

Preliminary Draft

SEWRPC Community Assistance Planning Report No. 279

MILWAUKEE COUNTY TRANSIT SYSTEM DEVELOPMENT PLAN: 2005-2009

Chapter I

INTRODUCTION

At the request of Milwaukee County, the Regional Planning Commission has prepared this transit system development plan for the Milwaukee County Transit System recommending service and capital improvements for the next five years. The preparation of the plan includes an evaluation of the performance of the existing transit system; an identification of unmet transit service needs; the design and evaluation of transit system improvement alternatives to address the identified performance deficiencies and unmet transit service needs; and development of a set of recommended operating and capital improvements. The plan also identifies the costs associated with the operating and capital improvements, and provides recommendations with respect to the funding of those costs.

NEED FOR THE STUDY

The conduct of a short-range transit planning study and the preparation of a new short-range plan for the Milwaukee County Transit System is needed to provide:

- An assessment of unmet transit travel needs for Milwaukee County residents using new population data from the 2000 U.S. Census and land use and economic development data collected by the Commission;
- A rigorous evaluation of transit routes and route segments to review their existing performance and to identify areas of good and poor performance;
- Consideration of transit system, individual route, and other alternatives to improve transit system performance and address unmet transit service needs;

- A short-range plan identifying recommended transit system service modifications and improvements and capital projects, thereby guiding annual transit system budget preparation and capital and operating project programming; and
- An estimate of short-term future transit system capital and operating needs, and comparison of those needs to existing and projected available funding, identifying any funding shortfalls, and considering alternatives to address those shortfalls.

The last transit system development plans prepared for the Milwaukee County Transit System were completed in 1996 and 1997 by the Milwaukee County Transit System staff and the Milwaukee County Department of Public Works staff, respectively. The plan completed in 1996 analyzed transit service needs and recommended a service improvement plan for the years 1998 through 2002.¹ The plan completed in 1997 considered and presented the transit system capital and operating needs and total funding requirements for the years 1997 through 2001². The design years of these plans have been reached and passed, and transit planning considering transit service and capital and operating needs has not been conducted in over five years. In addition, population data from the 2000 U.S. Census and land use and economic development data for the year 2000 collected by the Commission is now available and should be reviewed for changes that impact the use of, and need for, transit service by Milwaukee County residents.

A management performance audit of the Milwaukee County Transit System was completed by the Wisconsin Department of Transportation (WisDOT) in 2003.³ The audit, which considered transit service and ridership data through the year 2001, recognized the superior efficiency and effectiveness of the Milwaukee County Transit System, particularly when compared to similar transit systems serving urban areas of comparable size, finding that:

- Although the service area population for the transit system was 20 percent less than the average for its peer transit systems, the Milwaukee County Transit System carried almost 80 percent more passengers than the average for its peer transit systems.
- The transit system also carried the most passengers per capita, had the lowest operating cost per passenger, and had second highest farebox recovery rate among the peer transit systems.

¹See *Milwaukee Transport Services, Inc.*, Service Improvement Plan 1998-2002, 1996.

²See *Milwaukee County Department of Public Works*, Transit System Development Program for the Milwaukee County Transit System, Milwaukee County, Wisconsin, 1997-2001, 1997.

³See *Wisconsin Department of Transportation*, Transit System Management Performance Audit of the Milwaukee County Transit System, Performance Audit Summary, *Abrams-Cherwony and Associates*, April 2003.

- In terms of trends over the five years since the previous WisDOT performance audit, the transit system improved significantly in the number of performance measures found to be above average and improving, increasing from 37 percent of performance measures in the previous audit to 75 percent in the current audit.
- In terms of the measures used by the WisDOT to evaluate the performance of the transit systems receiving State transit operating assistance (passengers per capita, revenue vehicle hours per capita, passengers per revenue vehicle hour, farebox recovery rate, operating expense per passenger, and operating expense per revenue vehicle hour), the audit determined that the performance of the transit system is outstanding when compared to its peer transit systems.

While citing the superior performance of the Milwaukee County Transit System, the audit identified a deficiency in the area of transit system short-range planning. Specifically, a plan to address short-range service and capital needs and improvements had not been completed in seven years. The audit noted that the Milwaukee County Transit System has undergone fare increases and service reductions in the years since 2000, principally due to overall Milwaukee County budgetary constraints. The WisDOT audit report raised a concern that additional service reductions and fare increases due to such budget constraints could further erode the service quality, ridership, and performance of the system.

