crash rates on the most extremely congested freeways), it is anticipated that the improved safety that would potentially occur from a reduction in congestion along the freeway segments proposed to be widened would as well directly benefit minority and low-income populations that are served by these widened freeway segments.

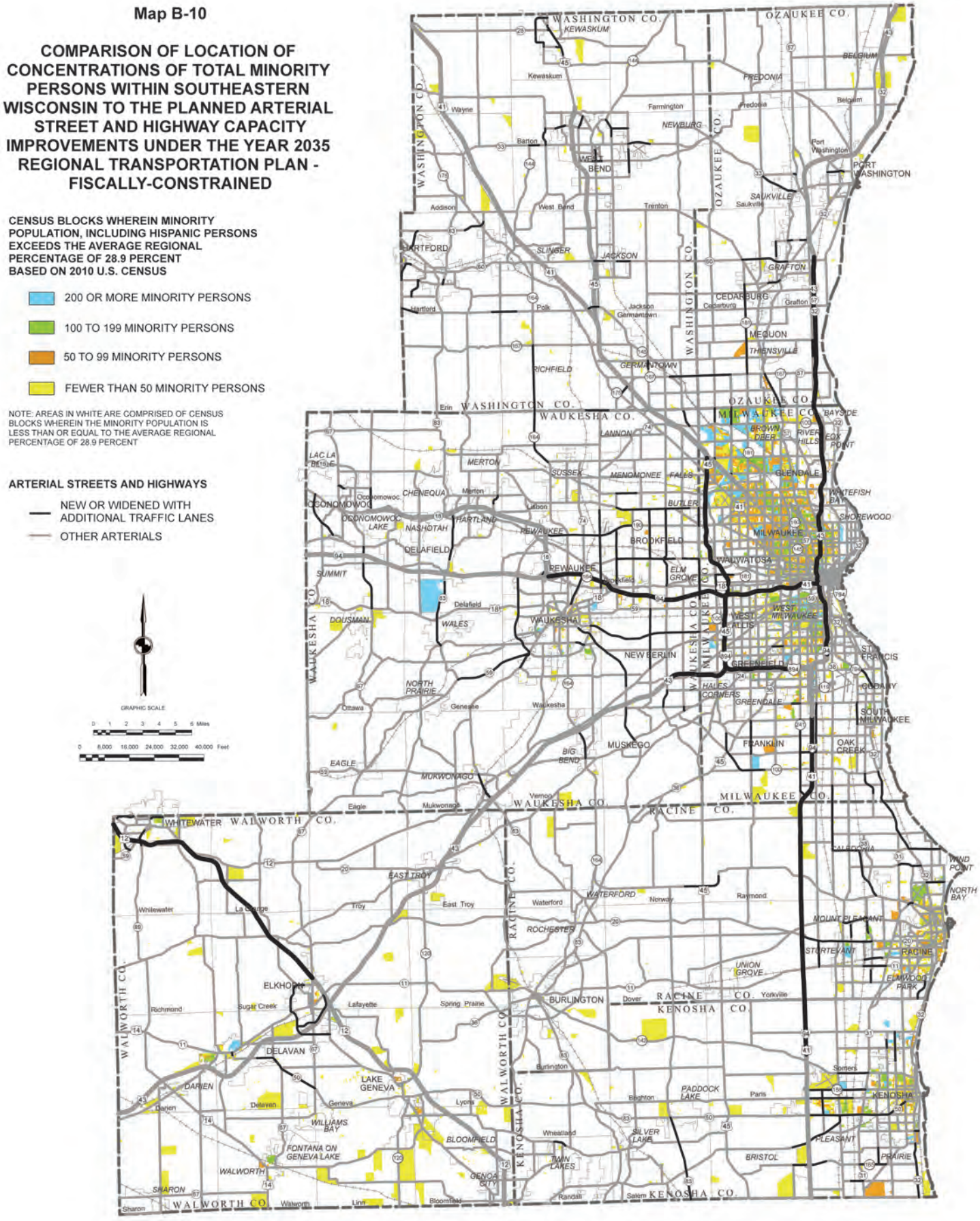
Public Transit Element of the Fiscally-Constrained Regional Transportation Plan

The expected funding gap between the estimated costs of the transit recommendations of the Year 2035 Regional Transportation Plan – Vision and the existing and reasonably expected revenues available to implement the plan is expected to result in a lack of implementation of the improvement and expansion of public transit proposed in the Vision plan, and as well reductions in the current transit service and a potential increase in transit fares above the rate of inflation. Based on the fiscally-constrained plan, it would also be expected that there would be about a 11 percent reduction in transit service from 61,000 vehicle-miles of transit operating in 2012 to 54,100 vehicle-miles of transit operating by the year 2035. Further, the fiscally-constrained transit plan assumed that transit fares would increase at about 3.5 percent annually, somewhat greater than the current rate of inflation of 2.5 percent experienced from 2006—the year the plan was adopted—to 2012. The reduction in transit service levels of about 11 percent from existing service levels would be expected to be achieved through reductions in service frequency.

Maps B-18 and B-19 show the existing year 2012 routes and service areas for the public transit systems in Southeastern Wisconsin in comparison to concentration of minority and low-income populations. These routes and service areas represent the transit system in the Year 2035 Regional Transportation Plan – Fiscally Constrained. Comparison of the fiscally constrained transit system plan to the location of minority and low-income populations indicates that most (but not all) of the transit system would serve the principal concentrations of minority and low-income populations. Maps B-20 and B-21 show the comparison of the frequency, or quality, of the fixed-route transit service under the fiscally constrained transit system plan to concentrations of minority and low-income populations in the Region. This analysis demonstrates that most of the higher quality bus routes serve areas of minority and low-income populations.

Map B-10

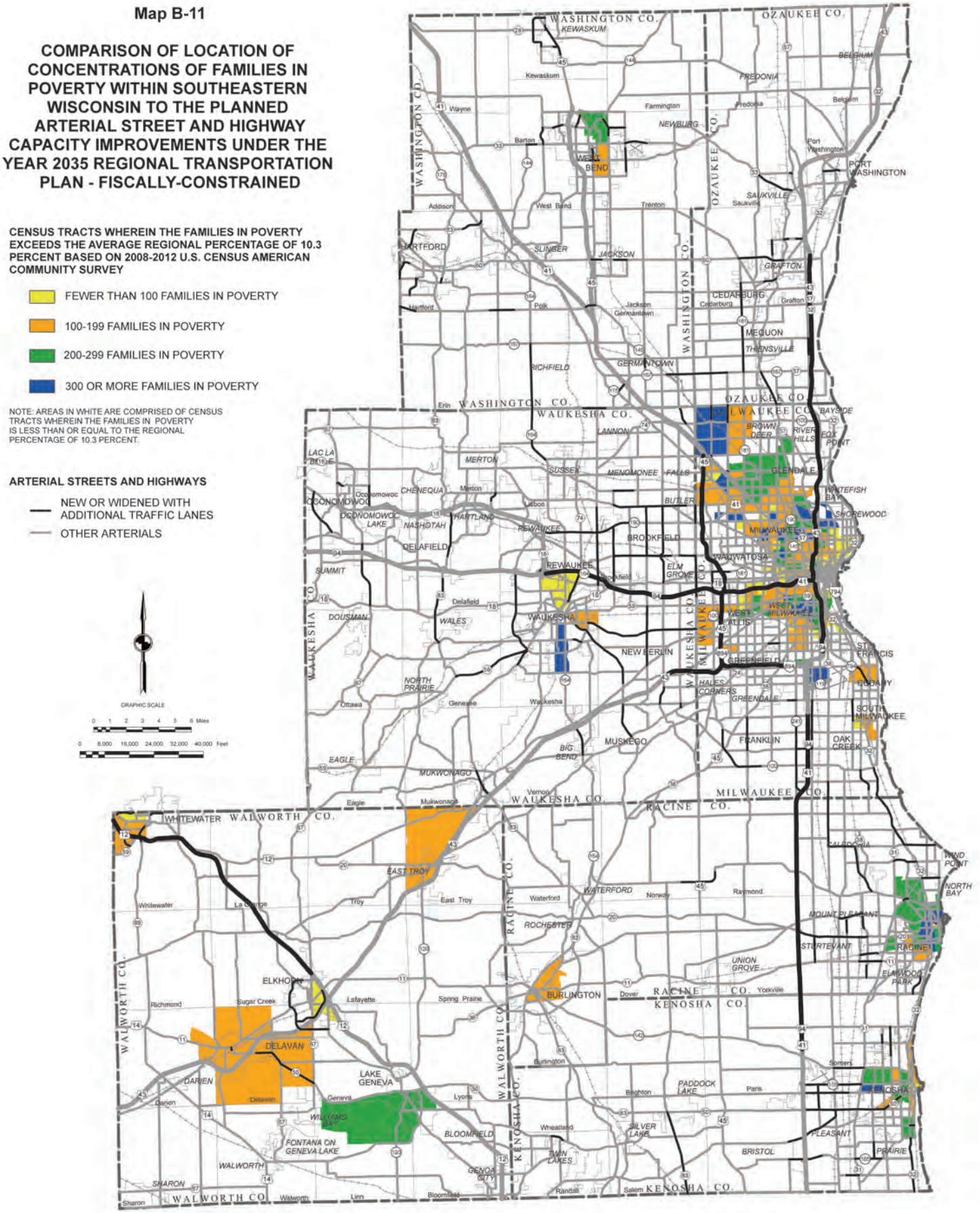
COMPARISON OF LOCATION OF CONCENTRATIONS OF TOTAL MINORITY PERSONS WITHIN SOUTHEASTERN WISCONSIN TO THE PLANNED ARTERIAL STREET AND HIGHWAY CAPACITY IMPROVEMENTS UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY-CONSTRAINED



Source: U.S. Bureau of the Census and SEWRPC.

Map B-11

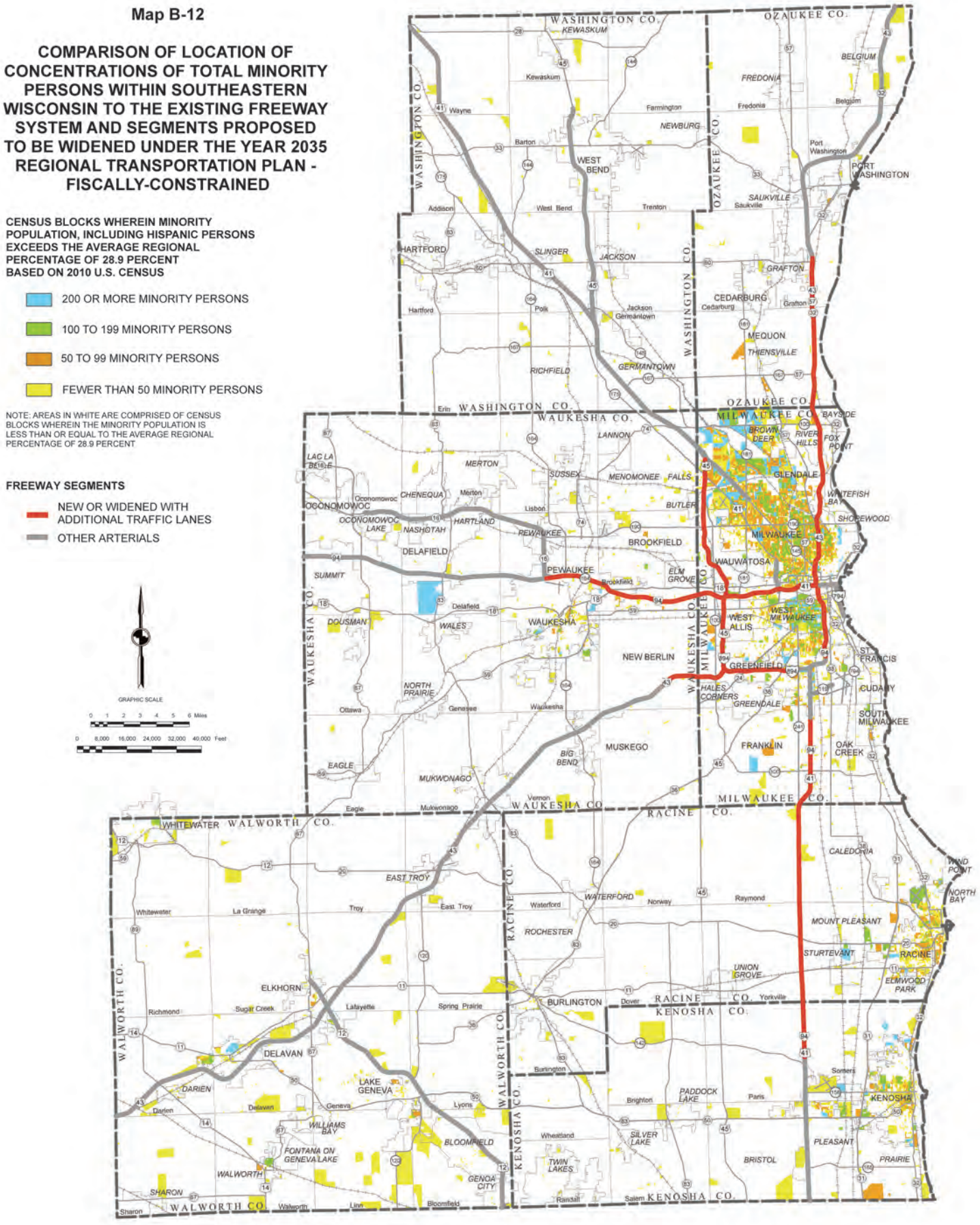
COMPARISON OF LOCATION OF CONCENTRATIONS OF FAMILIES IN POVERTY WITHIN SOUTHEASTERN WISCONSIN TO THE PLANNED ARTERIAL STREET AND HIGHWAY CAPACITY IMPROVEMENTS UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY-CONSTRAINED



Source: U.S. Bureau of the Census and SEWRPC.

Map B-12

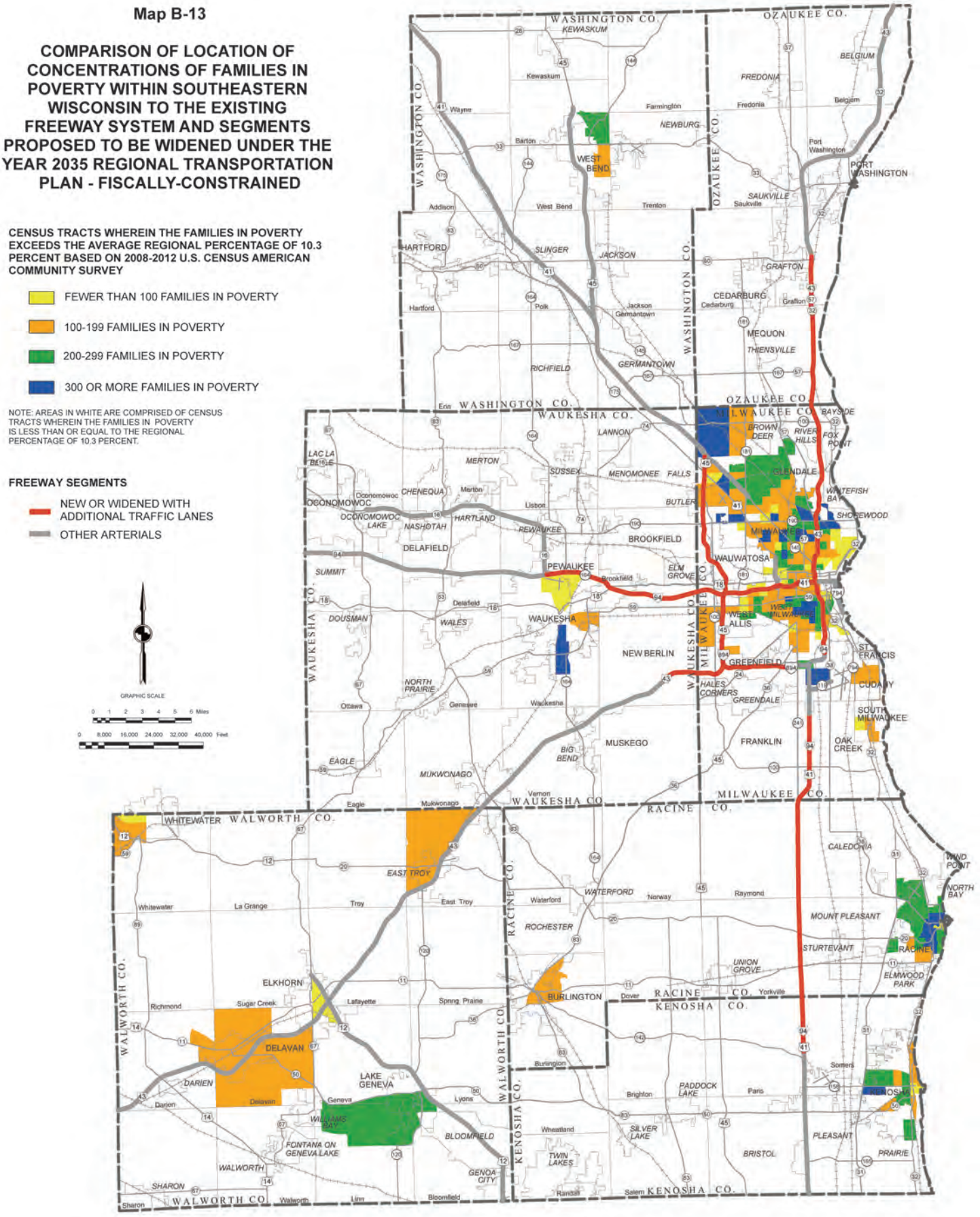
COMPARISON OF LOCATION OF CONCENTRATIONS OF TOTAL MINORITY PERSONS WITHIN SOUTHEASTERN WISCONSIN TO THE EXISTING FREEWAY SYSTEM AND SEGMENTS PROPOSED TO BE WIDENED UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY-CONSTRAINED



Source: U.S. Bureau of the Census and SEWRPC.

