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# COMMUNITY ASSISTANCE PLANNING REPORT NUMBER 286

# **RACINE COUNTY PUBLIC TRANSIT PLAN: 2013-2017**

# Prepared by the

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

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# **Chapter I**

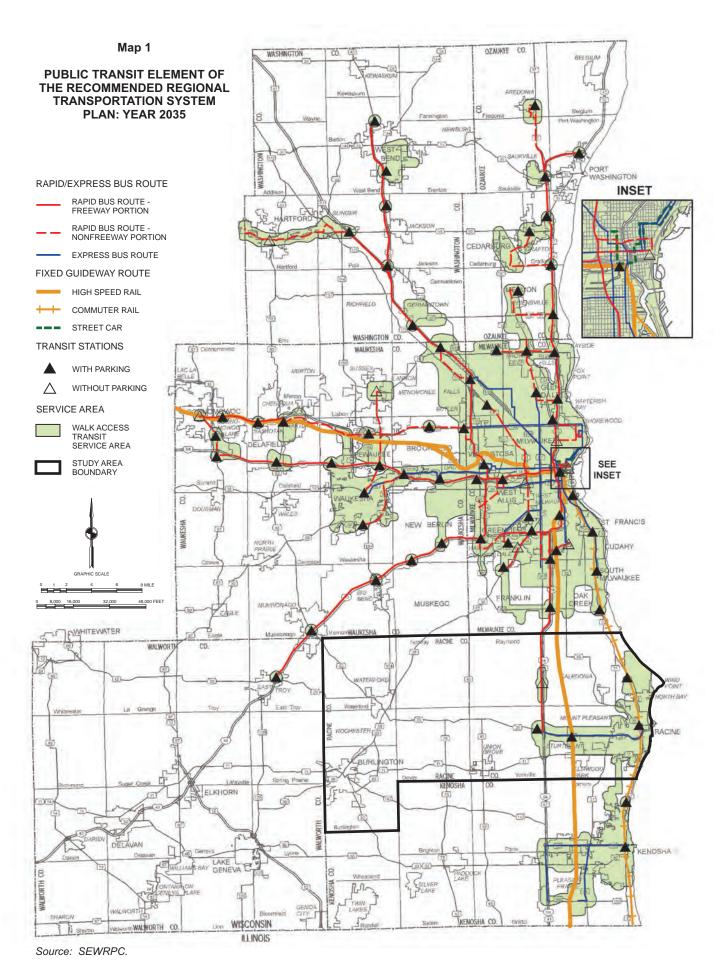
# INTRODUCTION

At the request of the City and County of Racine, the Southeastern Wisconsin Regional Planning Commission has prepared this study of public transit in Racine County for the years 2013-2017. The Regional Planning Commission has routinely prepared short-range transit system development plans for the City of Racine and the surrounding area east of IH 94. The last short-range plan prepared for the City was for the period 1998-2002 and outlined a plan for improving and expanding local transit service in the Racine area, including operating the bus routes using pulse scheduling to facilitate transfers, relocating the downtown transfer point, and extending service hours to include evening and Sunday operations. The City requested that the present study include an update of the transit system development plan for its transit system. Racine County requested that the study address the potential need for public transportation service within the portion of Racine County west of IH 94; for service connecting Racine County to adjacent counties; and for service connecting western and eastern Racine County.

This report provides an in-depth evaluation of the current operations of the City of Racine Belle Urban System (BUS), identification of unmet transit travel needs, and recommendations for transit service and capital improvements for the BUS. The report also identifies all other existing public and human services transportation in Racine County; identifies potential unmet transit travel needs within Racine County and between Racine County and other Counties; and considers transit service improvement alternatives that could address problems or deficiencies identified in the evaluation, or unmet needs. The plan includes recommendations for the coordination of all public transit services recommended for Racine County.

The plan was conducted within the context of the continuing regional transportation planning program. In 2006, the Commission adopted a regional transportation system plan with a design year 2035. The year 2035 regional transportation plan includes a public transit element that recommends an approximate doubling of transit service in the Region over a 30-year period (see Map 1). The short-range plan presented in this report should be

<sup>&</sup>lt;sup>1</sup>See SEWRPC Community Assistance Planning Report No. 233, Racine Area Transit System Development Plan: 1998-2002, October 1997.



considered an initial implementation stage of the transit recommendations for the Racine area presented in the year 2035 regional transportation plan.<sup>2</sup>

The preparation of the transit plan included:

- Analysis of the existing land use patterns within Racine County, with particular attention given to
  identifying concentrations of employment and associated transit needs for work commuting and those
  facilities serving the County's seniors, people with disabilities, and low-income individuals;
- Analyses of the travel habits, patterns, and needs of Racine County residents, particularly transit-dependent populations;
- A thorough evaluation of the performance of the existing public and private transportation services operating in Racine County; and
- A careful evaluation of alternative courses of action for providing new or improved transit services that include consideration of the financial commitment and actions necessary to implement them.

The transit service improvements that are recommended under this new transit plan are for the period 2013 through 2017 and represent a refinement, and improvement or expansion, of the existing transit services that have evolved in Racine County.

### **STUDY AREA**

This report will focus on the public transit services and needs within Racine County. The study will also consider the need to provide transit services between Racine County and major activity centers, such as employment centers and educational institutions in adjacent counties.

### STUDY PURPOSE

This report is intended to serve the following purposes:

- To evaluate the performance of the existing transit services in the County including City of Racine BUS
  routes and services, and the Racine County Human Services Department specialized transportation
  programs. This evaluation includes reviewing the BUS, the effectiveness of the existing route structure
  and schedules, and the financial performance of each service and component routes so as to identify areas
  of effective and efficient transit service operation, along with areas of ineffective or inefficient operation;
- 2. To identify those transit service needs of Racine County residents which are not being met, or not being met well, by existing transit services, including travel which cannot be made with existing services within reasonable travel times, or cannot be made with those services at all;

<sup>&</sup>lt;sup>2</sup>The public transit element of the year 2035 plan recommends significant improvement and expansion of transit service in the Region over the next 30 years. (See SEWRPC Planning Report No. 49, A Regional Transportation System Plan for Southeastern Wisconsin: 2035, June 2006). Specific recommendations in the long-range plan pertaining to the Racine area include: improved and expanded local bus service for the greater Racine area with more frequent service and longer service hours; extending local bus service to developing areas, especially to serve individuals traveling to and from work; and extending or providing rapid and express bus service, and commuter rail service, through eastern Racine County including the City of Racine, connecting to downtown Milwaukee and the City of Kenosha.

- 3. To design and evaluate alternative transit service improvements for the City of Racine BUS routes and Dial-A-Ride Transport (DART) paratransit service that address the problems and deficiencies identified in the performance evaluation;
- 4. To design and evaluate transit service improvement alternatives that address the unmet transit service needs in Racine County outside of the BUS service area, including west of IH 94;
- 5. To design and evaluate transit service improvement alternatives that address the unmet transit service needs between Racine County, including the City of Racine, and surrounding counties;
- 6. To prepare a planning document that will serve as a guide for County, City, and BUS staff and officials with regard to implementing transit recommendations over a five-year period; and
- 7. To develop a plan that will ensure adequate financing of existing and planned transit services through available Federal and State transit funding programs.

### SCOPE OF WORK

The scope of the work for preparing the transit plan involves the following eight steps:

- 1. Study organization;
- 2. The formulation of appropriate transit service objectives and supporting performance standards for both the City and County;
- 3. The collection of the socioeconomic, land use, and travel pattern data pertinent to the evaluation of the existing and proposed transit services;
- 4. The analysis of the operation of existing transit services, including the identification of any potential deficiencies and unmet transit service needs;
- 5. The design of transit service changes that could address the problems and deficiencies that were identified and any unmet transit service needs;
- 6. The evaluation of the proposed transit service changes;
- 7. The selection and documentation of a recommended plan; and
- 8. The identification of the actions to be taken by the City of Racine, Racine County, and each of the other concerned units of government to implement the recommended transit system improvements in an orderly and timely manner.

# STUDY ORGANIZATION

The preparation of this transit plan was a joint effort by the staffs of Racine County, the City of Racine, 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 development of transit service policies and improvement proposals, an Advisory Workgroup was formed that includes representatives from all units of government in Racine County and a wide variety of agencies and populations with an interest in transportation in the County. Figure 1 provides a list of the agencies and organizations invited to serve on the Workgroup.

### Figure 1

# AGENCIES AND ORGANIZATIONS INVITED TO PARTICIPATE IN THE RACINE COUNTY TRANSIT PLAN WORKGROUP

**Racine County Government** 

City of Racine Government

County Executive's Office

City of Burlington

Village of Caledonia

Village of Rochester

Village of Sturtevant

Village of Waterford

Village of Wind Point

Village of Union Grove

Village of Mt. Pleasant

Health and Human Development Committee

**Human Services Department** 

Department of Planning and Development

Workforce Development Center

Mayor's Office

Department of City Development

**Transportation Department** 

Transit and Parking Commission

Other Government

Town of Burlington
Town of Dover
Town of Norway
Town of Raymond

Town of Waterford Town of Yorkville

Wisconsin Department of Transportation

Educational Institutions with

Student Transportation Needs

Business Organizations

Racine Area Manufacturers and Commerce

Greater Union Grove Area Chamber

of Commerce

Waterford Area Chamber of Commerce Burlington Chamber of Commerce Racine County Economic Development

Corporation

Non-Profit Organizations

Racine County Opportunity Center Racine Hispanic Business and Professionals Association Racine Interfaith Coalition Racine Literacy Council

Burlington Area School District

Racine Unified School District

Union Grove High School District

Waterford Union High School District

Society's Assets, Inc.

Urban League of Racine and Kenosha

Transit Service Providers

Racine Belle Urban System

Alliance on Mental Illness of Racine County

American Red Cross
Careers Industries, Inc.

First Choice Pre-Apprentice Jobs Training

Hispanic Roundtable

Love, Inc.

First Transit, Inc.

Source: SEWRPC.

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, "Existing Transit Services," which describes the current public and private transit services operating in Racine County.

- Chapter III, "Land Use and Travel Patterns," which describes the land use, demographic, and economic characteristics of, and the travel habits and patterns in, Racine 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 Belle Urban System and Identification of Unmet Transit Service Needs," which describes how well existing transit services meet the objectives and standards, thereby identifying service-related problems and deficiencies and unmet transit service needs within the County.
- Chapter VI, "Transit Service Improvement Alternatives," which provides a description of the alternative transit service improvements for 2013 through 2017 considered and recommended by the Workgroup.
- Chapter VII, "Recommended Transit Service Improvement Plan," which presents the final plans recommended by the Workgroup for consideration by the City of Racine and Racine County.
- Chapter VIII, "Summary and Conclusions," which provides a brief overview of the significant study findings and plan recommendations.

# **Chapter II**

# **EXISTING TRANSIT SERVICES**

# **INTRODUCTION**

An understanding of the existing public transit system in the Racine area is basic to the preparation of any sound transit study and plan. This understanding should be based on pertinent information describing the operating characteristics and ridership levels for the current City transit system and for the other major transit services within Racine County.

This chapter presents a description of the City of Racine's public transit system, the Belle Urban System (BUS), including service operations, equipment and facilities, ridership, and costs. This is followed by descriptions of the operations of other major public transit service providers serving Racine County, including local and intercity bus service, railroad passenger service, taxicab service, and human services transportation providers for seniors and people with disabilities.

### THE BELLE URBAN SYSTEM

Urban public transit service has been available in the City of Racine since 1883, when privately owned and operated street railway operations were initiated. Public transit service in the Racine area was provided exclusively by streetcars until 1928, when the first feeder-bus route was instituted. An extensive street paving program was undertaken by the City during the Depression of the 1930s, and a decision was made then to convert to buses rather than to replace street car track where the repaving program affected the streetcar routes. Continuous declines in ridership and profits during the period after World War II resulted in several changes of private ownership. In July 1975, the City of Racine acquired the transit system from the last private operator and began public operation of the Racine transit system, renaming it the "Belle Urban System".

### **Administrative Structure**

The BUS, owned by the City of Racine, is currently privately operated by a management firm, First Transit, with their own staff but under the direct supervision of the City of Racine Department of Transportation. The policy-making body of the BUS is the Racine Transit and Parking Commission, consisting of five members appointed by the Mayor and confirmed by the Common Council. The powers of the Transit and Parking Commission include all the powers necessary to acquire, operate, and manage the BUS. However, the Racine Common Council has the ultimate responsibility for review and approval of certain matters, including the system's annual budget.

### **Fixed-Route Bus Service**

During 2102, fixed-route bus service was provided by the BUS over the 10 routes shown on Map 2. The system includes nine regular bus routes and one peak-hour tripper route (serving J. I. Case High School). The system has operated essentially the same existing routes and schedules since 2004, when the City opened the Racine Metro Transit Center (renamed the Corinne Reid-Owens Transit Center in 2010) on the edge of the central business district (CBD). Several of the system's routes were restructured in 2002 when the central transfer point for the system was relocated from Monument Square to a temporary site adjacent to the Transit Center while it was being completed. The City initiated use of "pulse" scheduling on the system at that time. The current operating characteristics, service levels, and fares for the system are summarized below.

### Regular Routes

All nine regular routes operate largely within the City of Racine with service to portions of the Villages of Caledonia, Elmwood Park, Mt. Pleasant, North Bay, Sturtevant, and Wind Point. Eight of the nine regular routes are radial in design, so that they either start from or pass through the Corinne Reid-Owens Transit Center, located on State Street approximately one block east of Memorial Drive. One route, No. 27, acts as an extension of Route No. 3. Route No. 20 operates as an express shuttle route that serves major employment centers in the Villages of Mt. Pleasant and Sturtevant, and the Town of Yorkville.

The Transit Center provides off-street transfer connections for all regular routes except No. 27. On weekdays, buses from the other eight regular routes meet at the Transit Center on the same schedule to facilitate transfers between routes. Transfer opportunities are also possible at other locations where individual routes meet or cross each other.

### Peak-Hour Tripper Route

Route No. 30 operates as a weekday peak-hour route between the southeast side of the City of Racine, the Transit Center, and J. I. Case High School located in the Village of Mt. Pleasant at Washington Avenue (STH 20) and Oakes Road.

### Service Levels

The operating characteristics and service levels in 2012 for the regular routes of the BUS are presented in Table 1. Service over the regular routes was provided between 5:10 a.m. and 10:10 p.m. on weekdays, between 5:40 a.m. and 6:40 p.m. on Saturdays and between 9:40 a.m. and 6:40 p.m. on Sundays. The routes were operated with service frequencies of 30 to 60 minutes during weekday peak and midday periods, 60 minutes during weekday evenings, and 60 minutes all day Saturdays and Sundays.

#### Fares

As shown in Table 2, the base cash fare for the regular route service was \$2.00 per trip for adults and \$1.50 per trip for youth. Children under the age of six ride free if accompanied by an adult. The senior and disabled fare is \$1.00 per trip. Passengers may also purchase books of 10 tickets and monthly passes which are good for unlimited riding during one month. Qualifying disabled passengers receive more than a 50 percent discount on the monthly pass.

The Racine Unified School District reimburses the BUS at a varying rate based upon the total number of passes issued per school day. The District provides yellow school bus transportation to and from public and private schools for pupils who meet certain requirements. In addition, some students who meet these requirements are provided with BUS special student passes or tokens so they can ride to and from school on the City transit system. All of the District's school day transportation service is provided at no direct cost to the student.

The historic transit fares for the BUS since it began public operation in 1975 are shown in Figure 2 in both actual dollars and constant 1975 dollars. After being reduced in May 1976 to promote transit ridership, passenger fares remained stable through October 1982, but have increased several times since then in response to increasing costs of operation, declining ridership and limited Federal/State operating subsidies. The BUS increased the adult cash fares in 2012 by 33 percent, from \$1.50 to \$2.00 per trip, the senior and disabled cash fare by 33 percent from \$0.75 to \$1.00, the monthly pass by 30 percent from \$50.00 to \$65.00, and the disabled pass by 20 percent from \$25.00 to \$30.00. In constant 1975 dollars, the current adult fare of \$2.00 is slightly higher than the 1975 rate of \$0.40 per trip that was charged by the private transit operator when the City of Racine purchased the transit system.

Table 1

THE BELLE URBAN SYSTEM OPERATING AND SERVICE CHARACTERISTICS BY ROUTE: SEPTEMBER 2012

		Service Availability						
		Weekdays		Satu	Saturday		nday	
Bus Route	Round Trip Route Length (miles)	Start Time First Trip (a.m.)	Start Time Last Trip (p.m.)	Start Time First Trip (a.m.)	Start Time Last Trip (p.m.)	Start Time First Trip (a.m.)	Start Time Last Trip (p.m.)	
1	22.5	5:26	9:39	5:39	5:47	9:39	5:47	
2	18.2	5:40	6:13	6:10	5:54			
3	20.3	5:11	10:10	5:41	5:55	9:41	5:55	
4	19.6	5:14	9:44	5:44	6:44	9:44	5:54	
5	23.3	5:21	6:24	5:51	5:54			
7	19.3	5:31	9:44	5:25	6:10	9:47	6:10	
20	29.7	6:10	5:38					
27	11.6	6:41	6:14					
30 <sup>a</sup>	7.3	6:11	3:15					
86	14.6	5:31	10:10	5:31	6:10	9:31	6:10	
System Total	186.4							

		Service Frequency (Minutes)						
		Weel						
Bus Route	A.M. Peak	Midday	P.M. Peak	Evening	Saturday	Sunday		
1	30	30-60 <sup>b</sup>	30	30-60 <sup>b</sup>	60	60		
2	30	30-60 <sup>b</sup>	30		60			
3	30	30-60 <sup>b</sup>	30	30-60 <sup>b</sup>	60	60		
4	30	30-60 <sup>b</sup>	30	30-60 <sup>b</sup>	60	60		
5	30	30-60 <sup>b</sup>	30		60			
7	30	30-60 <sup>b</sup>	30	60	60	60		
20	3 trips	1 trip	3 trips					
27	30	30	30					
30 <sup>a</sup>	2 trips	1 trip	2 trips					
86	60	60	60	60	60	60		

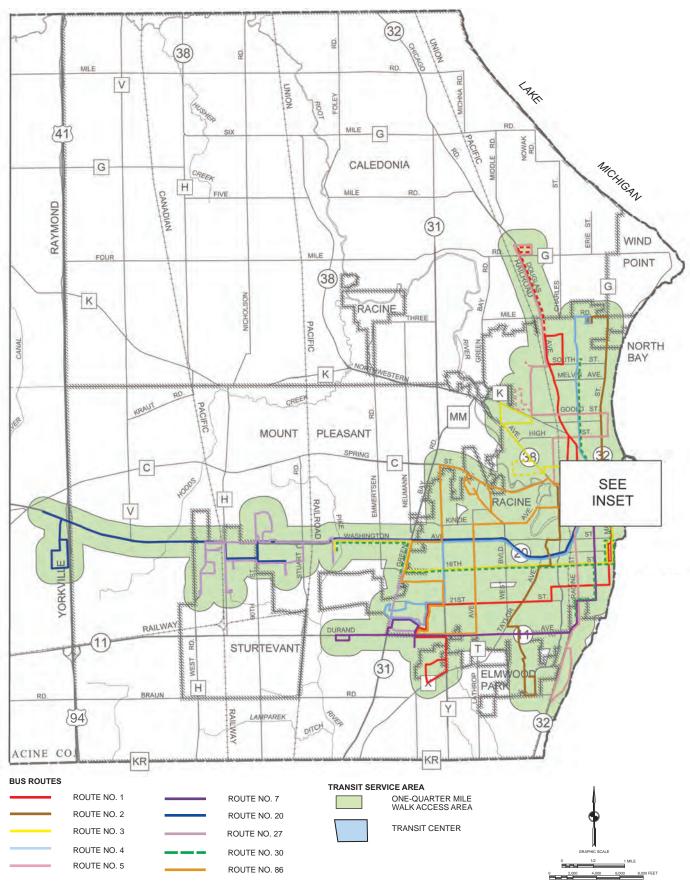
		Buses Required							
		Saturday	Sunday						
Bus Route	A.M. Peak	Midday	P.M. Peak	Evening	All Day	All Day			
1	3	2	3	2	2	2			
2	3	2	3	1	2				
3	3	2	3	2	2	2			
4	3	2	3	2	2	2			
5	3	2	3		2				
7	3	2	3	1	2	1			
20	2	1	1	1					
27	1	1	1						
30 <sup>a</sup>	6		6						
86	1	1	1	1	1	1			
System Total	28	15	27	10	13	8			

<sup>&</sup>lt;sup>a</sup>Operates only on days when schools in the Racine Unified School District are in session.

<sup>&</sup>lt;sup>b</sup>Service alternates between 30 and 60 minute frequencies.

Map 2

FIXED-ROUTE TRANSIT SERVICE PROVIDED BY THE BELLE URBAN SYSTEM: SEPTEMBER 2012



Map 2 Inset

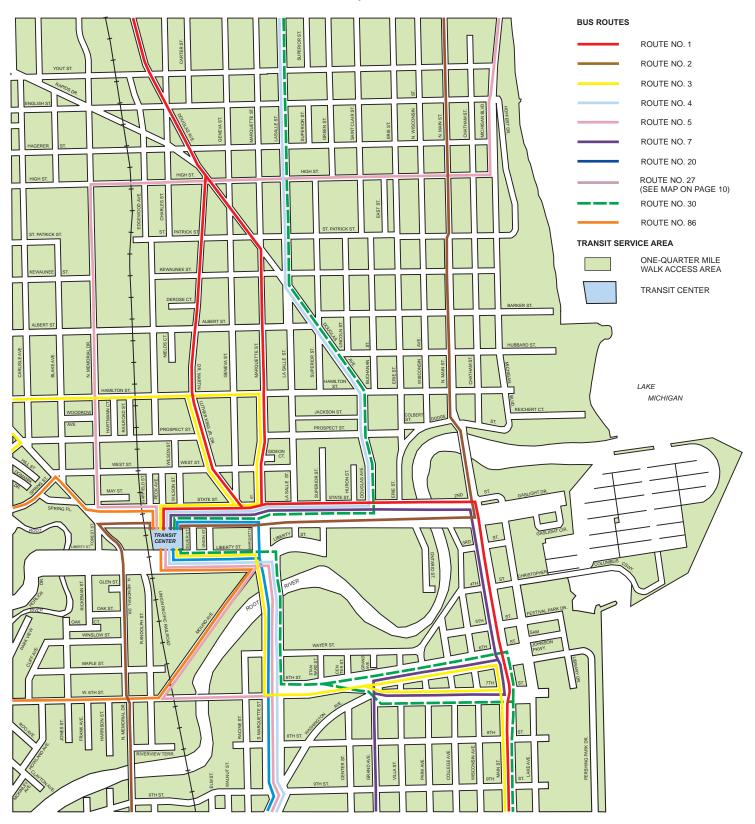
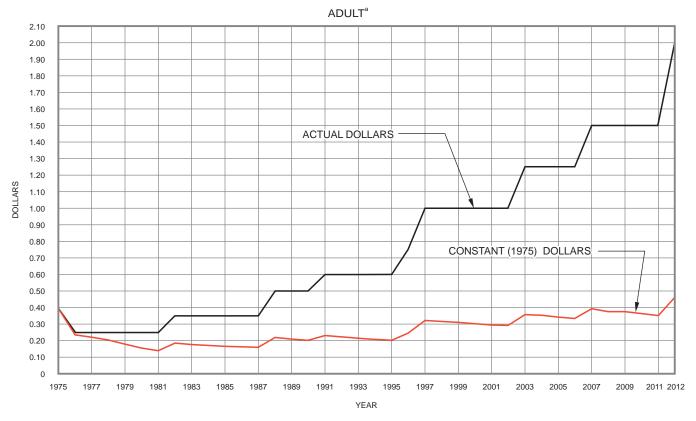
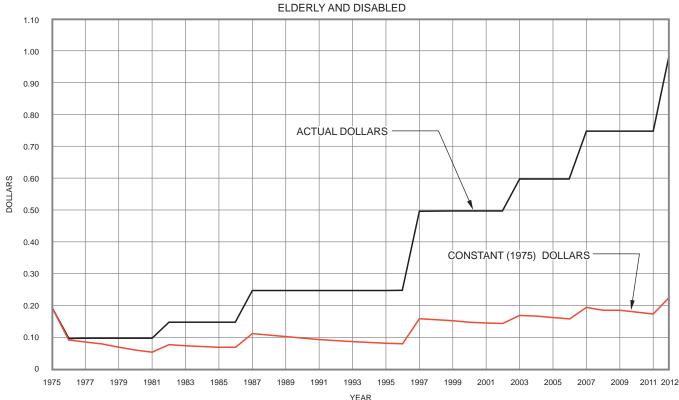


Figure 2
HISTORIC FARES CHARGED BY THE BELLE URBAN SYSTEM FOR FIXED-ROUTE BUS SERVICE: 1975-2012





<sup>&</sup>lt;sup>a</sup> UNTIL 2003, THE ADULT FARE FOR THE BELLE URBAN SYSTEM HISTORICALLY COVERED ALL PERSONS AGED 6 THROUGH 64, INCLUDING SCHOOL-AGE CHILDREN. IN 2003, THE TRANSIT SYSTEM ESTABLISHED AYOUTH FARE WHICH PROVIDED LOWER FARES FOR STUDENTS AGED 6 TO 17. THE YOUTH FARE WAS ESTABLISHED AT \$1.10 PER RIDE IN 2003 AND WAS INCREASED TO \$1.25 PER RIDE IN 2007 AND AGAIN TO \$1.50 PER RIDE IN 2012.

Table 2

FARES CHARGED BY THE BELLE URBAN SYSTEM FOR FIXED-ROUTE BUS SERVICE: 2012

		Youth		Senior <sup>a</sup>	Disabled <sup>b</sup>
Fare Category	Adults (ages 18 through 64)	Ages 0-5°	Ages 6-17 <sup>d</sup>	Ages 65 and Older	Ages 6 and Older
Cash	\$2.00 per trip	Free	\$1.50 per trip	\$1.00 per trip	\$1.00 per trip
10 Ride Pass	\$5.00	Free	\$15.00	\$15.00	\$15.00
Transfers	Free	Free	Free	Free	Free
Monthly Pass (Unlimited Rides)	\$65.00	Free	\$65.00	\$30.00	\$30.00
School Pass			<sup>e</sup>		

<sup>&</sup>lt;sup>a</sup>To qualify, a person must be at least 65 years of age. Upon application submittal and acceptance, a reduced fare photo identification card is issued and must be shown at the time the reduced fare is paid.

### Paratransit Service for People with Disabilities

In addition to fixed-route bus service, the City of Racine also provides paratransit service to serve the travel needs of people with disabilities who are unable to use the fixed-route bus system. This service is provided to comply with Federal regulations implementing the public transit requirements of the Americans with Disabilities Act (ADA) of 1990. These regulations require each public entity operating a fixed-route transit system to provide paratransit service to qualifying people with disabilities as a complement to its fixed-route bus service.

The current eligibility requirements and service characteristics of the City's paratransit service are summarized in Table 3. The paratransit service is designed to provide door-to-door transportation to pre-certified individuals with physical or cognitive disabilities who are unable to use the City's bus service. Prior to October 2006, the City's paratransit service was provided under a program administered by the Racine County Human Services Department utilizing a private contractor. Currently, the BUS directly provides paratransit service through its Dial-a-Ride Transport (DART) service utilizing a fleet of seven mini-buses to transport eligible individuals on a next-day reservation basis for trips made within three-quarters of a mile of a bus route during the hours of operation for the bus system. The service fare is \$3.00 in cash or prepaid tickets for each one-way trip. The BUS approves applications for DART users and maintains an eligibility list.

# **Equipment and Facilities**

The current fleet of the BUS, as of 2012, is listed in Table 4 and consists of 42 buses.

- Thirty-five diesel-powered buses are used on the 10 regular and special tripper routes of the BUS. Twenty-one low-floor buses with wheelchair ramps were put into service in 2004, 2009, 2011, and 2012. Fourteen buses equipped with wheelchair lifts were placed into service in mid-1997.
- Seven mini-buses with lifts are currently used to provide DART paratransit services.

<sup>&</sup>lt;sup>b</sup>To qualify, a person must submit an application and provide a physician's certificate of disability. Upon acceptance, a photo identification card is issued and must be shown at the time the reduced fare is paid.

<sup>&</sup>lt;sup>c</sup>When accompanied by an adult (4 children maximum for free fare, each additional child \$0.50).

<sup>&</sup>lt;sup>d</sup>With valid elementary or secondary school identification card.

<sup>&</sup>lt;sup>e</sup>The Racine Unified School District contracts with the Belle Urban System to transport students if they live within certain boundaries jointly agreed upon by the City of Racine and the District and if the school they attend is further than two miles from their home. Such students are issued a school bus pass allowing them to ride the transit system free on regular school days. Otherwise, students pay the youth fare.

Table 3

OPERATING AND SERVICE CHARACTERISTICS FOR THE CITY OF RACINE DIAL-A-RIDE (DART) TRANSPORTATION SERVICE FOR PEOPLE WITH DISABILITIES: 2012<sup>a</sup>

Characteristics	DART Service Provided by Belle Urban System
Eligibility	<ul> <li>Any person with a physical or cognitive disability that prevents them from using other modes of transportation, including public transportation or private automobile. Eligibility criteria include disabilities which would prohibit an individual from using a transit vehicle or from traveling to or from a bus stop.</li> </ul>
	<ul> <li>Eligibility must be approved by Belle Urban System</li> </ul>
	<ul> <li>Eligibility list maintained by Belle Urban System</li> </ul>
Response Time	<ul> <li>Service provided on a next-day reservation basis</li> <li>Reservation service for trip requests available Monday through Friday 8:00 a.m. to 4:00 p.m. On Saturday and Sunday a message service is utilized for next day service.</li> </ul>
Restrictions or Priorities Placed on Service	None
Fares	\$3.00 per one-way trip
Days and Hours of Operation	<ul> <li>Monday-Friday: 5:00 a.m. to 10:00 p.m.</li> <li>Saturday: 5:30 a.m. to 6:30 p.m.</li> <li>Sunday: 9:30 a.m. to 6:30 p.m.</li> </ul>
Service Area	Door-to-door service provided for trips made within three-quarters mile of a Belle Urban System bus route

<sup>&</sup>lt;sup>a</sup> Paratransit service required to meet Federal regulations implementing the public transit requirements of the Americans with Disabilities Act of 1990.

Table 4

FLEET OF THE RACINE BELLE URBAN SYSTEM: 2012

Manufacturer and Model	Number of Buses	Seats Per Bus	Year of Manufacture	Age (Years)	Wheelchair Lift / Ramp
Fixed-Route Buses					
Gillig Low Floor	3	32	2012	0	Ramp
Gillig Low Floor	5	32	2011	1	Ramp
Gillig Low Floor	3	32	2009	3	Ramp
Gillig Low Floor	10	32	2004	8	Ramp
Nova T70606	14	36	1997	15	Lift
Total	35			Average 8.7	
Paratransit Vehicles					
Ford Phoenix	7	9	2009	3	Lift
Total	7			Average 3.0	

The fixed facilities used by the transit system are shown on Map 3, consisting of the following:

- A total of 48 bus passenger waiting shelters sited at various locations throughout the transit service area. Most
  of the shelters are of a modular design, with the size of the shelter determined by the number of back and side
  wall panels used. All shelters include a bench for use by waiting transit patrons.
- The Kentucky Street storage, maintenance, and office complex located on the southwest side of the City. It consists of two buildings, used exclusively for transit program functions. One was constructed by the City in 1977 and is used exclusively for the storage, cleaning, and servicing of vehicles. The other was acquired by the City in 1975 along with other assets of the former private transit operator and houses the bus maintenance and parts-storage facilities, lockers and a meeting room for employees, and the general offices of the public transit system. Services for the general public provided through the offices include the sale of monthly bus passes, the distribution of schedules and maps, and telephone information services.
- The Racine City Hall, located on the western edge of the Racine CBD, houses the offices of the City of Racine Department of Transportation and public meeting rooms used by the Department of Transportation, the Racine Transit and Parking Commission, and the Racine Common Council. Services for the general public provided at City Hall include the sale of monthly bus passes; the distribution of transit system information, including route maps and schedules; and the issuing of photo identification cards to seniors and people with disabilities who qualify for reduced fares.
- The Corinne Reid-Owens Transit Center located in the 1400 block of State Street just east of the Racine railroad depot was opened in July 2004. The off-street transfer center provides covered access for up to 20 buses. Two arrival and departure platforms enable the positioning of buses to facilitate transfers between buses. The dual platforms are linked together by a covered bridge structure and further linked to the adjacent railroad depot which provides a heated and air-conditioned waiting area with bathrooms for bus patrons. The Transit Center also serves as a connection point with the bus route operated by Wisconsin Coach Lines, Inc., thereby providing a link to commuter bus service between Kenosha, Racine, and Milwaukee.

# **Ridership and Service Levels**

Ridership on the BUS increased steadily in each year from 1976 through 1981, during which ridership nearly quadrupled from about 613,000 revenue passengers in 1975 to about 2.42 million revenue passengers in 1981, as shown in Figures 3 and 4. This was a period of major transit service improvement and expansion occurring immediately after the City began public operation of the transit system in July 1975, during which the City implemented an entirely new system of routes and schedules, reduced transit fares and then kept them stable, and introduced a fleet of new buses. Substantial increases in gasoline prices also occurred over the period.

Despite some service increases between 1982 and 2004, the predominant trend on the BUS over this period was one of declining transit ridership. Modest increases in systemwide service levels and ridership occurred from 1982 through 1984 as a result of peak-period service frequency reductions and route extensions implemented by the transit system. After that, service levels remained almost constant until 1998 when bus service was expanded to include late evening service. Some increases in service continued through 2003 as a result of various route and service changes, including relocating the transit system's central transfer point in 2002 from Monument Square to La Salle and Liberty Streets, and replacing Caledonia fixed-route bus service with shared-ride taxicab service (which operated for three years until it was discontinued in 2003 as a cost-cutting measure by the Village of Caledonia). The decline in ridership in the Racine transit system, however, continued, and by 2004 ridership had decreased to about 1.10 million revenue passengers—less than one-half the 1981 level. The ridership decreases observed between 1981 and 2004 may be attributed to several factors, including: six fare increases which raised the adult cash fare from \$0.25 to \$1.25 per trip; decreased use of the bus system by the Racine Unified School District to provide student transportation services; a severe economic recession which resulted in high unemployment levels within the Racine area; and steady decreases in gasoline prices and increases in automobile availability which resulted in increased travel by automobile. On the average weekday in 2001, about 0.7 percent of trips made in Racine County were made using transit. In the City of Racine, about 1.0 percent of trips were made using transit.

Map 3

LOCATION OF FIXED FACILITIES FOR THE BELLE URBAN SYSTEM: 2012

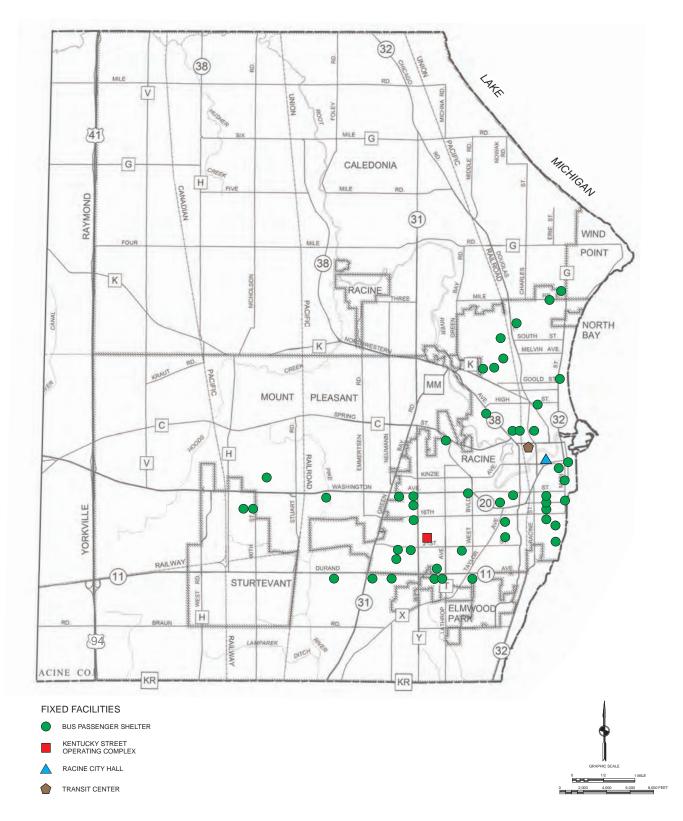


Figure 3
HISTORIC RIDERSHIP AND SERVICE LEVELS ON THE BELLE URBAN SYSTEM: 1975-2011

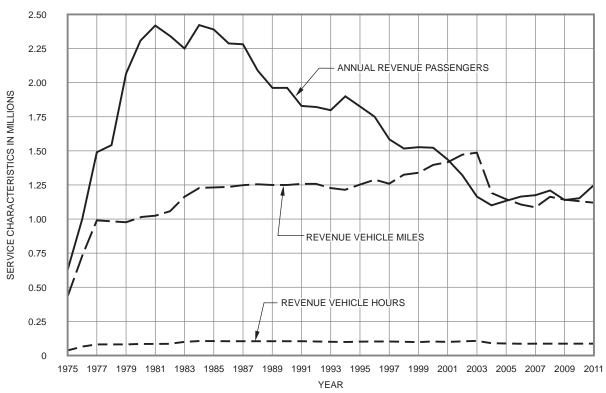


Figure 4

PERCENTAGE CHANGE IN ANNUAL RIDERSHIP ON THE BELLE URBAN SYSTEM: 2002-2011

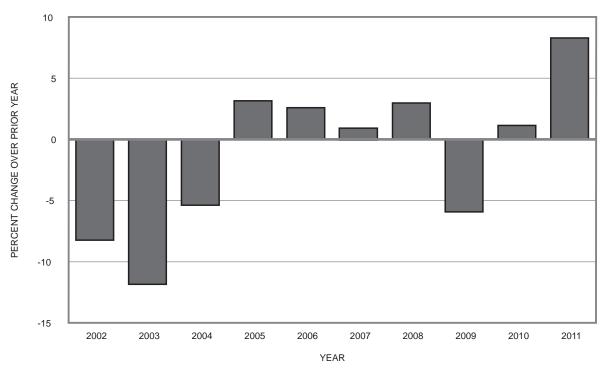


Table 5

ANNUAL RIDERSHIP AND SERVICE LEVELS ON THE BELLE URBAN SYSTEM: 2007-2011

	Year					Five-Year
Characteristic	2007	2008	2009	2010	2011	Average
Primary Service Area Population <sup>a</sup>	80,100	80,300	80,100	78,900	78,700	79,600
Service Provided						
Revenue Vehicle-Miles	1,086,900	1,163,100	1,142,100	1,131,000	1,120,200	1,128,700
Revenue Vehicle-Hours	85,300	86,900	87,300	86,9,00	88,000	86,900
Revenue Passengers						
Regular Bus Routes	1,159,400	1,186,000	1,104,500	1,122,600	1,217,000	1,158,100
Paratransit Service	16,500	25,100	35,000	30,200	31,500	27,700
Total	1,175,900	1,211,100	1,139,500	1,152,800	1,248,500	1,185,800
Service Effectiveness						
Revenue Passengers per Capita	14.7	15.1	14.2	14.6	15.9	14.9
Revenue Passengers per Vehicle-Mile	1.1	1.0	1.0	1.0	1.1	1.1
Revenue Passengers per Vehicle-Hour	13.8	13.9	13.1	13.3	14.2	13.6

<sup>&</sup>lt;sup>a</sup> Based upon the estimated resident population of the City of Racine.

Source: City of Racine Department of Transportation, Wisconsin Department of Administration, and SEWRPC.

Information is presented in Table 5 on systemwide ridership and service levels for the most recent five-year period, 2007 through 2011. Between 2007 and 2011, the annual revenue vehicle miles and revenue vehicle hours of service on the transit system modestly increased by 3 percent. The system ridership in 2011 of 1,248,500 revenue passengers was about 6 percent above the 2007 ridership of 1,175,900 revenue passengers and about 10 percent above the recent ridership low in 2009 of 1,139,500 revenue passengers.

Table 6 presents the total weekday, Saturday, and Sunday ridership by bus route, based on passenger counts conducted by the BUS during the month of October 2006. As indicated in this table, Routes No. 1, 3, 4, and 7 accounted for about 67 percent of the total weekday ridership, about 77 percent of the Saturday ridership, and 92 percent of the Sunday ridership on the BUS during this period. In addition, average weekday transit system ridership is more than double that of Saturday ridership and more than five times that of Sunday ridership.

Table 5 also presents ridership on the City's DART service for people with disabilities. Over the last five years, an average of about 27,700 trips per year were made using this service, representing about 2.3 percent of the total annual systemwide ridership reported by the BUS.

### **Operating and Capital Costs**

The operating expenses of the BUS are funded through a combination of farebox revenues, Federal, State, and local funds. Capital expenditures are funded through a combination of Federal and local funds. The historic trend of the operating expenses, revenues, and assistance of the BUS since it began public operation in 1975 are shown in Figure 5 in both actual dollars and constant 1975 dollars. A summary of the recent trends in operating expenses, revenues, and assistance for the transit system is shown in Table 7 for the period 2007-2011, while information on transit system capital expenditures over this same period is shown in Table 8. The following observations may be made on the basis of an examination of this information:

 Operating expenses and assistance for the transit system have risen steadily in both actual and constant dollar terms since the City assumed operation of the system in 1975. Cost increases in the late 1970s and early

Table 6

AVERAGE BOARDING PASSENGERS<sup>a</sup> ON THE REGULAR BUS
ROUTES OF THE BELLE URBAN SYSTEM: OCTOBER 2006

		kday Boarding engers	Average Saturday Boarding Passengers		Average Sunday Boarding Passengers	
Route Number	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
1	800	14.7	390	15.2	240	24.5
2	680	12.5	250	9.7		
3	1,080	19.9	420	16.3	100	10.2
4	990	18.2	640	24.9	330	33.7
5	380	7.0	150	5.8		
7	800	14.7	540	21.0	230	23.5
20	120	2.2				
27	80	1.5				
30	210	3.9				
86	300	5.5	180	7.0	80	8.2
Total	5,440	100.0	2,570	100.0	980	100.0

<sup>&</sup>lt;sup>a</sup>This measure of ridership counts passengers as they are boarding the vehicle. A person who boards one bus then transfers to another bus to get to their final destination will be counted twice.

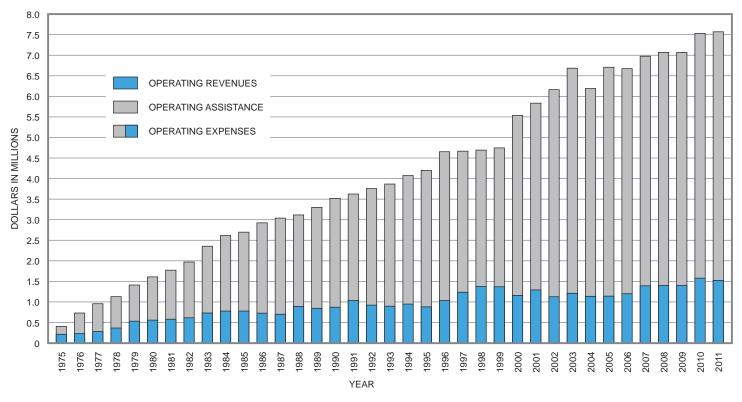
1980s reflect the major transit service improvements implemented by the City after it purchased the system in 1975, as well as significant increases in costs of diesel fuel and employee wages in the late 70s and early 80s. Actual operating expenses and assistance for the system increased steadily between 1984 and 1996, after which they stabilized until 2000. The increases resumed in 2001 and continued through 2011, with the exception of 2004 when major service cuts were implemented. Actual operating revenues have grown somewhat since 1975, reflecting the periodic fare increases implemented by the City. In constant dollars, revenues have been relatively flat, which has prevented any real growth in revenue for the system despite the increases in passenger fares.

- From 2007 through 2011, the City expended about \$7,344,100 on an average annual basis on operating and maintaining the transit system. Of this total, about \$1,469,300, or 18 percent, came from farebox and other operating revenues. The remaining \$5,874,800, or 82 percent, constituted the average annual public funding requirement funded through Federal and State transit operating assistance programs and local property taxes. The average annual operating funding provided by the City of Racine has been about \$1,096,300, or about 15 percent of total system operating expenses.
- As illustrated in Figure 6, the share of total operating expenses funded by Federal and State operating assistance modestly increased between 2007 and 2011. Federal operating assistance increased by 8 percent from \$2,259,300 in 2007 to \$2,444,500 in 2011, State operating assistance increased by 17 percent from \$1,753,200 in 2007 to \$2,049,500 in 2011, and local funding assistance decreased by 2 percent from \$1,574,000 in 2007 to \$1,542,500 in 2011.

Figure 5

TOTAL ANNUAL OPERATING EXPENSES, REVENUES, AND ASSISTANCE
FOR THE BUS AND PARATRANSIT SERVICES PROVIDED BY THE BELLE URBAN SYSTEM: 1975-2011





### **CONSTANT 1975 DOLLARS**

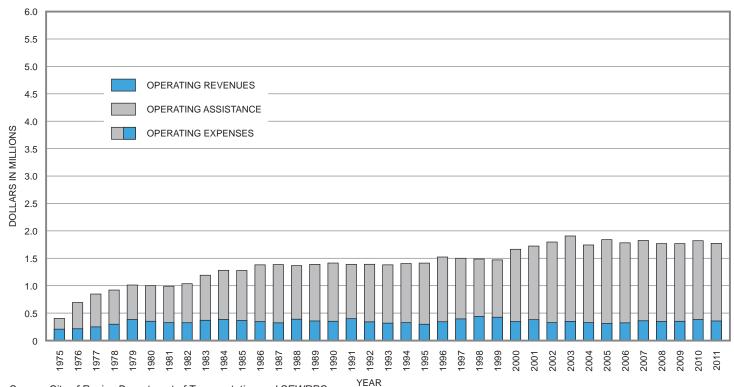


Table 7

ANNUAL OPERATING EXPENSES, REVENUES, AND ASSISTANCE FOR THE BELLE URBAN SYSTEM: 2007-2011

			Year			Five-Year
Characteristic	2007	2008	2009	2010	2011	Average
Revenue Passengers						
Regular Routes	1,159,400	1,186,000	1,104,500	1,122,600	1,217,000	1,158,100
Paratransit Service	16,500	25,100	35,000	30,200	31,500	27,700
Total	1,175,900	1,211,100	1,139,500	1,152,800	1,248,500	1,185,800
Costs, Revenues, and Public Assistance						
Operating Expenses	\$6,976,900	7,584,100	\$7,065,400	\$7,527,000	7,567,200	\$7,344,100
Operating Revenues	1,390,400	1,445,800	1,403,300	1,576,500	1,530,700	1,469,300
Required Public Assistance	5,586,500	6,138,300	5,662,100	5,950,500	6,036,500	5,874,800
Percent of Expenses Recovered through Revenues	19.9	19.1	19.9	20.9	20.2	18.4
Source of Public Assistance Funds						
Federal	\$2,259,300	\$2,154,000	\$2,416,400	\$2,533,300	\$2,444,500	\$2,361,500
State	1,753,200	2,196,200	2,031,800	1,857,200	2,049,500	1,977,600
Local						
City of Racine	1,084,500	1,097,400	1,103,400	1,096,400	1,100,000	1,096,300
Other <sup>a</sup>	489,500	690,700	110,500	463,600	442,500	439,400
Total	\$5,586,500	\$6,138,300	\$5,662,100	\$5,950,500	\$6,036,500	\$5,874,800
Per Trip Data						
Operating Expenses	\$5.93	\$6.26	\$6.20	\$6.53	\$6.06	\$6.19
Operating Revenues	1.18	1.19	1.23	1.37	1.22	1.23
Total Public Assistance	4.75	5.07	4.97	5.16	4.84	4.96
City Public Assistance	1.34	1.48	1.07	1.35	1.24	1.30

<sup>&</sup>lt;sup>a</sup>Represents funds provided by other entities contracting for transit service from the Belle Urban System.

Source: Wisconsin Department of Transportation, City of Racine Department of Transportation, and SEWRPC.

Table 8

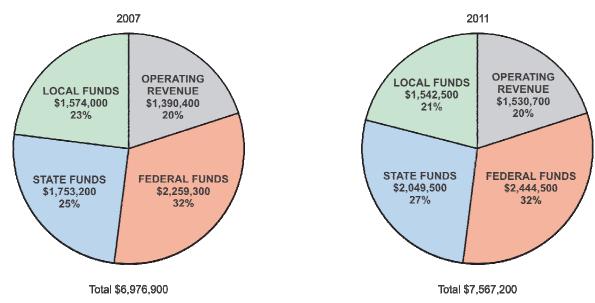
ANNUAL CAPITAL PROJECT EXPENDITURES BY FUNDING SOURCE FOR THE BELLE URBAN SYSTEM: 2007-2011

		Capital Expenditures by Year									
Characteristic	2007	2008	2009	2010	2011	Five-Year Average					
Capital Project Type											
Bus Fleet Rehabilitation, Replacement, or Expansion			\$ 408,900		\$3,178,500	\$ 717,500					
Facility Renovation, Replacement, or Expansion	\$267,500	\$ 21,500	617,600	\$ 18,700	738,200	332,700					
Other	63,600	125,000	43,000	262,600	50,800	109,000					
Total	\$331,100	\$145,500	\$1,069,500	\$281,300	3,967,500	\$1,159,200					
Source of Funds											
Federal	\$264,900	\$117,200	\$ 855,600	\$225,000	\$3,174,000	\$ 927,300					
City	66,200	29,300	213,900	55,300	793,500	231,900					
Total	\$331,100	\$146,500	\$1,069,500	\$281,300	\$3,967,500	\$1,159,200					

Source: City of Racine Department of Transportation and SEWRPC.

Figure 6

DISTRIBUTION OF TOTAL ANNUAL OPERATING EXPENSES FOR THE BELLE URBAN SYSTEM BY FUNDING SOURCE: 2007 AND 2011



Source: City of Racine Department of Transportation and SEWRPC.

- The average annual capital expenditures on the transit system over the five-year period 2007 through 2011 totaled about \$1,159,200. During the period, eight buses were purchased in 2009 and 2011 at a total cost of about \$3,587,500. Of the \$1,159,200 average annual capital expenditures, about \$927,300, or 80 percent, came from Federal programs providing transit capital assistance with the remaining 20 percent, about \$231,900, coming from the City of Racine.
- The total estimated five-year average annual expenditures for transit system operations and capital projects amounted to about \$8.5 million. The total average annual public funding requirement provided through Federal and State transit assistance programs and local property taxes amounted to about \$7.0 million, including total average annual funds provided by the City of Racine of about \$1.3 million. Funds from other local units of government, the private sector, and other sources amounted to about \$0.4 million annually.

# OTHER PUBLIC TRANSIT SERVICES

The City of Racine is the principal provider of public transit service within the greater Racine area. However, a number of other public transit services are also provided to residents of Racine County. They include the following: commuter bus service provided by Wisconsin Coach Lines, Inc.; intercity bus services provided by Coach USA; and intercity passenger train service provided by Amtrak. The general characteristics of these services are summarized in Table 9. The alignments of the routes for each operator are shown on Map 4. Each of the services may be briefly described as follows:

# • Wisconsin Coach Lines, Inc./Coach USA

Wisconsin Coach Lines, Inc., (a subsidiary of Coach USA) operates one route which provides commuteroriented express-bus service between the Milwaukee CBD and the Cities of Racine and Kenosha. The route passes through, and has several intermediate stops within, Racine County. Service over the route consists of

Table 9

ADDITIONAL LOCAL AND INTERCITY TRANSIT SERVICES FOR THE GENERAL PUBLIC IN RACINE COUNTY: 2012

Name of Service Provider	Type of Provider	Type of Service	Days and Hours of Operation		Fares <sup>a</sup>	Service Area	Vehicles Used
Wisconsin Coach Lines, Inc./ Coach USA	Public/ private <sup>b</sup>	Commuter bus	Weekdays: Weekends/Holidays	5:15 a.m. – 10:30 p.m. 8:15 a.m. – 10:37 p.m.	Distance-based ranging from \$2.00 to \$4.25 for adults	Service between Kenosha and Milwaukee, stopping in Racine County in the Village of Caledonia, the City of Racine, and the Village of Mt. Pleasant	Long distance over- the-road motor coaches
Coach USA	Private	Intercity bus	Weekdays: Weekends/Holidays	5:15 a.m 11:30 p.m. 8:15 a.m 10:30 p.m.	Distance-based	Service between Milwaukee and Chicago, with one stop at IH 94 and STH 20	Long distance over- the-road motor coaches
Amtrak	Public	Intercity passenger train	Weekdays: Saturdays Sundays/Holidays	6:00 a.m 9:30 p.m. 6:00 a.m 9:30 p.m. 8:00 a.m 9:00 p.m.	Distance-based	Service between Milwaukee and Chicago, with one stop in the Village of Sturtevant	Standard intercity single-level passenger train coaches

<sup>&</sup>lt;sup>a</sup>Fares shown are cash fares per trip.

seven trips in each direction on weekdays and six trips in each direction on weekends and holidays. The company's service is oriented principally towards serving Racine and Kenosha passengers commuting to and from the Milwaukee area, but it can also be used to travel between Racine and Kenosha. The City of Racine has a transfer agreement with Wisconsin Coach Lines (WCL), which permits passengers transferring from WCL routes to ride free on City bus routes, and passengers transferring from City bus routes to receive a \$1.00 discount off the WCL fare. Since 1985, the City of Racine has acted as the public sponsor and applicant or grantee for the State urban transit operating assistance funds used to subsidize the operation of the service. Prior to 1985, the route was operated without public assistance.

#### Coach USA

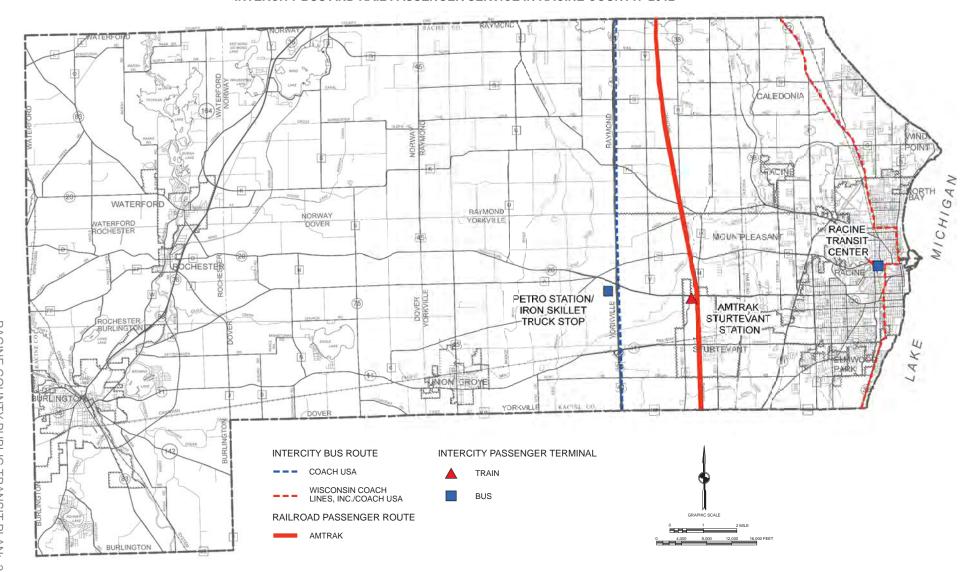
Coach USA operates one intercity bus route over IH 94 between the Milwaukee CBD and Chicago's O'Hare International and Midway Airports, including a stop at Milwaukee's General Mitchell International Airport. Service over the route consists of 15 southbound runs and 15 northbound runs daily, with one stop in Racine County at the Petro Station/Iron Skillet truck stop at the intersection of IH 94 and STH 20. The company's service is directed principally toward serving airport-related trips and is not conducive to general-purpose travel between Milwaukee and Chicago. Coach USA currently does not receive public financial assistance for the airport transportation services they provide through Racine County.

# • Amtrak

Amtrak provides publicly-subsidized intercity passenger-train service between the Milwaukee CBD and Chicago over the Canadian Pacific (CP) Railway System's Chicago-Milwaukee-St. Paul main line. Amtrak's Chicago-Milwaukee *Hiawatha* Service features seven trains in each direction Monday through Saturday, and six trains in each direction on Sundays, all of which stop in the Village of Sturtevant in eastern Racine County. One additional train, the *Empire Builder*, provides daily long-distance service through Milwaukee to St. Paul, Minnesota, and Seattle, Washington, passing through Racine County without stopping. Amtrak service in

<sup>&</sup>lt;sup>b</sup>The City of Racine acts as the public sponsor for the service, contracting with Wisconsin Coach Lines, Inc./Coach USA (a private for-profit company) to provide the bus service. Source: SEWRPC.

Map 4
INTERCITY BUS AND RAIL PASSENGER SERVICE IN RACINE COUNTY: 2012



Source: Amtrak, Coach USA, Greyhound Lines and SEWRPC.

the Chicago-Milwaukee corridor connects to other long-distance trains at the system's hub in Chicago. However, the service is heavily used by individuals traveling to Chicago on business trips, commuting to Chicago workplaces, or making daytime trips to Chicago for personal or recreational purposes. Amtrak's Chicago-Milwaukee *Hiawatha* Service is funded in part by the Wisconsin and Illinois Departments of Transportation. The Amtrak station in the Village of Sturtevant is served by BUS Route No. 20.

#### HUMAN SERVICES TRANSPORTATION PROVIDERS

Human services transportation within Racine County is provided by a number of public and private nonprofit agencies and organizations, as well as by private for-profit transportation and ambulance companies. In western Racine County, human services transportation is currently the only public transportation that is available for most of the population. In general, most of the available human services transportation is provided by appointment or on-demand, rather than on a fixed schedule. Eligibility for service by the public and/or private nonprofit providers is limited to people with physical or cognitive disabilities, with eligibility usually limited to the clientele of the sponsoring agency or organization. The private for-profit providers serve the general public, particularly Medicaid recipients in need of transportation for non-emergency medical activities or other activities, such as adult day care and shopping trips. The general characteristics of the major human services transportation providers within Racine County are presented in Table 10.

### **Racine County Human Services Department**

Two major programs providing human services transportation within Racine County are administered by the Racine County Human Services Department. The County contracts with a private bus company, First Transit, to provide service under the first program. This program provides door-to-door, demand-response transportation service for seniors and people with disabilities outside the BUS DART paratransit service area, and for seniors within the BUS paratransit service area. Users are generally required to make trip reservations no later than the day prior to the trip, although allowances are made for scheduling trips on a space-available basis up to one hour prior to the desired travel time.

The second program is a shuttle service initiated in 2011, called Shuttling People Around Racine County (SPARC). The SPARC program initially included three shuttle routes in the Burlington, Mt. Pleasant, and Waterford areas, but the Waterford and Mt. Pleasant shuttles were eliminated in August 2012 due to low ridership, while service on the Burlington shuttle was increased due to higher ridership. The County contracts with Kenson Enterprises to operate the SPARC shuttle service, which is operated as a "flex-route" service, meaning the vehicles can (upon request) deviate a short distance off the identified route to pick up and drop off passengers. The shuttle is aimed at providing transportation for seniors or people with disabilities in areas not served by public transit, but there are no formal eligibility restrictions on using the service.

A summary of the recent trends in ridership, operating expenses, revenues, and assistance for the demand-response, transportation-handicapped service provided by the Racine County Human Services Department is shown in Table 11 for the period 2008-2011. During those four years, ridership on the service increased by about 14 percent from 14,500 trips in 2008 to 16,500 trips in 2011. The County expended an average of \$576,400 annually to operate the demand-response service, of which \$48,700, or 8 percent, came from farebox revenue. The remaining \$527,700 constituted the average annual public funding requirement provided through Federal and State specialized transportation assistance programs and Racine County funds.

<sup>&</sup>lt;sup>1</sup>In order for a person to be eligible for this service, a physician must certify that the person has a physical, psychological, or developmental disability that prevents the person from using other transportation services.

Table 10

MAJOR HUMAN SERVICES TRANSPORTATION PROVIDERS FOR SENIORS
AND PEOPLE WITH DISABILITIES PROVIDED WITHIN RACINE COUNTY: 2012

Name of Service Provider	Type of Provider	Type of Service	Eligible Users	Days and H	ours of Operation	Service Area	Fees	Vehicles Used
Racine County Human Services								
Transportation- handicapped	Public	Advance reservation demand response, door-to-door	People certified as transportation handicapped, or 60 years or older	Monday–Friday:	5:30 a.m6:00 p.m.	Racine County outside Belle Urban System service area	Fare of \$2.50 per one-way trip	Vehicles are provided by First Transit, Inc., the contracted provider for this service
Shuttling People Around Racine County (SPARC)	Public	Route deviation	Primarily senior; general public when space is available	Monday–Friday:	9:00 a.m3:00 p.m.	Burlington	\$2.00 one-way \$3.00 round trip \$5.00 for all day	Vehicles are provided by Kenson Enterprises, LLC, the contracted provider for this service
Baby Express	Private, nonprofit	Advance reservation and on demand, curb-to-curb	Pregnant women and families who qualify for Medicaid	Every day, 24 hours	a day	Racine County	No charge	Non-wheelchair accessible vehicles
Careers Industries, Inc.	Private, nonprofit	Fixed route and scheduled daily trips	Participants in Careers Industries day services	Monday–Friday:	8:30 a.m2:30 p.m.	Racine County	Community Care	Wheelchair accessible vans
DRS Medical Transport	Private, nonprofit	Advance reservation door-through-door for any trip purpose	General public	Monday- Friday: Saturday: Sunday:	8:00 a.m3:00 p.m. As needed On call	Western Racine County and Kenosha, Rock, and Walworth Counties	Private pay and Title 19 Medicaid reimbursement	Wheelchair accessible vans
Durham	Private	School district, charters	Students, charters	Monday– Friday: Saturday and Sunda	5:00 a.m5:00 p.m. ay: As needed	Southeastern Racine	Based on Charter	Large and small buses
Erickson Ambulance	Private, for-profit	Advance reservation and on demand, door-through-door	General public	Every day, 24 hours	a day	Racine, Kenosha, Milwaukee and other long- distance destinations	Private pay and Title 19 Medicaid reimbursement	Non-wheelchair accessible ambulances
First Transit, Inc.	Private, for-profit	Advance reservation door-to-door for medical activities	Medicaid recipients	Monday–Friday:	5:00 a.m6:00 p.m.	Racine County	Private pay and Title 19 Medicaid reimbursement	Wheelchair accessible vans and buses
Goodwill Industries	Private, nonprofit	Fixed route, door-to- door and scheduled day trips	Participants in Goodwill adult day services program	Monday–Friday:	7:00 a.m.–5:30 p.m.	Racine County	No charge to user	Wheelchair accessible vans
iTNRacineCounty	Private, nonprofit	Advance reservation and on demand, door-to-door	County residents 55 years and older, and the visually impaired	Every day, 24 hours	a day	Racine, Milwaukee, and Kenosha counties	Annual membership fee, distance-based fare	Private vehicles
Lincoln Lutheran Specialized Transportation	Private, nonprofit	Scheduled door-to- door for adult day care, shopping events and medical activities	Residents of Lincoln Lutheran facilities	As required		As required	No charge	Wheelchair accessible and non-wheelchair accessible vans and buses
LJH Ambulance	Private, for-profit	Advance reservation and on demand, door to-door	General public	Every day, 24 hours	a day	Racine, Kenosha, Milwaukee and other long- distance destinations	Private pay and Title 19 Medicaid reimbursement	Non-wheelchair accessible ambulance
Medix Wheelchair Service	Private, for-profit	Advance reservation, door-to-door	General public	Monday-Friday:	6:00 a.m.–6:00 p.m.	Racine, Kenosha, Walworth, and other long- distance destinations	Private pay	Wheelchair accessible vans
Racine County Opportunity Center	Private, nonprofit	Fixed-route, door-to- door subscription service	Participants in RCOC programs	Monday-Friday:	7:45 a.m.–3:15 p.m.	Racine County	Private pay	Non-wheelchair accessible vans
Recovery Medical Transport	Private, for-profit	Advance reservation, door-to-door	General public	Monday-Friday:	7:00 a.m5:00 p.m.	Racine, Kenosha and Milwaukee Counties	Private pay and Title 19 Medicaid reimbursement	Wheelchair accessible van
Wisconsin Veteran's Home	Public	Advance reservation, door-through-door; scheduled group day trips	Residents of Wisconsin Veteran's Home	Monday-Friday:	7:30 a.m4:30 p.m.	Racine County to appointments in Milwaukee County	No charge	Wheelchair accessible vans

Table 11

ANNUAL OPERATING EXPENSES, REVENUES, AND ASSISTANCE FOR TRANSPORTATION-HANDICAPPED SERVICE PROVIDED BY THE RACINE COUNTY HUMAN SERVICES DEPARTMENT: 2008-2011

		Ye	ear		Four-Year
Characteristic	2008	2009	2010	2011	Average
Revenue Passengers	14,500	16,900	16,700	16,500	16,200
Costs, Revenues, and Public Assistance					
Operating Expenses	\$531,500	\$534,900	\$617,600	\$621,600	\$576,400
Operating Revenues	50,000	42,500	49,500	52,700	48,700
Required Public Assistance	481,500	492,400	568,100	568,900	527,700
Percent of Expenses Recovered through Revenues	9.4	7.9	8.0	8.5	8.4
Source of Public Assistance Funds					
Federal			\$62,900	\$50,500	\$28,500
State	400,800	410,500	419,300	432,000	415,700
Local	80,700	81,900	85,900	86,400	83,700
Total	\$481,500	\$492,400	\$568,100	\$568,500	\$527,900

Source: Wisconsin Department of Transportation, Racine County Human Services Department, and SEWRPC.

# **Other Human Services Transportation Providers**

In addition to the Racine County Human Services Department, human services transportation is provided by other providers, as shown in Table 10. The major existing transportation services identified included five private for-profit transportation providers that primarily serve travel for medical appointments by passengers in wheelchairs or those without other means of transportation for trips to and from hospitals, nursing homes, and physicians both within the County and between Racine County and adjacent counties. They also serve individuals, residential facilities, or agencies needing accessible vehicles for their general transportation needs.

#### SCHOOL AND CHARTER BUS COMPANIES

Several private companies provide transportation for the school districts in Racine County on a contract or charter basis. The major companies that provided these services in the County are identified in Table 12. Student transportation services are generally provided on weekdays that are school days generally between 6:30 a.m. and 8:30 a.m. and 2:00 p.m. and 4:00 p.m., with limited service also provided during weekday midday periods as needed to serve students attending half-day classes, field trips, and special education needs. The school bus companies also are available to provide charter services when their equipment is not being used to provide school transportation. The companies identified also represent potential contract operators of any public transit services that may be proposed under this study.

# **SUMMARY**

This chapter has presented pertinent information on the existing City of Racine public transit system, as well as on other major transit services provided in Racine County during 2012. A summary of the most important findings concerning the transportation services identified follows.

1. The major supplier of local public transit service in the greater Racine area is the City of Racine, which has operated the Belle Urban System (BUS) since July 1975. The City of Racine owns the facilities and equipment for its fixed-route transit system and contracts with a private firm, First Transit, to oversee the day-to-day

operation of the system, with the management firm under the direct supervision of the City Department of Transportation. While the policymaking body of the transit system is the Racine Transit and Parking Commission, the ultimate responsibility for review and approval of certain important matters, including the annual program budget, lies with the City of Racine Common Council.

2. During 2012, fixed-route bus service was provided by the BUS over a system of 10 bus routes. Nine of these routes provided regular local bus service with frequent stops, with eight of the routes providing direct service to the Racine CBD where the City has established a common stop to facilitate transfers between routes. One of these routes provides express

Table 12

PRINCIPAL SCHOOL AND CHARTER BUS
OPERATORS IN RACINE COUNTY: 2012

Company Name	Portion of Racine County Served
Durham School Services	Racine County
Dousman Transport Co., Inc	Union Grove and Waterford
First Student	Racine County
First Transit, Inc	Racine County
Prompt Charters	Racine
Road Runner Charter Bus	Western Racine County
Thomas Bus Service, Inc	Burlington

Source: SEWRPC.

and/or shuttle service with limited stops between the Racine CBD and businesses located along STH 20 in the Village of Mt. Pleasant and in the Grandview Industrial Park in the Town of Yorkville. A tenth local route is a weekday peak-hour tripper route operated to serve students at J. I. Case High School. Five routes extend outside the City to serve residential areas or major trip generators in the Villages of Caledonia, Elmwood Park, Mt. Pleasant, North Bay, and Sturtevant.

- 3. Service over the regular routes was provided between 5:10 a.m. and 10:10 p.m. on weekdays, between 5:40 a.m. and 6:40 p.m. on Saturdays, and between 9:40 a.m. and 6:40 p.m. on Sundays. The routes were operated with service frequencies of 30 to 60 minutes during weekday peak and midday periods, 60 minutes during weekday evenings, and 60 minutes all day Saturdays and Sundays. The base cash fare for the regular route service was \$2.00 per trip for adults and \$1.50 per trip for youth. The base fare is reduced to \$1.00 per trip for seniors and people with disabilities. Special reduced fares for students are provided through the Racine Unified School District. The transit system maintains a fleet of 35 buses to provide service over the regular routes.
- 4. To comply with Federal regulations, the transit system also provides a door-to-door Dial-a-Ride Transport (DART) service directed at serving the travel needs of people with disabilities unable to use the fixed-route bus service provided by the BUS. The DART service was operated during the same hours as the fixed-route service and was available within three-quarters of a mile of a bus route. Prior to 2006, the service was provided through the Racine County Human Services Department specialized transportation program. Currently, the BUS directly operates the DART service utilizing a fleet of seven mini-buses.
- 5. Ridership on the BUS increased steadily in each year from 1976 through 1981, during which time ridership nearly quadrupled. This was a period during which the City implemented an entirely new transit system, new buses, and maintained stable passenger fares. Substantial increases in gasoline prices occurred over the period. From 1982 through 2004, the predominant trend on the BUS was of declining transit ridership. These declines may be attributed to several factors, including: six fare increases; decreased use of the system by the Racine PUnified School District to provide student transportation services; a severe economic recession which resulted in high unemployment levels within the Racine area; and steady decreases in gasoline prices and increases in automobile availability which resulted in increased automobile use. During the most recent five-year period, 2007 to 2011, annual revenue vehicle hours and miles increased modestly by 3 percent. Ridership in 2011 was about 6 percent above the 2007 ridership of 1.18 million revenue passengers.
- 6. For the most part, operating expenses and assistance have increased steadily in both actual and constant dollars since 1975. Actual operating revenues have grown somewhat since 1975, reflecting periodic fare increases. In constant dollars, revenues have been relatively flat, which has prevented any real growth in revenue for the system despite the increases in passenger fares.

- 7. From 2007 through 2011, the City expended a total of about \$8.5 million on an average annual basis for transit system operations and for capital projects. The total average annual public funding provided through Federal and State transit assistance programs and local property taxes amounted to about \$7.0 million. The total average annual funds provided by the City of Racine amounted to about \$1.3 million, while funds from other local units of government, the private sector, and other sources amounted to about \$0.4 million. The total local share of public operating assistance for the BUS was relatively flat between 2007 and 2011.
- 8. Other transit services for the general public operating within Racine County were identified. Wisconsin Coach Lines operates a commuter bus route between the Milwaukee CBD and the Cities of Racine and Kenosha, with several intermediate stops in Racine County. Coach USA operates intercity bus routes between Milwaukee and Chicago, with a stop along IH 94 in Racine County. Amtrak operates intercity passenger train service between Milwaukee and Chicago, with a stop in the Village of Sturtevant.
- 9. Human services transportation for seniors and people with disabilities is also provided within Racine County by a number of public and private agencies and organizations. The Racine County Human Services Department administers two countywide programs: one providing door-to-door transportation services to transportation-handicapped individuals for general travel purposes and one providing shuttle service directed at seniors or people with disabilities in areas not served by public transit. Finally, five private for-profit companies also provide service to a significant number of passengers within Racine County, mostly for medical activities.
- 10. Several private companies provide transportation for the school districts in Racine County on a contract or charter basis. Student transportation services are generally provided on weekdays that are school days with limited service also provided during weekday midday periods as needed. The school bus companies also are available to provide charter services when their equipment is not being used to provide school transportation.

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# **Chapter III**

# LAND USE AND TRAVEL PATTERNS

# INTRODUCTION

This chapter presents information on the historic and current population, households, and employment levels in Racine County and documents the growth and changes that have occurred to the year 2012. The chapter also identifies the areas of urban development in Racine County that should be most capable of supporting fixed-route bus service and the major land use activity centers in the County which attract significant total person or transit person trips or which may be desirable destinations for County residents. In addition, the travel habits and patterns associated with the resident population, employment, and land uses in Racine County are identified.

#### POPULATION AND EMPLOYMENT

#### **General Population Characteristics**

The resident population levels in Racine County over the period 1970 through 2012 are set forth in Table 13. Map 5 shows the distribution of the resident population of the County in 2010 by U.S. Public Land Survey one-quarter section. Table 14 indicates the change in the number of households in the County from 1970 to 2010. The following observations may be made based upon an examination of this information:

- Between 1970 and 2012, the resident population of the County increased by about 14 percent. Most of this growth occurred in the Villages of Caledonia and Mt. Pleasant, where population increased by about 48 and 60 percent, respectively, over this period. As shown in Table 15, the 14 percent growth in population in Racine County between 1970 and 2012 lagged behind that of neighboring Kenosha, Walworth, and Waukesha Counties—whose populations grew by 29, 38, and 41 percent, respectively—but was greater than in Milwaukee County, whose population decreased by 11 percent.
- In 2012, about 79,000 persons resided in the City of Racine, accounting for about 40 percent of the total County population. The highest population concentrations in the County were located east of STH 31, principally within the City of Racine. The population in the remainder of the County west of IH 94 was more widely dispersed with the most significant population concentrations found in and around the Burlington, Waterford-Rochester, and Union Grove areas. The concentrations of population in these areas, however, do not approach the concentrations found in the central portions of the City of Racine. The majority of the transit service currently provided by the City of Racine Belle Urban System (BUS) is focused on the portions of the City located east of Green Bay Road (STH 31).
- The number of households in the County increased by about 53 percent from 1970 to 2010, nearly four times as fast as the increase in resident population. The average household size within the County decreased from about 3.4 persons per household in 1970 to about 2.6 persons per household in 2010. This trend mirrored the trend for the seven-county Southeastern Wisconsin Region as a whole.

Table 13
POPULATION IN RACINE COUNTY BY CIVIL DIVISION: 1970-2012

						Total Po	pulation					
	19	70	19	1980		90	20	00	20	10	2012 E	stimate
		Percent of		Percent of		Percent of		Percent of		Percent of		Percent of
Civil Division	Number	County	Number	County	Number	County	Number	County	Number	County	Number	County
Cities												
Burlington	7,479	4.4	8,385	4.8	8,851	5.1	9,936	5.3	10,464	5.4	10,496	5.4
Racine	95,162	55.7	85,725	49.5	84,298	48.2	81,855	43.3	78,860	40.9	78,830	40.3
Villages												
Caledonia <sup>a</sup>	16,748	9.8	20,940	12.1	20,999	12.0	23,614	12.5	24,705	12.8	24,731	12.7
Elmwood Park	456	0.3	483	0.3	534	0.3	474	0.3	497	0.2	498	0.3
Mt. Pleasant <sup>b</sup>	16,368	9.6	19,340	11.2	20,084	11.5	23,142	12.3	26,197	13.3	26,220	13.4
North Bay	263	0.2	219	0.1	246	0.1	260	0.1	241	0.1	239	0.1
Rochester <sup>c</sup>	1,455	0.9	2,224	1.3	2,822	1.6	3,403	1.8	3,682	1.9	3,676	1.9
Sturtevant	3,376	2.0	4,130	2.4	3,803	2.2	5,287	2.8	6,970	3.3	7,016	3.6
Union Grove	2,703	1.6	3,517	2.0	3,669	2.1	4,322	2.3	4,915	2.3	4,900	2.5
Waterford	1,922	1.1	2,051	1.2	2,431	1.4	4,048	2.1	5,368	2.4	5,368	2.7
Wind Point	1,251	0.7	1,695	1.0	1,941	1.1	1,853	1.0	1,723	0.9	1,717	0.9
Towns												
Burlington	4,963	2.9	5,629	3.3	5,833	3.3	6,384	3.4	6,502	3.3	6,451	3.3
Dover	3,780	2.2	3,419	2.0	3,631	2.1	3,908	2.1	4,051	2.1	3,979	2.0
Norway	4,620	2.7	4,619	2.7	5,493	3.1	7,600	4.0	7,948	4.1	7,961	4.1
Raymond	3,735	2.2	3,610	2.1	3,243	1.9	3,516	1.9	3,870	1.9	3,886	2.0
Waterford	3,483	2.0	3,984	2.3	4,255	2.4	5,938	3.1	6,344	3.4	6,338	3.2
Yorkville	3,074	1.8	3,162	1.8	2,901	1.7	3,291	1.7	3,071	1.7	3,080	1.6
County Total	170,838	100.0	173,132	100.0	175,034	100.0	188,831	100.0	195,408	100.0	195,386	100.0

		Change in Population										
	1970-	1980	1980-	-1990	1990-	-2000	2000-	-2010	2010-	-2012	1970	-2012
Civil Division	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent
Cities												
Burlington	906	12.1	466	5.6	1,085	12.3	528	5.4	32	0.3	3,017	40.3
Racine	-9,437	-9.9	-1,427	-1.7	-2,443	-2.9	-2,995	40.4	-30	-0.3	-16,332	-17.2
Villages												
Caledonia <sup>a</sup>	4,192	25.0	59	0.3	2,615	12.5	1,091	12.6	26	0.2	7,983	47.7
Elmwood Park	27	5.9	51	10.6	-60	-11.2	23	0.3	1	0.0	42	9.2
Mt. Pleasant <sup>b</sup>	2,972	18.2	744	3.8	3,058	15.2	3,055	13.4	23	0.2	9,852	60.2
North Bay	-44	-16.7	27	12.3	14	5.7	-19	0.1	-2	0.0	-24	-9.1
Rochester <sup>c</sup>	769	52.9	598	26.9	581	20.6	279	1.9	-6	-0.1	2,221	152.6
Sturtevant	754	22.3	-327	-7.9	1,484	39.0	1,683	3.6	46	0.4	3,640	107.8
Union Grove	814	30.1	152	4.3	653	17.8	593	2.5	-15	-0.1	2,197	81.3
Waterford	129	6.7	380	18.5	1,617	66.5	1,320	2.7			3,446	179.3
Wind Point	444	35.5	246	14.5	-88	-4.5	-130	0.9	-6	-0.1	466	37.3
Towns												
Burlington	666	13.4	204	3.6	551	9.4	118	3.3	-51	-0.5	1,488	30.0
Dover	-361	-9.6	212	6.2	277	7.6	143	2.1	-72	-0.7	199	5.3
Norway	-1	0.0	874	18.9	2,107	38.4	348	4.1	13	0.1	3,341	72.3
Raymond	-125	-3.3	-367	-10.2	273	8.4	354	2.0	16	0.2	151	4.0
Waterford	501	14.4	271	6.8	1,683	39.6	406	3.2	-6	-0.1	2,855	82.0
Yorkville	88	2.9	-261	-8.3	390	13.4	-220	1.6	9	0.1	6	0.2
County Total	2,294	1.3	1,902	1.1	13,797	7.9	6,577	3.5	-22	-0.2	24,548	14.4

<sup>&</sup>lt;sup>a</sup>The Town of Caledonia was incorporated as a Village in October 2005. The 1970 through 2000 population levels presented in this table are for the former Town of Caledonia.

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

<sup>&</sup>lt;sup>b</sup>The Town of Mt. Pleasant was incorporated as a Village in September 2003. The 1970 through 2000 population levels presented in this table are for the former Town of Mt. Pleasant

<sup>&</sup>lt;sup>c</sup>The Town and Village of Rochester were consolidated as a Village in December 2008. The 1970 through 2000 population levels presented in this table are for the total combined populations of the former Town and Village of Rochester.