The service cuts and higher fares implemented by the Milwaukee County Transit System beginning in the year 2001 stand as evidence of the need to carry out long-standing recommendations for a dedicated source of funding to replace Milwaukee County property taxes as the local funds financing the costs of transit system operations, equipment, and facilities. There is currently great pressure on Milwaukee County officials to effectively reduce the level of property taxes. For the past few years, transit system officials have been able to use Federal transit aids that have been carried forward from previous years to avoid the need for increases in County tax levy funding and to limit the extent of service reductions and fare increases. Those Federal carryover funds are limited and may be fully exhausted in the next few years, after which more extensive service cuts and additional fare increases are likely to be needed if property taxes cannot be increased to finance the transit system. Milwaukee County is unique when compared to its peer transit systems serving urban areas of similar size in its reliance on property taxes to fund transit expenditures. The preparation of an updated transit system development plan will enable the County to examine and document the need for a dedicated local source of transit funds. The study will identify the required County public funding levels for the recommended program of operating and capital improvements, compare the required funding to historic and existing County funding levels, and identify the anticipated funding shortfall. The study will also identify the consequences of continuing to fund the local costs of the transit system principally through County property taxes by identifying the service reductions, fare increases, and other actions that likely will be needed assuming the continued reliance on County property taxes.

The long-range regional transportation system plan for Southeastern Wisconsin for the year 2020⁴ prepared in December 1997 and extended to the year 2025 in April 2003⁵ includes a public transit element (see Map 1-1) that recommends significant improvement and expansion of transit service in the Region. The implementation of all elements of the regional transportation plan—including improvement and expansion of public transit, arterial streets and highways including freeways, and transportation systems management—is essential to meeting the future travel needs of Southeastern Wisconsin. The improvement and expansion of public transit is recommended, in particular, to meet the travel needs of the transit dependent-population by providing a means of access to jobs, essential services, and other activities; provide additional capacity in major travel corridors and at major activity centers where it is not possible or desirable to accommodate all travel by automobile or to provide adequate parking; and contribute to the reduction of vehicle air pollutant emissions and fuel consumption.

In summary, the long-range regional transportation system plan for Southeastern Wisconsin recommends improving and expanding rapid transit bus connections to downtown Milwaukee and through Milwaukee to the other urban centers of Southeastern Wisconsin; developing an overlay of express bus routes with frequent service in the major travel corridors in Milwaukee County that will provide connections to the planned rapid transit routes and to the County's major activity centers; increasing the frequency of service on local bus routes serving the central portion of Milwaukee County; and improving and expanding local bus service to serve commercial and industrial development in the northern and southern portions of the County. The Milwaukee County Transit System short-range development plan can serve to consider an initial implementation stage of those recommendations over the next five years.

STUDY PURPOSE

This transit system development plan is intended to serve the following purposes:

1. To evaluate the performance of the existing transit system, including the effectiveness of the existing bus route structure and services and the financial performance of the system and its component bus routes so as to identify areas of effective and efficient transit service operation, along with areas of ineffective and/or inefficient operation;

⁴See *SEWRPC Planning Report No. 46, A Transportation System for the Southeastern Wisconsin Region: 2020, December 1997.*

⁵See *SEWRPC Memorandum Report No.157, Review and Reaffirmation of Year 2020 Regional Land Use and Transportation Plans and Extension of Plan Design Year to 2025, April 2003.*