Map B-13

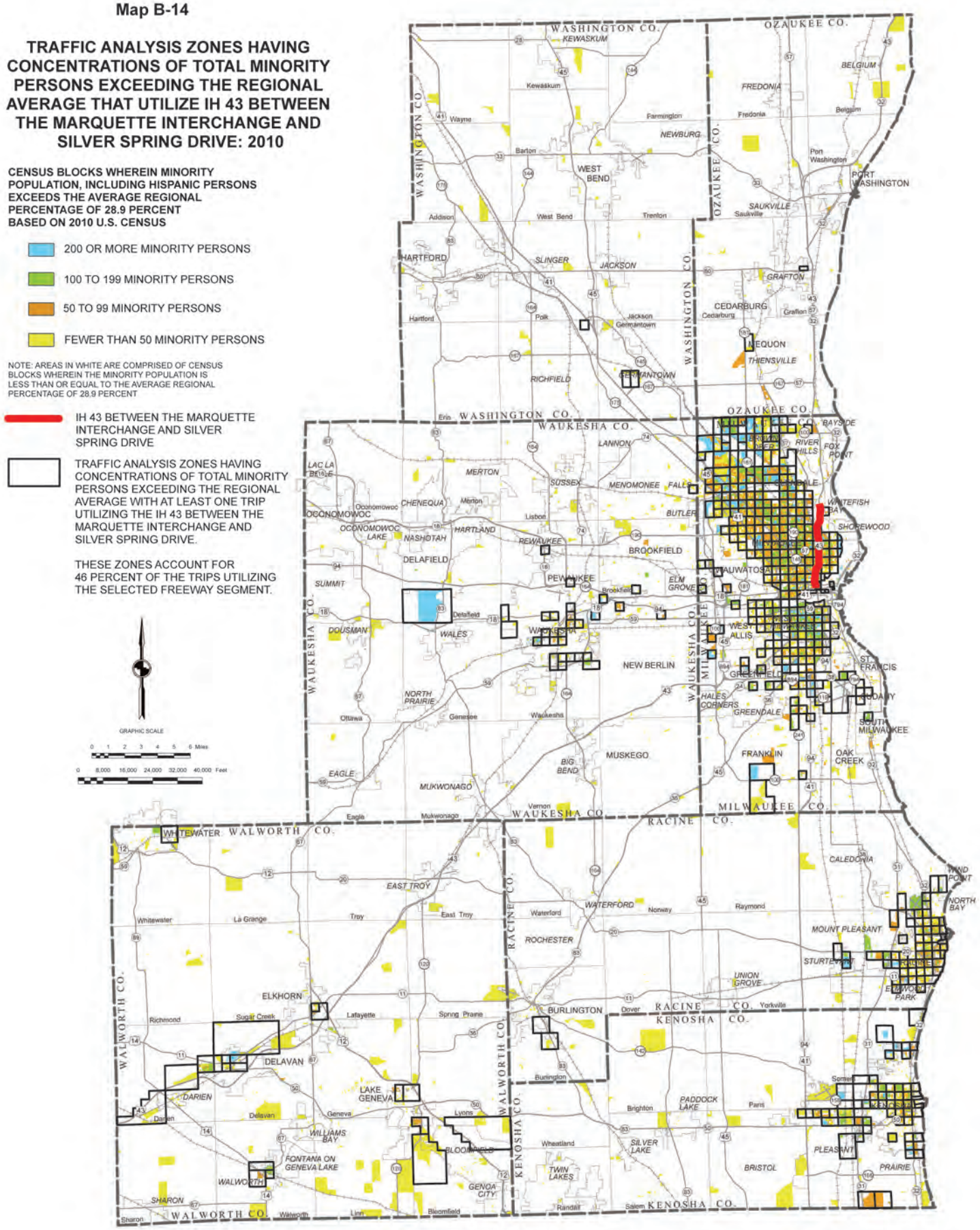
COMPARISON OF LOCATION OF CONCENTRATIONS OF FAMILIES IN POVERTY WITHIN SOUTHEASTERN WISCONSIN TO THE EXISTING FREEWAY SYSTEM AND SEGMENTS PROPOSED TO BE WIDENED UNDER THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY-CONSTRAINED



Source: U.S. Bureau of the Census and SEWRPC.

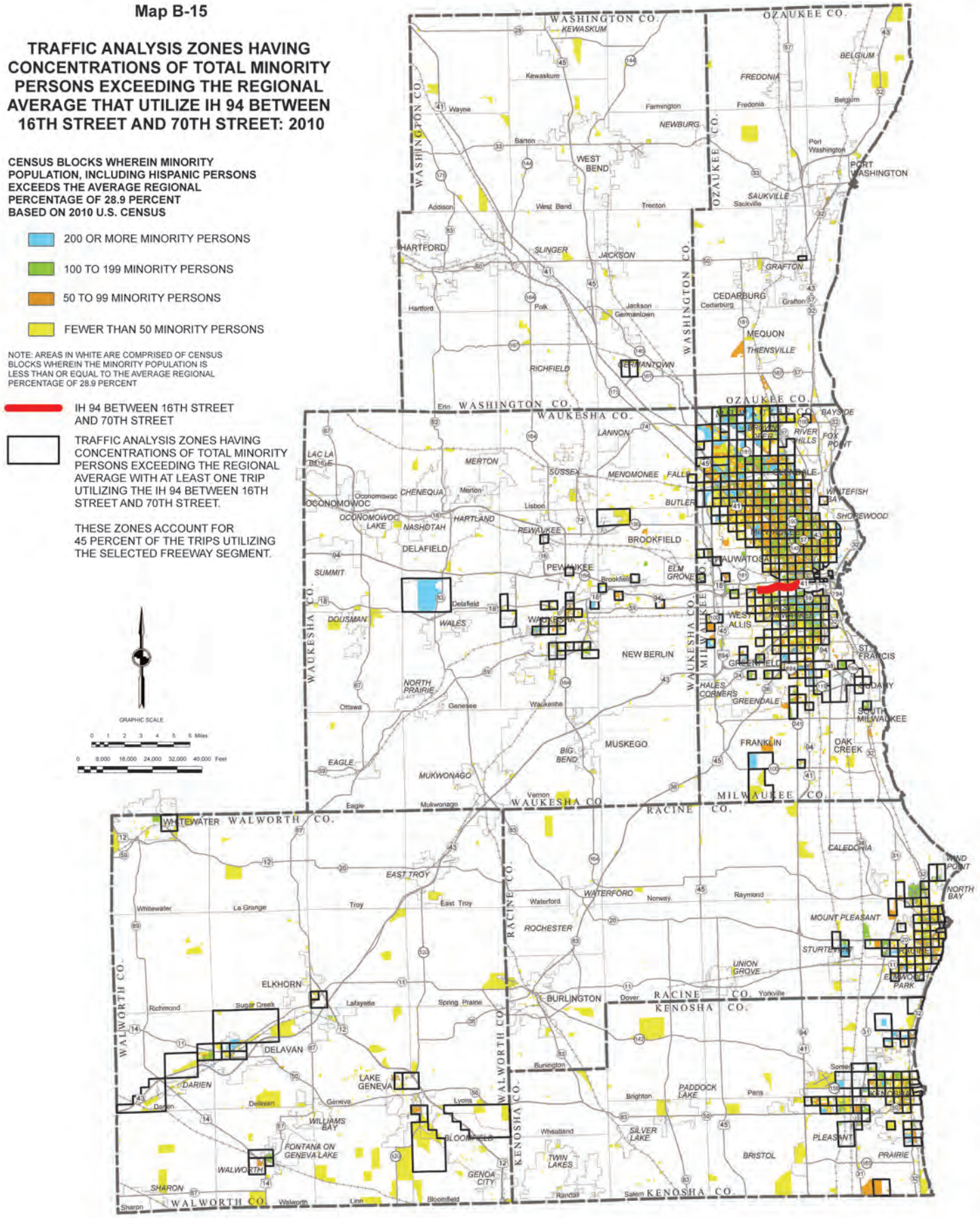
Map B-14

TRAFFIC ANALYSIS ZONES HAVING CONCENTRATIONS OF TOTAL MINORITY PERSONS EXCEEDING THE REGIONAL AVERAGE THAT UTILIZE IH 43 BETWEEN THE MARQUETTE INTERCHANGE AND SILVER SPRING DRIVE: 2010



Map B-15

TRAFFIC ANALYSIS ZONES HAVING CONCENTRATIONS OF TOTAL MINORITY PERSONS EXCEEDING THE REGIONAL AVERAGE THAT UTILIZE IH 94 BETWEEN 16TH STREET AND 70TH STREET: 2010



Source: U.S. Bureau of the Census and SEWRPC.

Map B-16

TRAFFIC ANALYSIS ZONES HAVING CONCENTRATIONS OF FAMILIES IN POVERTY EXCEEDING THE REGIONAL AVERAGE THAT UTILIZE IH 43 BETWEEN THE MARQUETTE INTERCHANGE AND SILVER SPRING DRIVE: 2012

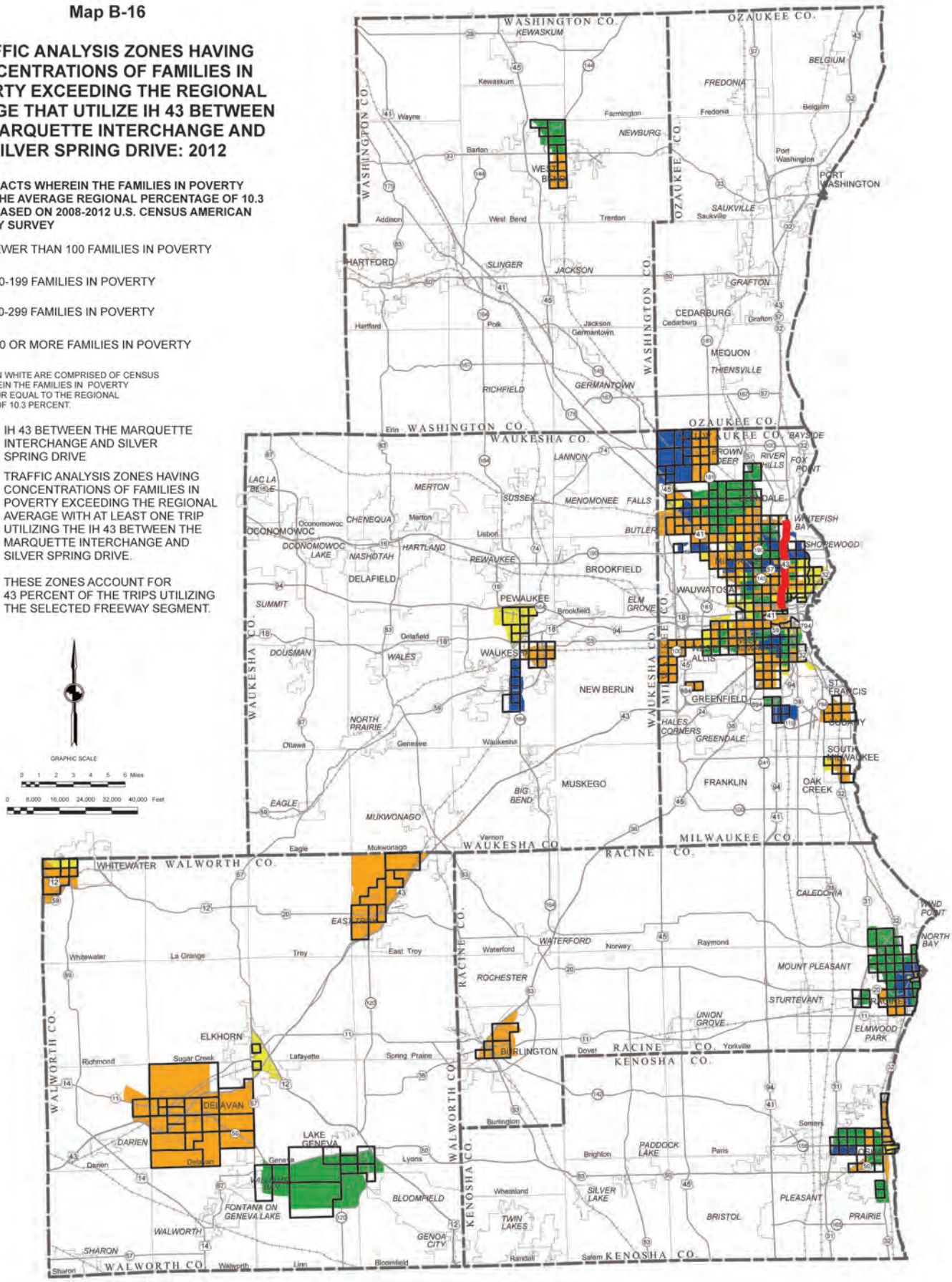
CENSUS TRACTS WHEREIN THE FAMILIES IN POVERTY EXCEEDS THE AVERAGE REGIONAL PERCENTAGE OF 10.3 PERCENT BASED ON 2008-2012 U.S. CENSUS AMERICAN COMMUNITY SURVEY

- FEWER THAN 100 FAMILIES IN POVERTY
- 100-199 FAMILIES IN POVERTY
- 200-299 FAMILIES IN POVERTY
- 300 OR MORE FAMILIES IN POVERTY

NOTE: AREAS IN WHITE ARE COMPRISED OF CENSUS TRACTS WHEREIN THE FAMILIES IN POVERTY IS LESS THAN OR EQUAL TO THE REGIONAL PERCENTAGE OF 10.3 PERCENT.

- IH 43 BETWEEN THE MARQUETTE INTERCHANGE AND SILVER SPRING DRIVE
- TRAFFIC ANALYSIS ZONES HAVING CONCENTRATIONS OF FAMILIES IN POVERTY EXCEEDING THE REGIONAL AVERAGE WITH AT LEAST ONE TRIP UTILIZING THE IH 43 BETWEEN THE MARQUETTE INTERCHANGE AND SILVER SPRING DRIVE.

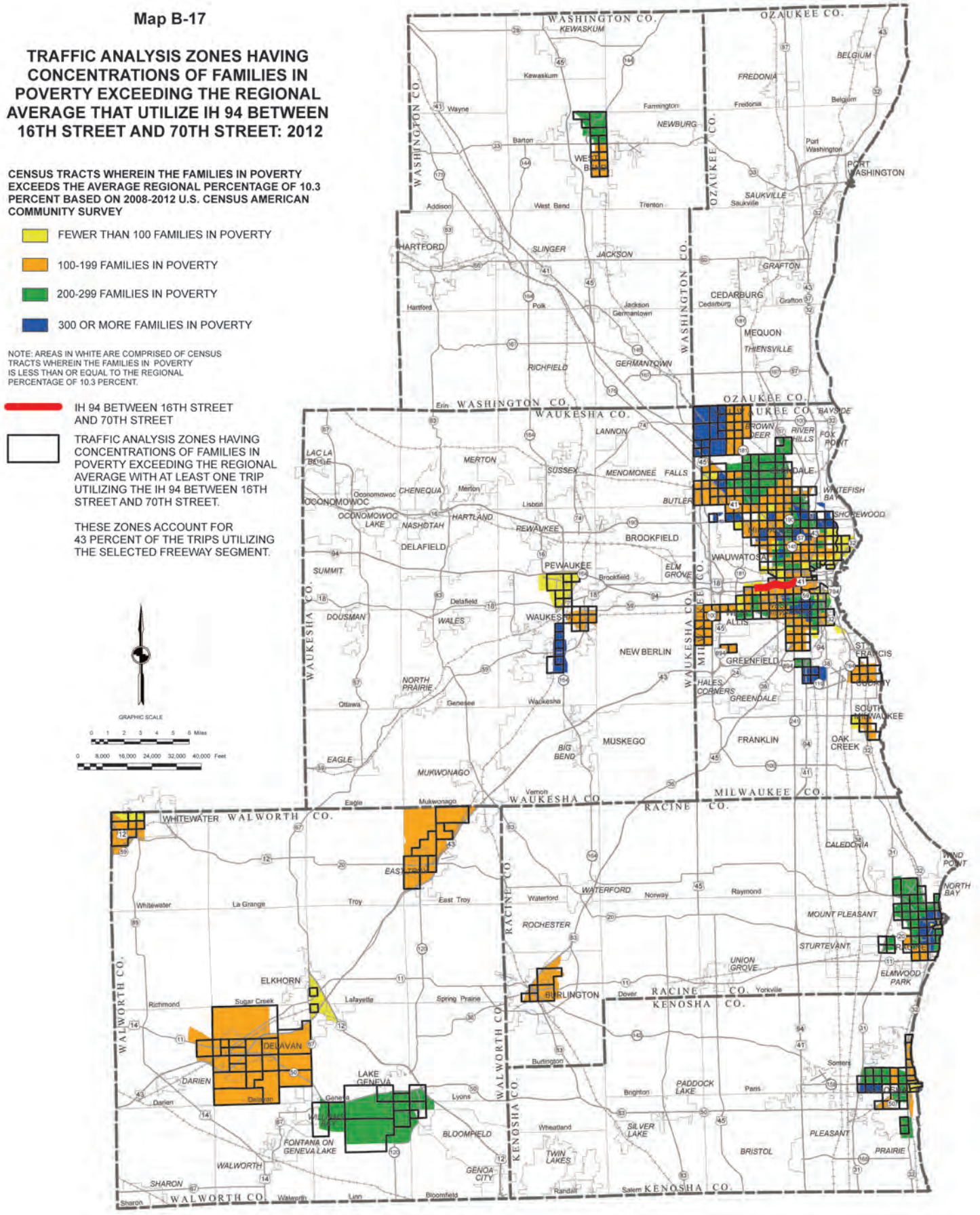
THESE ZONES ACCOUNT FOR 43 PERCENT OF THE TRIPS UTILIZING THE SELECTED FREEWAY SEGMENT.



Source: U.S. Bureau of the Census and SEWRPC.