Map 5
POPULATION DENSITY BY U.S. PUBLIC LAND SURVEY QUARTER-SECTION IN RACINE COUNTY: 2010

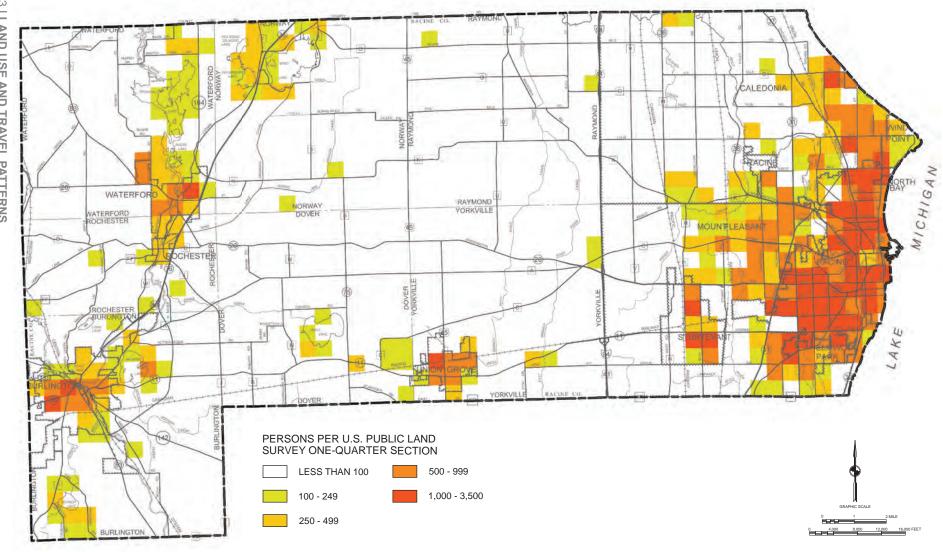


Table 14

TOTAL HOUSEHOLDS IN RACINE COUNTY: 1970-2010

					Total Ho	useholds				
	19	70	19	980	19	90	20	000	20	110
Civil Division	Number	Percent of County	Number	Percent of County	Number	Percent of County	Number	Percent of County	Number	Percent of County
Cities										
Burlington	2,311	4.6	2,928	4.9	3,346	5.2	3,838	5.4	4,240	5.5
Racine	29,851	59.9	31,744	53.4	31,767	49.8	31,449	44.4	30,530	41.7
Villages										
Caledonia <sup>a</sup>	4,203	8.4	6,328	10.6	7,058	11.1	8,549	12.1	9,629	12.5
Elmwood Park	137	0.3	164	0.3	186	0.3	200	0.3	197	0.3
Mt. Pleasant <sup>b</sup>	4,363	8.8	6,438	10.8	7,708	12.1	9,453	13.3	11,936	14.3
North Bay	88	0.2	88	0.1	91	0.1	91	0.1	91	0.1
Rochester <sup>c</sup>	406	0.8	706	1.2	944	1.5	1,192	1.7	1,343	1.7
Sturtevant	848	1.7	1,262	2.1	1,308	2.1	1,477	2.1	2,103	2.4
Union Grove	810	1.6	1,159	2.0	1,295	2.0	1,631	2.3	1,881	2.4
Waterford	577	1.2	721	1.2	903	1.4	1,561	2.2	2,114	2.5
Wind Point	339	0.7	562	0.9	711	1.1	736	1.0	731	1.1
Towns										
Burlington	1,331	2.7	1,805	3.0	2,044	3.2	2,354	3.3	2,506	3.3
Dover	622	1.2	836	1.4	1,033	1.6	1,193	1.7	1,326	1.7
Norway	1,233	2.5	1,383	2.3	1,817	2.9	2,641	3.7	2,942	3.8
Raymond	934	1.9	1,053	1.8	1,076	1.7	1,245	1.8	1,417	1.8
Waterford	992	2.0	1,289	2.2	1,469	2.3	2,086	2.9	2,322	3.2
Yorkville	751	1.5	952	1.6	980	1.5	1,123	1.6	1,143	1.6
County Total	49,796	100.0	59,418	100.0	63,736	100.0	70,819	100.0	75,651	100.0

		Change in Households										
	1970	-1980	1980	-1990	1990	-2000	2000	-2010	1970	-2010		
Civil Division	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent		
Cities												
Burlington	617	26.7	418	14.3	492	14.7	402	10.5	1,889	81.7		
Racine	1,893	6.3	23	0.1	-318	-1.0	-919	-2.9	1,849	6.2		
Villages												
Caledonia <sup>a</sup>	2,125	50.6	730	11.5	1,491	21.1	1,080	12.6	5,297	126.0		
Elmwood Park	27	19.7	22	13.4	14	7.5	-3	-1.5	63	46.0		
Mt. Pleasant <sup>b</sup>	2,075	47.6	1,270	19.7	1,745	22.6	2,483	26.3	6,537	149.8		
North Bay			3	3.4					12	13.6		
Rochester <sup>c</sup>	300	73.9	238	33.7	248	26.3	151	12.7	894	220.2		
Sturtevant	414	48.8	46	3.6	169	12.9	626	42.4	952	112.3		
Union Grove	349	43.1	136	11.7	336	25.9	250	15.3	990	122.2		
Waterford	144	25.0	182	25.2	658	72.9	553	35.4	1,323	229.3		
Wind Point	223	65.8	149	26.5	25	3.5	-5	-0.7	461	136.0		
Towns												
Burlington	474	35.6	239	13.2	310	15.2	152	6.5	1,169	87.8		
Dover	214	34.4	197	23.6	160	15.5	133	11.1	678	109.0		
Norway	150	12.2	434	31.4	824	45.3	301	11.4	1,667	135.2		
Raymond	119	12.7	23	2.2	169	15.7	172	13.8	466	49.9		
Waterford	297	29.9	180	14.0	617	42.0	236	11.3	1,408	141.9		
Yorkville	201	26.8	28	2.9	143	14.6	20	1.8	449	59.8		
County Total	9,622	19.3	4,318	7.3	7,083	11.1	4,832	6.8	26,204	52.6		

<sup>&</sup>lt;sup>a</sup> The Town of Caledonia was incorporated as a Village in October 2005. The 1970 through 2000 household levels presented in this table are for the former Town of Caledonia.

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

<sup>&</sup>lt;sup>b</sup>The Town of Mt. Pleasant was incorporated as a Village in September 2003. The 1970 through 2000 household levels presented in this table are for the former Town of Mt. Pleasant.

<sup>&</sup>lt;sup>c</sup>The Town and Village of Rochester were consolidated as a Village in December 2008. The 1970 through 2000 household levels presented in this table are for the total combined households of the former Town and Village of Rochester.

Table 15

HISTORIC POPULATION LEVELS IN RACINE COUNTY
AND THE SOUTHEASTERN WISCONSIN REGION: 1970-2012

			Popu	lation		
County	1970	1980	1990	2000	2010	2012 <sup>a</sup>
Kenosha	117,900	123,100	128,200	149,600	166,400	166,800
Milwaukee	1,054,200	965,000	959,300	940,200	947,800	948,300
Ozaukee	54,500	67,000	72,800	82,300	86,400	86,600
Racine	170,800	173,100	175,000	188,800	195,400	195,400
Walworth	63,400	71,500	75,000	92,000	102,200	102,500
Washington	63,800	84,800	95,300	117,500	131,900	132,500
Waukesha	231,300	280,200	304,700	360,800	389,900	390,900
Region	1,755,900	1,764,700	1,810,300	1,931,200	2,020,000	2,023,000

			Percent Chang	e in Population		
County	1970-1980	1980-1990	1990-2000	2000-2010	2010-2012	1970-2012
Kenosha	4.4	4.1	16.7	8.4	0.2	29.3
Milwaukee	-8.5	-0.6	-2.0	-0.2	0.1	-11.2
Ozaukee	22.9	8.7	13.0	5.7	0.2	37.1
Racine	1.3	1.1	7.9	4.0		12.6
Walworth	12.8	4.9	22.7	10.1	0.3	38.1
Washington	32.9	12.4	23.3	11.1	0.5	51.8
Waukesha	21.1	8.7	18.4	6.1	0.3	40.8
Region	0.5	2.6	6.7	3.5	0.1	13.2

<sup>&</sup>lt;sup>a</sup>Estimated.

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

# **Minority Population Characteristics**

Census information was compiled and examined for the various minority populations in the County. This information will facilitate the identification of the impacts of the recommendations of this Racine County Public Transit Plan on the County's minority populations. Tables 16 and 17 set forth the historic levels of the County minority populations—Black/African American, American Indian or Alaska Native, Asian or Pacific Islander, other minority, and Hispanic—in 1980, 1990, 2000, and 2010. The principal minority populations in the County in 2010 were Black/African American persons constituting about 24,500 persons, or about 13 percent of the total County population, and Hispanic persons constituting about 22,500 persons, or about 12 percent of the County population. Both minority groups have significantly increased in size since 1980—there are 76 percent more Black/African American persons in the County compared to 1980, and 213 percent more Hispanic persons.

Year 2010 Census block population data were used to identify blocks where the percent of population that was in a minority group exceeded the County average percentage for that minority group. Map 6 shows the areas with above-average concentrations for the total combined minority population in the County. Most concentrations of minority populations occur in the older, more densely developed sections of the City of Racine that are well served by public transit.

Table 16

POPULATION BY RACE IN RACINE COUNTY: 1980 - 2010

					Nonwhite <sup>a</sup>								
		White		Black / African American		American Indian and Alaska Native		Asian and Pacific Islander <sup>b</sup>		Other Race			
Year	Total Population	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population		
1980	173,132	155,206	89.7	13,894	8.0	419	0.2	576	0.3	3,037	1.8		
1990	175,034	152,098	86.9	16,999	9.7	521	0.3	1,004	0.6	4,412	2.5		
2000 <sup>a</sup>	188,831	159,582	84.5	21,100	11.2	1,448	0.8	1,885	1.0	8,168	4.3		
2010	195,408	160,116	81.9	24,471	12.5	1,806	0.9	2,898	1.5	11,363	5.8		

<sup>&</sup>lt;sup>a</sup>For the 2000 Federal census, individuals could report that they were of more than one race. The figures on this table indicate the number of persons reported as being of a given race (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 sum to more than the total population.

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

# **Transit-Dependent Population Characteristics**

Certain segments of the population may be expected to have a greater dependence on, and make more extensive use of, public transit than the population as a whole because they have historically had more limited access to the automobile as a mode of travel than the population in general. Five such "transitdependent" population groups were identified for this study: 1) school-age children (ages 10 through 16),<sup>1</sup> 2) seniors (ages 65 and older), 3) persons in lowincome households, 4) people with disabilities,<sup>2</sup> and 5) households with no vehicle available. Information about these transit-dependent groups in the County was obtained from U.S. Census data. Table 18 displays the historic population of these groups in the County in 1980, 1990, 2000, and 2010. The information in the table leads to the following observations:

Table 17
HISPANIC OR LATINO POPULATION IN RACINE COUNTY: 1980 - 2010

		Hispanic or Lat	ino Population <sup>a</sup>
Year	Total Population	Number	Percent of Total Population
1980	173,132	7,201	4.2
1990	175,034	9,034	5.2
2000	188,831	14,990	7.9
2010	195,408	22,546	11.5

<sup>&</sup>lt;sup>a</sup>Persons of Hispanic or Latino origin may be of any race.

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

 Persons in low-income families accounted for the largest share of the transit-dependent population in the County for the year 2010. They constituted about 60,400 persons, or about 31 percent of the total County population. Seniors, people with disabilities, and school-age children represent smaller, but significant,

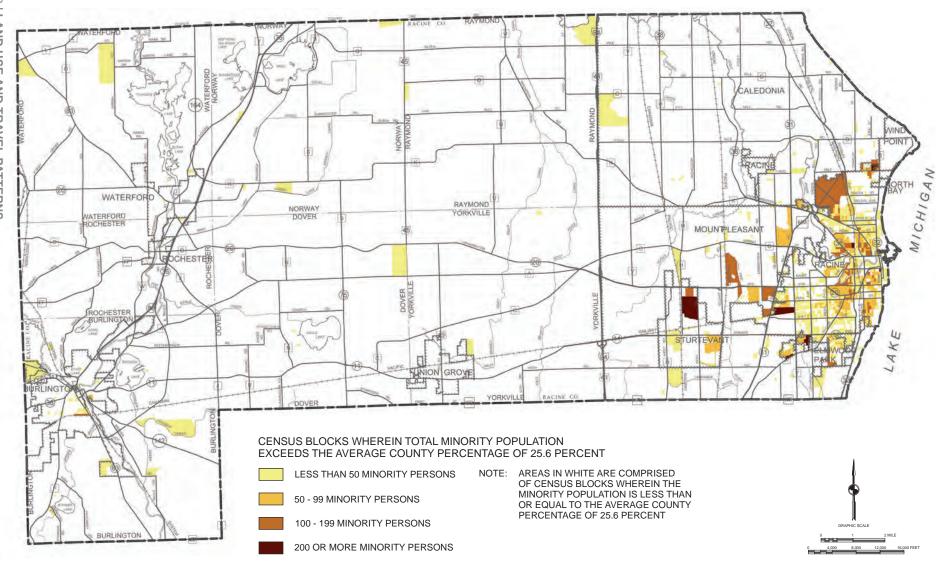
<sup>&</sup>lt;sup>b</sup>The population reported under this category includes persons identified as "Asian" and as "Native Hawaiian and Other Pacific Islander" in the data for the years 2000 and 2010.

<sup>&</sup>lt;sup>1</sup>For the purpose of this study, children in the age group 10 through 16 were considered as potentially transit-dependent, principally for social and recreational trips. Those in the upper end of this age range could also be transit-dependent for work trips. Transit dependence for trips between homes and schools was considered to be significant for this study only for trips made by students who reside between one and two miles from school and are not eligible for the student transportation provided by local school districts.

<sup>&</sup>lt;sup>2</sup>The Census data do not reflect ambulatory disabled persons whose physical or mental impairment does not prevent them from traveling independently.

Map 6

LOCATIONS OF CONCENTRATIONS OF TOTAL MINORITY PERSONS WITHIN RACINE COUNTY: 2010



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

Table 18

HISTORIC LEVELS OF TRANSIT-DEPENDENT POPULATIONS IN RACINE COUNTY: 1980-2010

					Transit-Dependent Population Groups <sup>a</sup>								
	Popu	lation			e Children hrough 16)		niors and older)		s in Low- ouseholds <sup>b</sup>		e with vilities <sup>c</sup>		ds With No Available
Year	Total	Ages 16 and Over	Total Households	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Population Ages 16 and Over	Number	Percent of Total Households
1980	173,132	126,975	59,418	22,960	13.3	17,492	10.1	34,132	19.7	2,834	1.6	5,947	3.4
1990	175,034	131,218	63,736	18,056	10.3	21,002	12.0	42,834	24.5	5,394	3.1	5,669	3.2
2000	188,831	143,798	70,819	20,744	11.0	23,374	12.4	39,586	21.0	9,783	5.2	5,759	3.0
2010	195,408	152,709	75,651	19,598	10.0	25,739	13.2	60,407	30.9	20,651	10.6	6,582	3.4

					Change in Transit-Dependent Population Groups <sup>a</sup> : 1980-2010								
	in Total 1980-2010		louseholds: 2010	School-Age Children (ages 10 through 16) Seniors (ages 65 and older)		Persons in Low- Income Households <sup>b</sup>		People with Disabilities <sup>c</sup>		Households with No Vehicle Available			
Number	Percent	Number	Percent	Number	Percent	Number	Number	Percent	Number	Percent	Number	Percent	Number
22,246	12.8	25,734	20.3	-3,362	-14.6	8,247	22,246	12.8	25,734	20.3	-3,362	-14.6	8,247

<sup>&</sup>lt;sup>a</sup>All figures are based on Census information derived from sample data.

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

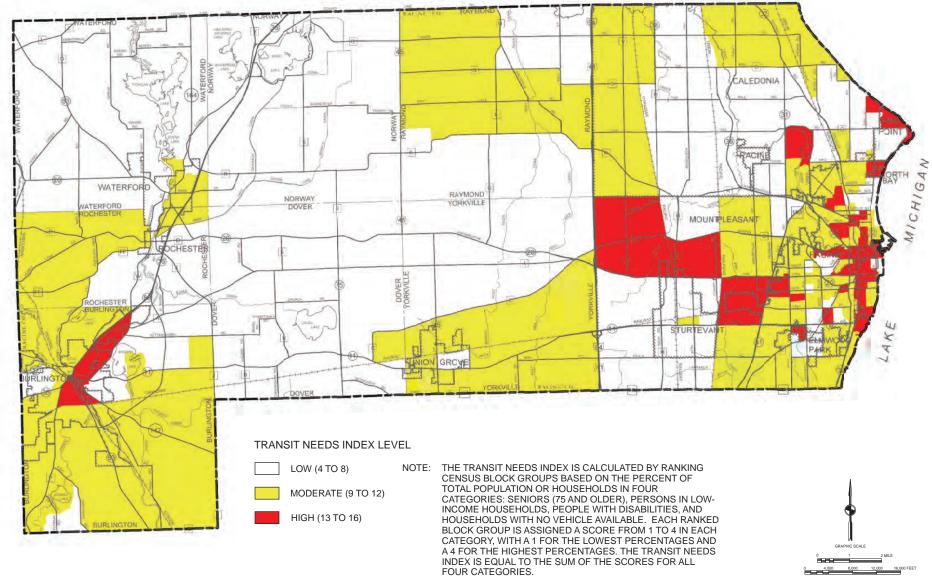
segments of the total County population, at about 13 percent, 11 percent, and 10 percent, respectively. Persons in households with no vehicle available accounted for the smallest portions of the total population at about 3 percent. As indicated by the low percentage of households in the County with no automobile available, most of the residents in the County may have access to a vehicle for their travel needs, thereby reducing their potential dependence on transit. As noted in a later section of this chapter, school-age children, persons residing in households with no vehicle available, and low-income persons currently comprise a significant share of the ridership on Racine's transit system.

- Since 1980, the senior, low-income, and disabled populations have increased in absolute numbers and in
  their share of the total population. Zero-auto households have slightly increased in absolute numbers, but
  remained about the same in their share of the total population, while school-age children have dropped
  slightly in both absolute numbers and in their share of total population.
- Data from the 2010 Census were used to identify areas in Racine County where transit needs are highest. Map 7 displays Census block groups within the County with the highest concentration of transit-dependent populations. These may be considered as potential priority areas for the provision of transit service. In 2010, the highest concentrations of residential populations with transit needs were focused in the center of the City of Racine and around its outskirts. An additional area of high transit need is found in the City of Burlington. The remainder of the County has moderate to low transit needs.

<sup>&</sup>lt;sup>b</sup>Includes persons residing in households with a total family income less than 200 percent of the Federal poverty level, which is the threshold for qualifying for State public assistance through the Temporary Assistance for Needy Families (TANF) Program.

<sup>&</sup>lt;sup>c</sup>The definition of "people with disabilities" varied for the 1990, 2000, and 2010 Census. For the 1990 Census, people with disabilities included those persons age 15 and older having a mobility limitation if they had a health condition which made it difficult to go outside the home alone for such activities as visiting the doctor's office. For the 2000 Census, people with disabilities included those persons age 16 and older having a physical, mental, or emotional condition that made it difficult to go outside the home to shop or visit a doctor's office. For the 2010 Census, people with disabilities included those persons age 15 or older who had serious difficulty living independently or a serious sensory, cognitive, or ambulatory disability.

Map 7
TRANSIT NEEDS INDEX FOR RACINE COUNTY: 2009



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

Table 19

HISTORIC EMPLOYMENT LEVELS IN RACINE COUNTY AND THE SOUTHEASTERN WISCONSIN REGION: 1970-2012

		Employment							
Area	1970	1980	1990	2000	2010	2012 Estimate			
Kenosha	42,100	54,100	52,200	68,700	74,900	73,900			
Milwaukee	525,200	583,200	609,800	624,600	575,400	578,400			
Ozaukee	21,300	28,200	35,300	50,800	52,500	54,200			
Racine	64,600	81,200	89,600	94,400	88,300	91,000			
Walworth	26,400	33,500	39,900	51,800	52,700	54,000			
Washington	24,300	35,200	46,100	61,700	63,900	67,200			
Waukesha	81,000	132,800	189,700	270,800	268,900	279,700			
Region	784,900	948,200	1,062,600	1,222,800	1,176,400	1,198,400			

	Change in Employment								
	1970-	1970-1980		-1990	1990-	-2000			
Area	Number	Percent	Number	Percent	Number	Percent			
Kenosha	12,000	28.5	-1,900	-3.5	16,500	31.6			
Milwaukee	58,000	11.0	26,600	4.6	14,800	2.4			
Ozaukee	6,900	32.4	7,100	25.2	15,500	43.9			
Racine	16,600	25.7	8,400	10.3	4,800	5.4			
Walworth	7,100	26.9	6,400	19.1	11,900	29.8			
Washington	10,900	44.9	10,900	31.0	15,600	33.8			
Waukesha	51,800	64.0	56,900	42.8	81,100	42.8			
Region	163,300	20.8	114,400	12.1	160,200	15.1			

		Change in Employment						
	2000-	2000-2010		-2012	1970-2012			
Area	Number	Percent	Number	Percent	Number	Percent		
Kenosha	6,200	9.0	-1,000	-1.3	31,800	75.5		
Milwaukee	-49,200	-7.9	3,000	0.5	53,200	10.1		
Ozaukee	1,700	3.3	1,700	3.2	32,900	154.5		
Racine	-6,100	-6.5	2,700	3.1	26,400	40.9		
Walworth	900	1.7	1,300	2.5	27,600	104.5		
Washington	2,200	3.6	3,300	5.2	42,900	176.5		
Waukesha	-1,900	-0.7	10,800	4.0	198,700	245.3		
Region	-46,200	-3.8	21,800	1.9	413,500	52.7		

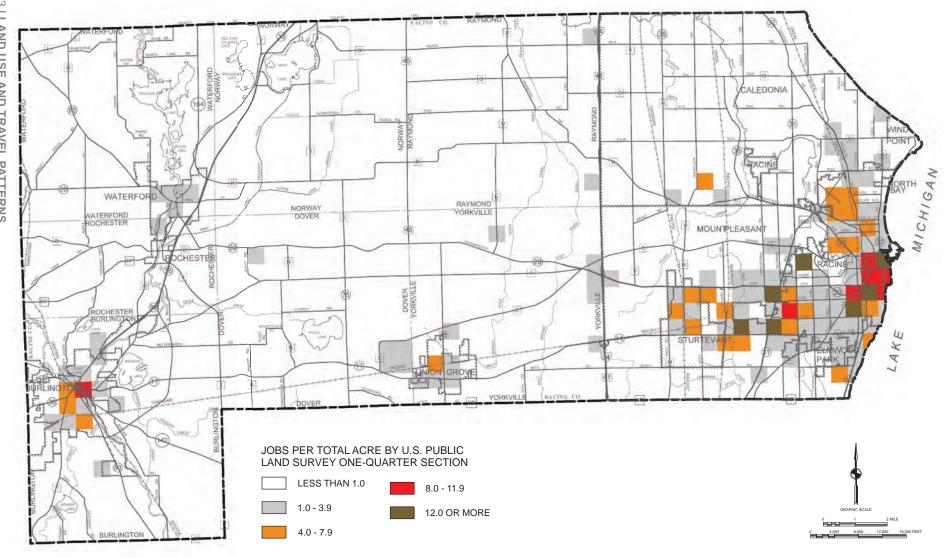
Source: U.S. Bureau of Economic Analysis and SEWRPC.

# **Employment Characteristics**

Table 19 shows employment trends in Racine County from 1970 through 2012; Map 8 displays employment density in 2000 by U.S. Public Land Survey quarter-section. The following observations can be drawn from this table and map:

• The County experienced an overall increase in employment between 1970 and 2012 of about 41 percent, although the employment increases varied significantly by decade and municipality. The County saw large increases in employment between 1970 and 1980, followed by slower growth between 1980 and 1990 caused by a nationwide recession, which severely affected the local economy between 1979 and 1984. Between 1990 and 2000, total employment growth in the County slowed even more with the City of Racine losing 4,800 jobs, mostly due to the closings of manufacturing plants in the City. Employment opportunities at new commercial, industrial, and office developments outside the City of Racine, in communities such as the Villages of Mt. Pleasant, Caledonia, and Sturtevant, have offset some of the

Map 8
EMPLOYMENT DENSITY IN RACINE COUNTY: 2000



job losses within the City. Employment losses in the County between 2000 and 2010 can mostly be attributed to the economic recession occurring between 2007 and 2009. The employment estimates for 2012 indicate some modest job growth in the County since 2010.

- The highest employment concentrations in the County remain in the City of Racine, particularly in the central business district (CBD)—where several governmental, retail, and service employers are located—in the area immediately south of the CBD, and in the southwest corner of the City where significant commercial development, including the Regency Mall, is located. Map 9 shows how employment concentrations in the entire Southeastern Wisconsin Region have dispersed greatly between 1972 and 2000. High job densities in Racine County now exist in many locations outside the City of Racine along both Washington Avenue (STH 20) and Durand Avenue (STH 11) in the Villages of Mt. Pleasant and Sturtevant, respectively, as well as in the City of Burlington CBD.
- Research has suggested that an employment density of at least four jobs per total acre is needed to support conventional fixed-route bus service operated with hourly headways<sup>3</sup>. The quarter-sections in the County that have this employment density are shaded in orange, red, and brown on Map 8. Most of these areas are in the City of Racine with nearly all areas already served by the City's existing bus service. The City of Burlington also has a significant concentration of employment.

# **Employment Transportation Survey**

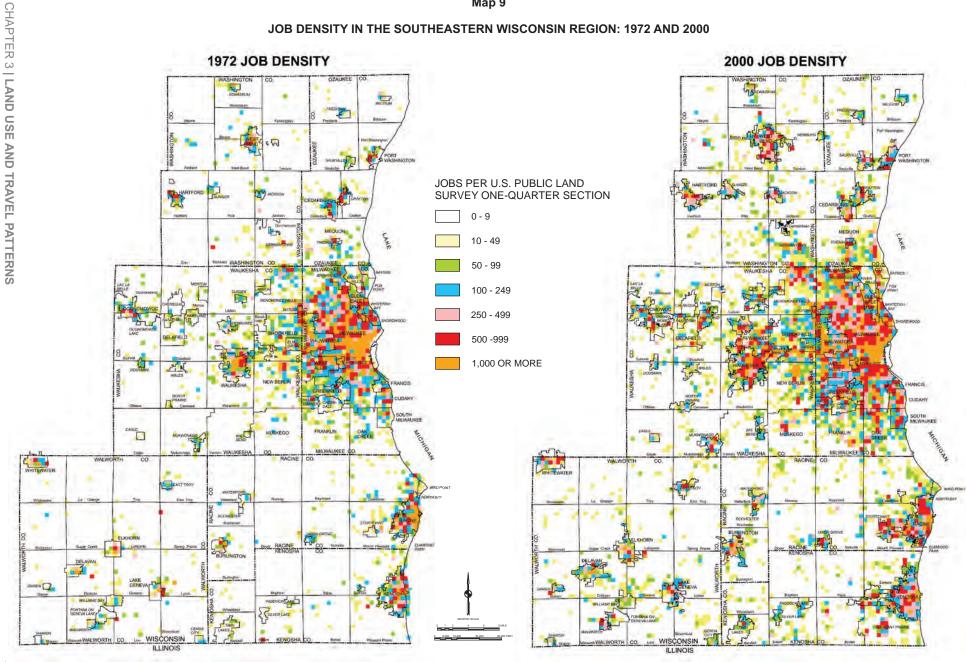
In fall 2008, Racine Area Manufacturers and Commerce (RAMAC) conducted a special survey of its members to gather information on the transportation needs of employers in Racine County for use in preparing the Racine County Transit Plan. The survey contained a series of questions, asking each employer to indicate if their location was currently served by a public transit route; if they were having problems recruiting or retaining workers, and if so, whether transportation was a factor; and if their company could be flexible on shift start and end times. The survey also asked for employers' opinions on whether they would consider making a contribution to expand public transportation services in their area and on what types of transit service improvements they wanted to see implemented. RAMAC distributed the survey by sending an e-mail to approximately 1,800 employers on the e-mail lists for RAMAC, the Burlington Chamber of Commerce, the Union Grove Chamber of Commerce, and the Waterford Chamber of Commerce, requesting that they complete an online survey. Follow-up hard copies of the survey questions were sent via regular mail to 87 selected employers that did not complete the online survey. The e-mail requesting employers to fill out the survey, as well as a list of the survey questions, are included in Appendix A.

A total of 155 employers completed the survey. Of that total, 150 were located in Racine County; their locations are shown on Map 10. Table 20 summarizes the employers' responses to selected questions, grouped by communities in the County. Based on the surveys that were returned, the following general observations may be made concerning employer transportation needs:

- Only 66 of the 150 County employers responding to the survey, or 44 percent, indicated they were served by public transit.
- Only 37 of the 150 County employers responding to the survey, or about 25 percent, indicated they had problems recruiting workers, with four of these 37 employers, or about 11 percent, indicating that transportation problems were a significant factor contributing to their recruiting problems. About 20 of the 150 employers responding to the survey, or about 13 percent, indicated they have problems retaining workers, with two of these 20 employers, or 10 percent, indicating that transportation problems were a significant factor contributing to their retention problems.

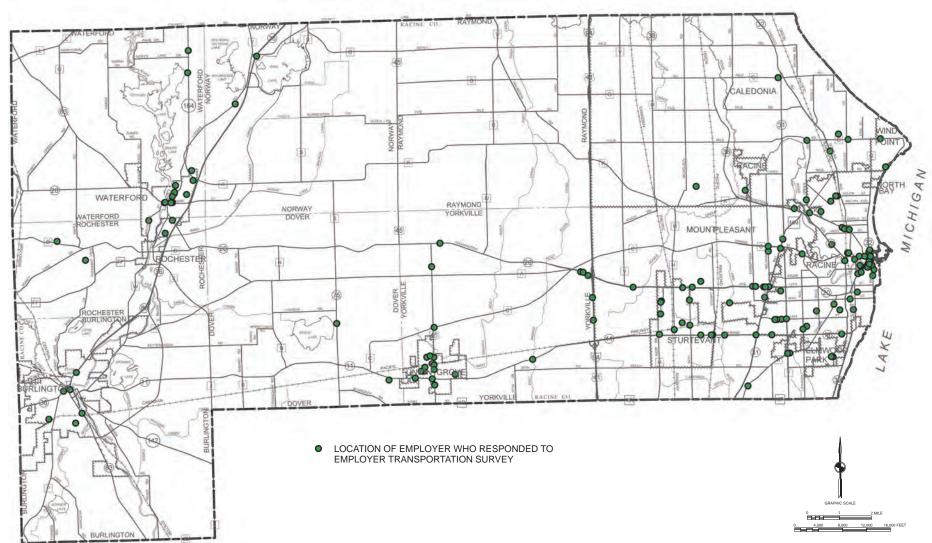
<sup>&</sup>lt;sup>3</sup>See TCRP Report No. 100, Transit Capacity and Quality of Service Manual, 2nd Edition, Part 3-Quality of Service, Chapter 3: Fixed-Route Transit Service Measures.

Map 9 JOB DENSITY IN THE SOUTHEASTERN WISCONSIN REGION: 1972 AND 2000



Map 10

LOCATIONS OF EMPLOYERS IN RACINE COUNTY WHO RESPONDED TO THE SURVEY OF EMPLOYER
TRANSPORTATION NEEDS CONDUCTED BY THE RACINE AREA MANUFACTURERS AND COMMERCE: FALL 2008



Source: Racine Area Manufacturers and Commerce and SEWRPC.

Table 20

SUMMARY OF RESPONSES BY RACINE COUNTY EMPLOYERS TO EMPLOYER TRANSPORTATION SURVEY CONDUCTED BY THE RACINE AREA MANUFACTURERS AND COMMERCE: FALL 2008

				Number of	Employers by	Community			
				Racine/ Elmwood	Rochester/ Waterford		Union Grove	Other	Total Number of Employers, Racine
Survey Question	Burlington	Caledonia	Mt. Pleasant	Park	Area	Sturtevant	Area	Community	County
Is employer served by a public transportation route?									
Yes		5	11	40		9		1	66
No	6	7	7	11	19	3	16	11	80
No response				3				1	4
Total for question	6	12	18	54	19	12	16	13	150
For the 37 employers stating they had difficulties recruiting workers, are transportation problems a significant factor?									
Yes				2	1		1		4
No				1					1
No response	1	1	8	13	4	3	2		32
Total for question	1	1	8	16	5	3	3		37
For the 20 employers stating they had difficulties retaining workers, are transportation problems a significant factor?									
Yes				2					2
No				1					1
No response	2		4	4	3	2	2		17
Total for question	2	0	4	7	3	2	2		20
Is employer willing to be flexible on shift times where transportation is a problem?									
Yes	2	7	13	28	10	5	11	8	84
No	4	3	5	23	7	7	5	5	59
No response		2		3	2			0	7
Total for question	6	12	18	54	19	12	16	13	150
What types of changes would employers like to see in public transportation? <sup>a</sup>									
Addition of evening service			3	11	1	3		1	19
Addition for other shifts			2	8		2			12
Change in bus schedule			2	4		1			7
Expansion of current routes in		4	5	4		2			16
employer's area  New routes for employer's area	2	1	5 1	4 2	5	1	1	4 2	16 14
None	3	8	5	19	12	5	12	4	68
Other	1		3	6	2	1	1	2	16
No response		3	3	12		2	2	3	25
Would employer be willing to make a contribution to expand transportation service in its area?				••					
Yes, with financial support								1	1
Yes, cooperating to establish privately- sponsored bus route				1		1			2
Yes, cooperating to establish privately-sponsored subscription van services				1					1
Not at this time	5	10	16	42	18	10	14	11	126
Other	1	10	2	5	1	10			11
No response		1		5			2	1	9
			1						·

<sup>&</sup>lt;sup>a</sup>Some employers identified more than one potential service change.

Source: Racine Area Manufacturers and Commerce and SEWRPC.

Table 21
HISTORIC URBAN GROWTH IN RACINE COUNTY: 1900-2010

		Racin	e County Urban Develor	oment <sup>a</sup>	
	Change from		Previous Date	Average Annual	
Year	Total Area in Square Miles	Square Miles	Percent	Change in Square Miles from Previous Date	Percent of Total Area <sup>b,c</sup>
1900	2.9				0.9
1950	13.1	10.2	351.7	0.20	3.8
1963	26.8	13.7	104.6	1.05	7.9
1970	33.9	7.1	26.5	1.01	10.0
1980	41.4	7.5	22.1	0.75	12.2
1990	47.6	6.2	15.0	0.62	14.0
2000	53.8	6.2	13.0	0.62	15.8
2010	59.0	5.2	9.7	0.52	17.3

<sup>&</sup>lt;sup>a</sup>Urban development as defined for the purposes of this analysis includes those areas of the County where houses or other buildings have been constructed in relatively compact groups, thereby indicating a concentration of residential, commercial, industrial, governmental, or institutional land uses. The continuity of such development was considered interrupted if a quarter mile or more of nonurban type land uses, such as agriculture, woodlands, or wetlands, prevailed in which the above conditions were generally absent.

- About 56 percent, or 84 of the 150 County employers responding to the survey, indicated that they could be flexible on the shift start and end times of employees for whom transportation was a problem. However, only four of these 150 employers, or about 3 percent, indicated that they would be willing to make a contribution to expand transportation service in their area through financial support or by cooperating to establish a privately-sponsored bus route or subscription van service.
- In communities currently within the service area of the BUS, employer survey responses showed mixed demand for expanding existing services. Of the 54 employers responding to the survey from the City of Racine/Village of Elmwood Park, 11 (20 percent) wanted to add evening transit service, eight (15 percent) wanted transit service for other shifts, four (7 percent) wanted an expansion of current routes, and two (4 percent) wanted new routes. Of the 30 employers responding from the Villages of Mt. Pleasant and Sturtevant, six (20 percent) wanted to add evening service, four (13 percent) wanted transit service for other shifts, seven (23 percent) wanted an expansion of current routes, and two (7 percent) wanted new routes.

In communities outside the BUS service area, most of the interest in new public transportation services was reported from employers in the City of Burlington or the Rochester/Waterford area. Of the six Burlington employers responding, two (33 percent) wanted new routes for their area. Of the 19 Rochester/Waterford employers responding, five (26 percent) wanted new routes and one (5 percent) wanted evening service.

# **EXISTING LAND USE**

Fixed-route transit systems, like the Racine BUS, typically need to limit service extent to within urban developed areas in order to be cost-effective and economical. Utilizing aerial photographs, the Regional Planning Commission has assembled information documenting the historic growth and pattern of urban development throughout the Southeastern Wisconsin Region and including Racine County. The historic increase in the developed urban land in the County is quantitatively summarized in Table 21, and displayed on Map 11.

<sup>&</sup>lt;sup>b</sup>The total land area of Racine County from 1900 to 1990 is 340.54 square miles.

<sup>&</sup>lt;sup>c</sup>The total land area of Racine County in 2000 and 2010 is 340.58 square miles.

WATERFORD RAYMOND PRIOR TO 1850 1963 - 1970 1850 - 1900 1970 - 1980 1900 - 1940 1980 - 1990 1940 - 1950 1990 - 2000 1950 - 1963 2000 - 2010

Map 11
HISTORIC URBAN GROWTH IN RACINE COUNTY: 1850 - 2010

In 1900, development in the County was virtually nonexistent outside the area immediately surrounding and including the City of Racine CBD. During the first half of the 20th Century, most of the development in the County occurred in relatively tight, concentric rings, contiguous to, and outward from, existing urban development in the center of the City of Racine and the other Cities and Villages in the County. The second half of the 20th Century and first decade of the 21st Century saw the amount of land in the County devoted to urban land uses more than quadrupled from about 13.1 square miles in 1950 to about 59.0 square miles in 2010. The County experienced a period of rapid urban development between 1950 and 1970, when urban land uses grew at an average annual average rate of about 1.0 square mile per year, after which the rate of growth slowed to about 0.8 square miles per year through 1980, about 0.6 square miles per year between 1980 and 2000, and about 0.5 square miles per year between 2000 and 2010. While much of the rapid development between 1950 and 1970 occurred near the established urban areas, other development was scattered in outlying portions of the County. Since 1970 urban development has occurred both through the infilling of partially developed areas, particularly in the urban-rural fringe, and in scattered urban enclaves.

Research has suggested that a residential density of at least four dwelling units per net residential acre is needed to support efficient and effective conventional fixed-route bus service operated with at least hourly headways<sup>4</sup>. As shown on Map 12, residential densities of at least four dwelling units per acre exist throughout the City of Racine and just beyond the city limits. The City of Burlington, Villages of Caledonia, Sturtevant, Union Grove, and Waterford, also support some areas with more than four dwelling units per acre. The central portions of the City of Racine, where residential densities of nine or more dwelling units per net acre exist, can potentially support higher levels of transit service.

# **Major Activity Centers**

Planning for transit service must also consider the travel demand generated by major activity centers. Major activity centers can be land uses or facilities that currently attract, or have the potential to attract, significant travel. Four basic types of major activity centers were identified for Racine County: major activity centers excluding large employers; large employers; industrial and business parks; and major facilities for seniors, people with disabilities, and low-income residents.

The major activity centers excluding large employers which were identified for this study included the following categories: 1) commercial centers, 2) educational institutions, 3) medical centers, and 4) government centers. Tables 22 through 25 list the specific activity centers in the County in 2008 under each of these categories and Map 13 shows their locations. In the eastern portion of the County, most of these activity centers are distributed throughout the City of Racine. A small number are also located in the Village of Sturtevant, or in the area between the Village of Sturtevant and the City of Racine. In the western portion of the County, most activity centers are located in the City of Burlington or the Villages of Rochester, Union Grove, and Waterford.

Large employer activity centers were defined as individual companies with 100 or more employees in 2008. Table 26 lists these large employers and Map 14 shows their locations. Many of the major employers in the County tend to be located in one of several concentrations. Within the City of Racine, the largest concentrations of major employers are located in the CBD and just south of it; in the northwest part of the City near Batten Airport; and on the southwest side near the intersection of Green Bay and Durand Avenue. In the Village of Sturtevant, several major employers are located in the Renaissance Business Park and in the area between the

<sup>&</sup>lt;sup>4</sup>See Transit Cooperative Research Program Report No. 16, Transit and Urban Form, Volume I-Part I; Transit, Urban Form, and the Built Environment: A Summary of Knowledge; Transportation Research Board, 1996.

CALEDONIA WATERFORD RAYMOND MOUNTPLEASANT DWELLING UNITS PER NET RESIDENTIAL LAND ACRE LESS THAN 4.0 9.0 TO 14.9 4.0 TO 6.9 15.0 OR MORE 7.0 TO 8.9

Map 12
RESIDENTIAL LAND DENSITY IN RACINE COUNTY: 2010

Table 22

MAJOR COMMERCIAL CENTERS IN RACINE COUNTY: 2008

Number on Map 13	Commercial Center	Location
1	Racine Central Business District Office Center	City of Racine, on Main Street between State Street and 7th Street, and on 6th and 7th Streets, between Lake Street and Grand Avenue
2	Racine-West Retail Center	City of Racine, includes retail office and service establishments located north and east of the intersection of Green Bay Road and Durand Avenue, including the Regency Mall Shopping Center, the High Ridge Mall, and the Regency Point Shopping Center
3	Durand Avenue and Lathrop Avenue Retail Center	City of Racine, including Elmwood Plaza and the retail and service establishments on Durand Avenue between Lathrop Avenue and Kentucky Street
4	Shorecrest Plaza Shopping Center	City of Racine, on Three Mile Road from 3800 - 4000 Erie Street
5	Green Tree Centre	Village of Caledonia, at the intersection of Douglas Avenue and Four Mile Road
6	Wal-Mart and Menard's	Village of Mount Pleasant, on Durand Avenue from 3000 - 3200 Oakes Road
7	Washington Avenue and Green Bay Road Retail Center	Village of Mount Pleasant, on Washington Avenue between Emmertsen Road and Ohio Street, including the Jewel/Osco-Kohls Shopping Center, Westgate Mall Shopping Center, and Shopko Department Store
8	Burlington Central Business District	City of Burlington, includes retail office and service establishments located south and east of the intersection of State Highways 11 and 36, primarily along Pine Street and Milwaukee Avenue
9	State Highway 36 Commercial Corridor in Burlington	City of Burlington, on State Highway 36 between Grove Street and Buckley Street.

Source: City of Racine Department of Transportation and SEWRPC.

Village of Sturtevant and the City of Racine, and also near the intersection of IH 94 and STH 20. In the City of Burlington, several major employers are located within city limits, including Nestle USA, Inc. and Aurora Medical Group, Inc. It is also worth noting that there are two major employers situated away from any other major employers; those being Metro Milwaukee Auction in the Town of Raymond and the Wisconsin Department of Health Service's Southern Wisconsin Center in the Village of Union Grove.

In addition to the major employers identified in Table 26, the locations of major industrial or business parks within the County were also identified as major employment centers. These parks are listed in Table 27 along with their approximate acreage and are displayed on Map 15. While most employers in these parks had less than 100 employees, concentrations of such smaller employers in close proximity resulted in large combined employment levels in such areas. In 2008, there were a total of 19 industrial and business parks dispersed throughout the County, encompassing about 2,100 gross acres<sup>5</sup>.

Major activity centers comprised of selected facilities for seniors or people with disabilities and low-income individuals and families were also identified. The nature of the population using the types of facilities identified under this category could be expected to generate significant transit usage since they are likely to be transit-dependent individuals. Specific locations of such facilities within the County in 2008 appear in Table 28 and Map 16. The largest concentration of these facilities is located on the City of Racine's southwest side near the Regency Mall area. A number of individual facilities are also scattered along the City's edge on the north, west, and south sides. The western portion of the County has a relatively small number of these facilities.

<sup>&</sup>lt;sup>5</sup>As identified in SEWRPC Memorandum Report No. 136, 2nd Edition, Racine County Industrial Park Land Absorption Study, December 2005.

Table 23

MAJOR EDUCATIONAL INSTITUTIONS IN RACINE COUNTY: 2006

Number on Map 13	Educational Institutions <sup>a</sup>	Address	Approximate Enrollment <sup>b</sup>
	Universities and Colleges		
1	Gateway Technical College – Burlington Center	496 McCanna Parkway, City of Burlington	N/A
2	Gateway Technical College – CATI	2320 Renaissance Boulevard, Village of Sturtevant	N/A
3	Gateway Technical College – Racine Campus	1001 S. Main Street, City of Racine	N/A
	Public Junior and Senior High Schools		
4	Burlington High School	400 McCanna Parkway, City of Burlington	1,350
5	Fox River Middle School	921 W. Main Street, Village of Waterford	350
6	Gilmore Middle School	2330 Northwestern Avenue, City of Racine	800
7	J.I. Case High School	7345 Washington Avenue, Village of Mt. Pleasant	1,950
8	Jerstad – Agerholm Middle School	3601 LaSalle Street, City of Racine	800
9	Keith R. Mack Achievement Center	2015 Franklin Street, City of Racine	100
10	McKinley Middle School	2340 Mohr Avenue, City of Racine	800
11	Mitchell Middle School	2701 Drexel Avenue, City of Racine	900
12	Nettle E. Karcher Middle School	225 Robert Street, City of Burlington	600
13	REAL Charter School	1230 6th Street, City of Racine	200
14	Starbuck Middle School	1516 Ohio Street, City of Racine	850
15	Union Grove High School	3433 S. Colony Avenue, Village of Union Grove	750
16	Walden III Middle and High School	1012 Center Street, City of Racine	500
17	Washington Park High School	1901 12th Street, City of Racine	2,300
18	Waterford Union High School	507 W. Main Street, Village of Waterford	1,100
19	William Horlick High School	2119 Rapids Drive, City of Racine	2,150
	Parochial and Private Schools		
20	Catholic Central High School	148 McHenry Street, City of Burlington	200
21	Concordia Lutheran School	3350 Lathrop Avenue, Village of Elmwood Park	150
22	John Paul II Academy	2023 Northwestern Avenue, City of Racine	150
23	Lutheran High School	251 Luedtke Avenue, City of Racine	250
24	Prairie School	4050 Lighthouse Drive, Village of Wind Point	650
25	Racine Christian School	912 Virginia Street, City of Racine	200
26	Racine Montessori School	2317 Howe Street, City of Racine	200
27	San Juan Diego Middle School	1101 Douglas Avenue, City of Racine	50
28	St. Catherine's High School	1200 Park Avenue, City of Racine	400
29	St. Charles Catholic School	449 Conkey Street, City of Burlington	210
30	St. Edward's Elementary School	1435 Grove Avenue, City of Racine	350
31	St. John's Lutheran School	198 Westridge Ave, City of Burlington	200
32	St. John's Lutheran School	510 Kewaunee Street, City of Racine	200
33	St. Joseph Elementary School	1525 Erie Street, City of Racine	200
34	St. Lucy's Elementary School	3101 Drexel Avenue, City of Racine	250
35	St. Mary's Grade School	225 W. State Street, City of Burlington	300
36	St. Peter's Lutheran School	145 S. 6th Street, Village of Waterford	100
37	St. Richard School	1509 Grand Avenue, City of Racine	150
38	St. Rita's Elementary School	4433 Douglas Avenue, Village of Caledonia	250
39	St. Sebastian's Elementary School	3030 95th Street, Village of Sturtevant	150
40	St. Thomas Aquinas Grade School	302 S. 2nd Street, Village of Waterford	200
41	Trinity Evangelical Luther School – Wisconsin Synod	7900 Nicholson Road, Village of Caledonia	100
42	Trinity Lutheran School – Missouri Synod	2065 Geneva Street, City of Racine	250
43	Union Grove Christian School	417 15th Avenue, Village of Union Grove	150
44	Wisconsin Lutheran School	734 Villa Street, City of Racine	150

<sup>&</sup>lt;sup>a</sup>Public elementary schools were not considered major potential transit trip generators because their students generally have fewer school-sponsored after-school activities, typically live in relatively close proximity to the school, which permits them to travel by walking or bicycling, or are likely to have transportation regularly provided by the local school district or by their families. Also not included is the University of Wisconsin – Parkside, which is located in Kenosha County but has a significant enrollment from Racine County. Parochial and private schools were identified as major potential transit trip generators because students are drawn from an area larger than the surrounding neighborhoods.

Source: Wisconsin Department of Public Instruction and SEWRPC.

<sup>&</sup>lt;sup>b</sup>Schools with fewer than 50 students enrolled were not included.

Table 24

MAJOR MEDICAL CENTERS IN RACINE COUNTY: 2008

Number on Map 13	Medical Center	Address
	Community Medical Centers <sup>a</sup>	
1	Aurora Memorial Hospital – Burlington	252 McHenry Street, City of Burlington
2	Wheaton Franciscan Healthcare	1320 Wisconsin Avenue, City of Racine
3	Wheaton Franciscan Healthcare - All Saints Spring Street Campus	3801 Spring Street, City of Racine
	Special Medical Centers <sup>b</sup>	
4	Aurora Health Center – Racine	8400 Washington Avenue, Village of Mt. Pleasant
5	Aurora Health Center – Waterford	818 Forrest Lane, Village of Waterford
6	Lakeview Specialty Hospital and Rehabilitation Center	1701 Sharp Road, Town of Dover

<sup>&</sup>lt;sup>a</sup>Defined as a hospital serving persons of all ages having at least 100 beds and providing in-patient and out-patient facilities and laboratory and clinical services.

# TRAVEL HABITS AND PATTERNS

In 2001, the Regional Planning Commission conducted a household travel survey and a survey of Racine transit system users, which yielded information on the quantity and characteristics of person travel in the County. The 2001 surveys were part of a comprehensive inventory of travel which also included a commercial truck survey and an external travel survey. The findings of the 2001 household and transit passenger surveys that are relevant to the preparation of this transit plan are summarized below.

#### **Total Person Travel Characteristics**

The Commission conducted a household travel survey in the fall of 2001 based on a sample size of about 17,000 households, or about 2 percent of the households in the Region. The distribution of person trips<sup>6</sup> in the County in 2001 is shown in Table 29 by trip purpose and by internal and external trips. Internal trips have both trip ends within the County, and external intraregional trips have one trip end within the County and the other trip end in a different area within the seven-county Southeastern Wisconsin Region.

To facilitate analysis of 2001 person-travel, the County was divided into 23 internal analysis areas, and the area outside the County was divided into 18 external analysis areas comprising the remainder of the Southeastern Wisconsin Region. The generalized patterns and volumes of the person trips made in 2001 between the internal analysis areas within the County, and between the County and the external analysis areas are shown on Maps 17 and 18, respectively. Trips are shown on the maps in produced-attracted format—that is, from area of production to area of attraction. The production area for a trip having one end at "home"—that is either beginning at or ending at home—is the area containing the location of the "home" and the attraction area is the area containing the "non-home" end of that trip. The production area for trips having neither end at "home" is the

<sup>&</sup>lt;sup>b</sup>Defined as all other major medical facilities and special clinics offering multispecialty medical services with at least 10 doctors.

<sup>&</sup>lt;sup>6</sup>A person trip was defined as a one-way journey between a point of origin and a point of destination by a person five years of age or older traveling as an auto driver or as a passenger in an auto, taxi, truck, motorcycle, school bus, or other mass transit carrier. To be considered, the trip must have been at least the equivalent of one full city block in length.

**MAJOR ACTIVITY CENTERS IN RACINE COUNTY: 2008** 414 CALEDONIA 22 RACINE "ICHIGA! WATERFO RAYMOND NORWAY YORKVILLE WATERFORD DOVER MOUNTPLEASANT ROCHESTER LA **COMMERCIAL CENTERS** MEDICAL CENTERS MAJOR COMMERCIAL CENTERS COMMUNITY MEDICAL CENTER SPECIAL MEDICAL CENTER **IDENTIFICATION NUMBER** (See Table 22)

**EDUCATIONAL INSTITUTIONS** 

PUBLIC JUNIOR OR SENIOR HIGH SCHOOL

PRIVATE SCHOOL

(See Table 23)

MAJOR PAROCHIAL OR

**IDENTIFICATION NUMBER** 

UNIVERSITY OR COLLEGE

**IDENTIFICATION NUMBER** 

(See Table 24)

LOCAL

**GOVERNMENTAL CENTERS** 

PUBLIC LIBRARY

(See Table 25)

REGIONAL OR COUNTY

**IDENTIFICATION NUMBER** 

Map 13



BURLINGTON

Table 25

GOVERNMENTAL AND PUBLIC INSTITUTIONAL CENTERS IN RACINE COUNTY: 2008

Number on				
Map 13	Institutional Centers	Address		
	Regional and County			
1	Human Services Department and Western Racine County Service Center	209 N. Main Street, City of Burlington		
2	Racine County Child Support Department	818 6th Street, City of Racine		
3	Racine County Courthouse and Administration	730 Wisconsin Avenue, City of Racine		
4	Racine County Human Service Department/ Workforce Development Center	1717 Taylor Avenue, City of Racine		
5	Racine County Ives Grove Office Complex	14200 Washington Avenue, Town of Yorkville		
6	Racine County Law Enforcement Center	717 Wisconsin Avenue, City of Racine		
7	Racine Youthful Offenders Correctional Facilities	1501 Albert Street, City of Racine		
8	Social Security Administration	4020 Durand Avenue, City of Racine		
9	Wisconsin Department of Corrections, Racine Correctional Institution	2019 Wisconsin Street, Village of Sturtevant		
10	Wisconsin Department of Corrections, Robert E. Ellsworth Correctional Center	21425-A Spring Street, Town of Dover		
11	Wisconsin Department of Motor Vehicles and Department of Natural Resources Service Center	9531 Rayne Road, Village of Sturtevant		
	Local Government			
12	Burlington City Hall	300 N. Pine Street, City of Burlington		
13	Burlington Town Hall	32288 Bushnell Road, Town of Burlington		
14	Caledonia Village Hall	6922 Nicholson Road, Village of Caledonia		
15	Dover Town Hall	4110 S. Beaumont Avenue, Town of Dover		
16	Elmwood Park Village Hall	3131 Taylor Avenue, Building 4, City of Racine		
17	Mt. Pleasant Village Hall	6126 Durand Avenue, Village of Mt. Pleasant		
18	North Bay Village Hall	3615 Hennepin Place, Village of North Bay		
19	Norway Town Hall	6419 Heg Park Road, Wind Lake, Town of Norway		
20	Racine City Hall	730 Washington Avenue, City of Racine		
21	Racine Municipal Court	800 Center Street, City of Racine		
22	Raymond Town Hall	2255 76th Street, Town of Raymond		
23	Rochester Town and Village Halls	203 W. Main Street, Village of Rochester		
24	Sturtevant Village Hall	2801 89th Street, Village of Sturtevant		
25	Union Grove Village Hall	925 15th Avenue, Village of Union Grove		
26	Waterford Town Hall	415 N. Milwaukee Street, Village of Waterford		
27	Waterford Village Hall	123 N. River Street, Village of Waterford		
28	Wind Point Clerk's Office	215 E. Four Mile Road, Village of Wind Point		
29	Yorkville Town Hall	720 Main Street, Town of Yorkville		
	Public Libraries			
30	Burlington Public Library	166 E. Jefferson Street, City of Burlington		
31	Graham Public Library	1215 Main Street, Village of Union Grove		
32	Racine Public Library	75 7th Street, City of Racine		
33	Rochester Public Library	208 W. Spring Street, Village of Rochester		
34	Waterford Public Library	101 N. River Street, Village of Waterford		

Table 26
MAJOR EMPLOYERS WITHIN RACINE COUNTY: 2008

Number				Approximate Employment		
on Map 14	Employment Centers <sup>a</sup>	Address <sup>b</sup>	100-249	250-499	500-999	1,000 or more
	Industrial Manufacturing					
1	A&E Manufacturing Company	5501 21st Street	х			
2	Allesee Orthodontic Appliances, Inc.	13931 Spring Street, Town of Yorkville	х			
3	Andis Company	1800 Renaissance Blvd, Village of Sturtevant	х			
4	Bombardier Recreational	10101 Science Drive, Village of Sturtevant	х			
5	Career Industries, Inc.	3502 Douglas Avenue	х			
6	CNH	700 State Street		Х		
7	CNH	5729 Washington Avenue, Village of Mt. Pleasant				
8	CNH	7000 Durand Avenue, Village of Mt. Pleasant				
9	E.C. Styberg Engineering Company	1600 Goold Street	х			
10	Edstrom Industries, Inc.	819 Bakke Avenue, Village of Waterford	Х			
11	Ganton Technologies (Intermet)	2620 90th Street, Village of Sturtevant		Х		
12	Ganton Technologies (Intermet)	8213 Durand Avenue, Village of Sturtevant	Х			
13	General Converters & Assemblers	1325 16th Street	Х			
14	Goodwill Industries of Southeastern Wisconsin	5420 21st Street	Х			
15	Great Northern Corporation	1800 South Street	X			
16	Hypro, Inc.	600 South Jefferson Street, Village of Waterford	Х			
17	In-Sink-Erator, Division of Emerson Electric Company	4700 21st Street				х
18	JohnsonDiversey, Inc.	8310 16th Street, Village of Mt. Pleasant			X	
19	Modine Manufacturing Company	1500 DeKoven Avenue			x	
20	Nestle USA, Inc.	637 South Pine Street, City of Burlington			x	
21	Pioneer Products, Inc.	1917 South Memorial Drive	x			
22	Poclain Hydraulics, Inc.	1300 Grandview Parkway, Town of Yorkville	x			
23	Putzmeister, Inc.	1733 90th Street, Village of Mt. Pleasant		х		
24	R&B Grinding Company, Inc.	1900 Clark Street	х			
25	Racine Federated Inc.	8635 Washington Avenue, Village of Mt. Pleasant	х			
26	Racine Journal-Times	212 4th Street	х			
27	Ruud Lighting, Inc.	9201 Washington Avenue, Village of Sturtevant		х		
28	Saint Gobain Containers, LLC	815 McHenry Street, City of Burlington		х		
29	S.C. Johnson and Son, Inc.	1525 Howe Street				х
30	Twin Disc, Inc.	1328 Racine Street	х			
31	Twin Disc, Inc.	4600 21st Street		х		
32	Unico, Inc.	3725 Nicholson Road, Village of Caledonia	х			
33	Warren Industries, Inc.	3130 Mount Pleasant Street		Х		
	Retail and Service					
34	Best Buy Stores, LTD.	2630 Green Bay Road, Village of Mt. Pleasant	х			
35	Boston Store	5500 Durand Avenue	х			
36	Cleanco	1617 9th Street	Х			
37	Covenant Home Health Services, Inc.	1055 Prairie Drive, Village of Mt. Pleasant		х		
38	Culver's of Racine	722 S Sylvania Avenue, Town of Yorkville	х			
39	Durham School Services	1622 Oakes Road	х			
40	Farm & Fleet Company	8401 Durand Avenue, Village of Sturtevant	Х			
41	Frank Gentile, Inc.	6801 Washington Avenue, Village of Mt. Pleasant	х			
42	Home Depot USA, Inc.	2429 Green Bay Road	X			
43	J.C. Penney Company, Inc.	5900 Durand Avenue	X			
44	Jewel Food Stores, Inc.	5740 Washington Avenue, Village of Mt. Pleasant	X			
45 46	Johnson Bank	555 Main Street	X			
46 47	JRS Distribution Company K-Mart Corporation	1333 Grandview Parkway, Village of Sturtevant	X			
47	K-Mart Corporation  Kohl's Department Store	2211 South Green Bay Road 5500 Washington Avenue, Village of Mt. Pleasant	X X			
49	Kohl's Department Store	1032 Milwaukee Avenue, City of Burlington	x			
50	LaCosta Inc.	910 State Street	x			
50 51	McLane Foodservice, Inc.	1906 Grandview Parkway, Village of Sturtevant	X	x		
52	Menards, Inc.	3101 South Oakes Road, Village of Mt. Pleasant	x			
53	Menards, Inc.	2100 S Milwaukee Avenue, City of Burlington	x			
54	Metro Milwaukee Auto Auction	561 South Highway 41, Town of Raymond			x	
55	O&H Danish Bakery, Inc.	1841 Douglas Avenue	х			
			· · · · · · · · · · · · · · · · · · ·		L	L

# Table 26 (continued)

Number on Map 14 Employment Centers <sup>a</sup> Address <sup>b</sup> Retail and Service (continued)  56 Olive Garden  57 Pick 'n Save  58 Pick 'n Save  59 Pick 'n Save  2210 Rapids Drive  2406 South Green Bay Road  60 Promotions Unlimited Corporation  Address <sup>b</sup> 6000 Durand Avenue  515 North Milwaukee Street, Village of W  2210 Rapids Drive  2406 South Green Bay Road  7601 Durand Avenue, Village of Mt. Plea	100-249	250-499	E00 000	1,000 or
Retail and Service (continued)  56 Olive Garden  57 Pick 'n Save  58 Pick 'n Save  59 Pick 'n Save  210 Rapids Drive  2406 South Green Bay Road			500-999	more
56 Olive Garden 57 Pick 'n Save 58 Pick 'n Save 59 Pick 'n Save 6000 Durand Avenue 515 North Milwaukee Street, Village of W 2210 Rapids Drive 2406 South Green Bay Road				
57 Pick 'n Save 515 North Milwaukee Street, Village of W 2210 Rapids Drive 59 Pick 'n Save 2406 South Green Bay Road	X			
58 Pick 'n Save 2210 Rapids Drive 2406 South Green Bay Road				
59 Pick 'n Save 2406 South Green Bay Road	х			
	х			
		x		
61 Quadra Incorporated 1810 Renaissance Blvd., Village of Sturte				
62 Racine Dental Group 1320 Green Bay Road, Village of Mt. Ple				
63 Racine Marriot Hotel 7111 Washington Avenue, Village of Mt.				
64 Runzheimer and Company 851 Cornerstone Crossing, Village of Wa				
65 Sam's Club 6200 Regency West Drive	х			
66 Sears Roebuck & Company 5600 Durand Avenue	x			
67 Shopko Department Stores 4801 West Washington Avenue	х			
68 Target Stores 5300 Durand Avenue	х			
69 United Parcel Service, Inc. 10240 Durand Avenue, Village of Sturtev				
70 Wal-Mart 1901 Milwaukee Avenue, City of Burlingt		х		
71 Wal-Mart 3049 South Oakes Road, Village of Mt. F		X		
72 We Energies 7815 Northwestern Avenue, Village of Ca				
73 YMCA of Racine 725 Lake Avenue		х		
Governmental and Institutional				
74 All Saints Medical Group 3807 Spring Street		х		
75 Alpha Homes of Wisconsin 6216 Washington Avenue	x			
76 Aurora Medical Group, Inc. 248 McHenry Street, City of Burlington	^		X	
77 Aurora Medical Group, Inc. 8348 Washington Avenue, Village of Mt.				
78 Lincoln Village Convalescent Center 1700 C.A. Becker Street	X			
79 Oak Ridge Care Center, Inc. 1400 8th Avenue, Village of Union Grove				
80 Lakeview Neurology Rehabilitation Center	^			
Midwest, Inc. 1701 Sharp Road, Town of Dover		х		
81 Racine City Hall 730 Washington Avenue	х			
82 Racine County Courthouse 730 Wisconsin Avenue	х			
83 Racine County Human Services Department 1717 Taylor Avenue		x		
84 Racine County Law Enforcement Center				
(Sheriff Department) 717 Wisconsin Avenue		х		
85 Racine Police Department 730 Center Street		х		
86 Town of Caledonia Town Hall 6922 Nicholson Road, Village of Caledor	nia x			
87 U.S. Postal Service 603 Main Street	Х			
88 Village of Mt. Pleasant Village Hall 6126 Durand Avenue, Village of Mt. Plea	asant x			
89 Wheaton Franciscan Healthcare–All Saints				
Spring Street Campus 3801 Spring Street				Х
90 Wheaton Franciscan Healthcare 1320 Wisconsin Avenue			Х	
91 Wisconsin Department of Corrections, Racine Correctional Institution 2019 Wisconsin Street, Village of Sturtev	vant	х		
92 Wisconsin Department of Corrections, Racine				
Youthful Offenders Correctional Facilities 1501 Albert Street	х			
93 Wisconsin Department of Health Services, Southern Wisconsin Center 21425 Spring Street, Town of Dover			x	
Educational				
94 Burlington High School 400 McCanna Parkway, City of Burlingto	on x			
95 Gateway Technical College 1001 South Main Street		х		
96 J.I. Case High School 7345 Washington Avenue, Village of Mt.	Pleasant x			
97 Prairie School 4050 Lighthouse Drive, Village of Wind P				
98 Racine Unified Schools Offices 2220 Northwestern Avenue	X			
99 Washington Park High School 1901 12th Street	x			
100 Waterford Union High School 507 West Main Street, Village of Waterford				
101 William Horlick High School 2119 Rapids Drive	x			

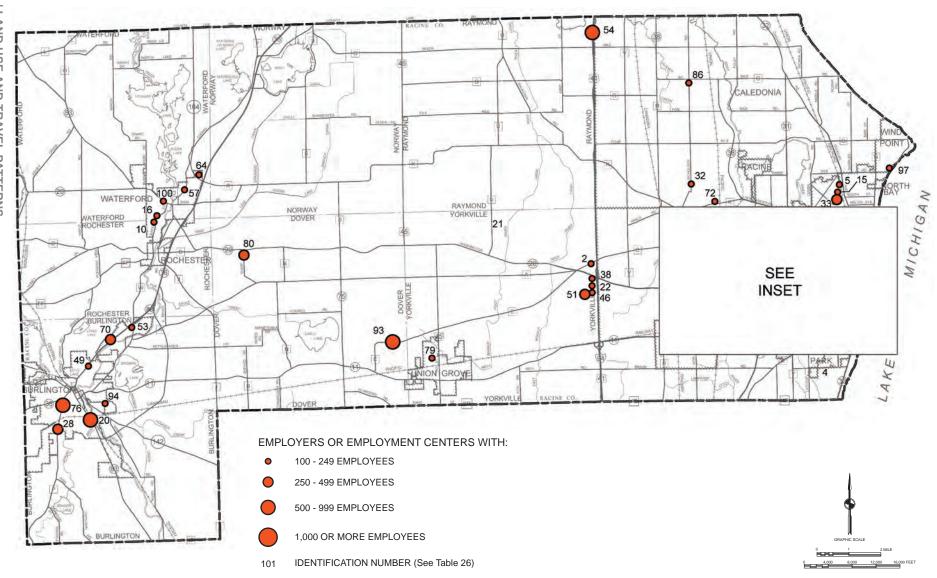
<sup>&</sup>lt;sup>a</sup>Includes employers with approximately 100 or more employees at one worksite.

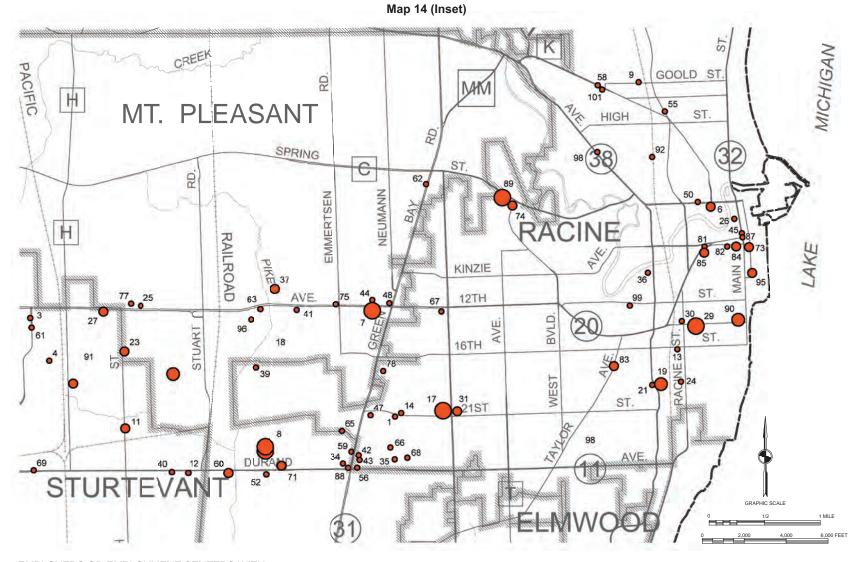
Source: The Business Journal, Wisconsin Business Service Directory, Wisconsin Department of Workforce Development and SEWRPC.

<sup>&</sup>lt;sup>b</sup>All addresses are in the City of Racine unless otherwise noted.

Map 14

MAJOR EMPLOYERS WITH 100 OR MORE EMPLOYEES IN RACINE COUNTY: 2008





#### EMPLOYERS OR EMPLOYMENT CENTERS WITH:

- 100 249 EMPLOYEES
- 250 499 EMPLOYEES
- 500 999 EMPLOYEES
- 1,000 OR MORE EMPLOYEES

101 IDENTIFICATION NUMBER (See Table 26)

location of the trip origin and the attraction area is the location of the trip destination. Maps 17 and 18 illustrate the generalized pattern of the largest and most concentrated volumes of person trips made on an average weekday. The following observations relevant to person travel in Racine County and between the County and adjacent counties may be made on the basis of an examination of this information:

- About 695,200 person trips with either the origin or destination within Racine County, including both internal and external trips, were made on an average weekday in 2001. This represents an increase of about 7 percent over the approximately 652,500 Racine County person trips observed in 1991. When trips for school purposes are excluded, about 626,200 person trips with either the origin or destination within Racine County were made in 2001, representing increases of about 7 and 34 percent over the average weekday nonschool trips observed in 1991 and 1972, respectively.
- About 510,900 of the 695,200 Racine County person trips, or about 73 percent, were made internal to, or totally inside, the County. The largest share of these trips were home-based other trips, such as trips made for medical, personal business, or social or recreational purposes. The pattern of internal person trips shown on Map 17 reflects the locations and concentrations of employment and activity centers in the County, with the heaviest volumes of trips observed between the City of Racine proper and the areas immediately outside the City (see the inset for Map 17). Within this area, there was a base of weekday person trips made virtually in all directions from each analysis area. A large proportion of these trips occurred between immediately adjacent analysis areas and had a trip length of two to three miles. The generalized pattern shown on the Map 17 inset illustrates that much of the heaviest person-trip activity occurs in what could be termed as "cross town" travel, focused on the areas in the southwestern part of the City of Racine that include significant commercial development. A circumferential pattern of trips is also evident along the west, northwest, and southwest sides of the City of Racine. The Racine CBD is also the focus of significant trip activity for the City analysis areas. Within western Racine County, smaller but significant volumes of trips were focused on the Burlington, Rochester, and Waterford areas. Trips between eastern Racine County and western Racine County, divided roughly by IH 94, accounted for about 21,700 trips, or about 4 percent of all internal County person trips.
- The remaining 184,300 person trips, or about 27 percent of the 695,200 average weekday Racine County person trips, were made with one trip end external to the County. Most of these trips—69,100, or about 38 percent—were made for work purposes. Trips between Racine County and Milwaukee County accounted for about 72,300 trips, or about 39 percent, of all external person trips, and between Racine County and Kenosha County accounted for about 66,200 trips, or about 36 percent of all external person trips. Together, these two adjacent Counties accounted for about three-quarters of the external trips. Trips between Racine County and its two other adjacent counties included about 25,400 trips for Waukesha County, or about 14 percent of all external trips; and about 17,400 trips for Walworth County, or about 9 percent of all external trips.

#### Transit Person Travel Characteristics of Belle Urban System Users

The Commission's on-board bus survey of City of Racine transit system passengers, conducted in May 2001, entailed distributing a prepaid, preaddressed, mail-back survey questionnaire to all passengers on each scheduled weekday bus trip operated by the transit system. Hispanic bus passengers who did not want to or could not use the standard form were provided with a Spanish translation of the questionnaire. About 300 completed survey questionnaires were returned, representing about 5 percent of the estimated 6,500 average weekday linked passenger trips made on the BUS in 2001. The vast majority of these trips occurred inside the area bounded by Lake Michigan on the east, Durand Avenue on the south, Green Bay Road on the west, and Three Mile Road on the north.

Table 30 summarizes the socioeconomic characteristics of Racine transit system passengers using weekday bus service. The following observations may be made based upon the examination of this information:

• Racine transit system passengers on the regular bus routes were predominantly female, without a valid driver's license, ages 44 and under, and from households with incomes below \$30,000 per year.

Table 27
INDUSTRIAL/BUSINESS PARKS IN RACINE COUNTY: 2008

Number on			Gross
Map 15	Industrial or Business Park	Civil Division	Acres
1	Blackhawk Industrial Park	Town of Raymond	48.8
2	Burlington Industrial Complex	City of Burlington	59.5
3	Burlington Manufacturing and Office Park	City of Burlington	147.0
4	Caledonia Business Park	Village of Caledonia	276.7
5	Evergreen Commerce Park	Town of Dover	33.7
6	F.M. Young Industrial Park	City of Racine	50.0
7	Grandview Industrial Park	Town of Yorkville	182.5
8	Haag Industrial Park	Town of Dover	19.4
9	Huck Industrial Park	City of Racine	43.7
10	Norway Industrial Park	Town of Norway	124.0
11	Racine Steel Castings	City of Racine	10.7
12	S.F. Olsen Industrial Park	City of Racine	111.0
13	Southside Industrial Park	City of Racine	15.7
14	The Renaissance	Village of Sturtevant	287.8
14a	The Renaissance North	Village of Sturtevant	60.3
15	Union Grove Industrial Complex and Annex	Village of Union Grove	93.7
16	Washington Avenue Industrial Complex <sup>a</sup>	Village of Mt. Pleasant	262.0
17	Waterford Industrial Park	Village of Waterford	71.0
18	Westerra Business Campus	Village of Waterford	78.7
19	Wright – Wieczorek Industrial Park	City of Racine	122.0
		Total	2,098.2

<sup>&</sup>lt;sup>a</sup>Includes 52.5 acres located in the Village of Sturtevant.

- Most of the trips made on the Racine transit system regular routes were for work or school purposes, with smaller but significant proportions of trips also made for shopping and other purposes.
- School-age children make significant proportion of passengers, along with persons residing households with no vehicle available and low-income persons, all of which are typically considered transit dependent. Notably, the Commission's 2001 on-bus survey indicated that seniors (age 65 and older), another population group that is typically considered to be transit dependent, did not comprise a significant proportion of the passengers using the BUS.

#### SUMMARY AND CONCLUSIONS

This chapter has presented information on past trends and existing conditions for characteristics of Racine County which affect, or may be affected by, the provision and use of transit service, including population, employment, land use, and travel habits and patterns. Figure 7 presents the changes in these characteristics over the period 1970 to 2012. The most important findings concerning these characteristics are summarized below:

- 1. The County population has grown since 1970, increasing from about 170,800 persons in 1970 to about 195,400 persons in 2012, or by about 14 percent. The growth in population did not occur evenly, with the City of Racine decreasing in population while a high percentage of growth occurred in the Villages of Caledonia and Mt. Pleasant. The combined growth of the two Villages accounted for about 17,800 new residents since 1970.
- 2. The number of households in the County increased from about 49,800 households in 1970 to about 75,700 households in 2010, or by about 53 percent. The growth in households since 1970 has been nearly four times as fast as the County resident population during the same period. Consequently, the average household size has decreased, from about 3.4 persons in 1970 to about 2.6 persons in 2010. Trip making and, hence, the potential need to serve trips by transit, is strongly related to the number of households and their characteristics.
- 3. Population subgroups whose dependence on, and use of, public transit service historically has been greater than that of the general population as a whole include school-age children (ages 10 through 16), seniors (age 65 and older), persons in low-income households, people with disabilities, and households with no vehicle available. Since 1980, the number of seniors, persons in low-income households, and people with disabilities has significantly increased in terms of absolute numbers, the number of novehicle households has slightly increased, and the number of school-age children has decreased.

10 CALEDONIA MICHIGAN WATERFORD RAYMOND NORWAY YÖRKVILLE WATERFORD ROCHESTER 17 MOUNTPLEASAN ROCHESTER! 14a 16 19 14 STURTEVANT INDUSTRIAL/BUSINESS PARK 3 IDENTIFICATION NUMBER (See Table 27) 19 BURLINGTON

Map 15

MAJOR INDUSTRIAL OR BUSINESS PARKS IN RACINE COUNTY: 2008

33 CALEDONIA MICHIGAN WATERFORE RAYMOND 52 NORWAY YORKVILLE WATERFORD MOUNTPLEASANT BOCHESTER 23 FACILITIES FOR SENIORS, DISABLED, AND LOW-INCOME PERSONS RESIDENTIAL FACILITIES FOR SENIORS, DISABLED, OR LOW-INCOME PERSONS SENIOR CENTERS AND SENIOR MEAL SITES IDENTIFICATION NUMBER (See Table 28) 59

Map 16

FACILITIES SERVING SENIORS, DISABLED, AND LOW-INCOME PERSONS IN RACINE COUNTY: 2008

RACINE COUNTY PUBLIC TRANSIT PLAN: 2013-2017

Table 28
SELECTED FACILITIES FOR SENIORS, DISABLED, AND LOW-INCOME PERSONS WITHIN RACINE COUNTY: 2008

Number on Map 16	Facility	Address <sup>a</sup>
	Residential Facilities and Apartment Complexes for Senior Individuals	
1	Albert House <sup>b</sup>	4000 Maryland Avenue
2	Atrium of Racine	3900 N. Main Street
3	Biscayne Apartments	5110 Biscayne Avenue
4	College Avenue Apartments	1113 College Avenue
5	Danish Home of Racine	T =
		5111 Wright Avenue
6	Durand Plaza Apartments	3003 Durand Avenue
7	Fountain Hills	1100 Fountain Hills Drive, Village of Mt. Pleasant
8	Imperial Apartments	5000 Graceland Boulevard, Village of Mt. Pleasant
9	Lake Oaks on Lake Michigan <sup>c</sup>	1912 Wisconsin Avenue
10	Levi Barnes Manor	200 S. 7th Street, Village of Waterford
11	Lincoln Manor	5801 16th Street, Village of Mt. Pleasant
12	Lincoln School Historic Apartments	1840 State Street
13	Lincoln Villas North <sup>b,c</sup>	3919 Ruby Avenue
14	Lincoln Villas South <sup>c</sup>	5810-5820 Lincoln Village Drive, Village of Mt. Pleasant
15	Marian Housing	4105 Spring Street, Village of Mt. Pleasant
16	McMynn Tower	110 7th Street
17	Mount Pleasant Manor <sup>b</sup>	2250 Layard Avenue
18	Norway Shores	7435 W. Wind Lake Road, Town of Norway
19	Parkview Senior Apartments	5215 Douglas Avenue, Village of Caledonia
20	Regency Apartments	4111 Erie Street
21	Ridgewood Care Center of Racine County <sup>d</sup>	3205 Wood Road
22	Saint Paul Gardens	812 Carrol Street
23		1101 S. Pine Street, City of Burlington
23	Spring Brook Village	141 Main Street
	State at Main	
25	Trinity Terrace	2132 Center Street
26	Washington Apartments	2000 Washington Avenue
27	Washington Court	5105 Wright Avenue
28	Waterford Senior Living	301 S. 6th Street, Village of Waterford
29	Westridge Manor	3101-3133 86th Street, Village of Sturtevant
	Subsidized Housing Facilities for Low-Income Persons	
30	Bethany Apartments	806 S. Wisconsin Avenue
31	Chapel Terrace Town Homes	937 Chapel Terrace, City of Burlington
32	Chateau I and II Apartments	4901 and 5501 Byrd Avenue
33	Clare Meadows	6800 Middle Road, Village of Caledonia
34	Courtyard Apartments	4215 - 4225 Durand Avenue
35	Historic Olson Building Loft Apartments	134 Main Street
36	Lighthouse Point Town Homes	540 Shelbourne Court
37	Main Lake Apartments	413 S. Main Street
38	Mitchell Wagon Factory Loft Apartments	815 8th Street
39	Oakes Village	1311-1345 Oakes Road, Village of Mt. Pleasant
40	Oakview Manor	4720 Byrd Avenue
	Oakwood Terrace	1802-1812 Oakdale Avenue
41		
42	Pleasant View I and II Apartments	1100-1120 Oakes Road and 7220 Kinzie Avenue, Village of Mt. Pleasant
43	Sunset Terrace Apartments	5539-5655 Byrd Avenue
44	The Boardwalk	232 Bridge Street, City of Burlington
45	The Home Company	1204 Schiller Street
46	Washington Court	1345 Oakes Avenue
47	Wilmanor Apartments	255 N. Memorial Drive
48	Wood Side Village	2800-2932 Crossridge Drive
	Residential Facilities for People with Disabilities	
49	Hometown Harbor	1600 Ohio Street
-	Senior Centers and Senior Meal Sites	
50		2015 Wright Avenue
50 51	Atonement Lutheran Church	2915 Wright Avenue
51	Burlington Senior Center	201 N. Main Street, City of Burlington
52	Cesar Chavez Center	2221 Douglas Avenue
53	Dr. Martin Luther King Center	1134 Martin Luther King Drive
54	Hometown Village	1415 13th Avenue, Village of Union Grove

#### Table 28 (continued)

Number on Map 16	Facility	Address <sup>a</sup>
55	Humble Park Center	2200 Blaine Avenue
56	Lakeview Community Center	201 Goold Street
57	Love, Inc.	480 S. Pine Street, Burlington
58	Memorial Hall Senior Center	72 7th Street
59	Salvation Army Senior Citizens Drop-In Center	1901 Washington Avenue

<sup>&</sup>lt;sup>a</sup>Except where noted, all addresses refer to the City of Racine.

Source: Racine County Human Services Department, Wisconsin Housing and Economic Development Authority, Housing Authority of Racine County and SEWRPC.

Table 29

DISTRIBUTION OF AVERAGE WEEKDAY PERSON TRIPS FOR RACINE COUNTY BY TRIP PURPOSE: 1991 AND 2001

		Person Trips 1991 2001		Change			
				2001		1991-2001	
Area	Trip Purpose <sup>a</sup>	Number	Percent	Number	Percent	Number	Percent
Inside Racine County	Home-based work	102,400	20.4	101,400	19.8	-1,000	-1.0
	Home-based shopping	73,900	14.7	62,800	12.3	-11,100	-15.0
	Home-based other	165,400	33.0	183,900	36.0	18,500	11.2
	Nonhome-based	103,600	20.7	105,400	20.6	1,800	1.7
	School	55,800	11.1	57,400	11.2	1,600	2.9
	Total	501,100	100.0	510,900	100.0	9,800	2.0
Between Racine County and	Home-based work	53,200	35.1	69,100	37.5	15,900	29.9
Other Areas Inside the Region	Home-based shopping	17,500	11.6	18,500	10.0	1,000	5.7
-	Home-based other	39,700	26.2	53,700	29.1	14,000	35.3
	Nonhome-based	27,700	18.3	31,400	17.0	3,700	13.4
	School	13,300	8.8	11,600	6.3	-1,700	-12.8
	Total	151,400	100.0	184,300	100.0	32,900	21.7
Total	Home-based work	155,600	23.8	170,500	24.5	14,900	9.6
	Home-based shopping	91,400	14.0	81,300	11.7	-10,100	-11.1
	Home-based other	205,100	31.4	237,600	34.2	32,500	15.8
	Nonhome-based	131,300	20.1	136,800	19.7	5,500	4.2
	School	69,100	10.6	69,000	9.9	-100	-0.1
	Total	652,500	100.0	695,200	100.0	42,700	6.5

<sup>&</sup>lt;sup>a</sup>The trip data were grouped into five categories of travel purpose: home-based work trips, home-based shopping trips, home-based other trips, nonhome-based trips, and school-based trips. Home-based work trips are defined as trips having one end at the place of residence of the tripmaker and the other end at the place of work. Home-based shopping trips are defined as trips having one end at the place of residence of the tripmaker and the other end at a shopping place of destination. Home-based other trips are defined as trips having one end at the place of residence of the tripmaker and the other end at a place of destination other than home, work, shopping, or school. Such trips would include trips made for social, recreational, medical, and personal business. Nonhome-based trips are defined as trips that neither originate nor end at home. School-based trips are defined as having at least one end at school.

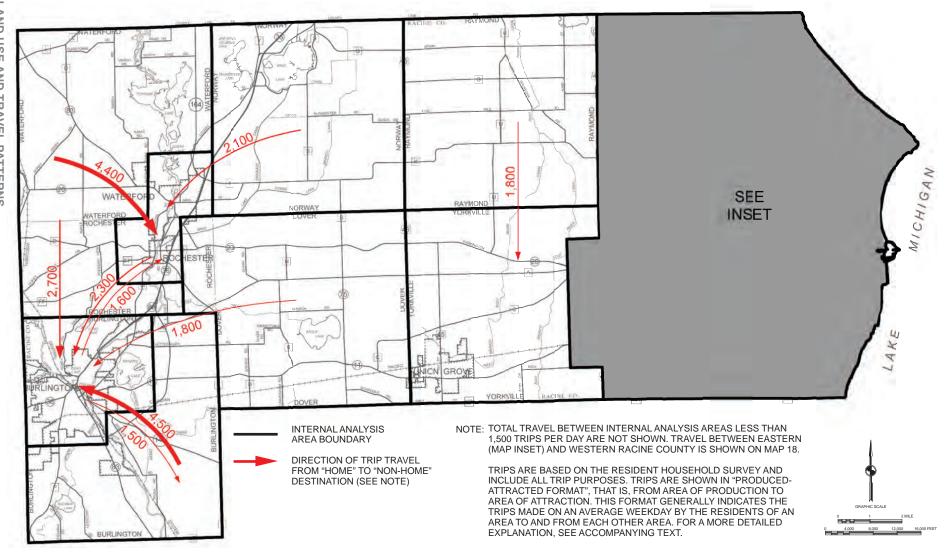
<sup>&</sup>lt;sup>b</sup>Facility also serves low-income individuals.