Map 1-1

**PUBLIC TRANSIT ELEMENT
 OF THE ADOPTED REGIONAL
 TRANSPORTATION SYSTEM PLAN
 FOR SOUTHEASTERN WISCONSIN: 2025**

RAPID TRANSIT SERVICE

— BUS SERVICE IN MIXED TRAFFIC ON
 FREEWAYS AND SURFACE ARTERIAL
 STREETS AND HIGHWAYS

EXPRESS TRANSIT SERVICE

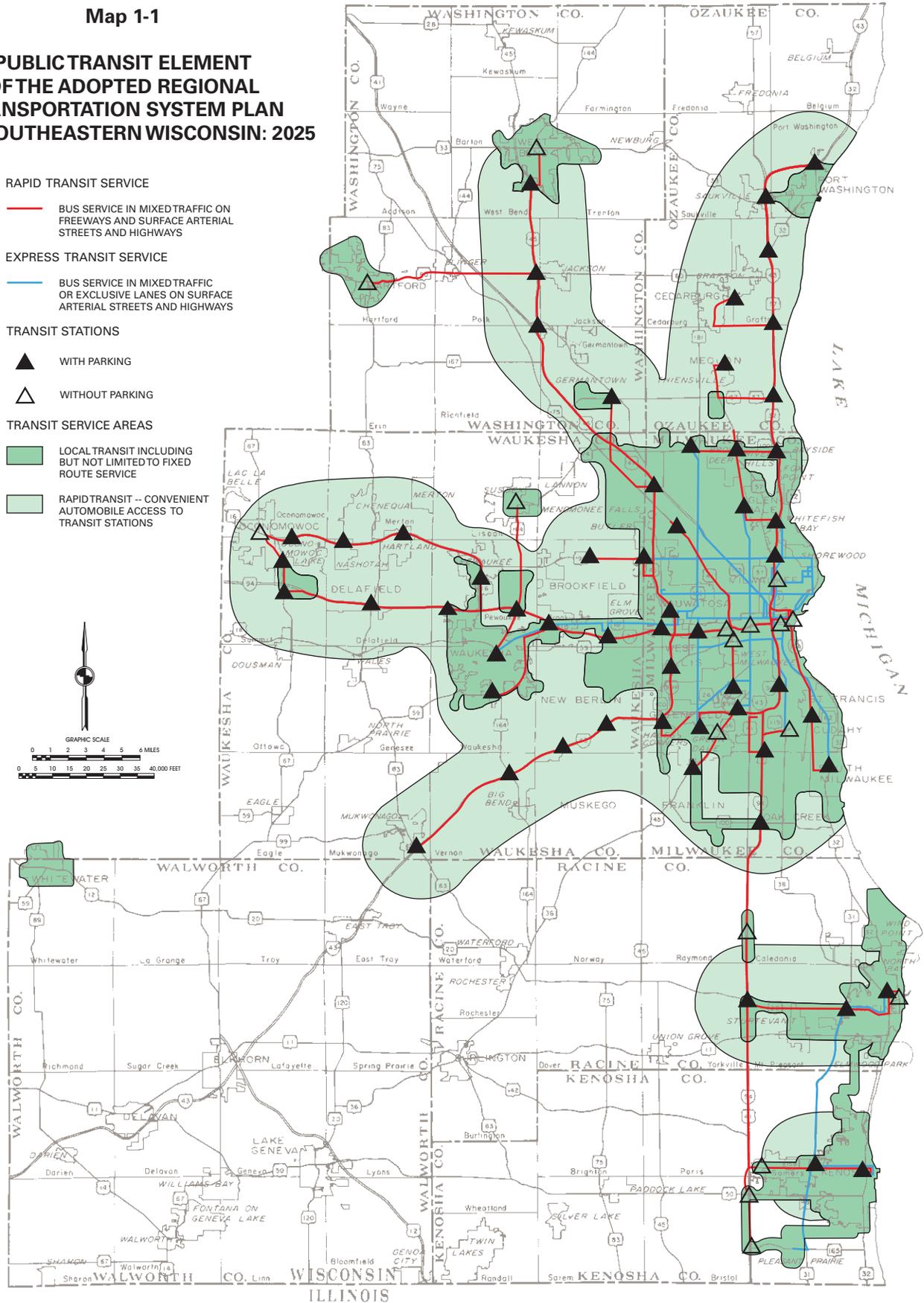
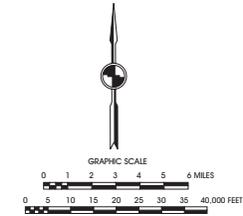
— BUS SERVICE IN MIXED TRAFFIC
 OR EXCLUSIVE LANES ON SURFACE
 ARTERIAL STREETS AND HIGHWAYS

TRANSIT STATIONS

- ▲ WITH PARKING
- △ WITHOUT PARKING

TRANSIT SERVICE AREAS

- LOCAL TRANSIT INCLUDING
 BUT NOT LIMITED TO FIXED
 ROUTE SERVICE
- RAPID TRANSIT – CONVENIENT
 AUTOMOBILE ACCESS TO
 TRANSIT STATIONS



Source: SEWRPC.