Map B-17

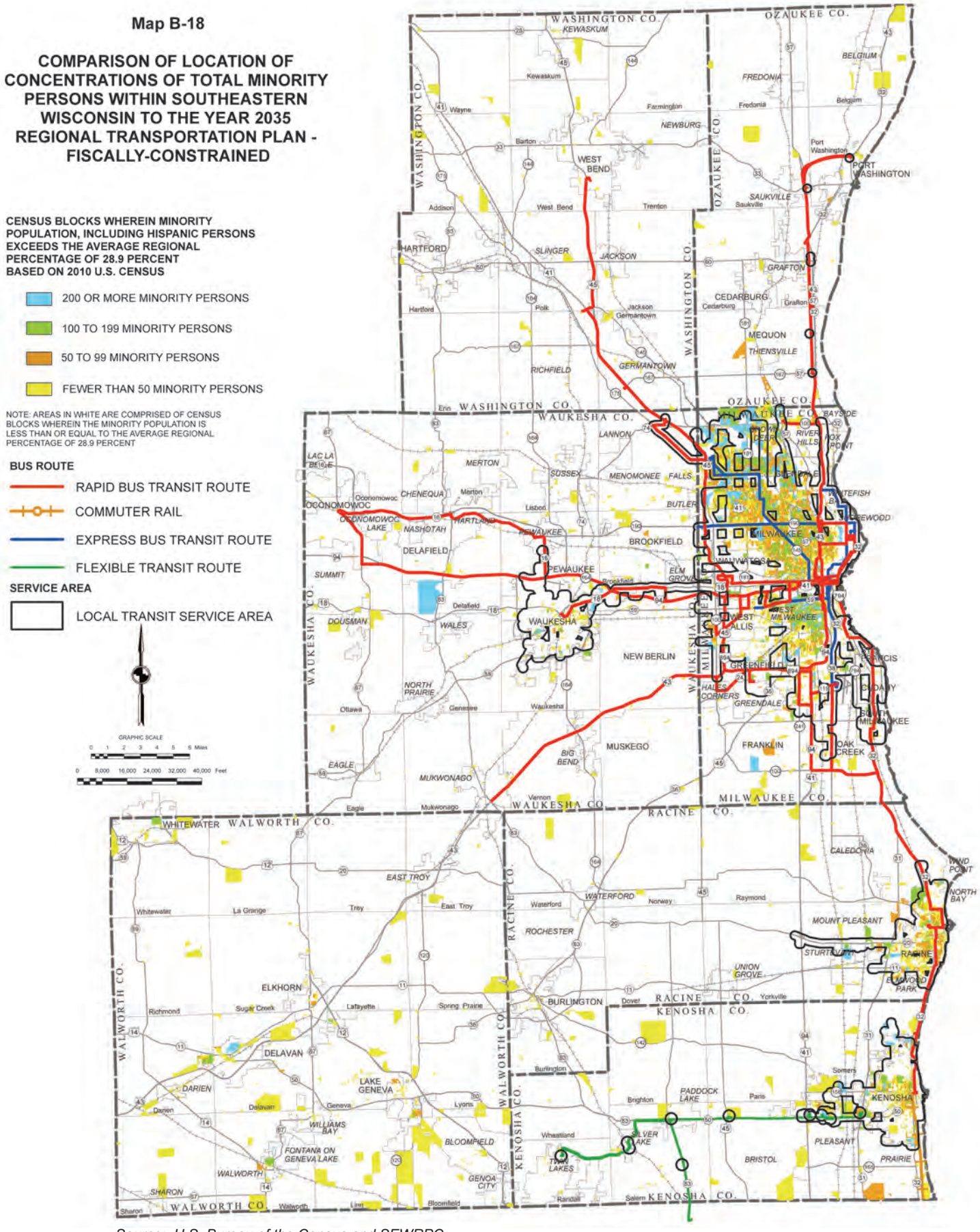
TRAFFIC ANALYSIS ZONES HAVING CONCENTRATIONS OF FAMILIES IN POVERTY EXCEEDING THE REGIONAL AVERAGE THAT UTILIZE IH 94 BETWEEN 16TH STREET AND 70TH STREET: 2012



Source: U.S. Bureau of the Census and SEWRPC.

Map B-18

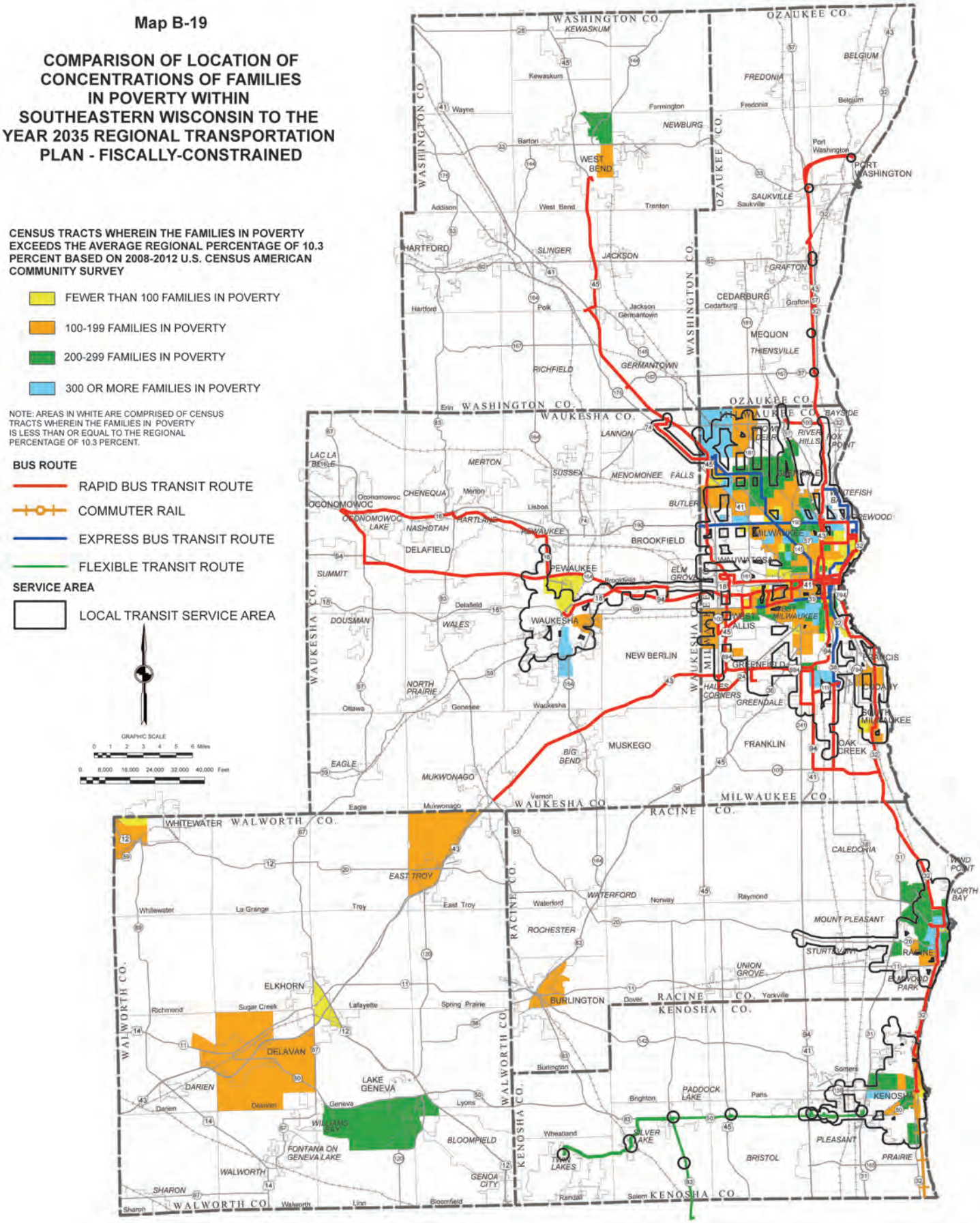
COMPARISON OF LOCATION OF CONCENTRATIONS OF TOTAL MINORITY PERSONS WITHIN SOUTHEASTERN WISCONSIN TO THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY-CONSTRAINED



Source: U.S. Bureau of the Census and SEWRPC.

Map B-19

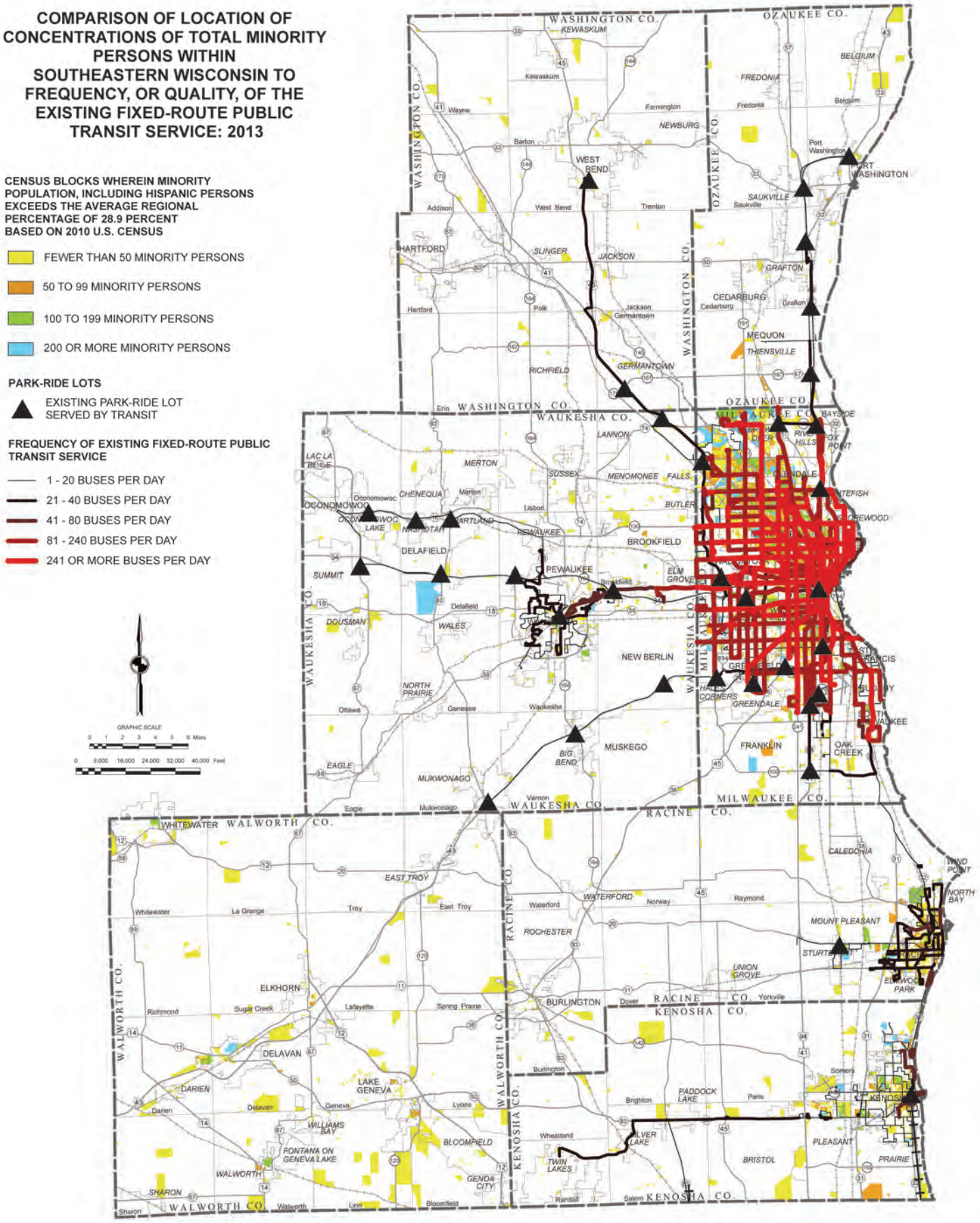
COMPARISON OF LOCATION OF CONCENTRATIONS OF FAMILIES IN POVERTY WITHIN SOUTHEASTERN WISCONSIN TO THE YEAR 2035 REGIONAL TRANSPORTATION PLAN - FISCALLY-CONSTRAINED



Source: U.S. Bureau of the Census and SEWRPC.

Map B-20

COMPARISON OF LOCATION OF CONCENTRATIONS OF TOTAL MINORITY PERSONS WITHIN SOUTHEASTERN WISCONSIN TO FREQUENCY, OR QUALITY, OF THE EXISTING FIXED-ROUTE PUBLIC TRANSIT SERVICE: 2013



Source: U.S. Bureau of the Census and SEWRPC.

Map B-20 (continued)

COMPARISON OF LOCATION OF CONCENTRATIONS OF TOTAL MINORITY PERSONS WITHIN MILWAUKEE COUNTY TO THE FREQUENCY, OR QUALITY, OF THE EXISTING FIXED-ROUTE PUBLIC TRANSIT SERVICE: 2013

CENSUS BLOCKS WHEREIN MINORITY POPULATION, INCLUDING HISPANIC PERSONS EXCEEDS THE AVERAGE REGIONAL PERCENTAGE OF 28.9 PERCENT BASED ON 2010 U.S. CENSUS

- FEWER THAN 50 MINORITY PERSONS
- 50 TO 99 MINORITY PERSONS
- 100 TO 199 MINORITY PERSONS
- 200 OR MORE MINORITY PERSONS

PARK-RIDE LOTS

- EXISTING PARK-RIDE LOT SERVED BY TRANSIT

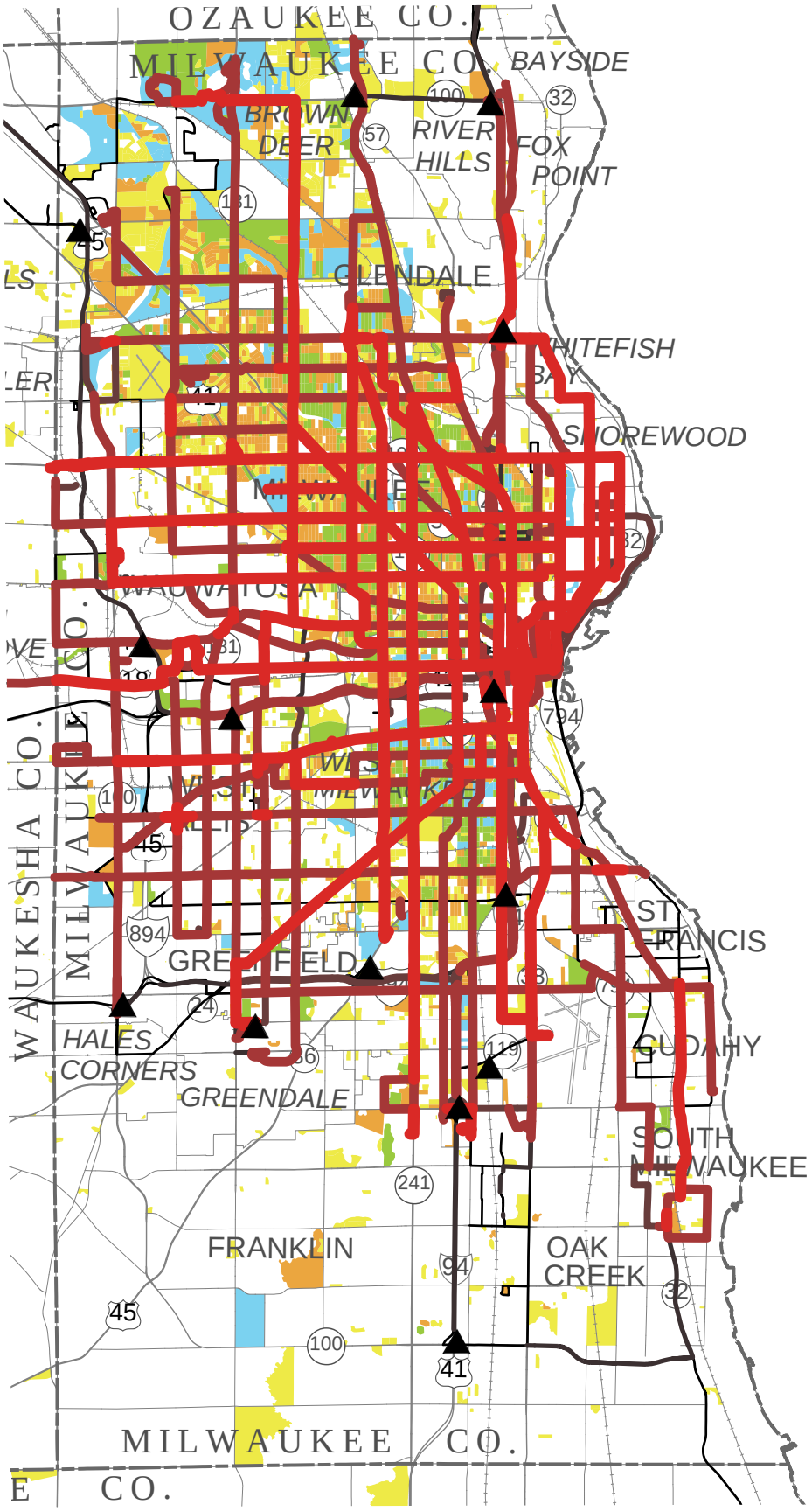
FREQUENCY OF EXISTING FIXED-ROUTE PUBLIC TRANSIT SERVICE

- 1 - 20 BUSES PER DAY
- 21 - 40 BUSES PER DAY
- 41 - 80 BUSES PER DAY
- 81 - 240 BUSES PER DAY
- 241 OR MORE BUSES PER DAY