<sup>&</sup>lt;sup>c</sup>Facility also serves as a senior center or senior meal site.

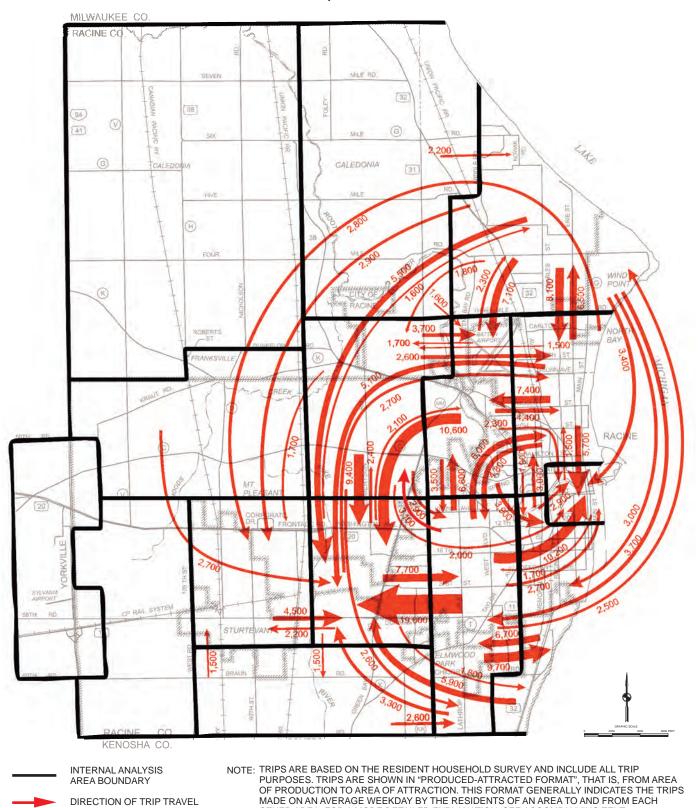
<sup>&</sup>lt;sup>d</sup>Facility also serves people with disabilities.

Map 17

DISTRIBUTION OF THE LARGEST AVERAGE WEEKDAY PERSON TRIP VOLUMES
BETWEEN ANALYSIS AREAS WITHIN RACINE COUNTY: 2001



Map 17 Inset

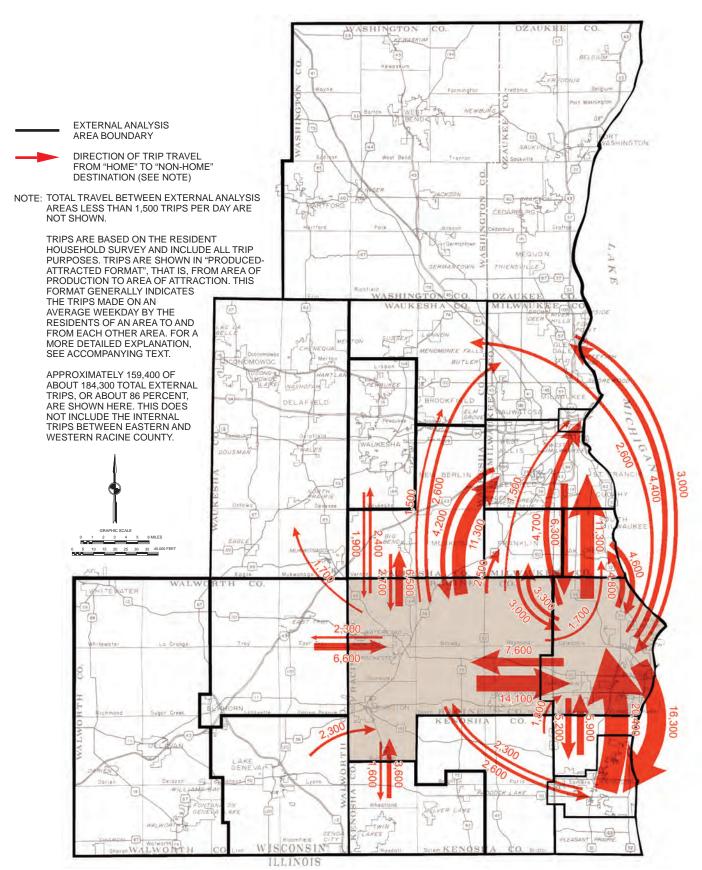


DIRECTION OF TRIP TRAVEL FROM "HOME" TO "NON-HOME" DESTINATION (SEE NOTE)

OTHER AREA. FOR A MORE DETAILED EXPLANATION, SEE ACCOMPANYING TEXT.

Map 18

## DISTRIBUTION OF AVERAGE WEEKDAY INTERCOUNTY PERSON TRIPS BETWEEN RACINE COUNTY AND SURROUNDING AREAS: 2001



However, the overall proportions of the total County population that each of these groups represent has not changed dramatically over the period, except with respect to the disabled population. The different definitions of people with disabilities used by the Census in 1980, 1990, 2000, and 2010 should be considered when reviewing the changes in the County's disabled population shown by Census figures. The transit-dependent population within the County was concentrated primarily in the City of Racine and in the City of Burlington and Village of Union Grove areas in 2010.

- 4. The number of jobs in Racine County has increased from about 64,600 jobs in 1970 to about 91,000 jobs in 2012, or by about 41 percent. However, the job growth rate has slowly decreased over this period. Most of the overall increase in employment in the County occurring outside the City of Racine. A large part of this job growth can be attributed to new employment centers which have been developed in communities like the Villages of Mt. Pleasant, Caledonia, and Sturtevant. The County experienced employment losses between 2000 and 2010 attributed to the economic recession between 2007 and 2009.
- 5. The amount of land in the County devoted to urban land uses more than quadrupled between 1950 and 2010. Between 1970 and 2010, the urban developed land increased by about 74 percent from about 34 square miles to about 59 square miles. Some of this development has occurred near established urban center of Racine, but most has occurred in the outlying portions of the County, resulting in a discontinuous and diffused development pattern. This kind of development is difficult and costly to serve with conventional fixed-route bus services in an effective and efficient manner, but could potentially be served by some form of demand-responsive transit service.

Table 30

PERCENTAGE DISTRIBUTION OF RIDERSHIP ON THE BELLE URBAN SYSTEM FOR VARIOUS RIDERSHIP CHARACTERISTICS: MAY 1-2, 2001

	Percent of
Ridership Characteristic	Revenue
	Passengers
Age 12 and under	0.7
	25.5
13-18	
19-24	16.3
25-34	20.3
35-44	18.2
45-54	9.4
55-64	5.3
65 and older	4.3
Total	100.0
Sex	
Male	41.5
Female	58.5
Total	100.0
Licensed Driver	
Yes	30.6
No	69.4
Total	100.0
Household Income	
Under \$10,000	31.6
\$10,000-\$19,999	23.0
\$20,000-\$29,999	19.6
\$30,000-\$39,999	11.8
\$40,000 and over	14.0
Total	100.0
Trip Purpose	
Home-based work	39.4
Home-based shopping	9.6
Home-based other	20.9
Nonhome-based	7.7
School	22.4
Total	100.0
Vehicles Available per Household	
No vehicle	40.6
One vehicle	30.7
Two or more vehicles	28.7
Total	100.0

Source: SEWRPC.

6. The portions of the City of Racine located east of Green Bay Road have residential densities capable of supporting conventional fixed-route bus service operating with headways of 60 minutes or less. The central portions of the City of Racine, where residential densities of nine or more dwelling units per net acre exist, can potentially support higher levels of transit service. Similarly, areas with employment densities capable of supporting fixed-route bus service can be found east of Green Bay Road in the central

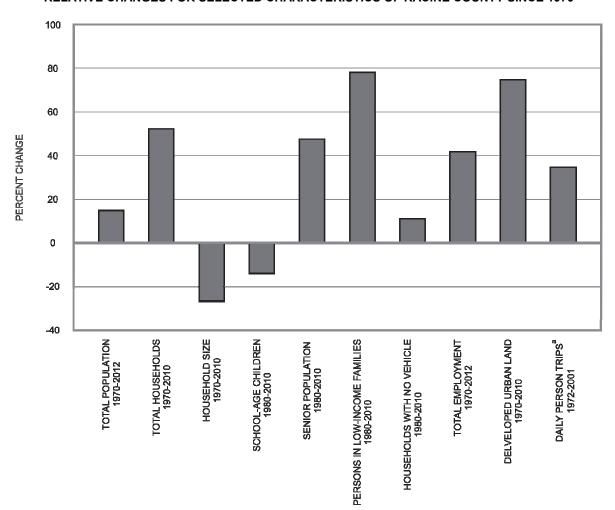


Figure 7

RELATIVE CHANGES FOR SELECTED CHARACTERISTICS OF RACINE COUNTY SINCE 1970

<sup>a</sup>Excludes trips made for school purposes.

Source: SEWRPC.

portions of the City of Racine, as well as in a small number of areas west of Green Bay Road. Some portions of western Racine County, including in the City of Burlington, Villages of Mt. Pleasant, Sturtevant, and Union Grove areas, also have transit-supportive residential densities or employment densities. The areas which have residential and employment densities with the potential for supporting fixed-route transit service are shown on Map 19.

7. Certain major activity centers in the County generate a large number of person trips on a daily basis, including commercial centers, educational institutions, medical centers, government centers, major employers, industrial or business parks, and residential facilities for senior, disabled, and low-income persons, and were identified in the County in 2008. In the eastern portion of the County, most of these activity centers are in the City of Racine proper, with a small number located in the Villages of Sturtevant and Mt. Pleasant. In the western portion of the County, the City of Burlington and the Villages of Rochester, Union Grove, and Waterford contain most of the activity centers.

CALEDONIA MICHIGAN WATERFORD RAYMOND NORWAY YORKVILLE WATERFORD MOUNTPLEASAN FOCHESTER AREA WITH TRANSIT-SUPPORTIVE RESIDENTIAL DENSITY (4 OR MORE DWELLING UNITS PER NET RESIDENTIAL ACRE) AREA WITH TRANSIT-SUPPORTIVE EMPLOYMENT DENSITY (4 OR MORE JOBS PER TOTAL ACRE) AREA WITH BOTH TRANSIT-SUPPORTIVE RESIDENTIAL AND EMPLOYMENT DENSITIES BURLINGTON

Map 19

TRANSIT-SUPPORTIVE AREAS FOR CONVENTIONAL FIXED-ROUTE TRANSIT SERVICES IDENTIFIED IN RACINE COUNTY: 2000

RACINE COUNTY PUBLIC TRANSIT PLAN: 2013-2017

- 8. On the basis of past travel surveys undertaken by the Regional Planning Commission, average weekday total person travel entirely within the County and between the County and other external areas has increased from about 652,500 person trips in 1991 to about 695,300 trips in 2001, or by about 7 percent. About 73 percent of these person trips were internal trips made entirely within the County in 2001, with the largest proportion being home-based other trips, such as trips made for medical, personal business, or social or recreational purposes. The pattern of internal person trips within the County largely reflects the concentrations of population, employment, and major activity centers with most travel occurring in and around the City of Racine in eastern Racine County and in the Burlington, Rochester, and Waterford areas in western Racine County. Trips between eastern and western Racine County, as divided by IH 94, accounted for about 4 percent of all Racine County average weekday internal person trips. The remaining 27 percent of average weekday person trips in 2001 were made with one trip end outside the County, with most of these external trips made for work purposes. Notably, over three-fourths of the total observed increase in person travel for Racine County between 1991 and 2001 occurred as external trips, which increased by 32,900 trips, or about 22 percent, over this period. About 75 percent of all Racine County external person trips were made to or from Milwaukee or Kenosha Counties.
- 9. The Commission conducted a survey of passengers using the City of Racine Belle Urban System (BUS) in 2001, with survey forms distributed to all passengers using the weekday bus service provided by the system. An estimated 6,500 linked passenger trips were made on an average weekday on the transit system in 2001. The survey found that most of the passenger trips made on the system's regular routes were for work or school purposes. School-age children, consequently, make up a significant proportion of passengers on the system, along with persons residing in households with no vehicle available and low-income persons, all of which are typically considered transit dependent. Notably, the on-bus survey indicated that seniors (age 65 and older), another population group that is typically considered to be transit dependent, did not comprise a significant proportion of the passengers using the BUS. Passengers on the regular routes were found to be predominantly female, without a driver's license, ages 44 and under, and from households with incomes below \$30,000 per year.

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#### **Chapter IV**

### PUBLIC TRANSIT SERVICE OBJECTIVES AND STANDARDS

#### INTRODUCTION

One of the critical steps in the preparation of a public transit plan is the articulation of the objectives to be served by public transit, together with the identification of supporting standards that can be used to measure the degree of attainment of the objectives. The objectives and standards provide the basis for assessing the performance of the existing transit services, identifying unmet transit service needs, designing and evaluating alternative transit plans, and recommending service changes and improvements. The objectives and standards formulated under this study are intended to represent the level of transit performance desired by Racine County.

This chapter presents the public transit service objectives, principles, and standards that were formulated and applied under the County's public transit plan. The objectives and supporting standards set forth in this chapter may also be used by the City of Racine and Racine County to guide in the design, operation, and review of its transit services after completion of this planning effort.

#### **OBJECTIVES**

The transit service objectives, principles, and standards set forth in this chapter are intended to reflect the underlying values of the elected officials and residents of Racine County. One of the important functions of the Racine County Public Transit Plan Workgroup was to articulate transit service objectives, principles, and supporting standards for the planning effort. By drawing upon the collective knowledge, experience, views, and values of the members of the Workgroup, it is believed that a meaningful expression of the performance desired for transit services in Racine County was obtained, and a relevant set of transit service objectives and supporting principles and standards was defined.

The specific objectives adopted envision transit services that will effectively serve transit travel by Racine County residents both within the County and between the County and other adjacent communities in the Racine urbanized area. More specifically, the following objectives were adopted by the Workgroup:

- 1. Public transit services should effectively serve the existing land use pattern, meeting the demand and need for transit services, particularly the transit travel needs of the transit-dependent population and of employers for workers;
- 2. Public transit services should promote effective utilization of transit services and operate services that are safe and reliable and provide for user convenience and comfort; and

3. Public transit services should be economical and efficient, meeting all other objectives at the lowest possible cost.

#### PRINCIPLES AND STANDARDS

Complementing each of the foregoing transit service objectives are planning principles and a set of service standards. The planning principle supports each objective by asserting its validity. Each set of standards is directly related to the transit service objective and serves several purposes. The service design and operating standards are intended to primarily provide guidelines for the design of new and improved services, the operation of the transit services, and the acquisition of capital equipment and construction of facilities. The service performance standards primarily facilitate the evaluation of the performance of the existing transit services and of alternative service improvements. For each performance standard, one or more criteria are identified which can be used to quantify the performance of the transit service for measurement against the standard. For the Racine County transit planning effort, separate planning principles and service standards were developed for public fixed-route transit services, like those provided by the City of Racine Belle Urban System (BUS), and public demand-responsive transit services, including route- or point-deviation services and shared-ride taxicab services. The principles and standards are shown in Tables 31 and 32, respectively.

The performance evaluation of the existing transit services undertaken for the current study included assessments of transit performance on both a broad systemwide or countywide basis and also on an individual route basis for the Racine BUS. The performance standards identified in Tables 31 and 32 represent the specific standards and performance measures that were applied in conducting these evaluations. The performance standards in the tables also include the transit system performance measures which the Wisconsin Department of Transportation utilizes to assess the performance of Wisconsin transit systems on a regular basis, and which the State requires be included in the multi-year service and performance goals identified in annual applications for State operating assistance. Such measures include operating ratio, or farebox recovery rate; operating expense per passenger; passengers per capita; passengers per revenue vehicle hour of service; operating expenses per revenue vehicle hour of service; and revenue vehicle hours of service per capita. The performance standards and evaluation findings of this study can, therefore, provide guidance to the County and the City of Racine in establishing the required multi-year service and performance goals.

#### OVERRIDING CONSIDERATIONS

The objectives, principles, and standards set forth in Tables 31 and 32 were intended to be used to guide the evaluation of the performance of existing transit services and the design and evaluation of alternative service improvements. In the application of the objectives, principles, and standards, several overriding considerations must be recognized:

- 1. It must be recognized that an overall evaluation of the existing transit services and the alternative service plans must be made based on cost and revenue. Such an analysis may show the attainment of one or more standards to be beyond the economic capability of the County or its member communities and, therefore, the standards cannot be met practically and must be either modified or eliminated.
- 2. A public transit system is unlikely to fully meet all the standards and the extent to which each standard is met, exceeded, or violated must serve as the final measure of the ability of the system to achieve the objective that a given standard supports.
- 3. Certain intangible factors, including the perceived value of the public transit service to the County or its member communities, and its potential acceptance by the concerned elected officials, may influence the selection of the transit service recommendations and the preparation of the final Racine County transit plan. Inasmuch as transit service may be perceived as a valuable service, it could be determined that they should be initiated or retained regardless of performance or cost. Only if a considerable degree of such acceptance exists will the service recommendations of the plan be implemented and their anticipated benefits realized.

#### Table 31

# PUBLIC TRANSIT SERVICE OBJECTIVES, PRINCIPLES, STANDARDS, AND PERFORMANCE MEASURES FOR FIXED-ROUTE TRANSIT SERVICES IN RACINE COUNTY INCLUDING THE CITY OF RACINE BELLE URBAN SYSTEM

Objective	Fixed-route Transit Principle	Fixed-route Transit Standard	Fixed-route Transit Performance Measure		
Public transit services should	Fixed-route transit services can	Design and Operating Standards			
effectively serve the existing land use pattern, meeting the demand and need for transit services, particularly the transit travel needs of the transit-dependent population and of employers for workers.	provide an important means of mobility for all segments of the population in urban areas and particularly for persons residing in low- to middle-income households, students, seniors, and people with disabilities.  Fixed-route public transit	mobility for all segments of the population in urban areas and particularly for persons residing in low- to middle-income households, students, seniors, and people with disabilities.	Fixed-route transit service should be provided to serve the travel and mobility needs of the County population generated by contiguous areas of high and medium density urban development. The highest levels of service availability, frequency, coverage, and connectivity to major destinations should be provided in such areas.	1	
	services generally are best suited for operating within and between large and medium-size urban areas including the City of Racine and its immediate environs and other urban areas	Fixed-route transit services should be provided that addresses the varied travel and mobility needs of the County population. The service types that should be considered include:     a. Rapid and express service designed to	2		
	which are developed to medium or high densities. These are the areas within the County that should receive the highest levels of fixed-route services. Fixed-route services can also be important to businesses and the	reduce travel times for the longest trips made between component parts of the transit service area and to connect areas of urban development to the largest major activity centers within the County or in adjacent counties			
	economy in these areas by providing transit access to job opportunities.	b. Local service designed to provide transit within and between residential areas, to link residential areas with nearby major activity centers, and to provide for transfer connections with rapid, express, local, shuttle, or demand-responsive transit services			
		<ul> <li>c. Local shuttle services serving major activity centers designed to connect with rapid, express, and other local services</li> </ul>			
				Aratransit service designed to meet the needs of people with disabilities who are unable to use fixed-route bus service	
		<ol><li>Fixed-route transit services should serve and connect the major activity centers within the transit service area including:</li></ol>	The number of major activity centers within one-quarter mile of a local bus route or      The number of major activity centers within one-quarter mile of a local bus route or      The number of major activity centers within the major activity of the second contents.		
		a. Shopping centers	one-half mile of a rapid or express bus stop.		
		b. Educational institutions			
		c. Medical Centers d. Major employers (those with 100 or more			
		employees) e. Governmental and public institutional centers			
		f. Facilities serving senior individuals			
		g. Facilities serving people with disabilities			
		h. Facilities serving low income individuals			
		Performance Standards			
		The population served should be maximized, particularly those who are transit-dependent.     The population should be considered as served when it resides within the following distances of fixed-route transit services:	The number of people     residing within the     appropriate walking or     driving distance of a bus     stop and the percent of the		
		Maximum Distance From a Bus Stop	total population represented.		
		Service Type Walking Driving Rapid Express 1/2 Mile 3 Miles			
		Local/Shuttle 1/4 Mile			
		The major activity centers and jobs served should be maximized. Major activity centers and jobs should be considered as served when located within the walking distances identified in Performance Standard 1 of this Objective	The number of major activity centers and jobs located within appropriate walking distance of a bus stop and the percent of the total activity centers and jobs represented.		

#### Table 31 (continued)

			Fixed-route Transit
Objective	Fixed-route Transit Principle	Fixed-route Transit Standard	Performance Measure
1. (continued)		The transit supportive land area served should be maximized. To be considered transit supportive, an area should have a density of at least 4 dwelling units per net residential acre, or at least 4 jobs per gross acre.	The proportion of the transit supportive land area located within one-quarter mile of a local bus route.
Public transit services should promote effective utilization of transit services and operate services that are safe and reliable and provide for user convenience and comfort.	The benefits of fixed-route transit services are, to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a function of the	Design and Operating Standards     Bus routes should have direct alignments with a limited number of turns, and should be arranged to minimize duplication of service and unnecessary transfers which would otherwise discourage transit use.	1
	degree to which people have access to services that are reliable and provide for quick, convenient, comfortable, and	Rapid and express bus routes should be extended as needed to perform a collection- distribution function at the ends of the route	2
	safe travel. Riders view transit services with these attributes as an effective and attractive	Local bus routes should be spaced one-half mile apart in high-density and medium-density areas.	3
	alternative to the private automobile.	4. Bus stops should be clearly marked by easily recognized signs and located so as to minimize the walking distance to and from residential areas and major activity centers, and to facilitate connections with other transit services where appropriate. The suggested locations and spacing for stops are as follows:  Service Type Stop Locations and Spacing Rapid At terminal areas and one-mile or more on line-haul sections  Express At terminal areas, intersecting transit routes, signalized intersections with arterial streets, and major activity	4
		centers  Local/Shuttle Two to three blocks apart	
		5. Bus service should provide adequate service and vehicle capacity to meet existing and projected demand. The average maximum load factor, measured as the ratio of passengers to bus seats at that point on a route where passenger loads are highest, should not exceed the following during any one-hour period:	Average maximum load factor by route for the weekday peak hour of service.
		Average     Maximum Load Factor   Peak   All Other   Service Type   Periods   Times   Times	
		Operating headways should be capable of accommodating passenger demand at the specified load standards. Headways should not exceed the following maximum headways if service is offered during a period:	6
		Maximum Headway (minutes)  Weekday Weekend  Off- Peak Peak Periods/	
		Service Type         Periods         Periods         Holidays           Rapid         30         60         60           Express         30         60         60	
		Local/Shuttle 30 60 60  7. Fixed-route transit services should be designed and operated so as to achieve the following minimum overall travel speeds by area based on average weekday conditions:	7
		Travel speed (miles per hour)           Service Type         CBD         Other Areas           Rapid         5-10         20-35           Express         5-10         18-25	
		Local/Shuttle 5-10 15-20	

#### Table 31 (continued)

Objective	Fixed-route Transit Principle	Fixed-route Transit Standard Performance Measure
2. (continued)		8. Consideration should be given to rehabilitating or replacing the vehicles used to provide fixed-route transit services at the end of its normal service life as defined below:  8
		Normal Service Life
		Length Vehicle Type (feet) Years Mileage
		Heavy-duty bus 35 or more 12 500,000
		Heavy-duty bus 25-30 10 350,000
		Medium-duty bus 25-30 7 200,000
		Light-duty bus 25-30 5 150,000
		Cars and Vans 4 100,000
		Consideration should be given to providing     passenger shelters of an attractive design at all fixed-route stops where:     Section 1. The providing stops are should be given to providing stops
		a. The location serves major facilities designed specifically for the use of, or is frequently used by, senior or people with disabilities
		b. The location has a boarding passenger volume of 50 or more passengers per day
		c. The location is a major passenger transfer     point between bus routes or with other transit     services
		d. The location is in a wide open space where waiting patrons are unprotected from harsh weather conditions
		Service Performance Standards
		Ridership on fixed-route bus services and the overall effectiveness of such services should be maximized.     Total passengers     b. Total passengers per capita
		1c. Revenue vehicle hours per capita  1d. Total passengers per
		revenue vehicle hour 1e. Total passengers per
		zevenue vehicle mile 2. Bus routes with ridership and service 2a. Total passengers
		effectiveness levels which are less than 80 percent of the average for all routes of the transit system should be reviewed for potential
		service changes unless special circumstances warrant otherwise <sup>a</sup> .  2c. Total passengers per revenue vehicle hour
		2d. Total passengers per revenue vehicle-mile
		2e. Percent of weekday passengers riding on Saturday
		3. The service provided over bus routes should closely adhere to published timetables and be "on time." Performance should be regularly monitored and routes with marginal or unsatisfactory on-time performance levels as defined below should be reviewed for corrective actions:      3. Percent of scheduled bus trips on time      visually trips on time
		Percent of Scheduled Bus Trips On-Time (Between Zero Minutes Early and Three
		Category Minutes Late) Good 90.0 percent or more
		Satisfactory 85.0- 89.9 percent
		Marginal 80.0- 84.9 percent Unsatisfactory Less than 80.0 percent

#### Table 31 (continued)

			Fixed-route Transit	
Objective	Fixed-route Transit Principle	Fixed-route Transit Standard	Performance Measure	
2. (continued)		Travel times for bus riders should be kept reasonable in comparison to travel times for similar trips made by automobile between	Ratio of bus transit to highway distance      Ratio of bus transit to	
		component parts of the service area.	highway travel time	
3. Public transit services should	The total financial resources	Design and Operating Standards		
be economical and efficient, meeting all other objectives at the lowest possible cost.	available to be expended on fixed-route transit services by the County and the municipalities within its boundaries are limited.	fixed-route transit services by the County and the municipalities	The total operating and capital investment for fixed-route bus services should be minimized and reflect efficient utilization of resources.	1
	Therefore, total bus system costs should be minimized for the desired level of transit service, and transit revenues should be maximized to maintain the	The fare policy for fixed-route bus services should provide for premium fares for premium services, as well as special or discounted fares for priority population groups, including transit-dependent individuals and frequent riders.	2	
	financial stability of the system. The attainment of this objective may at times conflict with, and	Periodic increases in passenger fares should be considered to maintain the financial stability of fixed-route bus services when:	3	
	require the modification or elimination of, other standards.	A. The farebox recovery rate for the transit system goes below levels determined to be acceptable by local officials		
			b. Operating expenses for the bus system have increased by 10 to 15 percent since fares were last raised	
			Projected levels of Federal and State operating assistance funds would require an increase in projected local operating assistance levels above that determined to be acceptable by local officials	
		Service Performance Standards		
		The operating expense per unit of bus service, the operating expense per passenger, and the	Operating expense per total vehicle mile	
		total operating assistance per passenger should be minimized for the bus system as a whole. Annual increases in such costs should	Operating expense per revenue vehicle hour	
		not exceed the average percentage increase experienced by comparable urban bus systems.	Operating expense per passenger	
			1d. Total operating assistance per passenger	
		Operating revenues generated from passenger fares and sources other than public operating assistance should be maximized.	Percent of operating     expenses recovered     through passenger and     other operating revenues,     excluding public operating     assistance.	
		Bus routes with financial performance levels which are less than 80 percent of the average for all routes of the bus system should be	3a. Operating expense per boarding passenger	
		reviewed for service changes, unless special circumstances warrant otherwise <sup>a</sup> .	3b. Total operating assistance per boarding passenger	
			Percent of operating     expenses recovered     through passenger and     other operating revenues,     excluding public operating     assistance	

<sup>&</sup>lt;sup>a</sup>A reasonable period of time should be allowed for ridership to develop and stabilize before evaluating the performance of new fixed-route bus services to determine if the service is to be continued, modified, or eliminated. Performance goals should be for new bus services to achieve 30 percent of average performance levels for existing routes after six months of operation; 60 percent of average performance levels for existing routes after one year of operation; and 100 percent of average performance levels for existing routes after two years of operation.

# Table 32 PUBLIC TRANSIT SERVICE OBJECTIVES, PRINCIPLES, STANDARDS, AND PERFORMANCE MEASURES FOR DEMAND-RESPONSIVE TRANSIT SERVICES IN RACINE COUNTY

	Demand-Responsive		Demand-Responsive Transit Performance
Objective	Transit Principle	Demand-Responsive Transit Standard	Measure
1. Public transit services should	Demand-responsive transit	Design and Operating Standards	
effectively serve the existing land use pattern, meeting the demand and need for transit services, particularly the transit travel needs of the transit-dependent population	services can provide an important means of mobility for all segments of the population in both urban and rural areas and particularly for persons residing in low- to middle-	Demand-responsive transit service should be available to provide local transportation to the County's resident population, particularly the portion that is transit-dependent and to connect residential areas with each other and with major activity centers.	1
and of employers for workers.	income households, students, seniors, and for people with disabilities who have difficulty getting to and from a bus stop. Demand-responsive public transit services are more costefficient than fixed-route transit services when serving areas with low-density urban development, small urban areas, and rural areas. Demand-responsive transit services can also be important to businesses and the economy in these areas by providing transit access to job opportunities.	2. Different types of demand-responsive transit service should be provided to address the varied travel and mobility needs of the County population. The service types that should be considered include:  a. Flexibly routed transit services designed to serve both the general public and disabled persons in areas where conventional fixed-route bus service would not be cost-effective  b. Shared-ride taxicab services designed to serve both the general public and disabled persons in areas where conventional fixed-route bus service would not be cost-effective  c. Employment transportation services designed to connect unemployed and underemployed individuals with employers and job training centers or to provide childcare transportation service  d. Community service routes designed to link residential locations of transit dependent individuals with major activity centers and provide group transportation to nutrition sites, adult daycare centers, medical or rehabilitation centers, and education or training facilities  e. Volunteer driver programs designed to serve individuals who do not have access to an automobile or public transit for their travel need	2
		Demand-responsive transit service should be provided, to serve major activity centers and facilities for transit-dependent persons in the County including:     a. Shopping centers	The number of major activity centers within the service areas of demand- responsive transit services.
		b. Educational institutions	
		c. Medical Centers	
		d. Major employers (those with 100 or more employees)	
		e. Governmental and public institutional centers	
		f. Facilities serving senior individuals	
		g. Facilities serving people with disabilities	
		h. Facilities serving low-income individuals	
		Performance Standards	
		The population served and, particularly that portion which is transit-dependent, shall be maximized.	Total population residing within the service areas of demand-responsive transit services.
		The number of jobs served should be maximized.	Total employment at businesses within the service areas of demand- responsive transit services.

#### Table 32 (continued)

	Demand-Responsive		Demand-Responsive Transit Performance																					
Objective	Transit Principle	Demand-Responsive Transit Standard	Measure																					
2. Public transit services should	The benefits of demand-	Design and Operating Standards																						
promote effective utilization of transit services and operate services that are safe and reliable and provide for user convenience and comfort.	responsive transit services are, to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a function of the degree to which people have access to services that are reliable and provide for quick, convenient, comfortable, and safe travel. Riders view transit services with these attributes as an effective and attractive alternative to the private automobile.	to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a	to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a	to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a	to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a	to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a	to a large extent, greatly related to the degree to which they are used as measured by transit ridership. Ridership is a	Demand-responsive transit services should be designed to provide adequate capacity to meet existing and potential demand. The maximum load factor for such services should not exceed 1.0 person per seat at all times of operation.	1															
Connort.		The minimum overall travel speed for demand- responsive transit services should average 10 miles per hour.	2																					
		Demand-responsive transit services should provide a level of service commensurate with potential demand. Response times for service requests should be as follows:      Assignment Transit Services.	3																					
	,	Service Type Maximum Response Time																						
		Flex route service Next day																						
		Shared-ride taxi service 45 minutes in urban areas and four hours in rural areas																						
		Employment transportation services 24 hours																						
		Community service Routes 24 to 48 hours																						
		Volunteer driver programs 48 to 72 hours																						
		4. Demand-responsive transit services should minimize the number of trip requests for which service must be denied. Service for subscription trips provided on a regular basis should be provided only to the extent that at least 50 percent of the capacity of the service remains available during peak periods for serving other trip requests.	4																					
		Each vehicle should be rehabilitated or replaced at the end of the normal service life which shall be defined as follows:	5																					
		Normal Service Life Length																						
		<u>Vehicle Type</u> (feet) <u>Years</u> <u>Mileage</u>																						
		Automobiles/Vans 4 100,000																						
		Light-duty bus 25-30 5 150,000																						
									Demand-responsive transit services should be utilized where cost-effective to provide collection-distribution services at the ends of bus routes to effectively extend fixed-route bus service to major employment centers and commercial developments.	6														
		Performance Standards																						
		Ridership on, and the overall effectiveness of, demand-responsive transit services should be maximized.	1a. Total passengers     1b. Total passengers per capita     1c. Vehicle hours per capita     1d. Total passengers per vehicle mile     1e. Total passengers per vehicle hour																					
		Demand-responsive transit services with substandard ridership and service effectiveness levels should be reviewed for potential changes to their service areas and service periods unless special circumstances warrant otherwise a. Levels shall be considered substandard if they are more than 20 percent below the statewide average for the service being provided in similar areas.	2a. Total passengers per service area     2b. Total passengers per service request     2c. Total passengers per vehicle mile     2d. Total passengers per vehicle hour     2e. Percent of weekday ridership carried on weekends and holidays																					

#### Table 32 (continued)

	Demand-Responsive		Demand-Responsive Transit Performance
Objective 2. (continued)	Transit Principle	Demand-Responsive Transit Standard  3. Demand-responsive transit services should be designed and operated to maximize adherence to	Measure 3. Percent of scheduled rider pick-ups on time.
		scheduled rider pick-up times and be "on-time." Performance should be regularly monitored and services with marginal or unsatisfactory on-time performance levels as defined below should be reviewed for corrective actions:	
		Percent of Scheduled Rider Pick-ups On-Time (Between 10 Minutes Category Early and 10 Minutes Late)	
		Good 90.0 percent or more	
		Satisfactory 85.0-89.9 percent	
		Marginal 80.0- 84.9 percent	
		Unsatisfactory Less than 80.0 percent	
		Travel times on demand-responsive transit services should be kept reasonable in comparison to travel times by automobiles for trips made between component parts of the County.	4a. Ratio of transit to automobile distance  4b. Ratio of transit to automobile travel time
Demand-responsive public	The total financial resources	Design and Operating Standards	automobile traver time
transit services should be economical and cost effective, meeting all other objectives at the lowest	available to be expended on demand-responsive transit services by the County and the municipalities within its boundaries are limited; therefore, the total costs of demand-responsive services should be minimized for the desired level of service, and revenues should be maximized to maintain the financial stability of the services. The attainment of this objective may at times conflict with, and require the modification or elimination of, other standards.	The total operating and capital investment for demand-responsive transit services should be minimized and reflect efficient utilization of resources.	1
possible cost.		The fare policies for demand-responsive transit services should provide for premium fares for premium transit services, as well as special or discounted fares for priority population groups and frequent transit riders	2
		Periodic increases in the passenger fares should be considered to maintain the financial stability of demand-responsive transit services when:     The farebox recovery rate for the service goes below the level determined to be acceptable by	3
		local officials  b. Operating expenses per unit of service for the service have increased by 10 to 15 percent since fares were last raised	
		c. Projected levels of Federal and State operating assistance funds would require an increase in projected local operating assistance levels above that determined to be acceptable by local officials	
		Performance Standards	
		The operating expense per unit of service, the operating expense per passenger, and the total operating assistance per passenger should be minimized. Annual increases in such costs should not exceed the average percentage increase experienced by comparable transit systems.	1a. Total operating expense per vehicle mile      1b. Total operating expense per vehicle hour      1c. Total operating expense per passenger
			1d. Total operating assistance per passenger
		Operating revenues generated from passenger fares, including private sources, should be maximized.	Percent of operating expenses recovered through passenger and other operating revenues, excluding public operating assistance.

#### Table 32 (continued)

Objective	Demand-Responsive Transit Principle	Demand-Responsive Transit Standard	Demand-Responsive Transit Performance Measure
3. (continued)	uued)	3. Demand-responsive transit services with substandard cost effectiveness levels should be reviewed for potential changes to their service areas and service periods unless special circumstances warrant otherwise <sup>a</sup> . For this standard, levels shall be considered as substandard when the operating cost or operating assistance per passenger or per passenger mile are more than 20 percent above, or the farebox recovery rate is more than 20 percent below, the average for comparable transit systems.	3a. Total operating expense per boarding passenger      3b. Total operating assistance per boarding passenger      3c. Total operating expense per passenger mile      3d. Total operating assistance per passenger mile
			3e. Percent of total operating expenses recovered through passenger and other operating revenues, excluding public operating assistance

<sup>&</sup>lt;sup>a</sup>A reasonable period of time should be allowed for ridership to develop and stabilize before evaluating the performance of new transit services to determine if the service should be continued, modified, or eliminated. Generally, new transit services should achieve 30 percent of average performance levels for existing routes after six months of operation; 60 percent of average performance levels for existing routes after one year of operation; and 100 percent of average performance levels for existing routes after two years of operation.

#### Chapter V

# EVALUATION OF THE EXISTING BELLE URBAN SYSTEM AND IDENTIFICATION OF UNMET TRANSIT SERVICE NEEDS

#### INTRODUCTION

This chapter documents the results of an evaluation of transit service in Racine County, which consists of two components: an examination of the performance of the existing Belle Urban System (BUS) on a systemwide and route-by-route basis; and an identification of the unmet transit service needs in the portions of Racine County not currently served by transit. The evaluation of the BUS is based on the transit service objectives, standards, and measures set forth in Chapter IV of this report; the specific objectives and performance measures applied in the systemwide and route performance evaluations are listed in Table 33. The identification of unmet transit service needs beyond the BUS service area is based on a transit needs index and on findings from coordination planning meetings and interviews with transportation providers or agencies whose consumers use transportation in those parts of the County. The findings of this evaluation, as well as public input, were used to develop the alternative transit service improvements in the subsequent chapter of this report.

The BUS evaluation begins with two assessments of the systemwide performance of the transit system: first, a measurement of how well the transit system serves existing population, employment, and activity centers; and second, a comparison of the system's overall ridership and financial performance to a select group of similar transit systems. The chapter then includes assessments of individual routes with respect to ridership and effectiveness indicators, evening ridership, on-time performance, travel times, and alignments. This performance evaluation complements the State management performance audit of the BUS, which is conducted every five years. The State audits address management structure and operating and service characteristics in greater detail.

The identification of unmet transit service needs for areas not currently served by transit is addressed in the second section of this chapter. It begins with an index of transit needs for areas in the entire County, and continues with a summary of significant findings from the Public Transit-Human Services Transportation Coordination Plan for Racine County. The chapter then includes the key findings from interviews with individuals who represent key "stakeholders"—transportation providers, human services agencies, business leaders, and advocacy groups. The third section of the chapter summarizes the unmet needs for transit service connecting Racine County to adjacent counties.

Table 33

PERFORMANCE MEASURES USED IN THE EVALUATION OF THE BELLE URBAN SYSTEM

	Objective and Specific Performance Measure	Systemwide Performance Evaluation	Route Performance Evaluation		
Objective No. 1: Effectively Serve Existing Land Use and Meet the Demand and Need for Transit Services					
1.	Population served	X			
2.	Area of new development served	X			
3.	Total employment served	Χ			
4.	Major activity centers served	Χ			
5.	Residential concentrations of transit-dependent populations served	Χ			
6.	Facilities for seniors, low-income individuals, and people with disabilities served	X			
_	• •	X			
7.	• • • • • • • • • • • • • • • • • • • •	Λ			
	ve No. 2: Promote Transit Utilization and Operate Reliable, Convenient, and Comfortable Service				
1.	Total boarding passengers	X	X		
2.	Passengers per capita	X			
3.	Revenue vehicle hours per capita	X			
4.	Passengers per revenue vehicle mile	X	X		
5.	Passengers per revenue vehicle hour	X	X		
6.	Percent of weekday passengers riding on Saturdays		X		
7.	Percent of weekday passengers riding in evenings	Χ			
8.	Percent of scheduled bus trips on time	X			
9.	Ratio of travel distance by bus to travel distance by automobile		X		
10.	Ratio of travel time by bus to travel time by automobile		X		
Objecti	ve No. 3: Provide Economical and Efficient Service				
1.	Operating expense per revenue vehicle mile	X	X		
2.	Operating expense per revenue vehicle hour	Χ	X		
3.	Operating expense per passenger	Χ	X		
4.	Operating assistance per passenger	Χ	X		
5.	Percent of operating expenses recovered by operating revenues (Farebox recovery rate)	X	x		

#### **EVALUATION OF BELLE URBAN SYSTEM**

#### Systemwide Performance Evaluation: Service to Existing Population, Employment, and Land Uses

Ideally, the transit system's service area should include the residential concentrations of the general and transit-dependent population, employment concentrations, and the major activity centers within the City of Racine in particular, and within a wider evaluation area that includes the communities around the City. Such residential areas, major employment concentrations, and major activity centers were identified for the entire County in Chapter III. For this section, staff estimated the extent to which each of these land uses were served within a one-quarter mile walk access service area of the BUS routes. The evaluation area for this section includes all of Racine County east of IH 94, plus a small portion west of IH 94 at the IH 94 and STH 20 interchange.

The performance of the BUS' service to population, employment, and land uses is displayed in Table 34 and on Maps 20 through 24, and summarized below:

• <u>Population Served</u>. The existing transit system provides excellent coverage of the population in the City of Racine, as well as within the Villages of Elmwood Park and North Bay, along with the most densely populated residential areas adjacent to the City in the Villages of Caledonia, Mt. Pleasant, and Sturtevant. For the year 2010 resident population, almost 99 percent of the City and about 69 percent of the

Table 34

TRANSIT SERVICE PROVIDED TO LAND USES AND POPULATION GROUPS BY THE 2012 BELLE URBAN SYSTEM

	Systemwide Performance		
Performance Measure	Characteristics		
Population Served by the 2012 BUS <sup>a</sup>			
Inside City of Racine	77,716		
Outside City of Racine	17,876		
Total	95,592		
Percent of City of Racine Resident Population Served	98.6		
Percent of Evaluation Area <sup>b</sup> Resident Population Served	68.5		
Employment Served by the 2012 BUS <sup>c</sup>			
Inside City of Racine	44,699		
Outside City of Racine	18,914		
Total	63,613		
Percent of Total Employment Within City of Racine Served	97.9		
Percent of Total Employment Within Evaluation Area Served	86.5		
Major Activity Center Served by the 2012 BUS <sup>d</sup>			
Medical Centers	3 of 3		
Educational Institutions	29 of 31		
Governmental and Public Institutional Centers	9 of 9		
Major Employers	74 of 85		
Commercial Centers	7 of 7		
Industrial Parks	9 of 11		
Total	131 of 146		
Transit-Dependent and Minority Population Groups Served by the 2012 BUS Areas with Substantial Transit Needs <sup>e</sup>			
Census block groups with high transit needs served	27 of 34		
Census block groups with moderate transit needs served	50 of 78		
Facilities for Seniors, Low-Income Individuals <sup>f</sup> , and People with Disabilities	50 of 54		
Concentrations of Total Minority Persons <sup>9</sup>	532 of 560		

<sup>&</sup>lt;sup>a</sup>All population figures are based on 2010 Census data allocated to U.S. Public Land Survey quarter sections by Commission staff. The total population in the eastern Racine County evaluation area was estimated at 139,500 persons in 2012.

<sup>&</sup>lt;sup>b</sup>The eastern Racine County evaluation area is shown on Map 20 and consists of the portion of Racine County east of IH 94 and a small area west of IH 94 that includes the Racine County Ives Grove Office complex and the Ives Grove Park-Ride lot at IH 94 and STH 20.

<sup>&</sup>lt;sup>c</sup> All employment figures are based on 2000 U.S. Bureau of Economic Analysis data allocated to U.S. Public Land Survey quarter sections by Commission staff. The total employment in the eastern Racine County evaluation area was estimated at 73,500 jobs in 2000.

<sup>&</sup>lt;sup>d</sup>The major activity centers identified within the eastern Racine County evaluation area are listed in Tables 22 through 27 and are shown on Maps 13, 14, and 15 in Chapter III.

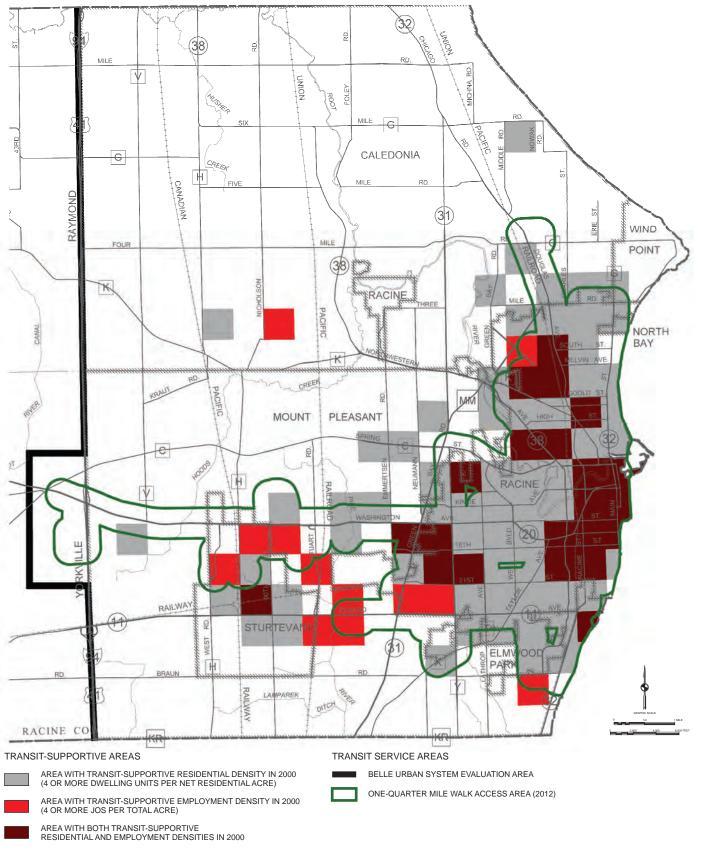
<sup>&</sup>lt;sup>e</sup>The transit needs index is calculated by ranking Census block groups based on the percent of total population and households in five categories: school-age children (10 through 16), seniors (74 and older), persons in low-income households, people with disabilities, and households with no vehicle available. Each ranked block group is assigned a score from 1 to 4, in each category, with a 1 for the lowest percentages and a 4 for the highest percentages. The transit needs index is equal to the sum of all scores for all five categories.

<sup>&</sup>lt;sup>f</sup>The facilities for seniors, low-income individuals, and people with disabilities identified within the evaluation area are listed in Table 28 and shown on Map 16 in Chapter III.

<sup>&</sup>lt;sup>9</sup>The major concentrations of total minority population identified within the evaluation area are based upon 2010 U.S. Census data and are shown in Map 6 in Chapter III by Census block.

Map 20

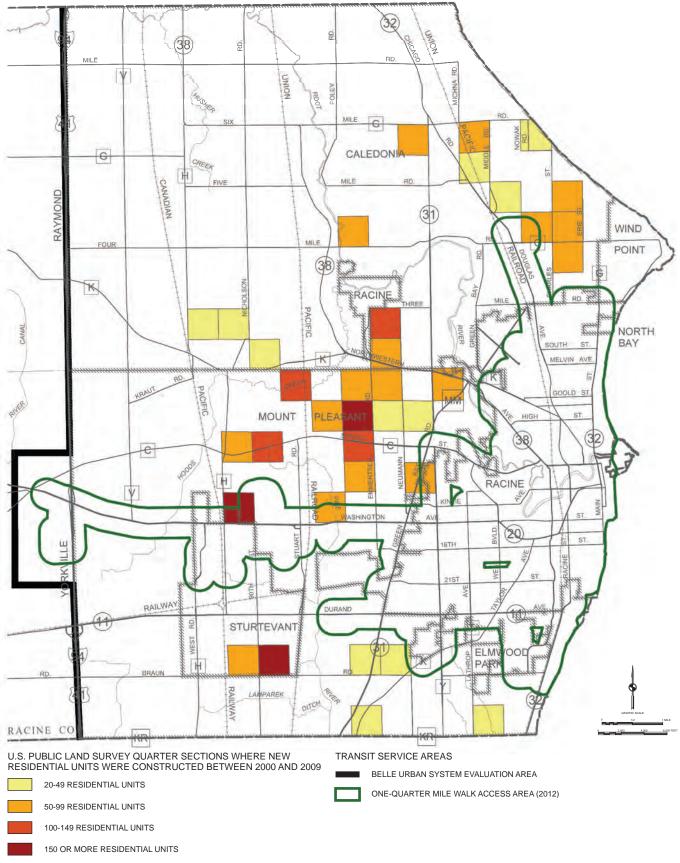
## TRANSIT-SUPPORTIVE AREAS FOR CONVENTIONAL FIXED-ROUTE TRANSIT SERVICES WITHIN AND OUTSIDE THE 2012 WALK ACCESS SERVICE AREA FOR THE BELLE URBAN SYSTEM



Source: City of Racine Department of Transportation and SEWRPC.

Map 21

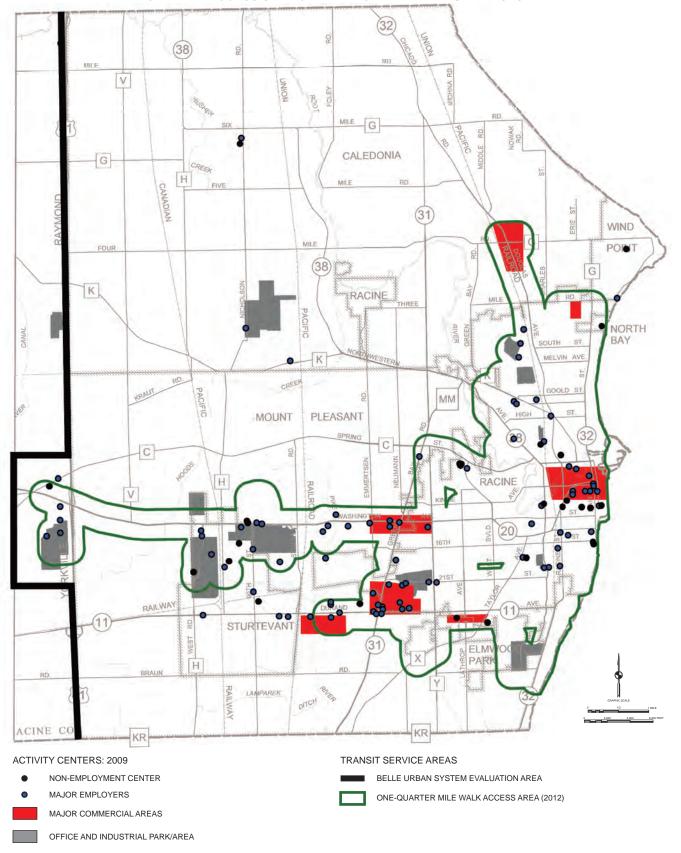
# NEW RESIDENTIAL DEVELOPMENT WITHIN AND OUTSIDE THE 2012 WALK ACCESS SERVICE AREA FOR THE BELLE URBAN SYSTEM



Source: Racine County and SEWRPC.

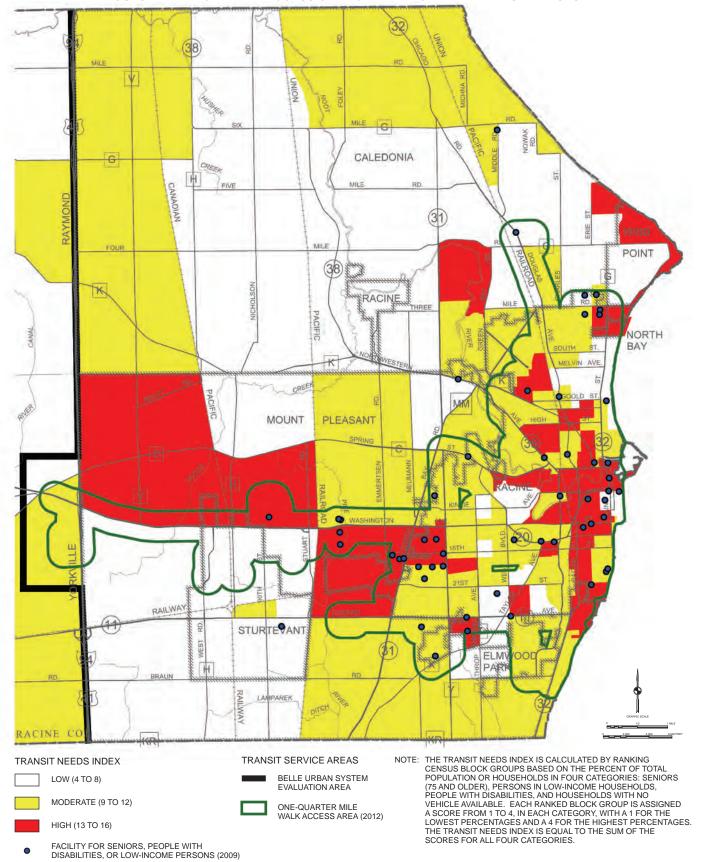
Map 22

# MAJOR ACTIVITY CENTERS WITHIN AND OUTSIDE THE 2012 WALK ACCESS SERVICE AREA FOR THE BELLE URBAN SYSTEM



Source: City of Racine Department of Transportation and SEWRPC.

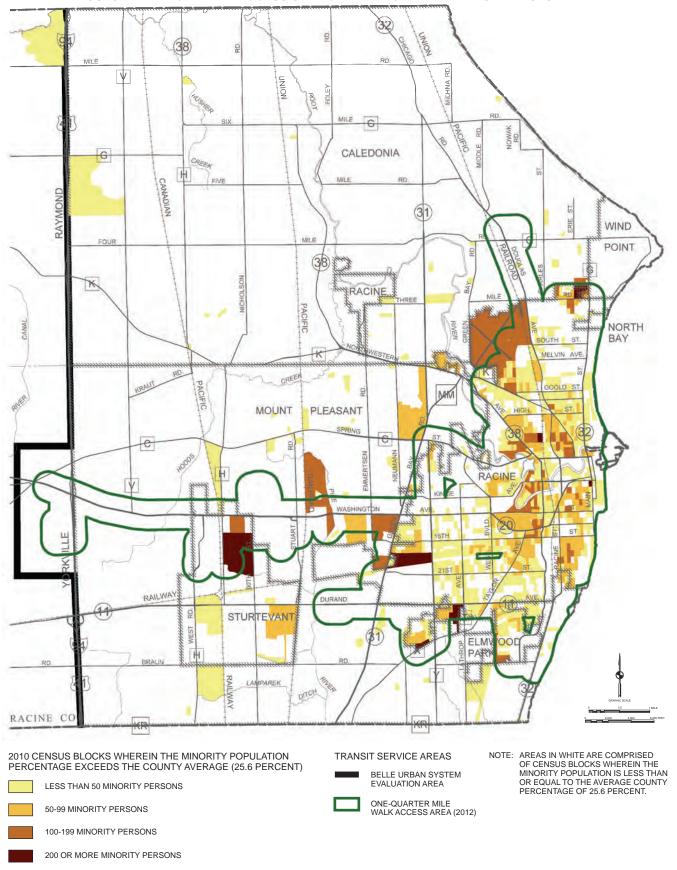
# CENSUS BLOCK GROUPS WITH MODERATE TO HIGH TRANSIT NEEDS AND FACILITIES FOR SENIORS, PEOPLE WITH DISABILITIES, AND LOW-INCOME PERSONS WITHIN AND OUTSIDE THE 2012 WALK ACCESS SERVICE AREA FOR THE BELLE URBAN SYSTEM



Source: City of Racine Department of Transportation, U.S. Bureau of the Census, and SEWRPC.

Map 24

## CONCENTRATIONS OF TOTAL 2010 MINORITY POPULATION WITHIN AND OUTSIDE THE 2012 WALK ACCESS SERVICE AREA FOR THE BELLE URBAN SYSTEM



Source: City of Racine Department of Transportation, U.S. Bureau of the Census, and SEWRPC.

evaluation area resided within one-quarter mile of a bus route. The evaluation area population outside the City that is not served by the transit system principally resides in areas where residential densities are generally too low to support conventional fixed-route transit service. However, Map 21 shows some areas of new development outside the City that may be considered for bus service if they have adequate density, including parts of the Village of Sturtevant and newly developed portions of Mt. Pleasant between CTH K and CTH C, and adjacent to STH 20 just west of 90th Street. Generally, the City does not extend routes to serve areas outside the City unless another municipality agrees to provide the local operating assistance funds needed for that service.

• Employment Served. The existing transit system provides excellent coverage of the employment concentrations inside the City of Racine and good coverage of the employment concentrations outside the City within the evaluation area. For year 2000 employment, about 98 percent of the jobs within the City and 87 percent of the jobs within the evaluation area were located within the transit system service area. Some unserved employment concentrations in the evaluation area have employment densities high enough to be considered for bus service; the majority of these concentrations are located in the Village of Mt. Pleasant adjacent to Durand Avenue, and in the Village of Sturtevant.

Not all jobs counted as "covered" by the transit system service area should be considered as completely served because of the hours of operation of the individual BUS routes. Most routes operate a full service day (operating from 5:10 a.m. until 10:10 p.m.) on weekdays, but have more limited hours on Saturdays (from 5:40 a.m. until 6:40 p.m.) Moreover, some of the routes that serve employment concentrations operate less than a full service day, as shown on Map 20. The weekday full service day hours do serve the starting and ending times for all first-shift and most second-shift jobs; however, the more limited hours on some routes and on Saturdays and Sundays restricts the ability of individuals working on weekends or along those routes to use the transit system even though their job may be located within the service area.

- Major Activity Centers Served. The transit system provides very good coverage of the major activity centers in the evaluation area, serving 131 of the 146 activity centers identified (see Map 22). Of the 15 major activity centers not served, 14 are located outside the City of Racine, and therefore, outside of the primary service area of the transit system. The one unserved activity center in the City of Racine is a major employer, Durham School Services, which is located south of Case High School on Oakes Road.
- Transit-Dependent and Minority Population Groups Served. The transit system provides excellent coverage of both the residential concentrations of transit-dependent population groups and the facilities used by those groups (see Map 23). The BUS served 50 of the 54 facilities identified in the evaluation area. The transit system also provides very good coverage of the residential concentrations of the total combined minority population (see Map 25). The transit system serves 532 of the 560 Census blocks where the combined minority population exceeds the County average. Most of the remaining unserved 28 Census blocks were areas with less than 50 total persons identifying as minority.

#### **Systemwide Performance Evaluation: Peer Group Comparison**

The transit system's systemwide ridership and financial performance can be evaluated by comparing the BUS to similar transit systems for certain key performance measures. This performance evaluation compared the ridership, service, and financial indicators for the BUS to two peer groups: a Wisconsin peer group comprised of six other urban transit systems located within the state, and a national peer group comprised of 10 other urban transit systems located in other states. The peer transit systems were all located in areas with populations similar to that of the City of Racine, operated similar service hours, and had similar bus fleet size. Table 35 presents the characteristics of the Racine transit system and the other transit systems in both the national and Wisconsin peer

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Table 35

SELECTED SERVICE CHARACTERISTICS FOR THE BELLE URBAN SYSTEM AND TRANSIT SYSTEMS IN THE NATIONAL AND WISCONSIN PEER GROUPS: 2009

			Hours of Operation			Peak		
Transit System	Ownership/ Management	Service Area Population	Weekdays	Saturdays	Sundays	Buses Operated Weekdays	Adult Cash Fares	Special School Routes
Racine Belle Urban System	Public	112,000	5:30 AM – 12:00 PM	5:30 AM – 10:30 PM	9:30 AM – 7:00 PM	26	\$1.50	Yes <sup>a</sup>
Transit Systems in National Peer Group								
Bay Metro (Bay City, Michigan)	Transit Authority	110,000	6:00 AM - 6:15 PM			40	1.00	No
Broome County Department of Transportation (Binghamton, New York)	Public	165,000	5:20 AM – 12:30 AM	5:20 AM – 10:40 PM	9:50 AM - 5:45 PM	38	1.25	Yes <sup>a</sup>
The Bus (Springfield, Missouri)	Public	151,000	6:00 AM – 11:00 PM	6:00 AM – 11:00 PM	7:00 AM – 11:00 PM	20	1.00	Yes <sup>b</sup>
Cherriots (Salem, Oregon)	Transit District	207,000	5:45 AM – 10:30 PM	7:00 AM – 10:30 PM		61	1.25	No
Erie Metropolitan Transit Authority (Erie, Pennsylvania)	Transit Authority	190,000	5:15 AM – 11:30 PM	5:50 AM – 11:05 PM	9:15 AM - 7:10 PM	52	1.10	No
Metro Transit (Kalamazoo, Michigan)	Transit Authority	185,000	6:00 AM – 10:15 PM	6:00 AM – 10:15 PM		32	1.35	No
Metropolitan Evansville Transit System (Evansville, Indiana)	Public	122,000	5:15 AM – 12:15 AM	6:15 AM – 12:15 PM		23	1.00	No
Metropolitan Transit Authority of Black Hawk County (Waterloo and Cedar Falls, Iowa)	Transit Authority	109,000	5:45 AM - 6:30 PM	7:45 AM - 6:00 PM		12	1.50	No
Valley Ride (Boise, Idaho)	Transit Authority	273,000	5:15 AM - 7:40 PM	7:45 AM - 6:10 PM		36	1.00	No
Whatcom Transportation Authority (Bellingham, Washington)	Transit Authority	188,000	5:30 AM – 11:00 PM	8:30 AM – 11:00 PM	10:00 AM – 7:30 PM	46	0.75	No
Transit Systems in Wisconsin Peer Group								
Appleton Valley Transit	Public	252,000	5:30 AM – 10:30 PM	7:30 AM – 10:30 PM		29	1.80	Yes <sup>a</sup>
Eau Claire Transit System	Public	69,000	6:00 AM – 10:30 PM	8:00 AM - 6:45 PM		15	1.50	Yes <sup>a</sup>
Green Bay Metro	Public	173,000	5:45 AM - 9:45 PM	7:45 AM - 5:45 PM		30	1.50	No
Kenosha Transit System	Public	92,000	6:00 AM - 7:30 PM	6:00 AM - 6:00 PM		48	1.25	No
La Crosse Municipal Transit Utility	Public	65,000	5:15 AM – 10:45 AM	7:45 AM - 7:45 PM	7:45 AM - 6:45 PM	15	1.25	Yes <sup>a</sup>
Sheboygan Transit System	Public	59,500	5:45 AM - 9:45 PM	7:45 AM - 5:45 PM		20	1.50	Yes <sup>a</sup>

<sup>&</sup>lt;sup>a</sup>School tripper service operated to serve school starting and ending times in the mornings and afternoons.

Source: National Transit Database and SEWRPC.

<sup>&</sup>lt;sup>b</sup>Extensions of fixed routes to serve school starting and ending times in mornings and afternoons.

Table 36

COMPARISON OF KEY INDICATORS OF RIDERSHIP AND FINANCIAL PERFORMANCE FOR THE BELLE URBAN SYSTEM AND OTHER BUS SYSTEMS IN THE WISCONSIN AND NATIONAL PEER GROUPS: 2003 AND 2007

				(	Operating Data	a			
	Be	lle Urban Syst	em		ge <sup>b</sup> for Bus Sy consin Peer G		Average <sup>b</sup> for Bus Systems in National Peer Group <sup>d</sup>		
Performance Measure	2003	2007	Average Annual Percent Change	2003	2007	Average Annual Percent Change	2003	2007	Average Annual Percent Change
Ridership									
Total Passengers <sup>e</sup>	1,533,200	1,458,700	-1.2	1,158,600	1,170,400	0.3	2,120,200	2,311,200	2.2
Service Levels									
Revenue Vehicle Miles	1,442,400	1,085,700	-6.9	940,600	908,200	-0.9	1,276,500	1,347,900	1.4
Revenue Vehicle Hours	106,100	85,300	-5.3	63,200	60,800	-1.0	93,000	101,200	2.1
Service Effectiveness									
Passengers per Capita	13.7	13.0	-1.3	12.2	12.0	-0.4	11.7	13.2	3.1
Revenue Vehicle Hours per Capita	0.9	0.8	-2.9	0.7	0.6	-3.8	0.5	0.6	4.7
Passengers per Revenue Vehicle Mile	1.1	1.3	4.3	1.2	1.3	2.0	1.5	1.6	1.6
Passengers per Revenue Vehicle Hour	14.4	17.1	4.4	18.0	18.9	1.2	20.6	20.8	0.2
Service Efficiency									
Operating Expense per Revenue Vehicle Mile	\$ 4.33	\$ 6.00	8.5	\$ 4.08	\$ 5.05	5.5	\$ 4.97	\$ 5.75	3.7
Operating Expense per Revenue Vehicle Hour	\$58.87	\$76.33	6.7	\$60.04	\$74.36	5.5	\$68.89	\$78.51	3.3
Cost Effectiveness	_			_	_	_	_	_	
Operating Expense per Passenger, Fixed Route Service	\$ 4.08	\$ 4.46	2.3	\$ 3.52	\$ 4.17	4.3	\$ 3.74	\$ 4.29	3.5
Total Operating Assistance per Passenger, All Service	\$ 3.48	\$ 3.78	2.1	\$ 3.33	\$ 3.93	4.2	\$ 3.83	\$ 4.39	3.5
Farebox Recovery Rate for Fixed Route Service (percent)	19.4	20.7	1.6	15.2	15.8	1.0	18.0	20.9	3.8

<sup>&</sup>lt;sup>a</sup>Based on ridership, service, and financial data obtained from the Federal Transit Administration National Transit Database for the years 2003 through 2007. Performance measures are for fixed-route bus operations only.

Source: SEWRPC.

groups. The key ridership, service, and financial performance measures for the BUS and the peer systems are presented in Table 36 for the years 2003 and 2007. A review of the trends in the performance measures for the BUS and the peer systems from 2003 to 2007 produced the following conclusions:

- 1. Ownership and Management. Outside of Wisconsin, most transit systems in the national peer group are owned and operated by transit authorities or transit districts, whereas in Wisconsin, transit systems are owned and usually operated by local units of government.
- 2. <u>Ridership and Service</u>. The BUS's service area population is larger than most of the systems in the Wisconsin peer group, and smaller than most of the systems in the national peer group, and the BUS operates more service hours than most of the systems in the Wisconsin peer group, and operates service

<sup>&</sup>lt;sup>b</sup>Averages reflect the mean of the individual performance measure values calculated for each transit system in the peer group.

<sup>&</sup>lt;sup>c</sup>Key performance indicators were developed based on information reported by six other urban bus systems in Wisconsin: Appleton Valley Transit, Eau Claire Transit, Green Bay Metro, Kenosha Area Transit, La Crosse Municipal Transit Utility, and Sheboygan Transit.

<sup>&</sup>lt;sup>d</sup>Key performance indicators were developed based on information reported by 10 other urban bus systems in the United States. The municipalities where these systems are located are: Bay City, MI; Broom County, NY; Springfield, MO; Salem, OR; Erie, PA; Kalamazoo, MI; Evansville, IN; Black Hawk County, IA; Boise, ID; Bellingham, WA.

<sup>&</sup>lt;sup>e</sup>This measure of ridership counts all passengers each time they board a transit vehicle. Passengers who transfer one or more times to different routes of a transit system are counted as two or more passengers in completing a single trip between a specific origin and destination.

Table 37

STUDENT RIDERSHIP ON WISCONSIN PEER TRANSIT SYSTEMS
FOR THE BELLE URBAN SYSTEM: 2009 ESTIMATED

	Estimated '	Weekday Student Passen	ger Trips <sup>a</sup>
Transit System	Average Weekday Boarding Passengers		
Appleton Valley Transit	3,200	330	10
Eau Claire Transit System	3,500	360	10
Green Bay Metro	4,900	1,150	24
Kenosha Area Transit System	6,000	3,970	66
La Crosse Municipal Transit Utility	4,200	350	8
Sheboygan Transit System	1,700	440	26
Racine Belle Urban System	4,900	1,500	31

<sup>&</sup>lt;sup>a</sup>Represents estimated passenger trips made by elementary and secondary school (K-12) students as provided in a telephone survey of the peer transit systems or as taken from published reports.

Source: SEWRPC.

hours similar to most of the systems in the national peer group. These service characteristics (displayed in Table 35) result in the ridership and service levels calculated for Table 36. The BUS has more riders and provides more vehicle miles and hours of service compared to the average for the Wisconsin peer transit systems; however, it has fewer riders and provides less service than the average for the national peer transit systems.

During the five years between 2003 and 2007, BUS ridership declined at an average annual rate of 1.2 percent, while the average ridership in both the Wisconsin and the national peer groups increased. During this same time period, the BUS reduced the amount of service provided, as measured by revenue vehicle miles and hours, to a much greater degree than the Wisconsin peer group. The national peer group, in comparison, slightly increased service levels on average. Most of the decline in service provided by the BUS dates from significant service cuts implemented by the City of Racine in 2004. From 2003 to 2004, revenue vehicle miles dropped by about 18 percent, and revenue vehicle hours dropped by about 15 percent. Since then, the revenue vehicle hours and vehicle miles of service provided by the system have remained relatively stable.

One potential area where it may be possible for the BUS to achieve ridership gains is by having more elementary and secondary school (K-12) students use the transit system. Table 37 presents information showing the proportion of average weekday passengers on the Wisconsin peer transit systems that are K-12 school students. The proportion of weekday ridership attributable to students ranged from about 8 percent on the La Crosse transit system to about 66 percent on the Kenosha transit system, with an average of about 29 percent for all six peer systems. Student ridership on the BUS was about the peer average but could potentially be increased by working with the Racine Unified School District to increase the number of students it places on the BUS.

3. <u>Service Effectiveness</u>. The BUS performed better than the Wisconsin peer group but not as well as the national peer group in most measures of service effectiveness in 2007. Compared to both peer groups, the transit system provides a fair amount of service given the size of its service area population, as measured by revenue vehicle hours per capita. This high level of service, however, results in low marks in two other

indicators: the transit system has lower passengers per revenue vehicle mile and vehicle hour than either peer group. The BUS improved on both those measures, which increased over 4 percent annually between 2003 and 2007, a much faster rate of increase than the Wisconsin and national peer groups.

- 4. <u>Service Efficiency</u>. In 2007, the Racine transit system's operating expenses per revenue vehicle mile were 16 percent higher than the national peer group average and 4 percent higher than the Wisconsin peer group average. For operating expenses per revenue vehicle hour, the Racine system's 2007 level was 3 percent higher than the Wisconsin peer group average and 3 percent lower than the national peer group average. The peer group averages for cost per revenue mile and revenue hour did not increase as quickly as the BUS measures did between 2003 and 2007.
- 5. Cost Effectiveness. The BUS in 2007 outperformed its peers for some cost effectiveness measures and underperformed for others. With regard to operating expense per passenger, in 2007 the BUS was about 4 percent higher than the national peer group average and about 7 percent higher than the Wisconsin peer group average. On the other hand, the level of operating assistance per passenger was about 4 percent lower for the BUS than the Wisconsin peer group and about 16 percent lower than the national peer group average, and the system's farebox recovery rate exceeded the Wisconsin peer group average. Between 2003 and 2007, the BUS and both peer groups experienced increases in operating expense and operating assistance per passenger; however, the increases for the BUS were lower than those for either peer group. With regard to farebox recovery, the BUS outperformed the Wisconsin peer group average and measured about the same as the national peer group average in 2007. The farebox recovery rate for both the BUS and the peer groups improved over the five-year period.

Overall, the BUS measures about average when compared to similar transit systems. It outperformed the Wisconsin peer group average in seven of 12 performance measures and outperformed the national peer group average in two of 12 measures, and was very close to the national group average in another four measures. In general, the BUS provides a high level of service for its service area population size, resulting in higher service effectiveness, but lower service efficiency. The transit system's service efficiency is likely the principal area of concern identified by the peer group comparison.

### **Route Performance Evaluation**

### Route Ridership, Service Effectiveness, and Cost Effectiveness

The previous two sections assessed the systemwide performance of the transit system by measuring how well it serves population, employment, and activity centers, and by comparing its overall ridership and financial performance to similar transit systems. This section of the evaluation looks at the ridership and financial performance for the regular routes of the transit system, in order to identify the routes with the lowest overall performance levels based on route data identifying total boarding passengers; passengers per revenue vehicle-hour and per revenue vehicle-mile; total operating cost and operating assistance per passenger; and farebox recovery rate.

Tables 38 through 40 and Figures 8 and 9 display the estimated service effectiveness and cost effectiveness measures for the regular routes of the transit system. The performance measures presented in these tables and figures are based upon the daily operating characteristics of the routes of the transit system in 2006 and the total daily boarding passengers—including revenue, free, and transfer passengers—obtained from automatic passenger counts collected by the transit system from October 1 through 31, 2006; and the average systemwide cost per vehicle hour and vehicle mile, and passenger revenue per boarding passenger during 2006. It should be noted that, although the data used for these performance measures are for routes of the transit system as they were in 2006, the routes in 2012 are substantially the same as they were in 2006. The most notable exception is that the BUS implemented changes to Route No. 27 in September 2012. The performance of the revised Route No. 27 should be monitored and reevaluated once it has operated for a sufficient period of time. A minimum (or maximum) acceptable performance level accompanies each of the performance measures in the tables. Routes that have ridership, service effectiveness, and farebox recovery levels that are more than 20 percent below the average for

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Table 38

AVERAGE WEEKDAY PERFORMANCE CHARACTERISTICS FOR THE REGULAR ROUTES OF THE BELLE URBAN SYSTEM: OCTOBER 2006

					fectiveness sures			Cost Effectiveness Measures			
Bus Route	Revenue Vehicle Hours	Revenue Vehicle Miles	Total Passengers	Passengers per Revenue Vehicle Hour	Passengers per Revenue Vehicle Mile	Operating Cost <sup>a</sup>	Operating Assistance a	Bus Route	Revenue Vehicle Hours	Revenue Vehicle Miles	
1	38.3	548	800	20.9	1.5	\$ 3,140	\$ 2,650	\$ 3.93	\$ 3.31	15.5	
2	32.1	395	680	21.2	1.7	2,345	1,930	3.45	2.84	17.7	
3	44.4	581	1,080	24.3	1.9	3,320	2,660	3.07	2.46	19.8	
4	44.0	466	990	22.5	2.1	2,680	2,075	2.71	2.10	22.5	
5	38.1	567	380	10.0	0.7	3,240	3,010	8.53	7.92	7.2	
7	38.1	422	800	21.0	1.9	2,390	1,900	2.99	2.38	20.4	
20	6.9	180	120	17.4	0.7	1,080	1,010	9.00	8.42	6.8	
27	11.4	156	80	7.0	0.5	880	830	11.00	10.38	5.6	
30	6.6	72	210	31.8	2.9	660	530	3.14	2.52	19.4	
86	18.5	288	300	16.2	1.0	1,560	1,380	5.20	4.60	11.7	
System Total/ Average	278.4	3,673	5,440	19.5	1.5	\$21,295	\$17,980	3.91	3.31	15.6	
Minimum/ Maximum Acceptable Level			435 <sup>b</sup>	15.6 <sup>b</sup>	1.2 <sup>b</sup>			\$ 4.70°	\$ 3.97°	12.5 <sup>b</sup>	

<sup>&</sup>lt;sup>a</sup>Operating cost and operating assistance values are estimated based on the revenue vehicle miles of each week, the average systemwide cost per revenue vehicle mile, and the total daily boarding passengers per route.

<sup>&</sup>lt;sup>b</sup>The minimum acceptable performance level for the ridership, service effectiveness and farebox recovery measures is 20 percent below the overall average for all routes. Red text in these measures indicates that a route performs below the minimum acceptable level for that particular measure and should be considered a poor performer as specified under Objective 2, service performance standard 2.

<sup>&</sup>lt;sup>c</sup>The maximum acceptable performance level for cost effectiveness measures is 20 percent above the overall average for all routes. Red text in these measures indicates that a route performs worse than the maximum acceptable level for that particular measure, and should be considered a poor performer as specified under Objective 3, service performance standard 3.

Table 39

AVERAGE SATURDAY PERFORMANCE CHARACTERISTICS FOR THE REGULAR ROUTES OF THE BELLE URBAN SYSTEM: OCTOBER 2006

				Service Effectiveness Measures						ectiveness M	easures
Bus Route	Revenue Vehicle Hours	Revenue Vehicle Miles	Total Passengers	Passengers per Revenue Vehicle Hour	Passengers per Revenue Vehicle Mile	Percent of Weekday Passengers Riding on Saturdays	Operating Cost <sup>a</sup>	Operating Assistance <sup>a</sup>	Bus Route	Revenue Vehicle Hours	Revenue Vehicle Miles
1	33.5	389	390	11.6	1.0	48.8	\$2,214	\$1,976	\$ 5.68	\$ 5.07	10.7
2	24.6	227	250	10.2	1.1	36.8	1,335	1,182	5.34	4.73	11.5
3	33.3	350	420	12.6	1.2	38.9	1,996	1,740	4.75	4.14	12.8
4	33.3	286	640	19.2	2.2	64.6	1,663	1,273	2.60	1.99	23.5
5	25.0	293	150	6.0	0.5	39.5	1,709	1,617	11.39	10.78	5.4
7	30.2	255	540	17.9	2.1	67.5	1,742	1,413	3.23	2.62	18.9
20											
27											
30											
86	17.0	272	180	10.6	0.7	60.0	1,474	1,364	8.19	7.58	7.5
System Total/ Average	196.9	2,071	2,570	13.1	1.2	47.2	\$12,133	\$10,565	4.72	4.11	12.9
Minimum/ Maximum Acceptable Level			294 <sup>b</sup>	10.5 <sup>b</sup>	1.0 <sup>b</sup>	37.8 <sup>b</sup>			\$ 5.67 <sup>c</sup>	\$ 4.93 <sup>c</sup>	10.3 <sup>b</sup>

<sup>&</sup>lt;sup>a</sup>Operating cost and operating assistance values are estimated based on the revenue vehicle miles of each week, the average systemwide cost per revenue vehicle mile, and the total daily boarding passengers per route.

<sup>&</sup>lt;sup>b</sup>The minimum acceptable performance level for the ridership, service effectiveness and farebox recovery measures is 20 percent below the overall average for all routes. Red text in these measures indicates that a route performs below the minimum acceptable level for that particular measure and should be considered a poor performer as specified under Objective 2, service performance standard 2.

<sup>&</sup>lt;sup>c</sup>The maximum acceptable performance level for cost effectiveness measures is 20 percent above the overall average for all routes. Red text in these measures indicates that a route performs worse than the maximum acceptable level for that particular measure, and should be considered a poor performer as specified under Objective 3, service performance standard 3.

Table 40

AVERAGE SUNDAY PERFORMANCE CHARACTERISTICS FOR THE REGULAR ROUTES OF THE BELLE URBAN SYSTEM: OCTOBER 2006

				Service Effectiveness Measures					Cost Eff	ectiveness M	easures
Bus Route	Revenue Vehicle Hours	Revenue Vehicle Miles	Total Passengers	Passengers per Revenue Vehicle Hour	Passengers per Revenue Vehicle Mile	Percent of Weekday Passengers Riding on Sundays	Operating Cost <sup>a</sup>	Operating Assistance <sup>a</sup>	Bus Route	Revenue Vehicle Hours	Revenue Vehicle Miles
1	18.5	220	240	13.0	1.1	30.0	\$1,304	\$1,158	\$ 5.43	\$ 4.83	11.2
2											
3	18.2	185	100	5.5	0.5	9.3	1,105	1,044	11.05	10.44	5.5
4	18.3	151	330	18.0	2.2	33.3	828	627	2.51	1.90	24.3
5											
7	9.4	125	230	24.5	1.8	28.8	696	556	3.03	2.42	20.1
20											
27											
30											
86	9.5	144	80	8.4	0.6	26.7	781	732	9.76	9.15	6.3
System Total/ Average	73.9	826	980	13.3	1.2	18.0	\$4,714	\$4,116	4.81	4.20	12.7
Minimum/ Maximum Acceptable Level			157 <sup>b</sup>	10.6 <sup>b</sup>	1.0 <sup>b</sup>	14.4 <sup>b</sup>			\$ 5.77 <sup>c</sup>	\$ 5.04 <sup>c</sup>	10.1 <sup>b</sup>

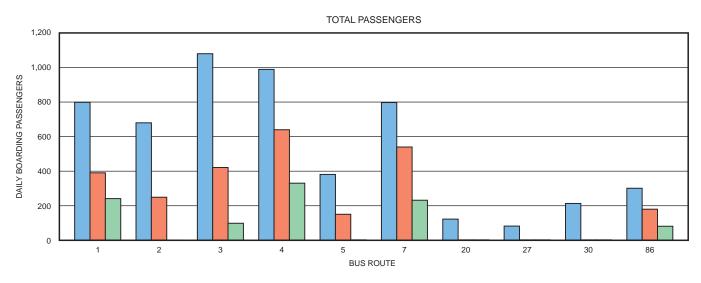
<sup>&</sup>lt;sup>a</sup>Operating cost and operating assistance values are estimated based on the revenue vehicle miles of each week, the average systemwide cost per revenue vehicle mile, and the total daily boarding passengers per route.

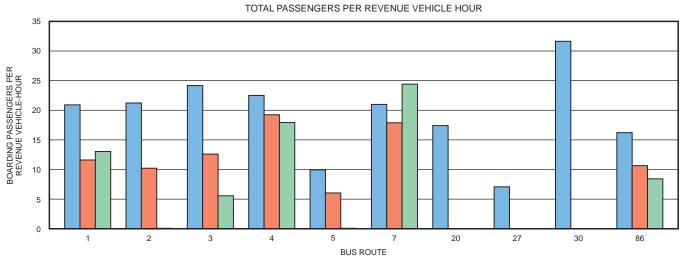
<sup>&</sup>lt;sup>b</sup>The minimum acceptable performance level for the ridership, service effectiveness and farebox recovery measures is 20 percent below the overall average for all routes. Red text in these measures indicates that a route performs below the minimum acceptable level for that particular measure and should be considered a poor performer as specified under Objective 2, service performance standard 2.

<sup>&</sup>lt;sup>c</sup>The maximum acceptable performance level for cost effectiveness measures is 20 percent above the overall average for all routes. Red text in these measures indicates that a route performs worse than the maximum acceptable level for that particular measure, and should be considered a poor performer as specified under Objective 3, service performance standard 3.