2. To identify those transit service needs of Milwaukee County residents which are not being met, or are not being met well, by the existing transit system, including travel which cannot be made within reasonable travel times on the existing system, or cannot be made on the existing system at all;
3. To design and evaluate transit system improvement alternatives that address the service problems and deficiencies of the existing system identified in the performance evaluation and the identified unmet transit service needs. The potential improvements considered will include:
 - a. Modifying, consolidating, or eliminating the routes, or route segments, identified in the performance evaluation as experiencing very poor performance;
 - b. Restoring some of the bus service that has been eliminated by the transit system in the recent past, and restructuring other existing routes and services;
 - c. Initiating additional routes or improving and expanding service to include new arterial express and freeway flyer bus routes, extensions of bus service to provide access to jobs, improving service frequencies, and expanding service periods;
 - d. Operating buses over exclusive lanes on major arterial streets, providing priority treatment of buses at signalized intersections, and using intelligent transportation systems (ITS) and advanced public transportation systems (APTS) technologies;
 - e. Providing for improved coordination with other public transit services which connect with the Milwaukee County Transit System, in particular the commuter-oriented bus routes serving Ozaukee, Washington, and Waukesha Counties;
 - f. Consideration of an initial stage of implementation of the transit element of the long-range regional transportation system plan for Southeastern Wisconsin, thereby promoting incremental plan implementation;
4. To recommend a five year plan of operating and capital improvements that address the service needs and performance deficiencies identified; and
5. To identify the potential funding shortfall attendant to implementing the plan recommendations, and to consider alternatives to address this shortfall including dedicated funding.

SCOPE OF WORK

The scope of the work for preparing the new transit system development plan involved the following:

1. Study organization, including the appointment by the Milwaukee County Executive of an advisory committee to guide the study effort;
2. The formulation of appropriate transit service development objectives and supporting performance standards;
3. The collation and collection of the socioeconomic, land use, and travel habit and pattern information pertinent to the evaluation of the existing and proposed transit services;
4. The analysis of the operation of the existing transit system, including the identification of any potential problems and deficiencies in that system and the unmet transit service needs;
5. The design of transit system improvement alternatives to address the identified problems and deficiencies in the existing transit services and any unmet transit service needs;
6. The evaluation of the proposed transit system improvement alternatives;
7. The selection and documentation of a recommended plan;
8. The identification of the potential funding shortfall attendant to implementing the plan recommendations, and the consideration of alternatives to address this funding gap; and
9. The identification of the actions to be taken by Milwaukee County to implement the recommended program of transit operating and capital improvements and transit funding mechanisms in an orderly and timely manner.