GRAPHIC SCALE

0 1 2 Miles

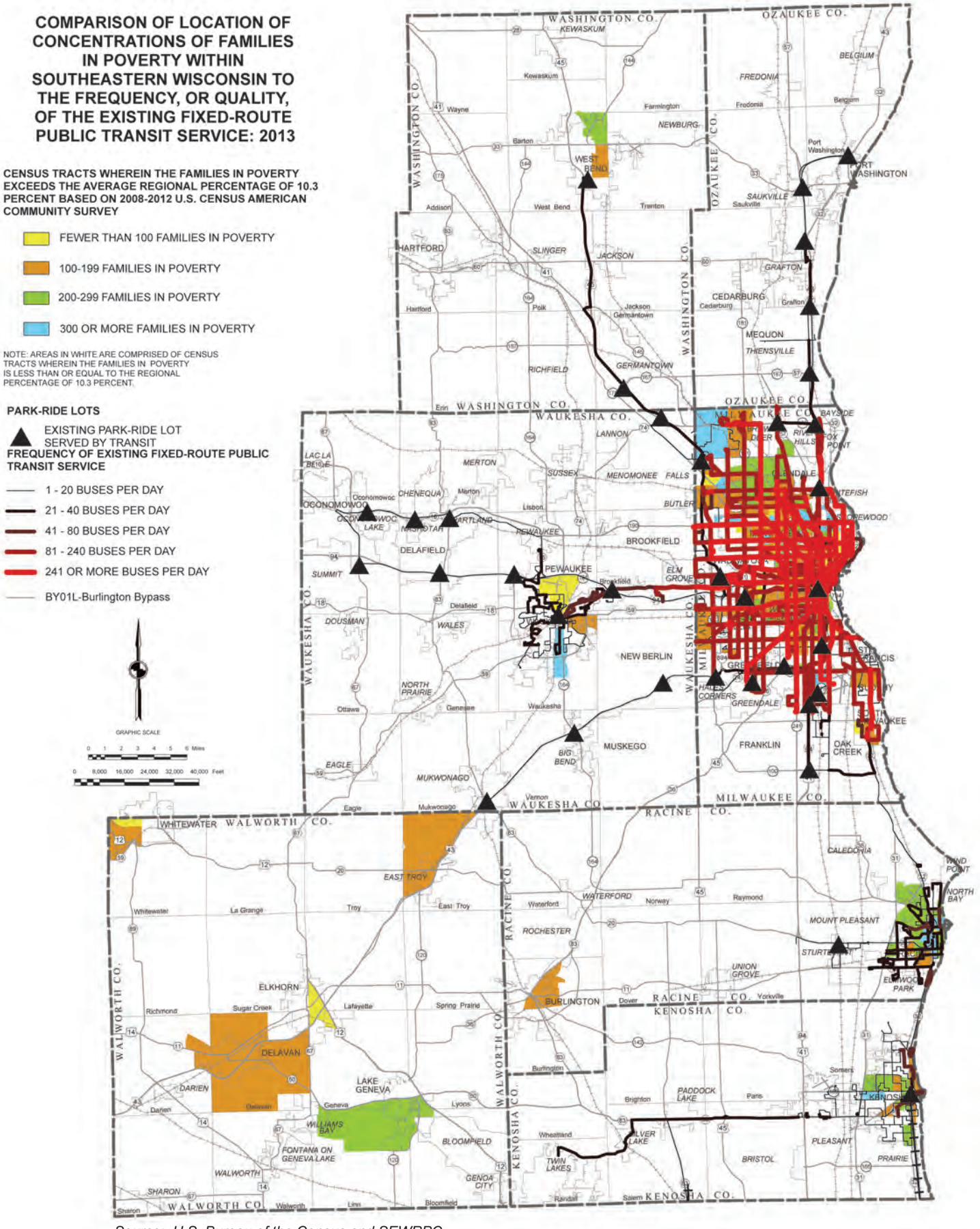
0 8,000 16,000 Feet



Source: U.S. Census Bureau and SEWRPC

Map B-21

COMPARISON OF LOCATION OF CONCENTRATIONS OF FAMILIES IN POVERTY WITHIN SOUTHEASTERN WISCONSIN TO THE FREQUENCY, OR QUALITY, OF THE EXISTING FIXED-ROUTE PUBLIC TRANSIT SERVICE: 2013



Source: U.S. Bureau of the Census and SEWRPC.

Map B-21 (continued)

COMPARISON OF LOCATION OF CONCENTRATIONS OF FAMILIES IN POVERTY WITHIN MILWAUKEE COUNTY TO THE FREQUENCY, OR QUALITY, OF THE EXISTING FIXED-ROUTE PUBLIC TRANSIT SERVICE: 2013

CENSUS TRACTS WHEREIN THE FAMILIES IN POVERTY EXCEEDS THE AVERAGE REGIONAL PERCENTAGE OF 10.3 PERCENT BASED ON 2008-2012 U.S. CENSUS AMERICAN COMMUNITY SURVEY

- FEWER THAN 100 FAMILIES IN POVERTY
- 100-199 FAMILIES IN POVERTY
- 200-299 FAMILIES IN POVERTY
- 300 OR MORE FAMILIES IN POVERTY

NOTE: AREAS IN WHITE ARE COMPRISED OF CENSUS TRACTS WHEREIN THE FAMILIES IN POVERTY IS LESS THAN OR EQUAL TO THE REGIONAL PERCENTAGE OF 10.3 PERCENT.

PARK-RIDE LOTS

- EXISTING PARK-RIDE LOT SERVED BY TRANSIT

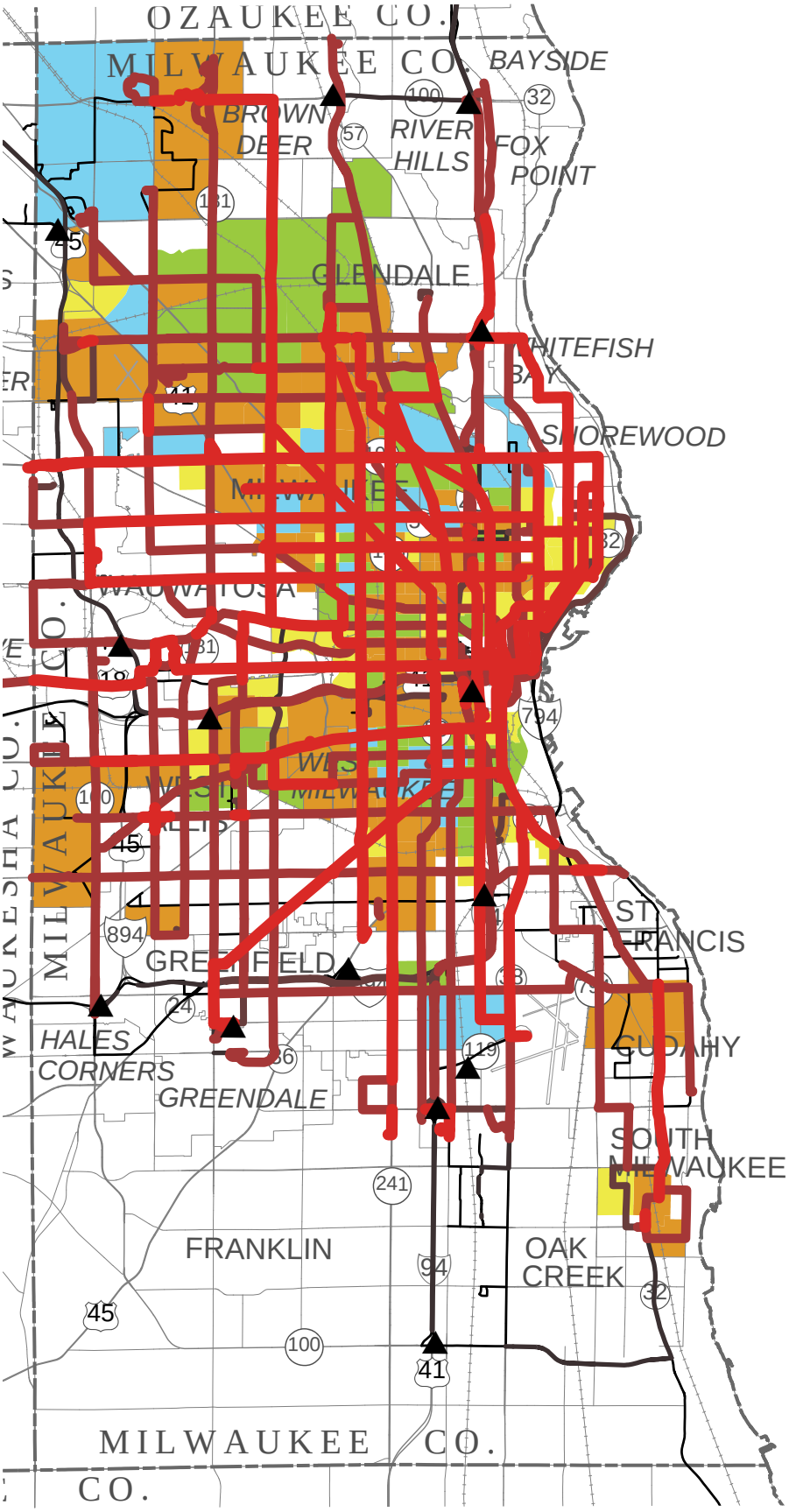
FREQUENCY OF EXISTING FIXED-ROUTE PUBLIC TRANSIT SERVICE

- 1 - 20 BUSES PER DAY
- 21 - 40 BUSES PER DAY
- 41 - 80 BUSES PER DAY
- 81 - 240 BUSES PER DAY
- 241 OR MORE BUSES PER DAY

GRAPHIC SCALE

0 1 2 Miles

0 8,000 16,000 Feet



Source: U.S. Census Bureau and SEWRPC

Summary and Conclusions – Fiscally Constrained Plan

This section summarizes the conclusions of the evaluation conducted to determine whether the minority and low-income populations within Southeastern Wisconsin receive a disproportionate share of the estimated impacts—both costs and benefits—of the year 2035 Regional Transportation Plan – Fiscally Constrained Plan.

Based on comparisons of the location of the freeway and surface arterial street and highway capacity improvements under the Year 2035 Plan – Fiscally Constrained to areas of the Region with concentrations of minority and low-income populations, it was concluded that no area of the Region, including minority and low-income populations, would disproportionately bear the impact of the recommended plan freeway and arterial street and highway capacity improvements. As the segments of freeway proposed to be widened under the Year 2035 Plan – Fiscally Constrained would directly serve areas of minority and low-income populations, these populations would benefit from the expected improvement in arterial street and highway accessibility to employment associated with the proposed freeway widening. Similarly, the anticipated improved safety that would potentially occur from a reduction in congestion would directly benefit minority and low-income populations that would be served by widened freeway segments proposed under the fiscally constrained plan.

The existing and reasonably expected limitations on funding, as well as existing limitations on State and Federal funding—such as dictating that funding can be used only for capital projects as opposed to covering operating costs or funds being restricted to a specific travel mode, program, or geographic area—is expected to result in reductions in the current transit service and a potential increase in transit fares above inflation. A comparison of the service area and frequency of the fiscally constrained transit system plan with concentrations of minority and low-income populations indicated that the fiscally constrained transit system, including most of the higher quality bus routes, would principally serve concentrations of minority and low-income populations. The transit service reductions would be expected to be achieved through reductions in transit frequency. Such service reductions are recommended to be considered to occur in outlying areas of the transit service area where the ridership is modest and where the impact on minority and low-income populations is minimal.

Appendix C

RECORD OF PUBLIC COMMENTS

2014 INTERIM AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

INTRODUCTION

This appendix presents the public comment received on the 2014 interim review and update of the year 2035 regional transportation plan during a formal public comment period of May 7, 2014, through June 9, 2014 and during the May 22, 2014 public meeting.

The report presents in a series of figures:

- Attendance and recorded comments received at the public meeting held on May 22, 2014 (Figure C-1).
- Other written comments received during the formal comment period from May 7, 2014, through June 9, 2014 (Figure C-2).
- Newspaper articles published concerning the 2014 interim review and update of the year 2035 regional transportation plan (Figure C-3).
- Materials announcing the public comment period and meeting, including paid newspaper advertisements and a newsletter (Figure C-4)

The following section provides a summary of the comments received, and Commission staff responses to those comments.

SUMMARY OF COMMENTS AND RESPONSES

During the period of May 7, 2014, through June 9, 2014, a total of 6 persons provided comment regarding the interim review and update of the year 2035 regional transportation plan. Oral comment was provided by 1 person during a public meeting held on May 22, 2014. Written comment was provided by the remaining 5 persons either on forms available at the public meeting held on May 22, 2014, or via letter or electronic mail, including a comment received by electronic mail by Ms. Karyn Rotker of the American Civil Liberties Union of Wisconsin. The comments received from Ms. Rotker were similar to comments given at a meeting of the Commission's Environmental Justice Task Force (EJTF) held on May 6, 2014.

Comments received from Ms. Karyn Rotker of the American Civil Liberties Union of Wisconsin

- Comment : The plan update report should acknowledge that transit implementation has lagged behind what was recommended by the year 2035 plan and that the failure to implement transit recommendations – especially those transit services focused on communities of color and the neighborhoods in which those communities live – has had a discriminatory effect on minority and low-income populations in Southeastern Wisconsin. Further, there is a disparity in the treatment of the transit and highway elements of the plan, as the transit recommendations of the year 2035 plan have not implemented or given equal priority with the freeway elements of the plan, and in fact financial support for transit has eroded at the same time that freeway and other highway and road elements of the plan have proceeded.

  Response: The year 2035 regional transportation plan as adopted in 2006 is advisory, indicating the vision of transportation development for Southeastern Wisconsin to the design year 2035. It is recognized in the plan that, while all elements of the plan—including public transit—are considered of equal priority in the plan, the implementation of the plan is entirely dependent upon actions taken by the responsible level of government—local, county, State, and Federal. Implementation of the plan is also dependent upon the amount of available revenues for transportation projects and the limitations on funding. For example, there may be limitations based on Federal or State Legislation which dictate that funding can only be used for capital projects as opposed to covering operating costs and that funds may be restricted to a specific travel mode, program, or geographic area.

  With respect to implementation of public transit, the year 2035 region plan envisioned that the proposed significant improvement and expansion of public transit would likely require State legislation to create local dedicated public transit funding and a renewal of adequate annual State financial assistance to transit. The plan also envisioned a regional transit authority—also requiring creation by State legislation—to assist in implementing the recommended transit system expansion. While such legislation came very close to passing in 2009 and 2010, legislative efforts have not progressed since 2010 to provide a dedicated local funding source for transit or create a regional transit authority. With respect to State transit operating assistance, the 2013-2015 State budget restored some of the State transit funds cut in the 2011-2013 budget. Without such legislation, the improvement and expansion of public transit service recommended in the regional plan may not be implemented, and transit service is likely to continue to decline.

  With respect to impacts to minority populations, while the automobile remains by far the dominant mode of transportation for the minority population in the Region, including within Milwaukee County, minority populations utilizes public transit at a higher percentage relative to other modes of travel than the non-minority population of the Region. In Southeastern Wisconsin, most (but not all) of the existing routes and service areas for public transit systems would serve the principal concentrations of minority and low-income populations. Further, in comparing the concentrations of the minority and low-income populations to the frequency, or quality, of the fixed-bus service routes in Southeastern Wisconsin, it can be concluded that most of the higher quality bus routes principally serve areas of minority and low-income populations.

  Based on a similar comment provided by Ms. Rotker at the May, 7, 2014, meeting of the EJTF, the section of Chapter 6 describing the consequences of not being able to implement the year 2035 regional transportation plan due to current fiscal constraints was revised to include language that for the estimated 10 percent of Region residents who are unable to use, or cannot afford an automobile, mobility and access to the Region may be limited, including with respect to jobs, health care, education, grocery shopping, and other basic travel needs.

- Comment: Consider the comments made by Dr. Alex Karner of Arizona State University with respect to particular methods used to evaluate whether minority and low-income populations may be expected to receive a proportionate share of benefits, and not receive a disproportionate share of negative impacts, from the fiscally constrained year 2035 regional transportation plan, as documented in Appendix B of the plan update report. Dr. Karner had also provided comments on the methods used in the more detailed evaluation conducted in 2005 for the development of the recommended year 2035 regional transportation plan, and made suggestions for the methods that could be used in the development of the year 2050 regional transportation plan.

  Response: Appendix B of the 2014 review and update to the year 2035 regional transportation plan related to the evaluation of impacts of the fiscally-constrained plan on minority and low-income populations was revised to include an analysis involving a comparison of the frequency, or quality, of the existing fixed-route transit service to concentrations of minority and low-income populations in the Region. The analysis demonstrates that most of the higher quality bus routes principally serve areas of minority and low-income populations. In addition, Appendix B was revised to include an analysis showing the traffic analysis zones (TAZs) with a minority or low-income population greater than the regional average that utilize two segments of freeway recommended to be widened—IH 94 between 70th Street and 16th Street and IH 43 between the Marquette Interchange and Silver Spring Drive—based on at least one trip end being located within the TAZ. The analysis showed that these zones account for between 45 and 46 percent with respect to minority populations and between 40 and 42 percent with respect to low income populations of the trips that utilize these two freeway segments, indicating that minority and low-income populations located near these two freeway segments would likely experience some benefit from the expected improvement in arterial street and highway accessibility associated with the proposed freeway reconstruction.

  In addition, the methods suggested in Dr. Karner's memorandum will be considered during the development of the year 2050 regional transportation plan—VISION 2050—currently being conducted by the Commission.

Other Comments Received Expressing Support for Specific Recommendations of the Year 2035 Plan

A number of comments were received expressing support of the public transit improvement and expansion recommended in the year 2035 plan.

- Two persons expressed support of improving and expanding transit service within the Region, as recommended in the year 2035 regional transportation plan, in order to address congestion on the highways and the transportation needs of the aging population, and to accommodate the lifestyle choices of younger adults.

- One person expressed disappointment that the fiscally constrained year 2035 regional transportation plan does not include the proposed improvement and expansion of public transit proposed in the year 2035 vision plan, and acknowledged that improvement and expansion to the public transit would not likely occur without, and expressed support for, the creation of a dedicated local funding source for transit and a regional transit authority, as recommended in the year 2035 regional transportation plan.

- One person expressed support for expanded commuter and inter-regional rail service and the need for a regional transit authority, as recommended in the year 2035 regional transportation plan.

- One person expressed support for the recommendations in the year 2035 regional transportation plan related to paratransit services, and for the services continued improvement in Southeastern Wisconsin.

One person expressed support for the implementation of the Lake Parkway extension proposed in the year 2035 regional transportation vision plan, and expressed disappointment of the extension not being included in the fiscally constrained year 2035 regional transportation plan.

Two persons expressed support for expanding bicycle/pedestrian accommodations within the Region, as recommended in the year 2035 regional transportation plan

Other Comments Received Expressing Opposition to Specific Recommendations of the Year 2035 Plan

One person expressed opposition to the widening of arterial streets and highways to provide additional traffic-carrying capacity, as recommended in the year 2035 regional transportation plan, and expressed support for focusing on system preservation.

Response: The adopted year 2035 regional transportation plan was designed to serve and be consistent with the planned development pattern of the adopted year 2035 regional land use plan. This planned development pattern seeks to preserve the Region's prime farmland and best natural areas and to accommodate new urban development through the infilling and renewal of existing urban areas and through the orderly expansion of such areas. The adopted year 2035 regional transportation plan recommends a near doubling in public transit service, and expansion of bicycle and pedestrian facilities, transportation systems management measures, and travel demand management measures. The arterial street and highway improvement and expansion recommended in the year 2035 plan only addresses the residual highway traffic volumes and attendant traffic congestion which could not be alleviated by public transit, bicycle/pedestrian facilities, transportation systems management, and travel demand management.