Figure 8

RIDERSHIP AND SERVICE EFFECTIVENESS MEASURES FOR THE ROUTES OF THE BELLE URBAN SYSTEM: OCTOBER 2006





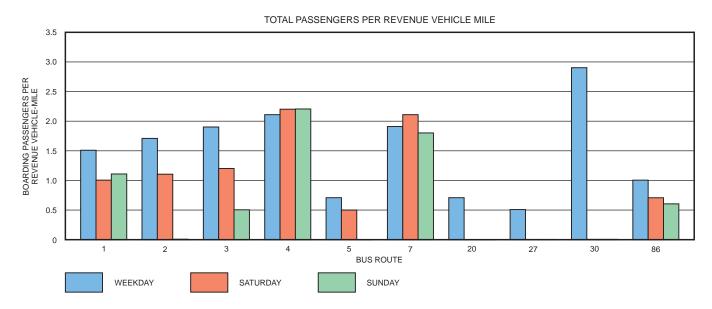
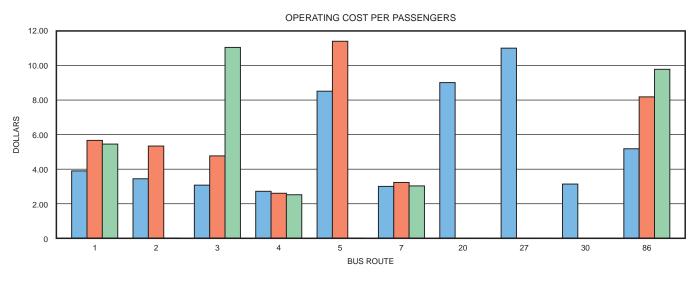
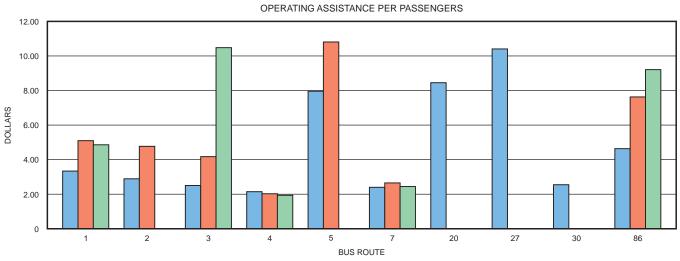
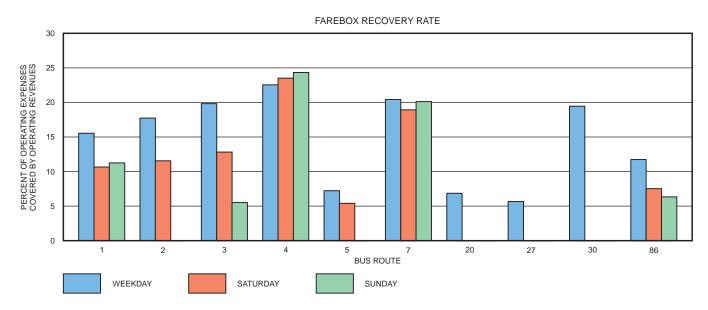


Figure 9

COST EFFECTIVENESS MEASURES FOR
THE ROUTES OF THE BELLE URBAN SYSTEM: OCTOBER 2006







all routes are identified as poor performers with red text; routes that have cost effectiveness levels that are more than 20 percent above the average of all routes are also identified as poor performers in red text. The following observations may be drawn from the information in the tables and figures:

- Routes that Performed Well on Weekdays. Route Nos. 1, 2, 3, 4, 7, and 30 had weekday performance levels for all measures that consistently exceeded the minimum (or maximum) acceptable level. Of these six routes, Route Nos. 3, 4, and 7 were clearly the best performers; ranking in the top three for nearly all the service effectiveness and cost effectiveness measures. The remaining three, Route Nos. 1, 2, and 30 had weekday performance measures that were generally above average. Based solely upon these measures, these routes could continue to be operated without change.
- Routes that Performed Poorly on Weekdays. The remaining four regular routes, Route Nos. 5, 20, 27, and 86, showed weekday performance levels consistently worse than the acceptable level. Of these four routes, Route No. 27 was the poorest performer in every measure, and Route No. 86 was usually the best performer, with measures that come close to meeting the acceptable performance level. Potential changes to all of these routes to improve their performance should be considered.
- <u>Saturday Route Performance</u>. On Saturdays, Route Nos. 4 and 7 continued to be the best performers, followed by Route No. 3. Route Nos. 1 and 2 did not meet the acceptable performance levels in all categories; however, these routes performed better than Route Nos. 5 and 86, which continued to be the poorest performers.
- <u>Sunday Route Performance</u>. On Sundays, Route Nos. 4 and 7 remained best-performing routes. Route No. 1 improved its performance from the Saturday levels and consistently exceeded acceptable levels for Sunday, while the performance of Route No. 3 worsened and consistently failed to meet the acceptable level. Route No. 86 continued to be a poor performer for all measures.

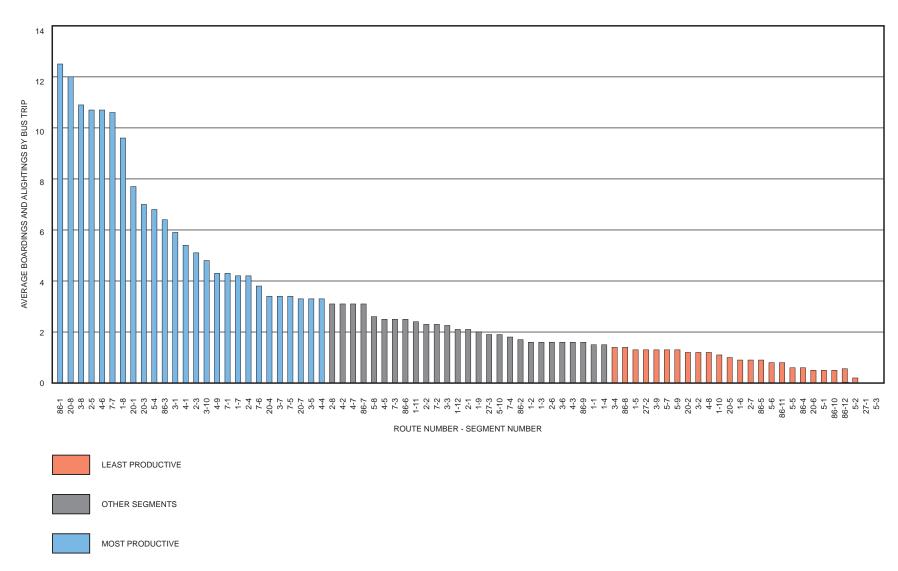
### **Productive and Nonproductive Route Segments**

To supplement the route ridership, service, and cost performance measures, Commission staff examined the boarding and alighting passenger activity along each bus route to help identify productive and nonproductive route segments. The October 2006 automatic passenger counts collected by the transit system that were used for the performance measures above also included the number of boarding and alighting passengers by stop for each bus route. To facilitate the analysis of the passenger boarding and alighting data, Commission staff divided the bus routes into segments of about one mile in length based on land uses and major intersections along the route. Staff calculated the average weekday total passenger boardings and alightings at all the stops along each segment, then divided that figure by the total bus trips operated over the segment to calculate the average boardings and alightings per bus trip along each segment. Figure 10 displays the 79 route segments designated for the transit system, ordered by passenger activity per trip. The route segments which rank in the top one-third are considered the most productive segments in the transit system, and the route segments ranking in the bottom third are considered the least productive segments in the transit system. The most productive and least productive route segments are shown for each route on Map 25. The following observations may be drawn from the figure and map:

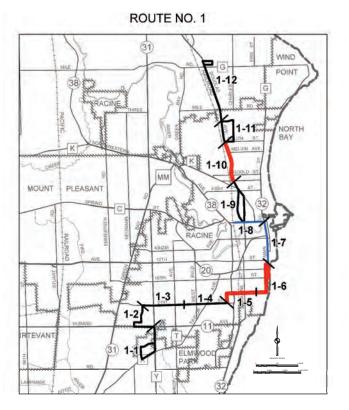
- Most of the segments with the highest passenger activity are those that pass through the Corinne Reid-Owens Transit Center, and reflect the high number of boardings and alightings that occur there for passengers transferring between routes.
- Route Nos. 5, 27, and 86, which were poor performers in the measures of ridership, service effectiveness, and cost effectiveness, are comprised of many segments that have low passenger activity.
- At least one unproductive route segment was found on all other routes of the system except Route No. 7. This information is an indicator of where routing changes should be considered; some of these

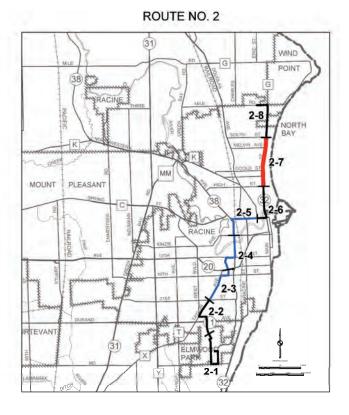
Figure 10

AVERAGE WEEKDAY PASSENGER ACTIVITY ON THE ROUTE SEGMENTS OF THE BELLE URBAN SYSTEM: OCTOBER 2006



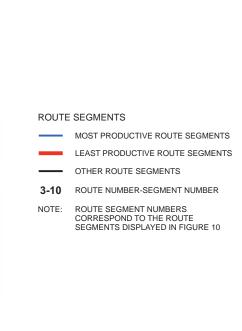
Map 25
PRODUCTIVE AND NONPRODUCTIVE ROUTE SEGMENTS OF THE BELLE URBAN SYSTEM: OCTOBER 2006





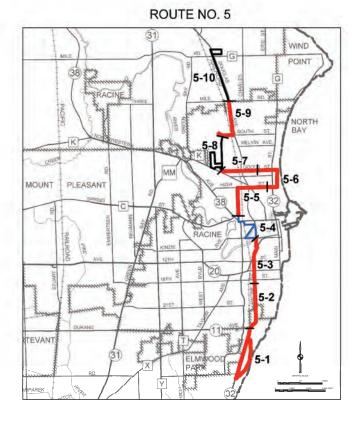
### RD. NORTH BAY K MELVIN AVE CREEK SOOLD ST MM MOUNT **PLEASANT** 3-10 3-9 RACINE RAILROAD 3-2 3-6 3-5 DURAND RTEVANT

**ROUTE NO. 3** 

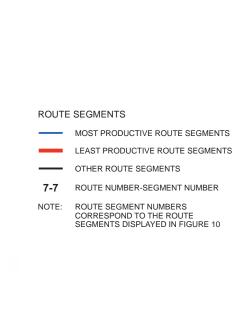


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Map 25 (continued)

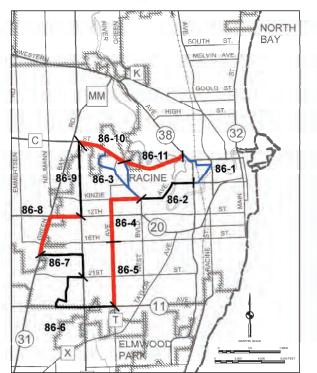


**ROUTE NO. 7** 



### Map 25 (continued)

**ROUTE NO. 86** 



#### **ROUTE SEGMENTS**

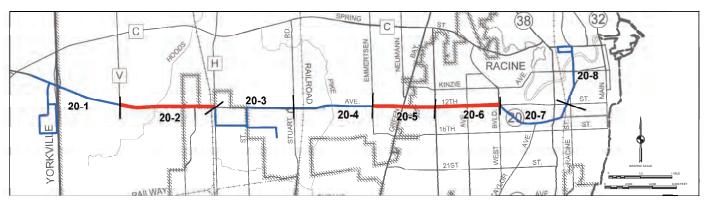
MOST PRODUCTIVE ROUTE SEGMENTS

LEAST PRODUCTIVE ROUTE SEGMENTS

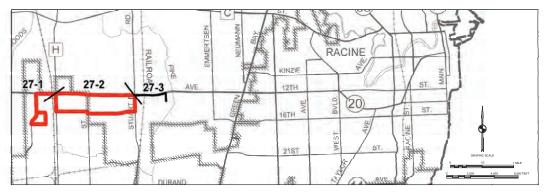
7-7 ROUTE NUMBER-SEGMENT NUMBER

NOTE: ROUTE SEGMENT NUMBERS
CORRESPOND TO THE ROUTE
SEGMENTS DISPLAYED IN FIGURE 10

**ROUTE NO. 20** 



**ROUTE NO. 27** 



Source: SEWRPC.

Table 41

AVERAGE EVENING RIDERSHIP OF THE REGULAR ROUTES OF THE BELLE URBAN SYSTEM: OCTOBER 2006<sup>a</sup>

	Average	Weekday Ever	ning Ridership <sup>b</sup>	Average	Saturday Ever	ning Ridership
Route No.	Weekday Total Boarding Passengers	Total Boarding Passengers	Percent of Weekday Average	Saturday Total Boarding Passengers	Total Boarding Passengers	Percent of Saturday Average
1	800	90	11.3	390	50	12.8
2	680			250		
3	1,080	80	7.4	420	60	14.3
4	990	110	11.1	640	70	10.9
5	380			150		
7	800	70	8.8	540	50	9.3
20	120	6°	5.0			
27	80					
86	300	30	10.0	180	24	13.3
Total	5,230	380	7.3	2,570	254	9.9

<sup>&</sup>lt;sup>a</sup>The evening ridership presented in this table was collected in October 2006, and does not reflect the shorter weekday and weekend service hours implemented on the transit system in January 2012.

unproductive route segments will be revisited in the next chapter, which proposes alternative transit service improvements. It should be noted, however, that some of the route segments with the lowest passenger activity occur where bus routes pass through areas with few activity centers and land uses unsupportive of transit, on their way towards activity centers or land uses that do generate significant ridership. Consequently, if the transit system is to continue to provide extensive coverage of the greater Racine area, some bus routes will perform at relatively lower levels of efficiency than other routes because of the specific and constrained operating and service area characteristics of each route.

### Route Performance—Evening Service

The BUS began providing evening bus service in 1998, as a result of a recommendation in the Commission's last transit development plan for the system<sup>1</sup>. At that time, the transit system extended weekday service hours from about 7:30 p.m. to midnight on most routes, and extended Saturday service hours on most routes from about 7:30 p.m. to 10:30 p.m. The extended service hours for Route Nos. 1, 3, 4, 7, and 86 added about four round trips on weekdays and three round trips on Saturdays. In January 2012, the City reduced service hours so most routes operate until 10:10 p.m. on weekdays and 6:40 p.m. on Saturdays and Sundays. The following evening service evaluation was conducted prior to implementation of the reduced January 2012 service hours, and is presented for informational purposes.

For the evening service evaluation, Commission staff used the same October 2006 automatic passenger counts collected by the transit system that were used for the evaluations of route ridership, service effectiveness, cost effectiveness, and route segments. Table 41 displays the average evening ridership for the regular routes of the

<sup>&</sup>lt;sup>b</sup>Reflects passengers boarding between approximately 7:30 p.m. and midnight on weekdays and between approximately 7:30 p.m. and 10:30 p.m. on Saturdays.

<sup>&</sup>lt;sup>c</sup>Route No. 20 only operates one partial trip after 7:30 p.m. on weekdays. The Route No. 20 bus departs the Johnson Diversey Waxdale plant on 8310 16th Street at 10:39 p.m., travels west to Grandview Business Park at IH 94 and STH 20, and departs Grandview at 11:04 p.m. The bus arrives at the Transit Center at 11:40 p.m.

<sup>&</sup>lt;sup>1</sup>See SEWRPC Community Assistance Planning Report No. 223, Racine Area Transit System Development Plan: 1998-2002, October 1997.

transit system for weekdays and Saturdays. Based on these data, evening ridership represents about 7 percent of the ridership on the regular routes on weekdays and about 10 percent of the ridership on the regular routes on Saturdays. The routes with the highest evening ridership (Route Nos. 1, 3, and 4) generally corresponded with those that performed well on a daily basis in the service effectiveness and cost effectiveness measures. Route No. 86 had a low level of ridership for both weekday and Saturday evenings, but weekday evening riders made up 10 percent of the weekday boarding passengers on the route, and Saturday evening riders made up over 13 percent of the Saturday boarding passengers. Route No. 20 averaged only six boarding passengers on weekday evenings because it only operates one partial trip, leaving the JohnsonDiversey Waxdale plant at 10:40 p.m., passing through the Renaissance Industrial Park and the Grandview Business Park, and arriving at the Transit Center at about 11:40 p.m.

Consideration should be given to restructuring evening bus service where passenger counts are consistently low. Such service restructuring will be considered in the next chapter on alternative service improvements, and could possibly include: combining routes to serve only the most productive areas; reducing service hours or service frequency; or considering alternatives to the current fixed-route service with demand-responsive service such as route-deviation or shared-ride taxicab services.

### Schedule Adherence

Excessive waiting times caused by buses running behind schedule or resulting from missed connections due to early bus departures can detract from, and even be a deterrent to, using the transit system. The provision of reliable and on-time transit service is, therefore, extremely important in attracting and retaining transit riders. The transit service standards for this study define "on time" as adherence to published schedules within the range of one minute early and three minutes late.

The BUS monitors schedule adherence on its bus routes through an automatic vehicle location (AVL) system which tracks the location of each bus used in daily service throughout the day. The transit system monitors the bus stop arrival and departure times of the vehicles operating over each route and can compare those times to scheduled times at time points along the route.

For the systemwide performance evaluation, schedule adherence data were collected for the week of April 20-24, 2009 (displayed in Table 42). The on-time performance data collected by the transit system indicated that the transit system meets the service standard of 90 percent of the service being on-time. Every route was at or above this level except Route No. 7, which was only 80 percent on-time due to a large number of early departures from bus stops. Further investigation should be done to determine the cause of the early departures on Route No. 7.

### Directness of Route Alignments and Comparison of Transit and Automobile Travel Times

The directness of route alignments can affect the ability of the transit system to compete with private automobiles because indirect and circuitous routing alignments affect travel time and can discourage transit use. The absolute difference between transit and automobile travel times can be viewed to indicate a level of service as follows:

- No difference transit travel is as fast as or faster than travel by automobile
- 1 to 15 minutes longer transit travel is about as fast by automobile
- 16 to 30 minutes longer transit travel times are tolerable for choice transit riders
- 31 to 45 minutes longer a round trip is at least one hour longer by transit
- 46 to 60 minutes longer travel is tedious for all transit riders; may be the best possible in small cities
- Greater than 60 minutes transit travel is unacceptable to most riders

Table 42
ON-TIME PERFORMANCE OF THE REGULAR ROUTES OF THE BELLE URBAN SYSTEM: APRIL 20-24, 2009

		Time Che	cks Made by A	utomatic Vehicl	e Location (AVI	_) System	
	, ,	rtures (More nute early)	(between 1	Departures minute early nutes late)	Late Depar than 3 mir		
Route Number	Number	Percent	Number	Percent	Number	Percent	Total
1	55	3.1	1,681	96.1	14	0.8	1,750
2	137	8.5	1,481	91.4	2	0.1	1,620
3	110	5.7	1,790	92.5	36	1.9	1,936
4	57	3.4	1,585	95.0	27	1.6	1,669
5	16	1.0	1,518	96.0	47	3.0	1,581
7	286	18.5	1,247	80.7	13	0.8	1,546
20	66	32.7	136	67.3	0	0.0	202
27	6	1.1	484	89.6	50	9.3	540
86	87	10.7	721	88.7	5	0.6	813
Total System	820	7.0	10,643	91.3	194	1.7	11,657

For a city the size of Racine, where it is possible to drive virtually anywhere in the City in 10 to 15 minutes, the walk and wait time for transit by itself is nearly as much as the total automobile travel time. In general, for small cities or for short trips, the total transit travel time will generally be significantly longer than the automobile travel time. It may not be possible to reduce the transit-auto travel time difference to less than 45 minutes because automobile travel times are low. Map 26 identifies the portions of the routes on the Racine transit system that are not direct in alignment. Most of the existing transit system routes have at least a small segment of their alignment which is indirect when compared to a path that would be followed by an automobile. The indirectness of the current route alignments results largely from efforts made to maximize service to the residential areas and major activity centers on each route while minimizing the number of routes needed and the attendant total expenditures for transit system operation. In addition, the alignments of some routes have been designed to provide direct transit service between the residential areas and major traffic generators, including schools, along each route.

In order to measure the directness of the alignments on the regular routes, Commission staff compared the travel distance and in-vehicle travel time for each of the regular transit routes to the distance and time it would take an automobile to make the same trip between the route termini. The Corinne Reid-Owens Transit Center on State Street is a common transfer point for eight of the nine regular routes of the BUS. Accordingly, Commission staff measured the distances and times for travel between the outlying termini and the Transit Center for the eight routes serving the Transit Center, and between the two termini for Route No. 27, which in 2009 were Case High School on Oakes Road and the Renaissance Business Park (note: Route No. 27 as revised in September 2012 operates further east of Case High School to Regency Mall). Table 43 presents the comparison of automobile and transit travel distances and in-vehicle times for the regular routes of the transit system. An examination of the data in the table results in the following conclusions:

• All the routes' in-vehicle travel times were less than 30 minutes longer than automobile travel times. However, the ratio of transit-to-auto time was greater than two-to-one on nearly all routes. Only Route No. 20 and the portion of Route No. 4 between Shorecrest Plaza and the Transit Center were less than twice the speed of travel by automobile, primarily because the routes are very direct in alignment.

Map 26

ROUTE SEGMENTS ON THE BELLE URBAN SYSTEM NOT DIRECT IN ALIGNMENT: 2012

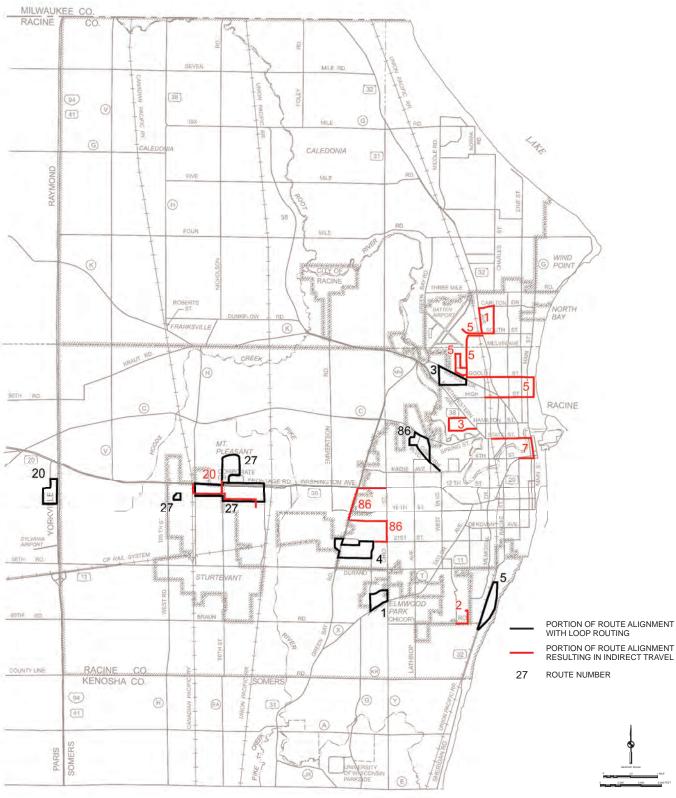


Table 43

COMPARISON OF TRANSIT AND AUTOMOBILE TRAVEL DISTANCES AND TIMES
FOR THE ROUTES OF THE BELLE URBAN SYSTEM: 2009

			Travel Dista	ance (miles)		In-	Vehicle Trave	I Time (minute	s) <sup>a</sup>
Route Numbers	Route Termini For Measurements of Travel Distance and Time	Transit	Auto	Difference (Transit - Auto)	Ratio (Transit to Auto)	Transit	Auto	Difference (Transit - Auto)	Ratio (Transit to Auto)
1	Douglas Avenue and Carlton Drive to Transit Center	4.1	2.5	1.6	1.6	14	7	7	2.0
	Taylor Avenue and Meachem Road to Transit Center	8.1	4.2	3.9	1.9	31	11	20	2.8
2	Shorecrest Plaza (3900 Erie Street) to Transit Center	3.9	3.6	0.3	1.1	18	9	9	2.0
	Olsen Industrial Park (S. Memorial Drive and Lincolnwood Court) to Transit Center	5.4	3.6	1.8	1.5	28	9	19	3.1
3	Golf Avenue and Rapids Drive to Transit Center	3.6	2.0	1.6	1.8	16	5	11	3.2
	Case High School (7345 Washington Avenue) to Transit Center	7.6	4.7	2.9	1.6	31	10	21	3.1
4	Shorecrest Plaza (3900 Erie Street) to Transit Center	3.9	3.6	0.3	1.1	16	9	7	1.8
	Kmart (Green Bay Road and 21st Street) to Transit Center	6.1	4.4	1.7	1.4	27	10	17	2.7
5	Greentree Shopping Center (5101 Douglas Avenue) to Transit Center	6.6	4.0	2.6	1.7	34	10	24	3.4
	Racine County Opportunities Center (4214 Sheridan Road) to Transit Center	4.5	3.8	0.7	1.2	18	9	9	2.0
7	Walmart (South Oakes Road and Durand Avenue) to Transit Center	7.8	5.8	2.0	1.3	40	12	28	3.3
86	Transit Center to Target (Durand Avenue and Roosevelt Avenue)	7.2	5.2	2.0	1.4	28	11	17	2.5
	Target (Durand Avenue and Roosevelt Avenue) to Transit Center	6.2	5.2	1.0	1.2	24	11	13	2.2
20	Grandview Business Park (IH 94 and STH 20) to Transit Center	9.8	9.7	0.1	1.0	35	18	17	1.9
27 <sup>b</sup>	Case High School (7345 Washington Avenue) to Renaissance Boulevard and Science Drive	3.3	2.6	0.7	1.3	13	4	9	3.3

<sup>&</sup>lt;sup>a</sup>Based on peak-period travel times between the points identified.

Source: SEWRPC.

• Route Nos. 1, 3, 5, and 7 have the greatest time differences between transit and automobile travel times for at least one route endpoint and the Transit Center. For the most part, this is due to the indirect alignment of these routes. Of all the system routes, Route No. 5 from Greentree Shopping Center to the Transit Center is the most indirect. Alternatives which would improve the convenience of travel on these routes should be explored. However, in the case of Route No. 7, the transit distance is only 1.3 times the auto distance, but the automobile travel path includes travel at high speeds on highways, which cannot be achieved using local bus transit service.

<sup>&</sup>lt;sup>b</sup>The analysis presented in this table was conducted prior to changes to Route No. 27 made by BUS staff in September 2012, which included moving the eastern terminus of the route to the east, from Case High School to Regency Mall.

• Several of the routes incorporate one-way loops at the outer end of the routes, as shown on Map 26, to maximize the area served by each route. While the one-way service along the loop portions of these routes can inconvenience passengers travelling between points along the loop, the loops on most routes are small and result in only minor indirection in travel. The principal exception would be Route No. 86, which operates entirely as a single one-way loop. While loop routing allows for a larger coverage of the southwestern portion of the City of Racine by Route No. 86, the large size of the loop results in a high degree of inconvenient travel for passengers. This inconvenience may be one reason that Route No. 86 has low ridership and service effectiveness measures. Alternatives should be considered in order to alleviate or eliminate the inconvenience experienced by passengers of this route. It should also be noted that Route No. 27 also operated as a single one-way loop prior to the changes made to the route in September 2012. The revised Route No. 27 operates more as a two-way out-and-back route, although it still has several one-way loop portions.

The need to make transfers between routes also affects transit travel times. The BUS uses a "pulse" schedule designed to facilitate transfers between routes at the Transit Center. This system ensures that the wait for most transfers is five minutes or less; however, it can also result in circuitous trips into the center of the city and back for travel between two points on the periphery of the city. In order to determine how well the transit travel times compare to automobile times for trips requiring transfers, Commission staff measured total transit and automobile travel times between six selected locations in the BUS service area. Table 44 presents a comparison of the total transit travel time (including the wait time for a transfer if necessary) and total automobile time, along with a ratio of transit-to-automobile time. The following points summarize the data shown in the table:

- Most transit travel times between the selected points were less than 30 minutes longer than auto travel times. The lowest time difference was between Gateway Technical College in downtown Racine and Regency Mall, which can be made without a transfer using Route No. 1. Of the 30 example trips shown in Table 44, five had transit-to-auto travel time differences over 46 minutes, which would be considered tedious for all riders.
- The largest transit-to-auto travel time ratios generally occur for trips with one end at the Amtrak Depot in Sturtevant (served by Route No. 27) or at the Wheaton Franciscan-All Saints Hospital on Spring Street (served by Route No. 86). Travel starting or ending at those locations often requires multiple transfers between routes. In addition, transit-to-auto travel time ratios always exceed 3.0 for trips with one end at the Olsen industrial park on South Memorial Drive (served by Route No. 2).

## IDENTIFICATION OF UNMET TRANSIT SERVICE NEEDS FOR AREAS NOT CURRENTLY SERVED BY TRANSIT

The first part of this Chapter focused exclusively on the performance of the BUS. However, many County residents and employers lie outside the service area of the transit system. The next two sections address the unmet transit service needs in the portions of Racine County not currently served by transit, and the unmet needs for transit services connecting Racine County to adjacent counties.

### **Transit Needs Index for Racine County**

Chapter III of this report included information on the locations of five population groups which may be expected to have a greater potential need for public transit services than the population as a whole including school-age children (ages 10 through 16), seniors (ages 65 and older), persons in low-income households, people with disabilities, and households with no vehicle available. Historically, these transit-dependent groups have had more limited access to the automobile as a mode of travel than the population in general and studies have found that transit use tends to increase or decrease along with population levels for these groups. For example, access to an automobile is a major determinant in who makes use of transit services, with transit usage highest in areas where automobile availability is lowest.

Table 44

COMPARISON OF TRANSIT AND AUTOMOBILE TRAVEL TIMES BETWEEN SIX SELECTED LOCATIONS IN THE BELLE URBAN SYSTEM SERVICE AREA: 2009

				Tı	ravel Time To L	ocation (minutes	s) <sup>a</sup>	
			1	2	3	4	5	6
	From Lo	Gateway College	Olsen Industrial Park	Regency Mall	Amtrak Depot	Shorecrest Plaza	Wheaton Franciscan - All Saints Hospital	
1	Gateway College	Transit time <sup>b</sup>		33	16	61	30	22
	(1001 Main Street)	Auto time		9	12	17	11	10
		Difference (Transit - Auto)		24	4	44	19	12
		Ratio		3.7	1.3	3.6	2.7	2.2
2	Olsen Industrial Park	Transit time <sup>b</sup>	33		22	64	42	69
	(S. Memorial Drive and Lincolnwood Court)	Auto time	10		7	15	18	12
	Lincolliwood Court)	Difference (Transit - Auto)	23		15	49	24	57
		Ratio	3.3		3.1	4.3	2.3	5.8
3	Regency Mall	Transit time <sup>b</sup>	17	32		40	39	18
	(5538 Durand Avenue)	Auto time	13	7		8	16	8
		Difference (Transit - Auto)	4	25		32	23	10
		Ratio	1.3	4.6		5.0	2.4	2.3
4	Amtrak Depot	Transit time <sup>b</sup>	43	75	39		64	44
	(Renaissance Business Park)	Auto time	17	15	8		18	10
	raik)	Difference (Transit - Auto)	26	60	31		46	34
		Ratio	2.5	5.0	4.9		3.6	3.7
5	Shorecrest Plaza	Transit time <sup>b</sup>	25	40	35	56		58
	(3900 Erie Street)	Auto time	11	17	16	18		12
		Difference (Transit - Auto)	14	23	19	38		46
		Ratio	2.5	2.4	2.2	3.1		4.8
6	Wheaton Franciscan - All	Transit time <sup>b</sup>	22	39	17	55	29	
	Saints Hospital (3810 Spring Street)	Auto time	10	12	8	10	12	
	(3010 Spring Street)	Difference (Transit - Auto)	12	27	9	45	17	
		Ratio	2.2	3.3	2.1	5.5	2.4	

<sup>&</sup>lt;sup>a</sup>Based on peak-period travel times between the locations identified.

Source: SEWRPC.

Commission staff developed a transit needs index using population data to identify the areas of greatest potential transit needs in Racine County, based on year 2005-2009 American Community Survey data by U.S. Census block group for the transit-dependent population groups noted above, with the exception of school-age children. It was assumed that school-age children currently have adequate transportation options available to them through family and local school districts. For each of the remaining four population groups, the Census block groups were rank-ordered based on the percent of the total population falling within that particular population group, then separated into four sets of equal size. Each ranked set of block groups then was assigned a score ranging from 1 to 4, with a 1 for the lowest percents and a 4 for the highest. The scores of 1 through 4 were then totaled across the four population categories for each block group for a possible composite index score of between 4 and 16 for each block group. The higher the index score, the greater the potential transit need shown by Census data. This approach does not quantify potential transit demand, but provides an illustration of where potential needs may be greatest in the County based on resident population characteristics.

<sup>&</sup>lt;sup>b</sup>Transit travel time includes the wait time for a transfer, if one is necessary.

Map 27 graphically displays the transit need levels identified using this method in terms of high, moderate, and low transit needs for all Census block groups in Racine County. The map shows a definite contrast in population-based transit needs between the portions of Racine County located east or west of IH 94. Most of eastern Racine County is identified as having a high or moderate transit needs index. This area has the highest concentrations of transit-dependent population groups in the County and is well-served by the BUS, whose service area covers the areas of highest needs. Most of western Racine County is identified as having a low transit needs index which helps explain why this part of the County has traditionally only been served by limited, specialized transit services. Areas with a moderate to high transit needs index, however, do exist in the Burlington-Rochester-Waterford and Union Grove areas of western Racine County. These areas in the western part of the County have the best potential to support some form of regular public transit service. They also correspond to the areas shown in Chapter III as having concentrations of major activity centers and major employers.

### **Summary of Key Findings from the Public Transit-Human Services Transportation Coordination Plan for Racine County**

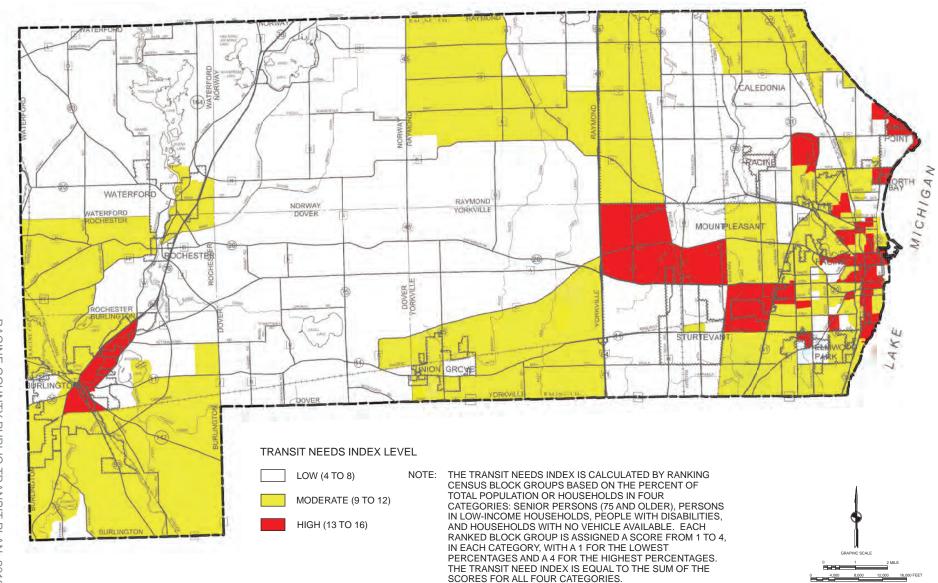
Although some transit needs can be revealed through an examination of Census data and maps, many of the needs can only be understood through direct dialogue and communication from agencies and individuals that provide or rely on transportation services. This section and the following section provide a summary of unmet needs derived from such meetings or interviews.

The Regional Planning Commission, at the request of the Wisconsin Department of Transportation (WisDOT), facilitated the development of a Public Transit-Human Services Transportation Coordination Plan for Racine County. The coordination plan was originally prepared in 2008, with a new plan developed in 2012 that built on the 2008 plan. The creation of a coordination plan is necessary to ensure the eligibility of transit projects funded through three Federal Transit Administration (FTA) programs—the Elderly Individuals and Individuals with Disabilities (Section 5310), Job Access and Reverse Commute (JARC), and New Freedom programs. In addition to Federal requirements for those three programs, WisDOT requirements for certain funding programs also stipulate that projects must be derived from a coordination plan.

For the 2008 Racine County coordination plan, Commission staff invited a wide range of stakeholders from Kenosha, Racine, and Walworth Counties to a series of two meetings in the City of Burlington to identify the unmet transportation needs in each of the three counties and between the counties, and to develop strategies to address the needs. At the first meeting, Commission staff distributed maps and tables similar to some that appear in Chapters II and III of this report. The Racine County attendees then divided into two small groups of about six people each. The small groups went through an evaluation exercise in which they assessed how well current transportation services meet residents' needs, based on: area served; days and hours of operation; fares; eligibility requirements for the service; vehicle accessibility for wheelchairs; customer service; reservation wait time; and ease of finding information on services. From that assessment, the small groups then developed a list of unmet transportation needs for Racine County residents. A similar process was also used in 2012, resulting in a similar assessment of unmet needs. A summary of the key findings of both the 2008 and 2012 small group assessments that are pertinent to the discussion of unmet transportation needs in Racine County, and particularly in the portions of Racine County not served by transit, is presented below.

- Residents of western Racine County need more transportation options, especially if they are not eligible for the Racine County demand-responsive service for transportation-handicapped persons. There is no longer a taxicab service in the City of Burlington, and the fares of private-for-profit transportation providers are expensive for people who are not eligible to receive Medical Assistance (MA). Participants stated that non-MA individuals who need regular transportation for dialysis or cancer treatments have difficulty finding an affordable service.
- There is a need for a demand-responsive transportation service that can accommodate next-day travel reservations. According to some of the participants, users of the County demand-response service for the transportation-handicapped regularly have to schedule trips many days in advance of when service is needed because demand for the service is very high and the number of vehicles is limited. Next-day travel reservations would enable individuals to request travel with only one day of advance notice.

Map 27
TRANSIT NEEDS INDEX FOR RACINE COUNTY: 2009



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

• The County lacks a coordinated source of information on all the available transportation services, including private for-profit and not-for-profit human services transportation providers. There is no directory, web site, or contact person that can provide the public with comprehensive information on all transportation options.

The group also listed several other unmet needs that are not directly relevant to the discussion of unmet needs for residents in the portions of Racine County not in the BUS service area. These include a need for a taxicab provider in the City of Racine that can serve trips at all hours and on all days with little to no advance reservation time requirement for scheduling; a need for modifying the transit routes of the BUS; and a need for a dedicated funding source separate from the property tax levy to address transportation needs in the County.

### **Unmet Needs for Transit Service Connecting Racine County with Adjacent Counties**

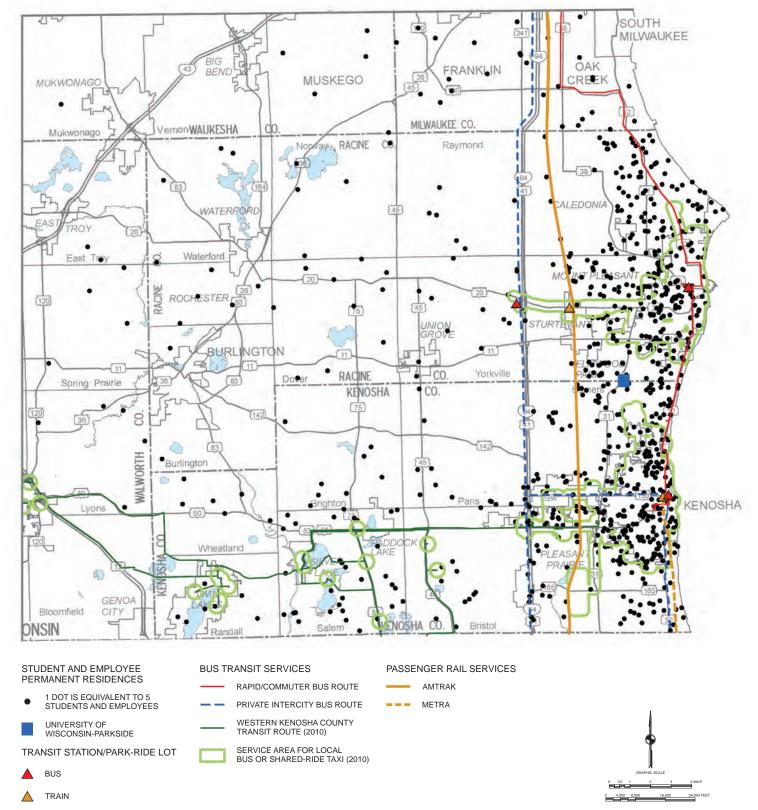
1. Travel between Racine and Kenosha Counties. Since 2006, when the City of Racine eliminated bus service to the UW-Parkside campus, the only transit service between the Cities of Kenosha and Racine has been provided by Coach USA/Wisconsin Coach Lines, which operates seven trips in each direction on weekdays and six trips in each direction on weekends and holidays between Kenosha, Racine and Milwaukee. This service has several drawbacks for use as local transit service: first, the system requires passengers traveling between Kenosha Area Transit (KAT) and BUS routes to transfer at the central transfer terminals of the two Cities. The BUS central transfer station is located about a mile from the main area of commercial development in the Racine central business district, making it somewhat inconvenient for some travelers from Kenosha to get to locations in downtown Racine, such as Gateway Technical College. Second, the BUS, unlike KAT, does not have a transfer agreement with Wisconsin Coach Lines, so passengers must pay the full fare when transferring between a BUS route and the Coach USA/Wisconsin Coach Lines route. Third, the service was largely designed for commuter trips to/from downtown Milwaukee and, therefore, does not have the frequency of service that is needed to make it convenient for travel between Racine and Kenosha. Participants in the Public Transit-Human Services Coordination Plan Meetings also identified the need to improve transit service between Racine and Kenosha, noting that students or staff needing to travel to the University of Wisconsin-Parkside, Gateway Technical College, or Carthage College in Kenosha County either could not make the trip by public transit, or could not do so without multiple transfers, long wait times, and paying high fares.

To investigate the level of demand for restoring some sort of service that would provide improved transit service between the two Cities, Commission staff reviewed the average weekday travel survey data for the year 2001 displayed on Maps 17 and 18 of Chapter III of this report. About 47,800 person trips were made on an average weekday in 2001 between eastern Racine County and eastern Kenosha County. Of those trips, about 17,500 were made between the primary transit service areas of Racine and Kenosha transit systems.

Commission staff also conducted an analysis to determine potential demand for restoring transit service from the City of Racine to the UW-Parkside campus. For the 2010-2011 school year, UW-Parkside had about 5,300 enrolled students and about 700 employees. Of those students, about 1,000 (19 percent) lived on campus. The UW-Parkside registrar's office provided data listing the number of employees and students' permanent residences by zip code. Map 28 graphically displays the distribution of residences for UW-Parkside employees and students. The University was not able to provide information on whether any of these students lived on campus, or had different addresses while classes were in session. As the map shows, most students and employees reside in eastern Kenosha and Racine Counties. About 1,600 students and employees have permanent residences in the KAT service area in the City of Kenosha while about 1,500 students and employees have permanent residences in the BUS transit service area in the City of Racine. The nearly-equal distribution of students and employees between the two Cities indicates that sufficient ridership may be generated by a route serving UW-Parkside from both the Cities of Racine and Kenosha.

Map 28

# PERMANENT RESIDENCES OF UNIVERSITY OF WISCONSIN-PARKSIDE STUDENTS AND EMPLOYEES COMPARED TO PUBLIC TRANSIT SERVICE AREA IN RACINE COUNTY AND ADJACENT COUNTIES: FALL 2010 HEADCOUNT



Source: University of Wisconsin-Parkside and SEWRPC.

The preceding analyses suggest that there is an unmet transit service need for frequent and convenient transit service connecting the City of Racine and the City of Kenosha along a corridor west of STH 32 (in order to avoid duplicating the existing Coach USA/Wisconsin Coach Lines service), with a stop at UW-Parkside.

2. Travel between Racine and Milwaukee County. Commission staff also conducted analyses to determine the extent of need for additional transit services between Racine County and Milwaukee County. Participants in the Public Transit-Human Services Coordination Plan meetings believed that individuals commuting from western Racine County to Milwaukee County needed and would use park-ride facilities along STH 36, and might also make use of a commuter-oriented public transit service between Burlington and Milwaukee County. They also believed there was a need for a fast, attractive transit service connecting the City of Racine with major activity centers and employment centers in eastern Milwaukee County.

The Coach USA/Wisconsin Coach Lines service is currently the only public transit service between Milwaukee and Racine Counties. The public and private transit services in Racine County and surrounding Counties are displayed on Map 29, which also shows some of the major employers and major universities that could attract travel between Racine County and the adjacent Counties.

Commission staff used the U.S. Census Bureau's Longitudinal Employment and Household Demographics (LEHD) data on residence and job location for 2007 through 2009 to prepare Map 30. As the map shows, about 7,120 workers with residences in eastern Racine County commute to the City of Milwaukee, and about 5,960 commute to the City of Kenosha. The numbers of commuters between those Cities does support the idea that increased commuter public transportation services could be considered.

The LEHD data show that about 2,010 workers with residences in western Racine County commute to the City of Milwaukee. Based on estimates that about 1.2 percent of commuter trips from rural areas to an urban area could be made by transit<sup>2</sup>, transit service between western Racine County and Milwaukee would generate about 50 revenue passengers per weekday. Based on these results, it is not clear whether there would be sufficient demand for a fixed-route commuter service between communities in western Racine County and central Milwaukee County at this time.

### **Unmet Needs Compiled through Public Participation and Outreach**

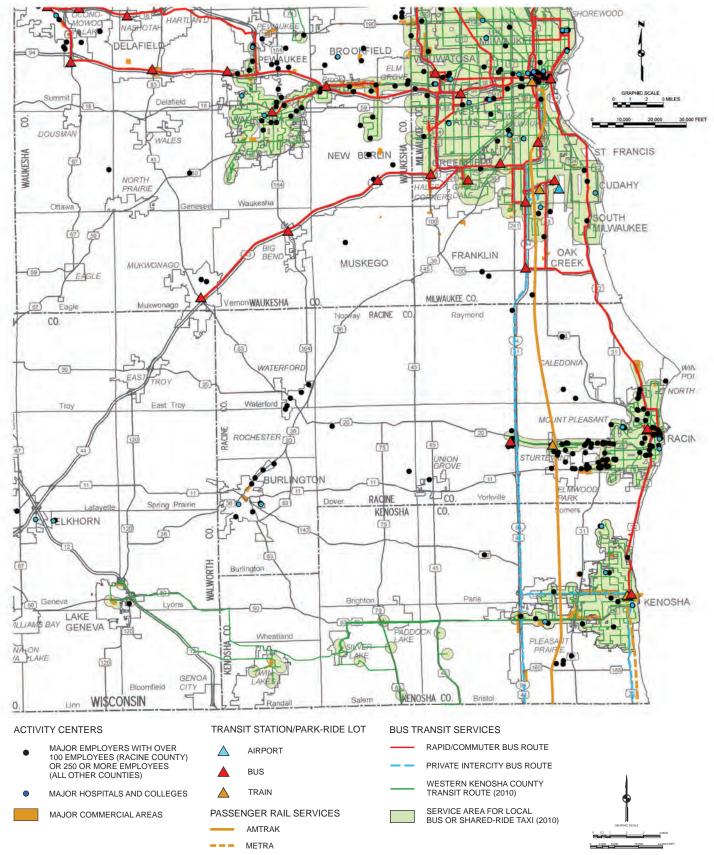
From September to November of 2009, Commission staff solicited public feedback on the transit plan via three methods. First, staff conducted three "discussion groups" on the unmet needs for transit with representatives from workforce development and private businesses; human services agencies; and transit users, respectively. Second, staff distributed information about the plan and the study findings through a widely distributed newsletter and provided opportunity for the public to comment through the website and via e-mail and letter during a public comment period. Third, Commission and County staff held three public informational meetings in the City of Racine, City of Burlington, and Village of Sturtevant.

The following sections summarize the comments made regarding transit service concerns at the three discussion groups and during the public comment period and the public informational meetings. Only the concerns that had three or more comments are listed below. The publication *Record of Public Comments: Racine County Public Transit Plan: 2012-2016*, has a full record of all the public comments received, was provided to each member of the study Workgroup, and is available on the Commission website.

<sup>&</sup>lt;sup>2</sup>Transportation Research Board, Transit Cooperative Research Report Web-only Document 49: Methods for Forecasting Demand and Qualifying Need for Rural Passenger Transportation, December 2009, pp. 2.

Map 29

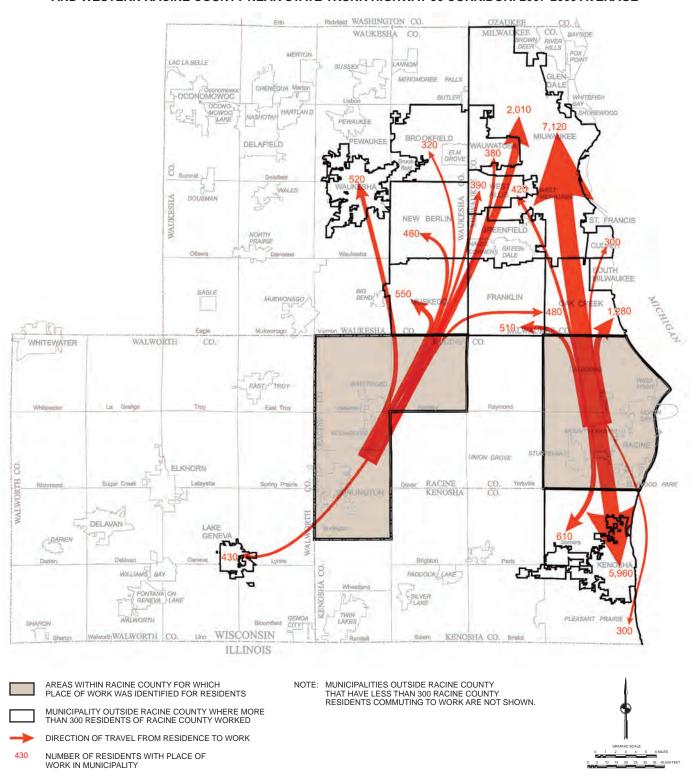
### MAJOR ACTIVITY CENTERS COMPARED TO PUBLIC TRANSIT SERVICES IN RACINE COUNTY AND ADJACENT COUNTIES: 2010



Source: SEWRPC.

Map 30

PLACE OF WORK OUTSIDE RACINE COUNTY FOR RESIDENTS IN EASTERN RACINE COUNTY
AND WESTERN RACINE COUNTY NEAR STATE TRUNK HIGHWAY 36 CORRIDOR: 2007-2009 AVERAGE



Source: SEWRPC.

In general, the comments were supportive of transit. The discussion groups agreed that providing public transit was necessary for getting people to jobs and services. A total of seven comments submitted during the public comment period and at public informational meetings expressed support for transit and the transit plan, while two comments from individuals located outside the BUS service area expressed opposition to transit.

### Comments about Transit Service Needs in Eastern Racine County

The public comments compliment the findings of the performance evaluation of the BUS presented previously in this Chapter:

- <u>BUS Routes, Schedules, and Hours.</u> Participants in the discussion groups believed that the current midday schedule of the BUS is confusing. Between 9:30 a.m. and 3:00 p.m., the bus routes alternate between 30-and 60-minute headways. The discussion group participants also agreed that the alignments of some should be modified to reflect land use changes. Specifically, the alignments of Route Nos. 20 and 27 (serving the Sturtevant and Mount Pleasant area), and Route No. 86 (which is a loop) make travel to destinations on those routes inconvenient. Three public comments made during the public comment period expressed a desire for more frequent service on the system.
- Service to Suburbs around the City of Racine. The discussion groups had mixed reactions to the idea of additional service to the communities around the City of Racine. The transit users believed that there was a need to improve the bus service between the City and the locations in Sturtevant and Mount Pleasant. The workforce development and private businesses discussion group agreed there was a need for more service, but questioned whether businesses and communities outside the City would cooperate financially. Six public comments made during the public comment period expressed support for maintaining and expanding service to the suburbs around Racine.
- <u>Bus shelters.</u> The transit users discussion group strongly emphasized the need for more bus shelters to protect riders from weather elements. Two public comments made during the public comment period also expressed a need for more bus shelters.
- <u>Private Taxi Service</u>. Both the workforce development and private businesses discussion group and the transit users discussion group strongly believed there is a need for a taxi service in the City of Racine that can respond to a request for service within an hour.

### Comments about Unmet Needs for Transit Services in Western Racine County

- Need for Affordable Rural Transportation. The human services agencies discussion group noted that many of the current transportation services in western Racine County are either not available to people who do not meet certain eligibility requirements (such as age or disability), or are prohibitively expensive for people who have regular medical appointments, but do not qualify for Title 19 (Medicaid) transportation. They also noted that there is a need for a transportation service that can take last-minute "crisis" transportation requests that are not medical-related. Two public comments made during the public comment period also expressed support for dial-a-ride service in Racine County.
- Need for Public Transportation in the Burlington Area. The human services agencies discussion group believed that either a subsidized shared-ride taxi or a shuttle service could address many of the unmet transportation needs in the western part of the County, especially if they were focused in the Burlington area.

### Comments Regarding Needs for Transit Connections to Other Counties.

Service to UW-Parkside and the City of Kenosha. The transit users discussion group believed there is a need to restore transit service from Racine to UW-Parkside and to the City of Kenosha. Four public comments made during the public comment period also expressed support for restoring service to UW-Parkside. Two public comments expressed general support for a transit service that would connect to the Kenosha Area Transit system.

- <u>Kenosha-Racine-Milwaukee Transit Service</u>. The transit users discussion group stated that the Coach USA/Wisconsin Coach Lines route between the City of Kenosha and the City of Milwaukee would benefit from more frequent service. Two public comments made during the public comment period indicated a lack of awareness of the Coach USA/Wisconsin Coach Lines route. Seven public comments made during the public comment period expressed support for a potential commuter rail line between Kenosha, Racine, and Milwaukee (KRM).
- <u>Burlington to Milwaukee Commuter Service.</u> The workforce development and private businesses discussion group, as well as the human service agencies discussion group, believed that a commuter bus service from Burlington, Waterford, and Rochester along STH 36 to Milwaukee County may be successful. On the other hand, several people at the public informational meeting held in the Town of Burlington made oral comments to Commission staff in opposition to transit for western Racine County, because it would be an unnecessary increase in government spending.

### **SUMMARY**

### Summary of the Evaluation of the Belle Urban System

This chapter evaluated the performance of the Belle Urban System (BUS) based upon specific performance measures identified in the transit system objectives and standards in Chapter IV. The evaluation included assessments of performance on a systemwide basis and on a route-by-route basis. Some of the most important findings of the transit system evaluation are listed below:

- 1. The existing transit system provides excellent coverage of the existing residential and employment concentrations inside the City of Racine. Outside the City of Racine, the transit system had good coverage of residential and employment concentrations, although some new developments that may have transit-supportive residential densities are not served, and some areas with transit-supportive employment densities in the Villages of Mt. Pleasant and Sturtevant are not served. The transit system also provides very good coverage of the major activity centers in the evaluation area, and excellent coverage of residential concentrations of transit-dependent population groups and the total minority population.
- 2. The transit system is about average when compared to similar transit systems in the State of Wisconsin and from around the country. The BUS outperformed the Wisconsin peer group average in seven of 12 performance measures and outperformed the national peer group average in two of 12 measures, and was very close to the national group average in another four measures. In general, the BUS provides a high level of service for its service area population size, resulting in higher service effectiveness, but somewhat lower service efficiency.
- 3. Route Nos. 1, 2, 3, 4, and 7 have weekday performance levels which consistently exceed the acceptable performance levels. Based solely upon these measures, these routes could continue to be operated without change. The remaining four regular routes, Route Nos. 5, 20, 27, and 86, show weekday performance levels consistently lower than the acceptable performance measure. Potential changes to these routes to improve their performance should be considered.
- 4. On Saturdays, Route Nos. 3, 4, and 7 continue to meet the acceptable performance levels. Route Nos. 1 and 2 meet some, but not all, of the acceptable performance measures. Route Nos. 5 and 86 continue to be poor performers. On Sundays, Route Nos. 4 and 7 remain best-performing routes. Route No. 1 improves its performance from the Saturday measures and consistently exceeds the acceptable performance levels, while the performance of Route No. 3 worsens and consistently fails to meet acceptable levels. Route No. 86 remained a poor performer in all measures.
- 5. All the routes of the system except Route No. 7 had at least one unproductive route segment. Route Nos. 5, 27, and 86, which were poor performers in the measures of ridership, service effectiveness, and cost effectiveness, are comprised of many segments that have low passenger activity. This information is an

- indicator of where routing changes should be considered; some of these unproductive route segments will be revisited in the next chapter, which proposes alternative transit service improvements.
- 6. Evening ridership represents about 7 percent of the ridership on the regular routes on weekdays and about 10 percent of the ridership on the regular routes on Saturdays. The routes with the highest evening ridership (Route Nos. 1, 3, and 4) generally corresponded with those that performed well in the service effectiveness and cost effectiveness measures. Route No. 86 had a low level of ridership for both weekday and Saturday evenings, but evening riders made up 10 percent of the weekday boarding passengers on the route, and over 13 percent of the Saturday boarding passengers. Route No. 20 averages only six boarding passengers on weekday evenings because it only operates one trip at 10:40 p.m.
- 7. The transit system appears to meet the service standard of 90 percent of the service being on-time. Every route was at or above this level except Route No. 7, which was only 80 percent on-time due to a large number of early departures from bus stops.
- 8. In general, in-vehicle travel times for the routes of the BUS were less than 30 minutes longer than automobile travel times, which would be considered tolerable by most riders. Route Nos. 1, 3, 5, and 7 have the greatest time differences between transit and automobile travel times for at least one route endpoint and the Transit Center. For the most part, this is due to the indirect alignment of these routes. Most of the existing transit system routes have at least a small segment of their alignment which is indirect when compared to a path that would be followed by an automobile. Of all the system routes, Route No. 5 from Greentree Shopping Center to the Transit Center is the most indirect. Route No. 86 operates as a single one-way loop, as did Route No. 27 until it was modified in September 2012, which results in a high degree of inconvenient travel for passengers. Alternatives which would improve the convenience of travel on Route Nos. 1, 3, 5, 27, and 86 should be explored.
- 9. For trips on the transit system that require transfers, most of the sampled transit travel times were less than 30 minutes longer than auto travel times. However, of the 30 example trips shown in Table 44, five had transit-to-auto travel time differences over 46 minutes, which would be considered tedious for all riders. The largest transit-to-auto travel time ratios generally occur for trips with one end at the Amtrak Depot in Sturtevant (served by Route No. 27) or at the Wheaton Franciscan-All Saints Hospital on Spring Street (served by Route No. 86). Travel starting or ending at those locations often requires multiple transfers between routes.

# **Summary of Unmet Needs for Transit Service in Portions of Racine County not Currently Served by Transit**

The chapter also included an assessment of unmet transit service needs, focusing in particular on the portions of Racine County not currently served by transit. The unmet transit service needs in the chapter will be refined and developed through public comments and input; however, the initial identification of unmet needs so far include the following findings:

- 1. Areas with a moderate-to-high transit needs index exist in the Burlington-Rochester-Waterford and Union Grove areas of western Racine County. These areas in the western part of the County have the best potential to support some form of regular public transit service. They also correspond to the areas shown in Chapter III as having concentrations of major activity centers and major employers.
- 2. Participants in the meetings to develop a Public Transit-Human Services Transportation Coordination Plan for Racine County identified several unmet needs for travel within Racine County. They found that residents of western Racine County who are not eligible for the County service for transportation-handicapped persons have difficulty finding an affordable transportation service. There is no taxicab service in the City of Burlington, and the fares of private-for-profit transportation providers are expensive for people who do not receive Medicaid assistance. There is also a need for a demand-responsive transportation service that can accommodate next-day travel reservations. The County lacks a directory, web site, or contact person that can provide the public with comprehensive information on all the available transportation services, including private for-profit and not-for profit human services transportation providers.

### **Summary of Unmet Needs for Transit Service Connecting to Adjacent Counties**

- 1. The only transit service between the Cities of Kenosha and Racine is a commuter bus route between Kenosha, Racine and Milwaukee, operated by Coach USA/Wisconsin Coach Lines. This service has several drawbacks for use as local transit service. First, passengers can only transfer to routes of the Kenosha and Racine transit systems at the systems' central transfer terminals. Second, BUS passengers must pay the full fare when transferring to/from the commuter route because there is no transfer agreement with Wisconsin Coach Lines. Third, the service focuses on commuter trips to/from downtown Milwaukee, making travel between Racine and Kenosha somewhat inconvenient. There is also a potential need for transit service to the University of Wisconsin-Parkside, Gateway Technical College, or Carthage College in Kenosha County.
- 2. There is a potential need for additional transit services between Racine and Milwaukee Counties, such as commuter service from western Racine County to Milwaukee County and park-ride facilities along STH 36. There may also be a need for a fast service to connect the City of Racine to major activity centers and employment centers in eastern Milwaukee County.

### Summary of Unmet Needs Compiled Through Public Participation and Outreach

- 1. Public comments received by Commission staff indicated that the current midday schedule of the BUS is confusing, the alignments of some routes should be modified to reflect land use changes, and that there is a desire for more frequent service on the system. Transit users indicated a need to improve bus service between the City of Racine and locations in Sturtevant and Mount Pleasant, although there is a question whether businesses and communities outside the City would cooperate financially. Transit users emphasized a need for more bus shelters. Numerous comments indicated that there is a need for a taxi service in the City of Racine.
- 2. Human services agencies noted that many current transportation services in western Racine County are either not available to people who do not meet certain eligibility requirements, or are prohibitively expensive for people who have regular medical appointments, but do not qualify for Title 19 (Medicaid) transportation. They noted that there is a need for a transportation service that can take last-minute transportation requests that are not medical-related. They also indicated that either a subsidized shared-ride taxi or a shuttle service could address many of the unmet transportation needs in the western part of the County, especially in the Burlington area.
- 3. A number of public comments indicated there was a need to restore transit service from Racine to UW-Parkside and to the City of Kenosha. Transit users also stated that the existing commuter bus route between Kenosha, Racine, and Milwaukee would benefit from more frequent service. Several public comments expressed support for a KRM commuter rail line. There were a number of individuals and groups that believed a commuter bus service from western Racine County along STH 36 to Milwaukee County may be successful, but some expressed opposition to any transit for western Racine County, citing that it would be an unnecessary increase in government spending.

The analyses documented in this chapter indicated that some changes should be considered, both for the Belle Urban System routes and service characteristics, and for potential new transit services to address the unmet transit needs in Racine County. The next chapter of this report will study alternative transit service improvements for the Belle Urban System, for the portion of the County not served by transit, and for service to adjacent counties.

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### **Chapter VI**

### TRANSIT SERVICE IMPROVEMENT ALTERNATIVES

### INTRODUCTION

This chapter describes the transit service improvement alternatives developed for the City of Racine and Racine County for the years 2013-2017. The remainder of this chapter consists of three sections. The first section describes in detail the preliminary recommended transit system alternative for the City of Racine Belle Urban System. The second section describes in detail the three transit service alternatives that could be considered by Racine County. The third section describes in detail four alternatives to improve transit service between Racine County and surrounding counties. Operating and capital budgets were developed for each alternative, based on estimates of future Federal, State, and local funding. The chapter concludes with a brief summary.

# PRELIMINARY RECOMMENDED TRANSIT SYSTEM ALTERNATIVE FOR THE CITY OF RACINE BELLE URBAN SYSTEM

A number of transit system improvement alternatives were initially developed for the City of Racine Belle Urban System (BUS) for the years 2013-2017 and were considered by the Advisory Workgroup and the City of Racine. Through an iterative development and evaluation process, several of these initial alternatives were eliminated from consideration. Appendix B of this report describes the initial alternatives that were developed but were ultimately eliminated from consideration. Eventually, the City of Racine and the Advisory Workgroup guiding the plan narrowed the possible alternatives down to one preliminary recommended alternative to be presented to the public for comment. This section of Chapter VI describes that preliminary recommended transit system alternative. At the direction of the City of Racine, the preliminary recommended alternative presented in detail represents a "financially-constrained" plan. The total annual transit operating budget would remain relatively flat over the five-year planning period, and maintain the City's share of the necessary operating assistance between about \$1.0 and \$1.1 million. The proposed changes accomplish this by reducing inefficiencies in the existing transit system and maintaining the transit system's year 2012 reduced service hours. Following the description of the financially-constrained preliminary recommended alternative is a discussion of potential improvements to the transit system that could be implemented should additional funding become available, as well as a discussion of options to further reduce the system's budget should the system face even more significant funding problems during the five-year planning period.

The evaluation of the existing transit system in Chapter V and the public comments made at public meetings and in discussion groups identified several concerns that would be addressed with the proposed changes to the transit system:

- 1. The current BUS midday schedule is confusing: between 9:30 a.m. and 3:00 p.m., the bus routes alternate between 30- and 60-minute service frequencies;
- 2. The circular design of Route No. 86 makes travel by bus to some of the destinations on that route very inconvenient;
- 3. The existing bus route alignments need to be updated to more efficiently serve the existing residential and commercial development in the urban area; and
- 4. There is a need to improve bus service between the City and the Renaissance Industrial Park and the Amtrak Station in the Village of Sturtevant, and the Grandview Industrial Park in the Town of Yorkville.

The preliminary recommended alternative described below would improve efficiency of the current transit system by combining several routes and reconfiguring them to address these issues. The proposed changes would provide the following benefits: the midday schedule would be more understandable and layover time during evenings and weekends would be significantly reduced.

### Route Restructuring under the Preliminary Recommended Alternative

The City of Racine's urban development pattern poses a challenge to designing a transit system that uses "pulse" scheduling. The City's downtown is located north and east of the City's geographic center. New development has spread south and west, in part due to the influence of the Root River and steep slopes in the vicinity of the river. The uneven development makes it difficult to design multiple transit routes with near-equal lengths between the central transfer point and their outlying termini. This geographic challenge is probably why, between 1976 and 2002, the routes on the BUS did not "pulse" and were scheduled independently of each other. This system worked well when service frequencies were 20 minutes at peak periods and 30 minutes at off-peak periods; many of the routes passed through downtown within 10 minutes of each other, thereby providing for convenient transfers. However, by 1996, ridership had declined, the City needed to reduce service frequency at off-peak periods in order to reduce the transit system's operating costs, and the City sought to revitalize the routes and increase ridership by adding evening service. The City asked the Commission to prepare a new Racine transit system development plan for the period 1998-2002, which recommended reducing service frequencies during the peak and off-peak periods in order to balance the costs of providing longer service hours.

When the transit system implemented the current pulse schedule system in 2002, it was designed so that most bus routes operated on a round-trip schedule of 90 minutes. The location of the transfer point (then at Monument Square, now at the downtown Transit Center) and the uneven development pattern in Racine meant that most routes serving the northern part of the City take 15 minutes from the central transfer point to the route terminus on the north, 15 minutes back to the transfer point, then 30 minutes to the southern route terminus and 30 minutes back. At peak morning and afternoon periods, the transit system achieves 30-minute service frequencies by assigning three buses to most of the routes. However, during the off-peak service periods, the transit system assigns two buses to most of the routes. With two buses on 90-minute round-trip routes, the transit system maintains the "pulse" schedule in one of two ways:

- 1. During midday service, the transit system operates with fluctuating service frequencies of 30 and 60 minutes. All routes except Route Nos. 7 and 86 "pulse" with the other routes at the downtown transfer point at intervals of 30 minutes, then 60 minutes, then 30 minutes.
- 2. On Saturdays and Sundays, and some night service, the transit system lengthens the bus route's layover times, stretching the 90-minute round-trip schedule into a 120-minute round-trip schedule. On those days, many routes are scheduled so that drivers wait over 20 minutes at the route termini before starting their next run.

The proposed route restructuring described below would make the route segments on the northern part of the City longer, in order to fit into a 60-minute round-trip schedule. It would also make all the routes serving the southern

part of the City fit into a 60-minute round-trip schedule. This would allow all regular routes to "pulse" at the downtown Transit Center on each trip. The northern routes would then be paired with southern routes so that a route would operate from its northern terminus through the downtown Transit Center to its southern terminus and vice versa. The proposal is also designed to improve transfers between the routes at a southwest transfer point to be constructed in the Regency Mall area.

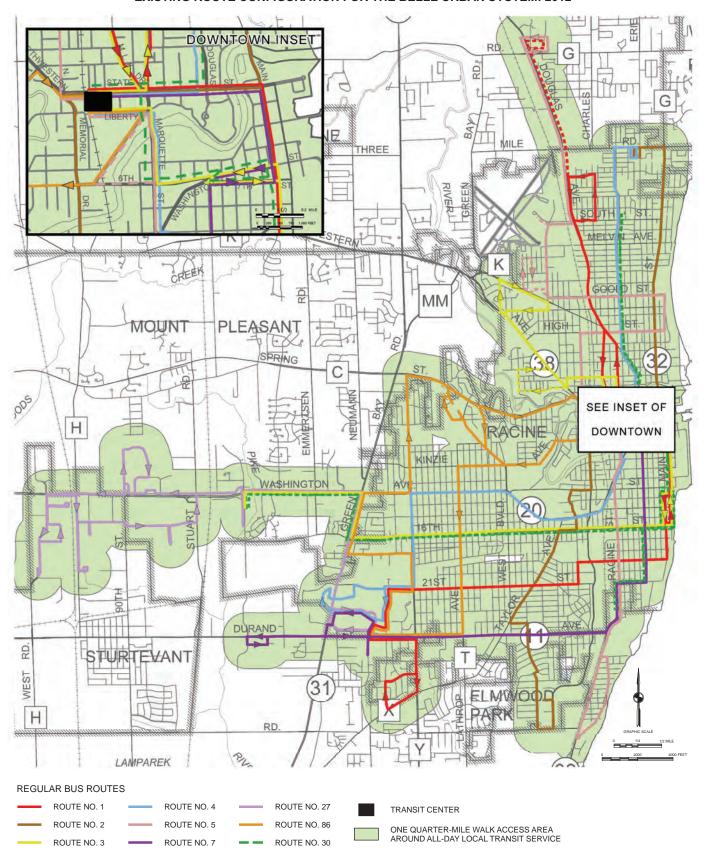
Map 31 presents the current routes of the transit system. Table 45 and Map 32 present a detailed explanation of the routing and service changes under the preliminary recommended alternative. The proposed changes to route alignments are summarized below.

- Route No. 1N: This route would provide service between the downtown Transit Center and Greentree Center on every trip, primarily along Douglas Avenue. The route would divert from Douglas Avenue to serve Horlick High School and the Rapids Plaza shopping area.
- Route No. 2N: This route would be a combination of the existing Route Nos. 2 and 5 north of the Transit Center. The route would serve downtown via Marquette Street, 6th/7th Streets, and Main Street, and would operate on Goold Street to serve the Rapids Plaza shopping area, the Amaranth Meadows (Jacato Drive) neighborhood, and Huck Industrial Park.
- Route No. 3N: This route would provide service to each entrance of St. Mary's Hospital, operating on 6th Street, Kinzie Avenue, Osborne Boulevard, and Spring Street. The route would operate on Northwestern Avenue to Golf Avenue and Rapids Drive, serving Horlick High School.
- Route No. 4N: This route would serve downtown via Marquette Street, 6th/7th Streets, and Main Street. It would also operate further east of Shorecrest Shopping Center on Three Mile Road.
- Route No. 2S: This route would be a combination of the existing Route Nos. 2 and 5 south of the Transit Center, serving most of the southern areas previously served by the two individual routes. These two routes were among the weakest-performing routes in the evaluation of the transit system in Chapter V.
- Route No. 3S: This route would operate on State Street and Main Street instead of on Marquette Street, 6th/7th Streets, and Main Street. It would also operate inbound to the Transit Center from Case High School on 16th Street between Oakes Road and Green Bay Road, instead of on Washington Avenue and Green Bay Road, in order to shorten its round-trip running time.
- Route No. 6: This route would be a conversion of the existing Route No. 86 from a one-way loop to a
  two-way out-and-back route serving St. Mary's Hospital, Ohio Street, Green Bay Road, and the Regency
  Mall area.
- Route No. 7: This route would operate on State Street and Main Street instead of on Marquette Street, 6th Street, and Grand Avenue. It would also not serve the Regency Mall area on its inbound trip to the Transit Center. These changes are designed to allow the route to complete its round-trip between the Transit Center and the route terminus at Walmart in 60 minutes.
- Establish a southwest transfer point in the Regency Mall area where passengers can conveniently and comfortably transfer between Route Nos. 4, 6, 7, and 27.

Other minor route changes being proposed are designed to equalize route lengths, in order to address on-time performance problems on the longer routes and leave less "dead time" at the ends of the routes. Altogether, the proposed changes would leave some gaps in the service area of the transit system, so that some of the areas currently served would no longer be within one-quarter mile of a local bus route. However, areas that would be unserved under this proposal are areas that showed very low ridership in the route segment analysis in the evaluation of the BUS in Chapter V.

Map 31

EXISTING ROUTE CONFIGURATION FOR THE BELLE URBAN SYSTEM: 2012



#### Table 45

# ROUTING AND SERVICE CHANGES BY ROUTE UNDER THE PRELIMINARY RECOMMENDED BELLE URBAN SYSTEM ALTERNATIVE: 2013-2017

#### NORTHERN ROUTES

Route No.	Potential Restructuring of Routes (See Map 32)	Potential Route Schedule and Service Period Adjustments
1N	Remove loop along South St., Charles St., and Carlton Dr. Divert from Douglas Ave. to serve Horlick High School and Rapids Plaza shopping area	Maintain year 2012 service hours.     Weekday peak service: maintain frequencies of 30 minutes on all 4 routes.
2N	Combine Rts. 2 and 5, with new route serving downtown via Marquette St., 6th or 7th Sts., and Main St. Also operate on Goold St. to serve Horlick High School, Rapids Plaza shopping area, Amaranth Meadows (Jacato Drive) neighborhood, and Huck Industrial Park.	3. Weekday midday/evening service: set frequencies to uniform 60 minutes on all 4 routes <sup>a</sup> , instead of alternating 30- and 60-minute frequencies.  4. Saturday service: set frequencies of 60 minutes
3N	Operate on 6th St., Kinzie Ave., Osborne Blvd, and Spring St. instead of Hamilton St. and Marquette St. or Dr. Martin Luther King Dr., serving each entrance of St. Mary's Hospital.	on all 4 routes.  5. Sunday service: set frequencies of 60 minutes on new Rts. 1N, 3N, and 4N.
4N	Serve downtown via Marquette St., 6th or 7th Sts., and Main St. and operate further east of Shorecrest Shopping Center on Three Mile Rd.	
5N	Eliminate route. Replace with parts of reconfigured Rt. 2N.	

#### **SOUTHERN ROUTES**

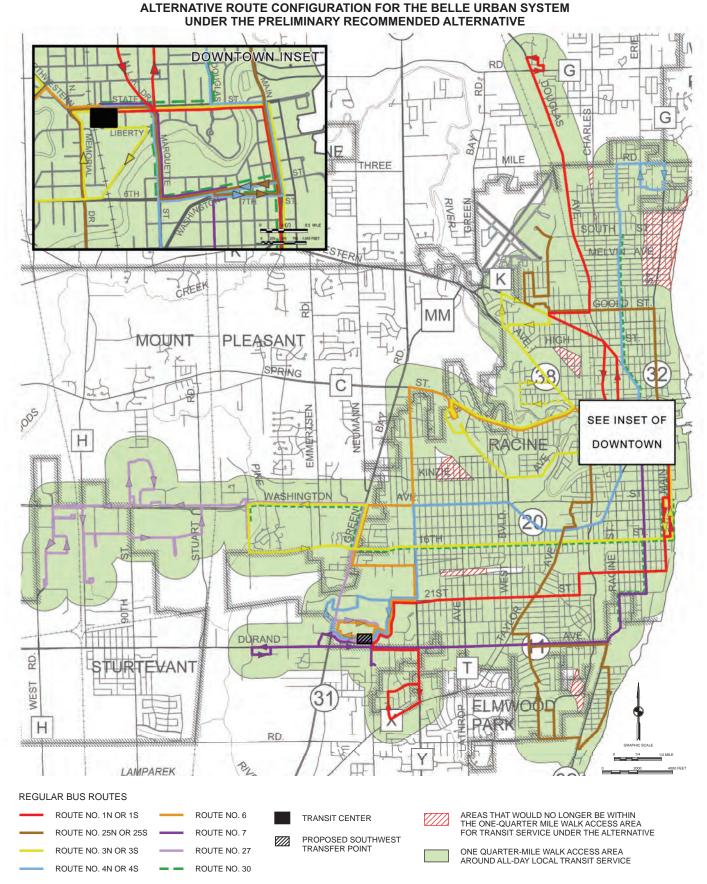
Route No.	Potential Restructuring of Routes (See Map 32)	Potential Route Schedule and Service Period Adjustments
5N	Eliminate route. Replace with parts of reconfigured Rt. 2N.	
1S	No change.	Maintain year 2012 service hours.
28	Combine Rts. 2 and 5, creating a one-way loop over Durand Ave., Sheridan Rd., and Lakeshore Dr. to Olsen Industrial Park, then via Knoll Pl. to Durand Ave.	Weekday peak service: maintain 30-minute frequencies on Rts. 1S, 2S, 3S, 4S, 5S, and 7, and 60-minute frequencies on Rt. 6.
3S	To/from Transit Center, operate via State St. and Main St., instead of Marquette St. and 6th St. or 7th St. Also operate inbound to Transit Center from Case High School via 16th St. between Oakes Rd. and Green Bay Rd., instead of Washington Ave.	<ol> <li>Weekday midday/evening service: set frequencies to uniform 60 minutes on all 6 routes<sup>a</sup>, rather than alternating 30- and 60- minute frequencies.</li> </ol>
4S	No change.	Saturday service: set frequencies of 60 minutes on all 6 routes.
5S	Eliminate route. Replace with parts of reconfigured Rt. 2S.	5. Sunday service: set frequencies of 60 minutes on
6	Convert the existing Rt. 86 from a one-way loop to a two-way out- and-back route via Spring St. to St. Mary's Hospital. Between St. Mary's Hospital and Regency Mall, operate in both directions via Ohio St., Washington Ave., Green Bay Rd., and Byrd Ave.	new Rts. 1S, 3S, 4S, 6, and 7.
7	After leaving Transit Center, operate via Marquette St. and 6th St., instead of State St. and Main St. Provide service to Ridgewood Care Center of Racine only on inbound trips to Transit Center.	

<sup>&</sup>lt;sup>a</sup> Evening service would not be operated on Route No. 2N/2S.

Source: SEWRPC.

In September 2012, the BUS implemented changes to Route No. 27 in the western portion of the BUS service area, which was determined to be one of the weakest performing routes in the system in the evaluation in Chapter V. In October 2010, Route No. 27 experienced 7.6 passengers per revenue hour of service, well below the minimum acceptable level of 15.4 passengers per revenue hour established in Chapter V. The changes being implemented have the potential to improve the overall performance of the route. They involve reducing the route's service frequencies from 30 minutes to 60 minutes, but lengthening the route to provide service over a larger area, including new service to the new Civic Campus and YMCA in the Village of Mt. Pleasant

Map 32



Source: City of Racine Department of Transportation and SEWRPC.

and Regency Mall. Given the recent implementation of these changes, BUS staff has not been able to analyze the performance of the new route, so presenting alternative changes to Route No. 27 would not be appropriate. As such, the preliminary recommended alternative above does not propose any changes to the route at this time.

The BUS staff intends to monitor the performance of Route No. 27 to determine whether further changes are necessary and whether the route should be expanded to operate on Saturdays and/or Sundays. One possible change that the BUS may want to consider in the future should the route perform below acceptable standards, would be to combine Route No. 27 with Route No. 20, which is a special commuter route providing express peakhour service to Grandview Industrial Park and the Waxdale complex in the Village of Mt. Pleasant. Map 33 shows a possible configuration for combining Route Nos. 20 and 27 that could be considered should Route No. 27 perform poorly despite the changes made in September 2012. The two routes when combined could use the same vehicle to avoid the existing duplication of service on portions of the two routes in the western portion of the BUS service area during peak periods. In terms of service hours, many of the areas currently served all day by Route No. 27 have not generated sufficient ridership to justify all-day service. As such, the combined route could be operated with morning peak service to Grandview Industrial Park, Renaissance Industrial Park, and Waxdale. After stopping at about 9:00 a.m., service on the combined route could resume in the afternoon to serve trips to locations along the STH 20 corridor in the Villages of Mt. Pleasant and Sturtevant, including the Aurora Health Clinic, the Department of Motor Vehicles, and other locations currently served all day by Route No. 27. In order to serve return trips by second-shift workers of employers served along the route, one evening round-trip after 10:00 p.m. could also be operated.

# Adjustments to Route Frequency or Service Periods under the Preliminary Recommended Alternative

The proposed adjustments to the route alignments, schedules, and service hours for all the routes under the preliminary recommended alternative were presented in Table 45. Table 46 presents the operating and service characteristics of each of the proposed routes under the preliminary recommended alternative. All routes shown in the table would have running times of 30 minutes between the Transit Center and the outlying route termini. Route Nos. 20 and 27 would continue to be operated as they do as of September 2012. Route No. 30 would continue to provide service to and from middle and high schools, with the addition of one bus to accommodate anticipated future demand for school service. The following key points can be made about the proposed frequency and service periods for the alternative routes:

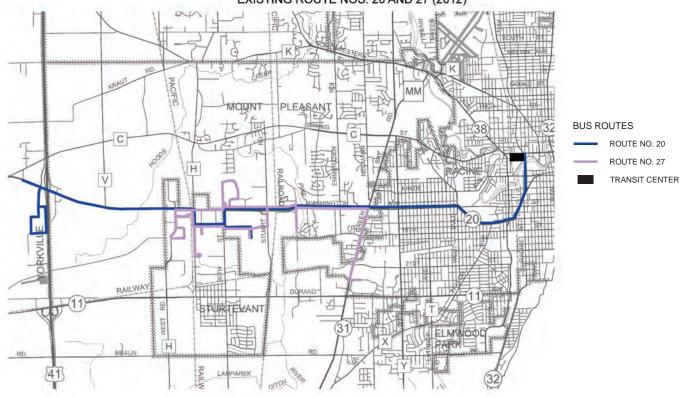
- Nearly all of the regular routes would have morning and afternoon peak service frequencies of 30 minutes, with off-peak service frequencies of 60 minutes. These service frequencies would allow the routes to "pulse" at the downtown Transit Center on each trip. The only exception would be Route No. 6, which would operate with 60-minute service frequencies all day as the Route No. 86 currently operates as of September 2012.
- Since all reconfigured northern and southern routes would be on a 60-minute round-trip schedule, the City has the flexibility to pair the longest routes serving the southern portion of the City with the shortest routes serving the northern part of the City. Each route would then operate from its northern terminus through the downtown Transit Center to its southern terminus and vice versa. The benefit of this pairing would be to provide drivers with sufficient recovery time at least once every hour (at the outlying terminus of a shorter route) to maintain a higher level of on-time performance on the longer southern routes.
- The reduced service hours established in January 2012 would be maintained<sup>2</sup>. On weeknights, the last trips would leave the Transit Center at 9:10 p.m. On Saturdays and Sundays, the last trips would leave the Transit Center at 6:10 p.m.