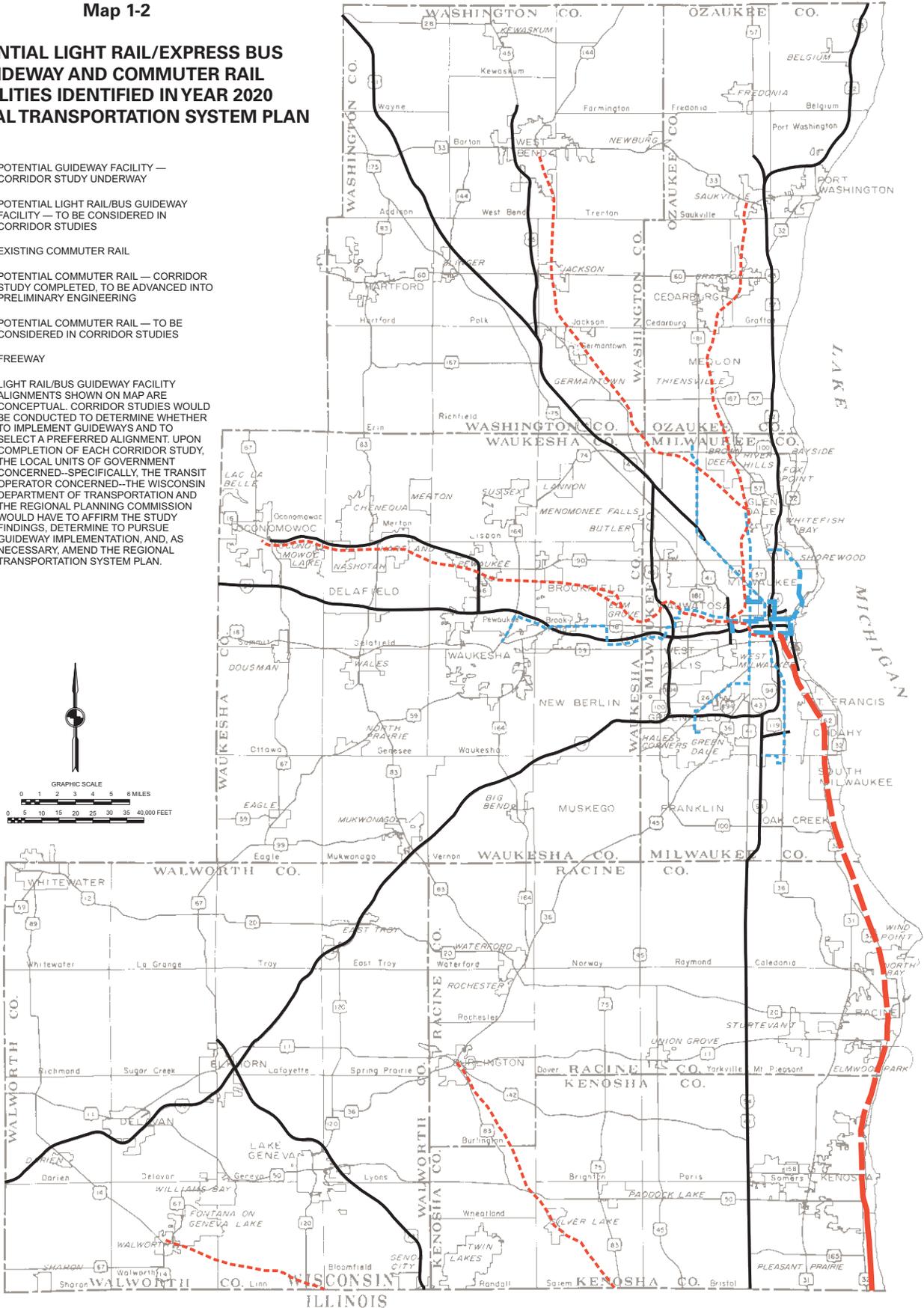
The study to prepare this new Milwaukee County Transit System development plan was undertaken to develop and recommend service changes and improvements for the fixed-route bus services provided by the Milwaukee County Transit System. Service options that included fixed-guideway transit services, including light rail, bus on exclusive guideway (facilities on existing freeways and arterial streets that are separated from adjacent traffic lanes or new facilities in their own right-of-way), and guided electric buses, were not considered under this study. The Commission's adopted regional transportation system plan for the year 2025 identifies potential corridors in

Map 1-2

**POTENTIAL LIGHT RAIL/EXPRESS BUS
 GUIDEWAY AND COMMUTER RAIL
 FACILITIES IDENTIFIED IN YEAR 2020
 REGIONAL TRANSPORTATION SYSTEM PLAN**

-  POTENTIAL GUIDEWAY FACILITY — CORRIDOR STUDY UNDERWAY
-  POTENTIAL LIGHT RAIL/BUS GUIDEWAY FACILITY — TO BE CONSIDERED IN CORRIDOR STUDIES
-  EXISTING COMMUTER RAIL
-  POTENTIAL COMMUTER RAIL — CORRIDOR STUDY COMPLETED, TO BE ADVANCED INTO PRELIMINARY ENGINEERING
-  POTENTIAL COMMUTER RAIL — TO BE CONSIDERED IN CORRIDOR STUDIES
-  FREEWAY

NOTE: LIGHT RAIL/BUS GUIDEWAY 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 UNITS OF GOVERNMENT CONCERNED—SPECIFICALLY, THE TRANSIT OPERATOR CONCERNED—THE WISCONSIN DEPARTMENT OF TRANSPORTATION AND THE REGIONAL PLANNING COMMISSION WOULD HAVE TO AFFIRM THE STUDY FINDINGS, DETERMINE TO PURSUE GUIDEWAY IMPLEMENTATION, AND, AS NECESSARY, AMEND THE REGIONAL TRANSPORTATION SYSTEM PLAN.