Under the proposed year 2035 vision regional transportation plan, approximately 89 percent of the planned arterial street and highway system in the Region would be recommended for system preservation—resurfaced or reconstructed to their same capacity. The remaining 11 percent of the arterial street and highway system was recommended to be capacity expansion—9 percent was recommended to be widened upon reconstruction to provide additional capacity and 2 percent were new facilities. Similarly, under the proposed year 2035 fiscally-constrained plan, approximately 90 percent of the planned arterial street and highway system in the Region would be recommended for system preservation. The remaining 10 percent of the arterial street and highway system was recommended to be capacity expansion—8 percent was recommended to be widened upon reconstruction to provide additional capacity and 2 percent were new facilities. The implementation of highway widening projects occurs when an existing facility requires reconstruction and the reconstruction includes a widening for additional traffic lanes. The majority of the cost for these projects is for the reconstruction of the existing roadway, and the additional traffic lanes may only represent 10 to 20 percent of the project.

Each recommended arterial street and highway capacity expansion—widening of the existing facility to provide additional capacity and the construction of a new facility—as well as a system preservation, would need to undergo preliminary engineering and environmental impact studies by the responsible State, county, or local government prior to implementation. The preliminary engineering and environmental impact studies would consider alternatives and impacts, and final decisions as to whether and how a planned project will proceed to implementation would be made by the responsible State, county, or local government at the conclusion of preliminary engineering. The proposed freeway widening in the plan would undergo preliminary engineering and environmental impact study by the Wisconsin Department of Transportation (WisDOT). 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 would a determination be made as to how the freeway would be reconstructed.

Other Comments Received

One person expressed support for the State to again index the motor fuel tax to inflation to assist in the implementation of the recommendations of the year 2035 regional transportation plan.

One person requested the consideration of including in the regional transportation plan of an east-west off-street bicycle path located in Milwaukee County south of Howard Avenue within an existing utility right-of-way in Milwaukee County.

Response: As the VISION 2050 effort currently being conducted by the Commission would result in a new regional transportation plan in about one year, the only amendments considered during the current review and update to the year 2035 regional transportation plan were ones resulting from completed, or about to be completed, engineering. As such, all other potential changes to the regional transportation plan—including the suggested addition of an off-street bicycle path south of Howard Avenue—would be considered during the VISION 2050 effort.

It should be noted that the plan not specifically identifying the suggested off-street bicycle path within the We Energies right-of-way would not prevent such a path from being implemented. Further, as such a project would be considered consistent with the goals of the adopted year 2035 plan, it would as well not be precluded from being implemented with Federal funding available for the implementation of bicycle facilities, such as Federal Transportation Alternative Program (TAP) and Congestion Mitigation and Air-Quality Improvement Program (CMAQ) funds.

One person suggested that citizens, in addition to elected and technical officials, be allowed to serve on the Advisory Committee on Regional Transportation System Planning.

Response: The Advisory Committee on Regional Transportation System Planning includes population-proportional representation from the local units of government within Southeastern Wisconsin and representatives from State and Federal transportation and environmental resource agencies. While there are no citizens serving as members on this Advisory Committee, extensive public involvement and outreach was conducted as part of the development of the year 2035 land use and regional transportation plans. Commission staff directly contacted a comprehensive list of groups representing a number of interests to inform them of the major review and update of the regional land use and transportation plans and to work with them to involve their respective members or communities. Commission staff met with many of these groups throughout the preparation of the plan. Also, paid advertisements regarding the development of the year 2035 plans were placed in a number of publications. Additionally, the Commission held a series of public meetings throughout the seven-county Region. The Commission as well prepared five newsletters throughout and following conclusion of the development of the year 2035 plans.

The Commission is currently conducting the latest major review and update to regional land use and transportation plans—VISION 2050—extending the design year of the plan to 2050. The interim review and update of the year 2035 regional transportation plan is separate from VISION 2050, which will replace the year 2035 plan about a year after the completion of the interim update. Extensive public involvement and outreach has so far been, and will continue to be, conducted as part of the development of VISION 2050. So far, two sets of public workshops were held last fall and winter in each of the seven counties of the Region as part of the initial visioning activities being used in the development of the plan. The Commission has made available all study materials on a website developed for the planning effort (vision2050sewis.org), and has conducted telephone and internet surveys. At least three more sets of public workshops are scheduled as part of the VISION 2050 effort. Similar to the year 2035 land use and transportation planning efforts, the Commission staff directly contacted a comprehensive list of groups representing a number of interests to inform them of the VISION 2050 effort and to work with them to involve their respective members or communities. The Commission is as well working with eight community organizations to host their own workshops corresponding to the workshops held for the general public. Commission staff has met, and will continue to meet, with many other such groups throughout the preparation of VISION 2050. Also, paid advertisements regarding the development of VISION 2050 were placed in a number of publications. In addition, the Commission has prepared, and will continue to prepare, newsletters and other materials summarizing the VISION 2050 effort. The Commission will as well be conducting task force meetings that include both public officials and citizens to address specific topics related to the VISION 2050 plan, such as public transit and non-motorized transportation.

Figure C - 1A

ATTENDANCE RECORD AND TRANSCRIPT OF THE PUBLIC INFORMATIONAL MEETING

SIGN-IN ROSTER

Public Meeting
2014 Interim Review and Update of the
Year 2035 Regional Transportation Plan

Thursday, May 22, 2014
O'Donnell Park Pavilion
910 E. Michigan Street
Milwaukee, WI

1.	Patricia Jursik	M/W Co Board	patricia.jursik@milwaukeecountywi.gov
2.	Jill Suurmeyer	MKE Co. Comptroller's Office	jill.suurmeyer@milwaukeecountywi.gov
3.	Jim Tarantino	Gateway to Milwaukee	jim@gatewaytomilwaukee.com
4.	Rich Rovito	Conley Media	crovito@yahoo.com
5.	NICHOLAS LAJOIE	MARQUETTE UNIVERSITY	nicholas.lajoie@mu.edu
6.	MARILYN VOHS		mvohs414@gmail.com
7.	Susan Sedlacek		
8.	Kerry Thomas	TransCFNow	
9.	TOM RAVE	AEROTROPOLIS MILWAUKEE	TRAVE@GATEWAYTOMILWAUKEE.COM
10.	Karen Schmeeckle	WisDOT	karen.schmeeckle@dot.wi.gov
11.	Gary Suchorski		gary such@yahoo.com
12.	Dennis Grzezinski	Law Office	dennisglaw@gmail.com
13.	DAN BOEHM	MCTS	DBOEHM@MCTS.ORG

Figure C - 1B

RECORDED COMMENTS RECEIVED VIA COURT REPORTERS AT THE PUBLIC INFORMATIONAL MEETING

BROWN & JONES REPORTING, INC.

PUBLIC COMMENTS

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

TRANSCRIPT OF PROCEEDINGS before

EMILY S. REBEK, a Notary Public in and for the State of Wisconsin, at O'Donnell Park, 910 East Michigan Avenue, Miller Room, Wisconsin, on May 22, 2014, commencing at 4:00 p.m. and concluding at 6:30 p.m.

735 North Water Street, Suite M185
Milwaukee, WI 53202
(414) 224-9533
(800) 456-9531

APPEARANCES

MR. KEVIN MUHS

MR. RYAN HOEL,

MR. JOSEPH DELMAGORI and

MR. CHRISTOPHER T. HIEBERT, Chief Transportation Engineer.

* * * * *

MS. PATRICIA JURSIK: Okay. I'm Patricia Jursik. I am chairperson of the economic and community development committee of the county board. I was also chair of the 794 extension committee, which packed a fair amount of the engineering advice for that extension committee. We successfully added the 794 extension to the 235 regional plant. It's very disappointing to me to see the constrained transportation plan no longer planned to implement the 794 extension. I understand it remains part of the vision for the 2035 plan if we properly financed our transportation needs; the reality is we're not. This will affect economic development and employment in the region because, without this infrastructure, we will not succeed in attracting the business, and the vacationers, et cetera, that we would attract with this kind of a lake shore corridor. The southern region lacks a proper lake shore corridor which the 794 extension would have provided, so it's very, very disappointing to see this lack of proper funding of the needs.

In addition, the transit funding: Milwaukee County must supplement it's transit

service with property tax dollars based on the studies that the board has done. Almost no other region funds transit with property tax dollars. It is really a backwards way of funding. We have many travelers come into this state, using our roads, using our transit. A sales tax would require those users to help pay for the system. So we continue to do this in a very backwards way. We need to be much more progressive in funding our transit. And, again, it's so disappointing to see a 7 percent decrease in fixed route service when in fact the 2035 plan foresaw the doubling of vehicle miles. So, again, we're going backwards.

This is very disappointing for our state, and I, for one, completely support dedicated funding for transit. I would like to see sales tax or support for Milwaukee County from a referendum for putting dedicated funding on a sales tax. That should be implemented. And I also would support going back to indexing of the motor fuel tax. That was a mistake to take that off, and we should return to indexing our fuel tax, especially since we're having more fuel efficient vehicles and already collecting less tax. Taking the indexing off has been a double whammy if you will.

Figure C - 1B (continued)

04:29 Thank you for the opportunity to weigh in
04:29 on this, and I look forward to the report.
(Proceedings concluded at 6:30 p.m.)

STATE OF WISCONSIN)
) SS:
COUNTY OF MILWAUKEE)

I, EMILY S. REBEK, a Notary Public in and for the State of Wisconsin, do hereby certify that the above Transcript of Proceedings was recorded by me on May 22, 2014, and reduced to writing under my personal direction.

In witness whereof I have hereunder set my hand and affixed my seal of office at Milwaukee, Wisconsin, this 27th day of May, 2014.

_____
Notary Public
In and for the State of Wisconsin

My Commission Expires: January 08, 2018.

Figure C - 1C

WRITTEN COMMENTS RECEIVED FROM PRIVATE CITIZENS AND ORGANIZATIONS DURING THE 2014 INTERIM REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN FORMAL COMMENT PERIOD: May 8, 2014 THROUGH JUNE 9, 2014

WRITTEN COMMENTS RECEIVED VIA LETTER AND FORM DISTRIBUTED AT PUBLIC INFORMATIONAL MEETING

2014 Interim Review and Update of the Year 2035 Regional Transportation Plan

Comment Form

Meeting Location O'DONNELL Park M. MR Room Date 5/22/14

Name M. VOHS

Address 2878 S. Wentworth

Community Milwaukee

Zip 53207

Comments will also be accepted until June 9, 2014 via:

Web: www.sewrpc.org/SEWRPC/RTSPUpdate2014.htm
E-mail: sewrpc@sewrpc.org
Fax: (262) 547-1103

Mail: SEWRPC
P.O. Box 1607
Waukesha, WI 53187

Comments:

Thank you for the opportunity to comment on the regional transportation plan.
I find it interesting that you identify public transit users as minority & low-income. I suppose that may currently be the case. However, as we are looking ahead, I speculate that future transit users will more & more include the aging population that no longer wishes to drive, or maybe cannot safely drive anymore. I believe the younger generation also is tending to be more urban & wishing to live in high-density areas where to operate & house a ~~[illegible]~~ car may be too costly.
I do not consider the parkways to be off-street lanes. →

(continue comments on back if more space is needed)

How did you learn about this meeting? Newsletter ____; Flyer ____; Ad in Newspaper ____;
Newspaper Article ____; Radio or TV ____; Website ____; Other (please specify) Sierra Club member

Thank you!

I am vehemently opposed to expanding/enlarging the highways. More highways lead to more traffic on them.
The transportation funds should be spent on decent public transit, pedestrian & non-motorized pathways. Highway & road spending should be used to keep up what we already have. More public transit would also benefit those who choose to drive, as it would relieve traffic on the highways.

I am very concerned that the Advisory committee consists mostly of highway engineers, DOT personnel, Public Works Directors, Dirs of Highway directors. What about members of the biking community, transit users & other community members?
Having visited cities such as Denver, Minneapolis & of course Chicago, Boston & N.Y., I see what is possible. Their systems allow citizens to be car-free, a goal I would like to achieve.
Unfortunately I do not see that as a possibility in Milwaukee with the current plan & leadership.

2014 Interim Review and Update of the Year 2035 Regional Transportation Plan

Comment Form

Meeting Location O'DONNELL PARK, MILWAUKEE Date MAY 22, 2014

Name S. Sedlacheks

Address 2878 S Wentworth Ave

Community BAYVIEW

Zip 53207

Comments will also be accepted until June 9, 2014 via:

Web: www.sewrpc.org/SEWRPC/RTSPUpdate2014.htm
E-mail: sewrpc@sewrpc.org
Fax: (262) 547-1103

Mail: SEWRPC
P.O. Box 1607
Waukesha, WI 53187

Comments:

Southeastern Wisconsin needs to have RTAs. To ensure the areas public transportation needs are addressed and funded properly.
Wisconsin's population is aging, an aging population will be more dependent upon public transportation. Even younger individuals often prefer taking public transportation thus enabling them to text while commuting or having the extra drink before returning home.
The price of gas is rising → the cost of driving will become even more prohibitive to the working class.
More and safer bike lanes are needed as additional alternatives to getting behind the wheel of an automobile.
Southeastern Wisconsin is not an island it needs to be accessible by commuter rail service to Racine, Kenosha, Waukesha, Madison, Minneapolis, Chicago, Green Bay and all points in between.
Wisconsin may be open for business but people need, must have, (over)

(continue comments on back if more space is needed)

How did you learn about this meeting? Newsletter ____; Flyer ____; Ad in Newspaper ____;
Newspaper Article ____; Radio or TV ____; Website ____; Other (please specify) ____

Thank you!

alternatives and better means of getting to and around the area.
I have gone to 1 Milwaukee Brewers game in the last 5 years. Why? Public transit was poor, traffic a mess, and then have to pay to park! I would go more often with better public transit to the games. Take a look at Denver, light rail to Rockies and Broncos games. No reason to get in the car.
Amtrak service to/from Milwaukee/Chicago is nice and needs to be expanded to include Green Bay and Central and Norther Wisconsin, at a minimum.
If ridership on public transportation is down, I would believe a direct relationship to the lack of routes, time of service and not because people won't or don't use it.
With Public transportation everyone is a winner even those that say they won't use it, they still need it. With more ~~pt~~ public transportation comes less people on the freeways, a win win for those in autos and a win win for those wanting to take public transportation.
I, like many of my friends look forward to a time when cars won't be a ~~[illegible]~~ necessity and everyone is biking on what used to be freeways.

Figure C - 1C (continued)

2014 Interim Review and Update of the Year 2035 Regional Transportation Plan

Comment Form

Meeting Location: O'Donnell Park

Date: 5/22/14

Name: Jim Tarantino

Address:

Community:

Zip: 53207

Comments will also be accepted until June 9, 2014 via:

Web: www.sewrpc.org/SEWRPC/RTSPUpdate2014.htm
E-mail: sewrpc@sewrpc.org
Fax: (262) 547-1103

Mail: SEWRPC
P.O. Box 1607
Waukesha, WI 53187

Comments:

Consider off street bicycle facility in utility corridor (We Energies) that extends East - West south of Howard Ave. Approx. Waterford Ave.

This corridor is on the Milwaukee Bicycle map as "future off street trail"

(continue comments on back if more space is needed)

How did you learn about this meeting? Newsletter _____; Flyer _____; Ad in Newspaper _____;

Newspaper Article _____; Radio or TV _____; Website _____; Other (please specify) _____

Thank you!

Figure C - 2A

WRITTEN COMMENTS RECEIVED VIA ELECTRONIC MAIL

From: Karyn Rotker <krotker@aclu-wi.org>
Date: Mon, 9 Jun 2014 15:34:14 -0500
To: Yunker, Kenneth R.<KYUNKER@sewrpc.org>
Cc: Dennis Grzezinski<dennisglaw@gmail.com>; Alex Karner<alex.karner@gmail.com>
Subject: Comments on Disparate Impact of 2035 Plan Implementation

Ken:

I am submitting these comments to request that, in its update of the 2035 Regional Transportation Plan ("2035 Plan") SEWRPC formally acknowledge what is unquestionably the reality: That transit implementation has lagged far behind what was recommended by its plan and that the failure to implement transit recommendations – especially those transit services focused on communities of color and the neighborhoods in which those communities live – has had a discriminatory effect. Please ensure these comments are shared with the committees making the decisions, and with the Environmental Justice Task Force. (I also attach and again request consideration of the issues raised in memos prepared in May by Dr. Alex Karner and sent to SEWRPC at that time.)

The 2035 Plan itself, at p. 592, *explicitly* stated that that "[a]s minority and low income populations disproportionately use and are dependent upon, public transit, these populations are disproportionately impacted by reductions in transit service." At the time the 2035 Plan was adopted, bus service had already declined 15% since the year 2000. *Id.* at 592. There is no question further transit reductions have occurred since then. *Review of Implementation to Date of Year 2035 Regional Transportation Plan* (Preliminary Draft), Ch. 5 at 5-1 – 5-2. (While "demand responsive" service has increased, the draft update fails to mention that demand-responsive service is in primarily white counties/communities.)