<sup>&</sup>lt;sup>1</sup>Prior to the January 2012 service cuts, the last trips for most of the BUS routes left the Transit Center at 11:40 p.m. on weeknights. On Saturdays, the last trips left at 10:10 p.m.; on Sundays, at 6:40 p.m.

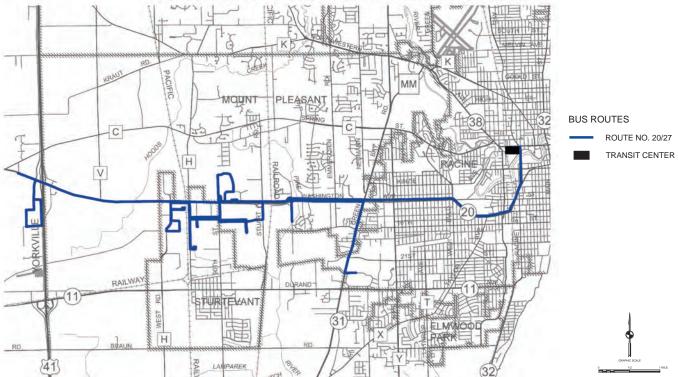
Map 33

# POSSIBLE CONFIGURATION FOR COMBINING ROUTE NOS. 20 AND 27 IN THE WESTERN PORTION OF THE BELLE URBAN SYSTEM

# EXISTING ROUTE NOS. 20 AND 27 (2012)



# POSSIBLE CONFIGURATION FOR COMBINING ROUTE NOS. 20 AND 27



Source: City of Racine Department of Transportation and SEWRPC.

Table 46

# OPERATING AND SERVICE CHARACTERISTICS BY ROUTE UNDER THE PRELIMINARY RECOMMENDED BELLE URBAN SYSTEM ALTERNATIVE: 2013-2017

#### WEEKDAY SERVICE

	Round-			Service F	requency		Buses Required			
Route Number	Trip Route Length (miles)	Service Hours	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period
1N	10.3	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
2N	11.5	5:40 a.m. – 7:10 p.m.	30	60	30		2	1	2	
3N	12.9	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
4N	10.5	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
1S	15.3	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
2S	11.4	5:40 a.m. – 6:40 p.m.	30	60	30		2	1	2	
3S	14.4	5:10 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
4S	12.0	5:10 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
6	14.6	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
7	15.1	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
Other <sup>a</sup>	Varies	Varies	N/A	N/A	N/A	N/A	9	1	8	1
Systemwide							28	11	27	9

#### SATURDAY SERVICE<sup>b</sup>

Route Number	Service Hours	Service Frequency	Buses Required
1N	5:40 a.m 6:40 p.m.	60	1
2N	6:10 a.m 6:40 p.m.	60	1
3N	5:40 a.m. – 6:40 p.m.	60	1
4N	5:40 a.m 6:40 p.m.	60	1
1S	5:40 a.m 6:40 p.m.	60	1
2S	5:40 a.m 6:40 p.m.	60	1
3S	5:40 a.m 6:40 p.m.	60	1
4S	5:40 a.m 6:40 p.m.	60	1
6	5:40 a.m. – 6:40 p.m.	60	1
7	5:40 a.m. – 6:40 p.m.	60	1
Systemwide			10

#### SUNDAY SERVICE<sup>b</sup>

Route Number	Service	e Hours	Service Frequency	Buses Required
1N	9:40 a.m.	– 6:40 p.m.	60	1
3N	9:40 a.m.	– 6:40 p.m.	60	1
4N	9:40 a.m.	– 6:40 p.m.	60	1
1S	9:40 a.m.	– 6:40 p.m.	60	1
3S	9:40 a.m.	– 6:40 p.m.	60	1
4S	9:40 a.m.	– 6:40 p.m.	60	1
6	9:40 a.m. – 6:40 p.m.		60	1
7	9:40 a.m. – 6:40 p.m.		60	1
Systemwide				8

<sup>&</sup>lt;sup>a</sup>"Other" refers to Route Nos. 20, 27, and 30. Service levels on Route Nos. 20 and 27 would not be changed under the proposed alternative. One bus would be added to Route No. 30 in the peak periods to provide additional school tripper service.

Source: SEWRPC.

• Under the 2012 transit service schedule, a total of 28 morning and 27 afternoon buses are required during weekday peak service. The preliminary recommended alternative would require the same number of peak period buses, allowing the BUS to utilize the current 35 heavy-duty buses in its fleet. For weekend service, the number of buses required on Saturdays would decrease from 11 to ten, and the number of buses required on Sundays would decrease from nine to eight.

The proposed changes should all be implemented at the same time in order to maintain service to all areas currently served by the routes and maintain the pulse schedule system. The alternative outlined in this chapter were developed assuming all changes would occur in January, 2013.

<sup>&</sup>lt;sup>b</sup>The Saturday and Sunday round-trip route lengths would not differ significantly from the Weekday round-trip route lengths.

### Figure 11

# ASSUMPTIONS USED IN DEVELOPING FORECASTS OF RIDERSHIP, EXPENSES, AND REVENUES FOR THE PRELIMINARY RECOMMENDED BELLE URBAN SYSTEM ALTERNATIVE: 2013-2017

Commission staff developed forecasts of ridership, expenses, and revenues under the preliminary recommended transit system alternative for the years 2013-2017 based on the following assumptions:

- The proposed routing alignments and service changes would be in effect for the entire calendar year 2013. The
  City of Racine may choose to implement the changes before or after that date, but this assumption makes it easier
  to compare service levels from year to year.
- For every 1 percent increase in fares, ridership would decrease by 0.43 percent. For every 1 percent decrease in revenue miles of service, ridership would decrease by 0.5 percent. These measures of elasticity of demand for transit service have been established through many studies and are widely accepted in the transit industry. These measures of elasticity of demand for transit service were applied to the ridership on the system during different periods of the day. Most of the proposed service reductions would occur during the midday period, which has lower ridership than the morning and afternoon peak periods.
- The operating cost per revenue vehicle hour of fixed-route service would be expected to increase by about 5 percent during 2013 (due to the system's contraction) followed by increases of 1.5 percent per year over the five-year planning period (due to inflation). On average, the operating expense per vehicle hour on the Belle Urban System increased by 1.5 percent annually between 2007 and 2011. The operating expense per unit of service tends to increase during system contraction because, even though the transit system is providing less service, there are still fixed costs that must be paid, including salaries for the system's dispatching, administrative, and mechanic positions.
- Fares would not be increased above the January 2012 levels.
- The combination of Federal Section 5307 and State Section 85.20 transit operating assistance funds will be
  available to cover 55.3 percent of the system's operating expenses in 2012. The share of operating expenses
  covered by State and Federal transit assistance funds will decrease to 55.0 percent in 2013 and remain flat
  throughout the five-year planning period.

Source: SEWRPC.

# Performance Measures and Costs of the Preliminary Recommended Alternative

Commission staff developed forecasts of ridership, operating costs, operating revenues, and transit assistance needs of the transit system under the preliminary recommended alternative, using the assumptions summarized in Figure 11. Table 47 shows the systemwide performance measures and costs for the existing system for 2013 through 2017, while Table 48 shows the same information during the same period for the preliminary recommended alternative. Under the alternative, the transit system would undergo some significant changes in performance measures and costs:

• The transit system's annual revenue miles (983,000) and revenue hours (77,000) of fixed-route service will be about 5 percent lower than the service levels in the 2012 budget (1,039,000 revenue miles and 81,200 revenue hours). Most of the decrease in service levels is due to the reductions in midday service frequency and the combination of Route Nos. 2 and 5.

Table 47

ESTIMATED OPERATING EXPENSES, REVENUES, AND PUBLIC ASSISTANCE
FOR EXISTING YEAR 2012 SERVICE LEVELS ON THE BELLE URBAN SYSTEM: 2013-2017

			Forecast		
Characteristic	2011 Estimate	2012 Budgeted	2013	2017	
Fixed-Route Annual Service					
Revenue Vehicle-Miles	1,120,000	1,039,000	1,039,000	1,039,000	
Revenue Vehicle Hours	88,000	81,200	81,200	81,200	
Systemwide Ridership					
Revenue Passengers	1,217,000	1,059,000	1,070,000	1,113,000	
Passengers per Revenue Vehicle-Mile	1.09	1.02	1.03	1.07	
Passengers per Revenue Vehicle-Hour	13.8	13.0	13.2	13.7	
Systemwide Operating Costs, Revenues, and Assistance					
Operating Expenses	\$7,567,000	\$7,141,000	\$7,246,000	\$7,690,000	
Passenger and Other Revenues	1,712,000	1,571,000	1,586,000	1,648,000	
Required Public Assistance	5,855,000	5,570,000	5,660,000	6,042,000	
Farebox Recovery (percent)	22.6	22.0	21.9	21.4	
Sources of Public Assistance					
Federal	\$2,445,000	\$2,132,000	\$2,252,000	\$2,390,000	
State	2,049,000	1,816,000	1,734,000	1,840,000	
Federal/State Share of Operating Expenses (percent)	58.6	55.3	55.0	55.0	
Local					
City of Racine	\$1,100,000	\$1,101,000	\$1,149,000	\$1,254,000	
Town of Yorkville	6,000	5,000	5,000	5,000	
Village of Caledonia	29,000	29,000	29,000	31,000	
Village of Mt. Pleasant	173,000	174,000	177,000	187,000	
Village of Sturtevant	53,000	52,000	53,000	56,000	
Other <sup>b</sup>		261,000	261,000	279,000	
Subtotal Local Assistance	\$1,361,000	\$1,622,000	\$1,674,000	\$1,812,000	
Total	\$5,855,000	\$5,570,000	\$5,660,000	\$6,042,000	
Per Passenger Trip Data					
Operating Costs	\$6.22	\$6.74	\$6.77	\$6.91	
Total Public Assistance	\$4.81	\$5.26	\$5.29	\$5.43	

<sup>&</sup>lt;sup>a</sup>The year 2013 and 2017 forecasts of ridership, revenues, and costs were based on the existing service levels provided in the year 2012, with the following assumptions: 1. operating cost per revenue hour would increase by 1.5% annually between 2013 and 2017; 2. revenue passengers would increase by 1.0% annually between 2013 and 2017; 3. fares would not be increased above the January 2012 levels; and 4. the combined Federal/State share of operating expenses would be 55.0% each year between 2013 and 2017.

Source: City of Racine and SEWRPC.

<sup>&</sup>lt;sup>b</sup>Other sources of local public assistance include the Racine Unified School District and a local radio station. Prior to the year 2012 budget, the amount that the Racine Unified School District paid the transit system for student transportation was counted under "passenger revenues". In the year 2012 budget and later, this contribution is counted under Local Public Assistance. This change will not affect State or Federal funding levels, but will make the transit system's farebox recovery rate appear lower than it actually is.

Table 48

ESTIMATED OPERATING EXPENSES, REVENUES, AND PUBLIC ASSISTANCE FOR THE PRELIMINARY RECOMMENDED BELLE URBAN SYSTEM ALTERNATIVE: 2013-2017

			Fore	cast <sup>a</sup>
Characteristic	2011 Estimate	2012 Budgeted	2013	2017
Fixed-Route Annual Service				
Revenue Vehicle-Miles	1,120,000	1,039,000	983,000	983,000
Revenue Vehicle Hours	88,000	81,200	77,000	77,000
Systemwide Ridership				
Revenue Passengers	1,217,000	1,059,000	1,070,000	1,113,000
Passengers per Revenue Vehicle-Mile	1.09	1.02	1.09	1.13
Passengers per Revenue Vehicle-Hour	13.8	13.0	13.9	14.5
Systemwide Operating Costs, Revenues, and Assistance				
Operating Expenses	\$7,567,000	\$7,141,000	\$6,907,000	\$7,330,000
Passenger and Other Revenues	1,712,000	1,571,000	1,586,000	1,648,000
Required Public Assistance	5,855,000	5,570,000	5,321,000	5,682,000
Farebox Recovery (percent)	22.6	22.0	23.0	22.5
Sources of Public Assistance				
Federal	\$2,445,000	\$2,132,000	\$2,146,000	\$2,278,000
State	2,049,000	1,816,000	1,652,000	1,754,000
Federal/State Share of Operating Expenses (percent)	58.6	55.3	55.0	55.0
Local				
City of Racine	\$1,100,000	\$1,101,000	\$1,037,000	\$1,130,000
Town of Yorkville	6,000	5,000	7,000	7,000
Village of Caledonia	29,000	29,000	25,000	27,000
Village of Mt. Pleasant	173,000	174,000	154,000	167,000
Village of Sturtevant	53,000	52,000	39,000	42,000
Other <sup>b</sup>		261,000	261,000	277,000
Subtotal Local Assistance	\$1,361,000	\$1,622,000	\$1,523,000	\$1,650,000
Total	\$5,855,000	\$5,570,000	\$5,321,000	\$5,682,000
Per Passenger Trip Data				
Operating Costs	\$6.22	\$6.74	\$6.46	\$6.59
Total Public Assistance	\$4.81	\$5.26	\$4.97	\$5.11

<sup>&</sup>lt;sup>a</sup>The year 2013 and 2017 forecasts of ridership, revenues, and costs were based on the service levels provided under the preliminary recommended alternative with the following assumptions: 1. operating cost per revenue hour would increase by 1.5% annually between 2013 and 2017; 2. revenue passengers would increase by 1.0% annually between 2013 and 2017; 3. fares would not be increased above the January 2012 levels; and 4. the combined Federal/State share of operating expenses would be 55.0% each year between 2013 and 2017.

Source: City of Racine and SEWRPC.

<sup>&</sup>lt;sup>b</sup>Other sources of local public assistance include the Racine Unified School District and a local radio station. Prior to the year 2012 budget, the amount that the Racine Unified School District paid the transit system for student transportation was counted under "passenger revenues". In the year 2012 budget and later, this contribution is counted under Local Public Assistance. This change will not affect State or Federal funding levels, but will make the transit system's farebox recovery rate appear lower than it actually is.

- Ridership on the system is estimated to increase by about one percent per year, from the current estimate of 1,059,000 in 2012 to 1,113,000 in 2017. Despite the initial slight decrease in revenue vehicle miles and hours of service, an assumed modest increase in revenue passengers is based on the potential for the alternative to make the system more attractive to existing and potential riders. In 2013, the transit system is forecast to carry about 1.09 passengers per vehicle-mile and 13.9 passengers per vehicle-hour of service provided, which is slightly more efficient than the existing transit system. The increase in efficiency is due to the elimination of long layover times on evenings and weekends, the reduction of service during periods that had low ridership, and the combination and reconfiguration of low-ridership routes.
- The total cost of operating the transit system with the proposed service changes is estimated to decrease by about three percent in the first year, from \$7.14 million in the 2012 budget to \$6.91 million in 2013. About \$1.59 million, or about 23 percent, would be expected to be recovered by passenger fares and other revenues including advertising, leaving about \$5.32 million in needed public assistance in 2013. By the end of the five-year planning period in 2017, the increases in operating costs per revenue hour of transit service would increase total operating expenses of the transit system to about \$7.33 million. The amount of money recovered from passenger fares and other revenues would increase slightly, leaving about \$5.68 million in needed public assistance in 2017.
- Federal and State funds may be expected to provide about 55 percent (\$3.80 million) of the total operating expenses in 2013. The remaining public assistance needed (\$1.52 million, or 22 percent) would be provided by local sources, including the City of Racine, the surrounding municipalities served by transit, and the Racine Unified School District. By the end of the five-year planning period in 2017, Federal and State funds may be expected to provide about \$4.03 million. Local sources would likely need to increase their contributions to \$1.65 million (25 percent of expenses) in order to make up the gap in public assistance needed.

The methodology currently utilized by the City of Racine to distribute the local share of the necessary public assistance among the Town of Yorkville and the Villages of Caledonia, Mt. Pleasant, and Sturtevant, is based on the communities' respective shares of the total annual revenue vehicle-miles of fixed-route transit service provided. Commission staff used this methodology to develop the transit system's estimated operating costs under the preliminary recommended alternative. This methodology could be re-examined to more equitably distribute the local share among the above communities. As such, Commission staff would suggest that representatives from each of the four local governments meet with City staff to discuss whether and how the current methodology should be modified.

## Capital Needs for the Belle Urban System under the Preliminary Recommended Alternative

Significant capital investments must occur over the next five years to maintain the existing transit system equipment and facilities. As noted above, the preliminary recommended alternative would not require any additional buses, operating with the same total of 28 morning and 27 afternoon buses currently required during weekday peak service. Maintaining the existing BUS fleet of 35 heavy-duty buses will allow the BUS to continue to have seven spare buses on hand, which represents a desirable "spare ratio" of 0.25. The following capital investments will be necessary over the next five years to achieve a fleet of 35 buses, maintain the transit system facilities, and establish a southwest transfer point in the Regency Mall area:

- In 2013, the transit system needs 14 buses to replace the vintage 1997 Nova buses that are still in the BUS fleet, and which have exceeded their service life of 12 years and 500,000 miles. The BUS has already used a Federal transportation grant of \$4.76 million for the 14 buses and City funding has been provided for the required 20 percent match of \$1.19 million. The buses were received and put in service in early 2013.
- Starting in 2014, the transit system will need to replace the seven paratransit buses that have been in service since 2009 with new paratransit buses. These buses typically have an estimated service life of about five years. Under the transit system's current Capital Improvement Plan, the City plans to purchase

10 new compressed natural gas (CNG) paratransit buses in 2014 at an estimated cost of \$100,000 per vehicle. The City plans to utilize a current City-owned CNG fueling facility, and does not expect significant additional costs to retrofit the facility to serve the new CNG paratransit buses.

- By 2014, the capital needs assume the City will have reached an agreement to lease or purchase land in
  the Regency Mall area to accommodate a small transfer facility with one or two large passenger shelters.
  Map 34 shows potential locations that the City could consider for the facility, although the City is
  currently discussing other possible sites with the owner of Regency Mall.
- Starting in 2016, the transit system will need to begin replacing the 10 Gillig buses that went into service in 2004. These buses have a service life of 12 years. These buses are proposed to be replaced over a three-year period between 2016 and 2018.
- Various repairs, renovations, and upgrades to BUS facilities (currently scheduled in the transit system's Capital Improvement Plan), including replacement bus cameras, a replacement fueling system at the Kentucky Street Complex, and funds for the repair or replacement of maintenance equipment.
- In addition, City and County staff identified a potential capital need associated with the existing park-ride lot located at IH 94 and STH 20 in the Town of Yorkville. Route No. 20 buses currently experience difficulties serving the lot due to cars parking illegally during times when the lot is filled above its current capacity of 76 vehicles. The Wisconsin Department of Transportation (WisDOT) would be responsible for determining whether the lot would require expansion, which could possibly occur on adjacent County-owned land. Should an expansion be pursued, Federal capital assistance could cover 80 percent of the cost of the expansion, with the remaining 20 percent to be provided by WisDOT, the Town of Yorkville, and/or Racine County.

Table 49 shows the capital investment required for the proposed transit system, as well as the projected breakdown between Federal and local funding. The anticipated Federal share for capital funding is 80 percent, or \$8.78 million, over the five-year period. The City of Racine's projected local share for the necessary capital investments would be \$2.20 million over the five-year period. It should be noted that historically Federal funding of 80 percent of transit system capital costs has been available; however, there is some uncertainty regarding the continuing availability of Federal transit capital assistance during the five-year planning period and beyond. Under the Moving Ahead for Progress in the 21st Century Act (MAP-21)—the two-year Federal transportation reauthorization bill which was passed in October of 2012 and expires in September of 2014—discretionary grant funding for fixed-route bus systems through Federal Section 5309 was replaced with a formula program through Federal Section 5339. There is some concern that Section 5339 funding levels may not provide an adequate level of funding for necessary capital expenditures. There is the potential to possibly provide the additional needed funding through other Federal programs, and there has also been discussion of creating a State of Wisconsin transit capital assistance program. Alternatively, the City may need to contribute a higher local share of funding for the necessary capital expenditures.

# **Options for Service Improvements if Additional Funding Becomes Available**

The preliminary recommended alternative presented above was developed assuming the total transit operating budget would remain relatively flat over the five-year planning period and local funding also would need to remain at about the year 2012 funding level. Commission staff identified and evaluated several potential desirable service improvements, which could be considered beyond the proposed changes above should additional funding become available. For illustrative purposes, the necessary additional funding for any of the service improvements is assumed to become available by year 2016, toward the end of the five-year planning period. Table 50 and Map 35 present a detailed explanation of the potential service improvements, including Commission staff estimates of operating costs and public assistance. The potential service improvements are summarized below.

Map 34
POTENTIAL SITES FOR SOUTHWEST TRANSFER POINT





POTENTIAL LOCATIONS FOR SOUTHWEST TRANSFER POINT (ALL AREAS EQUAL TO 13,000 SQ, FT,)

Source: SEWRPC.

Table 49

PROPOSED CAPITAL EQUIPMENT EXPENDITURES FOR THE BELLE URBAN SYSTEM: 2013-2017

Year	Equipment or Project Description	Quantity	Unit Cost <sup>a</sup>	Total Cost <sup>a</sup>
2013	Replacement 35-foot Buses	14	\$425,000	\$ 5,950,000
	Maintenance & Operating Equipment <sup>b</sup>			120,000
	Subtotal			\$ 6,070,000
2014	Replacement 35-foot Buses			
	Shelters, Lighting, and Improvements for			
	Southwest Transfer Point			\$150,000
	Paratransit Bus Replacement	10	100,000	1,000,000
	Maintenance & Operating Equipment <sup>b</sup>			240,000
	Subtotal			\$ 1,390,000
2015	Replacement 35-foot Buses			
	Paratransit Bus Replacement			
	Replace Supervisory Van	1	45,000	45,000
	Replace Scheduling Software	1	160,000	160,000
	Maintenance & Operating Equipment <sup>b</sup>			102,000
	Subtotal			\$ 307,000
2016	Replacement 35-foot Buses	3	\$442,000	\$ 1,326,000
	Replace Asphalt Paving at Kentucky Street Complex			320,000
	Maintenance & Operating Equipment <sup>b</sup>			104,000
	Subtotal			\$ 1,750,000
2017	Replacement 35-foot Buses	3	\$451,000	\$ 1,353,000
	Maintenance & Operating Equipment <sup>b</sup>			106,000
	Subtotal			\$ 1,459,000
Total Capital	Project Costs			\$10,976,000
Federal Capit	al Assistance Funds			\$ 8,781,000
Local Share of	f Costs			2,195,000
	ual Costs over Planning Period			
				\$ 2,195,000
	are			1,756,000
	9			439.000

<sup>&</sup>lt;sup>a</sup>Costs are expressed in estimated year of expenditure dollars

Source: Racine Belle Urban System and SEWRPC.

Table 50

POTENTIAL SERVICE IMPROVEMENTS THAT COULD BE CONSIDERED
IF MORE OPERATING FUNDING BECOMES AVAILABLE: YEAR 2016 ESTIMATES

Service Improvement	Additional Annual Revenue Vehicle Hours of Service	Estimated Additional Operating Expense of Service Improvment <sup>a</sup>	Estimated Additional Fare Revenues from Service Improvement <sup>b</sup>	Estimated Net Operating Assistance Needed
Add service on Route No. 6 in one of two ways:				
A. Provide new branch of Route No. 6 during weekday peak periods	1,800	\$ 168,000	\$ 14,000	\$ 154,000
B. Provide 30-minute service frequencies on Route No. 6 during weekday peak periods	1,800	168,000	28,000	140,000
Provide service to Sturtevant in one of two ways:				
A. Extend Route No. 7 at peak periods	1,700	\$ 159,000	\$ 20,000	\$ 139,000
B. Provide shuttle service from Regency Mall	800	75,000	4,000	71,000
Provide express bus service between downtown Racine and Kenosha <sup>c</sup>	8,200	\$ 791,000	\$131,000	\$ 660,000
Extend Saturday service hours to 9:40 p.m.	1,100	\$ 103,000	\$ 11,000	\$ 92,000
Total for maximum level of service improvements (30-minute service frequencies on Route No. 6, Extend Route No. 7 to Sturtevant, Express bus between Racine and Kenosha, and Extend Saturday service hours)	12,800	\$1,221,000	\$190,000	\$1,031,000

<sup>&</sup>lt;sup>a</sup>The change in operating expenses was calculated assuming the 2016 cost per revenue vehicle hour would be \$93.31.

Source: SEWRPC.

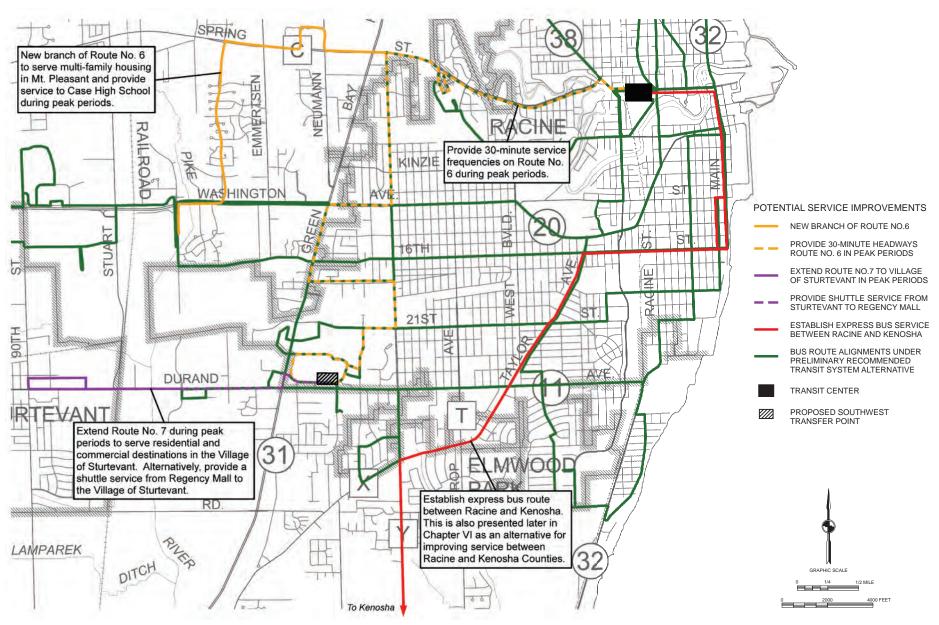
<sup>&</sup>lt;sup>b</sup>The maintenance and operating equipment expenditures include replacement bus cameras, a replacement fueling system at the Kentucky Street Complex, and funds for the repair or replacement of maintenance equipment.

<sup>&</sup>lt;sup>b</sup>The change in fare revenues was calculated assuming the 2016 revenue per passenger would be \$1.44 for local routes, and \$1.69 for express routes.

<sup>&</sup>lt;sup>c</sup>Express bus service would be jointly funded by the Kenosha and Racine transit systems. The transit systems could apply to certain Federal programs to cover part of the costs of operating the service.

Map 35

POTENTIAL SERVICE IMPROVEMENTS TO THE BELLE URBAN SYSTEM SHOULD ADDITIONAL FUNDING BECOME AVAILABLE



Add service on the new Route No. 6 in one of two ways:

- Provide a new branch during weekday peak periods. The new branch of Route No. 6 would operate west of Green Bay Road on Spring Street and Sunnyslope Drive, serving several multi-family residential developments in the Village of Mt. Pleasant. It would also provide service to Case High School during peak periods, to supplement the service provided by Route Nos. 3 and 30. The branch would be expected to increase annual operating expenses by approximately \$168,000 and require an additional estimated \$154,000 in net operating assistance. It would also require an additional bus during the morning and afternoon peak periods, increasing the number of buses required for morning weekday peak service from 28 to 29 and afternoon weekday peak service from 27 to 28 under the preliminary recommended alternative.
- Provide 30-minute service frequencies during weekday peak periods. Increasing the service frequencies of Route No. 6 from 60 minutes to 30 minutes during weekday peak periods would result in common 30-minute frequencies on all regular routes during the peak periods, allowing all routes to pulse every 30 minutes. Similar to providing a new branch on Route No. 6, increased service frequencies would be expected to increase annual operating expenses by approximately \$168,000. However, Commission staff would expect ridership to increase more with more frequent service than a new branch, so the net operating assistance would be expected to be about \$140,000. Similar to a new branch on Route No. 6, this improvement would also require an additional bus during the morning and afternoon peak periods under the preliminary recommended alternative.

Provide service to the Village of Sturtevant in one of two ways:

- Extend Route No. 7 during weekday peak periods. The Route No. 7 extension would operate west of Oakes Road on Durand Avenue, serving residential and commercial developments in the Village of Sturtevant. The extension would be expected to increase annual operating expenses by approximately \$159,000 and require an additional estimated \$139,000 in net operating assistance. It would also require an additional bus during the morning and afternoon peak periods, increasing the number of buses required for morning weekday peak service from 28 to 29 and afternoon weekday peak service from 27 to 28 under the preliminary recommended alternative.
- Provide shuttle service from Regency Mall during weekday peak periods. As a lower cost alternative, the City could operate a shuttle service over Durand Avenue between Regency Mall and the Village of Sturtevant using a BUS paratransit vehicle and driver. To operate the shuttle with paratransit vehicles, the shuttle service would have to be scheduled into the operation of the Racine DART paratransit service. This option assumes the shuttle would make six round-trips during weekday peak periods, with one-way running times of about 15 minutes. The shuttle would be scheduled to arrive and depart the southwest transfer point at Regency Mall at transit "pulse" transfer times, in order to facilitate transfers between the shuttle and BUS routes. The shuttle would be expected to increase annual operating expenses by approximately \$75,000 and require an additional estimated \$71,000 in net operating assistance. The City would also need to acquire an additional CNG paratransit vehicle at an estimated cost of \$100,000 to provide the shuttle service, increasing the number of paratransit vehicles to be purchased during the planning period from 10 to 11. Federal capital assistance would cover 80 percent of the cost of the additional vehicle, with the remaining 20 percent to be provided by the City of Racine and/or the Village of Sturtevant.

Establish express bus service between the Cities of Racine and Kenosha<sup>2</sup>:

This potential service improvement would involve a joint agreement between the Cities of Racine and Kenosha to establish and contract for the operation of an express bus service between downtown Racine and downtown Kenosha. This service would address an apparent unmet need for frequent and convenient transit service

<sup>&</sup>lt;sup>2</sup>See Alternative 3 under the later section of Chapter VI entitled "Transit Service Alternatives for Travel between Racine and Surrounding Counties" for a more detailed analysis of an alternative for establishing an express bus service between the Cities of Racine and Kenosha.

Table 51

POTENTIAL IMPACTS OF SERVICE REDUCTIONS AND FARE INCREASES THAT COULD BE IMPLEMENTED IN CASE OF A BUDGET SHORTFALL: YEAR 2016 ESTIMATES

Service Reduction	Annual Revenue Vehicle Hours of Service	Amount of Operating Expenses Saved as a Result of Reduction <sup>a</sup>	Change in Fare Revenues as a Result of Service Cut <sup>b</sup>	Estimated Net Savings in Needed Operating Assistance
Eliminate Route 2N/2S on Saturdays	1,300	\$121,000	-\$ 5,000	\$116,000
Eliminate Route 1S after 6:30 p.m. on weeknights	900	84,000	-10,000	74,000
Eliminate Route 1S on Saturdays	700	65,000	-7,000	58,000
Eliminate Route 1S on Sundays	500	47,000	-4,000	43,000
Total	3,400	\$317,000	-\$26,000	\$291,000

Fare Increase	Annual Ridership in 2016 (without a Fare Increase)	Change in Revenue Passengers as a Result of Fare Increase	Increase in Fare Revenues as a Result of Fare Increase <sup>b</sup>	Estimated Net Savings in Needed Operating Assistance
Increase cash fares by \$0.25 (about 12 percent)	1,102,000	-59,000	\$103,000	\$103,000

<sup>&</sup>lt;sup>a</sup>The change in operating expenses was calculated assuming the 2016 cost per revenue vehicle hour would be \$93.31.

between the two Cities. The proposed service would make 16 round-trips on weekdays, with service frequencies of 30 minutes during peak periods and 60 minutes during off-peak periods. In 2016, the express bus service would be expected to require total annual operating expenses of approximately \$791,000 and require an estimated \$660,000 in net operating assistance. It would also require the two Cities to jointly purchase four urban buses similar to those being purchased in 2013 by the City of Racine at an estimated \$425,000 each.

## Extend Saturday service hours to 9:40 p.m.:

• This potential service improvement would involve providing later service on all routes proposed to operate on Saturday, extending service for an additional three hours from 6:40 p.m. to 9:40 p.m. The later service would return Saturday hours closer to pre-2012 levels when service was provided until about 11:00 p.m. on most Saturday routes. Extending Saturday hours would particularly benefit individuals that need to access the many service and other jobs outside of the existing 2012 service hours on Saturdays. The extended Saturday hours would be expected to increase annual operating expenses by approximately \$103,000 and require an additional estimated \$92,000 in net operating assistance. It would not require any additional buses on Saturdays.

### **Options for Additional Service Reductions or Fare Increases**

Additional possible further service reductions and fare increases were also identified and evaluated should the City determine that it become necessary to further reduce the local funding that it provides to the transit system over the planning period. For the purposes of the analysis, it was assumed that these service and fare changes would be implemented in the year 2016, but they could be considered and implemented at any time during the planning period. Table 51 summarizes the impact that those actions would likely have on the operating assistance needed by the transit system, and they are reviewed below:

• Eliminate Route No. 2N/2S on Saturdays. Currently, Route Nos. 2 and 5—proposed to be combined into the new Route No. 2N/2S—have low ridership on Saturdays. Combining the two routes may improve ridership, which is the primary reason the preliminary recommended alternative maintains Saturday service on that route. However, if ridership remains low on Route No. 2N/2S on Saturdays, eliminating the combined route would reduce the amount of total annual operating assistance needed by about \$116,000, and the City's operating assistance by about \$34,000.

<sup>&</sup>lt;sup>b</sup>The change in fare revenues was calculated assuming the 2016 revenue per passenger would be \$1.44. For the Fare Increase option, a \$0.25 increase in cash fares would be expected to increase the estimated 2016 revenue per passenger to about \$1.62.

- Eliminate Route No. 1S after 6:30 p.m. on weeknights. Currently, Route No. 1S has about 50 boarding passengers on an average weeknight, compared to a weeknight average of about 110 boarding passengers in the southern portion of the system for Route Nos. 3, 4, 7, and 86. Commission staff estimates that eliminating Route No. 1S after 6:30 p.m. on weeknights would reduce the amount of total annual operating assistance needed by about \$74,000, and the City's operating assistance by about \$19,000.
- Eliminate Route No. 1S on Saturdays and/or Sundays. Currently, Route No. 1S has one of the lowest levels of boarding passengers of all the routes on both Saturdays and Sundays, with the exception of Route No. 86. Commission staff estimates that eliminating Route No. 1S would reduce the amount of total annual operating assistance needed by about \$58,000 on Saturdays (reducing the City's operating assistance by about \$15,000), by about \$43,000 on Sundays (reducing the City's share by about \$12,000), and by about \$101,000 if it is eliminated on both Saturdays and Sundays (reducing the City's share by about \$27,000).
- Increase cash fares by \$0.25 (about 12 percent). The City could increase fares to help the transit system avoid making cuts to service, which could be essential for people who need transportation to get to work. A 12 percent increase in fares would increase the base adult cash fare from \$2.00 to \$2.25, and would be expected to reduce annual revenue passengers by about 59,000, but would result in about \$103,000 more in revenues for the transit system.

Another potential option for service reduction would require evaluation after implementation of the preliminary recommended alternative. That option would involve reducing weeknight and/or weekend service on the newly-revised Route No. 6, depending on the performance of that new route. The current Route No. 86, which forms the basis for the new Route No. 6, has experienced low ridership levels. However, the new Route No. 6 is designed to try to increase ridership. Career Industries has relocated to a facility that would be served by the proposed Route No. 6 alignment, which could result in higher ridership levels. The new Route No. 6 is also designed to encourage transfers to other routes at the proposed southwest transfer point. Therefore, Commission staff would not recommend any potential cuts be considered for Route No. 6 until it has been in operation with the new alignment for at least a year.

At the direction of City of Racine staff, Commission staff also evaluated a service reduction option that could be implemented in year 2013 should the system face even more severe funding problems. This option for cutting service would involve cutting back all regular routes under the preliminary recommended alternative from operating with 30-minute service frequencies during peak periods to operating with 60-minute service frequencies during all time periods. Table 52 presents the operating and service characteristics of each of the proposed routes assuming 60-minute all day service frequencies. Table 53 summarizes the impact that this reduction option would likely have on the operating assistance needed by the transit system. The option is discussed and summarized below.

- This option is presented as an illustration of a potential system that would only provide essential services in order to minimize the City's necessary operating assistance in the case of severe cuts in funding. It should be recognized that the level of service provided under this option would represent a drastic and highly undesirable change from both existing and proposed levels, but could possibly serve as a foundation for future improvements if funding levels were to increase in years subsequent to the reduction.
- Commission staff estimates that switching to 60-minute service frequencies on all regular routes would reduce the amount of total operating assistance needed in 2013 by about \$720,000, from \$5.32 million to \$4.60 million. Of the total savings, the City of Racine would be expected to save about \$170,000, reducing its required annual local assistance in 2013 from about \$1.04 million to \$870,000. However, the system would also lose about \$470,000 in Federal and State annual operating assistance in 2013.

Table 52

PEAK PERIOD OPERATING AND SERVICE CHARACTERISTICS BY ROUTE IF SWITCHING FROM 30-MINUTE TO 60-MINUTE SERVICE FREQUENCIES IN PEAK PERIODS ON ALL ROUTES

	Weekday Service									
	Round-Trip			Service F	requency			Buses F	Required	
Route Number	Route Length (miles)	Service Hours	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period
1N	10.3	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
2N	11.5	5:40 a.m. – 7:10 p.m.	60	60	60		1	1	1	
3N	12.9	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
4N	10.5	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
1S	15.3	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
28	11.4	5:40 a.m. – 6:40 p.m.	60	60	60		1	1	1	
3S	14.4	5:10 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
4S	12.0	5:10 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
6	14.6	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
7	15.1	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
Other <sup>a</sup>	Varies	Varies	N/A	N/A	N/A	N/A	9	1	8	1
Systemwide							19	11	18	9

a"Other" refers to Route Nos. 20, 27, and 30. Weekday service levels on these routes would not be changed under the proposed alternative.

Table 53

POTENTIAL IMPACTS OF SWITCHING FROM 30-MINUTE TO 60-MINUTE
SERVICE FREQUENCIES IN PEAK PERIODS ON ALL ROUTES: YEAR 2013 ESTIMATES

Service Reduction	Reduction in Annual	Amount of Operating	Change in Fare	Estimated Net Savings
	Revenue Vehicle	Expenses Saved as a	Revenues as a	in Operating
	Hours of Service	Result of Reduction <sup>a</sup>	Result of Service Cut <sup>b</sup>	Assistance Needed
Cut back to 60-minute service frequencies	14,000	\$863,000	-\$145,000	\$718,000

<sup>&</sup>lt;sup>a</sup>The change in operating expenses was calculated assuming the 2013 cost per revenue vehicle hour would be \$96.70, which represents a 10 percent increase over the budgeted \$87.91 for 2012 to account for the system's significantly reduced service levels.

Source: SEWRPC.

• The number of buses required for weekday peak service would be reduced from the existing 28 to 19, reducing the required active fleet from the existing 35 to between 25 and 27 buses (including 6 to 8 spare buses). Given that the City would need to operate fewer buses under this option, there is a potential for capital savings. The City could sell excess buses and other equipment that would no longer be needed, and assuming the service level would be maintained for several years, the system would likely no longer need to replace the 10 aging Gillig buses (that went into service in 2004) over a three-year period between 2016 and 2018.

As a less drastic option, if the City needs to reduce the amount of operating assistance it provides, the preliminary recommended alternative also provides the ability for City and transit system staff to selectively cut back individual routes from 30-minute peak service frequencies to 60-minute all-day service frequencies—as opposed to cutting back all regular routes to 60-minute all-day service frequencies. This benefit of the alternative provides the City with more flexibility during budget shortfalls than the existing system because each route fits into a 60-minute round-trip schedule from the Transit Center to its outlying terminus. Upon implementation of the alternative, the City would be able to evaluate each individual route's performance to determine whether it requires 30-minute peak service frequencies and make adjustments as the system's annual budget requires.

<sup>&</sup>lt;sup>b</sup>The change in fare revenues was calculated assuming the 2013 revenue per passenger would be \$1.44.

## TRANSIT SERVICE ALTERNATIVES FOR RACINE COUNTY

This section of Chapter VI describes transit service alternatives for Racine County for the years 2013-2017. Commission staff developed three alternatives for consideration by the Advisory Workgroup and County officials. The County could choose to implement any or all of these alternatives, or to maintain the current services:

- Racine County Alternative 1: Expansion and Coordination of Existing Services. Sub-alternatives under Alternative 1 would expand the eligibility for the County's demand-response transportation service, combine City and County paratransit east of IH 94, and continue and refine the County shuttle service and operate the service as public transit.
- Racine County Alternative 2: Public Shared-Ride Taxi West of IH 94
- Racine County Alternative 3: Vanpools for Commuter Trips

The evaluation of existing transit services in Chapter V, and the comments made at public meetings and in discussion groups, identified several concerns that would be addressed with the County transportation initiatives proposed under the three alternatives. In the western part of Racine County, there is a need for affordable transportation services that have fewer eligibility restrictions and shorter advance-reservation time requirements for non-medical trips and other spontaneous trips. In particular, there were areas with moderate-to-high transit need in the Burlington-Rochester-Waterford and Union Grove areas. Some of the discussion groups were also interested in the concept of vanpools, in which volunteer drivers could provide group transportation for long work-trip commutes starting or ending in Racine County.

# Racine County Alternative 1: Expansion and Coordination of Existing Services

Under this alternative, County agencies and private non-profit agencies providing transportation would coordinate existing services to improve the efficiency of, and expand access to, those transportation services. Three potential ways to expand the existing services were identified and are summarized below and outlined in Table 54.

- Racine County Sub-alternative 1A: West of IH 94, expand the eligibility of the County's demandresponse transportation service for seniors and people with disabilities to include any individuals who receive assistance from County agencies (except Medicaid-funded non-emergency transportation).
- Racine County Sub-alternative 1B: East of IH 94, combine the City paratransit service with the County demand-response transportation service for seniors and people with disabilities.
- Racine County Sub-alternative 1C: Continue to operate with ongoing refinement the County shuttle service and operate the service as public transit.

# Racine County Sub-alternative 1A: Expand Eligibility of the County Demand-Response Transportation Service West of IH 94

The Racine County Human Services Department currently provides demand-response transportation service for seniors and people with disabilities outside the BUS paratransit service area, and for seniors within the BUS paratransit service area. The County contracts with First Transit to operate the service. People are eligible to use the service if they are 60 years of age or older, or have a cognitive or physical disability that prevents them from using other forms of transportation. Mental health clients are also eligible to use the service for trips to medical appointments or in-patient stays. The demand-response transportation service is also available for out-of-county trips for medical purposes. Fares for the current County demand-response service are \$2.50 per one-way trip.

Under Racine County Sub-alternative 1A, the operating characteristics of the demand-response transportation service would remain similar to the existing program. Table 54 summarizes the service hours and fares for Sub-alternative 1A.

Table 54

PROPOSED SERVICE CHARACTERISTICS OF SUB-ALTERNATIVES CONSIDERED UNDER ALTERNATIVE 1: EXPANSION AND COORDINATION OF EXISTING SERVICE

	Sub-alternative 1A: Expand Eligibility of County Demand- Response Transportation West	Sub-alternative 1B: Combine City / County	Sub-alternative 1C: Continue/Refine Shuttle Service
Service Characteristic	of IH 94	Paratransit East of IH 94	and Operate as Public Transit
Service Area	Racine County west of IH 94	Racine County east of IH 94	Racine County <sup>a</sup>
Proposed Eligibility Requirements	At least one trip end must be west of IH 94	Trips must be within area east of IH 94	Open to the public
	People with disabilities	People with disabilities	
	Seniors age 60 or over	Seniors aged 60 or older	
	Any client of County Human Services (except for Medicaid transportation)		
Proposed Service Days and Hours	Weekdays: 5:00 am - 6:00 pm	In BUS's paratransit service area (3/4-mile from fixed routes):	SPARC shuttle service:
	Saturdays: 5:00 am – 6:00 pm (Dialysis only)	Weekdays: 5:30 am – 9:40 pm	Weekdays: 9:00 am – 3:00 pm
		Saturdays: 5:30 am – 6:40 pm	
		Sundays/Holidays: 9:30 am – 6:40 pm	
		Outside paratransit service area:	
		Weekdays: 5:30 am - 7:00 pm	
		Saturdays: 5:30 am – 4:00 pm	
		Sundays: 9:30 am – 4:00 pm	
Response Time	1 day advance reservation	1 day advance registration	Frequency of 90 - 120 minutes
Passenger Fares	\$1 each way for nutrition	\$1 each way for nutrition	\$2 one way
	\$2.50 each way for all other trips less than 5 miles	\$3 each way for all other trips	\$3 round trip
	\$3.50 each way for trips between 5 and 10 miles within the County	Community Care agency rate: \$18 per ticket for its clients	
	\$4.50 each way for trips over 10 miles within the County	Racine County agency rate: \$18 per ticket for trips by seniors and people with	
	\$10 each way for medical trips outside the County	disabilities outside BUS's paratransit service area	
Vehicle Requirements for System Operation by 2017:			
Weekdays	15ª	14	1 accessible mini-bus 2 accessible 20-passenger buses
Saturdays	1	6	
Sundays/Holidays		3	
		County non-ADA DART	
Existing Fleet Size	13 <sup>b</sup>	13 <sup>b</sup> 7	2 non-accessible buses <sup>c</sup>
New or Extra Vehicles Needed by 2017	2	7	1 accessible mini-buses, 2 accessible 20-passenger buses

<sup>&</sup>lt;sup>a</sup>Shuttle service is currently provided only in the Burlington area, but could be provided in other communities within the County.

Source: Racine County, First Transit, and SEWRPC.

Sub-alternative 1A would address one of the unmet needs for transit service in the western part of the County by expanding the number of people who are eligible to use the Human Services Department transportation service in the rural part of the County. Under this policy, anyone who receives assistance through the Racine County Human Services Department (with the exception of individuals who need Medicaid-funded non-emergency

<sup>&</sup>lt;sup>b</sup>Includes vehicles owned by current operator of specialized transportation service (First Transit) needed to provide transportation to seniors and people with disabilities in both eastern and western Racine County and for out-of-County trips.

<sup>&</sup>lt;sup>c</sup>The current operator of the shuttle service (Kenson Enterprises) uses non-accessible vehicles. For this service to operate as public transit, the service must be provided with wheelchair-accessible vehicles.

transportation) would be eligible to use the transportation service for any trips that have at least one end west of IH 94. This would include low-income individuals who qualify for Medicaid non-emergency transportation for medical trips, but need transportation for non-medical trips. It could also include individuals receiving job training assistance from the County job center, veterans receiving assistance through the County Veterans Service office, and children in the foster care system. Priority would still be given to seniors or people with disabilities. The demand-response transportation service would still be available for out-of-county trips for medical purposes, but passenger fares on that service would increase to cover a larger share of the costs of those trips. Sub-alternative 1A uses the eligibility requirements of the Walworth County Specialized Transportation program as a model.

Individuals who qualify for Medicaid non-emergency medical transportation would not use the County service for medical trips. In Wisconsin, Medicaid non-emergency transportation is available for some BadgerCare recipients (eligible households with income less than 200 percent of the Federal poverty level), and some Wisconsin Medicaid recipients (people who are seniors, blind, or disabled). As of July 1, 2011, a private company called LogistiCare coordinates all Medicaid non-emergency transportation for BadgerCare and Medicaid recipients throughout the State of Wisconsin. LogistiCare would continue to arrange those trips with private transportation providers under Sub-alternative 1A.

Table 55 presents the ridership and financial performance of Sub-alternative 1A. Several key points can be made about the information in the table:

- Commission staff estimates that expanding eligibility to all Racine County Human Services clients would more than double the ridership on the demand-response transportation service west of IH 94. In 2011, about 35 percent (6,000 trips) of all the trips on the demand-response service had at least one end west of IH 94. Between 2013 and 2017, most of the growth in ridership under this Sub-alternative 1A is expected to come from people who are not currently eligible to use the system. The number of trips made by the newly-eligible human service clients would be expected to increase gradually until they represent about half of the total ridership (13,400 one-way trips) in 2017.
- The County's demand-response transportation service levels would need to increase significantly in order to accommodate the additional trips generated by the expanded eligibility under Sub-alternative 1A. The year 2013 and 2017 miles and hours of service were estimated assuming that the contract service operator will be able to increase efficiency of the service from the year 2011 level of 0.8 passengers per vehicle hour to 1.0 passenger per vehicle hour in 2017. The amount of service provided is projected to increase from 7,200 annual revenue vehicle hours in 2011 to 13,400 annual revenue vehicle hours in 2017.
- With increased service, operating expenses for the County's demand-response transportation service west of IH 94 would be expected to more than double. In 2011, the annual operating expenses for providing transportation west of IH 94 are estimated to be about \$123,000. The increase in operating costs between 2013 and 2017 are mostly related to the forecast increase in ridership and service, with inflation accounting for a small part of the increase. By the year 2017, the annual operating expense for Subalternative 1A may be expected to increase to about \$304,100, which represents an increase of 147 percent over the year 2011 level.
- The expanded eligibility and the new fare schedule proposed under the program in Table 54 would be expected to increase total passenger revenues significantly. In 2011, the passenger revenue for trips west of IH 94 is estimated to be about \$17,300. The fare schedule set forth in Table 54 was used to forecast revenues for 2013 to 2017. By the year 2017, the annual passenger revenue for Sub-alternative 1A may be expected to increase to about \$42,200, which represents an increase of 144 percent.
- Even with increased passenger revenues, the total public assistance needed for the expanded service in this Sub-alternative 1A would increase because of the increased operating expenses. In 2011, the demand-response transportation service west of IH 94 is estimated to require about \$105,700 in public

Table 55

RIDERSHIP AND FINANCIAL PERFORMANCE OF SUB-ALTERNATIVES CONSIDERED UNDER ALTERNATIVE 1,
EXPANSION AND COORDINATION OF EXISTING SERVICES: 2013-2017

		Sub-alternative 1A: Expand Eligibility of Demand- Response Transportation West of IH 94		Sub-alternative 1B: Combine City/County Paratransit East of IH 94			Sub-alternative 1C: Continue/Refine Shuttle Service and Operate as Public Transit			
	Existing (2011)	g (2011) Projected		Existing (2011) Proje		ected Existing (201		1) Projected		
Operating Characteristic	County Demand- Response Service West of IH 94	2013	2017	County Non- ADA Paratransit East of IH 94	City DART paratransit levels	2013 Combined Service	2017 Combined Service	Burlington, Waterford, and Mt. Pleasant Shuttles	2013ª	2017ª
Annual Ridership	6,000	8,000	13,400	10,500	31,500	42,600	46,400	5,500	6,100	7,400
Service Provided Annual Revenue Vehicle Miles	127,000 7,200	163,300 9,200	234,600 13,400	200,600 11,100	152,800 12,800	236,600 19,400	257,500 21,100	48,100 2,900	48,100 2,900	48,100 2,900
Costs, Revenues, and Public Assistance <sup>b</sup> Operating Expenses Operating Revenues Required Public Assistance	\$123,000 17,300 \$105,700	\$167,200 24,500 \$142,700	\$304,100 42,200 \$261,900	\$215,200 30,500 \$184,700	\$537,600 198,800 \$338,800	\$829,400 245,800 \$583,600	\$977,100 257,100 \$720,000	\$144,000 9,600 \$134,400	\$146,900 10,700 \$136,200	\$159,000 13,000 \$146,000
Source of Public Assistance Funds Federal New Freedom Funds <sup>c</sup> Federal/State Transit Operating Assistance <sup>d</sup>					 \$284,900	 \$383,900	 \$505,300	\$67,200 	 \$88,900	 \$96,200
State Specialized Transportation Assistance to Counties <sup>e</sup> County Funds City of Racine Funds	\$88,100 17,600	\$118,900 23,800	\$218,200 43,700	\$153,900 30,800	  \$53,900	166,400 33,300	178,900 35,800	53,800 13,400	39,400 7,900	41,500 8,300
1					· '					
Total  Service Effectiveness and Efficiency	\$105,700	\$142,700	\$261,900	\$184,700	\$338,800	\$583,600	\$720,000	\$134,400	\$136,200	\$146,000
Passengers per Vehicle Hour Passengers per Vehicle Mile	0.83 0.05	0.87 0.05	1.00 0.06	0.95 0.05	2.46 0.21	2.20 0.18	2.20 0.18	1.9 0.11	2.1 0.13	2.6 0.15
Expense per Passenger	\$20.49	\$20.90	\$22.69	\$20.49	\$17.07	\$19.47	\$21.06	\$26.18	\$24.08	\$21.49
Revenue per Passenger	\$2.90	\$3.06	\$3.14	\$2.90	\$6.31	\$5.77	\$5.54	\$1.75	\$1.75	\$1.75
Operating Assistance per Passenger Percent of Expenses Recovered	\$17.59	\$17.84	\$19.55	\$17.59	\$10.76	\$13.70	\$15.52	\$24.43	\$22.33	\$19.74
through Revenues (percent)	14.0	15.0	14.0	14.0	37.0	30.0	26.0	7.0	7.0	8.0

<sup>&</sup>lt;sup>a</sup>Only includes ridership and service levels for a Burlington area shuttle service operated as public transit. The Waterford and Mt. Pleasant shuttles were eliminated in August of 2012.

<sup>&</sup>lt;sup>b</sup>Costs per unit of service provided are assumed to increase by 2 percent per year.

<sup>&</sup>lt;sup>c</sup>Assumes the Federal Section 5317 New Freedom funding will only be available to fund the shuttle services through year 2012.

<sup>&</sup>lt;sup>d</sup>For Alternative 1B, assumes urban transit operating assistance through Federal Section 5307 and State Section 85.20 funds will be available to cover 52.5 percent of operating expenses of the combined City/County paratransit service in 2013, followed by decreases of 0.5 percent per year over the five-year planning period (note: this is more conservative than the assumption used in developing alternatives for the Belle Urban System, which assumed that the combined Federal/State share of operating expenses would be 55.0% each year between 2013 and 2017). The City of Racine would receive a net allocation of \$30,100 through the State Section 85.205 program to support paratransit, which could be used to offset the amount of State Section 85.20 funds dedicated to paratransit service. For Alternative 1C, assumes rural transit operating expenses of the Burlington area shuttle route in 2013, followed by decreases of 0.5 percent per year over the five-year planning period.

<sup>&</sup>lt;sup>e</sup>Assumes that funding for State Section 85.21 Specialized Transportation Assistance to Counties will remain unchanged between 2012 and 2013, and then increase at 1 percent per year from 2013 to 2017. This would mean that the total 85.21 funding available for Racine County is projected to be \$419,000 in 2013 and \$436,000 in 2017. If all three sub-alternatives are implemented and funded with the Federal and State funding sources as outlined above, there would be an annual surplus of about \$94,000 in 2013, but an annual funding shortfall of about \$3,000 by year 2017.

assistance. By 2017, the expanded service would require an estimated \$261,900 in public assistance. Of that public assistance, about 83 percent could be covered by Racine County's allocation of State Section 85.21 Specialized Transportation Assistance Program for Counties. The amount of State Section 85.21 funding required for transportation west of IH 94 would increase from about \$88,100 in 2011 to \$218,200 in 2017 (Racine County will receive an estimated \$436,000 in State Section 85.21 funding in 2017). The County's share of the needed public assistance would increase from \$17,600 to \$43,700.

• The operator will need additional vehicles to accommodate the increase in demand for transportation at peak hours of the day. Based upon the ridership data developed from trip logs provided by the operator, the number of vehicles used to provide transportation west of IH 94 will need to be expanded by one additional vehicle in 2013 and a second additional vehicle by 2017. Despite the need for two additional vehicles, there would be no capital costs for the County under Sub-alternative 1A. It is assumed that the County will continue to contract with a private transportation provider using its own equipment, and the private transportation provider will purchase new vehicles when passenger demand requires it. The costs of the equipment will continue to be included in the operating costs charged by the provider.

# Racine County Sub-alternative 1B: Combine City and County Paratransit Services East of IH 94

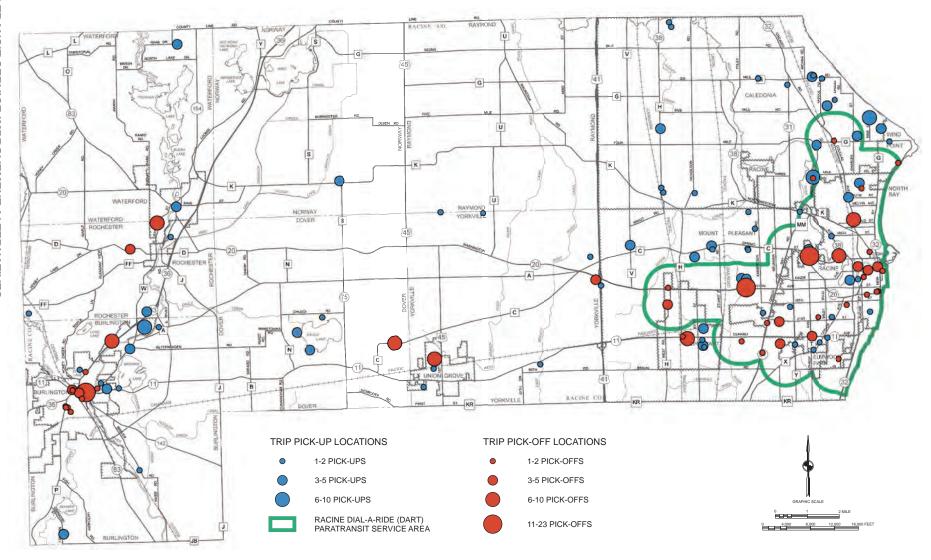
Currently, both the County and the City provide demand-response specialized transportation services east of IH 94. The City's Dial-A-Ride Transport (DART) is the Federally-mandated paratransit service provided in an area within three-quarters of a mile of the routes of the transit system. It serves people who cannot use the City's fixed-route service as a result of their physical or mental impairment. The County's demand-response transportation service provides transportation to people with disabilities outside the DART service area, and also to seniors within the DART service area. Map 36 shows the pick-up and drop-off locations for trips made on the County's demand-response transportation service from April 11-15, 2011, and Map 37 shows the distribution of trips by civil division. The two maps show that most of the trips made on the County's demand-response transportation service are made between the City of Racine and the communities that surround it. Many of these trips are made to health clinics, hospitals, senior meal sites, community centers, or agencies providing rehabilitation services within and around the City. During the week surveyed, seniors who were eligible for the County's service (but not DART) made 22 rides entirely within the City of Racine.

Under Racine County Sub-alternative 1B, the County would contract with the City DART paratransit to provide transportation for seniors and people with disabilities east of IH 94. This would create a single coordinated paratransit service for seniors and people with disabilities, thereby making it easier for both seniors and people with disabilities to travel in eastern Racine County because they would only have to deal with a single service provider. The City/County paratransit service would operate during evenings and weekends, which was identified as an unmet need in Chapter V. Most cities in Wisconsin of similar size to Racine coordinate with the County human services agencies in their area to provide joint City and County paratransit through local public transit systems. Moreover, most of these joint paratransit services utilize operating funding from the State Section 85.21 specialized transportation assistance allocation to the County as part of the local match for the Federal and State urban transit operating assistance funds awarded to the public transit systems. For example, Kenosha County and the City of Kenosha coordinate to provide paratransit service east of IH 94, with the County contributing part of its State Section 85.21 allocation, the City contributing part of its Federal and State urban transit operating assistance funds, and both contributing local County or City funds. Table 56 summarizes how transit systems provide and fund paratransit services in selected Wisconsin communities between 50,000 and 200,000 in population.

Table 54 presents the characteristics of the combined City/County paratransit in Sub-alternative 1B. The service would operate with the same service hours as the BUS in the Americans with Disabilities Act of 1990 (ADA) paratransit service area, and more restricted hours for trips with one end outside the ADA service area. Individuals using the service would need to call the service operator the day before to make a reservation. Fares for the combined City/County paratransit service are proposed to be \$3.00 each way for most trips, and \$1.00 each way

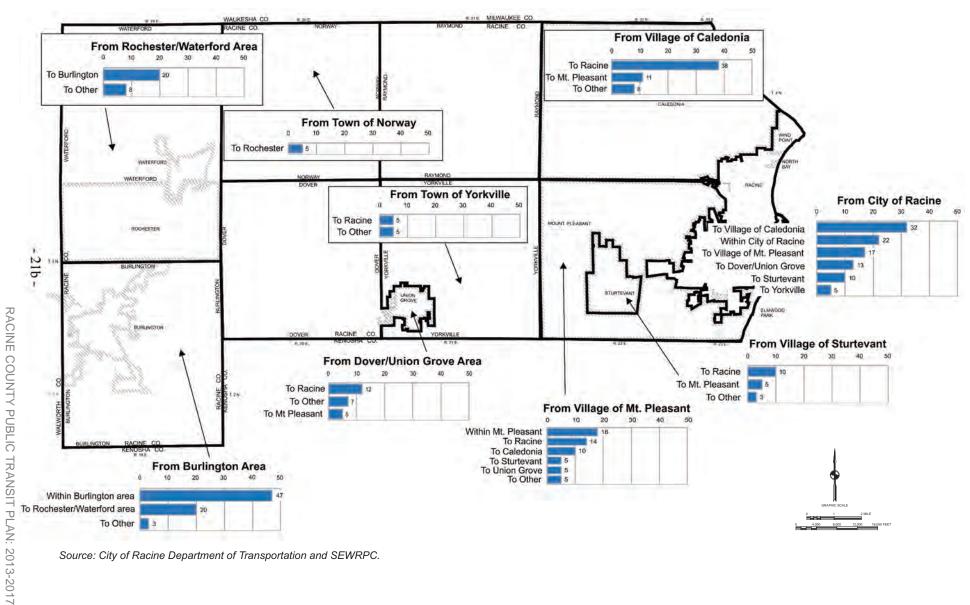
Map 36

PICK-UP AND DROP-OFF LOCATIONS ON THE RACINE COUNTY HUMAN SERVICES DEMAND-RESPONSE TRANSPORTATION SERVICE: APRIL 11-15, 2011



Source: City of Racine Department of Transportation and SEWRPC.

**Map 37** DISTRIBUTION OF ONE-WAY TRIPS MADE ON THE RACINE COUNTY HUMAN SERVICES DEMAND-RESPONSE TRANSPORTATION SERVICE BY CIVIL DIVISION: APRIL 11-15, 2011



Source: City of Racine Department of Transportation and SEWRPC.

Table 56

CHARACTERISTICS OF PARATRANSIT SERVICES IN SELECTED WISCONSIN COMMUNITIES WITH POPULATIONS OF 50,000 - 200,000: 2009

			Annual R	idership	Sources of Ope	erating Funding	
Transit System	Paratransit Service Area Population	Description of the Service	Trips on Combined Paratransit Service <sup>a</sup>	Trips that are ADA- Paratransit Eligible <sup>b</sup>	Share of Operating I	Expenses	Percent of Total
Belle Urban	93,500	Service Area: Within 3/4 mile of fixed routes.		35,000	Passenger Revenues:	\$137,000	21.0
System (Racine)		<ul> <li>Who can use: People with disabilities<sup>c</sup></li> <li>City/County cooperation: County gives City extra s.85.21 funds not needed for County specialized transport services.</li> </ul>			State and Federal Urban Transit Assistance: State s.85.21 funds:	380,000 68,000	58.5 10.5
		Operator: Belle Urban System			County:	0	0
					Municipality/ies: Total Expenses	65,000 \$650,000	10.0
Eau Claire Transit	99,000	<ul> <li>Service Area: Eau Claire County</li> <li>Who can use: Seniors or people with disabilities<sup>c</sup></li> </ul>	75,000	Data not available	Passenger Revenues: State and Federal Urban Transit	\$220,000	16.0
		<ul> <li>City/County cooperation: County and City both contribute funding.</li> </ul>			Assistance:	812,000	58.0
		Operator: Tender Care Transport			State s.85.21 funds:	144,000	10.0
		operator. Tender date Transport			County:	40,000	3.0
					Municipality/ies:	<u>174,000</u>	12.5
Green Bay	174,800	Service Area: Within 3/4 mile of fixed routes.		60,000	Total Expenses:  Passenger Revenues:	\$1,390,000 \$252,000	17.5
Metro	174,800	<ul> <li>Service Area: Within 3/4 mile of fixed routes.</li> <li>Who can use: People with disabilities<sup>c</sup></li> <li>City/County cooperation: None.</li> </ul>		69,000	State and Federal Urban Transit	\$232,000	17.5
		Operator: Green Bay Metro			Assistance:	842,000	58.5
					State s.85.21 funds:	0	0
					County:	0	0
					Municipality/ies:	346,000	24.0
	405.000	0 1 1 1 1 1 1 1 1 1 1 1 1	20,000	D-44	Total Expenses:	\$1,440,000	44.0
Kenosha Area Transit	125,000	<ul> <li>Service Area: East of IH 94</li> <li>Who can use: People with disabilities<sup>c</sup></li> <li>City/County cooperation: County and City both contribute funding.</li> </ul>	22,000	Data not available	Passenger Revenues: State and Federal Urban Transit Assistance:	\$45,000 144,495	11.0 35.0
		Operator: Kenosha Achievement Center			State s.85.21 funds:	143,000	35.0
					County:	47,000	11.0
					Municipality/ies:	<u>32,505</u>	8.0
					Total Expenses:	\$412,000	
La Crosse Municipal Transit Utility	78,000	<ul> <li>Service Area: Within 3/4 mile of fixed routes.</li> <li>Who can use: People with disabilities<sup>c</sup></li> <li>Cooperation: The County and the City have</li> </ul>	85,000	26,000	Passenger Revenues: State and Federal Urban Transit	\$740,000	67.0
		separate contracts with First Transit for specialized transportation. First Transit co-			Assistance:	360,000	33.0
		mingles paratransit riders with human			State s.85.21 funds:	0	0
		service agencies clients. The Family Care provider pays the full cost for their clients,			County:  Municipality/ies:	0	0
		resulting in high fare revenues.  Operator: First Transit			Total Expenses:	\$1,100,000	
Metro Ride	85,000	Service Area: Within MPO planning	28,000	7,000	Passenger Revenues:	\$144,000	23.0
(Wausau)		<ul> <li>boundary</li> <li>Who can use: People with disabilities<sup>c</sup></li> <li>City/County cooperation: County and City both fund service within 3/4 mile of fixed</li> </ul>			State and Federal Urban Transit Assistance: State s.85.21 funds:	373,000 89,000	58.0 14.0
		routes. County funds service outside the 3/4-mile buffer.			County:	22,000	3.0
		Operator: Abby Vans			Municipality/ies: Total Expenses:	10,000 \$638,000	2.0

### Table 56 (continued)

			Annual R	tidership	Sources of Ope	erating Funding	
Transit System	Paratransit Service Area Population	Description of the Service	Trips on Combined Paratransit Service <sup>a</sup>	Trips that are ADA- Paratransit Eligible <sup>b</sup>	Share of Operating I	Expenses	Percent of Total
Oshkosh	71,100	Service Area: Within 3/4 mile of fixed routes.	148,000	63,000	Passenger Revenues:	\$300,000	19.0
Transit System		<ul> <li>Who can use: Seniors or people with disabilities<sup>c</sup></li> <li>Cooperation: County and City both fund service within 3/4 mile of fixed routes.         County contracts with City to provide rural elderly and disabled transportation throughout Winnebago County.     </li> <li>Operator: Oshkosh Transit System.</li> </ul>			State and Federal Urban Transit Assistance: State s.85.21 funds: County: Municipality/ies: Total Expenses:	868,000 219,000 153,000 <u>0</u> \$1,540,000	56.0 14.0 10.0 0
Shoreline	98,000	Service Area: Eastern and central part of	66,000	28,000	Passenger Revenues:	\$134,000	16.0
Metro (Sheboygan)	30,000	county. Outside the urban area, transportation is centered around meal sites.  Who can use: Seniors or people with disabilities	00,000	20,000	State and Federal Urban Transit Assistance:	377,000	44.0
		City/County cooperation: County gives the			State s.85.21 funds:	269,000	31.0
		City all of its s.85.21 funds and matching			County:	77,000	9.0
		County tax levy. In return, Shoreline Metro's paratransit service provides transportation for all the County's elderly and disabled transportation needs.			Municipality/ies: Total Expenses:	<u>0</u>	0
		Operator: Shoreline Metro.				\$857,000	
Valley Transit (Appleton, Menasha, Neenah)	188,000	<ul> <li>Service Area: Within 3/4 mile of fixed routes.</li> <li>Who can use: People with disabilities<sup>c</sup>, and seniors in Calumet and Outagamie Counties</li> </ul>	162,000	73,000	Passenger Revenues: State and Federal Urban Transit	\$550,000	22.0
110011411)		City/County cooperation: Outagamie,     Calumet, and Winnebago Counties provide			Assistance:	1,444,000	58.5
		the local funding for the urban paratransit			State s.85.21 funds:	233,000	9.0
		service. Calumet and Outagamie Counties also fund additional transportation to			Counties:	164,000	7.0
		seniors.			Municipality/ies: Total Expenses:	<u>79,000</u>	3.0
		Operator: Running, Inc.			Total Expenses.	\$2,470,000	
Waukesha	70,000	Service Area: Within 3/4 mile of fixed routes.		23,000	Passenger Revenues:	\$97,000	19.0
Metro Transit		Who can use: People with disabilities <sup>c</sup> City/County cooperation: None.     Operator: Woulkeshe Metre.			State and Federal Urban Transit Assistance:	304,000	58.0
		Operator: Waukesha Metro			State s.85.21 funds:	0	0
					Counties:	0	0
					Municipality/ies:	119,000	23.0
					Total Expenses:	\$520,000	

<sup>&</sup>lt;sup>a</sup>In this table, "combined paratransit service" refers to the combined specialized transportation services provided jointly by the City and the County, where applicable. The riders may include seniors or other individuals that are not certified as eligible for paratransit service under the Americans for Disabilities Act of 1990, as amended.

Source: SEWRPC.

for senior nutrition trips. The January 2012 fare for the City's DART service is \$3.00 each way, and the current fare for Racine County's demand-response service is \$2.50 each way. The City would continue its policy of charging Community Care an agency rate of \$18.00 (\$15.00 plus the \$3.00 fare) for trips made by their clients, who are mostly seniors and people with disabilities that are enrolled in long-term care services and programs. Under this proposal, the County would contract with the City to provide transportation to seniors or people with disabilities who need transportation outside the ADA paratransit service area at a rate of \$18.00 per trip. Alternatively, Racine County could also agree to pay for a certain amount of the total cost of the joint paratransit service, which is how Kenosha County and the City of Kenosha combine funding. Under their agreement, if the

<sup>&</sup>lt;sup>b</sup>In this table, "trips that are ADA-paratransit eligible" refers to only those trips that are required under the Americans for Disabilities Act of 1990, as amended (ADA). The ADA requires public transit agencies to provide demand-response transportation for people with disabilities who cannot use the fixed bus routes as a result of physical or mental impairment within three-fourths of a mile of the fixed routes of the transit system.

<sup>&</sup>lt;sup>c</sup>In this table, "people with disabilities" refers to only those persons who are unable, as a result of physical or mental impairment, to used fixed bus routes, as prescribed under the Federal Americans with Disabilities act of 1990, as amended.

joint paratransit service has unexpected increases in costs, the City of Kenosha is responsible for paying the extra expense. Should a similar arrangement be pursued, Racine County and the City of Racine would need to reach agreement on how unexpected increases in costs would be covered.

It should be noted that, while Sub-alternative 1B proposes that the County contract with the City DART paratransit to provide transportation for seniors and people with disabilities east of IH 94, another option may be for the City to instead contract with the County to provide this transportation. Under this option the County would need to ensure that the County paratransit service in eastern Racine County meets Federal ADA requirements for the provision of demand-response transportation service within the Federally-mandated BUS paratransit service area, that is, the area within three-quarters of a mile of the routes of the City transit system. The County could continue to contract with a private operator to provide the service, but would need to modify the operator's contract to reflect the service area changes and ADA requirements for the City transit system.

Combining the City and County paratransit services east of IH 94, although potentially desirable, is a complex undertaking. A potential first step, which could have benefits to the County, the City, and users of both paratransit services, would be the establishment of an integrated call center providing a single point of contact for information and/or dispatching for users of both the City services and the County services. Exploring this call center would require coordination between the City and County in terms of location, staffing, and the specific functions of the call center.

The ridership and financial performance of Sub-alternative 1B was presented in Table 55. The following key points summarize the information in Table 55:

- Commission staff forecast that combining the City and County paratransit services east of IH 94 would increase total ridership, from about 42,000 trips on the existing two services in 2011, to about 42,600 trips on the combined service in 2013. The increased fare for paratransit service would minimize the effect that expanded service hours would have on ridership during the first year. The forecast year 2017 ridership on the combined paratransit service (46,400 one-way trips) would be 10 percent higher than the 2011 level.
- The service levels operated by the City DART paratransit (which would operate the new combined service) would need to increase significantly in order to accommodate the additional trips generated by the expanded service area and senior riders. However, the annual revenue vehicle hours and miles provided in 2013 by this combined paratransit service to be operated by DART would be significantly less than the sum of the hours and miles of service provided by the existing DART and County services in 2011. The year 2013 and 2017 estimates of miles and hours of service provided are based on an assumption that the combined service operated by DART will be able to carry 2.2 passengers per revenue vehicle hour and 0.18 passengers per revenue vehicle mile. Those two service efficiency levels are comparable to the levels observed in the other transit systems in Table 6-12, including the combined paratransit service operated in eastern Kenosha County.
- With increased service levels for DART, operating expenses and revenues for the combined paratransit service east of IH 94 would be expected to increase. In 2011, the sum of the expenses for the existing two services was estimated to be about \$752,800. The combined paratransit service would cost about \$829,400 to operate in year 2013. The annual operating cost would increase to about \$977,100 by the year 2017, about 30 percent higher than the year 2011 level. This significant increase is attributed to the fact that the combined paratransit service would necessarily be operated by the drivers for the BUS. The BUS's costs per revenue hour for operating the City's DART paratransit are much higher than the cost per revenue vehicle hour of the current private contractor (First Transit, Inc.) for the County's demand-response service. The efficiencies gained in the number of passengers per vehicle hour would be nearly cancelled out by the higher cost per hour for the BUS.
- The fare structure proposed for the combined paratransit service identified in Table 54 would be expected to slightly increase the revenues generated per passenger. In 2011, the fare for both the County demand-response transportation and the City's DART was \$2.50 per one-way trip, and the sum of passenger

revenues for the existing two services is estimated to be about \$229,200. Using the fares proposed in Table 54 to forecast passenger revenues for 2013 through 2017, the annual passenger revenue for the combined paratransit service would be expected to increase to \$257,100 by 2017, an increase of 13 percent over the year 2011 level.

- Total public assistance needed for the combined paratransit services in Sub-alternative 1B would also increase. In 2011, the public assistance required for both the County's demand-response transportation east of IH 94 and the DART paratransit service totaled about \$523,500. By 2017, the combined paratransit service would require an estimated \$720,000 in public assistance. Of that amount, a portion could be covered by Racine County's allocation of State Section 85.21 specialized transportation assistance funds, the current source of funding for the demand-response transportation service. Subalternative 1B proposes that the County and City share the expenses by having the County pay the City an "agency rate" of \$18.00 per trip for all seniors using the service, as well as all trips made by people with disabilities that are outside the BUS's mandatory paratransit service area. The \$18.00 is equal to the rate currently charged by the City for Community Care clients, and slightly more than the \$17.60 in operating assistance per passenger currently required on the County's demand-response transportation service. Under Sub-alternative 1B, the amount of State Section 85.21 funding required for the County's demandresponse transportation service east of IH 94 would increase from about \$154,000 in 2011 to \$179,000 in 2017, and the County contribution would increase from \$30,800 to \$35,800. The remainder of the public assistance would come from Federal and State urban transit operating assistance, with the combined Federal and State share of operating expenses of the combined City/County paratransit service assumed to be 52.5 percent in 2013, followed by decreases of 0.5 percent per year over the five-year planning period, as discussed in Figure 11. The City would not be expected to need the full amount of the Federal and State urban transit operating assistance for the combined paratransit service, because of the shared costs between the City and the County. The City would be expected to need Federal and State urban transit operating assistance to cover about 46.3 percent of operating expenses in 2013 and 51.7 percent in 2017.
- The cost of the vehicle purchases required for the combined City/County paratransit service under Subalternative 1B are presented in Table 57. The current DART service operates seven paratransit vehicles that were purchased in 2009. Those vehicles have a service life of five years, and will need to be replaced starting in 2014. Under the combined City/County paratransit service, the BUS would need to acquire seven additional vehicles to serve the increased demand. These seven additional vehicles would cost an estimated \$377,300 in 2013. Given that these vehicles would be used to provide public transportation services, they would qualify for funding with Federal transit capital assistance. In particular, these vehicles could qualify for 80 percent Federal funding under the FTA's Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program (a consolidation of FTA's Section 5310 and 5317 programs under MAP-21) because they would be used to provide transportation beyond ADA requirements. Sub-alternative 1B assumes that the County would contribute toward the local (non-Federal) share of the seven additional vehicles needed to provide service beyond the Federally-required paratransit service with \$62,900 of the State Section 85.21 specialized transportation assistance allocated to Racine County, and with another \$12,600 of County tax levy funds.

# Racine County Sub-alternative 1C: Continue/Refine Shuttle Service and Operate as Public Transit

In 2011, Racine County initiated funding to operate a program called Shuttling People Around Racine County (SPARC), providing shuttle service in several locations in the County. Three initial SPARC shuttle routes with varying days of service were operated in the Burlington, Mt. Pleasant, and Waterford areas, and are displayed on Map 38. In August of 2012, the County determined to eliminate two of the shuttles (Waterford and Mt. Pleasant) due to low ridership and decided to increase service on the Burlington shuttle, which had experienced higher ridership.

The County contracts with Kenson Enterprises to operate the SPARC shuttle service, which is operated as a "flex-route" service, meaning the vehicles can (upon request) deviate a short distance off the identified route to pick up and drop off passengers. The shuttle is aimed at providing transportation for seniors or people with disabilities in

Table 57

CAPITAL PROJECT EXPENDITURES REQUIRED FOR SUB-ALTERNATIVE 1B:
COMBINED CITY/COUNTY PARATRANSIT SERVICE EAST OF IH 94

Year	Capital Equipment	Quantity	Unit Cost <sup>a</sup>	Total Cost <sup>a</sup>			
2013	Additional Paratransit Buses Required for Combined City/County Paratransit Service	7	\$53,900	\$377,300			
2014	Replacement Paratransit Buses Required for Existing City Paratransit Service	3	\$55,000	\$165,000			
2015	Replacement Paratransit Buses Required for Existing City Paratransit Service	4	\$56,000	\$224,000			
2016			= =	-			
2017							
	Total 14						
Federal Sha	Federal Share of Costs <sup>b</sup>						
State Share	of Costs <sup>c</sup>			62,900			
City Share of	of Costs <sup>d</sup>			77,800			
County Sha	re of Costs			12,600			
Average An	nual Costs over Planning Period						
Total Cost	\$153,300						
Federal S	122,600						
State Sha	12,600						
City Share	15,600						
County Sh	nare	·····		2,500			

<sup>&</sup>lt;sup>a</sup>Costs are expressed in estimated year of expenditure dollars.

areas not served by public transit, but there are no formal eligibility restrictions on using the service. Most of the funding provided to run the SPARC program has come from the State Section 85.21 specialized transportation assistance program and the former Federal Section 5317 New Freedom program (now part of FTA's Section 5310 program). The primary focus of these State and Federal programs is serving the needs of seniors and/or people with disabilities. However, the services funded through these programs can be open to the general public, if sufficient unused capacity exists.

From June of 2012 through January of 2013, the County also operated a cross-county shuttle with Federal Section 5317 New Freedom funding, called the Racine County Link. The Link, open to the general public, was designed to serve cross-county trips between the City of Racine, the Village of Union Grove, and the Burlington/Rochester areas. The County eliminated the Link because it did not receive Section 5317 funding for 2013. Map 39 shows the initial Racine County Link route and also shows a possible alternative cross-county route that the County could consider implementing should funding become available. The alternative route would provide two-way out-and-back service instead of the Link's initial one-way loop routing in order to improve the efficiency and attractiveness of the route. The initial route provided service to a larger area, but passengers had to travel in a loop, resulting in higher individual travel times and indirect and inconvenient travel to some destinations on the route.

<sup>&</sup>lt;sup>b</sup>Assumes 80 percent of the total capital costs of the vehicles needed to provide the combined paratransit service would be funded through the Federal Transit Administration Section 5307, 5309, and 5310 grant programs.

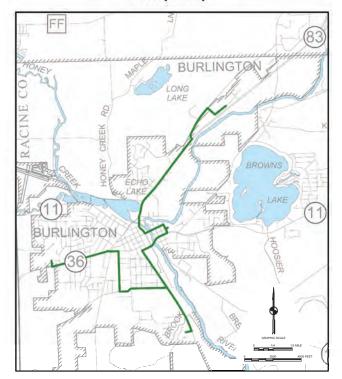
<sup>&</sup>lt;sup>c</sup>Reflects funds allocated to Racine County under the State Section 85.21 specialized transportation assistance for counties. It was assumed that about \$12,600 or 3 percent, of the County's assumed total annual allocation of about \$420,000, would be used or set aside each year from 2013 through 2017 to help fund the local share of the cost of the seven additional vehicles needed to provide the combined paratransit service.