Source: SEWRPC

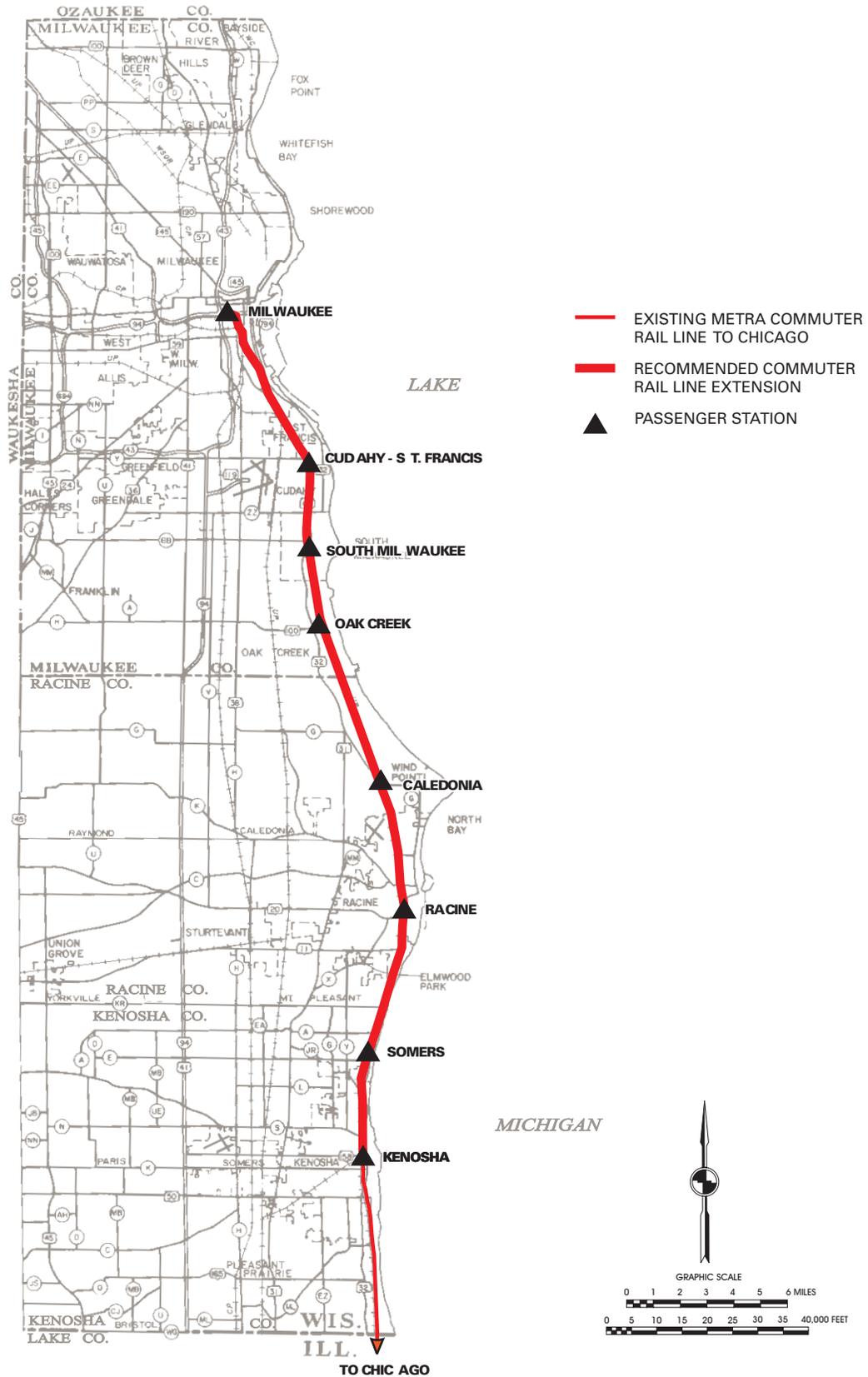
Milwaukee County (see Map 1-2) which may support such improved transit facilities and upgrading from bus transit in mixed traffic. However, these fixed-guideway transit alternatives are to be considered in corridor transit alternatives analysis studies which consider both short- and long-range transit service needs. One such study has recently been completed for the extension of commuter rail from Kenosha to Racine and Milwaukee (see Map 1-3). A second study that is currently underway, known as the Milwaukee Downtown Transit Connector Study, is considering the operation of buses in exclusive lanes on arterial streets (existing lanes that are reserved for use only by buses during part of each weekday) and the operation of guided electric buses as potential service improvements within central Milwaukee County (see Map 1-4). The implementation of commuter rail service in the Kenosha-Racine-Milwaukee corridor may be expected to have relatively minor impacts on Milwaukee County Transit System bus routes. However, if the downtown connector service in central Milwaukee County proceeds to fruition within the next five years, some changes to the alignments and schedules of the Milwaukee County bus routes will need to be considered to integrate bus services with the downtown connector service, and this short-range plan will require appropriate amendment.