The 2035 Plan affirmed that "[p]ublic transit is essential in the Region to meet the travel needs of persons unable to use personal automobile transportation. In the year 2000, approximately 80,000 households, or 11 percent of the Region's households, did not have a personal vehicle available and were dependent upon public transit for travel. The accessibility of this portion of the Region's population to the metropolitan area jobs, health care, shopping and education is almost entirely dependent upon the extent to which public transit is available, and is reasonably fast, convenient, and affordable." *Id.* at 367. The 2035 Plan made clear that those transit-dependent communities are disproportionately communities of color. "The public transit recommendations of the regional transportation plan would, in particular, serve minority and low-income populations within Southeastern Wisconsin. As shown in Table H-18, low-income households and a number of minority populations are particularly dependent upon public transit, as a significant proportion of those populations have no private vehicle available for travel. Driver's license data indicate a similar conclusion. Only about 68 percent of Milwaukee County Black/African American households indicate they have an automobile available for travel, and only an estimated 60 percent of Black/African American adults have a driver's license. Only about 80 percent of Milwaukee County Hispanic households indicate they have an automobile available for travel, and only an estimated 50 percent of Hispanic adults have a driver's license. As shown on Maps H-29 through H-35, the transit service recommendations of the plan would be particularly directed to serving minority and low-income populations." *Id.* at 576. Thus, "the transit element of the regional transportation system plan would in particular connect minority and low-income populations with jobs. Also, the public transit recommendations of the regional transportation plan are directed towards improving transit service in central Milwaukee County and those areas with minority and low-income populations." *Id.*

The 2035 Plan planned for "service on the regional transit system [to] be increased from service levels existing in 2005 by about 100 percent measured in terms of revenue transit vehicle-miles of service" by 2035. *Id.* at 367. The 2035 Plan contemplated a more than 200% increase by 2035 in rapid bus service, including freeway-based bus service to suburban employment and activity centers. *Id.* The public transit recommendations in the 2035 Plan include "bus rapid transit routes providing service in both directions during all periods of the day. Thus, the recommended rapid transit would provide better connectivity between central Milwaukee County residents, including minority and low-income populations, and employment and other opportunities in the outlying communities within the Region." *Id.* at 576. The transit recommendations of the 2035 Plan also were to expand access to jobs, education, health care, and other activities, in particular to opportunities in Waukesha County. *Id.*

The 2035 Plan contemplated that the public transit capacity expansion it recommended was to occur annually. *Id.* at 366. It stated that an "annual 4 to 5 percent increase may be essential to address rising costs, including inflation and real increases in fuel costs, and to support [transit] system improvement and expansion." *Id.* at 370. It contemplated annual and continual increases in transit. *Id.* at 374 (text and Fig. 40). The 2035 Plan also stated that "[a]ll elements of the year 2035 regional transportation plan are considered to be of equal priority. . ." Those "elements" include transit and travel demand management, as well as freeways. Id. at 366, 588. The 2035 Plan also stated that to "there will be a need to assure that during economic downturns, progress in plan implementation, particularly with respect to public transit, continues, and is not eroded through service reductions." *Id.* at 366, 592.

Yet as noted above, the transit recommendations of the 2035 Plan have not been implemented or even given equal priority with the freeway elements of the plan, and in fact financial support for transit and transit services have been eroded at the same time that freeway and other highway and road elements of the plan have proceeded. There is no question that this is a disparity in the treatment of the transit and highway elements of the plan. (It also continues to endorse a major capacity expansion of I-94 E/W to which the majority-minority city of Milwaukee objects.)

Whether or not SEWRPC can require other entities to pay for and implement its transit recommendations, it must come clean and at least acknowledge the factual reality: The failure to implement those recommendations has had, and continues to have, a disproportionate adverse impact on minority communities.

Karyn

--
Karyn L. Rotker
Senior Staff Attorney
Poverty, Race & Civil Liberties Project
ACLU of Wisconsin Foundation
207 E. Buffalo St. #325
Milwaukee WI 53202
(414) 272-4032 ext. 221
(414) 272-0182 (fax)
krotker@aclu-wi.org

Visit our website at aclu-wi.org
Like our Facebook page (https://www.facebook.com/ACLUofWi) or follow us on Twitter (https://twitter.com/ACLUofWisconsin)

MEMORANDUM

TO:	SEWRPC Environmental Justice Task Force
FROM:	Alex Karner, PhD, Global Institute of Sustainability, Arizona State University
DATE:	May 5, 2014
RE:	SEWRPC 2035 RTP Review and Update and Vision 2050 Scenarios

The Southeastern Wisconsin Regional Planning Commission (SEWERPC) is currently engaged in the preparation of "Vision 2050" – its first long-range regional transportation plan (RTP) since 2006 – and a review and update of their prior 2035 RTP. Currently, staff has prepared five "sketch" scenarios for Vision 2050 whose performance will be assessed on a number of metrics using outputs from CommunityViz. Both the 2035 RTP review and update and the sketch planning exercise involve some form of "equity analysis"; the quantification and/or discussion of the impacts and benefits of the plan on people of color and low-income populations in the SEWRPC region. As an academic researcher studying issues of transportation equity, I have reviewed the documents being released as part of these two ongoing processes with great interest. The purpose of this memorandum is to provide feedback and recommendations to SEWRPC as they undertake these two concurrent planning exercises.

Importantly, since SEWRPC last completed an equity analysis of their regional plan, substantial developments have occurred in the science of identifying and addressing disproportionately high and adverse effects on minority populations and low-income populations.[1] SEWRPC could adopt these methods for each of the tasks they are currently undertaking. Adopting state-of-the-art methods would have multiple benefits. First, it would increase the likelihood that the adopted plan would move the region towards equity. Second, it would place SEWRPC ahead of its peer metropolitan planning organizations (MPOs) and could serve as a model for other planning agencies across the country. Finally, it would respond to public feedback received during development of the prior RTP.

I have reviewed several documents related to the 2035 RTP review and update and Vision 2050.[2] Here, I include initial observations on 1) the 2035 RTP review and update results illustrating the impacts of the "fiscally constrained" plan on minority and low-income populations and 2) the proposed Vision 2050 sketch plan performance criteria.

[1] For example, see Alex Karner and Deb Niemeier, "Civil Rights Guidance and Equity Analysis Methods for Regional Transportation Plans: A Critical Review of Literature and Practice," *Journal of Transport Geography* 33(2013); Karel Martens, Aaron Golub, and Glenn Robinson, "A Justice-Theoretic Approach to the Distribution of Transportation Benefits: Implications for Transportation Planning Practice in the United States," *Transportation Research Part A: Policy and Practice* 46, no. 4 (2012); Antonio Páez et al., "Relative Accessibility Deprivation Indicators for Urban Settings: Definitions and Application to Food Deserts in Montreal," *Urban Studies* 47, no. 7 (2010).

[2] These include: 1) SEWRPC Memorandum Report No. 215: Review and Update of the Year 2035 Regional Transportation Plan (Preliminary Draft), 2) Draft Outline of Sketch Vision 2050 Land Use and Transportation Development Scenarios, and 3) Draft List of Criteria for Comparing Sketch Vision 2050 Land Use and Transportation Scenarios.

IMPACTS OF FISCALLY CONSTRAINED 2035 RTP REVIEW AND UPDATE ON MINORITY AND LOW-INCOME POPULATIONS

Staff is to be commended for developing a fiscally constrained plan that embodies prior and ongoing cuts to transit providers in the region. Appendix B of the 2035 RTP review and update provides a qualitative, map-based assessment of the benefits and impacts of the fiscally constrained plan on minority and low-income populations in the region. While valuable, the analysis would benefit from additional detail. Specifically, it is difficult to visually assess maps and determine whether benefits or impacts are distributed equitably. This is because the physical size of a Census unit is inversely proportional to its population and proximity to a facility does not necessarily indicate that one will derive a benefit from it. A quantitative, travel model-based comparison of current conditions to the 2035 fiscally constrained plan could provide valuable information about the potential impacts of the plan on minority and low-income populations, including whether disproportionate impacts/benefits are expected.

The first category of impacts discussed relates to roadways. The primary finding states that,

> no area of the Region, including minority and low-income populations, would disproportionately bear the impact of the recommended plan freeway and arterial street and highway capacity improvements. As the segments of freeway proposed to be widened under the Year 2035 Plan – Fiscally Constrained would directly serve areas of minority and low-income populations, these populations would benefit from the expected improvement in arterial street and highway accessibility to employment associated with the proposed.[3]

It is not possible to judge the veracity of this statement based on the evidence provided. There are two reasons why this is the case. First, capacity expansions will only provide mobility benefits for minority and low-income populations if they improve connectivity for those populations to desired destinations. The SEWRPC analysis does not quantitatively assess such changes. Additionally, automobile ownership and availability would need to be considered to determine that populations proximate to proposed capacity expansions would benefit. Select link analyses or detailed assessments of accessibility and travel time changes could be used to determine the geographic areas that derive benefits from capacity expansions. Second, no quantitative analysis of roadway proximity and demographics is provided. While Appendix B reports that "no area of the Region, or minority or low-income community, disproportionately bears the impact of the proposed street and highway capacity improvements" (p. B-3), a quantitative assessment using Census data and geographic information systems would be more informative. This analysis would likely find that people of color and low-income are *currently* disproportionately represented in the near-road environment.[4] As such, any projects likely to increase road volumes would have disproportionate effects on those populations in terms of exposure to harmful air pollution, traffic, and noise.

In terms of transit system impacts, Appendix B states that, "most (but not all) of the transit system would serve the principal concentrations of minority and low income populations" (p. 23). This is inadequate as a statement of plan impacts because, following the statement's logic, *any* service that runs proximate to these "principal concentrations" could be said to serve those populations, regardless of whether it provides them with an acceptable level of accessibility in terms of service frequency and route. Further, there is a much more interesting equity question

[3] SEWRPC, Memorandum Report No. 215, Appendix B, p. B-5.

[4] C.f. Gregory M. Rowangould, "A Census of the US near-Roadway Population: Public Health and Environmental Justice Considerations," *Transportation Research Part D: Transport and Environment* 25(2013).

that a base year comparison could address: To what extent does transit service decline in areas with high proportions of people of color or low-income in the fiscally constrained plan relative to automobile access for the remainder of the region? In other words, are people of color and other transit-dependent populations more likely to bear the burden of cuts than drivers? Is the difference likely to constitute a disproportionately high and adverse effect that should be avoided, minimized, or mitigated?

VISION 2050 SKETCH SCENARIO DEVELOPMENT AND PERFORMANCE ASSESSMENT

At this stage of Vision 2050, staff is preparing a high-level performance analysis using the sketch planning tool CommunityViz. SEWRPC's five proposed sketch scenarios provide a range of options for future land use and transportation infrastructure. This approach, while consistent with MPO scenario development across the country, misses an important opportunity to tailor a scenario that addresses the particularities of the SEWRPC region's transportation conditions. Specifically, deindustrialization, job suburbanization, and continuing racial segregation have combined to create a situation where the central city black population is largely isolated from growing job opportunities located in suburban parts of the region.[5] Status quo transportation policy that involves maintaining existing infrastructure and expanding capacity on congested freeway and arterial segments (such as that evidenced in the fiscally constrained 2035 RTP update) is likely to ensure that the benefits of transportation investments flow disproportionately to automobile users and that existing disparities in land use and transportation access continue.

Although the MPO has no land use authority and therefore cannot alter the zoning decisions of its member governments, including an *equity-focused* scenario at this stage of the planning process could serve to illustrate the environmental, transportation performance, and social benefits of a more equitable region. An equity-focused scenario would seek to identify the transportation- and land use-related barriers faced by low-income and minority communities in the region and address them through appropriate policies and investments. Candidate issues and accompanying scenario design elements in the SEWRPC region might include:

- *Reverse commute and spatial mismatch driven by racial segregation and exclusionary zoning.*[6] Increase the supply of transit linking central city areas to areas of suburban job growth. Increase the supply of affordable housing in those same suburbs.
- *Access to essential destinations.*[7] Ensure that public transit links areas of high transit dependent populations to essential services like healthy food, medical facilities, and schools.
- *Modal equity.* To the extent possible, close the gap between automobile and transit levels of service, especially in areas with high proportions of transit dependent residents.

[5] Marc V. Levine, "The Crisis of Black Male Joblessness in Milwaukee: Trends, Explanations, and Policy Options," (Milwaukee, WI: University of Wisconsin-Milwaukee Center for Economic Development, 2007).
[6] Robert Cervero, "Job Isolation in the US: Narrowing the Gap through Job Access and Reverse-Commute Programs," in *Running on Empty: Transport, Social Exclusion, and Environmental Justice*, ed. Karen Lucas (2004); Keith R. Ihlanfeldt and David L. Sjoquist, "The Spatial Mismatch Hypothesis: A Review of Recent Studies and Their Implications for Welfare Reform," *Housing Policy Debate* 9, no. 4 (1998).
[7] Joe Grengs, "Nonwork Accessibility as a Social Equity Indicator," *International Journal of Sustainable Transportation* (In press).

In some MPO regions in California, equity-focused scenarios have catalyzed public involvement in the planning process among those groups most likely to feel alienated from it. This is precisely because these plans speak to issues of importance to groups that traditionally feel alienated from public participation. As an added benefit, these scenarios have demonstrated improved environmental performance relative to the agency's preferred plans.[8]

In order to properly evaluate the likely effects of an equity scenario on plan performance, it is vital that staff derive a method for spatially quantifying the benefits of each scenario within CommuniyViz. Although staff lists a large number of possible quantitative performance measures and criteria for plan evaluation, many of which are focused on transit, there are also a number of qualitative criteria in categories which the document states "cannot be quantified or are very difficult to quantify accurately."[9] One such category is "benefits and impacts to minority and low income populations."[10] Although sketch planning tools are necessarily coarser than detailed travel demand models, some comparisons are possible in this regard. For example, one quantitative performance measure listed is "jobs accessible by transit." This metric could be calculated, by job type and/or income category, for particular subareas within the region, including those with high proportions of people of color, and compared to overall regional means. Completing this analysis for each scenario would give a sense of which performs best in terms of equity goals. Similar comparisons could be constructed for the other performance measures.

While some loss of fidelity is expected at the sketch planning stage, when moving to detailed travel demand modeling, improving the quantitative analysis of equity impacts will be important. SEWRPC undertook such an analysis for their last major RTP update, and many MPOs have been conducting quantitative analyses of spatially distributed benefits and burdens for over a decade.[11] Although many of the standard approaches to equity assessment contain shortcomings, travel demand model outputs combined with publicly available data sources can be used to identify and address adverse conditions in a region.[12]

[8] Both the Fresno County and San Francisco Bay Area MPOs included citizen-defined equity-focused scenarios in their most recent RTP development.
[9] Draft List of Criteria, p. 2.
[10] Ibid.
[11] Federal Highway Administration/Federal Transit Administration, "MPO Environmental Justice Report: Mid-Ohio Planning Commission," http://www.fhwa.dot.gov/environment/ejustice/case/case7.htm; SCAG, "2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) – Environmental Justice Appendix," http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_EnvironmentalJustice.pdf; Houston-Galveston Area Council, "2035 RTP Appendix C: Environmental Justice," http://www.h-gac.com/taq/plan/documents/2035_final/Appendix%20C-Environmental%20Justice.pdf.
[12] Karner and Niemeier, "Civil Rights Guidance and Equity Analysis Methods."; Martens, Golub, and Robinson, "A Justice-Theoretic Approach."

MEMORANDUM

TO:	SEWRPC Environmental Justice Task Force
FROM:	Alex Karner, PhD, Global Institute of Sustainability, Arizona State University
DATE:	May 5, 2014
RE:	SEWRPC 2006 RTP Equity Analysis

The Southeastern Wisconsin Regional Planning Commission (SEWERPC) is currently engaged in the preparation of "Vision 2050" – its first long-range regional transportation planning exercise since 2006. As part of this effort, the Commission will analyze projected impacts and benefits expected to result from the plan on minority and low-income populations as they have for past planning efforts. SEWERPC's most recent analysis was prepared as Appendix H to the 2006 regional transportation plan (RTP). Since 2006, when that document was written, substantial advances have been achieved in identifying and addressing disproportionately high and adverse effects on minority populations and low-income populations during the transportation planning process.[1] The purpose of this memorandum is to describe potential opportunities to advance the 2006 work that could be incorporated into Vision 2050's equity analysis. The discussion below addresses three areas covered in Appendix H – roadway proximity, automobile accessibility, and transit accessibility – and some additional considerations regarding overall approaches to equity analysis.

Roadway proximity and demographics

The 2006 analysis of roadway proximity and demographics concludes that minority and low-income populations are not over-represented proximate to roads. However, the analysis mixes both absolute counts of population with census block proportions, leading to counterintuitive conclusions. For example, comparing the proportion of census blocks with above average regional concentration of minorities proximate to highways proposed to be widened with the proportion of census blocks with above average regional concentration of minorities is not appropriate (see p. 548). Many census blocks have zero population, so the proportion proximate to highways may be artificially low. The population of census blocks also varies widely, unlike tracts, so adding total numbers of blocks is not likely to reflect overall exposure of individuals. Additionally, the correct comparison from an equity standpoint is between groups: are people of color more likely to be more exposed than non-Hispanic whites? If so, is the exposure disproportionately high? Examining the overall demographics of the near-road population by tabulating census totals within buffers for racial groups would provide this information.[2]

Automobile accessibility

Appendix H contains an analysis of highway accessibility comparing the 2005 base year to the 2035 forecast year (p. 567). It states that,

> without providing additional arterial street and highway system capacity, the accessibility to employment opportunities may be expected to decline significantly, including with respect to central Milwaukee County and other urbanized areas of the Region including minority and low income population areas. (p. 567)

Accessibilities are calculated for all jobs (presumably during the peak period). This metric is not necessarily relevant to the needs of low-income and minority residents of the SEWRPC region. Changes in accessibility should be assessed for particular neighborhoods or populations of concern, for actual destinations of importance (low-wage jobs, grocery stores, medical facilities, etc.), for different times of day. These results would indicate whether future accessibility changes are disproportionately borne by people of color and low-income populations.

Transit accessibility

The analysis of transit accessibility in Appendix H relies on several components: visual inspection of maps that delineate the location of transit routes, activity locations, and demographic concentrations (Maps H-29 – H-37), visual inspection of maps that delineate the location of transit routes and essential destinations as well as travel time thresholds (Maps H-40 – H-46), and maps that indicate the accessibility to all jobs by transit (Maps H-38 – H-39). These maps are provided for the base and forecast years. It is very difficult to inspect the maps and draw conclusions about how well the current network is functioning or to what degree the future network represents an improvement. Specifically, the following statement is impossible to verify,

> The preliminary recommended transit plan provides substantially better accessibility during peak and midday periods for central Milwaukee County residents, including minority and low-income populations, than does the existing system. (p. 588)

Maps H-38 and H-39 summarize transit accessibility to *all jobs* during the peak period. And although the areas of improved accessibility coincide with areas of high minority population, this does not mean that accessibility has increased for those populations. In order for access to increase, transit needs to connect residential locations with destinations that matter, including jobs well-matched to the skill level of residents at convenient times of day and within reasonable travel times. "All jobs" and the peak period are likely to be poor proxies for destinations that matter to low-income and minority populations.