<sup>&</sup>lt;sup>d</sup>The City would need to pay the local share (20 percent) of the replacement cost for the seven vehicles currently used to provide the DART paratransit service, regardless of whether the City and County decide to combine paratransit service east of IH 94.

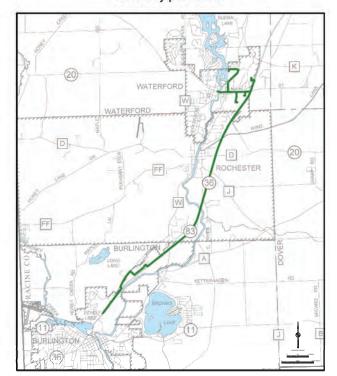
Map 38

# INITIAL SHUTTLE ROUTES PROVIDED BY RACINE COUNTY UNDER THE SPARC PROGRAM IN 2011

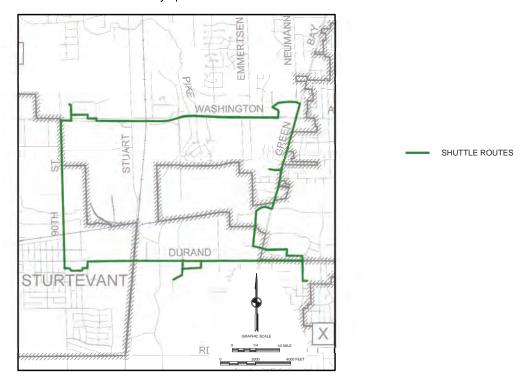
Burlington SPARC Service Monday-Friday



Waterford SPARC Service One Day per Week



Mt. Pleasant SPARC Service Five Days per Week



Source: SEWRPC.

CALEDONIA K MICHIGAN WATERFORD MOUNT PLEASANT INITIAL CROSS-COUNTY SHUTTLE ROUTE POSSIBLE ALTERNATIVE CROSS-COUNTY SHUTTLE ROUTE

Map 39
INITIAL ROUTE AND POSSIBLE ALTERNATIVE ROUTE FOR CROSS-COUNTY SHUTTLE

This Sub-alternative 1C proposes that the County continue to fund and pursue refinements to the shuttle service, including the current Burlington SPARC route. This could include modifying routes, dropping routes, and trying new routes. It also suggests that, as there may be unused capacity on the County's shuttle service, the County accommodate trips made by the general public in addition to trips by seniors and people with disabilities. The estimated service hours and characteristics of the shuttle service under Sub-alternative 1C are summarized in Table 54, assuming that the County would maintain the same general service levels and fares as the Burlington service.

The ridership and financial performance of Sub-alternative 1C was presented in Table 55. The following key points summarize the information in Table 55.

- Annual ridership on the shuttle service is projected to increase from about 5,500 estimated riders in 2011, to about 7,400 riders by the end of the planning period. The projections assume that ridership on the shuttle service will increase by about 5 percent per year.
- The current operator of the shuttle service, Kenson Enterprises, uses two non-accessible buses that can carry a total of 13 and 20 seated passengers. Federal ADA regulations require public transit operators to use vehicles that are accessible to people with disabilities, including those using wheelchairs. If the County uses Federal transit assistance to fund the shuttle service proposed under Sub-alternative 1C, the operator of the shuttle service must use wheelchair-accessible vehicles. Moreover, by year 2014, the SPARC shuttle service will likely need to use 20-passenger buses to accommodate forecast peak ridership levels. The larger vehicles would ensure sufficient seats to accommodate people with disabilities and seniors, as well as the general public. Despite the need for new vehicles, there would be no capital costs for the County under Sub-alternative 1C. It is assumed that the County will continue to contract with a private transportation operator who will provide the vehicles needed for the services under the contract.
- The shuttle service would cost an estimated \$146,900 to operate in 2013, based on continuing the existing service levels. Commission staff estimates that operating costs would increase by about 2 percent per year, which would result in total annual operating expenses of about \$159,000 by the end of the planning period. As ridership on the service increases, fare revenues would increase as well, but the total required operating assistance would still be expected to increase from about \$136,200 in 2013, to about \$146,000 by 2017.
- The shuttle service, if operated as public transit, would qualify to receive rural transit operating assistance through the Federal Section 5311 non-urbanized area formula grant program and State Section 85.20 transit operating assistance program<sup>3</sup>. The combination of Federal and State funds available through these programs may be expected to cover about 60.5 percent of operating expenses in 2013, followed by decreases of 0.5 percent per year over the five-year planning period. The local share of the operating assistance for the shuttle could come from the combination of the State Section 85.21 specialized transportation assistance allocation to the County and the County's required match under that program. The combination of these funding sources would be expected to limit the County's share of operating expenses to about \$8,000 a year between 2013 and 2017.

<sup>&</sup>lt;sup>3</sup>The Mt. Pleasant shuttle service eliminated in August of 2012 would not have been eligible for rural transit operating assistance funds, as the service is provided within the Racine urbanized area. Should the Mt. Pleasant service be reinstated it could potentially receive FTA Section 5310 funding if the County can make the case that the service is targeted at improving mobility for people with disabilities.

Table 58

### PROPOSED OPERATING CHARACTERISTICS UNDER ALTERNATIVE 2: SHARED-RIDE TAXI SERVICE WEST OF IH 94

Operating Characteristic	Proposed Under Shared-Ride Taxi
Service Administration	County would administer funding and policies and would provide vehicles, but would contract with private transit operator for service operation.
Service Area	Trips that start or end in Racine County west of IH 94
Eligibility Requirements	Open to the public. Trips by seniors or people with disabilities would continue to be provided.
Response Time	1-day advance reservation
Service Periods	
Weekdays	5:00 a.m 7:00 p.m.
Saturdays	5:00 a.m 6:00 p.m.
Sundays and Holidays	No service
Vehicle Requirements	
For Peak Service	
With existing system in 2011	4
With proposed system in 2013	10 <sup>a</sup>
Total vehicles needed by 2017	10 <sup>a</sup>
Vehicle Fleet Composition	
Wheelchair-accessible full-size mini-van	1
Wheelchair-accessible medium bus	1
Wheelchair-accessible full-size mini-bus	3
Automobiles	5
Passenger Fares <sup>b</sup>	
Cash Fares per One-Way Trip	Adult Students Seniors/Disabled
5.0 miles or less	\$4.00 \$3.00 \$2.50
5.1 to 10.0 miles	5.25 4.25 3.50
10.1 to 15.0 miles	6.50 5.50 4.50
15.1 and over	7.75 6.75 5.50

<sup>&</sup>lt;sup>a</sup>Currently, the County contracts with a private operator (First Transit) to provide demand-response transportation using its own vehicles. Under this alternative, the County would use Federal Section 5311 or 5309 capital assistance to purchase its own vehicles, which would be operated by the contractor.

Source: SEWRPC.

### Racine County Alternative 2: Shared-Ride Taxi Service West of IH 94

The current demand-response transportation service for seniors and people with disabilities provided by the Racine County Human Services Department was described in detail under Alternative 1. The County contracts with First Transit to operate the service, which is limited to people who are seniors (age 60 and over), have a physical or cognitive disability, or are a mental health client. The demand-response transportation service is also available for out-of-county trips for medical purposes.

Racine County Alternative 2 would address one of the unmet needs for transit service in the western part of the County by replacing the current, eligibility-limited demand-response transportation service with a public shared-ride taxi program. Under this alternative, anyone could use the shared-ride taxi service, with the same service area as the existing eligibility-limited service (any trips with one trip end west of IH 94, including out-of-county medical trips). The County would continue to contract with a private transit operator to provide the taxi service. Two counties in Southeastern Wisconsin currently operate rural shared-ride taxi services that are open to the public—Ozaukee and Washington Counties. Commission staff used the two Counties' taxi systems as models for the characteristics of the taxi service shown in Table 58.

<sup>&</sup>lt;sup>b</sup>The existing passenger fares are shown under Sub-alternative 1A in Table 54.

Table 59

RIDERSHIP AND FINANCIAL PERFORMANCE UNDER ALTERNATIVE 2:
SHARED-RIDE TAXI SERVICE WEST OF IH 94

	Existing Demand-	Projected Sha	red-Ride Taxi <sup>a</sup>
Operating Characteristic	Response (2011) <sup>a</sup>	2013	2017
Annual Ridership	6,000	8,700	21,300
Service Provided			
Total Annual Vehicle Hours	7,200	8,500	16,400
Total Annual Vehicle Miles	127,000	149,900	290,600
Annual Operating Costs and Revenues <sup>b</sup>			
Operating Costs	\$123,000	\$212,500	\$443,800
Passenger Revenues	17,300	37,000	90,000
Required Operating Assistance	\$105,700	\$175,500	\$353,800
Potential Sources of Public Funds			
Federal/State Rural Transit Operating Assistance <sup>c</sup>		\$128,600	\$259,600
State Specialized Transportation Assistance to Counties <sup>d</sup>	\$88,100	39,100	78,500
County Funds	17,600	7,800	15,700
Total	\$105,700	\$175,500	\$353,800
Service Effectiveness and Efficiency			
Annual passengers per vehicle-hour	0.8	1.0	1.3
Total expense per vehicle-hour	\$17.08	\$25.00	\$27.06
Total expense per passenger	\$20.49	\$24.43	\$20.84
Total revenue per passenger	\$2.90	\$4.23	\$4.23
Total operating assistance per passenger	\$17.59	\$20.20	\$16.61
Percent of expenses recovered through operating revenues	14.2	17.3	20.3

<sup>&</sup>lt;sup>a</sup>Assumes taxi service would be provided with the operating characteristics shown in Table 58.

Table 59 shows the ridership and financial performance of Racine County Alternative 2. The following points summarize the information in the table.

- Under Alternative 2, the proposal to create a public shared-ride taxi service would be expected to experience more than triple the ridership on the existing County specialized transportation service west of IH 94. In 2011, the number of one-way trips on the current service with at least one end west of IH 94 was estimated to be about 6,000 trips. The ridership forecast for 2013-2017 on the taxi service assumes that ridership would increase by 45 percent the first year of service and by 25 percent in following years, following a similar trend in ridership seen for the Ozaukee and Washington County taxi services in their first five years of operation. The ridership forecast for 2017 (21,300 one-way trips) is about 3.5 times higher than the 2011 ridership level on the County's specialized transportation service.
- The service levels would need to increase significantly in order to accommodate the additional trips on the shared-ride taxi service. The future year forecasts of miles and hours of service were estimated

<sup>&</sup>lt;sup>b</sup>Assumes total expense per vehicle-hour will increase to \$25.00 in the first year of the taxi service's operation, followed by increases of 2 percent per year.

<sup>&</sup>lt;sup>c</sup>Assumes rural transit operating assistance through Federal Section 5311 and State Section 85.20 funds will be available to cover 60.5 percent of the operating expenses of the shared-ride taxi service in 2013, followed by decreases of 0.5 percent per year over the five-year planning period.

<sup>&</sup>lt;sup>d</sup>Assumes that funding for State Section 85.21 Specialized Transportation Assistance to Counties will remain unchanged between 2012 and 2013, and then increase at 1 percent per year from 2013 to 2017. Under these assumptions, the total 85.21 funding available for Racine County would be about \$419,000 in 2013 and \$436,000 in 2017.

assuming that the operator will be able to increase the efficiency of the service from the current 0.8 passengers per vehicle hour in 2011 to 1.3 by 2017, which is comparable to the service efficiency of Washington County's taxi service after five years of operation. Even with increased efficiency, the hours and miles of service are expected to more than double. Commission staff also estimates the total cost per vehicle hour would increase from about \$17 for the existing eligibility-limited demand-response service in 2011 to about \$25 in the first year of the public shared-ride taxi service, followed by inflationary increases of about 2 percent each year. As a result of the service increase and higher unit cost of service, operating expenses for the shared-ride taxi service west of IH 94 would be expected to more than triple. In 2011, the operating expense for providing transportation west of IH 94 was estimated to be about \$123,000. By the year 2017, the annual operating expense for Alternative 2 may be expected to increase to about \$444,000, nearly four times the year 2011 level.

- The expanded ridership and new fare structure proposed under the program in Table 58 would be expected to increase total passenger revenues significantly. In 2011, the passenger revenue for trips west of IH 94 is estimated to be about \$17,300. By the year 2017, the annual passenger revenue may be expected to increase to \$90,000, or over five times higher than 2011 levels.
- Even with the increased passenger revenues, the total public assistance needed for the expanded service in this alternative would increase because of the increased operating expenses. By converting the service to public transit, the County could apply for funding under the Federal Section 5311 non-urbanized area program and the State Section 85.20 mass transit operating assistance program. The combination of Federal and State funds available through these programs may be expected to cover about 60.5 percent of operating expenses in 2013, followed by decreases of 0.5 percent per year over the five-year planning period. The local share of public assistance could be paid for in part with Racine County's allocation of State Section 85.21 specialized transportation assistance funding. The amount of State Section 85.21 and County funds required for transportation west of IH 94 would actually be expected to decrease in the first year of the public shared-ride taxi program. However, as ridership and attendant hours and miles of service and operating costs increase through the planning period, the levels of Section 85.21 and County funds would return to similar amounts in 2017 as they were 2011. Eventually, the shared-ride taxi service may be expected to require a much higher County contribution than the existing service. This is because the demand for the service would likely continue to increase beyond the five-year planning period, which would require an increase in service levels, attendant operating costs, and the County share of costs. In Ozaukee and Washington Counties, the shared-ride taxi systems have experienced steady increases in ridership and operating costs, with particularly significant increases in the first several years of operation.

The cost of vehicle purchases required for the shared-ride taxi service under this alternative are presented in Table 60. Under the County's current contract with the private operator (First Transit), the full costs of the vehicles provided by the operator to provide the service are included in the operating costs charged by the private operator. The County could continue with this arrangement, but in the long run it would likely be financially advantageous for the County to purchase the vehicles using Federal capital assistance and lease the vehicles back to the contracted operator for a nominal fee. If Racine County purchased the vehicles used for the shared-ride taxi services, it could use Federal Section 5311 funds to cover about 80 percent of the capital costs, and the contract costs for operating the taxi service would be reduced. The County would need to acquire five vehicles to operate the shared-ride taxi service by 2013, and five additional vehicles to accommodate the additional demand by 2017, for a total of 10 vehicles. The total cost of the 10 vehicles would be about \$352,200. Since the vehicles would be used to provide public transportation, they would qualify for 80 percent capital funding under the Federal Section 5311 non-urbanized area formula grant program, and the County would be responsible for only 20 percent (about \$70,400) of the cost.

## Racine County Alternative 3: Vanpools for Commuting Trips

Under Racine County Alternative 3, the County would coordinate, or encourage, the formation of vanpools for workers with long commutes who cannot use public transportation or find it very inconvenient to do so. The vanpools would be for groups of 5 to 15 people commuting together to and from work, with each member

Table 60

CAPITAL NEEDS AND COSTS UNDER ALTERNATIVE 2: SHARED-RIDE TAXI SERVICE WEST OF IH 94

Capital Equipment	Number	Number of seated passengers <sup>a</sup>	Unit Cost <sup>b</sup>	County Total <sup>b</sup>
New Taxicab Equipment Required under				
Shared-Ride Taxicab Service				
Wheelchair-accessible mini-van	3	4/1	\$38,300	\$114,900
Wheelchair-accessible mini-bus	1	7/1	51,300	51,300
Wheelchair-accessible medium bus	1	10/2	61,000	61,000
Automobiles	5	4	25,000	125,000
Total	10			\$352,200
Federal Share of Costs <sup>c</sup>				\$281,800
Local Share of Costs				70,400

<sup>&</sup>lt;sup>a</sup>Number of seated passengers are shown in the following format: "passenger seats for non-wheelchair users" / "number of wheelchair berths"

contributing to the cost of operating the van. One member of the group would volunteer to become the primary driver, usually in exchange for reduced monthly fees. Typically, the vans are owned, administered, and maintained by a third party, which could be a government agency, an employer, or a private vanpool operator. This alternative would address some of the unmet needs identified for transportation for workers with long commutes within Racine County, as well as between the City of Racine and major business parks in Milwaukee and Kenosha Counties. Vanpools are most useful to a narrowly-defined market:

- Workers whose commutes are longer than 15 miles;
- Workers who share a single employer or who work in an area with a concentrated group of employers with similar shift start- and end-times; and
- Workers who live near each other or who can independently travel to a common departure point (such as a park-ride lot).

Currently, there are no vanpool programs specifically targeted to Racine County residents or employers. The Wisconsin Department of Transportation (WisDOT) operates a Rideshare program to encourage carpooling throughout the State. Any individual can sign up for the Rideshare program by providing their contact information and commute information to the WisDOT Rideshare coordinator. They then receive a list of other people whose commuting patterns may match. Through the end of 2011, the Milwaukee County Transit System (MCTS) also operated a vanpool program with volunteer drivers and members who paid for the operating costs of the program. Under the MCTS program, one end of the vanpool trip had to be in Milwaukee County, and the volunteer drivers were responsible for ensuring the vehicles were brought in for maintenance. Most of the recruiting for vanpool members was done by the members themselves. In 2011, two vanpools operated from the City of Racine to Milwaukee County. However, MCTS terminated the vanpool program at the end of 2011 in order to dedicate all of its Federal capital funding to bus purchases. Vanpool members were advised to find other vanpool providers or transportation options.

Racine County could coordinate or encourage vanpools in two ways, which are shown and described in Table 61 as Sub-alternatives 3A and 3B. Under Sub-alternative 3A, the County would purchase five vans over four years and administer the program with County staff. Fees charged to the vanpool users would be established that would

<sup>&</sup>lt;sup>b</sup>Costs are expressed in constant 2011 dollars.

<sup>&</sup>lt;sup>c</sup>Assumes 80 percent of the total capital costs of the vehicles needed to provide shared-ride taxi service to the general public would be funded through the Federal Section 5311 nonurbanized area program.

Table 61

PROPOSED OPERATING CHARACTERISTICS OF SUB-ALTERNATIVES UNDER ALTERNATIVE 3: VANPOOLING FOR COMMUTER TRIPS

		Sub-alternative 3A:			Sub-alternative 3B:	
Characteristic		Operated Vanpool I			Operated Vanpool	
Program Administration	Administered by Range Development standarivers.	acine County Work ff and operated wit			private vanpool ser th volunteer drivers	
Eligible Users	People with work to County that could transit systems.	ips that start or end I not be made on e		No eligibility restric	ctions.	
Vehicles Used	7-passenger miniv	ans.		vans. The user of	ans or 9-to-15 pass costs estimated in that a 7-passenger mini	nis table are based
Target Trip types		rs or areas where r byed, such as large n Racine, Kenosha	e employers or			
	Trips over 20 mil	es in length.				
Driver requirements	Each vanpool must have one primary driver and one or two back-up drivers who meet specified criteria.  Criteria would include having good driving records and passing written and behind-the-wheel driving tests.		five back-up driv primary driver m	It have one primary ers who meet spec ust pass a basic cre a valid drivers' licens ng record.	ified criteria. The edit check and	
		ed, and maintain the lin exchange, the li	ne vehicles at		rs must also have h years and good driv	
User Costs/Fees	User cost is calculated based on number of people in vanpool and daily miles traveled. Monthly user fees for 40- and 60-mile round-trip commutes are below:		vanpool and dail	ated based on num y miles traveled. T and 60-mile round	ypical monthly	
	Number of vanpoolers <sup>b</sup>	40 miles <sup>c</sup>	<u>60 miles<sup>c</sup></u>	Number of paying <u>vanpoolers<sup>d</sup></u>	40 miles <sup>c</sup>	<u>60 miles°</u>
	4	\$157	\$217	4	N/A	N/A
	5	126	174	5	\$241	\$266
	6	105	145	6	201	221
				7	172	190

Note: N/A indicates data not available

Source: VPSI and SEWRPC.

cover the costs of operating the vanpools, and could be "banked" to pay off the local share of the cost of purchasing additional vehicles or replacement vehicles for the program. Milwaukee County's former vanpool program would serve as a model for this option. Under Sub-alternative 3B, the County would encourage and promote the use of vanpools with a private vanpool operator. The County would not have to make any financial commitment and the private operator would collect the fees directly from the vanpool users.

<sup>&</sup>lt;sup>a</sup>The data in Sub-alternative 3B come from information provided by VPSI, a private vanpool service company.

<sup>&</sup>lt;sup>b</sup>Excludes driver.

<sup>&</sup>lt;sup>c</sup>Round-trip daily vehicle miles.

<sup>&</sup>lt;sup>d</sup>Under the privately-operated vanpool program, the participants in each vanpool would determine whether the driver would contribute to the monthly fee.

Table 62

PROJECTED CAPITAL AND OPERATING EXPENSES UNDER SUB-ALTERNATIVE 3A:
COUNTY-OPERATED VANPOOL PROGRAM

		Year				
Expense Category	2013	2014	2015	2016	2017	Total
Capital Costs						
Purchase of 7-Passenger minivans						
Quantity <sup>a</sup>	2	1	1	1		5
Unit Price <sup>b</sup>	\$25,200	\$25,700	\$26,200	\$26,700		
Total Cost	\$50,400	\$25,700	\$26,200	\$26,700		\$129,000
Sources of Capital Funding						
Federal Share <sup>c</sup>	\$40,300	\$20,600	\$21,000	\$21,400		\$103,300
County Share	10,100	5,100	5,200	5,300		25,700
Total Cost	\$50,400	\$25,700	\$26,200	\$26,700		\$129,000
Operating Costs						
Number of Vans in Operation	2	3	4	5	5	
Operating Expenses <sup>b</sup>	\$17,000	\$23,500	\$29,800	\$36,400	\$36,800	
Operating Revenue						
From Monthly Van Feed	\$3,700	\$5,700	\$7,800	\$9,900	\$10,100	
From Mileage Fees <sup>e</sup>	17,200	23,600	29,900	36,700	37,000	
Total Revenues	\$20,900	\$29,300	\$37,700	\$46,600	\$47,100	
Annual Surplus/Shortfall in Revenues	-\$6,200	\$700	\$2,700	\$4,900	\$10,300	
Balance in Vehicle Purchase/Replacement Fund	-\$6,200	-\$5,500	-\$2,800	\$2,100	\$12,400	

<sup>&</sup>lt;sup>a</sup>Assumes that the vans will be purchased by the beginning of the year and will operate the entire year.

Table 61 shows some estimates of user fees to vanpool participants, assuming the use of 7-passenger minivans. The County-administered vanpool program proposed under Sub-alternative 3A would offer lower user fees than the privately-operated vanpools. This is primarily because Sub-alternative 3A assumes that the County would use Federal Section 5311 transit capital assistance funds to pay for 80 percent of the cost of the vans, so user fees would not need to cover the full cost of van purchase and replacement.

#### Sub-alternative 3A: County-Operated Vanpool Program

Table 62 presents more detail showing the projected capital and operating expenses under Sub-alternative 3A. It proposes that the County purchase only two vans in the first year, and more vehicles in subsequent years, in order to avoid a situation faced by Waukesha County. Waukesha County terminated a bus route serving a large industrial business park in 2009. About the same time, they purchased eight minivans with Federal American Reinvestment and Recovery Act (ARRA) stimulus funding, with the intention of providing a transportation option for the employees of those areas. The minivans were delivered at the beginning of 2011 but the County was unable to find employers and groups of employees willing to use the vans (which would cost \$575 per month) until the start of 2012.

<sup>&</sup>lt;sup>b</sup>Assumes a rate of inflation of 2 percent per year for capital and operation costs, and includes program administration, fuel, maintenance, and insurance costs.

<sup>&</sup>lt;sup>c</sup>Assumes 80 percent of the total capital costs of the minivans would be funded through the Federal Transit Administration Section 5311 funding program.

<sup>&</sup>lt;sup>d</sup>Each van would be charged a flat fee of \$150/month, which would reimburse the County for the local share of the costs of van purchases in the first three years of operation. After the vans are paid off, the funds generated by the flat van fee would be deposited into a replacement vehicle fund.

<sup>&</sup>lt;sup>e</sup>Each van would be charged a mileage fee to cover the cost of operating the vehicle. As more vans are added to the fleet, the mileage fee would be expected to decrease as the cost of administering the program would be spread across more vans.

The County's share of the capital costs under Sub-alternative 3A would be about \$10,100 to purchase the first two vans, and about \$5,000 for each minivan in subsequent years. This assumes that the County will be able to use Federal Section 5311 non-urbanized area funds. This program has restrictions on the eligibility of capital expenses depending on whether the service is for urban or rural areas, so the County would need to specify the approximate route and service area for the vanpools prior to submitting an application for funding from the program.

The operating expenses for Sub-alternative 3A would be expected to more than double between the first year of operation (when it would operate with only two vans), and 2017 (when it would operate with five vans). The operating expenses include the cost of administration, fuel, maintenance, and insurance.

Operating revenue from the fees charged to the vanpools would be designed to be sufficient to cover both annual operating expenses and the County's share of the capital costs of van purchase and replacement. Each vanpool would be charged a monthly fee of \$150 and a mileage fee which would start at about \$0.57 per mile in the first year of operation and decrease slightly in subsequent years. By year 2016, the combination of monthly van fees and mileage fees would be sufficient to repay the County for the 20 percent County share of the capital costs of the vehicles purchased between 2013 and 2015, leaving a positive balance of about \$2,100 in a vehicle purchase/replacement fund. By 2017, the County would have a balance of about \$12,400 in the vehicle purchase/replacement fund for future vehicle purchases.

#### Sub-alternative 3B: Private Vanpool Provider

Sub-alternative 3B assumes the cost of the vans and program administration would be covered by the fees charged by the vanpool operator. It would require no financial commitment on the County's part, but there would be no guarantee that the vanpool provider would provide a vehicle, especially if the provider is not confident in seeing a return on the investment. The County could work with the private vanpool provider to promote and advertise the vanpool program. However, there are several disadvantages associated with using a private vanpool company, especially if the County is considering using vanpools as a transportation solution for low-income workers. These include the following:

- The monthly user fees would be significantly higher under a private vanpool provider.
- Vanpools work best with a constant group of individuals who pay their entire monthly fee at once. They
  are harder to implement with low-income workers because many find jobs as temporary workers and are
  paid week-to-week.
- The drivers' license and credit history requirements for volunteer and back-up drivers may be harder to meet than under a County-run program.

If the County decides to work with a private vanpool provider to run a vanpool program, the County could choose to subsidize some of the user fees in the program, or to form a partnership with employers who are willing to contribute to part of the cost of the service, or to pay for additional insurance. Private vanpool operators could also assist County staff with analyses and surveys to determine employee commuting patterns and highlight groups with the potential to be organized into shared-ride arrangements.

#### Considerations when Choosing the Appropriate Transit Service(s) for Racine County

As the Advisory Workgroup and Racine County officials determine which of the above transit service alternatives are appropriate for Racine County, they should consider the following points:

1. Racine County should consider purchasing the vehicles used for providing all the County-funded transit services using Federal capital assistance that would cover 80 percent of the cost of the purchase. The County's current contracts with the private operators of the demand-response and SPARC transportation services include the costs for vehicles provided by the operators of the service. If the County purchases

the vehicles with Federal capital assistance, it could provide those vehicles to the contracted operators of the service for a nominal fee. For the demand-response transportation service for seniors and people with disabilities, the County could apply through the FTA Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities program (assuming no private nonprofit organizations are willing and able to provide the transportation service). For the transit services that are open to the general public (such as shuttles in non-urbanized areas and shared-ride taxi service west of IH 94 under Alternative 2) the County could apply through the FTA Section 5311 non-urbanized area funding program. The three advantages of Racine County purchasing the vehicles needed for the County-funded transit services are listed below:

- The County will be able to negotiate lower rates for the contractors' operating costs, because the contractors will not need to include charges for providing their own vehicles.
- Having the County purchase and provide the vehicles needed to operate the transit services has the
  potential to increase competition for the service contract and result in a decrease in the costs for the
  service contract. However, if the County provides the vehicles needed for the services, operators
  bidding on the contract will still need to provide maintenance and garage facilities for the County's
  transit vehicle fleet.
- Federal capital assistance covers 80 percent of the cost of vehicle purchases, but Federal and State operating assistance covers only between about 50 and 60 percent of operating expenses.
- 2. This chapter has identified two options for a demand-response public transit service in western Racine County (west of IH 94):
  - Expand the eligibility of the existing demand-response specialized transportation service to include any individuals receiving assistance from County agencies (Racine County Sub-alternative 1A)
  - Replace the existing demand-response specialized transportation service with a shared-ride taxi service open to the general public (Racine County Alternative 2)

The latter option would provide a service open to the entire population west of IH 94 and may be expected to have lower costs to the County in the short term, because Federal and State transit assistance would be expected to cover about 58.5 to 60.5 percent of operating expenses. In the long term (beyond the five-year planning period), the operating budget of the shared-ride taxi program would be expected to grow for several more years, as ridership continues to increase along with the necessary services levels to accommodate that ridership. The two public shared-ride taxi services operated by Ozaukee and Washington Counties have both experienced significant increases in ridership and costs, along with each County's local share, since they began operating in 1998. In 2010, the total costs of operating the Ozaukee and Washington County shared-ride taxi services were about \$1.4 million and \$2.0 million, respectively, with the two Counties each providing estimated local shares of about \$400,000. Given that the populations of Ozaukee and Washington Counties are considerably higher than the population of Racine County west of IH 94, the ridership and costs for a Racine County public shared-ride taxi service would not be expected to increase to the same level as those in Ozaukee and Washington Counties. Nevertheless, should Racine County consider implementing the public shared-ride taxi service under Alternative 2, it should be aware that once ridership has fully developed several years beyond the fiveyear planning period, the County may need to provide a local match as high as \$100,000 to \$200,000 annually.

3. The County and the City should consider combining the City and County demand-response paratransit service east of IH 94, similar to how it is provided in Kenosha County. A combined service has the following advantages:

- Combining the service will not likely have a significant financial impact on either the City or the County in the short term. Even though it will raise the operating expenses of the City's paratransit program, the absolute amount of Federal and State assistance will increase. The County's contribution would increase, but it would be paying about the same amount per rider—it would just be providing service to more riders.
- Combining the service would benefit seniors and people with disabilities who need transportation in eastern Racine County by providing a convenient, one-stop transportation service. A combined service would mean one phone number and one transportation provider, regardless of the passenger's trip origin and destination in the greater Racine area.
- Since many of the County's demand-response passenger trips start or end within the BUS service area, combining the service simply makes sense from an efficiency standpoint.

However, there are also significant drawbacks to combining the paratransit service:

- The combined paratransit service would necessarily be operated by the drivers for the BUS, rather than the County's contracted service provider for demand response service. Federal law requires municipalities receiving Federal transit aid to have labor protection agreements with strong protections for transit employees. The labor protection agreement restricts the City's ability to replace service provided by unionized transit employees with another private service. The BUS's costs per revenue hour for operating the City's DART paratransit are much higher than the cost per revenue vehicle hour of the current private contactor (First Transit, Inc.) for the County's demand-response service. The efficiencies gained in the number of passengers per vehicle hour would be nearly cancelled out by the higher cost per hour for the BUS.
- Another potential complicating factor would be achieving agreement on how the City and County will combine funding for the joint paratransit service. In particular, the City and County would need to determine how to cover unexpected increases in costs. Adding to the complication, ADA requirements stipulate that the City must provide a certain level of paratransit service within three-quarters of a mile of the routes of the transit system—a service level that is not required in the rest of the County.
- 4. By operating the County shuttle service as public transit, and applying for funding through the Federal Section 5311 non-urbanized area formula grant program, the County can limit its share of operating expenses while still improving the service. The County could also set aside some funds from the State Section 85.21 specialized transportation assistance program into a trust fund to purchase vehicles for the County-funded transportation services.
- 5. There are sufficient funds from the existing County levy, the State section 85.21 specialized transportation program, and Federal transit funding sources to adequately fund a number of the alternatives presented in this chapter to address many of the unmet needs for transit service. For example, the County could implement the following initiatives—Sub-alternative 1B (Combine City/County Paratransit East of IH 94); Sub-alternative 1C (Continue/Refine Shuttle Service and Operate as Public Transit), and either sub-alternative under Alternative 3 (Vanpools)—while maintaining their existing eligibility-limited demand-response transportation service west of IH 94. By 2017 (assuming an inflationary cost increase of 2 percent per year for the existing demand-response service west of IH 94), all four services would require an estimated \$332,000 in State Section 85.21 funds, which is well below the \$436,000 in State Section 85.21 specialized transportation funds expected to be available to the County in 2017. The total estimated County share of funds for the four services would be about \$59,000 in 2013 and \$64,000 in 2017, which is about equal to the total County share for existing services of \$62,000 in 2011.

As noted previously, the County could also consider implementing either Sub-alternative 1A (Expand Eligibility of the County Demand-Response West of IH 94) or Alternative 2 (Public Shared-Ride Taxi Service West of IH 94) in place of the existing eligibility-limited demand-response transportation service west of IH 94. Again assuming implementation of the three initiatives above, also implementing Sub-alternative 1A would result in utilizing the expected \$436,000 of State Section 85.21 funds in 2017 and increase the total estimated County share of funds for the four services to about \$65,000 in 2013 and \$103,000 in 2017—well above the existing \$62,000 in 2011. If Alternative 2 were implemented, the required amount of State Section 85.21 funds would be expected to be about \$311,000 in 2017, and the total estimated County share of funds for the four services would decrease to about \$49,000 in 2013 and \$59,800 in 2017. However, beyond 2017, a public shared-ride taxi service would be expected to continue to grow in ridership and associated service hours and miles along with the necessary State Section 85.21 funds and County share of funds, which would likely be substantially higher than the existing levels given the experiences of operating public shared-ride taxi systems in Ozaukee and Washington Counties.

## TRANSIT SERVICE ALTERNATIVES FOR TRAVEL BETWEEN RACINE AND SURROUNDING COUNTIES

This section of Chapter VI describes transit service alternatives for connecting Racine County residents and activity centers to adjacent counties for the years 2013-2017. Commission staff developed four potential alternatives for consideration by the Advisory Workgroup and City and County officials. The City and County could choose to implement any combination of these alternatives.

- Inter-County Alternative 1: Increase service frequency on the Milwaukee-Racine-Kenosha commuter bus route
- Inter-County Alternative 2: Provide local public transit service between the City of Racine and the University of Wisconsin-Parkside
- Inter-County Alternative 3: Establish express bus service between the Cities of Racine and Kenosha
- Inter-County Alternative 4: Establish commuter bus service between the City of Burlington and the Milwaukee central business district

The evaluation of existing transit services in Chapter V and the comments made at public meetings and in discussion groups identified several concerns that would be addressed with the initiatives outlined in this section. In particular, some comments made at the public meetings expressed support for restoring bus service to UW-Parkside. Some of the discussion group members were interested in seeing the existing Wisconsin Coach Lines (WCL) commuter bus route between the City of Kenosha and the Milwaukee central business district run more frequently, especially in the midday and afternoon time periods.

Currently, WCL operates the commuter bus route with seven round-trips between 5:15 a.m. and 10:30 p.m. on weekdays, mostly during the morning and afternoon peak periods, with an emphasis on providing morning service from Kenosha and Racine to the Milwaukee central business district, and evening service from the Milwaukee central business district to Racine and Kenosha. WCL also operates six round-trips between 8:15 a.m. and 10:37 p.m. on Saturdays and Sundays. The service runs every 55 to 65 minutes during peak periods and every 75 to 225 minutes during off-peak periods and on weekends.

WCL has made three recent service changes to the Milwaukee-Racine-Kenosha commuter bus route. In May of 2012, WCL reduced the number of weekday round-trips from eight to seven and eliminated service to the UW-Milwaukee campus on the route. In September of 2012, WCL began serving the UW-Parkside campus on two of its seven weekday round-trips, in both the northbound and southbound directions, when UW-Parkside classes are in session. The route extension runs over 12th Street/CTH E and 30th Avenue/Wood Road to serve UW-Parkside's Tallent Hall. In each direction, the one-way length of the entire existing route is about 44 miles and takes about 90 minutes between the Milwaukee Intermodal (Amtrak) Station and the corner of 63rd Street and 22nd Avenue in the City of Kenosha, with an additional about 4.3 miles and 15 minutes for the extension to UW-Parkside.

These recent changes to the existing service have the potential to affect the annual operating expenses and ridership of the route. Commission staff estimates that the annual ridership on the existing route in the year 2013 would be about 76,900 revenue passengers, which is slightly less than the average annual ridership of about 79,700 revenue passengers between the years 2009 and 2011. The existing service is estimated to require about 7,800 annual revenue vehicle hours and about 230,700 annual revenue vehicle miles of service. This estimated service level reflects a net decrease of about 1,000 hours and 35,200 miles compared to year 2011 levels, accounting for the reduction in weekday round-trips, the elimination of service to UW-Milwaukee, and the extension to UW-Parkside. Based on an estimated unit cost per revenue vehicle mile of about \$5.53 in the year 2013, the total operating expenses of the existing service are estimated to be about \$1.28 million, requiring about \$1.03 million in total public operating assistance. The operating assistance is funded through the State Section 85.20 urban mass transit operating assistance program, with WCL contributing the necessary local share.

### Inter-County Alternative 1: Increase Service Frequency on the Milwaukee-Racine-Kenosha Commuter Bus Route

This alternative proposes an increase to the service frequency of the WCL commuter bus route currently operating between Milwaukee, Racine, and Kenosha.

Comments made at public meetings and in discussion groups expressed support for the existing route between the City of Kenosha and the Milwaukee central business district, and indicated that the route would benefit from more frequent service, particularly in the midday and afternoon time periods. Accordingly, Alternative 1 would provide ten round-trips per weekday along the entire route beginning in 2013, instead of the seven round-trips currently provided. The three additional round-trips would be provided as one more northbound one-way trip in the morning peak period and two more northbound one-way trips in the afternoon peak period. The corresponding additional southbound one-way trips would include one trip in the midday and two trips in the evening.

Along with an increase in the service frequency of the route, Alternative 1 would include a slight route alignment change in the City of Racine to allow the addition of a stop at the Gateway Technical College campus in Racine. The current route operates between the downtown transit centers in Racine and Kenosha via Marquette Street and STH 32 in downtown Racine. The alignment change would instead operate over State Street to Main Street to Gateway Technical College, adding about 1.2 miles and two minutes to each one-way trip, still allowing a round-trip on the route to be completed in about 3 hours and 30 minutes. Table 63 presents the operating and service characteristics for Alternative 1 in comparison to the existing service. Map 40 shows the existing route alignment of the Milwaukee-Racine-Kenosha commuter bus route between Racine and Kenosha along with the proposed alignment change in downtown Racine that would accompany the increased service frequency on the route.

Impacts on Ridership and Financial Performance: Table 64 presents the forecast ridership and financial performance of Alternative 1 in year 2017, after about four years of operation, compared to the existing service. Under Alternative 1, Commission staff would expect the increased service frequency from adding three weekday round-trips to increase annual ridership by about 19,200, to about 96,100 revenue passengers. Increasing the weekday service frequency would also be expected to increase the annual revenue vehicle hours by about 3,100 hours, to 10,900, and the annual revenue vehicle miles by about 87,500 miles, to about 318,200. Based on an estimated unit cost per revenue vehicle mile of about \$6.23 in the year 2017, the total operating expenses of the existing service are estimated to be about \$1.44 million. The increased service frequency under Alternative 1 would be expected to increase the total annual operating expenses by about \$545,000, to \$1.98 million, requiring an estimated additional \$483,000 in total public operating assistance. Federal Section 5307 program funds and State Section 85.20 urban mass transit operating assistance program funds may be assumed to cover about \$275,000 of the additional total public operating assistance, resulting in an increase in required local match of about \$208,000. The additional local match would likely need to be provided by WCL or by the Cities of Racine and Kenosha.

<u>Considerations</u>: Alternative 1 would provide additional service to Milwaukee and Kenosha and increase travel options for City of Racine and Racine County residents at times when there is an apparent need for more frequent service. This service improvement has the potential to significantly increase ridership on the route. However, it is recognized that the additional local funding required from WCL or the Cities of Racine and Kenosha may not be available given their current financial constraints.

Table 63

SERVICE CHARACTERISTICS OF ALTERNATIVE 1:
INCREASE SERVICE FREQUENCY OF MILWAUKEE-RACINE-KENOSHA COMMUTER BUS ROUTE

Service Characteristic	Existing Service on Milwaukee-Racine- Kenosha Route	Increase Service Frequency of the Milwaukee-Racine-Kenosha Route
Round-trip Route Length (miles)	96.6	99.0
Round-trip Route Length between Racine and Kenosha (miles)	33.0	35.4
Round-trip Route Time	3 hours 30 minutes	3 hours 30 minutes
Round-trip Route Time between Racine and Kenosha	86 minutes	90 minutes
Service Hours		
Weekday	5:15 a.m 10:30 p.m.	5:15 a.m 10:30 p.m.
Saturday	8:15 a.m 10:37 p.m.	8:15 a.m 10:37 p.m.
Sunday	8:15 a.m 10:37 p.m.	8:15 a.m 10:37 p.m.
Number of Round-trips per Weekday	7	10
Service Frequency		
Weekday	Varies from 55 minutes to 225 minutes	Varies from 55 minutes to 190 minutes
Saturday	Varies from 75 minutes to 225 minutes	Varies from 75 minutes to 225 minutes
Sunday	Varies from 75 minutes to 225 minutes	Varies from 75 minutes to 225 minutes
Passenger Fares	\$2.00 - \$4.25 Base Adult Cash Fare (depending on distance traveled)	\$2.00 - \$4.25 Base Adult Cash Fare (depending on distance traveled)
Vehicle Requirements		
Weekday	2	4
Saturday	3	3
Sunday	3	3

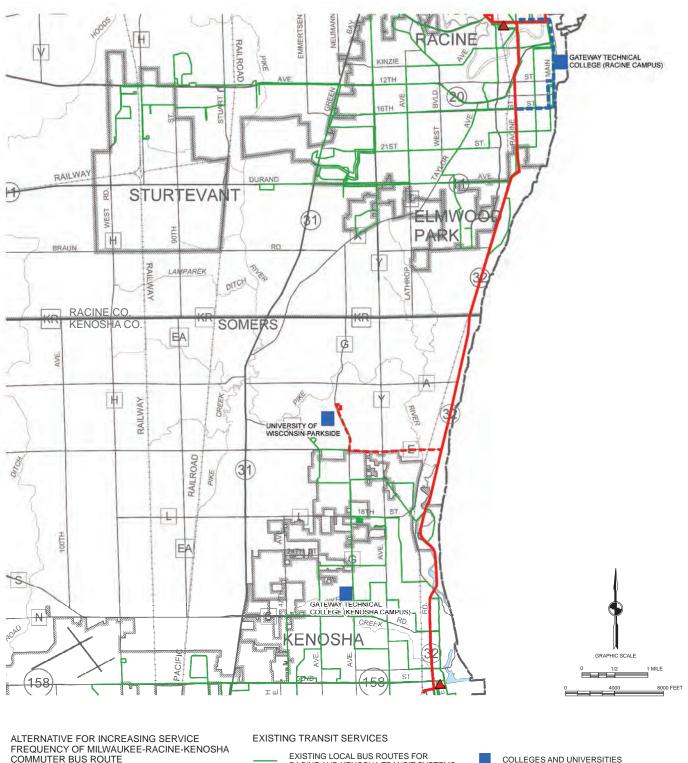
Regardless of whether or not Alternative 1 is implemented, and the service frequency is increased on the Milwaukee-Racine-Kenosha commuter bus route, the City of Racine should consider taking steps to integrate the route with existing BUS routes. These steps would promote coordination between commuter and local transit services by making it easier and more attractive to use the two services. Possible actions to consider may include:

- Add the commuter route alignment to the BUS route map and request that the City of Kenosha also add the alignment to the Kenosha Area Transit (KAT) route map.
- Establish consistent charges for transfers between the commuter route and the local routes of the Racine and Kenosha transit systems.
- Provide information about the commuter route and its schedule at the Racine Transit Center and on the Kenosha and Racine transit system websites and anywhere else information about the two Cities' transit systems is displayed.

## Inter-County Transit Service Alternative 2: Provide Local Public Transit Service to the University of Wisconsin-Parkside Campus

Under this alternative, the City of Racine would operate local public transit service between the City of Racine and the UW-Parkside campus in Kenosha County. The local share of the service would most likely be funded from the University's operating budget or student fees.

Map 40 **ALTERNATIVE 1: INCREASE SERVICE FREQUENCY OF** MILWAUKEE-RACINE-KENOSHA COMMUTER BUS ROUTE



FREQUENCY OF MILWAUKEE-RACINE-KENOSHA COMMUTER BUS ROUTE

ALTERNATIVE 1, ALIGNMENT CHANGE TO COMMUTER BUS ROUTE TO ACCOMPANY INCREASED SERVICE FREQUENCY

EXISTING LOCAL BUS ROUTES FOR RACINE AND KENOSHA TRANSIT SYSTEMS

EXISTING MILWAUKEE-RACINE-KENOSHA COMMUTER BUS ROUTE

EXISTING EXTENSION TO UW-PARKSIDE

**COLLEGES AND UNIVERSITIES** 

BUS TRANSIT CENTER

Source: SEWRPC.

Table 64

RIDERSHIP AND FINANCIAL PERFORMANCE OF ALTERNATIVE 1:
INCREASE SERVICE FREQUENCY OF MILWAUKEE-RACINE-KENOSHA COMMUTER BUS ROUTE

Operating Characteristic	Existing Service on Milwaukee-Racine- Kenosha Route (2017 <sup>a</sup> )	Increase Service Frequency of the Milwaukee-Racine- Kenosha Route (2017 <sup>a</sup> )
Annual Revenue Passengers	76,900	96,100
Service Provided		
Annual Revenue Vehicle Hours	7,800	10,900
Annual Revenue Vehicle Miles	230,700	318,200
Operating Costs, Revenues, and Public Assistance		
Total Annual Operating Expenses <sup>b</sup>	\$1,436,400	\$1,981,400
Total Annual Operating Revenues	246,000	307,600
Required Public Assistance	\$1,190,400	\$1,673,800
Potential Sources of Public Operating Assistance		
Federal/State Share of Operating Expenses <sup>c</sup>	50.5	50.5
Federal/State Transit Operating Assistance	\$725,400	\$1,000,600
Other/Local Match <sup>d</sup>	465,000	673,200
Total	\$1,190,400	\$1,673,800
Service Effectiveness and Efficiency		
Passengers per Revenue Vehicle Hour	9.9	8.8
Passengers per Revenue Vehicle Mile	0.33	0.30
Expense per Passenger	\$18.69	\$20.62
Revenue per Passenger	\$3.20	\$3.20
Operating Assistance per Passenger	\$15.49	\$17.42
Percent of Expenses Recovered through Revenues	21.0	18.0

<sup>&</sup>lt;sup>a</sup>The table displays the forecast ridership and estimated public funding in the year 2017 of the existing service and after four years of operating under Alternative 1, assuming fully developed ridership under the alternative.

Currently, the University Police operate a shuttle within the UW-Parkside campus on weekdays when class is in session. The shuttle also makes two round-trips between the UW-Parkside campus and the McDonald's located at the intersection of Taylor Avenue and Meachem Road in the City of Racine (the terminus of BUS Route No. 1) as part of its daily route. Of the shuttle's total annual budget (about \$60,000), the shuttle between the campus and the City of Racine costs about \$11,000. Assuming an annual inflation rate of about 2 percent per year, the existing shuttle service is expected to cost about \$12,200 to operate in 2017. The service characteristics for the existing shuttle service are presented in Table 65, along with the service characteristics for two sub-alternatives for providing local public transit service to the UW-Parkside campus and one sub-alternative for extending and increasing the existing University shuttle service:

• Sub-alternative 2A: Operate a shuttle between Regency Mall and UW-Parkside using a BUS paratransit vehicle

<sup>&</sup>lt;sup>b</sup>The operating expenses were calculated assuming the 2017 cost per revenue vehicle mile would be \$6.23.

<sup>&</sup>lt;sup>c</sup>For Alternative 1, assumes urban transit operating assistance through Federal Section 5307 and State Section 85.20 funds will be available to cover 50.5 percent of operating expenses of the increased service frequency in 2017, more conservative than the assumption used in developing alternatives for the Belle Urban System, which assumed that the combined Federal/State share of operating expenses would be 55.0 percent in 2017.

<sup>&</sup>lt;sup>d</sup>The "Other/Local Match" refers to funding provided by Wisconsin Coach Lines, local or County government, or from the UW-Parkside operating budget or student fees.

Table 65

SERVICE CHARACTERISTICS OF SUB-ALTERNATIVES UNDER ALTERNATIVE 2:
PROVIDE LOCAL PUBLIC TRANSIT SERVICE TO THE UNIVERSITY OF WISCONSIN-PARKSIDE CAMPUS

Service Characteristic	Existing Shuttle Service to UW-Parkside Campus (2011-2012 School Year)	Sub-alternative 2A: Operate a Shuttle between Regency Mall and UW- Parkside using a BUS Paratransit Vehicle (2017)	Sub-alternative 2B: Extend the Proposed BUS Route No. 1S to Serve UW- Parkside (2017)	Sub-alternative 2C: Extend and Increase Existing Shuttle Service to UW-Parkside Campus (2017)
Round-trip Route Length (Length of Extension)	6.9 miles	8.6 miles	7.0 miles <sup>a</sup>	8.6 miles
Service Hours	7:30 a.m. – 6:00 p.m.	7:30 a.m. – 9:10 p.m.	7:00 a.m. – 6:00 p.m.	7:30 a.m. – 6:00 p.m.
Number of Trips on School Days	2 round-trips	Round-trip every 2 hours / 6 round-trips per day	15.5 round-trips	3 round-trips
Passenger Fares	Free for UW-Parkside Students and employees	\$2.00 Base Adult Cash Fare (same as all BUS routes)	\$2.00 Base Adult Cash Fare (same as all BUS routes)	Free for UW-Parkside Students and employees
Vehicle Requirements	(1) 22-passenger University paratransit bus	(1) additional 25-foot BUS paratransit bus	(1) additional 35-foot BUS urban transit bus	(1) 22-passenger University paratransit bus

<sup>&</sup>lt;sup>a</sup>The extension of Route No. 1 to the UW-Parkside campus would increase round-trip route miles on Route No. 1 by about 7.0 miles. The full round-trip length of the extended route would increase from 13.8 miles as proposed in the recommended transit system to 20.8 miles with the extension to the UW-Parkside campus.

- Sub-alternative 2B: Extend the proposed BUS Route No. 1S to serve UW-Parkside
- Sub-alternative 2C: Extend and increase the existing UW-Parkside shuttle service

Map 41 shows the proposed alignments for each of the sub-alternatives, along with the alignments of the existing transit services in the Cities of Racine and Kenosha.

Between 1975 and 2006, the City operated BUS Route No. 9 between downtown Racine and UW-Parkside. Funding from student fees paid for the local share of the operating assistance needed to operate the service. In 2006, the student government association decided to end the contract because of low ridership on Route No. 9 by students attending UW-Parkside, bearing in mind that a high percentage of the expenses to operate the route came from student fees. Restoring Route No. 9 is not presented as a sub-alternative for providing local transit service to the UW-Parkside campus because it would cost an estimated \$243,000 in annual operating expenses, \$102,000 of which would have to be paid for by the University's operating budget or student fees.

## Inter-County Sub-Alternative 2A: Operate a Shuttle between Regency Mall and UW-Parkside Using a BUS Paratransit Vehicle

Sub-alternative 2A would involve the BUS implementing shuttle service between Tallent Hall on the UW-Parkside campus and the southwest transfer point for BUS routes being implemented at Regency Mall. The shuttle would be operated using a BUS paratransit vehicle and driver and would provide six round-trips per day between the campus and Regency Mall, with trips scheduled approximately every two hours. The shuttle would operate over Durand Avenue, Meachem Road, Taylor Avenue, and Wood Road, as shown on Map 41.

For the BUS to operate the shuttle with paratransit vehicles, the shuttle service would have to be scheduled into the operation of the Racine DART paratransit service. Service to UW-Parkside would be operated for six round-trips a day, between 7:30 a.m. and 9:10 p.m., only on those weekdays when classes are in session. The shuttle would be scheduled to arrive and depart the transfer point at Regency Mall at transit "pulse" transfer times, in order to facilitate transfers between the shuttle and BUS routes.

Map 41

SUB-ALTERNATIVES UNDER ALTERNATIVE 2:
PROVIDE LOCAL PUBLIC TRANSIT SERVICE TO THE UNIVERSITY OF WISCONSIN-PARKSIDE CAMPUS

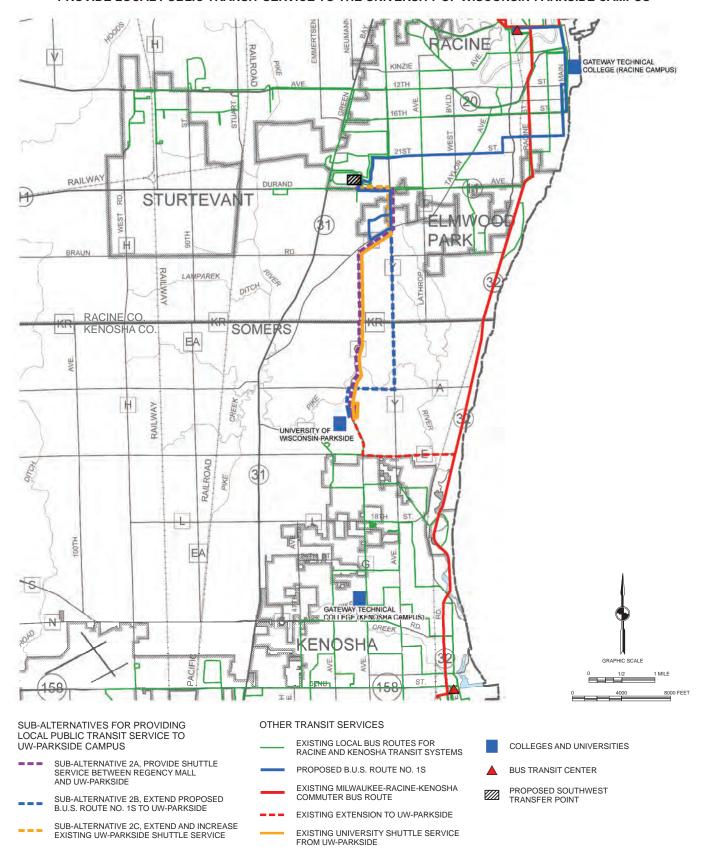


Table 66

RIDERSHIP AND FINANCIAL PERFORMANCE OF SUB-ALTERNATIVES UNDER ALTERNATIVE 2:
PROVIDE LOCAL PUBLIC TRANSIT SERVICE TO THE UNIVERSITY OF WISCONSIN-PARKSIDE CAMPUS: 2017

	Sub-alternatives <sup>a</sup>		rnatives <sup>a</sup>
Operating Characteristic	Existing Shuttle Service to UW- Parkside Campus	Sub-alternative 2A: Operate a Shuttle between Regency Mall and UW-Parkside using a BUS Paratansit Vehicle <sup>b</sup>	Sub-alternative 2B: Extend the Proposed BUS Route No. 1S to Serve UW-Parkside <sup>b</sup>
Annual Boarding Passengers on Route Extension or Shuttle <sup>c</sup>	600	1,600	3,400
Service Provided on Route Extension or Shuttle <sup>c</sup>			
Annual Revenue Vehicle Hours	300	700	1,600
Annual Revenue Vehicle Miles	2,200	8,000	16,900
Costs, Revenues, and Public Assistance			
Total Annual Operating Expenses <sup>d</sup>	\$12,200	\$30,700	\$160,500
Total Annual Operating Revenues		2,400	4,900
Required Public Assistance	\$12,200	\$28,400	\$155,600
Potential Sources of Public Operating Assistance			
Federal/State Transit Share of Operating Expenses <sup>e</sup>		50.5	50.5
Federal/State Transit Operating assistance		\$15,500	\$81,000
Local Assistance <sup>f</sup>	\$12,200	12,900	74,500
Total	\$12,200	\$28,400	\$155,500
Service Effectiveness and Efficiency			
Passengers per Revenue Vehicle Hour	2.0	2.5	2.1
Passengers per Revenue Vehicle Mile	0.26	0.20	0.20
Expense per Passenger	\$20.33	\$18.79	\$46.90
Revenue per Passenger		\$1.44	\$1.44
Operating Assistance per Passenger	\$20.33	\$17.35	\$45.46
Percent of Expenses Recovered through Revenues		8.0	3.0

<sup>&</sup>lt;sup>a</sup>Ridership and financial performance estimates were not developed for Sub-alternative 2C given that it proposes an improved shuttle service that would be operated by the University, and would not be operated as a local public transit service.

Ridership and Financial Performance: Table 66 presents the ridership and financial performance of the existing University shuttle service compared to Sub-alternatives 2A and 2B. About 1,600 riders would be estimated to use the proposed shuttle service annually, which would require about 51.6 weekday revenue vehicle miles and 4.25 weekday revenue vehicle hours of service when classes are in session. Based on an estimated unit cost of \$46.37 per revenue hour of service in 2017, the shuttle service would cost an estimated \$30,700 to operate annually. Of that amount, \$12,900 (42 percent) would have to be paid for by local transit operating assistance, which would most likely come from the University's operating budget or student fees.

<sup>&</sup>lt;sup>b</sup>The table displays the forecast ridership and estimated public funding in the year 2017 after four years of operating under each sub-alternative, assuming fully developed ridership under each sub-alternative.

cRidership and service shown in the table for Sub-alternative 2B is only for the extension of the proposed BUS Route No. 1S to UW-Parkside.

<sup>&</sup>lt;sup>d</sup>The operating expenses for Sub-alternative 2A were calculated assuming the 2017 cost per revenue vehicle hour would be \$46.37. The operating expenses for Sub-alternative 2B were calculated assuming the 2017 cost per revenue vehicle hour would be \$97.97.

<sup>&</sup>lt;sup>e</sup>For Alternative 2, assumes urban transit operating assistance through Federal Section 5307 and State Section 85.20 funds will be available to cover 50.5 percent of operating expenses of the Route 1 extension or the City shuttle service in 2017, more conservative than the assumption used in developing alternatives for the Belle Urban System, which assumed that the combined Federal/State share of operating expenses would be 55.0 percent in 2017.

f"Local assistance" refers to public funding provided by either local or County government, or from the UW-Parkside operating budget or student fees.

The City of Racine currently utilizes seven vehicles for the DART paratransit service. At peak periods for the DART service (weekdays from 7:30 a.m. to 9:30 a.m., and from 2:30 p.m. to 4:30 p.m.) there is not sufficient capacity to provide the shuttle service with the existing vehicle fleet, which already operates at capacity. Therefore, in order to provide the shuttle service with paratransit vehicles, the City of Racine would need to acquire one additional paratransit vehicle. Federal capital assistance could be used to cover 80 percent of the cost of the vehicle. This additional vehicle could also be used to alleviate some of the demand for the DART paratransit service when not serving the shuttle trips. The remaining 20 percent of the cost of the additional paratransit vehicle would have to be paid for by the City of Racine or a combination of City and University funds. The proposed capital equipment expenditures for the BUS presented earlier in this chapter included the replacement of the seven existing paratransit vehicles with 10 CNG paratransit vehicles at a cost of about \$100,000 each in 2014. If Sub-alternative 2A is chosen to provide local transit service to UW-Parkside, that number would be revised to recommend 11 vehicles be purchased, at an additional total cost of \$100,000 and estimated local share of \$20,000.

Considerations: The shuttle service presented in Sub-alternative 2A is a more affordable option than Sub-alternative 2B for serving both students needing transportation between the City of Racine and the UW-Parkside campus, and for serving individuals who need to continue on to the KAT system. It also has the potential to better serve students who live on the UW-Parkside campus but need to leave campus for shopping or errands, compared to the existing University shuttle service. Providing the shuttle service to the southwest transfer point in the Regency Mall area would also provide a more convenient transit service than the existing shuttle, which only provides service to connect to the existing BUS Route No. 1 terminus at Taylor Avenue and Meachem Road. The BUS paratransit vehicle proposed for the shuttle service is also less expensive to operate than the urban bus in Sub-alternative 2B because of the cost of dead time that would be associated with operating an extension of the proposed BUS Route No. 1S. Also, the BUS paratransit service could benefit from the addition of an extra vehicle. However, the infrequency of the service limits its ability to provide a convenient way to transfer to the Kenosha transit system.

#### Inter-County Sub-Alternative 2B: Extend the Proposed BUS Route No. 1S to Serve UW-Parkside

The concept of Sub-alternative 2B, which would extend the proposed BUS Route No. 1S (presented earlier in this chapter) to UW-Parkside, was first recommended in the 1998-2002 transit development plan prepared by the Commission for the City of Racine. The proposed extension would provide frequent local bus service to UW-Parkside's Tallent Hall, and would permit transfers between the proposed BUS Route No. 1S and KAT Route No. 1, which already serves UW-Parkside. The alignment of the proposed extension is shown on Map 41.

As presented in Table 65, the extension would increase round-trip route-miles on Route No. 1S by about 7.0 miles. Service to UW-Parkside would be operated only between about 7:00 a.m. and 6:00 p.m. on those weekdays when classes are in session. At all other times of operation, including Saturdays, Route No. 1S would operate without the extension to UW-Parkside. Service frequencies for the extension to UW-Parkside would be 30 minutes during peak periods and 60 minutes during off-peak periods, as would be operated on the proposed Route No. 1S. An additional vehicle would be needed to operate the extended Route No. 1S during peak periods, increasing the total number of peak period vehicles on the route from two to three vehicles.

Impacts on Ridership and Financial Performance: The ridership and financial performance of Sub-alternative 2B was presented in Table 66. About 3,400 riders would be estimated to board or alight the extended Route No. 1S at UW-Parkside, with the extension adding about 108.5 weekday revenue vehicle miles and 10.5 weekday revenue vehicle hours to the route when class is in session. Based on an estimated unit cost of \$97.97 per revenue hour of service in 2017, the extension would cost an estimated \$160,500 to operate annually. Of that amount, \$74,500 (46 percent) would have to be paid for by local transit operating assistance, which would most likely come from the University's operating budget or student fees.

<u>Considerations</u>: The route extension presented in Sub-alternative 2B represents the most desirable option for serving both students needing transportation between the City of Racine and the UW-Parkside campus, and for serving individuals who need to continue on to the KAT system. The frequent morning and evening peak service,

and the hourly service frequencies during the day, would permit convenient transfers to the Kenosha transit system. However, the route extension is still not an ideal solution for people who need transportation between Racine and Kenosha because it would only operate on weekdays when classes are in session. Sub-alternative 2B is also the more expensive option for providing local transit service to the UW-Parkside campus, in comparison to Sub-alternative 2A. In addition, the route extension may pose operational problems for the BUS because the route would be longer than the other BUS routes south of the Transit Center. The route extension would have a 90-minute round-trip schedule between the downtown Transit Center and UW-Parkside, compared to 60-minute round-trip schedules for the other routes.

#### Inter-County Sub-Alternative 2C: Extend and Increase the Existing UW-Parkside Shuttle Service

A third sub-alternative for improving transportation between the City of Racine and the UW-Parkside campus would be for the City to work with the University to enhance the University's existing shuttle service. As previously noted, the existing shuttle service is operated on weekdays when class is in session, and includes two daily round-trips between the campus and the McDonald's located at the intersection of Taylor Avenue and Meachem Road in the City of Racine. Of the two round-trips, one is provided during the morning peak period and one during the afternoon peak period. Sub-alternative 2C would involve the University extending these existing round-trips (by about 1.2 miles in each direction) from McDonald's north to the proposed southwest transfer point at Regency Mall, and operating an additional round-trip to the southwest transfer point during the midday period, resulting in a total of three daily round-trips. This service improvement would provide students and staff access to the four or five BUS routes proposed to serve the southwest transfer point, as opposed to existing connections only to BUS Route No. 1, which are not necessarily coordinated to allow transfers. The improved University shuttle service could be coordinated with the schedules of those BUS routes in order to allow transfers between the two services at the southwest transfer point.

While this sub-alternative would not involve the implementation of a local public transit service between the City of Racine and UW-Parkside, it would result in increased public transportation options accessible by UW-Parkside students and staff. Given that the improved shuttle service proposed in Sub-Alternative 2C would be operated by the University, estimates of the expected ridership and costs to operate the proposed service were not developed. The annual cost to operate an improved University shuttle service would most likely be funded by the University's operating budget or student fees.

#### **Inter-County Transit Service Alternative 3:**

#### Establish Express Bus Service between the Cities of Racine and Kenosha

Under this alternative, the Cities of Racine and Kenosha would jointly establish and contract for the operation of an express bus service between downtown Racine and downtown Kenosha.

This alternative addresses an apparent unmet transit service need for frequent and convenient transit service connecting the Cities of Racine and Kenosha. In 2008, participants in meetings to develop the Racine and Kenosha County Public Transit-Human Services Coordination Plans identified the need to improve public transit service between Racine and Kenosha Counties, noting that students and staff needing to travel to Gateway Technical College in Racine County, UW-Parkside, and Gateway Technical College in Kenosha County either could not make the trip by public transit, or could not do so without multiple transfers, long wait times, or high fares. Average weekday travel survey data for 2001 presented in Chapter III of this plan also showed a large number of trips between the Cities of Racine and Kenosha.

One attempt to address this unmet need that was recently studied was a potential commuter rail line between Kenosha, Racine, and Milwaukee (see Appendix C for a summary of the most recent proposal for a potential commuter rail line between Kenosha, Racine, and Milwaukee). During the public participation and outreach meetings for this plan, seven comments were made expressing support for this commuter rail line. The line would have served as an express service between the Cities of Racine and Kenosha, but efforts to implement the line have been indefinitely postponed given the absence of a regional transit authority to implement the line and a dedicated funding source for the line. As such, this chapter presents an express bus service alternative, rather than a commuter rail line, for providing express transit service between the Cities of Racine and Kenosha.

Map 42 shows the proposed alignment for an express bus service between the downtown transfer centers in Racine and Kenosha under Alternative 3, and Table 67 presents the proposed service characteristics. The proposed express bus service would run via Main Street, Washington Avenue, Taylor Avenue, and Meachem Road in Racine County, to 7th Street, Wood Road/30th Avenue, and STH 158/52nd Street in Kenosha County. The route would serve major public higher education institutions, including Gateway Technical College campuses in Racine and Kenosha and the UW-Parkside campus in Kenosha County. proposed service, 16 round-trips would be operated between 7:00 a.m. and 7:00 p.m. on weekdays, with service frequencies of 30 minutes during peak periods and 60 minutes during off-peak periods. Should the weekday service be implemented and experience high ridership, expanding the service to also operate on Saturdays could be considered.

Table 67

#### SERVICE CHARACTERISTICS OF ALTERNATIVE 3: ESTABLISH EXPRESS BUS SERVICE BETWEEN THE CITIES OF RACINE AND KENOSHA

Service Characteristic	Express Bus Service between the Cities of Racine and Kenosha (2017)
Round-trip Route Length (Miles)	28.9
Round-trip Route Time (Minutes)	120
Service Hours	
Weekday	7:00 a.m 7:00 p.m.
Saturday	
Sunday	
Number of Round-trips per Weekday	16
Service Frequency	
Weekday	30 minutes during peak periods, 60 minutes during off peak periods
Saturday	
Sunday	
Passenger Fares	\$2.25 Base Adult Cash Fare
Vehicle Requirements	
Weekday	(4) 35-foot buses
Saturday	
Sunday	

Source: SEWRPC.

Ridership and Financial Performance: Table 68 presents the ridership and financial performance of the alternative for providing express bus service between the Cities of Racine and Kenosha. Commission staff estimates that about 82,600 riders annually would use the proposed express bus service by 2017, which would require about 460 weekday revenue vehicle miles and 32 weekday revenue vehicle hours of service. Based on an estimated unit cost of \$97.97 per revenue hour of service in 2017, the service would cost an estimated \$802,600 to operate annually. The proposed express bus service would be funded through the Federal Section 5307 program and the State Section 85.20 urban mass transit operating assistance program, with a required local match of about \$257,700 to be provided by the Cities of Racine and Kenosha.

The proposed capital needs for the BUS presented earlier in this chapter included the purchase of urban buses at an estimated cost per bus of \$425,000 for the year 2013. If Alternative 3 is chosen to provide express bus service between the Cities of Racine and Kenosha, about four buses would be required for operation. The four buses would cost a total of about \$1,700,000, of which 80 percent could be funded using Federal transportation grants. The remaining 20 percent would need to be provided by the Cities of Racine and Kenosha, with the two Cities needing to reach an agreement on how the local match for both operating and capital funds would be provided. The agreement would also need to address how the buses purchased to operate the proposed express bus service would be maintained. Alternative 3 assumes that the buses could be maintained using existing facilities in either City.

#### **Inter-County Transit Service Alternative 4:**

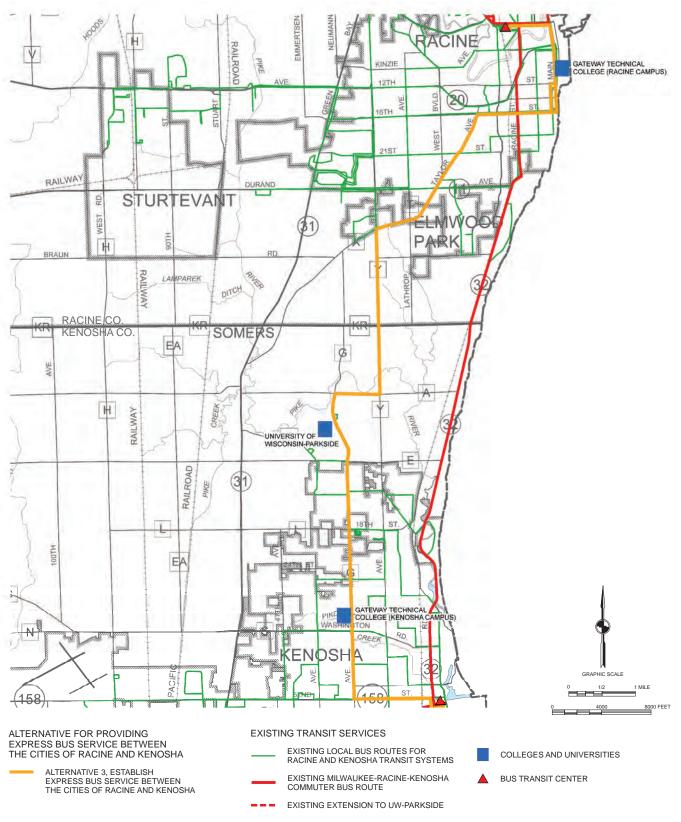
#### Establish Commuter Bus Service between Burlington and Milwaukee

Alternative 4 involves establishing a commuter bus service between downtown Burlington and downtown Milwaukee over STH 36 and IH 43.

The evaluation of the existing transit services in Chapter V and the comments made at public meetings and discussion groups identified a need for transportation service between western Racine County and the City of Milwaukee. At the Racine County Public Transit-Human Services Transportation Coordination Plan meeting in

Map 42

ALTERNATIVE 3: ESTABLISH EXPRESS BUS SERVICE BETWEEN THE CITIES OF RACINE AND KENOSHA



2008, participants identified unmet needs for transit service connecting to other counties. They indicated that individuals commuting from western Racine County to the Milwaukee central business district along the STH 36 corridor needed transportation services and amenities such as park-ride facilities along STH 36, and might also make use of a commuter-oriented transportation service between western Racine County and the Milwaukee central business district.

Commission staff conducted analyses to determine the extent of need for additional transit services between Racine County and Milwaukee County. The U.S. Census Bureau's Longitudinal Employment and Household Demographics (LEHD) data on residence and job location for years 2007 through 2009 were used to prepare Map 30 which is presented in Chapter V. Map 30 shows that about 2,010 workers with residences in western Racine County commute to the City of Milwaukee. Based on estimates that about 1.2 percent of commuter trips from rural or small urban areas to an urban center or downtown could be made by transit<sup>4</sup>, a commuter bus service between western Racine County and the City of Milwaukee could be expected to generate about 50 revenue passengers per weekday in its initial year of service (2013). Similar to the experience of the existing Wisconsin Coach Lines Route 906 between Mukwonago and Milwaukee, annual ridership would be expected to increase each year, with an estimated 80 revenue passengers by the year 2017.

Table 68

#### RIDERSHIP AND FINANCIAL PERFORMANCE OF ALTERNATIVE 3: ESTABLISH EXPRESS BUS SERVICE BETWEEN THE CITIES OF RACINE AND KENOSHA

	Express Bus Service between the Cities of
	Racine and Kenosha
Operating Characteristic	(2017 <sup>a</sup> )
Annual Boarding Passengers	82,600
Service Provided	
Annual Revenue Vehicle Hours	8,200
Annual Revenue Vehicle Miles	118,400
Costs, Revenues, and Public Assistance	
Total Annual Operating Expenses <sup>b</sup>	\$802,600
Total Annual Operating Revenues	139,600
Required Public Assistance	\$663,000
Potential Sources of Public Operating Assistance	
Federal/State Share of Operating Expenses <sup>c</sup>	50.5
Federal/State Transit Operating Assistance	\$405,300
Other/Local Match <sup>d</sup>	257,700
Total	\$663,000
Service Effectiveness and Efficiency	
Passengers per Revenue Vehicle Hour	10.1
Passengers per Revenue Vehicle Mile	0.70
Expense per Passenger	\$9.72
Revenue per Passenger	\$1.69
Operating Assistance per Passenger	\$8.03
Percent of Expenses Recovered through Revenues	21.0

<sup>&</sup>lt;sup>a</sup>The table displays the forecast ridership and estimated public funding in the year 2017 after four years of operating under Alternative 3, assuming fully developed ridership under the alternative.

<sup>c</sup>For Alternative 3, assumes urban transit operating assistance through Federal Section 5307 and State Section 85.20 funds will be available to cover 50.5 percent of operating expenses of the express bus service in 2017, more conservative than the assumption used in developing alternatives for the Belle Urban System, which assumed that the combined Federal/State share of operating expenses would be 55.0 percent in 2017.

Source: SEWRPC.

The proposed commuter bus service would provide two round-trips on weekdays, with two one-way trips from Burlington to Milwaukee during the morning peak period and two one-way trips from Milwaukee to Burlington during the afternoon peak period. Racine County could contract for operation of the route from a private transit operator much like the manner in which Waukesha County contracts for commuter bus service. The proposed route alignment would operate over STH 36 between Burlington and downtown Milwaukee with the characteristics shown on Map 43. Map 43 also shows three proposed park-ride lots that would be served by the route. Two of the proposed park-ride lots would require lease agreements as they would be located in existing privately-owned parking lots at the Fox River Plaza in the City of Burlington and at the Pick n' Save at Rawson Avenue and South 76th Street in the City of Franklin. The third proposed park-ride lot would need to be

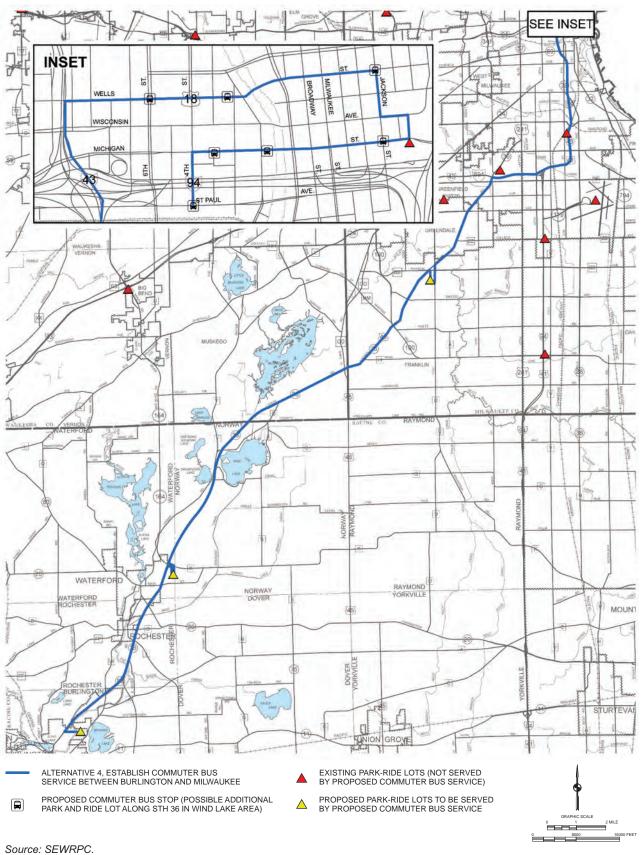
<sup>&</sup>lt;sup>b</sup>The operating expenses were calculated assuming the 2017 cost per revenue vehicle hour would be \$97.97.

<sup>&</sup>lt;sup>d</sup>The "Other/Local Match" refers to public funding provided by the Cities of Racine and Kenosha.

<sup>&</sup>lt;sup>4</sup>Transportation Research Board, Transit Cooperative Research Report Web-only Document 49: Methods for Forecasting Demand and Qualifying Need for Rural Passenger Transportation, December 2009, pp, 27-28.

Map 43

ALTERNATIVE 4: ESTABLISH COMMUTER BUS SERVICE BETWEEN BURLINGTON AND MILWAUKEE



constructed southeast of the intersection of STH 164 and STH 36 in the Town of Waterford. Federal Highway Administration Congestion Management and Air Quality Improvement (CMAQ) grant funds could fund about 80 percent of the total cost to construct the proposed park-ride lot, along with a local match from Racine County of up to 20 percent. Commission staff estimates that constructing a park-ride facility with 50 parking spaces would cost about \$350,000 (year 2012 dollars).

Table 69 presents the service characteristics of an alternative to establish a commuter bus service between Burlington and Milwaukee. The route length of the proposed alternative would be 36 miles one-way from the Fox River Plaza in Burlington to the Milwaukee Intermodal (Amtrak) Station in downtown Milwaukee. Service would be operated on weekdays with two round-trips a day, including two morning one-way trips between 5:39 a.m. and 7:55 a.m. and two afternoon one-way trips between 4:05 p.m. and 6:22 p.m.

Table 69

#### SERVICE CHARACTERISTICS OF ALTERNATIVE 4: ESTABLISH COMMUTER BUS SERVICE BETWEEN BURLINGTON AND MILWAUKEE

Service Characteristic	Commuter Bus Service between Burlington & Milwaukee (2017)
Round-trip Route Length (miles)	72
Round-trip Route Time (minutes)	150
Service Hours	
Weekday (a.m.)	5:39 a.m 7:55 a.m.
Weekday (p.m.)	4:05 p.m 6:22 p.m.
Saturday	
Sunday	
Number of Trips	
Inbound on weekdays (a.m.)	2
Outbound on weekdays (p.m.)	2
Saturday	
Sunday	
Passenger Fares	\$3.25 Base Adult Cash Fare
Vehicle Requirements	
Weekday	(2) 40-foot buses
Saturday	
Sunday	

Source: SEWRPC..

Ridership and Financial Performance: Table 70 presents the ridership and financial performance of Alternative 4. Ridership forecasts for Alternative 4 were developed using existing ridership information from WCL Route No. 906 between Mukwonago and Milwaukee. Commission staff estimates that about 20,500 revenue passengers would be expected to use the commuter bus service annually in the year 2017, which would require 144 weekday revenue vehicle miles and five weekday revenue vehicle hours of service. Commission staff estimates the cost of providing service for the year 2017 at about \$6.23 per revenue vehicle mile, based on the operating expense of the existing WCL Milwaukee-Racine-Kenosha commuter bus route, or about \$229,600 annually. The proposed commuter bus service would be funded through the Federal Section 5311 program and the State Section 85.20 mass transit operating assistance program, with a local match of about \$38,700 provided by Racine County in 2017. The County may also be able to obtain CMAQ grant funding to fund about 80 percent of the total cost to operate the service for its first three years as a demonstration project, which would require a local match from the County of at least 20 percent.

#### **SUMMARY**

This chapter has described the transit service improvement alternatives for the City of Racine and Racine County for the years 2013-2017, for consideration by the Advisory Workgroup. At the direction of the City of Racine, the preliminary recommended alternative for the Belle Urban System (BUS) represents a financially-constrained plan that would maintain the total operating budget relatively flat and maintain the City's share of the necessary operating assistance between \$1.0 and \$1.1 million. The proposed changes accomplish this by reducing inefficiencies in the existing transit system and maintaining the transit system's year 2012 reduced service hours. Several potential desirable service improvements were presented, which could be considered beyond the proposed changes should additional funding become available. In addition, possible further service reductions and fare increases were also presented should the City determine that it become necessary to further reduce the local funding that it provides to the transit system over the planning period. For Racine County, the three transit

service alternatives presented would expand the eligibility of existing services or provide new services for the general public. For transit service between Racine County and surrounding counties, four potential alternatives were presented that would either improve existing services or establish new services.

#### Preliminary Recommended Transit System Alternative for the City of Racine Belle Urban System

The City's urban development pattern poses a challenge to designing a transit system that uses "pulse" scheduling, because the new development has historically spread south and west of the City's downtown. The proposed route restructuring under the preliminary recommended transit system alternative would make the route segments on the northern part of the City longer, in order to fit into a 60-minute round-trip schedule. It would also make all the routes serving the southern part of the City fit into a 60minute round-trip schedule. In addition, the proposal is designed to improve transfers between the routes at a southwest transfer point to be constructed in the Regency Mall area.

#### Route Restructuring

The proposed system would combine several routes and reconfigure several others. The primary route alignment changes can be summarized as follows:

Table 70

# RIDERSHIP AND FINANCIAL PERFORMANCE OF ALTERNATIVE 4: ESTABLISH COMMUTER BUS SERVICE BETWEEN BURLINGTON AND MILWAUKEE

	Commuter Bus Service between Burlington and Milwaukee	
Operating Characteristic	2013	2017 <sup>a</sup>
Annual Revenue Passengers	12,800	20,500
Service Provided		
Annual Revenue Vehicle Hours	1,300	1,300
Annual Revenue Vehicle Miles	36,900	36,900
Costs, Revenues, and Public Assistance		
Total Annual Operating Expenses <sup>b</sup>	\$203,800	\$229,600
Total Annual Operating Revenues	35,400	56,600
Required Public Assistance	\$168,400	\$173,000
Potential Sources of Public Operating Assistance		
Federal/State Share of Operating Expenses (percent)	60.5	58.5
Federal/State Transit Operating Assistance	\$123,300	\$134,300
Other/Local Match <sup>c</sup>	45,100	38,700
Total	\$168,400	\$173,000
Service Effectiveness and Efficiency		
Passengers per Revenue Vehicle Hour	10.0	16.0
Passengers per Revenue Vehicle Mile	0.35	0.56
Expense per Passenger	\$15.92	\$11.21
Revenue per Passenger	\$2.76	\$2.76
Operating Assistance per Passenger	\$13.16	\$8.45
Percent of Expenses Recovered through Revenues	21.0	33.0

<sup>&</sup>lt;sup>a</sup>The table displays the forecast ridership and estimated public funding in the year 2017 after four years of operating under Alternative 4, assuming fully developed ridership under the alternative.