The transit system development plan also identifies the changes to the service area and operating characteristics of the paratransit service for disabled individuals provided through the Milwaukee County Transit Plus service, and the actions needed to keep these aspects of the paratransit service in compliance with Federal regulations. However, a comprehensive analysis of the Transit Plus service that would include a performance evaluation identifying areas of efficient and inefficient service operation and the potential unmet service needs of the County's disabled population was not undertaken during the preparation of this transit system development plan. Such an analysis would best be undertaken through the conduct of a separate study under the guidance of a separate advisory committee with representatives from a broad spectrum of the disabled community and organizations serving the disabled population.

STUDY AREA

The focus of this Milwaukee County Transit System development plan is on the transit service needs of Milwaukee County residents. The plan will, therefore, principally focus on the fixed-route bus services provided by the Milwaukee County Transit System within Milwaukee County, that is, those services that are sponsored by Milwaukee County and funded in part with Milwaukee County property tax dollars. This transit system development plan, however, will also review existing intercounty commuter bus services connecting Milwaukee County to adjacent counties, identify service deficiencies and unmet travel needs with respect to travel by Milwaukee County residents, and design and evaluate potential service changes and improvements to existing routes and new or expanded bus services to meet the intercounty travel needs of Milwaukee County residents. Existing intercounty transit service, with one exception, is sponsored by local governments other than Milwaukee County—Ozaukee, Washington, and Waukesha Counties and the City of Racine—and any local funds needed to support service operation are provided by these local governments. Only the bus routes operating between Milwaukee County and