Additionally, regional transit operators have been experiencing reductions in their operating budgets and concomitant reductions in service.[3] In order to realistically propose expansions in transit service, as the RTP does,[4] problems with funding need to be explicitly addressed in the plan and equity analysis.[5] The MPO's regional coordinating role can be used here to articulate a powerful regional vision for improvements in transit service.

Overall approaches to equity

The analyses included in 2006's Appendix H embody a particular approach to equity. Accessibility changes for total jobs are examined in the aggregate, for a base year and for the forecast year, by automobile and transit. Because accessibility is projected to increase and

[1] For example, see Alex Karner and Deb Niemeier, "Civil Rights Guidance and Equity Analysis Methods for Regional Transportation Plans: A Critical Review of Literature and Practice," *Journal of Transport Geography* 33(2013); Karel Martens, Aaron Golub, and Glenn Robinson, "A Justice-Theoretic Approach to the Distribution of Transportation Benefits: Implications for Transportation Planning Practice in the United States," *Transportation Research Part A: Policy and Practice* 46, no. 4 (2012).
[2] Staff undertook this analysis earlier in Appendix H, and found that at the regional level, minority populations tended to reside in closer proximity to roads than non-minority populations. Because there was no "disproportionately high" standard set in advance of the analysis, staff was able to conclude that the impacts were not significant.
[3] Peggy Schulz, "More Cuts for County Transit," *Milwaukee Journal Sentinel*, 9 October 2010; Larry Sandler, "Transit Cuts Put Jobs out of Reach of Workers without Cars," *Milwaukee Journal Sentinel*, 25 September 2011.
[4] As stated in the RTP, "Rapid transit service would be significantly expanded from a largely peak-period, peak direction, weekday service to an all day and evening, bi-direction, weekday and weekend service. The proposed express and local transit service would also be expanded to all day and evening, bi direction, weekday and weekend service" (p. 588).
[5] This approach was used to define the "fiscally constrained" alternative for the 2035 RTP Review and Update.

because the increases cover geographic areas populated by high concentrations of minority and low-income individuals, the report concludes that the plan is equitable. However, this conclusion is far from certain, as the proposed additional analyses above indicate. Additionally, because of differences in the demographics of transit and automobile users, it is important to assess modal equity by directly comparing automobile and transit levels of service. This comparison should determine whether projected declines in transit service constitute a disproportionately high and adverse effect on people of color vis-à-vis projected changes in automobile levels of service. If such an effect is found, it must be avoided or mitigated.

Finally, in order to actually inform planning and programming decisions, equity analyses must feed back to the planning process. This feedback requires a normative discussion about the levels of transit access that are desirable for each area and for particular demographic groups. Should each neighborhood be able to access a grocery store or a park within a 15 minute transit or non-motorized trip? How many low-wage jobs should be accessible by transit from low-income neighborhoods? How far are existing conditions from those standards and how will the plan move the region closer to it? These are the key questions that must be addressed during public participation processes and that must be quantified during the analysis.

6/6/14

SWRPC Planning Committee Members

I have received the proposed 2035 RTP and would like to thank and congratulate you on your efforts. I am appreciative of the fact that in a free and open society the key to participation is the ability to get around. In that regard it is essential that attention be paid to those most desperately in need of transportation services.

The Para-transit system is essential to the participation of persons with disability in our communities.

Since 1972 children who would otherwise been institutionalized, have remained and been educated and reared in our communities. Many persons who had been institutionalized have returned to our communities. Many heroic Veterans have returned home. Our fastest growing population is the elderly for whom disability is not uncommon. Many of these individuals have received support services (including Transportation) from Family Care with the promise that Transportation would be supplied to support community life style. This promise remains and will remain unfulfilled.

While annual passes, reduced student fees and employee/ee subsidies are effective marketing strategies, they cast a contradictory light on the 'double the fare' charged for accessibility. It is an overwhelming indication of the secondary participation of the disabled. Given that many persons with disability live on a fixed income, participation becomes self limiting.

Successful marketing must recognize that the rate of disability in our community is rising and that transportation systems are failing for many individuals. Successful planning for the disabled will require assessment of current provision, on-going outreach, training and assistance to individual participants.

Unless planning begins to embrace the concept of "full citizenship" for persons with disability, people will be un or underserved, and their marginalization perpetrated.

Larry Barthen
218 N. Charles St
Waukesha WI 53186

Larry J. Barthen
218 N. Charles St.
Waukesha, WI 53186

Figure C - 3 (continued)

Daily Reporter
Tuesday, May 20, 2014

dailyreporter.com

Regional planning group to discuss transportation plan

By: Beth Kevit May 20, 2014 11:37 am

The Southeastern Wisconsin Regional Planning Commission will hold a public meeting Thursday to discuss its 2035 regional transportation plan.

The meeting will include an open house, according to a news release, and an opportunity to submit formal comments about the latest version of the plan, which includes recommendations for the development of streets, highways, public transit, and pedestrian and bicyclist access throughout southeastern Wisconsin.

The meeting will be held from 4 to 6:30 p.m. in the Miller Room of the O'Donnell Park Pavilion, 910 E. Michigan St., Milwaukee.

Written comments about the plan will be accepted through June 8 and can be submitted online at www.sewrpc.org/2014update, by email at 2014update@sewrpc.org, by fax at 262-547-1103 or by mail at Southeastern Wisconsin Regional Planning Commission, W239 N1812 Rockwood Drive, P.O. Box 1607, Waukesha, WI 53187.

Figure C - 3

NEWS ARTICLES CONCERNING THE 2014 INTERIM REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

Daily Reporter
Friday, May 16, 2014

dailyreporter.com

Money short for Lake Parkway extension

By: [redacted] May 16, 2014 3:45 pm

The state's ongoing struggle to maintain its freeways is threatening the timeline for extending Milwaukee's Lake Parkway into Oak Creek.

The Southeastern Wisconsin Regional Planning Commission had recommended the Wisconsin Department of Transportation prioritize the extension to get it done before 2035. But SEWRPC has rescinded that recommendation, among others, following a four-year review of transportation needs that found there might not be enough money to go around.

Traffic on Lake Parkway passes a maintenance worker in the median Thursday in Cudahy. In light of state budget constraints, the Southeastern Wisconsin Regional Planning Commission is rescinding its recommendation to extend the parkway into Oak Creek before 2035. (Staff photos by Kevin Harnack)

According to the preliminary findings of the review, WisDOT will have an estimated $1.27 billion for transit and highway needs in southeast Wisconsin through 2035. But SEWRPC had recommended an estimated $1.73 billion in repairs, projects and services for the region during that period.

In light of that gap, SEWRPC Executive Director Kenneth Yunker said, the commission is withdrawing its recommendation that WisDOT extend the Lake Parkway from East Edgerton Avenue in Cudahy to Highway 100 in Oak Creek before 2035. In December 2012, SEWRPC recommended the estimated $207.2 million, six-mile extension and urged WisDOT to begin preliminary engineering.

"If you don't have the funding to reconstruct the existing system," he said, "it's difficult to pursue new facilities."

WisDOT is not bound by SEWRPC's recommendations, but the state agency is involved in the latest revision of the commission's 2035 regional transportation plan, according to an email attributed to Peg Schmitt, a WisDOT spokeswoman. She declined to comment further on the revision process or on how WisDOT will use the 2035 plan, which is expected to be finished by June.

If WisDOT chooses not to do the extension by 2035, Brian Biemat, Cudahy's director of economic development, said he would understand. But the project would spur development in Cudahy, he said, and WisDOT eventually should follow through on the recommendation.

Yunker said the state's gas tax, which has not kept pace with inflation or been adjusted to account for fuel efficiency, is the main reason for the gap between expected revenue and previously recommended spending.

Traffic on Pennsylvania Avenue in Cudahy merges onto Lake Parkway on Thursday.

Yunker said 255 miles of freeway in southeast Wisconsin would have to be reconstructed by 2035 to meet the commission's prior recommendations. But based on the latest revision to the 2035 plan, he said, SEWRPC now expects the state could afford to reconstruct only 89 miles.

There are 305 miles of freeways in southeastern Wisconsin, according to WisDOT's State Highway Plan 2020. According to that plan, 15 percent of the bridges and 36 percent of the pavement on freeways were subpar in 2000.

WisDOT reconstructing 89 miles of freeway by 2035, Yunker said, would be consistent with the agency's pace for about the past decade. He said if WisDOT does not increase that pace, the backlog of crumbling pavement will grow.

WisDOT needs to raise more money through some sort of additional user tax, such as toll roads, or by increasing the gas tax, Yunker said, although the commission has not endorsed an option. Without more money, he said, WisDOT is setting itself up for more emergency repairs.

The agency will be forced to replace sections of pavement, Yunker said, only to rip up patches a few years later when a full reconstruction project is ready to go.

http://dailyreporter.com/2014/05/16/money-short-for-lake-parkway-extension/

"There's a cost to pursuing those repairs," he said, "a cost you wouldn't have to pursue if you had adequate funding."

The Freeman
Friday May 16, 2014

2035 regional transport plan lagging behind

Public hearing in Milwaukee next week

MILWAUKEE – A meeting next week will allow the public to speak out on the Southeastern Wisconsin Regional Planning Commission's 2035 regional transportation plan, which is no longer on pace to be completed on time due to budget constraints.

The review, which will be held from from 4:00-6:30 p.m. May 22 at the O'Donnell Park Pavilion in Milwaukee, evaluates plan forecasts, measures transportation system performance and assesses the current implementation of the plan's recommendations.

According to a commission release, the plan – which consists of five main elements: public transit, bicycle and pedestrian facilities, transportation system management, travel demand management and arterial streets and highways – is no longer consistent with existing and future revenues, which appear to be more constrained this year than they were in 2010 or 2006.

Therefore, the recommended freeway expansion would not be completed by 2035 and improving and expanding transit would not occur. In this case, transit service levels would be expected to further decline by another 11 percent from the current already-reduced service levels.

Public transit, which was expected to have twice as many service miles by 2035, has actually declined by four percent, and of the 384 additional proposed miles of the recommended 586-mile off-street bicycle and pedestrian path system, only 47 miles have been constructed since 2006, according to the release.

Such meetings are held every four years to provide a guide for transportation development in the region for 20 years into the future.

Having begun in 2006, the plan is approximately one quarter of the way through its 30-year implementation period.

– Matt Masterson, Freeman Staff

Figure C - 3 (continued)

Greater Milwaukee Today
Tuesday, June 3, 2014

Long-term transportation plan altered due to funding challenges

Additional cuts in transit likely

By Rich Rovito
Special to The Freeman

MILWAUKEE – Funding issues have considerably altered a wide-ranging transportation plan for southeastern Wisconsin first developed nearly eight years ago.

The plan, devised by the Southeastern Wisconsin Regional Planning Commission for a period running through 2035, was the topic of a public information meeting held recently at the O'Donnell Park Pavilion in downtown Milwaukee.

The plan is reviewed and updated every four years.

"The plan had recommended significant improvement and expansion of public transit. Instead, fixed-route bus service has gone in the opposite direction," SEWRPC Executive Director Kenneth Yunker said.

Existing revenue and the outlook for future available funds are far more constrained than in 2005, during the development of the original plan, and in 2010, when the plan's first four-year update occurred, according to SEWRPC.

As a result, the 2035 plan "can no longer be considered reasonably consistent with existing and expected revenues, and the current limitations on the use of those revenues," SEWRPC stated.

"When we recommended an expansion of (transportation) service, we knew we needed dedicated local funding and a regional transit authority," Yunker said. "At the time, in 2006 when we completed the plan, and again in 2010 when we reviewed it, there was reason to expect local dedicated funding. Things have changed."

Not implementing the 2035 plan as originally proposed likely will impede economic growth in the region and diminish quality of life for its residents, Yunker said.

The 2035 regional transportation plan is intended as a guide for future transportation development in the region. It includes public transit, bicycle and pedestrian facilities, and arterial streets.

An off-street bicycle path system covering nearly 600 miles is among the recommendations, but just about 12 percent of that goal has been achieved.

Unmet expectations for local funding

Yunker noted that motor fuel tax indexing existed in 2006, which provided an automatic boost in the state gas tax each year to adjust for inflation. The measure has since been repealed.

"We had gas tax indexing in 2006. We don't any more. You had to reasonably expect that there would be local dedicated funding for transit and a regional transit authority, too. But probably no more," Yunker said.

Under the revamped plan, only 89 miles of the region's freeway system will be reconstructed by 2035.

"That means that there are almost 170 miles that you aren't going to be able to reconstruct," Yunker said. "The freeway system is approaching the end of its useful life. It will need reconstruction. The bridges will be approaching the end of their useful lives, too."

Without dedicated local funding and a regional transit authority, southeastern Wisconsin will be faced with continuing reductions in transit service, Yunker said.

Transit service levels are expected to further decline by another 11 percent from the current already-reduced service levels, according to the SEWRPC.

Not implementing the plan due to the limitations of current transportation revenue will have "significant negative consequences" for southeastern Wisconsin, Yunker said.

Among them could be a potentially significant increase in traffic congestion and travel delays, a jump in transportation-related energy consumption and air pollutant emissions, costly emergency repairs and inefficient pavement maintenance.

Mobility, access to be 'severely limited' for those without cars

For the estimated 10 percent of region's residents who are unable to use or cannot afford an automobile, mobility and access will be severely limited with respect to jobs, health care, education, grocery shopping, and other basic travel needs, according to the SEWRPC.

Implementation of some form of a user fee would provide a way toward supporting the plan, Yunker said.

"It could be a toll system or gas tax. We aren't saying what the funding source has to be, but the transportation system is severely underfunded," he said.

The plan is separate from the development of the next major regional transportation and land use document, titled "Vision 2050," which will replace the 2035 regional transportation plan and is scheduled to be completed about one year after the current review and update.

Although distinct from Vision 2050, the updated 2035 regional transportation plan will guide the planning work currently being conducted for Vision 2050.

"It's raising early on in the process the funding issues that will need to be addressed and specifically identified," Yunker said.

At a glance

The plan can be viewed at www.sewrpc.org/2014 update. Written comments can be submitted through Sunday via email to 2014update@sewrpc.org, by fax at 262-547-1103, or through standard mail to Southeastern Wisconsin Regional Planning Commission, W239-N1812 Rockwood Drive, P.O. Box 1607, Waukesha, WI 53187-1607.

Figure C - A4
PAID NEWSPAPER ADVERTISEMENTS

The Milwaukee Community Journal
Wednesday May 7, 2014

PUBLIC MEETING AND REVIEW PERIOD FOR THE REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

You are invited to attend a public informational meeting on the review and update of the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) year 2035 regional transportation plan. The regional transportation plan, completed in 2006 and last updated in 2010, is intended to provide a guide for transportation development in the Region for 20 years into the future, including public transit, bicycle and pedestrian facilities, and arterial streets and highways. SEWRPC reviews and updates the current regional transportation plan every four years. This effort is separate from the development of the next major regional transportation and land use plan, titled "VISION 2050". VISION 2050 will replace the year 2035 regional transportation plan, and is scheduled to be completed about one year after this review and update of the year 2035 regional transportation plan. While separate from VISION 2050, the review and update of the 2035 regional transportation plan will inform the VISION 2050 planning work currently being conducted.

At the meeting, you can learn more about the year 2035 regional transportation system plan and the every four-year review and update of the plan. The review and update evaluates plan forecasts, transportation system performance, and examines the funding available to implement the plan. Draft report chapters, and other information are available at www.sewrpc.org/2014update.

The meeting will be held on Thursday, May 22, 2014. Staff will be available in an "open house" format from 4:00 p.m. to 6:30 p.m. to individually answer questions and provide information. Oral comment may be given to a court reporter during the meeting or written comments may be submitted. Written comments may also be provided following the public informational meeting via U.S. mail, fax or e-mail through June 8, 2014. The public informational meeting will be held:

Thursday, May 22, 2014
4:00 – 6:30 p.m.
Miller Room
O'Donnell Park Pavilion
910 E. Michigan Street, Milwaukee

Persons with special needs are asked to contact the SEWRPC office at (262) 547-6721 a minimum of 72 hours before the meeting so that appropriate arrangements can be made regarding access or mobility, review or interpretation of materials, active participation, or submission of comments.

Southeastern Wisconsin Regional Planning Commission
PO Box 1607, Waukesha, Wisconsin 53187-1607
Telephone: (262) 547-6721 Fax: (262) 547-1103 Email: 2014update@sewrpc.org

Figure C - 4A (continued)

The Milwaukee Journal Sentinal
May 8, 2014

PUBLIC MEETING AND REVIEW PERIOD FOR THE REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

You are invited to attend a public informational meeting on the review and update of the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) year 2035 regional transportation plan. The regional transportation plan, completed in 2006 and last updated in 2010, is intended to provide a guide for transportation development in the Region for 20 years into the future, including public transit, bicycle and pedestrian facilities, and arterial streets and highways. SEWRPC reviews and updates the current regional transportation plan every four years. This effort is separate from the development of the next major regional transportation and land use plan, titled "VISION 2050". VISION 2050 will replace the year 2035 regional transportation plan, and is scheduled to be completed about one year after this review and update of the year 2035 regional transportation plan. While separate from VISION 2050, the review and update of the 2035 regional transportation plan will inform the VISION 2050 planning work currently being conducted.

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Figure C - 4A (continued)

El Conquistador
May 9, 2014

JUNTAS Y PERIODO DE REVISIÓN PÚBLICO PARA LA REVISIÓN Y ACTUALIZACIÓN DEL PLAN REGIONAL DE TRANSPORTE DEL AÑO 2035

Usted está invitado a asistir a una junta pública informativa acerca de la revisión y actualización del plan regional de transporte del año 2035 de La Comisión de Planeación Regional del Sureste de Wisconsin (SEWRPC-siglas en Inglés). El plan regional de transporte, finalizado en el 2006 y actualizado la última vez en el 2010, ofrece una guía para el desarrollo de transporte en la Región por los siguientes 20 años, incluyendo transporte público, instalaciones para bicicletas y para peatones, y calles principales y autopistas. SEWRPC revisa y actualiza el plan regional actual de transporte cada cuatro años. Este esfuerzo es un proyecto separado del proyecto llamado "VISIÓN 2050", el cual es el desarrollo del siguiente plan principal regional de transporte y del uso de la tierra. VISIÓN 2050 reemplazará el plan regional de transporte del año 2035, y está programado para ser terminado aproximádamente un año después de esta revisión y actualización del plan de transporte regional del año 2035. Aún cuando está separado de VISIÓN 2050, la revisión y actualización del plan de transporte regional del año 2035 proporcionará información al trabajo de planeación de VISIÓN 2050 que actualmente se está llevando a cabo.