Source: SEWRPC.

- Remove the Route No. 1 loop on South Street, Charles Street, and Carlton Drive, and modify the route to serve Horlick High School and the Rapids Plaza shopping area.
- Combine Route Nos. 2 and 5 north and south of the Transit Center.
- Modify Route No. 3 north of the Transit Center to serve St. Mary's hospital.
- Modify Route No. 4 north of the Transit Center to serve downtown.
- Convert the existing Route No. 86 from a one-way loop to a two-way out-and-back route ("Route No. 6") serving St. Mary's Hospital, Ohio Street, Green Bay Road, and the Regency Mall area.
- Establish a southwest transfer point in the Regency Mall area.

Other minor route changes are proposed to equalize route lengths, in order to address on-time performance problems on the longer routes and leave less "dead time" at the ends of the routes. No changes are proposed to

<sup>&</sup>lt;sup>b</sup>The operating expenses were calculated based on Wisconsin Coach Lines operating costs for the existing Milwaukee-Racine-Kenosha commuter bus route. In 2013, the cost per revenue vehicle mile was estimated to be about \$5.53, increasing with inflation to \$6.23 in 2017

<sup>&</sup>lt;sup>c</sup>The "Other/Local Match" refers to public funding provided by Racine County.

the newly-restructured Route No. 27 under the preliminary recommended alternative, but the BUS may want to consider combining Route No. 27 with Route No. 20 (a special commuter route) should the route perform below acceptable standards.

#### Adjustments to Route Frequency or Service Periods

The preliminary recommended alternative would require changes to the current systemwide pulse schedule system because all regular routes would now have running times of 30 minutes between the Transit Center and the outlying route termini. The proposed changes should all be implemented at the same time in order to maintain service to all areas currently served and maintain the pulse schedule system. The changes can be summarized as follows:

- 1. Nearly all of the regular routes would have morning and afternoon peak service frequencies of 30 minutes, with off-peak service frequencies of 60 minutes (except for the new Route No. 6 with 60-minute service frequencies all day).
- 2. Since all reconfigured northern and southern routes would be on a 60-minute round-trip schedule, the City can pair the longest routes serving the southern portion of the City with the shortest routes serving the northern part of the City.
- 3. The reduced service hours established in January 2012 would be maintained. On weeknights, the last trips will leave the Transit Center at 9:10 p.m. On Saturdays and Sundays, the last trips will leave the Transit Center at 6:10 p.m.

The preliminary recommended alternative would require the same number of buses for weekday peak service as in the current 2012 schedule, allowing the BUS to utilize its current fleet of 35 heavy-duty buses.

#### Performance Measures and Costs

The transit system would undergo some significant changes in level of service provided, performance measures, and costs:

- 1. The annual miles and hours of service would be about five percent lower than the miles and hours in the 2012 budget. Most of the decrease is due to reductions in midday service frequency and the combination of Route Nos. 2 and 5. Ridership is expected to increase by about one percent per year, from the current estimate of 1,059,000 in 2012 to 1,113,000 in 2017, based on the potential for the alternative to make the system more attractive to existing and potential riders.
- 2. The total cost of operating the transit system with the proposed service changes is estimated to decrease by about three percent in the first year, from \$7.14 million in the 2012 budget to \$6.91 million in 2013. By the end of the five-year planning period in 2017, the increases in operating costs per revenue hour of transit service would increase total operating expenses to \$7.33 million.
- 3. Federal and State funds may be expected to provide about 55 percent (\$3.80 million) of the total operating expenses in 2013. The remaining public assistance needed (\$1.52 million, or 22 percent) would be provided by local sources, with the City of Racine providing about \$1.04 million. By 2017, Federal and State funds may be expected to provide about \$4.03 million, likely requiring local sources to increase their contributions to \$1.65 million (25 percent of expenses), including about \$1.13 million from the City of Racine.

The preliminary recommended alternative suggests that representatives from the Town of Yorkville and the Villages of Caledonia, Mt. Pleasant, and Sturtevant, meet with City staff to discuss whether and how to modify the current methodology used to distribute the local share of the necessary public assistance.

#### Capital Needs

The following capital investments will be needed to maintain the existing transit system in good working condition and to establish a southwest transfer point in the Regency Mall area:

- 1. A total of 14 replacement buses in 2013 to replace the vintage 1997 Nova buses that have exceeded their service life, and six replacement buses in 2016 and 2017 to replace the vintage 2004 Gillig buses that will have exceeded their service life at that point.
- 2. Replacement paratransit buses for the seven vehicles that have been in service since 2009.
- 3. Funding to lease or purchase land in the Regency Mall area for a small transfer facility.
- 4. Various repairs, renovations, and upgrades to BUS facilities.

The anticipated Federal share for these capital funding needs is 80 percent, or \$8.78 million, over the five-year planning period. The City of Racine's projected local share would be \$2.20 million.

#### Options for Service Improvements if Additional Funding Becomes Available

The preliminary recommended transit system alternative was developed assuming the total transit operating budget would remain relatively flat over the five-year planning period and local funding also would need to remain at about the year 2012 funding level. The following potential desirable service improvements could be considered beyond the proposed changes should additional funding become available:

- 1. Add service on the new Route No. 6 in one of two ways:
  - Provide a new branch west of Green Bay Road on Spring Street and Sunnyslope Drive during weekday peak periods.
  - Provide 30-minute service frequencies during weekday peak periods, resulting in common 30-minute frequencies on all regular routes during the peak periods.
- 2. Provide service to the Village of Sturtevant in one of two ways:
  - Extend Route No. 7 west of Oakes Road on Durand Avenue during weekday peak periods.
  - Provide shuttle service over Durand Avenue between Regency Mall and the Village of Sturtevant during weekday peak periods (using a BUS paratransit vehicle and driver).
- 3. Establish express bus service between the Cities of Racine and Kenosha:
  - Establish an express bus service between Racine and Kenosha (also presented as an alternative for improving transit service between Racine County and surrounding counties).
- 4. Extend Saturday service hours to 9:40 p.m.:
  - Provide later service on all routes proposed to operate on Saturday, extending service for an additional three hours from 6:40 p.m. to 9:40 p.m.

For illustrative purposes, the necessary additional funding for any of the service improvements is assumed to become available by the year 2016. If the maximum improvements were implemented in 2016—30-minute peak period service frequencies on Route No. 6, extend Route No. 7 to the Village of Sturtevant, establish an express bus service between the Cities of Racine and Kenosha, and extend Saturday service hours—the total estimated annual operating expenses for all improvements would be about \$1.2 million, requiring an additional \$1.0 million in net operating assistance.

#### Options for Additional Service Reductions or Fare Increases

If the City determines that it needs to further reduce its share of local funding provided to the transit system, the following possible further service reductions or fare increases could be considered:

- 1. Eliminate Route No. 2N/2S on Saturdays.
- 2. Eliminate Route No. 1S after 6:30 p.m. on weeknights.
- 3. Eliminate Route No. 1S on Saturdays and/or Sundays.
- 4. Increase cash fares by \$0.25 (about 12 percent).

Using the year 2016 for analysis purposes, these options combined could reduce the amount of net operating assistance needed by about \$291,000. Another potential option for service reduction would involve reducing weeknight and/or weekend service on the newly-revised Route No. 6, depending on the performance of that new route. However, Commission staff would not recommend any potential cuts be considered for Route No. 6 until it has been in operation with the new alignment for at least a year.

At the direction of City of Racine staff, Commission staff also evaluated a service reduction option that could be implemented in year 2013 should the system face even more severe funding problems. This option would involve cutting back from 30-minute peak period service frequencies to 60-minute service frequencies during all time periods. While this option represents a drastic and undesirable change to the level of service provided, it presents an illustration of a potential system that would only provide essential services. It would minimize the City's necessary operating assistance in the case of severe cuts in funding and could possibly serve as a foundation for future improvements if funding levels were to increase. This service reduction would be expected to reduce the amount of total operating assistance needed in 2013 by about \$720,000, with the City of Racine saving about \$170,000.

As a less drastic option, City and transit system staff also has the ability under the preliminary recommended alternative to selectively cut back individual routes to 60-minute all-day service frequencies—as opposed to all routes. This is possible because each proposed route fits into a 60-minute round-trip schedule from the Transit Center to its outlying terminus. If funding reductions become needed, the City could evaluate the performance of individual routes to determine candidate routes to cut back.

#### **Transit Service Alternatives for Racine County**

Commission staff developed three alternatives for consideration by the Advisory Workgroup and County officials. All alternatives were designed to address a need for affordable transportation services with fewer eligibility restrictions and shorter advance-reservation time requirements.

- 1. Under Racine County Alternative 1, County agencies and private non-profit agencies providing transportation would coordinate existing services to improve the efficiency of, and expand access to, those transportation services. Three potential ways to expand the existing services were identified and are summarized below:
  - Racine County Sub-alternative 1A: West of IH 94, expand the eligibility of the County's demand-response transportation service for seniors and people with disabilities to include any individuals who receive assistance from County agencies (except Medicaid-funded non-emergency transportation). Commission staff estimates that expanding eligibility to all Racine County Human Services clients would more than double the ridership on the demand-response transportation service west of IH 94. The additional ridership would require the operator to provide significantly more vehicle hours of service. This increased service would cause operating expenses to increase from about \$123,000 in 2011 to about \$304,100 in 2017. Commission staff would not recommend implementing Subalternative 1A as expanding eligibility to all Racine County Human Services clients would dramatically increase the cost of the demand-response service, without increasing the availability of Federal and State operating assistance.

- Racine County Sub-alternative 1B: East of IH 94, combine the City paratransit service with the County demand-response transportation service for seniors and people with disabilities. Commission staff forecast that combining the City and County paratransit services would result in a slight increase in total ridership. Combining the service should make it operate more efficiently and may be expected not to have a significant financial impact on either the City or the County in the short term. Even though it will increase the operating expenses of the City's paratransit program, the amount of Federal and State operating assistance for the transit system will also increase. The County's contribution towards demand-response service east of IH 94 will also increase, but it would be paying about the same amount per rider—it would just be providing service to more riders. Combining the two services east of IH 94 would benefit seniors and people with disabilities by providing a convenient, one-stop transportation service for eastern Racine County. However, the combined paratransit service would be operated by the drivers for the BUS. The BUS's costs per revenue vehicle hour for operating the City's DART paratransit are much higher than the costs per revenue vehicle hour of the current private contactor (First Transit, Inc.) for the County's demand-response service. The efficiencies gained in the number of passengers per vehicle hour would be nearly cancelled out by the higher cost per hour for the BUS. While this sub-alternative proposes that the County contract with the City DART paratransit, it may be possible for the City to instead contract with the County to provide the combined paratransit service. In addition, given the complexity of combining City and County paratransit services east of IH 94, a potential first step towards more coordination would be the establishment of an integrated call center for the two services.
- Racine County Sub-alternative 1C: Continue to operate with ongoing refinement the County shuttle service and operate the service as public transit. This Sub-alternative 1C proposes that the County continue to fund and pursue refinements to the shuttle service, including the current Burlington SPARC route. This could include modifying routes, dropping routes, and trying new routes. It also suggests that, as there may be unused capacity on the County's shuttle service, the County accommodate trips made by the general public in addition to trips by seniors and people with disabilities. Commission staff projects that ridership on the shuttle service will increase from an estimated 5,500 riders in 2011, to about 7,400 riders on the shuttle by 2017. The operating expenses for the shuttle service are estimated to increase by about 2 percent per year, resulting in total annual operating expenses of about \$159,000 by the end of the planning period. The shuttle service, if operated as public transit, would qualify to receive rural transit operating assistance through the Federal Section 5311 non-urbanized area formula grant program and State Section 85.20 transit operating assistance program. The combination of Federal and State funds available through these programs may be expected to cover about 60.5 percent of operating expenses in 2013, followed by decreases of 0.5 percent per year over the five-year planning period. By operating the shuttle service as public transit and applying for funding through the Federal Section 5311 non-urbanized area formula grant program, the County can limit its share of operating expenses while still improving the service, and could set aside some funds from the State Section 85.21 specialized transportation assistance program to purchase vehicles for the County-funded transportation services.
- 2. Under Racine County Alternative 2, the County would replace the current, eligibility-limited demand-response transportation service provided under the Human Services Department with a public shared-ride taxi program. Anyone could use the shared-ride taxi service, with the same service area as the existing eligibility-limited service (any trips with one trip end west of IH 94, including out-of-county medical trips). Under this alternative, ridership would be expected to increase from the 6,000 trips provided in 2011 on the current service, to 21,300 trips provided on the proposed service in 2017. The additional ridership would require the operator (First Transit, Inc.) to provide significantly more vehicle hours of service causing operating expenses to increase from about \$123,000 in 2011 to about \$444,000 in 2017. By converting the service to public transit, the County could apply for funding under the Federal Section 5311 non-urbanized area program and the State Section 85.20 mass transit operating assistance program.

The combination of Federal and State funds available through these programs may be expected to cover about 60.5 percent of operating expenses in 2013, followed by decreases of 0.5 percent per year over the five-year planning period. The amount of State Section 85.21 and County funds required for transportation west of IH 94 would actually be expected to decrease in the first year of the public shared-ride taxi program. However, as ridership and attendant hours and miles of service and operating costs increase through the planning period, the levels of Section 85.21 and County funds would return to similar amounts in 2017 as they were 2011. Eventually, the shared-ride taxi service may be expected to require a much higher County contribution than the existing service.

- 3. Under Racine County Alternative 3, Racine County would coordinate, or encourage, the formation of vanpools for workers with long commutes. This could be done in two ways:
  - Racine County Sub-alternative 3A: The County would purchase vans and administer the program with County staff, using fees charged to the vanpool users to cover the operating costs and the local share of the cost of purchasing additional vehicles or replacement vehicles for the program. The County would purchase two vans in the first year (more in subsequent years) using Federal transit capital assistance funds to cover 80 percent of the vehicle costs. The County's share of the costs would be about \$10,100.
  - Racine County Sub-alternative 3B: A private vanpool operator would provide vans and administer the vanpool program, using fees charged to the vanpool users to cover their own costs. Monthly user fees would be significantly higher under a private vanpool provider, because the private vanpools do not receive Federal assistance for purchasing vehicles. If the County decides to work with a private vanpool provider to run a vanpool program, the County could choose to subsidize some of the user fees in the program, or to form a partnership with employers who are willing to contribute to part of the cost of the service, or to pay for additional insurance.

It is projected that there may be sufficient funds from the existing County levy, the State section 85.21 specialized transportation program, and Federal transit funding sources to adequately fund a number of the Racine County alternatives identified above to address many of the unmet needs for transit service. For example, the County could pursue implementation of the following initiatives—Sub-alternative 1B (Combine City/County Paratransit East of IH 94); Sub-alternative 1C (Continue/Refine Shuttle Service and Operate as Public Transit), and Alternative 3 (Vanpools)—while maintaining their existing eligibility-limited demand-response transportation service west of IH 94. By 2017 (assuming an inflationary cost increase of 2 percent per year for the existing demand-response service west of IH 94), all four services would require an estimated \$332,000 in State Section 85.21 funds, which is well below the \$436,000 in State Section 85.21 specialized transportation funds expected to be available to the County in 2017. The total estimated County share of funds for the four services would be about \$59,000 in 2013 and \$64,000 in 2017, which is about equal to the total County share for existing services of \$62,000 in 2011.

The County could also consider implementing either Sub-alternative 1A (Expand Eligibility of the County Demand-Response West of IH 94) or Alternative 2 (Public Shared-Ride Taxi Service West of IH 94) in place of the existing eligibility-limited demand-response transportation service west of IH 94. Again assuming implementation of the three initiatives above, also implementing Sub-alternative 1A would result in utilizing the expected \$436,000 of State Section 85.21 funds in 2017 and increase the total estimated County share of funds for the four services to about \$65,000 in 2013 and \$103,000 in 2017—well above the existing \$62,000 in 2011. If Alternative 2 were implemented, the required amount of State Section 85.21 funds would be expected to be about \$311,000 in 2017, and the total estimated County share of funds for the four services would decrease to about \$49,000 in 2013 and \$59,800 in 2017. However, beyond 2017, a public shared-ride taxi service would be expected to continue to grow in ridership and associated service hours and miles along with the necessary State Section 85.21 funds and County share of funds, which would likely be substantially higher than the existing levels given the experiences of operating public shared-ride taxi systems in Ozaukee and Washington Counties.

#### Transit Service Alternatives for Travel Between Racine and Surrounding Counties

Commission staff developed four alternatives for consideration by the Advisory Workgroup and City and County officials. All alternatives were designed to better connect Racine County residents and activity centers to adjacent counties.

- 1. Under Inter-County Alternative 1, the service frequency on the existing Milwaukee-Racine-Kenosha commuter bus route would be increased from the current seven round-trips on weekdays to ten roundtrips on weekdays. This alternative would also include a slight route alignment change to serve Gateway Technical College in Racine. Commission staff would expect the increased service frequency to increase annual ridership by about 19,200, to about 96,100 revenue passengers in 2017. The total annual operating expenses in 2017 would also be expected to increase by about \$545,000, from about \$1.44 million to \$1.98 million, requiring an estimated additional \$483,000 in total public operating assistance, including an increase in the required local match of about \$208,000, which would likely need to be provided by WCL or by the Cities of Racine and Kenosha. Alternative 1 would provide additional service to Milwaukee and Kenosha and increase travel options for City of Racine and Racine County residents at times when there is an apparent need for more frequent service. However, it is recognized that the additional local funding required from WCL or the Cities of Racine and Kenosha may not be available given their current financial constraints. Regardless of whether or not the service frequency is increased on the Milwaukee-Racine-Kenosha commuter bus route, the City of Racine should consider taking steps to integrate the route with existing BUS routes in order to promote coordination between commuter and local transit services and make each easier and more attractive to use.
- 2. Under Inter-County Alternative 2, local public transit service would be provided between the City of Racine and the University of Wisconsin-Parkside. This could be done in one of two ways:
  - Sub-alternative 2A: The City would implement shuttle service between UW-Parkside's Tallent Hall and the southwest transfer point for BUS routes being implemented at Regency Mall. The shuttle would replace the existing University Police shuttle and would be operated using a BUS paratransit vehicle and driver. Six round-trips per day would be provided between the campus and Regency Mall, with trips scheduled approximately every two hours and designed to meet BUS routes at transit "pulse" transfer times. The ridership and financial performance of Sub-alternative 2A was presented in Table 6-22. About 1,600 annual riders would be estimated to use the proposed shuttle service in 2017. Total annual operating expenses for the shuttle service would be about \$30,700. Of that amount, \$12,900 (42 percent) would have to be paid for by local transit operating assistance, which would most likely come from the University's operating budget or student fees. The City would also need to purchase an additional paratransit vehicle at a total cost of about \$100,000, with an estimated local share of \$20,000.
  - Sub-alternative 2B: The City would extend the proposed BUS Route No. 1S to UW-Parkside. The proposed extension would provide frequent local bus service to UW-Parkside's Tallent Hall, and would permit transfers between the proposed BUS Route No. 1S and KAT Route No. 1, which already serves UW-Parkside. Service to UW-Parkside would be operated only between about 7:00 a.m. and 6:00 p.m. on those weekdays when classes are in session. About 3,400 annual riders would be estimated to board or alight the extended Route No. 1S at UW-Parkside. Total annual operating expenses for the extension would be about \$160,500 in 2017. Of that amount, \$74,500 (46 percent) would have to be paid for by local transit operating assistance, which would most likely come from the University's operating budget or student fees. The City would need to operate one additional vehicle for the route extension during peak periods.

In terms of serving both students needing transportation between the City of Racine and the UW-Parkside campus and individuals who need to continue on to the KAT system, the route extension presented in Sub-alternative 2B represents a more desirable option than the shuttle service presented in Sub-alternative 2A. However, like the shuttle service, the route extension would only operate on weekdays when classes

are in session. In terms of costs, Sub-alternative 2A would be a more affordable option than Sub-alternative 2B. Providing the shuttle service to the southwest transfer point at Regency Mall would also be more convenient than the existing shuttle, which only provides service to connect to the existing BUS Route No. 1 terminus. However, the infrequency of the shuttle service would limit its ability to provide convenient transfers to the KAT system.

A third sub-alternative could be pursued to improve transportation between the City and the UW-Parkside campus:

- Sub-alternative 2C: The City would work with the University to enhance the University's existing shuttle service. This would involve the University extending service about 1.2 miles north to connect to BUS routes at the proposed southwest transfer point at Regency Mall. An additional round-trip to the southwest transfer point would also be operated during the midday period, resulting in a total of three daily round-trips. The improved shuttle service would provide additional access to BUS fixed routes for students and staff, but would not serve individuals who need to continue on to the KAT system, as it would not be a public transit service. As the improved shuttle service would be operated by the University, annual operating costs would most likely be funded by the University's operating budget or student fees.
- 3. Under Inter-County Alternative 3, the Cities of Racine and Kenosha would jointly establish and contract for an express bus service between the two Cities. The route would serve major public higher education institutions, including the Gateway Technical College campuses in Racine and Kenosha and the UW-Parkside campus in Kenosha County. On the proposed service, 16 round-trips would be operated between 7:00 a.m. and 7:00 p.m. on weekdays, with service frequencies of 30 minutes during peak periods and 60 minutes during off-peak periods. Commission staff estimates that about 82,600 annual riders would use the proposed express bus service by 2017. Total annual operating expenses would be about \$802,600 in 2017, with funding through the Federal Section 5307 program and the State Section 85.20 urban mass transit operating assistance program, and a required local match of about \$257,700 to be provided by the Cities of Racine and Kenosha. The express bus service would require four buses, which would cost a total of about \$1,700,000, of which 80 percent could be funded using Federal transportation grants. The remaining 20 percent would need to be provided by the Cities of Racine and Kenosha. The two Cities would need to agree how to provide the local match for both operating and capital funds.
- 4. Under Inter-County Alternative 4, Racine County would establish and contract for a commuter bus service between the City of Burlington and the Milwaukee central business district, operating over STH 36 and IH 43. The proposed commuter bus service would provide two round-trips on weekdays, focused on service from Burlington to Milwaukee during the morning peak period and from Milwaukee to Burlington during the afternoon peak period. Racine County could contract for operation of the route from a private transit operator much like the manner in which Waukesha County contracts for commuter bus service. About 20,500 revenue passengers would be expected to use the commuter bus service annually in the year 2017. Total annual operating expenses would be about \$229,600 in 2017, funded through the Federal Section 5311 program and the State Section 85.20 urban mass transit operating assistance program, with a local match of about \$38,700 to be provided by Racine County. The County may also be able to obtain Federal CMAQ grant funding to fund about 80 percent of the total cost to operate the service for its first three years, which would require a local match from the County of at least 20 percent. Three proposed park-ride lots would be served by the route, including two park-ride lots located in existing privately-owned parking lots in the Cities of Burlington and Franklin and a third parkride lot that would need to be constructed in the Town of Waterford. The proposed park-ride lot to be constructed would cost about \$350,000 (year 2012 dollars), with CMAO grant funds potentially funding about 80 percent of the total cost, along with a local match from Racine County of up to 20 percent.

#### **Chapter VII**

# RECOMMENDED TRANSIT SERVICE IMPROVEMENT PLAN

#### INTRODUCTION

This chapter describes the final recommended public transit plan for the City of Racine and Racine County for the years 2013-2017. The final plan may be considered an initial stage in the implementation of the transit element of the regional transportation plan, which proposes a substantial improvement and expansion of transit service in southeastern Wisconsin over the next 25 years. The previous chapter (Chapter VI) presented a preliminary recommended alternative for the City of Racine Belle Urban System, three transit service alternatives that could be considered by Racine County, and four alternatives to improve transit service between Racine County and surrounding counties. The following sections of Chapter VII present final recommended plans for consideration by the City of Racine and Racine County. The first section that follows includes recommendations specific to the City of Racine related to restructuring the routes of the City's Belle Urban System, improving coordination with the County on paratransit services, improving transportation to the UW-Parkside campus, and integrating the existing Milwaukee-Racine-Kenosha commuter bus route with City bus routes. The second section that follows includes recommendations specific to Racine County related to meeting transit needs in western Racine County, establishing a commuter bus service between Burlington and Milwaukee, improving coordination with the City of Racine on paratransit services, continuing the existing County shuttle service, and establishing guidelines for a possible future vanpool program. Following the sections describing recommendations for the City and County, the actions required to achieve plan implementation are identified. The chapter concludes with a brief summary.

#### FINAL RECOMMENDED TRANSIT SERVICE PLAN FOR THE CITY OF RACINE

#### **City Recommendation 1:**

#### Restructure the Routes of the Belle Urban System

Most of the comments received regarding the preliminary recommended alternative for the City of Racine Belle Urban System (BUS) were related to specific proposed changes under the alternative system. Some expressed concern that the proposed changes would make it difficult or inconvenient for them to continue to use the BUS or that the changes would confuse existing users of the BUS. Others expressed support for specific proposed changes under the alternative system or for continuing to serve specific destinations or certain groups of people. In general, nearly all comments on the preliminary recommended alternative indicated a desire to preserve and improve the transit system.

The final recommended short-range transit plan for the BUS is based on the changes to the transit system proposed under the preliminary recommended alternative. At the direction of the City of Racine, the

recommended plan is "financially-constrained". The total annual transit operating budget would remain relatively flat over the five-year planning period, and maintain the local share of the necessary operating assistance between about \$1.52 and \$1.65 million. Financial constraint is achieved by reducing inefficiencies in the existing transit system and maintaining the transit system's year 2012 reduced service hours. The plan recommends that over the next five years, the City of Racine should pursue a revised structure for its regular routes that addresses the key issues and inefficiencies in the system identified during plan development. The revised route structure would accomplish this through the combining of poor-performing routes, the reconfiguring of routes to serve recent development, and the equalizing of route running times between the Corinne Reid-Owens Transit Center and the outlying route endpoints. Associated with the revised route structure, the plan also recommends that routes be designed to improve transfers at a southwest transfer point to be constructed in the Regency Mall area.

As discussed in Chapter VI, urban development in the City of Racine has historically spread south and west of the City's downtown and the Corinne Reid-Owens Transit Center, partly due to the Root River and nearby steep slopes. This development pattern makes it difficult to design a transit system with routes of near-equal lengths between the Transit Center and the routes' outlying endpoints. As a consequence, most existing routes serving the northern part of the City take 15 minutes to travel from the Transit Center to the northern route endpoint, 15 minutes back to the Transit Center, then 30 minutes to the southern route endpoint and 30 minutes back to the Transit Center—a round-trip running time of 90 minutes. The premise of the revised route structure recommended in this final plan is to establish a longer round-trip running time of 120 minutes for all regular routes serving the Transit Center. Achieving these equalized round-trip running times of 120 minutes would require segments of some routes that serve the northern part of the City to be longer and require segments of some routes that serve the southern part of the City to be shorter.

There would be significant benefits to the transit system associated with equalizing running times. It would allow all regular routes to "pulse" at the Transit Center on each trip, result in a more understandable midday schedule, and reduce some of the excessive layover times currently experienced during evenings and weekends. In addition, having each route fit into the same round-trip schedule allows the City more flexibility during times when a significant budget shortfall is anticipated for the transit system. At those times, City and BUS staff could evaluate each individual route's performance and reduce service frequencies only on certain lower-performing routes, as opposed to cutting service on entire routes or during entire time periods.

Recognizing the benefits of a revised route structure with equalized route running times, the Commission staff and City and BUS staff worked jointly to develop a detailed route structure. As discussed above, the City's uneven development pattern makes it difficult to achieve that goal given the location of the Transit Center. Initial estimates of running times on the routes proposed in the preliminary recommended alternative indicated that each proposed route could likely travel from the Transit Center to its outlying endpoint—on either the northern or southern end of the City—and back to the Transit Center within 60 minutes. This would be expected to result in the attainment of 120-minute round-trip schedules for each route that serves both the northern and southern parts of the City and 60-minute round-trip schedules for each route that serves only the southern part of the City. As City and BUS staff conducted more detailed running time estimates, through field checks performed by driving the proposed routes with buses, they became concerned that some of the proposed routes, particularly in the southern part of the City, would experience running time difficulties making it difficult for those routes to pulse with the other routes. In recognition of these concerns, it should be noted that further refinements to the revised route structure included in this final recommended plan for the BUS may be necessary. As such, the plan should be used as a guide by City and BUS staff as they make these refinements, with the ultimate goal being the achievement of consistent round-trip schedules for each route so that each route is able to pulse at the Transit Center on each trip. There may also be a need for additional refinements to appropriately serve new developments and land uses in and around the City of Racine. In order to extend BUS service outside the City of Racine, agreement would need to be reached between the City and the other local units of government in terms of how funding would be provided for the service extension. One example of a new development that may potentially be desirable for the BUS to serve is a major employment center planned near CTH H and STH 11 (Durand Avenue) in the Village of Sturtevant.

#### Route Alignments under the Recommended Plan for the BUS

As indicated above, the revised route structure recommended for the BUS is based on the route restructuring proposed under the preliminary recommended alternative, and may require refinements by City and BUS staff as they work to implement the recommended changes. The recommended route structure involves combining poorperforming routes, reconfiguring routes to serve recent development, and attempting to equalize route running times between the Corinne Reid-Owens Transit Center and the outlying route endpoints. Route segments on the northern part of the City are generally longer than those of the existing system so that they fit into a 60-minute round-trip schedule. Routes and route segments serving the southern part of the City are generally shorter so that they fit into a 60-minute round-trip schedule. When northern and southern route segments are paired to form individual routes that operate from their northern endpoints through the Transit Center to their southern endpoints and back, each of these routes has a total round-trip schedule of 120 minutes. The purpose of these uniform running times is to allow all regular routes to pulse at the Transit Center on each trip. The route structure is also designed to improve transfers between routes at a southwest transfer point to be constructed in the Regency Mall area.

Map 44 presents the current routes of the transit system through the end of 2012. Table 71 and Map 45 present a detailed explanation of the routing and service changes under the recommended plan. The recommended changes to route alignments, to be further refined by City and BUS staff as they attempt to implement routing changes, are summarized below.

- Route No. 1: North of the Transit Center, this route would provide service between the Transit Center and Greentree Center on every trip, primarily along Douglas Avenue. The route would divert from Douglas Avenue to serve Horlick High School and the Rapids Plaza shopping area. South of the Transit Center, the route would remain unchanged from the existing Route No. 1.
- Route No. 2: This route would be a combination of the existing Route Nos. 2 and 5. North of the Transit Center, the route would serve downtown via Marquette Street, 6th/7th Streets, and Main Street, and would operate on Goold Street to serve the Rapids Plaza shopping area, the Amaranth Meadows (Jacato Drive) neighborhood, and Huck Industrial Park. South of the Transit Center, the route would serve most of the southern areas previously served by the two individual routes. The existing Route Nos. 2 and 5 were among the weakest-performing routes in the evaluation of the transit system in Chapter V.
- Route No. 3: North of the Transit Center, this route would provide service to each entrance of St. Mary's Hospital, operating on 6th Street, Kinzie Avenue, Osborne Boulevard, and Spring Street. It would operate on Northwestern Avenue to Golf Avenue and Rapids Drive, serving Horlick High School. South of the Transit Center, the route would operate on State Street and Main Street instead of on Marquette Street, 6th/7th Streets, and Main Street. It would also operate inbound to the Transit Center from Case High School on 16th Street between Oakes Road and Green Bay Road, instead of on Washington Avenue and Green Bay Road, in order to shorten its round-trip running time.
- Route No. 4: North of the Transit Center, this route would serve downtown via Marquette Street, 6th/7th Streets, and Main Street. It would also operate further east of Shorecrest Shopping Center on Three Mile Road. South of the Transit Center, the route would remain unchanged from the existing Route No. 4.
- Route No. 6: This route would be a conversion of the existing Route No. 86 from a one-way loop to a
  two-way out-and-back route serving St. Mary's Hospital, Ohio Street, Green Bay Road, and the Regency
  Mall area.
- Route No. 7: This route would operate on State Street and Main Street instead of on Marquette Street, 6th Street, and Grand Avenue. It would also not serve the Regency Mall area on its inbound trip to the Transit Center. These changes are designed to reduce the round-trip running time on the route between the Transit Center and the route endpoint at Wal-Mart.

• Establish a southwest transfer point in the Regency Mall area where passengers can conveniently and comfortably transfer between Route Nos. 4, 6, 7, and 27.

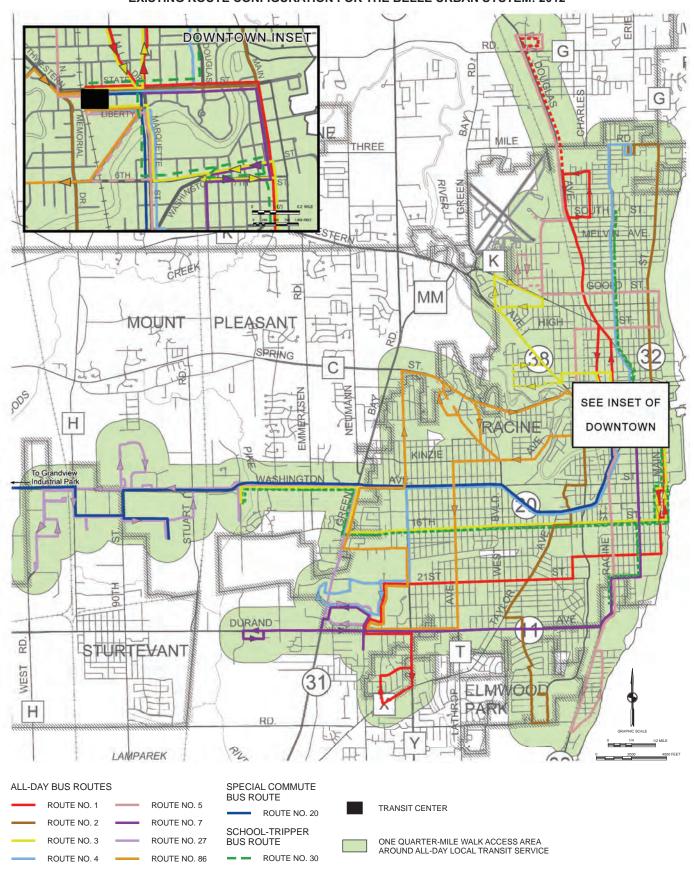
The plan does not recommend specific changes to the alignments of Route Nos. 20, 27, and 30 at this time. Route No. 20 would continue to operate as a special commuter route providing express peak-hour service to Grandview Industrial Park and the Waxdale complex in the Village of Mt. Pleasant. Route No. 27, which recently underwent considerable changes in September 2012, is being monitored by City and BUS staff to determine whether further changes are necessary and whether the route should be expanded to operate on Saturdays and/or Sundays. One possible change to the revised Route No. 27 identified by City and BUS staff would involve adding service to the Racine Correctional Institution in the Village of Sturtevant, which was provided as recently as 2006 and was initially planned for the revised route. This change would require addressing operational issues regarding access to the facility and agreement between the City and the Village on funding for the added service. Although no changes to the alignments of Route Nos. 20 and 27 are recommended at this time, the plan recommends that, should the revised Route No. 27 continue to perform poorly despite the changes made in September 2012, City and BUS staff should consider the possible combination of Route Nos. 20 and 27—discussed in more detail in Chapter VI—to avoid the existing duplication of service on portions of the two routes in the western portion of the BUS service area during peak periods, Route No. 30 would continue to provide service to and from middle and high schools, with the addition of one bus dedicated to the route to accommodate anticipated future demand for school service.

Given the potential running time difficulties on certain routes under the recommended plan, City and BUS staff should explore creative solutions that could address running time difficulties and aid in achieving a system of routes of approximately equal running times. A series of possible solutions that could be considered are identified below, along with foreseeable advantages and disadvantages of each solution. City and BUS staff may identify additional solutions as they attempt to implement routing changes, and it should be noted that a combination of solutions may be necessary to achieve the plan's ultimate goal of achieving consistent round-trip schedules for each route so that each route is able to pulse at the Transit Center on each trip. Possible solutions may include:

- 1. Increase the round-trip schedules for all route segments from 60 minutes to 70 minutes so that all routes pulse at the Transit Center every 35 minutes in peak periods—instead of every 30 minutes. During off-peak periods, where routes would experience fewer running time difficulties, routes could likely still pulse every 60 minutes.
  - Increasing scheduled time for all routes would provide additional time for those routes expected to
    experience running time difficulties, allowing them to more easily complete their round-trips in the
    same amount of time as all other routes.
  - However, the schedule would be more difficult to understand and the routes that are not expected to
    experience running time difficulties would experience increased layover times at their route
    endpoints.
- 2. Realign Route No. 27 to serve the Wal-Mart in Sturtevant and shorten Route No. 7.
  - Shortening Route No. 7—which is the longest route in the system and is expected to have the most running time difficulties—would likely allow the route to achieve a 60-minute round-trip schedule and pulse every 30 minutes with all other routes at the Transit Center.
  - However, travel times would increase for a significant number of passengers who would need to travel from the City to the Wal-Mart in Sturtevant, as they would need to transfer to Route No. 27, which does not connect to all routes.
- 3. Shorten the routes with running time difficulties so that they all fit into 60-minute round-trip schedules.
  - Shortening these routes would allow all routes to pulse every 30 minutes at the Transit Center.

Map 44

EXISTING ROUTE CONFIGURATION FOR THE BELLE URBAN SYSTEM: 2012



Source: City of Racine Department of Transportation and SEWRPC.

## Table 71 ROUTING AND SERVICE CHANGES BY ROUTE UNDER THE

**RECOMMENDED BELLE URBAN SYSTEM ROUTE STRUCTURE: 2013-2017** 

Route		Recommended Route Schedule and
No.	Recommended Restructuring of Routes (See Map 45)	Service Period Adjustments
1	North of the Transit Center, remove the loop along South St., Charles St., and Carlton Dr. and divert from Douglas Ave. to serve Horlick High School and the Rapids Plaza shopping area.  No change south of the Transit Center.	<ol> <li>Maintain year 2012 service hours.</li> <li>Weekday peak service: maintain 60-minute frequencies on Route 6 and 30-minute frequencies on all other routes.</li> </ol>
2	Combine Routes 2 and 5. North of the Transit Center, the new route serves downtown via Marquette St., 6th or 7th Sts., and Main St., and also operates on Goold St. to serve Horlick High School, the Rapids Plaza shopping area, the Amaranth Meadows (Jacato Drive) neighborhood, and Huck Industrial Park.	Weekday midday/evening service: set frequencies to uniform 60 minutes on all routes <sup>a</sup> , instead of alternating 30- and 60-minute frequencies.
	South of the Transit Center, create a one-way loop over Durand Ave., Sheridan Rd., and Lakeshore Dr. to Olsen Industrial Park, then via Knoll Pl. to Durand Ave.	Saturday service: set frequencies of 60 minutes on all routes.      Sunday service: set frequencies of 60 minutes on
	North of the Transit Center, operate on 6th St., Kinzie Ave., Osborne Blvd., and Spring St. instead of Hamilton St. and Marquette St. or Dr. Martin Luther King Dr., serving each entrance of St. Mary's Hospital.	new Rts. 1, 3, 4, 6, and 7.
3	South of the Transit Center, operate via State St. and Main St. to/from the Transit Center, instead of Marquette St. and 6th St. or 7th St., and operate inbound to the Transit Center from Case High School via 16th St. between Oakes Rd. and Green Bay Rd., instead of Washington Ave.	
4	North of the Transit Center, serve downtown via Marquette St., 6th or 7th Sts., and Main St. and operate further east of Shorecrest Shopping Center on Three Mile Rd.	
	No change south of the Transit Center.	
5	Eliminate the route. Replace it with parts of the reconfigured Route 2.	
6	Convert the existing Route 86 from a one-way loop to a two-way out- and-back route via Spring St. to St. Mary's Hospital. Between St. Mary's Hospital and Regency Mall, operate in both directions via Ohio St., Washington Ave., Green Bay Rd., and Byrd Ave.	
7	After leaving the Transit Center, operate via Marquette St. and 6th St., instead of State St. and Main St. Provide service to Ridgewood Care Center of Racine only on inbound trips to the Transit Center.	

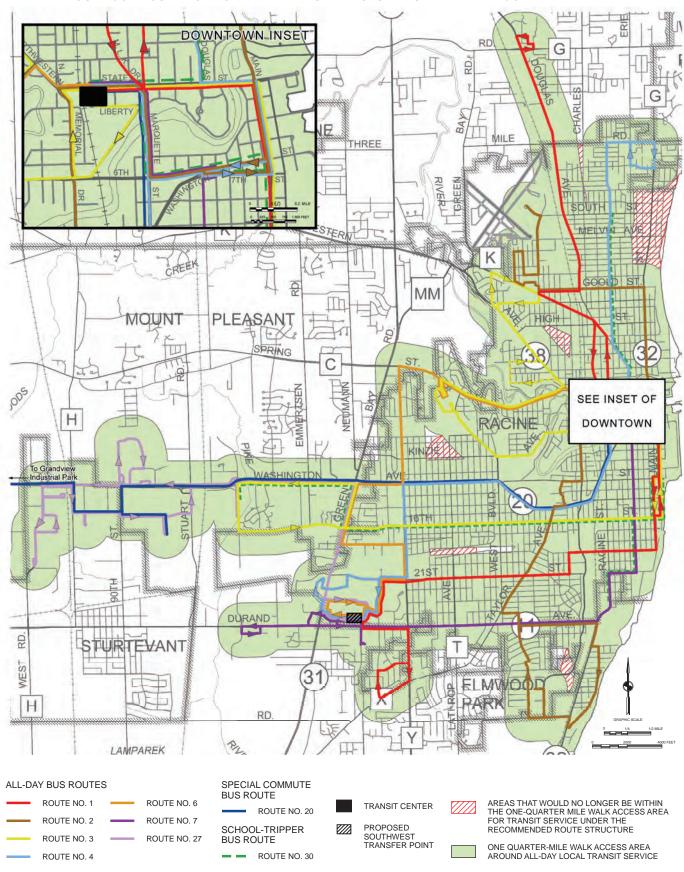
<sup>&</sup>lt;sup>a</sup> Evening service would not be operated on Route No. 2, similar to the existing Route Nos. 2 and 5.

Source: SEWRPC.

- However, some major destinations currently being served would either be unserved or would need to be served by other means, such as a less expensive shuttle service or by modifying other routes.
- 4. In addition to the shortening of routes with running time difficulties in No. 3 above, modify and expand Route No. 7 to fit into a 120-minute round-trip schedule—instead of a 60-minute round-trip schedule—with the modified route serving areas currently served by the shortened routes.
  - Combining the shortened routes with the longer Route No. 7 would allow all routes to pulse every 30 minutes at the Transit Center and maintain service to major destinations currently being served.

Map 45

ROUTE CONFIGURATION FOR THE BELLE URBAN SYSTEM UNDER THE RECOMMENDED PLAN



Source: City of Racine Department of Transportation and SEWRPC.

- However, service to many locations on the revised Route No. 7 would be less convenient and passenger travel times on the route would likely increase significantly. In addition, the longer Route No. 7 would require the BUS to provide twice as many service hours on that route in order for the route to pulse with the other routes, which would result in increased operating expenses and require additional local funding assistance. If the City wants to avoid increasing local funding for the transit system, service would need to be reduced elsewhere in the system.
- 5. Pursue street improvements, such as utilizing traffic signal preemption for buses at select locations, to reduce the travel times of routes that would be expected to experience running time difficulties.
  - If successful in sufficiently reducing travel times on routes expected to experience running time
    difficulties, street improvements could allow the recommended route structure to be implemented
    with the proposed 60-minute round-trip schedules with few downsides, resulting in all routes able to
    pulse at the Transit Center every 30 minutes during peak periods and every 60 minutes during offpeak periods.
  - However, it may be difficult to implement the desired street improvements and they may require initial capital investments by the City.
- 6. Operate without pulsing all routes at the Transit Center at all times of the day so that when the routes that would be likely to experience running time difficulties are running late, the other routes can remain on schedule.
  - Operating without pulsing at all times would allow most routes under the recommended route structure to pulse every time.
  - However, some passengers would likely experience extensive waiting times when needing to transfer to or from a route that is running late and is unable to pulse with the other routes.

#### Dial-A-Ride Transport (DART) Paratransit Service

The revised route structure recommended for the BUS would not be expected to result in any changes to the current service area for the City's Dial-A-Ride Transport (DART) paratransit program, the Federally-mandated paratransit service for people with disabilities provided in an area within three-quarters of a mile of the regular routes of the transit system. The revised route structure for the BUS would not expand the service area of the transit system, considered to be the area within one-quarter mile of a local bus route. There would be a few small areas no longer within the transit system service area, but those areas would continue to be within the DART paratransit service area. No other changes are envisioned to be needed for the DART paratransit service.

#### Service Frequency and Time Periods under the Recommended Plan for the BUS

The proposed adjustments to the route alignments, schedules, and service hours for all the routes under the recommended plan were presented in Table 71. Table 72 presents the operating and service characteristics of each of the proposed routes under the recommended plan. All routes shown in the table would have running times of 30 minutes between the Transit Center and the outlying route endpoints. As indicated above, Route Nos. 20 and 27 would continue to be operated as they do as of September 2012, and Route No. 30 would continue to provide service to and from middle and high schools, with the addition of one bus to accommodate anticipated future demand for school service. The following key points can be made about the proposed frequency and service periods for the routes under the recommended plan:

• Nearly all of the regular routes would have morning and afternoon peak service frequencies of 30 minutes, with off-peak service frequencies of 60 minutes. These service frequencies would allow the routes to pulse at the Transit Center on each trip. The only exception would be Route No. 6, which would operate with 60-minute service frequencies all day as the Route No. 86 currently operates as of September 2012.

#### Table 72

# OPERATING AND SERVICE CHARACTERISTICS BY ROUTE UNDER THE RECOMMENDED BELLE URBAN SYSTEM ROUTE STRUCTURE: 2013-2017

#### WEEKDAY SERVICE

	Round-			Service Frequency				Buses Required			
Route Number	Trip Route Length (miles)	Service Hours	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period	
1	25.6	5:40 a.m. – 10:10 p.m.	30	60	30	60	4	2	4	2	
2	22.9	5:40 a.m. – 7:10 p.m.	30	60	30		4	2	4		
3	27.3	5:40 a.m. – 10:10 p.m.	30	60	30	60	4	2	4	2	
4	22.5	5:40 a.m. – 10:10 p.m.	30	60	30	60	4	2	4	2	
6	14.6	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1	
7	15.1	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1	
Other <sup>a</sup>	Varies	Varies	N/A	N/A	N/A	N/A	9	1	8	1	
Systemwide							28	11	27	9	

#### SATURDAY SERVICE<sup>b</sup>

#### Route Service Buses Frequency Service Hours Number Required 5:40 a.m. - 6:40 p.m. 1 60 2 2 5:40 a.m. - 6:40 p.m. 60 2 3 5:40 a.m. - 6:40 p.m. 60 2 4 5:40 a.m. - 6:40 p.m. 60 2 6 60 5:40 a.m. - 6:40 p.m. 1 7 5:40 a.m. - 6:40 p.m. 60 1 10 Systemwide

#### SUNDAY SERVICE<sup>b</sup>

Route Number	Service Hours	Service Frequency	Buses Required
1	9:40 a.m. – 6:40 p.m.	60	2
3	9:40 a.m 6:40 p.m.	60	2
4	9:40 a.m. – 6:40 p.m.	60	2
6	9:40 a.m 6:40 p.m.	60	1
7	9:40 a.m 6:40 p.m.	60	1
Systemwide			8

<sup>&</sup>lt;sup>a</sup>"Other" refers to Route Nos. 20, 27, and 30. Service levels on Route Nos. 20 and 27 would not be changed under the recommended plan. One bus would be added to Route No. 30 in the peak periods to provide additional school tripper service.

Source: SEWRPC.

- The reduced service hours established in January 2012 would be maintained<sup>1</sup>. On weeknights, the last trips would leave the Transit Center at 9:10 p.m. On Saturdays and Sundays, the last trips would leave the Transit Center at 6:10 p.m.
- Under the 2012 transit service schedule, a total of 28 morning and 27 afternoon buses are required during weekday peak service. The recommended plan would require the same number of peak period buses, allowing the BUS to utilize the current 35 heavy-duty buses in its fleet. For weekend service, the number of buses required on Saturdays would decrease from 11 to 10, and the number of buses required on Sundays would decrease from nine to eight.

The recommended changes should be implemented simultaneously in order to maintain service to all areas currently served by the routes and maintain the pulse schedule system.

<sup>&</sup>lt;sup>b</sup>The Saturday and Sunday round-trip route lengths would not differ significantly from the Weekday round-trip route lengths.

<sup>&</sup>lt;sup>1</sup>Prior to the January 2012 service cuts, the last trips for most of the BUS routes left the Transit Center at 11:40 p.m. on weeknights. On Saturdays, the last trips left at 10:10 p.m.; on Sundays, at 6:40 p.m.

#### Figure 12

# ASSUMPTIONS USED IN DEVELOPING FORECASTS OF RIDERSHIP, EXPENSES, AND REVENUES FOR THE RECOMMENDED BELLE URBAN SYSTEM ROUTE STRUCTURE: 2013-2017

Commission staff developed forecasts of ridership, expenses, and revenues under the recommended plan for the Belle Urban System for the years 2013-2017 based on the following assumptions:

- For every 1 percent decrease in revenue miles of service, ridership would decrease by 0.5 percent. This measure of elasticity of demand for transit service has been established through many studies and is widely accepted in the transit industry. The measure of elasticity of demand was applied to the ridership on the system during different periods of the day. Most of the service reductions under the recommended plan would occur during the midday period, which has lower ridership than the morning and afternoon peak periods.
- The operating cost per revenue vehicle hour of fixed-route service would be expected to increase by about 5 percent during the first year (due to the system's contraction) followed by increases of 1.5 percent per year over the five-year planning period (due to inflation). On average, the operating expense per vehicle hour on the Belle Urban System increased by 1.5 percent annually between 2007 and 2011. The operating expense per unit of service tends to increase during system contraction because, even though the transit system is providing less service, there are still fixed costs that must be paid, including salaries for the system's dispatching, administrative, and mechanic positions.
- Fares would not be increased above the January 2012 levels.
- The combination of Federal Section 5307 and State Section 85.20 transit operating assistance funds will be
  available to cover 55.3 percent of the system's operating expenses in 2012. The share of operating expenses
  covered by State and Federal transit assistance funds will decrease to 55.0 percent in 2013 and remain flat
  throughout the five-year planning period.

Source: SEWRPC.

#### Operating Funding Needs of the Recommended Plan for the BUS

Commission staff developed forecasts of service levels, ridership, operating costs, operating revenues, and transit assistance needs of the transit system under the recommended plan, using the assumptions summarized in Figure 12. Table 73 shows estimated systemwide performance measures and costs for the transit system under the recommended plan. Under the recommended plan, the transit system would undergo some significant changes in level of service provided, performance measures, and costs:

- 1. The annual miles and hours of service would be about 5 percent lower than the miles and hours in the 2012 budget. Most of the decrease is due to reductions in midday service frequency and the combination of Route Nos. 2 and 5. Ridership is expected to increase by about 1 percent per year, from the current estimate of 1,059,000 in 2012 to 1,113,000 by the fifth year of operating under the recommended system, based on the potential for the recommended route structure to make the system more attractive to existing and potential riders.
- 2. The total cost of operating the transit system with the recommended service changes is estimated to decrease by about 3 percent in the first year, from \$7.14 million in the 2012 budget to \$6.91 million (year 2013 dollars). By the end of the five-year planning period, the increases in operating costs per revenue hour of transit service would be expected to increase total operating expenses to \$7.33 million (year 2017 dollars).

Table 73

ESTIMATED OPERATING EXPENSES, REVENUES, AND PUBLIC ASSISTANCE FOR THE RECOMMENDED BELLE URBAN SYSTEM ROUTE STRUCTURE: 2013-2017

			Fore	Forecast <sup>a</sup>		
			Year 1	Year 5		
Characteristic	2011 Estimate	2012 Budgeted	(2013 Dollars)	(2017 Dollars)		
Fixed-Route Annual Service						
Revenue Vehicle-Miles	1,120,000	1,039,000	983,000	983,000		
Revenue Vehicle Hours	88,000	81,200	77,000	77,000		
Systemwide Ridership						
Revenue Passengers	1,217,000	1,059,000	1,070,000	1,113,000		
Passengers per Revenue Vehicle-Mile	1.09	1.02	1.09	1.13		
Passengers per Revenue Vehicle-Hour	13.8	13.0	13.9	14.5		
Systemwide Operating Costs, Revenues, and Assistance						
Operating Expenses	\$7,567,000	\$7,141,000	\$6,907,000	\$7,330,000		
Passenger and Other Revenues	1,712,000	1,571,000	1,586,000	1,648,000		
Required Public Assistance	5,855,000	5,570,000	5,321,000	5,682,000		
Farebox Recovery (percent)	22.6	22.0	23.0	22.5		
Sources of Public Assistance						
Federal	\$2,445,000	\$2,132,000	\$2,146,000	\$2,278,000		
State	2,049,000	1,816,000	1,652,000	1,754,000		
Federal/State Share of Operating Expenses (percent)	58.6	55.3	55.0	55.0		
Local						
City of Racine	\$1,100,000	\$1,101,000	\$1,037,000	\$1,130,000		
Town of Yorkville	6,000	5,000	7,000	7,000		
Village of Caledonia	29,000	29,000	25,000	27,000		
Village of Mt. Pleasant	173,000	174,000	154,000	167,000		
Village of Sturtevant	53,000	52,000	39,000	42,000		
Other <sup>b</sup>		261,000	261,000	277,000		
Subtotal Local Assistance	\$1,361,000	\$1,622,000	\$1,523,000	\$1,650,000		
Total	\$5,855,000	\$5,570,000	\$5,321,000	\$5,682,000		
Per Passenger Trip Data						
Operating Costs	\$6.22	\$6.74	\$6.46	\$6.59		
Total Public Assistance	\$4.81	\$5.26	\$4.97	\$5.11		

<sup>&</sup>lt;sup>a</sup>The forecasts of ridership, revenues, and costs were based on the service levels provided under the recommended plan with the following assumptions: 1. operating cost per revenue hour would increase by 1.5 percent annually; 2. revenue passengers would increase by 1.0 percent annually; 3. fares would not be increased above the January 2012 levels; and 4. the combined Federal/State share of operating expenses would be 55.0 percent each year.

Source: City of Racine and SEWRPC.

3. Federal and State funds may be expected to provide about 55 percent (\$3.80 million in year 2013 dollars) of the total operating expenses in the first year. The remaining public assistance needed (\$1.52 million, or 22 percent) would be provided by local sources—including the City of Racine, the surrounding municipalities served by transit, and the Racine Unified School District—with the City of Racine providing about \$1.04 million. By the fifth year, Federal and State funds may be expected to provide about \$4.03 million (year 2017 dollars), likely requiring local sources to increase their contributions to \$1.65 million (25 percent of expenses), including about \$1.13 million from the City of Racine.

<sup>&</sup>lt;sup>b</sup>Other sources of local public assistance include the Racine Unified School District and a local radio station. Prior to the year 2012 budget, the amount that the Racine Unified School District paid the transit system for student transportation was counted under "passenger revenues". In the year 2012 budget and later, this contribution is counted under Local Public Assistance. This change will not affect State or Federal funding levels, but will make the transit system's farebox recovery rate appear lower than it actually is.

In terms of local funding assistance, the plan recommends that the methodology currently utilized by the City of Racine to distribute the local share of the necessary public assistance among the Town of Yorkville and the Villages of Caledonia, Mt. Pleasant, and Sturtevant, be re-examined to more equitably distribute the local share among the above communities. The current method—used to develop the transit system's estimated operating costs under the recommended plan—is based on the communities' respective shares of the total annual revenue vehicle-miles of fixed-route transit service provided. The plan suggests that representatives from each of the four local governments meet with City of Racine staff to discuss whether and how the current methodology should be modified.

#### Capital Investments under the Recommended Plan

Significant capital investments must occur over the next five years to maintain the existing transit system equipment and facilities. As noted above, the recommended plan would not require any additional buses, with the system operating the same total of 28 morning and 27 afternoon buses currently required during weekday peak service. Maintaining the existing BUS fleet of 35 heavy-duty buses will allow the BUS to continue to have at least seven spare buses, which represents a desirable "spare ratio" of 0.25. The following capital investments will be necessary over the next five years to achieve a fleet of 35 buses, maintain the transit system facilities, and establish a southwest transfer point in the Regency Mall area:

- A total of 20 buses are planned to be replaced between 2013 and 2017. A total of 14 vintage 1997 Nova buses that had exceeded their service life were recently replaced and the new buses were put in service in early 2013. The BUS used a Federal transportation grant of \$4.76 million for the 14 buses and City funding was provided for the required 20 percent match of \$1.19 million. Six additional buses are planned for replacement in 2016 and 2017, as part of a total of 10 Gillig buses that went into service in 2004, each with a service life of 12 years, that are planned to be replaced over a three-year period between 2016 and 2018. The remaining four buses would be replaced in 2018.
- Starting in 2014, the transit system will need to replace the seven paratransit buses that have been in service since 2009 with new paratransit buses. These buses typically have an estimated service life of about five years. Under the transit system's current Capital Improvement Plan, the City plans to purchase 10 new compressed natural gas (CNG) paratransit buses in 2014 at an estimated cost of \$100,000 per vehicle. The City plans to utilize a current City-owned CNG fueling facility, and does not expect significant additional costs to retrofit the facility to serve the new CNG paratransit buses.
- In order to establish a southwest transfer point, the City will need to lease or purchase land in the Regency Mall area and construct one or two large passenger shelters. The capital needs assume this will occur by 2014, and the City is currently discussing possible sites with the owner of Regency Mall.
- Various repairs, renovations, and upgrades to BUS facilities (currently scheduled in the transit system's Capital Improvement Plan) will be needed, including replacement bus cameras, a replacement fueling system at the Kentucky Street Complex, and funds for the repair or replacement of maintenance equipment.
- In addition, City and BUS staff identified a potential capital need associated with the existing park-ride lot located at IH 94 and STH 20 in the Town of Yorkville. Route No. 20 buses currently experience difficulties serving the lot due to cars parking illegally during times when the lot is filled above its current capacity of 76 vehicles. The Wisconsin Department of Transportation (WisDOT) would be responsible for determining whether the lot would require expansion, which could possibly occur on adjacent County-owned land. Should an expansion be pursued, Federal capital assistance could cover 80 percent of the cost of the expansion, with the remaining 20 percent to be provided by WisDOT, the Town of Yorkville, and/or Racine County. WisDOT staff has indicated that the issue may be able to be resolved by other means, such as additional signage.

Table 74

PROPOSED CAPITAL EQUIPMENT EXPENDITURES FOR THE BELLE URBAN SYSTEM: 2013-2017

Year	Equipment or Project Description	Quantity	Unit Cost <sup>a</sup>	Total Cost <sup>a</sup>		
2013	Replacement 35-foot Buses	14 <sup>b</sup>	\$425,000	\$5,950,000		
	Maintenance and Operating Equipment <sup>c</sup>			120,000		
	Subtotal			\$6,070,000		
2014	Replacement 35-foot Buses					
	Shelters, Lighting, and Improvements for Southwest Transfer Point			\$ 150,000		
	Paratransit Bus Replacement	10	\$100,000	1,000,000		
	Maintenance and Operating Equipment <sup>c</sup>			240,000		
	Subtotal			\$1,390,000		
2015	Replacement 35-foot Buses					
	Paratransit Bus Replacement					
	Replace Supervisory Van	1	\$ 45,000	\$ 45,000		
	Replace Scheduling Software	1	\$160,000	160,000		
	Maintenance and Operating Equipment <sup>c</sup>			102,000		
	Subtotal			\$307,000		
2016	Replacement 35-foot Buses	3	\$442,000	\$1,326,000		
	Replace Asphalt Paving at Kentucky Street Complex			320,000		
	Maintenance and Operating Equipment <sup>c</sup>			104,000		
	Subtotal			\$1,750,000		
2017	Replacement 35-foot Buses	3	\$451,000	\$1,353,000		
	Maintenance and Operating Equipment <sup>c</sup>			106,000		
	Subtotal			\$1,459,000		
Total Capita	Il Project Costs			\$10,976,000		
Federal Capital Assistance Funds						
Local Share of Costs						
	nual Costs over Planning Period					
Total Costs						
Federal	Share			1,756,000		
Local S	hare			439,000		

<sup>&</sup>lt;sup>a</sup>Costs are expressed in estimated year of expenditure dollars.

Source: Racine Belle Urban System and SEWRPC.

Table 74 shows the capital investment required for the recommended transit system, as well as the projected breakdown between Federal and local funding. The anticipated Federal share for capital funding is 80 percent, or \$8.78 million, over the five-year period, with \$4.76 million in Federal capital funding already obtained and used to purchase 14 new buses in 2013. The City of Racine's projected local share for the necessary capital investments would be \$2.20 million over the five-year period, of which \$1.19 million in City funding was already provided for the required 20 percent match for the 14 new buses purchased in 2013. It should be noted that historically Federal funding of 80 percent of transit system capital costs has been available; however, there is some uncertainty regarding the continuing availability of Federal transit capital assistance during the five-year planning period and beyond. Under the Moving Ahead for Progress in the 21st Century Act (MAP-21)—the two-year Federal transportation reauthorization bill which was passed in October of 2012 and expires in September of

<sup>&</sup>lt;sup>b</sup>These 14 buses were replaced using a Federal transportation grant of \$4.76 million, with the City of Racine providing the required 20 percent match of \$1.19 million, and the new buses were put into service in early 2013.

<sup>&</sup>lt;sup>c</sup>The maintenance and operating equipment expenditures include replacement bus cameras, a replacement fueling system at the Kentucky Street Complex, and funds for the repair or replacement of maintenance equipment.

Table 75

POTENTIAL LOCATIONS FOR FUTURE PASSENGER SHELTERS ALONG BELLE URBAN SYSTEM ROUTES

	Route(s)	Direction	Average Daily	
Shelter Location	Served	of Travel	Boarding Passengers <sup>a</sup>	Adjacent Land Use
Main St. at Tenth St.	1,3	South	38	Racine Masonic Center
Main St. at Fifth St.	1,7	South	31	Monument Square
Durand Ave. at Drexel Ave.	7	East	29	Gas station
Rapids Dr. at Mt. Pleasant St.	3	South	29	Horlick High School
Golf Ave. at Cecelia Pk. Dr.	3	South	22	Single-family residence
Goold St. at Mt. Pleasant St.	5	East	14	Single-family residence
Grand Ave. at Eleventh St.	7	West	14	Head Start Center
Sixteenth St. at Perry Ave.	3	West	14	Starbuck Middle School
Washington Ave. at Valley Dr.	4,20	West	14	Open church parking lot
Grand Ave. at Thirteenth St.	7	North	13	Single-family residence
Main St. at Eighth St.	1,3	North	12	Methodist Church
N. Memorial Dr. at Sixth St.	2	North	12	Open area
Sixteenth St. at Taylor Ave.	3	West	12	Single-family residence/furniture store
Washington Ave. at Warwick Way	3	East	12	Open car dealership parking lot
Byrd Ave. at Perry Ave.	86	West	11	Giese Elementary School
Douglas Ave. at Hagerer St.	1	North	11	Bookstore/apartment building
Byrd Ave. at Skyline Dr.	86	West	10	Single-family residence
Grand Ave. at Eighth St.	7	South	10	Open municipal courthouse parking lot
Lasalle St. at North St.	4	North	10	Single-family residence
Washington Ave. at Emmertson Rd.	3	East	10	Bank

<sup>&</sup>lt;sup>a</sup>Estimated based on total daily boarding passengers—including revenue, free, and transfer passengers—obtained from automatic passenger counts collected by the transit system from April 3 through 5, 2012.

Source: SEWRPC.

2014—discretionary grant funding for fixed-route bus systems through Federal Section 5309 was replaced with a formula program through Federal Section 5339. There is some concern that Section 5339 funding levels may not provide an adequate level of funding for necessary capital expenditures. There is the possibility that the additional needed funding could be provided through other Federal programs, and there has also been discussion of creating a State of Wisconsin transit capital assistance program. Alternatively, the City may need to contribute a higher local share of funding for the necessary capital expenditures.

The plan recognizes the need to provide passenger shelters of an attractive design along BUS routes, but there are no capital expenditures for new passenger shelters included in the recommendations for the BUS over the next five years. Currently, the BUS has a total of 48 passenger shelters, which provide excellent coverage of stops serving facilities for seniors and people with disabilities, stops with high boarding volumes, stops serving major passenger transfer points between routes and with other transit services, and stops in wide open space where waiting patrons are unprotected from harsh weather conditions. In addition, most of the 48 total shelters were recently constructed, including two existing shelters that were replaced and 27 new shelters that were added using a grant obtained in 2011 by the City of Racine through the Federal Transit Administration (FTA) Section 5309 Bus and Bus Facilities Livability Initiative Program. Although capital expenditures for shelters are not currently recommended, Commission staff worked with City and BUS staff to prepare a priority listing of additional locations with high passenger boarding volumes that could be considered for future shelters. This list was developed using daily boarding passengers obtained from automatic passenger counts collected by the transit system during the week of April 1-7, 2012, and is presented in Table 75. Implementation of future shelters would depend on the ability to obtain additional Federal capital assistance funding and to secure the required local matching funds.

# Options for Service Improvements or Reductions if Funding Levels Change

The recommended plan for the BUS presented above was developed assuming the total transit operating budget would remain relatively flat over the five-year planning period and local funding also would need to remain at about the year 2012 funding level. Chapter VI of the plan presented a detailed evaluation of several potential desirable service improvements—which could be considered beyond the recommended changes above should additional funding become available—and additional possible service reductions and fare increases—should the City determine that it become necessary to further reduce the local funding that it provides to the transit system over the planning period. The year 2016—toward the end of the five-year planning period—was used for illustrative purposes as the year that the necessary additional funding for any of the service improvements is assumed to become available and as the year that any service reductions or fare increases would be implemented.

The following potential service improvements could be considered should additional funding become available:

- 1. Add service on the new Route No. 6 in one of two ways:
  - Provide a new branch west of Green Bay Road on Spring Street and Sunnyslope Drive during weekday peak periods.
  - Provide 30-minute service frequencies during weekday peak periods, resulting in common 30-minute frequencies on all regular routes during the peak periods.
- 2. Provide service to the Village of Sturtevant in one of two ways:
  - Extend Route No. 7 west of Oakes Road on Durand Avenue during weekday peak periods.
  - Provide shuttle service over Durand Avenue between Regency Mall and the Village of Sturtevant during weekday peak periods (using a BUS paratransit vehicle and driver).
- 3. Establish an express bus service between the Cities of Racine and Kenosha.
- 4. Extend Saturday service hours, providing later service on all routes recommended to operate on Saturday, extending service for an additional three hours from 6:40 p.m. to 9:40 p.m.

These service improvements could be considered and implemented at any time during the planning period if additional funding becomes available. If the maximum improvements were implemented—30-minute peak period service frequencies on Route No. 6, extend Route No. 7 to the Village of Sturtevant, establish an express bus service between the Cities of Racine and Kenosha, and extend Saturday service hours—the total estimated annual operating expenses for all improvements would be about \$1.2 million (year 2016 dollars), requiring an additional \$1.0 million in net operating assistance.

The following possible service reductions or fare increases could be considered if local funding needs to be reduced:

- 1. Eliminate Route No. 2 service on Saturdays.
- 2. Eliminate Route No. 1 south of the Transit Center after 6:30 p.m. on weeknights.
- 3. Eliminate Route No. 1 south of the Transit Center on Saturdays and/or Sundays.
- 4. Increase cash fares by \$0.25 (about 12 percent).

These service reductions and fare changes could be considered and implemented at any time during the planning period if local funding needs to be reduced or if additional funding is needed due to shortfalls in Federal and State aids. If all four service reductions or fare changes are implemented the amount of net operating assistance needed could be reduced by about \$291,000 (year 2016 dollars). An additional service reduction option evaluated in

Chapter VI at the direction of City of Racine staff, that could be implemented should the system face even more severe funding problems, would involve cutting back from 30-minute peak period service frequencies to 60-minute service frequencies during all time periods. This service reduction would be expected to reduce the amount of total operating assistance needed by about \$720,000 (year 2013 dollars), with the City of Racine saving about \$170,000. It should be noted that this option represents a drastic and undesirable change to the level of service provided, but it does present an illustration of a potential system that would only provide essential services and could possibly serve as a foundation for future improvements if funding levels were to increase. As a less drastic option, the recommended route structure provides City and BUS staff the ability to selectively cut back individual routes to 60-minute all-day service frequencies—as opposed to all routes—because the routes would have uniform round-trip schedules.

# **City Recommendation 2:**

# Improve Coordination between City and County Paratransit Services

Currently, both the County and the City provide demand-response specialized transportation services east of IH 94. The City's Dial-A-Ride Transport (DART) is a Federally-mandated paratransit service for people with disabilities provided in the area within three-quarters of a mile of the routes of the City bus system. DART serves people who cannot use the City's fixed-route service as a result of their physical or mental impairment. The County's demand-response transportation service provides transportation to people with disabilities outside the DART service area, and also to seniors (without disabilities) within the DART service area.

In Chapter VI, County Sub-alternative 1B proposed that the County contract with the City DART paratransit to provide transportation for seniors and people with disabilities east of IH 94, similar to how these services are provided in Kenosha County. This would create a single coordinated paratransit service for seniors and people with disabilities, thereby making it easier for both seniors and people with disabilities to travel in eastern Racine County because they would only have to deal with a single service provider. It would be a convenient, one-stop transportation service, meaning one phone number and one transportation provider, regardless of the passenger's trip origin and destination in the greater Racine area. Since many of the County's demand-response passenger trips start or end within the BUS service area, combining the service makes sense from an efficiency standpoint.

However, there were limited public comments supporting this concept, and it was recognized as being a very complex task for the City and County to undertake. There were also concerns over how the combined service would be funded. If it were operated by the drivers for the BUS, rather than the County's contracted service provider for demand response service, any efficiencies gained from having one service could be cancelled out by the higher cost per hour for the BUS. The BUS's costs per revenue hour for operating the City's DART paratransit service are more than twice that of the cost per revenue vehicle hour of the current private contactor (First Transit, Inc.) for the County's demand-response service. City of Racine staff expressed concern that a combined service may require an increase in the City's funding contribution to provide paratransit service. Racine County and the City of Racine would also need to reach agreement on how any unexpected increases in costs would be covered.

#### Recommendations

Given the above considerations and the complexities involved with combining paratransit services east of IH 94 in Racine County, the plan recommends that the City of Racine and Racine County work incrementally to improve coordination between their services, which could have significant benefits to the County, the City, and to the seniors and people with disabilities that use either paratransit service.

One area of coordination could be in attempting to address a gap that currently exists between the City and County paratransit services. The City's DART paratransit service provides specialized transportation to people with disabilities for trips made entirely within three-quarters of a mile of City fixed-route, non-commuter service. The County's existing demand-response transportation service provides specialized transportation to people with disabilities residing outside the City's DART paratransit service area, and also to seniors (without disabilities) within the DART paratransit service area. Given the way that the current service areas are defined, it would

appear that trips by people with disabilities from within the DART paratransit service area to outside the DART paratransit service area are not currently being served by either the City or the County. This type of unserved trip was identified in a public comment received regarding the plan alternatives from a person with a disability who resides in the City of Racine. The commenter indicated that neither public nor specialized transportation was available from their residence in the City of Racine to the Aging and Disabilities Resource Center (ADRC) in Ives Grove located just west of IH 94. Given this potential gap, the City and County should each examine potential locations not currently being served by either the City or County service—such as the ADRC in Ives Grove—and determine if demand to those locations would be anticipated. Should certain locations be identified with sufficient perceived demand, the County and City should pursue an agreement for which party would be responsible for serving those locations.

In addition, as part of the recommended coordination efforts, the plan recommends that the City and County work to improve coordination and collaboration between the call centers for the City's DART paratransit service and the County's demand-response transportation service. An initial step would involve reviewing current call center operations to determine the level of coordination between the City and County services, and areas of potential improvement. One possible improvement could be to have staff at the call center for each service educated on the eligibility and process for the other service. Staff at each call center would then be able to better instruct callers on how to schedule a trip using the other service. It may also be beneficial for City and County staff to prepare materials describing each service and how to schedule trips on each service, and display those materials prominently on each service's website and in other appropriate locations.

As the City and County work to improve coordination and collaboration, it may be desirable to work toward establishing an integrated call center using existing staff from either or both services. An integrated call center would provide a single point of contact for information and/or dispatching for users of both the City DART paratransit service and the County demand-response transportation service. A call center could have benefits to the City and County as well as users of each service. Sharing a call center has the potential to reduce operating costs for the City and County services, as there should be efficiencies related to having each service represented in one shared location. Users would benefit from only needing to call one phone number to get information they need on either service, making it easier to use each service. The location for the call center, as well as how it should be staffed and what specific functions it should be responsible for performing, would be mutual decisions made by the City and County.

#### **City Recommendation 3:**

# Improve Transportation to the University of Wisconsin-Parkside Campus

In Chapter VI, Inter-County Alternative 2 presented three possible ways for improving transportation service between the City of Racine and the UW-Parkside campus in Kenosha County. Two sub-alternatives proposed providing local public transit service to the UW-Parkside campus and one sub-alternative proposed extending and increasing the existing University shuttle service, which is operated by the University Police within campus on weekdays when class is in session. The existing shuttle also makes two round-trips between the UW-Parkside campus and the McDonald's located at the intersection of Taylor Avenue and Meachem Road in the City of Racine (the terminus of BUS Route No. 1) as part of its daily route. The three sub-alternatives presented in Chapter VI were as follows:

- Sub-alternative 2A: Operate a shuttle between Regency Mall and UW-Parkside using a BUS paratransit vehicle
- Sub-alternative 2B: Extend the proposed BUS Route No. 1S to serve UW-Parkside
- Sub-alternative 2C: Extend and increase the existing UW-Parkside shuttle service

Under all three sub-alternatives, connecting to the proposed southwest transfer point at Regency Mall would provide access to more BUS routes. Each sub-alternative was proposed to operate with certain service frequencies. Sub-alternative 2A proposed that an extended BUS Route No. 1S would provide 15.5 weekday

round-trips, Sub-alternative 2B proposed that a City shuttle would provide six weekday round-trips, and Sub-alternative 2C proposed that an extended and increased University shuttle would provide three weekday round-trips. Providing a higher frequency service, regardless of which service type is selected, has the benefits of providing better service to UW-Parkside and allowing convenient transfers to Kenosha Area Transit (KAT) routes. Compatibility of each proposed service with existing services should also be a consideration. An extended BUS Route No. 1S may cause operational issues because the route would be longer than the other proposed BUS routes under City Recommendation 1 above. A City shuttle service would need to be scheduled into the operation of the Racine DART paratransit service.

In terms of ridership and financial performance, the extended BUS Route No. 1S proposed under Sub-alternative 2B would have significantly higher operating expenses than either Sub-alternative 2A or 2C, and would require additional local funding. While the City shuttle service proposed under Sub-alternative 2A would not represent the most desirable option for improving transportation to UW-Parkside, it would be a more affordable option than Sub-alternative 2B, as a BUS paratransit vehicle is less expensive to operate than an urban bus. The City would need to purchase an additional BUS paratransit vehicle for the City shuttle service, however, because the existing paratransit vehicle fleet already operates at capacity.

The improved University shuttle proposed under Sub-alternative 2C would be the least expensive option and would not require any local funding because the annual cost to operate the shuttle service would most likely be funded by the University's operating budget or student fees.

#### Recommendations

Given the considerations above and the funding constraints currently experienced by the City of Racine and the other municipalities served by the BUS—which are likely to continue throughout the five-year planning period—the plan does not recommend implementing a local public transit service at this time. The plan does, however, recommend that the City of Racine work with UW-Parkside to attempt to extend and increase the University shuttle service as proposed under Sub-Alternative 2C.

Specifically, the plan recommends that the City encourage the University to extend its two current round-trips between the campus and the City of Racine (by about 1.2 miles in each direction) from the McDonald's located at the intersection of Taylor Avenue and Meachem Road north to the proposed southwest transfer point at Regency Mall. The City should also encourage the University to operate an additional extended round-trip to the southwest transfer point during the midday period, resulting in a total of three daily round-trips.

While the improved University shuttle service would not involve the implementation of a local public transit service between the City of Racine and UW-Parkside, it would result in increased public transportation options accessible by UW-Parkside students and staff. This service improvement would provide students and staff access to the four or five BUS routes proposed to serve the southwest transfer point, as opposed to existing connections only to BUS Route No. 1, which are not necessarily coordinated to allow transfers. The City should collaborate with the University to ensure that the improved University shuttle service is coordinated with the schedules of those BUS routes in order to allow transfers between the two services at the southwest transfer point. Ultimately, since the annual cost to operate an improved University shuttle service would most likely be funded by the University's operating budget or student fees, the University would need to determine whether to improve the University shuttle service.

# **City Recommendation 4:**

# Integrate Milwaukee-Racine-Kenosha Commuter Bus Route with Belle Urban System Routes

In Chapter VI, Inter-County Alternative 1 proposed an increase to the service frequency of the commuter bus route currently operated by Wisconsin Coach Lines (WCL) between Milwaukee, Racine, and Kenosha. The increased service frequency would be expected to increase annual ridership by about 25 percent, but would be expected to increase the total annual operating expenses by about \$545,000, to \$1.98 million, requiring an estimated additional \$483,000 in total public operating assistance. Federal Section 5307 program funds and State Section 85.20 urban mass transit operating assistance program funds may be assumed to cover about \$275,000 of

the additional total public operating assistance, resulting in an increase in required local match of about \$208,000. The additional local match would likely need to be provided by WCL or by the Cities of Racine and Kenosha. It was recognized that this additional local funding may not be available at this time given current financial constraints. In fact, due to the current financial constraints, WCL determined to reduce the number of weekday round-trips from eight to seven in May of 2012.

#### Recommendations

Given that current financial constraints are likely to continue throughout the five-year planning period, making it difficult for WCL or the Cities of Racine and Kenosha to provide any additional local funding, the plan does not recommend increasing the service frequency on the Milwaukee-Racine-Kenosha commuter bus service at this time. However, the plan does recommend that the City of Racine take steps to integrate the route with existing BUS routes, which was suggested as part of Inter-County Alternative 1. These steps would promote coordination between commuter and local transit services by making it easier and more attractive to use the two services. The plan recommends that the City take the following three actions:

- Add the commuter route alignment to the BUS route map and request that the City of Kenosha also add the alignment to the KAT route map.
- Establish consistent charges for transfers between the commuter route and the local routes of the Racine and Kenosha transit systems.
- Provide information about the commuter route and its schedule at the Racine Transit Center, on the Kenosha and Racine transit system websites, and anywhere else information about the two Cities' transit systems is displayed.

#### FINAL RECOMMENDED TRANSIT SERVICE PLAN FOR RACINE COUNTY

The final recommended short-range transit plan for Racine County is based on the evaluation of the alternative transit service improvements proposed in detail in Chapter VI, and consideration of the public comments received on the alternative improvements. The final plan has also been prepared within the constraints of expected available funding. No substantial increase may be expected over the next five years in the Federal and State funding programs currently used by the County, although the County may be able to obtain some additional Federal and State funding by accessing programs they do not currently use. In addition, the plan recognizes that the County may not be expected to increase the funding it currently provides for transportation services over the next five years. The recommendations set forth in the plan for the County to pursue in order to provide or improve transportation services within the County, and between the County and surrounding counties, have been developed accordingly. These recommendations for the County are presented below.

#### **County Recommendation 1:**

# Continue Current Approach to Meeting Transit Needs in Western Racine County *Background and Considerations*

The Racine County Human Services Department currently provides demand-response transportation service for seniors and people with disabilities outside the BUS paratransit service area, and for seniors (without disabilities) within the BUS paratransit service area. In Chapter VI, two service improvements were proposed that would replace and expand the existing eligibility-limited demand-response transportation service west of IH 94—County Sub-Alternative 1A (expand eligibility of County demand-response transportation service west of IH 94 to all Racine County Human Services clients) and County Alternative 2 (public shared-ride taxi service west of IH 94). The expanded eligibility under County Sub-alternative 1A would substantially increase the ridership, amount of service, and cost of the demand-response service, without increasing the availability of Federal and State operating assistance, resulting in a significant increase in the required level of County funding. A shared-ride taxi service open to the general public under County Alternative 2 would be expected to generate even more ridership, approximately a tripling of the ridership on the existing County service west of IH 94. The miles and hours of service would need to increase significantly in order to accommodate these additional trips, resulting in annual

operating expenses of nearly four times those of the existing service. Despite the increased operating expenses, the costs to operate a shared-ride taxi service to the County would likely be limited in the short term, because Federal and State transit assistance available to transit service open to the general public would be expected to cover about 58.5 to 60.5 percent of operating expenses. In the long term (beyond the five-year planning period), the operating budget of the shared-ride taxi program would be expected to grow for several more years, as ridership continues to increase along with the service levels to accommodate that ridership. Eventually, a shared-ride taxi service may be expected to require a much higher level of County funding than the existing service, similar to the experiences of operating public shared-ride taxi systems in Ozaukee and Washington Counties.

#### Recommendations

Given the potential to require significant additional County funding during or beyond the five-year plan period, County Sub-Alternative 1A and County Alternative 2 are not recommended at this time. Instead, the plan recommends that the County continue the current approach to meeting transit needs in western Racine County, which involves implementing transportation services on a trial basis in communities with anticipated demand. After evaluating the performance of each trial service, the services that experience high enough demand should be continued and those that experience low demand should be eliminated. Recently, the County has used this approach to implement several new transportation services within and between communities in the County. One such example was the Racine County Link, a cross-county shuttle service operated from June of 2012 through January of 2013, funded with Federal Section 5317 New Freedom funding. The Link experienced low ridership and did not receive Section 5317 funding for 2013, so it was subsequently eliminated. Another more successful example has been the Shuttling People Around Racine County (SPARC) program initiated by the County in 2011. Three initial SPARC shuttle routes were attempted in the Burlington, Mt. Pleasant, and Waterford areas. In August of 2012, the County determined to eliminate the Waterford and Mt. Pleasant shuttles due to low ridership, but decided to increase service on the Burlington shuttle, which had experienced higher ridership. County Recommendation 4 below recommends that the County continue to operate the SPARC shuttle program, monitoring the level of County funding required to operate the service as it does currently and possibly seeking Federal and State transit operating assistance in the future should there be enough demand by the general public.