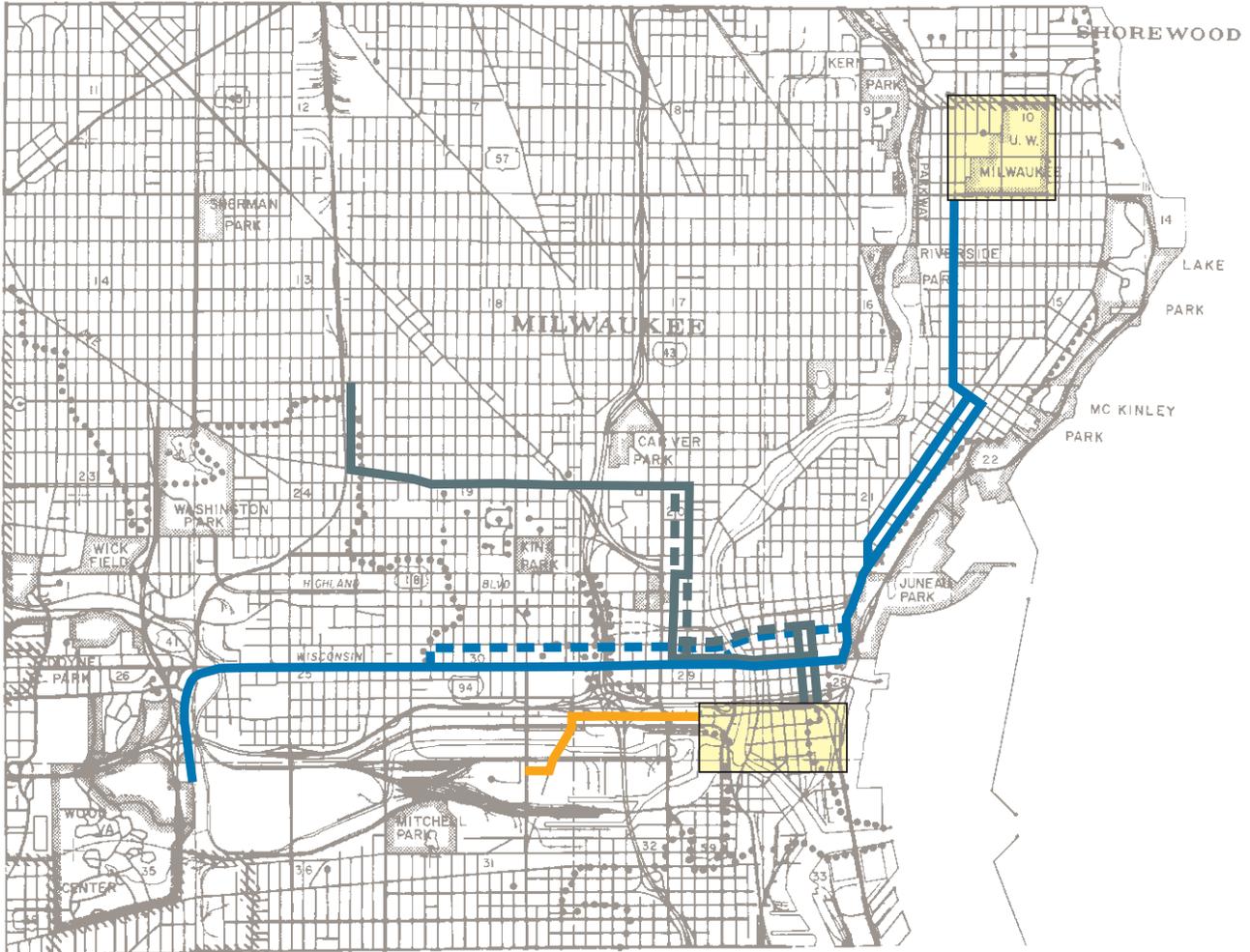
RECOMMENDED COMMUTER RAIL LINE IN THE KENOSHA-RACINE-MILWAUKEE CORRIDOR



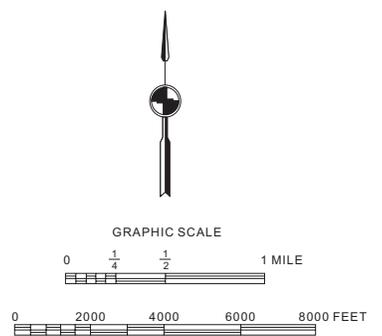
Source: SEWRPC.

Map 1-4

POTENTIAL TWO-ROUTE SYSTEM BEING CONSIDERED UNDER THE
MILWAUKEE DOWNTOWN TRANSIT CONNECTOR STUDY: JANUARY 2004



-  ROUTE 1
-  ROUTE 2
-  ROUTE VARIATIONS
-  FUTURE ROUTE EXTENSIONS
-  AREAS REQUIRING FURTHER REVIEW



Source: Milwaukee Downtown Transit Connector Study.

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STUDY ORGANIZATION

The preparation of this transit system development plan was a joint effort of the staffs of Milwaukee County and the Southeastern Wisconsin Regional Planning Commission. To provide guidance to the technical staffs in the preparation of this plan, and to involve concerned and affected public officials and citizen leaders more directly and actively in the design and evaluation of transit improvement proposals, the Milwaukee County Executive created a 13-member Milwaukee County Transit Development Program Advisory Committee. The full membership of this Committee is listed on the inside front cover of this report.

[A copy of the Advisory Committee membership roster is available [here](#).]

SCHEME OF PRESENTATION

After this introductory chapter, seven chapters present the findings of the major inventories and analyses conducted under the planning effort, and describe the plan recommendations. The specific chapters consist of:

- Chapter II, “Land Use and Travel Patterns,” which describes the land use, demographic, and economic characteristics of, and the resident travel habits and patterns in, the County.
- Chapter III, “Existing Transit Services,” which provides a detailed description of the current characteristics of the Milwaukee County Transit System, as well as a summary of other public transit services currently available within the County.
- Chapter IV, “Public Transit Service Objectives and Standards,” which provides a set of transit service objectives and supporting performance standards and design criteria.
- Chapter V, “Evaluation of the Existing Milwaukee County Transit System,” which describes how well the existing transit system met the objectives and standards, thereby identifying service-related problems and deficiencies and unmet transit service needs.
- Chapter VI, “Alternative and Recommended Transit System Improvements,” which identifies, describes, and evaluates the transit system improvement alternatives.

- Chapter VII, “Recommended Transit System Development Plan,” which details the transit system improvements for 2005 through 2009 that have been recommended by the Advisory Committee.
- Chapter VIII, “Funding and Implementation Actions”, which identifies the actions needed to finance the recommended transit system improvements and the actions to be taken by the concerned units and agencies of government to implement the new plan.
- Chapter IX, “Summary and Conclusions,” which provides a brief overview of the significant findings and recommendations of the study.

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