Durante la junta, usted puede tener más información acerca del plan del sistema regional de transporte del año 2035 y de sus revisiones y actualizaciones de cada cuatro años. La revisión y actualización evalúa los pronósticos del plan, el funcionamiento del sistema de transporte, y revisa los fondos disponibles para implementar el plan. Borradores de capítulos del reporte, y otra información están disponibles en www.sewrpc.org/2014update.

La junta se llevará a cabo el Jueves, 22 de Mayo, 2014. Empleados de SEWRPC estarán disponibles en un formato de "puerta abierta" de 4:00 p.m. a las 6:30 p.m. para responder preguntas individualmente y ofrecer información. Comentarios verbales pueden ser dados a un taquígrafo durante la junta ó comentarios por escrito pueden ser entregados personalmente. Comentarios por escrito también pueden ser enviados por correo regular, fax ó e-mail después de la junta pública informativa hasta el 8 de Junio, 2014. La junta pública informativa se llevará a cabo:

Jueves, 22 de Mayo, 2014
4:00 – 6:30 p.m.
Miller Room
O'Donnell Park Pavilion
910 E. Michigan Street, Milwaukee

A las personas con necesidades especiales se les pide que contacten las oficinas de SEWRPC al (262) 547-6721 con un mínimo de 72 horas antes de la junta para que arreglos apropiados se puedan hacer con respecto a acceso ó mobilidad, revisión ó interpretación de materiales, participación activa, ó entrega de comentarios.

Southeastern Wisconsin Regional Planning Commission
PO Box 1607, Waukesha, Wisconsin 53187-1607
Telephone: (262) 547-6721 Fax: (262) 547-1103 Email: 2014update@sewrpc.org

PUBLIC MEETING AND REVIEW PERIOD FOR THE REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION PLAN

You are invited to attend a public informational meeting on the review and update of the Southeastern Wisconsin Regional Planning Commission's (SEWRPC) year 2035 regional transportation plan. The regional transportation plan, completed in 2006 and last updated in 2010, is intended to provide a guide for transportation development in the Region for 20 years into the future, including public transit, bicycle and pedestrian facilities, and arterial streets and highways. SEWRPC reviews and updates the current regional transportation plan every four years. This effort is separate from the development of the next major regional transportation and land use plan, titled "VISION 2050". VISION 2050 will replace the year 2035 regional transportation plan, and is scheduled to be completed about one year after this review and update of the year 2035 regional transportation plan. While separate from VISION 2050, the review and update of the 2035 regional transportation plan will inform the VISION 2050 planning work currently being conducted.

At the meeting, you can learn more about the year 2035 regional transportation system plan and the every four-year review and update of the plan. The review and update evaluates plan forecasts, transportation system performance, and examines the funding available to implement the plan. Draft report chapters, and other information are available at www.sewrpc.org/2014update.

The meeting will be held on Thursday, May 22, 2014. Staff will be available in an "open house" format from 4:00 p.m. to 6:30 p.m. to individually answer questions and provide information. Oral comment may be given to a court reporter during the meeting or written comments may be submitted. Written comments may also be provided following the public informational meeting via U.S. mail, fax or e-mail through June 8, 2014. The public informational meeting will be held:

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INTERIM REVIEW AND UPDATE OF THE YEAR 2035 REGIONAL TRANSPORTATION SYSTEM PLAN

NEWSLETTER MAY 2014

The Southeastern Wisconsin Regional Planning Commission (SEWRPC) is conducting an interim review and update of the year 2035 regional transportation plan. The review and update occurs every four years and was last done in 2010. The regional transportation plan is intended to provide a vision and guide for transportation system development in the Region for 20 years into the future. The plan consists of five principal elements:

- Public Transit
- Bicycle and Pedestrian Facilities
- Transportation System Management
- Travel Demand Management
- Arterial Streets and Highways

The plan was adopted by the Commission in June 2006, and was published as SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*. Individuals wishing to learn more about the plan may request copies of a newsletter summarizing the regional land use and transportation system plans, or visit the Commission's website at www.sewrpc.org/2014update.

The interim review and update includes the following steps:

- Examine the forecasts underlying the plan.
- Measure transportation system performance.
- Assess the implementation to date of the regional transportation plan recommendations.
- Based on existing and reasonably expected future funding, determine whether it remains reasonable for the recommendations in the plan to be achieved over the next 20 years.

REVIEW OF FORECASTS IN YEAR 2035 PLAN

As part of the planning effort for the year 2035 transportation plan, Commission staff developed long-range demographic and economic forecasts (including population, households, and employment) and travel forecasts (vehicle-miles of travel, transit ridership, and personal vehicle availability). The interim review process includes a comparison of these forecasts to more recent data. Estimates of current population, households, employment, automobile ownership, and vehicle-miles of travel were within 2 to 6 percent of forecasts. It was concluded that the current estimates of transit ridership were about 27 percent below year 2035 forecasts, which is due to the lack of implementation of the transit element of the year 2035 plan.

The interim review and update of the year 2035 regional transportation plan is separate from the next major update of the regional land use and transportation plan, called VISION 2050. VISION 2050 will replace the year 2035 regional transportation plan and is scheduled to be completed about one year following completion of the review and update of the year 2035 regional transportation plan. While separate from VISION 2050, the review and update of the 2035 regional transportation plan will inform the VISION 2050 planning work currently being conducted.

To learn more about VISION 2050 and its development, visit VISION2050SEWis.org.

REVIEW OF TRANSPORTATION SYSTEM PERFORMANCE

Review of transportation system performance trends indicates little change in pavement condition, traffic congestion, arterial street and highway travel speeds and times, and transit travel times. Substantial reductions in all air pollutant emissions are estimated, particularly for ozone-related emissions, with the exception being an increase in greenhouse gas-related emissions and ammonia. In addition, there has been some improvement in bridge condition and some reduction in highway and transit fatalities, injuries, and crashes.

IMPLEMENTATION TO DATE OF YEAR 2035 PLAN

The plan is about eight years, or about a quarter, into its 30-year implementation period. Since adopting the regional plan in 2006, plan implementation has lagged modestly to significantly depending upon the plan element concerned. The following is a summary of implementation by element since the plan was adopted in 2006:

- Public Transit: The year 2035 plan recommended a near doubling of vehicle miles of service for the transit system in the Region by 2035. Since 2006, transit service has declined by about 4 percent (7 percent decrease in fixed route bus service and 17 percent increase in shared-ride taxi service), and transit fares have increased faster than inflation. The reduction in the areal extent of transit service from 2005 to 2012 is shown on Map 1.

- Bicycle and Pedestrian Facilities: Of the 384 additional proposed miles of the recommended 586-mile off-street bicycle and pedestrian path system, 47 miles, or 12 percent, have been constructed since 2006. With respect to recommended accommodation of bicycle travel on the regional arterial street system, WisDOT and FHWA now require such consideration during preliminary engineering conducted for State, county, and local arterial construction and reconstruction using State and Federal funds. Since 2004, on-street bicycle accommodations – bike lanes, paved shoulders, and outside widened lanes – on arterials increased by 199 miles, or 31 percent.

- Transportation Systems Management: Implementation has included the expansion of freeway ramp-meters, variable message signs and closed circuit television cameras, and installation of a 511 travel information system. Other implementation has included additional traffic signal interconnection and coordination.

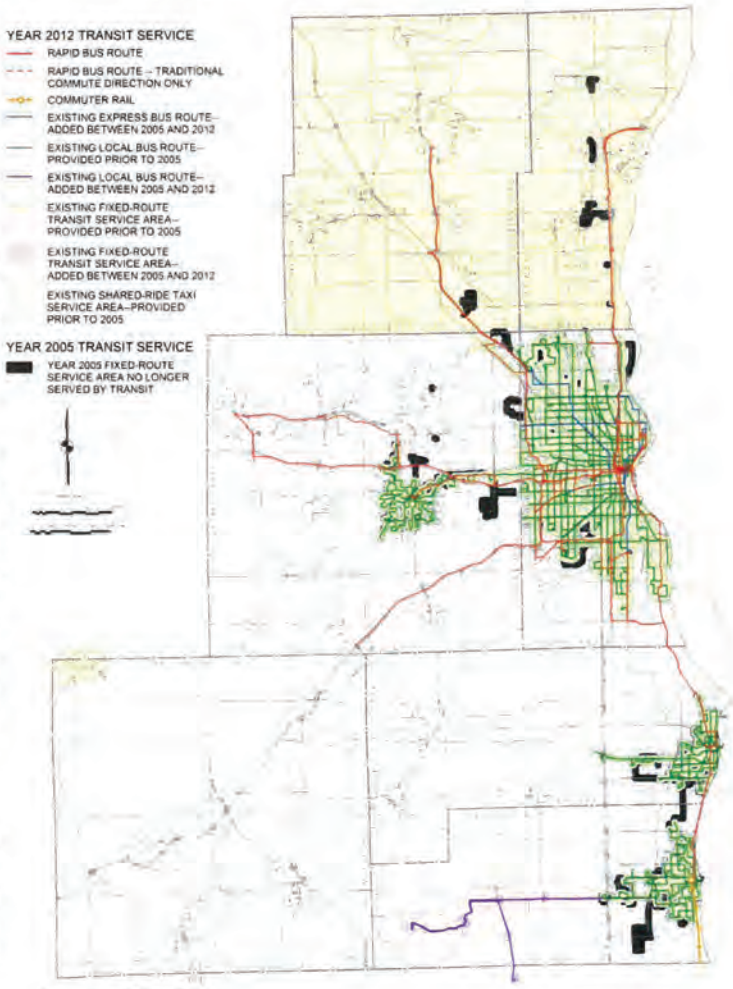
- Travel Demand Management: Implementation has included expansion of park-ride lots, transit system internet trip planners, and automatic bus location systems, and development of site-specific transit-oriented development neighborhood plans for the nine KRM commuter rail station areas.

- Arterial Streets and Highways: About 57.3 miles, or 13 percent, of the plan-recommended 453 miles of arterial capacity expansion have been completed and are open to traffic as of 2012. There has been some progress since 2006 in reconstructing the 270-mile freeway system in Southeastern Wisconsin with completion of the Marquette and Mitchell interchanges, as well as about five miles of the 30-mile project to reconstruct IH 94 between the Mitchell Interchange and the Illinois State line, to be completed in 2021. In addition, the reconstruction of the Zoo Interchange began in 2013 and is planned to be completed in 2018.

The lagging in plan implementation is a result of significantly constrained transportation funding. The indexing of the State motor fuel tax to inflation – the principal source of State transportation funding – ended as the regional transportation plan was being completed. With respect to transit funds, State funding of transit systems was reduced by 10 percent in the 2011-2013 State budget (though some but not all of the State funds for transit were restored in the 2013-2015 State budget). Additionally, legislative efforts have not progressed since 2010 to provide a dedicated local funding source for transit or create a regional transit authority (RTA), which the year 2035 plan recognized as being necessary to fully implement the transit improvements and expansion recommended in the plan.

Map 1

CHANGES IN PUBLIC TRANSIT SERVICE PROVIDED IN THE REGION: 2005 AND 2012



Source: SEWRPC.

REVIEW OF AVAILABLE FUNDING TO IMPLEMENT THE 2035 PLAN

As part of this review and update of the year 2035 regional transportation plan, the estimated 2035 plan costs were compared to revenues expected to be available over the remaining 20 years of the plan. In 2014, the existing, and outlook for future, available revenue is far more constrained than in 2005 during development of the year 2035 regional transportation plan and in 2010 during its first update. As a result, it is no longer possible to conclude with this plan update that the year 2035 regional transportation plan was reasonably consistent with existing and reasonably expected to be available revenues and

the current limitations of those revenues. As such, it was necessary to consider the year 2035 plan as a "vision" plan, outlining the desirable transportation plan to address the current and future needs of the Region. It was further necessary to identify a "fiscally constrained" year 2035 regional transportation plan which includes those elements of the 2035 plan which can be achieved within the restrictions of the amounts and limitations of existing and reasonably expected to be available revenues.

Fiscally constraining the plan would result in a reduction in the amount of freeway that can be reconstructed by the year 2035 and the deferring of the planned extension of the Lake Parkway between Edgerton Ave and STH 11 in Milwaukee County. The principal effect on the transit element is a lack of the transit improvement and expansion identified under the 2035 plan, with the exception of the implementation of the City of Milwaukee streetcar project, along with about an 11 percent reduction from current transit service levels and an estimated average annual increase in transit fares above inflation.

Key Differences between Year 2035 Vision and Fiscally Constrained Plans

Freeway Reconstruction

- Vision Plan: 255 miles (all remaining segments)
- Fiscally Constrained Plan: 89 miles (see Map 2)

Public Transit Improvements and Expansion

- Vision Plan: 76,300 additional weekday vehicle miles of transit service for a 125 percent expansion from current levels
- Fiscally Constrained Plan: 6,900 fewer weekday vehicle miles of service (from current transit service levels) for an 11 percent decline, which would come from reductions in service frequency. There would be no improvements or expansion to the transit system, except for the Milwaukee streetcar.

Consequences of Current Fiscal Constraints

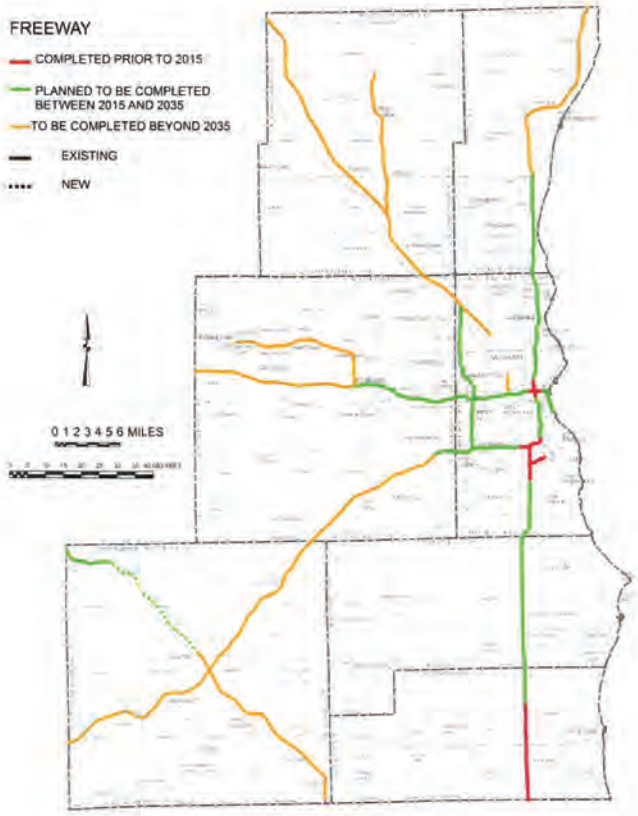
The gap in funding between estimated costs and existing and reasonably expected revenues will have significant negative consequences on the transportation systems in Southeastern Wisconsin:

- Traffic congestion and travel delays may be expected to significantly increase, and travel reliability will decrease, as highway capacity improvements are deferred and delayed and public transit is not improved and expanded in the Region's most heavily traveled corridors, urban areas, and activity centers.
- Transportation-related energy consumption and air pollutant emissions may be expected to be greater as a result of increased traffic congestion and a lack of improvement and expansion of public transit.
- Costly emergency repairs and inefficient pavement maintenance may be expected to be required on freeways as segments of freeway and freeway bridges reach the end of their service life and funding does not permit their reconstruction.
- For the estimated 10 percent of Region residents who are unable to use or cannot afford an automobile, mobility and access to the Region will be severely limited, including with respect to jobs, health care, education, grocery shopping, and other basic travel needs. This will impact minority and low income populations to a greater extent, as minority and low income populations have lower levels of automobile ownership and disproportionately use and are dependent on transit.
- Costs of public infrastructure and services, and the taxes necessary to support them, may be expected to be higher as improved and expanded public transit would not be available to support and promote more efficient higher density development.

All of these consequences may be expected to negatively impact economic growth in the Region and quality of life for its residents.

Map 2

ESTIMATED TIME FRAME FOR COMPLETION OF FREEWAY RECONSTRUCTION UNDER 2035 PLAN - FISCALLY CONSTRAINED



Source: WisDOT and SEWRPC.

ADVISORY COMMITTEE

The Advisory Committee on Regional Transportation System Planning provides guidance for this planning effort. The Committee promotes coordination and serves as a direct liaison between the regional planning effort and the government entities responsible for future implementation.

For the full committee list, see:
http://www.sewrpc.org/RTSPCommittee

FOR MORE INFORMATION OR TO MAKE A COMMENT

Website:	www.sewrpc.org\2014update
E-mail:	2014update@sewrpc.org
Phone:	(262) 547-6721
Fax:	(262) 547-1103
Mail:	P.O. Box 1607 Waukesha, WI 53187-1607

PUBLIC INFORMATIONAL MEETING

You are invited to attend an upcoming public informational meeting on the review and update of the year 2035 regional transportation plan. At the meeting, you can learn more about the 2035 plan and update, including plan forecasts, system performance, and funding available to implement the plan.

Thursday, May 22, 2014, 4:00-6:30 pm
O'Donnell Park Pavilion
Miller Room
910 E. Michigan Street, Milwaukee

Staff will be available in an "open house" format, allowing you to attend at any time between 4:00pm and 6:30pm, to individually answer questions and provide information. Attendees will have the opportunity to leave written comments, or speak to a court reporter or Commission staff for oral comments.

Persons with special needs are asked to contact the Commission office at (262) 547-6721 a minimum of 72 hours before the meeting so that appropriate arrangements can be made regarding access, review or interpretation of materials, or submission of comments.

SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION
W239 N1812 ROCKWOOD DRIVE
PO BOX 1607
WAUKESHA, WISCONSIN 53187-1607

First Class Mail
U.S. POSTAGE
PAID
WAUKESHA, WI
PERMIT NO. 645