#### **County Recommendation 2:**

# Establish Commuter Bus Service between Burlington and Milwaukee *Background and Considerations*

In Chapter VI, Inter-County Alternative 4 proposed that the County establish a commuter bus service between downtown Burlington and downtown Milwaukee over STH 36 and IH 43. This service would address a need for transportation service between western Racine County and the City of Milwaukee, which was identified in an evaluation of existing transit services in Chapter V and comments made at public meetings and discussion groups during development of the plan. Participants in the development of the Racine County Public Transit-Human Services Transportation Coordination Plan specifically indicated that individuals commuting from western Racine County to the Milwaukee central business district (CBD) along the STH 36 corridor needed public transportation services and amenities, including park-ride facilities along STH 36, between western Racine County and the Milwaukee CBD.

#### Recommendations

The plan recommends that Racine County establish a commuter bus service between downtown Burlington and downtown Milwaukee over STH 36 and IH 43. In order to establish the service with limited financial risk to the County, the County could apply for a grant through the Federal Highway Administration Congestion Mitigation and Air Quality Improvement (CMAQ) program, which could fund about 80 percent of the total cost to operate the service for its first three years as a demonstration project. The CMAQ grant funds would require a local match from the County of at least 20 percent, but passenger revenues could be used as local matching funds. Ridership forecasts indicate that passenger revenues may be enough to cover most if not all of the required 20 percent local match.

Following the three-year demonstration period, the service should qualify to receive rural transit operating assistance through the State Section 85.20 transit operating assistance program and Federal Section 5311 non-

urbanized area formula grant program, with the County required to provide local matching funds. The combination of Federal and State funds available through these programs may be expected to cover about 60.5 percent of operating expenses in 2013. Alternatively, the Wisconsin Department of Transportation (WisDOT) may determine that the service should instead receive urban transit operating assistance through the State Section 85.20 program and Federal Section 5307 urbanized area formula grant program. The combination of Federal and State funds available through these programs may be expected to cover about 55 percent of operating expenses in 2013. When it comes time to transition from CMAQ grant funding to the Federal and State transit operating assistance programs, the County could determine whether to continue or eliminate the service based on its performance and the availability of the necessary level of County funding.

The recommended commuter bus service as proposed would provide two round-trips on weekdays, with two oneway trips from Burlington to Milwaukee during the morning peak period and two one-way trips from Milwaukee to Burlington during the afternoon peak period. Racine County could contract for operation of the route from a private transit operator much like the manner in which Waukesha County contracts for commuter bus service. The proposed route alignment would operate over STH 36 between Burlington and downtown Milwaukee with the characteristics shown on Map 46. The route would begin at a proposed park-ride lot at the Fox River Plaza in the City of Burlington and continue north along STH 36 to the proposed park-ride lot southeast of the intersection of STH 164 and STH 36 in the Town of Waterford. The bus would continue north on STH 36, making one stop at a proposed park-ride lot at the Pick n' Save at Rawson Avenue and S. 76th Street in the City of Franklin, before merging onto IH 43/IH 894 at Loomis Road and continuing on to the Milwaukee CBD over the freeway system. The bus would exit IH 43 at N. 10th Street and operate in a local distribution mode over W. and E. Wells Street between N. 10th Street and N. Jackson Street, over N. Jackson Street, E. Wisconsin Avenue, and N. Cass Street to E. Michigan Street, over E. and W. Michigan Street to N. 4th Street, then over N. 4th Street to W. St. Paul Avenue, ending near the Milwaukee Intermodal (Amtrak) Station. It should be noted that this is one potential route alignment, and that the County could consider other route variations depending on demand. For example, possible variations on the route alignment could be to operate the route over S. 27th Street in the Cities of Greenfield and Milwaukee or to operate the route to the industrial and business parks along W. Ryan Road/STH 100 in the City of Franklin.

Two of the three proposed park-ride lots—at the Fox River Plaza in Burlington and at the Pick n' Save in Franklin—would require lease agreements as they would be located in existing privately-owned parking lots. The third proposed park-ride lot—at the intersection of STH 164 and STH 36 in Waterford—would need to be constructed. The County could apply for a Federal CMAQ grant to fund about 80 percent of the total cost to construct the proposed park-ride lot, along with a local match from the County of up to 20 percent. Timing for potentially obtaining a CMAQ grant is discussed below. Commission staff estimates that constructing a park-ride facility with 50 parking spaces would cost about \$350,000 (year 2012 dollars). In addition to the three proposed park-ride lots, the County may also want to consider a fourth park-ride lot in the Wind Lake area of western Racine County.

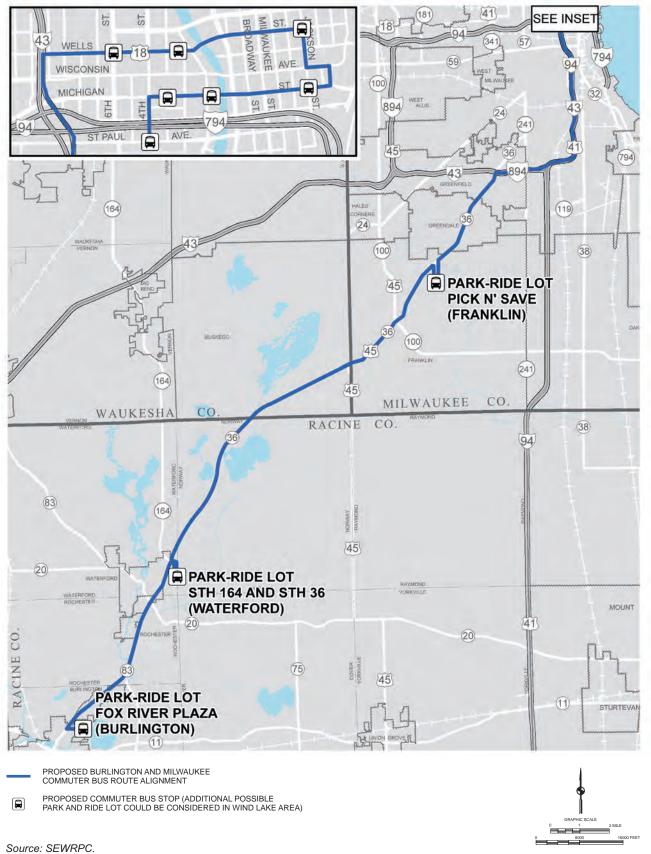
Table 76 presents the service characteristics of the recommended commuter bus service between Burlington and Milwaukee. The route length of the service would be about 36 miles one-way from the Fox River Plaza in Burlington to the Milwaukee Intermodal (Amtrak) Station in downtown Milwaukee. The service would consist of two round-trips each weekday, scheduled to arrive in the Milwaukee CBD around 6:55 a.m. and 7:55 a.m. and depart for return trips to Burlington around 4:05 p.m. and 5:05 p.m. The travel time between Burlington and Milwaukee on the bus route would be about 75 minutes. Table 77 presents a possible weekday schedule that the County could consider for the route. The commuter bus fares could be set at \$3.25 between Burlington and Milwaukee, with discounts provided to students, seniors, people with disabilities, and children.

#### Performance and Costs

Table 78 presents projections of the ridership and financial performance of the recommended commuter bus service between Burlington and Milwaukee. Based on an assumption that about 1.2 percent of the approximately 2,010 workers that reside in western Racine County and commute to the City of Milwaukee would use the recommended commuter bus service, the service could be expected to generate about 50 revenue passengers per

Map 46

BURLINGTON-MILWAUKEE COMMUTER BUS SERVICE: PROPOSED ROUTE ALIGNMENT



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weekday in its initial year of service. Annual ridership would be expected to increase each year, with an estimated 80 revenue passengers by the fifth year of operations. In the fifth year, about 20,500 revenue passengers would be expected to use the commuter bus service, which would require 144 weekday revenue vehicle miles and five weekday revenue vehicle hours of service.

The projections assume that the County would initiate the commuter bus service as a demonstration project funded with Federal funds potentially available through the CMAQ grant program, which could fund about 80 percent of the total cost to operate the service for its first three years. In terms of timing for a possible CMAQ grant, projects have already been selected for CMAQ funding through 2014. The next selection of projects, initiated in the Spring of 2013, will likely allocate CMAO funding through 2017 or 2018, so realistically the County should not expect to be able to initiate the recommended commuter bus service using CMAQ funding until that time.

Commission staff estimates the cost of providing the

service for the first full year would be about

Commuter Bus Service between Burlington and Service Characteristic Milwaukee (2017) Round-trip Route Length (miles) 72 Round-trip Travel Time (minutes) 150 Service Hours Weekday (a.m.).... 5:39 a.m. - 7:55 a.m. 4:05 p.m. - 6:22 p.m. Weekday (p.m.).....

Table 76

RECOMMENDED SERVICE CHARACTERISTICS OF

**BURLINGTON-MILWAUKEE COMMUTER BUS SERVICE** 

# Saturday..... Sunday..... Number of Trips Inbound on weekdays (a.m.)....... 2 Outbound on weekdays (p.m.)..... 2 Saturday..... Sunday..... Passenger Fares \$3.25 Base Adult Cash Fare Vehicle Requirements Weekday..... (2) 40-foot buses Saturday..... Sunday.....

Source: SEWRPC.

\$203,800 (year 2013 dollars). Assuming a 3 percent annual inflation rate, operating expenses would increase to about \$216,200 (year 2015 dollars) in the third year and to about \$229,600 (year 2017 dollars) in the fifth year. Annual passenger revenues would be expected to increase from about \$35,400 in the first year to \$50,900 in the third year and to \$56,600 in the fifth year. Given these estimates, and the fact that passenger revenues may be used to provide the required 20 percent local matching funds for a CMAQ grant, the need for County funding would likely be limited during the first three years. As the projections indicate, passenger revenues in the first year may not be quite enough to completely provide the 20 percent local matching funds, but would be expected to cover the 20 percent match in subsequent years.

Beginning in the fourth year of operations, the commuter bus service is assumed to be funded through the Federal Section 5311 program and the State Section 85.20 mass transit operating assistance program. As previously indicated, there is a possibility that the service could also be funded through the Federal Section 5307 program, which would be expected to cover a slightly lower percent of operating expenses. It is assumed that continuation of the service beyond the demonstration period would be dependent on actual service performance and the availability of County funding to provide the required local matching funds for the Federal and State operating assistance funds. Assuming annual operating expenses totaling about \$229,600 in the fifth year of operations (year 2017 dollars), the County would need to provide estimated local matching funds totaling about \$38,700.

### **County Recommendation 3:**

# **Improve Coordination between City and County Paratransit Services**

This recommendation is described in more detail under City Recommendation 2 above, which recommends that the City of Racine and Racine County work together to improve coordination between their existing paratransit services, which could have significant benefits to the County, the City, and to the seniors and people with disabilities that use either paratransit service. As part of the recommended coordination efforts, the plan recommends that the City and County work together to determine the trip origins and destinations that are not currently served by either the City or County paratransit services, but for which demand may be expected, and to pursue an agreement for which party would be responsible for serving trips to each location. The City and County could also work together to examine the trips each currently provides to determine if there would be a more efficient way of providing them.

Table 77

POSSIBLE WEEKDAY SCHEDULE FOR BURLINGTON-MILWAUKEE COMMUTER BUS SERVICE

MORNING: INBOUND FROM BURLINGTON TO MILWAUKEE

Burlington	Waterford	Franklin	Milwaukee				
Park-Ride: STH 36 and Fox River Plaza	Park-Ride: STH 36 and STH 164	Park-Ride: STH 36 and Rawson Avenue	Wells and 3rd Street	Wells and Jackson	Wisconsin and Cass	Michigan and Plankinton	Michigan and 4th Street
5:39 a.m.	5:53	6:21	6:47	6:49	6:51	6:54	6:55
6:39 a.m.	6:53	7:21	7:47	7:49	7:51	7:54	7:55

#### AFTERNOON: OUTBOUND FROM MILWAUKEE TO BURLINGTON

		Milwaukee	Franklin	Waterford	Burlington		
Michigan and 4th Street	Michigan and Plankinton	Wisconsin and Cass	Wells and Jackson	Wells and 6th Street	Park-Ride: STH 36 and Rawson Avenue	Park-Ride: STH 36 and STH 164	Park-Ride: STH 36 and Fox River Plaza
4:05 p.m.	4:09	4:11	4:14	4:15	4:40	5:08	5:22
5:05 p.m.	5:09	5:11	5:14	5:15	5:40	6:08	6:22

Source: SEWRPC.

Table 78

RIDERSHIP AND FINANCIAL PERFORMANCE OF BURLINGTON-MILWAUKEE COMMUTER BUS SERVICE

	Three-Year CMAQ Gra	Post-CMAQ Demonstration Period	
Operating Characteristic	Year 1	Year 3	Year 5 <sup>a</sup>
Annual Revenue Passengers	12,800	18,400	20,500
Service Provided			
Annual Revenue Vehicle Hours	1,280	1,280	1,280
Annual Revenue Vehicle Miles	36,900	36,900	36,900
Costs and Revenues			
Total Annual Operating Expenses <sup>b</sup>	\$203,800	\$216,200	\$229,600
Total Annual Operating Revenues	35,400	50,900	56,600
Potential Sources of Public Operating Assistance			
Federal CMAQ Grant Share of Operating Expenses	80.0	80.0	
Federal CMAQ Grant Amount	\$163,000	\$165,300	
Federal/State Share of Operating Expenses (percent)			58.5
Federal/State Transit Operating Assistance			\$134,300
Other/Local Match <sup>c</sup>	5,400		38,700
Total	\$168,400	\$165,300	\$173,000
Service Effectiveness and Efficiency			
Passengers per Revenue Vehicle Hour	10.0	14.4	16.0
Passengers per Revenue Vehicle Mile	0.35	0.50	0.56
Expense per Passenger	\$15.92	\$11.75	\$11.21
Revenue per Passenger	\$2.76	\$2.76	\$2.76
Operating Assistance per Passenger	\$12.73	\$8.98	\$8.45
Percent of Expenses Recovered through Revenues	17.0	24.0	25.0

<sup>&</sup>lt;sup>a</sup>The table displays the forecast ridership and estimated public funding in the fifth year of operations, assuming fully developed ridership.

Source: SEWRPC.

<sup>&</sup>lt;sup>b</sup>The operating expenses were calculated based on Wisconsin Coach Lines, Inc. operating costs for the existing Milwaukee-Racine-Kenosha commuter bus route. In 2013, the cost per revenue vehicle mile was estimated to be about \$5.53, increasing at an assumed rate of inflation of 3 percent per year to \$6.23 in 2017.

<sup>&</sup>lt;sup>c</sup>The "Other/Local Match" refers to public funding provided by Racine County.

The plan further recommends that the City and County collaborate on the establishment of an integrated call center using existing staff that would provide a single point of contact for information and/or dispatching for users of both the City DART paratransit services and the County demand-response transportation services. An initial step would involve reviewing current call center operations to determine the level of coordination between the City and County services, and areas of potential improvement. The next step would be for the City and County to work together to identify potential locations for an integrated call center and determine how the call center would be staffed and what specific functions the call center should be responsible for performing.

# **County Recommendation 4:**

# Continue Existing County Shuttle Service and Monitor Required Level of County Funding *Background and Considerations*

The County's existing SPARC shuttle service is aimed at providing transportation for seniors and people with disabilities in areas not served by public transit, although it does not have any formal eligibility restrictions and it allows the general public to use the service as space permits. In Chapter VI, County Sub-alternative 1C proposed that the County continue to fund and pursue refinements to the existing shuttle service, and operate the shuttle service as a public transit service open to the general public. There were a significant number of public comments received in support of the existing Burlington shuttle service and in opposition to operating the shuttle service as public transit. The comments primarily cited concerns that the County would not be able to provide the same level of personalized service as the current service if the County were to operate the shuttle service as public transit. In response to those concerns, it should be noted that under Sub-alternative 1C, the County could continue to contract with a private operator to provide the same level of personalized service that is currently being provided.

Operating the shuttle service as a public transit service open to the general public would have the potential to reduce the level of County funding required to operate the service. The service would be eligible to receive rural transit operating assistance through the Federal Section 5311 non-urbanized area formula grant program and State Section 85.20 transit operating assistance program. The combination of Federal and State funds available through these programs may be expected to cover about 55 to 60 percent of the annual operating expenses of a public shuttle service during the five-year plan period. The local share of the operating assistance for the shuttle could come from the combination of the State Section 85.21 specialized transportation assistance allocation to the County and the County's required match for the 85.21 program funds. Commission staff estimated that the combination of these funding sources would be expected to limit the County's annual share of operating expenses to about \$8,000 between 2013 and 2017—compared to County funding for the existing shuttle service of about \$13,000 in 2011. The County could choose to "bank" the savings for possible future use or use the savings to expand the current service to operate on weekends.

An additional consideration related to operating the shuttle service as public transit is the need for public transit operators to meet certain Federal requirements. One such requirement is that the private operator of a public shuttle service would need to be selected by the County through a competitive bid process. Federal Americans with Disabilities Act (ADA) regulations also require public transit operators to use vehicles that are accessible to people with disabilities, including those using wheelchairs. If the County were to use Federal transit assistance to fund the shuttle service proposed under Sub-alternative 1C, the operator of the shuttle service would need to use wheelchair-accessible vehicles. The County's current contract with Kenson Enterprises, the private operator of the SPARC shuttle service, includes the costs for vehicles provided by Kenson, which are not currently wheelchair accessible. To meet the Federal ADA requirements, the County could require the contract operator of the service to use accessible vehicles under its service contract, which could potentially increase the cost to operate the service. Alternatively, the County could purchase accessible vehicles with Federal capital assistance and provide those vehicles to the contract operator for a nominal fee. For the Burlington SPARC shuttle (and any other shuttle implemented in a non-urbanized area), the County could apply through the FTA Section 5311 non-urbanized area funding program. The County may also be able to apply through the FTA Section 5310 Enhanced Mobility for Seniors and Persons with Disabilities program under MAP-21, which makes capital funding available for services that provide public transportation service to seniors and people with disabilities beyond the requirements of the ADA. Federal capital assistance, if obtained from either program, would cover 80 percent of the cost of vehicle purchases. It should be noted that there is often more competition for Federal capital funding than the amount of funding that is available, so it is not guaranteed that Federal capital funding from either program would be available at the time the County needs to purchase vehicles.

Another important consideration is the additional administrative responsibilities that County staff would need to be prepared to take on in order to meet the requirements associated with using Federal transit operating and capital assistance funds. Commission staff recognizes that the necessary additional staff time would have the potential to increase costs, but as noted above, the availability of Federal and State transit operating assistance funds would be expected to reduce the County's annual share of operating expenses compared to that of the existing shuttle service.

#### **Recommendations**

Given the public comments expressing overwhelming opposition to the County operating the shuttle service as public transit and the potential additional responsibilities and costs needed to meet Federal requirements, the plan recommends that the County continue to operate the shuttle service as it does currently, focused on serving seniors and people with disabilities in areas not served by public transit and allowing the general public to use the service as space permits. However, the County should monitor the level of County funding required to operate the service and could revisit the possibility of operating the shuttle service as public transit open to the general public if Federal capital funding becomes more readily available and if the existing shuttle service can no longer effectively accommodate members of the general public.

# **County Recommendation 5:**

# Establish Guidelines for Vanpool Programs in Anticipation of Future Demand *Background and Considerations*

In Chapter VI, County Alternative 3 presented two ways that the County could coordinate, or encourage, the formation of vanpools for workers with long commutes for which public transportation is not available. Under Sub-alternative 3A, the County would purchase vans and administer a vanpool program with County staff. Under Sub-alternative 3B, the County would encourage and promote the use of vanpools through a private operator. Given the recent experience with vanpools in Waukesha County, and the fact that limited public comments expressed support for a potential vanpool program, it is recommended that the County proceed with caution when determining whether and how to coordinate or encourage vanpools. Around 2009, Waukesha County terminated a bus route serving a large industrial business park in the City of New Berlin and subsequently purchased eight minivans with Federal American Reinvestment and Recovery Act (ARRA) stimulus funding, with the intention of providing a different transportation option for the employees of those areas. The minivans were delivered at the beginning of 2011, but the County was unable to find enough employers and groups of employees willing to use the vans to justify operation of a vanpool program. Waukesha County has since terminated its vanpool program and has sold the vans.

#### Recommendations

The plan recommends that the County not pursue formation of vanpools at this time, but that the County apply guidelines for what would be desirable to start a vanpool program, in the event there becomes demand for vanpools in the future. Proposed guidelines for the County to use are as follows:

- Vanpool eligibility should be limited to individuals with work trips that start or end in Racine County that cannot be made on existing public transit systems;
- Vanpools should have at least five members per van commuting together to and from work;
- Vanpools should serve workers with long work commutes, typically at least 15 miles in length;
- Vanpools should serve workers who share a single employer or who work in an area with a concentrated group of employers with similar shift start- and end- times; and

• Vanpools should serve workers who live near each other or who can independently travel to a common departure points, such as a park-ride lot.

With the above guidelines established, the County should wait to pursue formation of a vanpool program until interest is expressed by a group of employers or employees. Interested employers could be located in Racine County or they could potentially be employers located in Kenosha or Milwaukee Counties that have Racine County residents as employees. If sufficient interest is expressed, the County could minimize its financial risk by working with a private vanpool provider. The private provider would use fees charged to members of the vanpools to cover the cost of the vans and program administration. As monthly user fees would likely be significantly higher under a private vanpool provider than if the program were to be run by County staff, the County could choose to subsidize some of the user fees in the program, or to form a partnership with employers who are willing to contribute to part of the cost of the service.

### PLAN ADOPTION AND IMPLEMENTATION

### **Plan Adoption**

Adoption or endorsement of the recommended Racine County Public Transit Plan is important to ensuring a common understanding among the concerned units and agencies of government and to enable the staffs of those governments to work cooperatively toward plan implementation. Accordingly, the following plan adoption actions are recommended:

### • City of Racine

The City of Racine Common Council should act to formally adopt the plan as a guide to the provision of transit services in the City and environs. Importantly, this action would not commit the City to implement any of the recommended service changes, but would indicate that the City agrees the plan would serve as a valuable reference document. The adoption action should be certified to the Southeastern Wisconsin Regional Planning Commission with a request that the plan be incorporated into the regional transportation system plan.

# • Racine County

The Racine County Board of Supervisors should act to formally adopt the plan as a guide to the provision of transit services in Racine County. Importantly, this action would not commit the County to implement any of the recommended service changes, but would indicate that the County agrees the plan would serve as a valuable reference document. The adoption action should be certified to the Southeastern Wisconsin Regional Planning Commission with a request that the plan be incorporated into the regional transportation system plan.

### • Southeastern Wisconsin Regional Planning Commission

Upon receipt of notification of adoption of the plan from the City of Racine and Racine County, the Southeastern Wisconsin Regional Planning Commission should adopt the plan as an amendment and extension of the regional transportation system plan and formally certify such adoption to all of the local units of government in the study area, to the Wisconsin Department of Transportation, and to the Federal Transit Administration.

# • Wisconsin Department of Transportation

Upon receipt of the certification by the Regional Planning Commission, the Wisconsin Department of Transportation should act to endorse the plan as a guide for the programming, administration, and granting of State transit assistance funds for the City of Racine and Racine County transit systems.

#### • Federal Transit Administration

Upon endorsement of the plan by the Wisconsin Department of Transportation, the Federal Transit Administration should endorse the plan as a guide for the programming, administration, and granting of Federal transit funds for the City of Racine and Racine County transit systems.

#### Local Units of Government

Upon receipt of the certified plan, the concerned city, village, and town boards in Racine County should act to adopt the plan, thereby indicating support to the City of Racine and Racine County in the implementation of that plan. Such actions on the parts of the communities concerned would indicate general agreement with services proposed under the plan.

# **Plan Implementation**

The City of Racine will have the primary responsibility for implementing the recommended transit plan for the Belle Urban System, as the system's owner and operator, and for the additional City recommendations presented above. Racine County will have the primary responsibility for implementing the recommended transit plan for Racine County. The City and County actions should include the following:

# • Belle Urban System Service Changes

Subject to the approval of the Transit and Parking Commission of the City of Racine Common Council, City and Belle Urban System staff will need to prepare detailed operating plans which refine the service changes to the Belle Urban System proposed by the recommended plan. The refinements included in these detailed operating plans should address running time issues that may be expected on certain proposed routes, and ensure that any new developments and land uses in and around the City of Racine following the plan's completion are appropriately served. The detailed operating plans will require Common Council approval prior to implementation of any significant changes to the transit system. The City should also work with the owners of Regency Mall to find a suitable location to accommodate the construction of a transfer facility in the Mall area and work with the Town of Yorkville and the Villages of Caledonia, Mt. Pleasant, and Sturtevant to re-examine the methodology currently utilized by the City to distribute the local share of the necessary public assistance for the Belle Urban System.

#### • Coordination between City and County Paratransit Services

The City of Racine and Racine County should undertake a cooperative effort to improve coordination between the separate demand-response specialized transportation services provided by the City and County. A first step should include examining potential locations not currently being served by either service, and if locations are identified that have sufficient perceived demand, pursuing an agreement for which party would be responsible for serving those locations. The City and County should review their current call center operations to determine the level of coordination between their services, and identify areas of potential improvement. Eventually, the City and County may want to consider establishing an integrated call center using existing staff from either or both services.

# • Transportation to UW-Parkside

To encourage UW-Parkside to extend and increase its existing shuttle service, City and Belle Urban System staff will need to initiate communications with University officials and determine the level of interest and any requirements by the University for pursuing this improvement. Prior to implementation of an improved University shuttle service, City and Belle Urban System staff should provide to University officials the precise schedules of the Belle Urban System routes that would serve the proposed southwest transfer point in order to ensure that the schedules for the two services are coordinated and to allow transfers between the two services.

#### • Milwaukee-Racine-Kenosha Commuter Bus Route

City of Racine staff should work with the private operator—Wisconsin Coach Lines, Inc. (Coach USA)—of the commuter bus route between Milwaukee, Racine, and Kenosha to integrate the route with existing Belle Urban System routes and encourage the City of Kenosha to do the same. The actions to be pursued for the Belle Urban System, and encouraged for the Kenosha Area Transit system, should include adding the commuter route alignment to the route maps for the local transit systems, establishing consistent charges for transfers between the commuter route and local routes, and providing information about the commuter route and its schedule at any locations where information about the local transit systems is displayed. This should include providing a link for the commuter route on the websites for the local transit systems.

#### • Racine County Transportation Services

The plan does not recommend significant changes to the transportation services currently provided by the Racine County Human Services Department, including the County demand-response transportation service limited to seniors and people with disabilities and the Shuttling People Around Racine County (SPARC) program. It is recommended that the County continue these services, while approaching on a trial basis the provision of new transportation services in western Racine County communities that would be expected to have demand. The County should monitor the level of County funding required to operate the existing shuttle service and consider Federal and State transit operating assistance in the future if the shuttle service can no longer effectively accommodate members of the general public. The County should also apply guidelines for what would be desirable to start a vanpool program, in the event there becomes demand for vanpools in the future.

# • Commuter Bus Service between Burlington and Milwaukee

Subject to the approval of the Racine County Board of Supervisors, County staff should pursue the establishment of a commuter bus service between downtown Burlington and downtown Milwaukee over STH 36 and IH 43. The County should apply for a grant through the Federal Highway Administration Congestion Mitigation and Air Quality Improvement (CMAQ) program, which could fund about 80 percent of the total cost to operate the service for its first three years as a demonstration project. The CMAQ grant funds would require a local match from the County of at least 20 percent, but passenger revenues could be used as local matching funds. Prior to applying for Federal CMAQ funds, the County should determine a specific route alignment and locations for park-ride lots along the route and for stops in downtown Milwaukee. For park-ride lots located in existing privately-owned parking lots, the County would need lease agreements. To construct new park-ride lots, the County could apply for a Federal CMAQ grant to fund about 80 percent of the total cost, with a required local match from the County of up to 20 percent. To select the provider of the recommended commuter bus service, County staff will need to undertake one or more competitive procurement processes. The procurement actions should be structured to meet all Federal and State requirements. Following the three-year demonstration period, the County would need to determine whether to continue or eliminate the service based on its performance and the availability of the necessary level of County funding. To continue the service with funding through the State Section 85.20 transit operating assistance program, the County would need to notify WisDOT of the County's intent to apply for these funds, no later than April 15 of the even-numbered year to be eligible for funding in the next biennium (e.g. by April 15, 2016, to be eligible for funding in 2018).

#### • Public Hearings

Federal regulations require transit systems using Federal funds to provide the opportunity for comment through public hearings prior to the implementation of significant service and fare changes. The City of Racine may need to conduct one or more public hearings for the specific service changes identified under the recommended plan and refined by City and Belle Urban System staff. Racine County may also need to conduct one or more public hearings should the County determine to pursue implementation of any services that would use Federal funds.

# • Federal and State Grant Applications

The City of Racine—and Racine County if any services are implemented that require Federal and State transit operating funds—should prepare annual operating budgets to support applications for the Federal and State funds needed over the planning period to implement the recommended plan. Such applications would need to be prepared annually on a schedule that meets the requirements of the agencies concerned.

### **SUMMARY**

This chapter has presented the recommended public transit plan for the City of Racine and Racine County for the years 2013-2017. The plan includes four recommendations specific to the City of Racine and five recommendations specific to Racine County. These recommendations are summarized below.

The City of Racine recommendations include:

# 1. Restructure the Routes of the Belle Urban System

The plan recommends that over the next five years, the City of Racine should pursue a revised structure for its regular routes that addresses the key issues and inefficiencies in the system identified during plan development. The revised route structure recommended for the Belle Urban System (BUS) would accomplish this through the combining of poor-performing routes, the reconfiguring of routes to serve recent development, and the equalizing of route running times between the Corinne Reid-Owens Transit Center and the outlying route endpoints. Associated with the revised route structure, the plan also recommends that routes be designed to improve transfers at the southwest transfer point proposed under the plan to be constructed in the Regency Mall area.

The premise of the revised route structure recommended in this final plan is to establish a round-trip running time of 120 minutes for all regular routes serving the Transit Center. Achieving these equalized round-trip running times of 120 minutes would require segments of some routes that serve the northern part of the City to be longer and require segments of some routes that serve the southern part of the City to be shorter. These equalized running times would have significant benefits, allowing all regular routes to "pulse" at the Transit Center on each trip, resulting in a more understandable midday schedule, and reducing some of the excessive layover times currently experienced during evenings and weekends. Nearly all of the regular routes in the plan's revised route structure would have peak service frequencies of 30 minutes and off-peak service frequencies of 60 minutes, allowing the routes to pulse at the Transit Center on each trip. The plan assumes the reduced service hours established in January 2012 would be maintained.

The plan should be used as a guide by City and BUS staff, recognizing that they will need to make refinements to the revised route structure recommended under the plan. These refinements may involve addressing potential running time difficulties on some routes as identified by City and BUS staff, which would make it difficult for those routes to pulse with the other routes. As such, the plan identifies possible solutions for addressing the running time difficulties anticipated by City and BUS staff and accomplishing the plan's ultimate goal of achieving consistent schedules for each route so that each is able to pulse at the Transit Center on each trip.

At the direction of the City of Racine, the recommended plan for the BUS is "financially-constrained," keeping the total annual transit operating budget relatively flat over the five-year planning period, and maintaining the local share of the necessary operating assistance between about \$1.52 and \$1.65 million. The plan recommends that representatives from the City of Racine, Town of Yorkville, and Villages of Caledonia, Mt. Pleasant, and Sturtevant, meet to discuss whether and how to modify the current methodology for distributing this local share among the communities receiving service.

The annual miles and hours of service under the plan would be about 5 percent lower than the miles and hours in the 2012 budget. Accordingly, total operating costs for the recommended system would decrease by about 3 percent in the first year, from \$7.14 million in the 2012 budget to \$6.91 million, increasing with inflation to \$7.33 million by the end of the five-year planning period. Ridership is expected to increase by about 1 percent per year, from the current estimate of 1.06 million revenue passengers in 2012 to 1.11 million revenue passengers by the fifth year of operating under the recommended system, based on the potential for the recommended route structure to make the system more attractive to existing and potential riders.

Capital investments under the plan involve maintaining the existing BUS fleet of 35 heavy-duty buses and the existing transit system facilities and establishing a southwest transfer point in the Regency Mall area. The anticipated Federal share for capital funding is 80 percent of total costs, or \$8.78 million, over the five-year period. About \$4.76 million in Federal capital funding has already been obtained and was used to purchase 14 new buses in 2013. The City of Racine's projected local share for the necessary capital investments would be \$2.20 million over the five-year period, of which \$1.19 million in City funding was already provided in 2013 as the required 20 percent match for the 14 new buses.

The recommended plan for the BUS was developed assuming the total transit operating budget would remain relatively flat over the five-year planning period and local funding also would need to remain at about the year 2012 funding level. The plan also identifies several potential desirable service improvements—which could be considered beyond the recommended changes should additional funding become available—and additional possible service reductions and fare increases—should the City determine that it become necessary to further reduce the local funding that it provides to the transit system over the planning period.

# 2. Improve Coordination between City and County Paratransit Services

The plan recommends that the City of Racine and Racine County work incrementally to improve coordination between their paratransit services provided east of IH 94. One area of coordination would involve the City and County investigating potential gaps between their service areas and making sure one party provides service to any locations with sufficient perceived demand that are not currently being served. The plan also recommends that the City and County work to improve coordination and collaboration between the call centers for each service, perhaps working toward eventually establishing an integrated call center that would provide a single point of contact for information and/or dispatching for users of both the City and County services.

#### 3. Improve Transportation to the University of Wisconsin-Parkside Campus

The plan recommends that the City of Racine work with UW-Parkside to attempt to extend and increase the existing University shuttle service. The existing shuttle makes two round-trips between the UW-Parkside campus and the intersection of Taylor Avenue and Meachem Road in the City of Racine as part of its daily route. The City should encourage the University to extend these two round-trips north to the proposed southwest transfer point at Regency Mall. The City should also encourage the University to operate an additional extended round-trip to the southwest transfer point during the midday period, resulting in a total of three daily round-trips. This service improvement would provide students and staff access to the four or five BUS routes proposed to serve the southwest transfer point. The City should work with the University to coordinate schedules in order to allow transfers between the two services.

# 4. Integrate Milwaukee-Racine-Kenosha Commuter Bus Route with BUS Routes

The plan recommends that the City of Racine take steps to integrate the existing Milwaukee-Racine-Kenosha commuter bus service with existing BUS routes. These steps would promote coordination between commuter and local transit services by making it easier and more attractive to use the two services. Three recommended actions include adding the commuter route alignment to the BUS and KAT route maps; establishing consistent charges for transfers between the commuter route and BUS and KAT routes; and providing information about the commuter route and its schedule anywhere information about the BUS and KAT systems is displayed, including on the websites for the two local transit systems.

The Racine County recommendations include:

### 1. Continue Current Approach to Meeting Transit Needs in Western Racine County

The plan recommends that Racine County continue its current approach to meeting public transit needs in western Racine County, which involves implementing transportation services on a trial basis in communities with anticipated demand. After evaluating the performance of each trial service, the services that experience high enough demand should be continued and those that experience low demand should be eliminated. Examples of recent uses of this approach include the Racine County Link—a cross-county shuttle service operated from June of 2012 through January of 2013—and the Shuttling People Around Racine County (SPARC) program initiated by the County in 2011. The Link and two SPARC routes experienced low demand and were eliminated, but the Burlington SPARC shuttle service has been successful and the County has increased its service. County Recommendation 4 recommends that the County continue to operate the SPARC shuttle program, monitoring the level of County funding required to operate the service as it does currently and possibly seeking Federal and State transit operating assistance in the future should there be enough demand by the general public.

# 2. Establish Commuter Bus Service between Burlington and Milwaukee

The plan recommends that Racine County consider establishing a commuter bus service between downtown Burlington and downtown Milwaukee over STH 36 and IH 43. The plan proposes providing two round-trips on weekdays, focused on commuters from Burlington to Milwaukee and serving three proposed park-ride lots. The cost of providing the service for the first full year would be an estimated \$203,800, increasing with inflation to about \$229,600 in the fifth year. The County could limit its financial risk by applying for a grant through the Federal Highway Administration Congestion Mitigation and Air Quality Improvement (CMAQ) program, which could fund about 80 percent of the total cost to operate the service for its first three years as a demonstration project. The CMAQ grant funds would require a local match from the County of at least 20 percent, but passenger revenues could be used as local matching funds. Ridership forecasts indicate that passenger revenues may be enough to cover most if not all of the required 20 percent local match. Following the three-year demonstration period, the service would qualify to receive Federal and State transit operating assistance, with the County required to provide local matching funds. When it comes time to transition from CMAQ grant funding to the Federal and State transit operating assistance programs, the County could determine whether to continue or eliminate the service based on its performance and the availability of the necessary level of County funding, which would be an estimated \$38,700 in the fifth year of operations.

# 3. Improve Coordination between City and County Paratransit Services

This recommendation is summarized under City Recommendation 2 above, which recommends that the City of Racine and Racine County work together to improve coordination between their existing paratransit services.

### 4. Continue Existing County Shuttle Service and Monitor Required Level of County Funding

The plan recommends that the County continue to operate the SPARC shuttle service as it does currently, focused on serving seniors and people with disabilities in areas not served by public transit and allowing the general public to use the service as space permits. However, the County should monitor the level of County funding required to operate the service and revisit the possibility of operating the shuttle service as public transit open to the general public if Federal capital funding becomes more readily available and if the existing shuttle service can no longer effectively accommodate members of the general public. Operating the shuttle service as a public transit service open to the general public would have the potential to reduce the level of County funding required to operate the service because the service would be eligible to receive Federal and State transit operating assistance funds. If these funds are used, the County would be considered a public transit operator and as such may have additional responsibilities and costs associated with selecting the operator of a public shuttle service through a competitive bid process and using wheelchair-accessible vehicles to operate the service.

#### 5. Establish Guidelines for Vanpool Programs in Anticipation of Future Demand

The plan recommends that the County apply a proposed set of guidelines for what would be desirable to start a vanpool program in the event there becomes demand for vanpools in the future. With the guidelines established, the County should wait to pursue formation of a vanpool program until interest is expressed by a group of employers or employees. If sufficient interest is expressed, the County could minimize its financial risk by working with a private vanpool provider. Monthly user fees would likely be significantly higher under a private vanpool provider than if the program were to be run by County staff, so the County could subsidize some of the user fees or partner with employers willing to contribute to part of the cost of the service.

# **Chapter VIII**

# SUMMARY AND CONCLUSIONS

#### INTRODUCTION

At the request of the City and County of Racine, the Southeastern Wisconsin Regional Planning Commission prepared this short-range, five-year public transit plan for Racine County for the years 2013-2017. The plan includes a review of population, employment, land use, and travel patterns in Racine County; review of the existing transit services and trends in transit service operation; definition of transit service objectives and standards to evaluate performance; assessment of the system and route performance of the City of Racine's Belle Urban System (BUS) and identification of unmet transit travel needs of Racine County residents; review of a comparison of the BUS to peer transit systems; consideration of potential transit service improvement alternatives; and the development of a recommended plan of operating and capital improvements for the City of Racine and Racine County, including the associated funding needs.

# **Study Organization**

Commission staff prepared the plan in a joint effort with the staffs of Racine County and the City of Racine. The plan was guided by an Advisory Workgroup of representatives from all units of government in the County and a wide variety of agencies and populations with an interest in transportation in the County. After careful study and evaluation, the Workgroup made the transit service improvement recommendations for the City and County of Racine that are included in this plan.

#### **EXISTING TRANSIT SERVICES**

During the planning effort, information was collected on the operating characteristics and ridership levels for the current City transit system and for the other major transit services within Racine County in 2012 (presented in Chapter II). This information provides the basis for preparation of the plan. The most important findings on the existing transit services are presented below.

#### City of Racine Belle Urban System

The BUS has been owned by the City of Racine since July 1975, when it was acquired from the last private operator. The system is operated by a private contract management firm, First Transit, with oversight of the management firm provided by staff within the City of Racine Department of Transportation. The Racine Transit and Parking Commission sets the policies of the transit system, but the Racine Common Council has the ultimate responsibility for review and approval of important matters, including the system's annual budget.

The BUS operated 10 bus routes in 2012, including nine regular routes and one peak-hour tripper route serving J. I. Case High School. The nine regular routes operated largely within the City of Racine with service to portions

of the Villages of Caledonia, Elmwood Park, Mt. Pleasant, North Bay, Sturtevant, and Wind Point. The system used "pulse" scheduling to facilitate transfers between bus routes at the Corinne Reid-Owens Transit Center, located near the Racine central business district (CBD). Service over the regular routes was provided between 5:10 a.m. and 10:10 p.m. on weekdays, between 5:40 a.m. and 6:40 p.m. on Saturdays, and between 9:40 a.m. and 6:40 p.m. on Sundays. The routes were operated with service frequencies of 30 to 60 minutes during weekday peak and midday periods, 60 minutes during weekday evenings, and 60 minutes all day Saturdays and Sundays. The base cash fare was \$2.00 per trip for adults and \$1.50 per trip for youth.

The transit system also provided paratransit service through its Dial-a-Ride Transport (DART) service directed at the travel needs of people with disabilities who were unable to use the City's bus service. DART provided door-to-door transportation for eligible trips made within three-quarters of a mile of a bus route and was available during the same hours as the fixed-route bus service.

The bus fleet operated by the BUS in 2012 consisted of 42 buses. The fleet included 35 diesel-powered buses used on the 10 regular and special tripper routes and seven mini-buses with lifts used to provide DART paratransit services. The fleet's average age was 8.7 years (buses) and 3.0 years (mini-buses). In early 2013, the BUS replaced 14 of its older buses, significantly reducing the fleet's average age.

Historic ridership and service levels were collected for the BUS for 2007 through 2011. During that period, the annual revenue vehicle hours of service on the system modestly increased by 3 percent, from about 85,300 revenue vehicle hours in 2007 to about 88,000 in 2011. The system ridership also increased by about 6 percent, from 1,175,900 revenue passengers in 2007 to 1,248,500 in 2011.

The operating expenses of the BUS are funded through a combination of farebox revenues, Federal, State, and local funds. Between 2007 and 2011, annual operating expenses averaged about \$7.34 million. Of this total, about \$1.47 million, or about 18 percent, came from farebox and other operating revenues. The remaining \$5.87 million, or about 82 percent, was annual public operating assistance for the system. The average annual operating funding provided by the City of Racine was about \$1.1 million, or about 15 percent of total system operating expenses. On average, operating expenses increased by about 2 percent annually over the five years, largely due to inflationary cost increases.

Capital expenditures for the BUS are funded through a combination of Federal and local funds. The average annual capital expenditures between 2007 and 2011 totaled about \$1.16 million. About \$0.93 million, or 80 percent, came from Federal transit capital assistance programs, with the remaining 20 percent, about \$0.23 million, coming from the City of Racine.

#### **Other Public Transit Services**

In addition to the BUS, a number of other public transit services were also provided to residents of Racine County in 2012. They include the following:

- Wisconsin Coach Lines, Inc. provides a commuter bus service, sponsored by the City of Racine and the
  Wisconsin Department of Transportation (WisDOT), between the Milwaukee CBD and the Cities of
  Racine and Kenosha. The route is operated with seven trips in each direction on weekdays and six trips in
  each direction on weekends and holidays.
- Coach USA provides intercity bus service along a route between the Milwaukee CBD, Milwaukee's General Mitchell International Airport, and Chicago's O'Hare International and Midway Airports, including a stop in Racine County at the intersection of IH 94 and STH 20. The service consists of 15 southbound runs and 15 northbound runs daily.
- Amtrak provides intercity passenger-train service between the Milwaukee CBD and Chicago on its
  Hiawatha route. Seven trains are operated in each direction Monday through Saturday, and six trains in
  each direction on Sundays, all of which stop in the Village of Sturtevant.

# **Human Services Transportation Providers**

In 2012, human services transportation within Racine County was provided by a number of public and private nonprofit agencies and organizations, as well as by private for-profit transportation and ambulance companies. In western Racine County, human services transportation was the only public transportation available for most of the population.

The Racine County Human Services Department contracts with First Transit to provide demand-response transportation service for seniors and people with disabilities outside the DART paratransit service area, and for seniors within the DART paratransit service area. In 2012, the service operated on weekdays from 5:30 a.m. to 6:00 p.m., with users generally required to make trip reservations by the day prior to the trip. Fares for the service were \$2.50 per one-way trip.

The County also contracted with Kenson Enterprises in 2012 to operate a program called Shuttling People Around Racine County (SPARC), which was initiated in 2011. SPARC is a flex-route—meaning the vehicles can (upon request) deviate a short distance off the route to pick up and drop off passengers—shuttle service aimed at providing transportation for seniors or people with disabilities in areas not served by public transit. In 2012, the SPARC service was provided in the Burlington area on weekdays from 9:00 a.m. and 3:00 p.m. Fares for the service were \$2.00 per one-way trip, \$3.00 per round-trip, and \$5.00 for an all-day pass.

#### LAND USE AND TRAVEL PATTERNS

As part of the public transit plan, information was gathered and reviewed on historic and current population, employment, land use, and travel patterns in Racine County (presented in Chapter III). The following paragraphs present some of the key findings.

# **Population**

The County population has grown since 1970, increasing from about 170,800 persons in 1970 to about 195,400 persons in 2012, or by about 14 percent. The growth in population did not occur evenly, with the City of Racine decreasing in population while a high percentage of growth occurred in the Villages of Caledonia and Mt. Pleasant. The number of households in the County has increased nearly four times as fast as the County resident population, as a result of a significant decrease in the average household size.

Five population groups generally have more limited access to the automobile than the population as a whole, and have historically been more dependent on public transit service as a result. These "transit-dependent" groups include school-age children (ages 10 through 16), seniors (age 65 and older), persons in low-income households, people with disabilities, and households with no vehicle available. The transit-dependent population within the County was concentrated primarily in the City of Racine and in the City of Burlington and Village of Union Grove areas in 2010.

### **Employment**

The number of jobs in Racine County increased from about 64,600 jobs in 1970 to about 91,000 jobs in 2012, or by about 41 percent. However, most of the overall employment growth occurred outside the City of Racine, largely at new employment centers developed in nearby communities. The economic downturn occurring between 2007 and 2009 resulted in employment losses, with modest job growth occurring in the years since 2009.

In fall 2008, Racine Area Manufacturers and Commerce (RAMAC) surveyed its members to gather information on the transportation needs of employers in Racine County. The survey is included in Appendix A and was completed by a total of 150 Racine County employers. The primary results are summarized below:

- Only 44 percent of employers indicated they were served by public transit.
- Only 3 percent of employers indicated that transportation problems caused recruiting problems.

- About 56 percent of employers indicated that they could be flexible on the shift start and end times of
  employees for whom transportation was a problem. However, only 3 percent indicated that they would be
  willing to contribute to expand transportation service in their area.
- There was mixed demand for expanding existing services in communities currently within the service area of the BUS.

#### **Land Use**

The amount of land in the County devoted to urban land uses more than quadrupled between 1950 and 2010. Some of this development has occurred near the established urban center of Racine, but most has occurred in the outlying portions of the County, resulting in a development pattern that is difficult and costly to serve with conventional fixed-route bus services.

Research indicates that fixed-route bus service operated with at least hourly service frequencies may be supported by employment densities of at least four jobs per acre and residential densities of at least seven dwelling units per acre. Applying this standard, transit-supportive residential densities are located in the portions of the City of Racine east of Green Bay Road, particularly in the central portions of the City. Transit-supportive employment densities can be found east of Green Bay Road in the central portions of the City, as well as in a small number of areas west of Green Bay Road. Some portions of western Racine County, including in areas of the City of Burlington and Villages of Mt. Pleasant, Sturtevant, and Union Grove, also have transit-supportive residential densities or employment densities.

Certain major activity centers in the County generate a large number of person trips on a daily basis, including commercial centers, educational institutions, medical centers, government centers, major employers, industrial or business parks, and residential facilities for seniors, people with disabilities, and low-income persons. In the eastern portion of the County, most of these activity centers are in the City of Racine proper, with a small number located in the Villages of Sturtevant and Mt. Pleasant. In the western portion of the County, the City of Burlington and the Villages of Rochester, Union Grove, and Waterford contain most of the activity centers.

#### **Travel Habits and Patterns**

Travel surveys undertaken by the Regional Planning Commission indicate that average weekday total person travel entirely within the County and between the County and other external areas increased by about 7 percent, from about 652,500 person trips in 1991 to about 695,300 trips in 2001. About 73 percent of these person trips were internal trips made entirely within the County in 2001. The remaining 27 percent were made with one trip end outside the County, with about three-fourths of those external trips made to or from Milwaukee or Kenosha Counties.

A 2001 survey of passengers using the BUS, conducted by the Commission, found that most of the passenger trips made on the system's regular routes were for work or school purposes. School-age children, consequently, make up a significant proportion of passengers on the system, along with persons residing in households with no vehicle available and low-income persons. Passengers on the regular routes were found to be predominantly female, without a driver's license, ages 44 and under, and from households with incomes below \$30,000 per year.

# PUBLIC TRANSIT SERVICE OBJECTIVES AND STANDARDS

Objectives and standards were formulated during the planning effort (presented in Chapter IV) to provide the basis for the analyses conducted for the plan, including assessing the performance of the existing transit services, identifying unmet transit service needs, designing and evaluating alternative transit plans, and recommending service changes and improvements. The objectives with supporting standards formulated under this study are intended to represent the level of transit performance desired in Racine County. Specifically, the following objectives were approved by the Workgroup:

- 1. Public transit services should effectively serve the existing land use pattern, meeting the demand and need for transit services, particularly the transit travel needs of the transit-dependent population and of employers for workers;
- 2. Public transit services should promote effective utilization of transit services and operate services that are safe and reliable and provide for user convenience and comfort; and
- 3. Public transit services should be economical and efficient, meeting all other objectives at the lowest possible cost.

Each objective was linked to a supporting principle and two sets of standards: one set to guide service design and operation, and one set to help evaluate service performance. Separate planning principles and service standards were developed for public fixed-route transit services like the BUS, and public demand-responsive transit services, including route- or point-deviation services and shared-ride taxicab services.

### **EVALUATION OF THE BELLE URBAN SYSTEM**

Using specific performance measures identified in the transit system objectives and standards, a systemwide and route-by-route evaluation of the existing BUS was conducted (presented in Chapter V). The evaluation identified areas of excellent performance of the transit system, as well as areas of travel needs not being met by the transit system. The conclusions reached from the BUS performance evaluation included:

# • Service to Existing Population, Employment, and Land Uses

The existing transit system provides excellent coverage of the existing residential and employment concentrations inside the City of Racine. It provides good coverage outside the City, but some areas with residential or employment densities that could support transit are not served. The transit system provides very good coverage of the major activity centers in the evaluation area, and excellent coverage of residential concentrations of the transit-dependent population and the total minority population.

#### Peer Comparison

The transit system is about average when compared to similar transit systems in the State of Wisconsin and from around the country. In general, the BUS provides a high level of service for its service area population size, resulting in higher service effectiveness, but somewhat lower service efficiency.

#### • Route Ridership, Service Effectiveness, and Cost Effectiveness

On weekdays, Route Nos. 1, 2, 3, 4, and 7 consistently exceed the acceptable performance levels, while Route Nos. 5, 20, 27, and 86 are consistently worse than the acceptable levels. On Saturdays, Route Nos. 3, 4 and 7 continue to meet the acceptable performance levels, Route Nos. 1 and 2 meet some of the acceptable levels, and Route Nos. 5 and 86 continue to be poor performers. On Sundays, Route Nos. 4 and 7 remain the best-performing routes, while Route No. 1 improves over its Saturday performance and consistently exceeds the acceptable levels. The performance of Route No. 3 worsens, with the route consistently failing to meet the acceptable levels, and Route No. 86 remains a poor performer in all measures.

# • Route Segment Productivity

All the routes of the system except Route No. 7 have at least one unproductive route segment. Route Nos. 5, 27, and 86 are comprised of many segments that have low passenger activity.

### • Schedule Adherence

The transit system meets the service standard of 90 percent of the service being on-time. Every route was at or above this level except Route No. 7, which was only 80 percent on-time due to a large number of early departures from bus stops.

# **Evening Ridership**

Evening ridership represents about 7 percent of the ridership on the regular routes on weekdays and about 10 percent of the ridership on the regular routes on Saturdays. The routes with the highest evening ridership (Route Nos. 1, 3, and 4) generally corresponded with strong performers in the route-by-route evaluation.

#### • Transit vs. Automobile Travel Times

In general, in-vehicle travel times for the routes of the BUS were less than 30 minutes longer than automobile travel times, which would be considered tolerable by most riders. Route Nos. 1, 3, 5, and 7 have the greatest time differences between transit and automobile travel times, due largely to the indirect alignment of these routes, particularly the northern portion of Route No. 5. In addition, Route No. 86 operates as a single one-way loop, as did Route No. 27 until it was modified in September 2012, which results in a high degree of inconvenient travel for passengers. For trips on the transit system that require transfers, most of the sampled transit travel times were less than 30 minutes longer than auto travel times. However, some transit trips were much longer than auto travel times, particularly those requiring multiple transfers between routes.

### IDENTIFICATION OF UNMET TRANSIT SERVICE NEEDS

An additional section of Chapter V involved an assessment of unmet transit service needs, focusing on travel within eastern Racine County, within western Racine County, and to/from adjacent counties. These unmet needs were identified through several different means, including through Commission staff analysis, through outreach to members of the public, through focus group discussions, and by individuals participating in the development of a Public Transit-Human Services Transportation Coordination Plan for Racine County. A brief summary of the unmet needs identified is presented below.

# **Unmet Transit Needs in Eastern Racine County**

- The current midday schedule of the BUS is confusing, as bus routes alternate between 30- and 60-minute service frequencies between 9:00 a.m. and 3:00 p.m.
- The alignments of some routes should be modified to reflect land use changes.
- There is a potential need for the BUS to provide more frequent service.
- There is support for improved bus service between the City of Racine and suburban locations, although it
  is recognized that suburban businesses and communities may not be willing to contribute funding for
  improved service.
- There is a potential need for a taxi service in the City of Racine that can respond to a request for service within an hour.

# **Unmet Transit Needs in Western Racine County**

- There are locations in the Burlington-Rochester-Waterford and Union Grove areas of western Racine County that have the potential to support some form of regular public transit service.
- There is a potential need for more transportation options for residents of western Racine County, especially if they are not eligible for the County demand-responsive service for transportationhandicapped persons.
- The County lacks a coordinated source of information on all of the available transportation services, including private for-profit and not-for-profit human services transportation providers.

#### **Needs for Transit Connections to Other Counties**

- There is a potential need for frequent and convenient transit service connecting the City of Racine and the City of Kenosha along a corridor west of STH 32.
- The Milwaukee-Racine-Kenosha commuter bus route (operated by Wisconsin Coach Lines) would benefit from more frequent service.
- There is a potential need for additional transit services between Racine and Milwaukee Counties, such as commuter service from western Racine County to Milwaukee County and park-ride facilities along STH 36
- There is a potential need for transit service to UW-Parkside, Gateway Technical College, and Carthage College in Kenosha County.
- Support was expressed for a commuter rail line between the Cities of Kenosha, Racine, and Milwaukee.

#### TRANSIT SERVICE IMPROVEMENT ALTERNATIVES

A number of transit service improvement alternatives were developed for the City of Racine and Racine County for the years 2013-2017 (presented in Chapter VI). The alternatives, described below, included:

- A preliminary recommended transit system alternatives for the BUS;
- Three transit service alternatives for Racine County; and
- Four alternatives to improve transit service between Racine County and surrounding counties.

# Preliminary Recommended Alternative for the City of Racine Belle Urban System

A number of transit system improvement alternatives were initially developed for the BUS for the years 2013-2017 (presented in Appendix B). Through an iterative development and evaluation process, several of these initial alternatives were eliminated from consideration, narrowing the possible alternatives down to one preliminary recommended alternative. At the direction of the City of Racine, the preliminary recommended alternative is financially-constrained, maintaining the total operating budget relatively flat and maintaining the City's share of the necessary operating assistance between \$1.0 and \$1.1 million.

The City's urban development pattern poses a challenge to designing a transit system that uses "pulse" scheduling, because the new development has historically spread south and west of the City's downtown. The preliminary recommended alternative for the BUS proposed restructuring routes so that the route segments on the northern part of the City were longer, in order to fit into a 60-minute round-trip schedule. It would also make all the routes serving the southern part of the City fit into a 60-minute round-trip schedule. In addition, the proposal is designed to improve transfers between the routes at a southwest transfer point to be constructed in the Regency Mall area.

#### Route Restructuring

The alternative proposed combining several routes and reconfiguring several others. The primary route alignment changes can be summarized as follows:

- Remove the Route No. 1 loop on South Street, Charles Street, and Carlton Drive, and modify the route to serve Horlick High School and the Rapids Plaza shopping area.
- Combine Route Nos. 2 and 5 north and south of the Transit Center.
- Modify Route No. 3 north of the Transit Center to serve St. Mary's hospital.

- Modify Route No. 4 north of the Transit Center to serve downtown.
- Convert the existing Route No. 86 from a one-way loop to a two-way out-and-back route ("Route No. 6") serving St. Mary's Hospital, Ohio Street, Green Bay Road, and the Regency Mall area.
- Establish a southwest transfer point in the Regency Mall area.

Other minor route changes were proposed to equalize route lengths, in order to address on-time performance problems on the longer routes and leave less "dead time" at the ends of the routes. No changes were proposed to the newly-restructured Route No. 27, but the alternative suggested that the BUS consider combining Route No. 27 with Route No. 20 (a special commuter route) should Route No. 27 perform below acceptable standards.

# Adjustments to Route Frequency or Service Periods

The required changes to the current systemwide pulse schedule system under the alternative can be summarized as follows:

- Nearly all regular routes would have morning and afternoon peak service frequencies of 30 minutes, with off-peak service frequencies of 60 minutes.
- Since all reconfigured northern and southern routes would be on a 60-minute round-trip schedule, the City can pair the longest routes serving the southern portion of the City with the shortest routes serving the northern part of the City.
- The reduced service hours established in January 2012 would be maintained. The last trips would leave the Transit Center at 9:10 p.m. on weeknights and at 6:10 p.m. on Saturdays and Sundays.

The preliminary recommended alternative would require the same number of buses for weekday peak service as in the 2012 schedule, allowing the BUS to utilize its current fleet of 35 heavy-duty buses.

#### Performance Measures and Costs

Under the alternative, the transit system would undergo some significant changes in level of service provided, performance measures, and costs:

- The annual miles and hours of service would be about 5 percent lower than the miles and hours in the 2012 budget, mostly due to reductions in midday service frequency and the combination of Route Nos. 2 and 5.
- Ridership would be expected to increase by about 1 percent per year, from the current estimate of 1.06 million (2012) to 1.11 million (2017), based on the potential for the alternative to make the system more attractive to existing and potential riders.
- The total cost of operating the alternative system is estimated to decrease by about 3 percent in the first year, from \$7.14 million in the 2012 budget to \$6.91 million in 2013. Inflationary cost increases would increase total operating expenses to \$7.33 million by 2017.
- Federal and State funds may be expected to provide about 55 percent (\$3.80 million) of the total operating expenses in 2013. The remaining public assistance needed (\$1.52 million) would be provided by local sources, with the City of Racine providing about \$1.04 million. By 2017, Federal and State funds would increase to \$4.03 million, likely requiring local funding to increase to \$1.65 million, including about \$1.13 million from the City of Racine.

#### Capital Needs

The following capital investments will be needed to maintain the existing transit system in good working condition and to establish a southwest transfer point in the Regency Mall area:

- A total of 14 replacement buses in 2013 to replace the vintage 1997 Nova buses that have exceeded their service life, and six replacement buses in 2016 and 2017 to replace the vintage 2004 Gillig buses that will have exceeded their service life at that point.
- Replacement paratransit buses for the seven vehicles that have been in service since 2009.
- Funding to lease or purchase land in the Regency Mall area for a small transfer facility.
- Various repairs, renovations, and upgrades to BUS facilities.

The anticipated Federal share for these capital funding needs is 80 percent, or \$8.78 million, over the five-year planning period. The City of Racine's projected local share would be \$2.20 million.

### Options for Service Improvements if Additional Funding Becomes Available

The following potential desirable service improvements could be considered beyond the proposed changes should additional funding become available during the five-year planning period:

- 1. Add service on the new Route No. 6 in one of two ways:
  - Provide a new branch west of Green Bay Road on Spring Street and Sunnyslope Drive during weekday peak periods; or
  - Provide 30-minute service frequencies during weekday peak periods, resulting in common 30-minute frequencies on all regular routes during the peak periods.
- 2. Provide service to the Village of Sturtevant in one of two ways:
  - Extend Route No. 7 west of Oakes Road on Durand Avenue during weekday peak periods; or
  - Provide shuttle service over Durand Avenue between Regency Mall and the Village of Sturtevant during weekday peak periods.
- 3. Establish express bus service between the Cities of Racine and Kenosha
- 4. Extend Saturday service hours to 9:40 p.m.:
  - Provide later service on all routes proposed to operate on Saturday, extending service for an additional three hours from 6:40 p.m. to 9:40 p.m.

For illustrative purposes, the necessary additional funding for any of the service improvements is assumed to become available by the year 2016. If the maximum improvements were implemented in 2016, the total estimated annual operating expenses for all improvements would be about \$1.2 million, requiring an additional \$1.0 million in net operating assistance.

#### Options for Additional Service Reductions or Fare Increases

If the City determines that it needs to further reduce its share of local funding provided to the transit system, the following possible further service reductions or fare increases could be considered:

- 1. Eliminate Route No. 2N/2S on Saturdays.
- 2. Eliminate Route No. 1S after 6:30 p.m. on weeknights.
- 3. Eliminate Route No. 1S on Saturdays and/or Sundays.
- 4. Increase cash fares by \$0.25 (about 12 percent).

Again assuming the year 2016, these options combined could reduce the amount of net operating assistance needed by about \$291,000. At the direction of City of Racine staff, Commission staff also evaluated a service reduction option that could be implemented should the system face even more severe funding problems. This option would involve cutting back from 30-minute peak period service frequencies to 60-minute service frequencies during all time periods. This service reduction would be expected to reduce the amount of total operating assistance needed in 2013 by about \$720,000, with the City of Racine saving about \$170,000. As a less drastic option, City and transit system staff also has the ability under the alternative to selectively cut back individual routes to 60-minute all-day service frequencies—as opposed to all routes—because each proposed route would fit into a 60-minute round-trip schedule from the Transit Center to its outlying terminus.

# **Transit Service Alternatives for Racine County**

Commission staff developed three alternatives for Racine County, all designed to address a need for affordable transportation services with fewer eligibility restrictions and shorter advance-reservation time requirements. These three alternatives are summarized below.

# Racine County Alternative 1: Expansion and Coordination of Existing Services

Under Racine County Alternative 1, County agencies and private nonprofit agencies providing transportation would coordinate existing services to improve the efficiency of, and expand access to, those transportation services. Three potential ways to expand the existing services were identified and are summarized below:

# • Racine County Sub-alternative 1A

West of IH 94, eligibility of the County's demand-response transportation service for seniors and people with disabilities would be expanded to include anyone who receives assistance from County agencies (except Medicaid-funded non-emergency transportation). This would more than double the ridership on the demand-response transportation service west of IH 94, which would require the operator (currently First Transit) to provide significantly more vehicle hours of service. This would cause operating expenses to increase significantly—from about \$123,000 in 2011 to about \$304,100 in 2017—without increasing the availability of Federal and State operating assistance.

#### • Racine County Sub-alternative 1B

East of IH 94, the City DART paratransit service would be combined with the County demand-response transportation service for seniors and people with disabilities. Combining the two services east of IH 94 would benefit seniors and people with disabilities by providing a convenient, one-stop transportation service for eastern Racine County. The combined service would result in more efficient operations and a slight increase in total ridership, likely without a significant financial impact on either the City or the County in the short term. This sub-alternative proposes that the County contract with the City DART paratransit (although it recognizes that it may be possible for the City to instead contract with the County). With the combined service operated by drivers for the BUS, the transit system would receive more Federal and State operating assistance. However, overall operating expenses would increase because the costs per revenue vehicle hour for operating the City's DART paratransit are much higher than those of the current private contactor (First Transit) for the County's demand-response service. The County's contribution towards demand-response service east of IH 94 would also increase, due to a projected increased in ridership. Combining the City and County paratransit services east of IH 94 would also be a complex undertaking. As such, a potential first step would be increased coordination between the two call centers, or the establishment of an integrated call center for the two services.

# • Racine County Sub-alternative 1C

The County shuttle service would continue to be operated with ongoing refinement and be operated as public transit. This sub-alternative proposes that the County continue to fund and pursue refinements to the shuttle service, including the current Burlington SPARC route. This could include modifying routes, dropping routes, and trying new routes. It also suggests that, as there may be unused capacity on the County's shuttle service, the County accommodate trips made by the general public in addition to trips by

seniors and people with disabilities. Ridership on the shuttle service is projected to increase from an estimated 5,500 riders in 2011, to about 7,400 riders by 2017. The operating expenses for the shuttle service are estimated to increase by about 2 percent per year, resulting in total annual operating expenses of about \$159,000 by the end of the planning period. If operated as public transit, the shuttle service would qualify to receive rural transit operating assistance (which would cover about 60 percent of operating expenses in 2013). As such, the County could limit its share of operating expenses while still improving the service, and could set aside some funds from the State Section 85.21 specialized transportation assistance program to purchase vehicles for County-funded transportation services.

#### Racine County Alternative 2: Shared-Ride Taxi Service West of IH 94

Under Racine County Alternative 2, the County would replace the current, eligibility-limited demand-response transportation service provided by the Human Services Department with a public shared-ride taxi program. Anyone could use the shared-ride taxi service, with the same service area as the existing eligibility-limited service (any trips with one trip end west of IH 94, including out-of-county medical trips). Under this alternative, ridership would be expected to increase from the 6,000 trips provided in 2011 on the current service, to 21,300 trips provided on the proposed service in 2017. The additional ridership would require the operator (First Transit) to provide significantly more vehicle hours of service, causing operating expenses to increase from about \$123,000 in 2011 to about \$444,000 in 2017. Like Sub-alternative 1C above, by converting the service to public transit, the County could apply for rural transit operating assistance (which would cover about 60 percent of operating expenses in 2013). The amount of State Section 85.21 and County funds required for transportation west of IH 94 would actually be expected to decrease in the first year of the public shared-ride taxi program. However, as ridership and attendant hours and miles of service and operating costs increase through the planning period, the levels of Section 85.21 and County funds would return to similar amounts in 2017 as they were 2011. Eventually, the shared-ride taxi service may be expected to require a much higher County contribution than the existing service.

# Racine County Alternative 3: Vanpools for Commuting Trips

Under Racine County Alternative 3, the County would coordinate, or encourage, the formation of vanpools for workers with long commutes. This could be done in two ways:

# • Racine County Sub-alternative 3A

The County would purchase vans and administer the program with County staff, using fees charged to the vanpool users to cover the operating costs and the local share of the cost of purchasing additional vehicles or replacement vehicles for the program. The County would purchase two vans in the first year (more in subsequent years) using Federal transit capital assistance funds to cover 80 percent of the vehicle costs. The County's share of the costs would be about \$10,100.

#### • Racine County Sub-alternative 3B

A private vanpool operator would provide vans and administer the vanpool program, using fees charged to the vanpool users to cover their own costs. Monthly user fees would be significantly higher under a private vanpool provider, because the private vanpools do not receive Federal assistance for purchasing vehicles. If the County decides to work with a private vanpool provider to run a vanpool program, the County could choose to subsidize some of the user fees in the program, or to form a partnership with employers who are willing to contribute to part of the cost of the service, or to pay for additional insurance.

# Transit Service Alternatives for Travel Between Racine and Surrounding Counties

Commission staff developed four transit service alternatives for connecting Racine County residents and activity centers to adjacent counties for the years 2013-2017. The City and County could choose to implement any combination of these alternatives, which are summarized below.

#### Inter-County Alternative 1:

# Increase Service Frequency on the Milwaukee-Racine-Kenosha Commuter Bus Route

Under Inter-County Alternative 1, the service frequency on the existing Milwaukee-Racine-Kenosha commuter bus route (operated by Wisconsin Coach Lines, or WCL) would be increased from the current seven round-trips on weekdays to 10 round-trips on weekdays. Annual ridership would be expected to increase by about 19,200, to about 96,100 revenue passengers in 2017. The total annual operating expenses in 2017 would also be expected to increase from about \$1.44 million to \$1.98 million, requiring an estimated additional \$483,000 in total public operating assistance. The public operating assistance would include an increase in the required local match of about \$208,000, which would likely need to be provided by WCL or local governments.

This alternative would provide additional service to Milwaukee and Kenosha and increase travel options for City of Racine and Racine County residents at times when there is an apparent need for more frequent service. However, it is recognized that the additional local funding needed may not be available given current financial constraints. Regardless of whether or not the service frequency is increased, the alternative suggests that the City of Racine should consider taking steps to integrate the commuter route with existing BUS routes in order to promote coordination between commuter and local transit services and make each easier and more attractive to use.

#### Inter-County Alternative 2:

#### Provide Local Public Transit Service to the UW-Parkside Campus

Under Inter-County Alternative 2, local public transit service would be provided between the City of Racine and UW-Parkside. This could be done in one of two ways:

#### • Inter-County Sub-alternative 2A

The City would implement shuttle service between UW-Parkside's Tallent Hall and the southwest transfer point for BUS routes being implemented at Regency Mall. The shuttle would replace the existing University Police shuttle—which makes two round-trips between the UW-Parkside campus and the intersection of Taylor Avenue and Meachem Road in the City of Racine as part of its daily route—and would be operated using a BUS paratransit vehicle and driver. Six round-trips per day would be provided between the campus and Regency Mall, with trips scheduled approximately every two hours and designed to meet BUS routes at transit "pulse" transfer times. About 1,600 annual riders would be expected to use the proposed shuttle service in 2017, with total annual operating expenses being about \$30,700. Of that amount, \$12,900 would have to be paid for by local transit operating assistance, which would most likely come from the University's operating budget or student fees. The City would also need to purchase an additional paratransit vehicle at a total cost of about \$100,000, with an estimated local share of \$20,000.

#### • Inter-County Sub-alternative 2B

The City would extend the proposed BUS Route No. 1S to UW-Parkside. The extension would provide frequent local bus service to UW-Parkside's Tallent Hall, and would permit transfers between the proposed BUS Route No. 1S and Kenosha Area Transit (KAT) Route No. 1, which already serves UW-Parkside. Service to UW-Parkside would be operated between about 7:00 a.m. and 6:00 p.m. only on those weekdays when classes are in session. About 3,400 annual riders would be estimated to use the extended Route No. 1S at UW-Parkside. Total annual operating expenses for the extension would be about \$160,500 in 2017. Of that amount, \$74,500 would have to be paid for by local transit operating assistance, which would most likely come from the University's operating budget or student fees. The City would need to operate one additional vehicle for the route extension during peak periods.

A third sub-alternative was also developed that would not provide a local public transit service, but would improve transportation between the City and the UW-Parkside campus:

### • Inter-County Sub-alternative 2C

The City would work with the University to enhance the University's existing shuttle service. This would involve the University extending service about 1.2 miles north to connect to BUS routes at the proposed

southwest transfer point at Regency Mall. An additional round-trip to the southwest transfer point would also be operated during the midday period, resulting in a total of three daily round-trips. The improved shuttle service would provide additional access to BUS fixed routes for students and staff, but would not serve individuals who need to continue on to the KAT system, as it would not be a public transit service. As the improved shuttle service would be operated by the University, annual operating costs would most likely be funded by the University's operating budget or student fees.

## *Inter-County Alternative 3:*

## Establish Express Bus Service between the Cities of Racine and Kenosha

Under Inter-County Alternative 3, the Cities of Racine and Kenosha would jointly establish and contract for an express bus service between the two Cities. The route would serve major public higher education institutions, including the Gateway Technical College campuses in Racine and Kenosha and the UW-Parkside campus in Kenosha County. On the proposed service, 16 round-trips would be operated between 7:00 a.m. and 7:00 p.m. on weekdays, with service frequencies of 30 minutes during peak periods and 60 minutes during off-peak periods. Commission staff estimates that about 82,600 annual riders would use the proposed express bus service by 2017. Total annual operating expenses would be about \$802,600 in 2017, with funding through the Federal Section 5307 program and the State Section 85.20 urban mass transit operating assistance program, and a required local match of about \$257,700 to be provided by the Cities of Racine and Kenosha. The express bus service would require four buses, which would cost a total of about \$1,700,000, of which 80 percent could be funded using Federal transportation grants. The remaining 20 percent would need to be provided by the Cities of Racine and Kenosha. The two Cities would need to agree how to provide the local match for both operating and capital funds.

Another means of providing express transit service between the Cities of Racine and Kenosha would be to establish a commuter rail line. Appendix C presents a summary of the most recent proposal for a commuter rail line between Kenosha, Racine, and Milwaukee. However, an express bus service alternative was developed—rather than a commuter rail alternative—because efforts to implement a commuter rail line have been indefinitely postponed in the absence of a regional transit authority to implement the line and a dedicated funding source for the line.

## Inter-County Alternative 4:

## Establish Commuter Bus Service between Burlington and Milwaukee

Under Inter-County Alternative 4, Racine County would establish and contract for a commuter bus service between the City of Burlington and the Milwaukee CBD, operating over STH 36 and IH 43. The proposed commuter bus service would provide two round-trips on weekdays, focused on service from Burlington to Milwaukee during the morning peak period and from Milwaukee to Burlington during the afternoon peak period. Racine County could contract for operation of the route from a private transit operator similar to how Waukesha County contracts for commuter bus service. About 20,500 revenue passengers would be expected to use the commuter bus service annually in the year 2017. Total annual operating expenses would be about \$229,600 in 2017, and are assumed to be funded through the State Section 85.20 mass transit operating assistance program and the Federal Section 5311 non-urbanized area formula grant program, with a local match of about \$38,700 to be provided by Racine County. Alternatively, WisDOT may determine that the service should instead be funded through the Section 85.20 program and the Federal Section 5307 urbanized area formula grant program. The County may also be able to obtain Federal Highway Administration Congestion Mitigation and Air Quality (CMAQ) grant funding to fund about 80 percent of the total cost to operate the service for its first three years, which would require a local match from the County of at least 20 percent. Three proposed park-ride lots would be served by the route, including two park-ride lots located in existing privately-owned parking lots in the Cities of Burlington and Franklin and a third park-ride lot that would need to be constructed in the Town of Waterford. The proposed park-ride lot to be constructed would cost about \$350,000 (year 2012 dollars), with CMAQ grant funds potentially funding about 80 percent of the total cost, along with a local match from the County of up to 20 percent.

## THE RECOMMENDED PLAN

The final public transit plan for the City of Racine and Racine County for the years 2013-2017, recommended by the Advisory Workgroup, is presented in Chapter VII. The plan includes two sets of recommendations; one set specific to the City of Racine and one set specific to Racine County. The City of Racine recommendations relate to restructuring the routes of the BUS, improving coordination with the County on paratransit services, improving transportation to UW-Parkside, and integrating the existing Milwaukee-Racine-Kenosha commuter bus route with City bus routes. The Racine County recommendations relate to meeting transit needs in western Racine County, establishing a commuter bus service between Burlington and Milwaukee, improving coordination with the City of Racine on paratransit services, continuing the existing County shuttle service, and establishing guidelines for a possible future vanpool program. The recommendations for the City and County are summarized below.

## **City of Racine Recommendations**

The recommendations for the City of Racine in the final recommended short-range transit plan are based on the evaluation of the alternative transit service improvements, and consideration of the public comments received on the alternative improvements. These recommendations for the City are presented below.

## 1. Restructure the Routes of the Belle Urban System

The plan recommends that over the next five years, the City of Racine should pursue a revised structure for its regular routes that addresses the key issues and inefficiencies in the system identified during plan development. The revised route structure recommended for the BUS—which is based on the proposed changes in the preliminary recommended alternative for the BUS—would accomplish this through the combining of poor-performing routes, the reconfiguring of routes to serve recent development, and the equalizing of route running times between the Transit Center and the outlying route endpoints. Associated with the revised route structure, the plan also recommends that routes be designed to improve transfers at the southwest transfer point proposed to be constructed in the Regency Mall area.

The premise of the revised route structure is to establish a round-trip running time of 120 minutes for all regular routes serving the Transit Center. Achieving these equalized round-trip running times would require segments of some routes that serve the northern part of the City to be longer and segments of some routes that serve the southern part of the City to be shorter. Equalized running times would have significant benefits, allowing all regular routes to "pulse" at the Transit Center on each trip, resulting in a more understandable midday schedule, and reducing some of the excessive layover times currently experienced during evenings and weekends. Nearly all of the regular routes in the plan's revised route structure would have peak service frequencies of 30 minutes and off-peak service frequencies of 60 minutes, allowing the routes to pulse at the Transit Center on each trip. The plan assumes the reduced service hours established in January 2012 would be maintained.

The plan should be used as a guide by City and BUS staff, recognizing that they will need to make refinements to the revised route structure recommended under the plan. These refinements may involve addressing potential running time difficulties on some routes as identified by City and BUS staff, which would make it difficult for those routes to pulse with the other routes. As such, the plan identifies possible solutions for addressing the running time difficulties anticipated by City and BUS staff and accomplishing the plan's ultimate goal of achieving consistent schedules for each route so that each route is able to pulse at the Transit Center on each trip.

At the direction of the City of Racine, the recommended plan for the BUS is "financially-constrained," keeping the total annual transit operating budget relatively flat over the five-year planning period, and maintaining the local share of the necessary operating assistance between about \$1.52 and \$1.65 million. The plan also recommends that representatives from the City of Racine, Town of Yorkville, and Villages of Caledonia, Mt. Pleasant, and Sturtevant, meet to discuss whether and how to modify the current methodology for distributing this local share among the communities receiving service.

The annual miles and hours of service under the plan would be about 5 percent lower than the miles and hours in the 2012 budget. Accordingly, total operating costs for the recommended system would decrease by about 3 percent in the first year, from \$7.14 million in the 2012 budget to \$6.91 million, increasing with inflation to \$7.33 million by the end of the five-year planning period. Ridership is expected to increase by about 1 percent per year, from the current estimate of 1.06 million revenue passengers in 2012 to 1.11 million revenue passengers by the fifth year of operating under the recommended system, based on the potential for the recommended route structure to make the system more attractive to existing and potential riders.

Capital investments under the plan involve maintaining the existing BUS fleet of 35 heavy-duty buses and the existing transit system facilities and establishing a southwest transfer point in the Regency Mall area. The anticipated Federal share for capital funding is 80 percent of total costs, or \$8.78 million, over the five-year period. About \$4.76 million in Federal capital funding has already been obtained and was used to purchase 14 new buses in 2013. The City of Racine's projected local share for the necessary capital investments would be \$2.20 million over the five-year period, of which \$1.19 million in City funding was already provided in 2013 as the required 20 percent match for the 14 new buses.

The recommended plan for the BUS was developed assuming the total transit operating budget would remain relatively flat over the five-year planning period and local funding also would need to remain at about the year 2012 funding level. The plan also identifies several potential desirable service improvements—which could be considered beyond the recommended changes should additional funding become available—and additional possible service reductions and fare increases—should the City determine that it become necessary to further reduce the local funding that it provides to the transit system over the planning period. These improvements and reductions are summarized above under the preliminary recommended alternative for the BUS.

## 2. <u>Improve Coordination between City and County Paratransit Services</u>

The plan recommends that the City of Racine and Racine County work incrementally to improve coordination between their paratransit services provided east of IH 94. One area of coordination would involve the City and County investigating potential gaps between their service areas and making sure one party provides service to any locations with sufficient perceived demand that are not currently being served. The plan also recommends that the City and County work to improve coordination and collaboration between the call centers for each service, perhaps working toward eventually establishing an integrated call center that would provide a single point of contact for information and/or dispatching for users of both the City and County services.

### 3. Improve Transportation to the University of Wisconsin-Parkside Campus

The plan recommends that the City of Racine work with UW-Parkside to attempt to extend and increase the existing University shuttle service. The existing shuttle makes two round-trips between the UW-Parkside campus and the intersection of Taylor Avenue and Meachem Road in the City of Racine as part of its daily route. The City should encourage the University to extend these two round-trips north to the proposed southwest transfer point at Regency Mall. The City should also encourage the University to operate an additional extended round-trip to the southwest transfer point during the midday period, resulting in a total of three daily round-trips. This service improvement would provide students and staff access to the four or five BUS routes proposed to serve the southwest transfer point. The City should work with the University to coordinate schedules in order to allow transfers between the two services.

## 4. Integrate Milwaukee-Racine-Kenosha Commuter Bus Route with BUS Routes

The plan recommends that the City of Racine take steps to integrate the existing Milwaukee-Racine-Kenosha commuter bus service with existing BUS routes. These steps would promote coordination between commuter and local transit services by making it easier and more attractive to use the two services. Three recommended actions include adding the commuter route alignment to the BUS and KAT route maps; establishing consistent charges for transfers between the commuter route and BUS and KAT routes; and providing information about the commuter route and its schedule anywhere information about the BUS and KAT systems is displayed, including on the websites for the two local transit systems.

## **Racine County Recommendations**

The recommendations for Racine County in the final recommended short-range transit plan are based on the evaluation of the alternative transit service improvements, and consideration of the public comments received on the alternative improvements. The recommendations were prepared within the constraints of expected available funding. No substantial increase may be expected over the next five years in the Federal and State funding programs currently used by the County, although the County may be able to obtain some additional Federal and State funding by accessing programs they do not currently use. The plan also recognizes that the County may not be expected to increase the funding it currently provides for transportation services over the next five years. The recommendations set forth in the plan for the County to pursue in order to provide or improve transportation services within the County, and between the County and surrounding counties, have been developed accordingly. These recommendations for the County are presented below.

## 1. Continue Current Approach to Meeting Transit Needs in Western Racine County

Two of the Racine County service improvement alternatives summarized previously proposed replacing and expanding the existing eligibility-limited demand-response transportation service west of IH 94 that the County currently provides. Given the potential to require significant additional County funding during or beyond the five-year plan period, those two alternatives are not recommended at this time. Instead, the plan recommends that Racine County continue its current approach to meeting public transit needs in western Racine County, which includes maintaining an eligibility-limited (seniors and people with disabilities) demand-response transportation service and implementing flex-route shuttle transportation services on a trial basis in communities with anticipated demand. After evaluating the performance of each trial service, the services that experience high enough demand should be continued and those that experience low demand should be eliminated. Examples of recent uses of this approach include the Racine County Link—a cross-county shuttle service operated from June of 2012 through January of 2013—and the SPARC program initiated by the County in 2011. The Link and two SPARC routes experienced low demand and were eliminated, but the Burlington SPARC shuttle service has been successful and the County has increased its service. The plan includes a specific recommendation for the County's SPARC shuttle service in County Recommendation 4, which is summarized below.

## 2. Establish Commuter Bus Service between Burlington and Milwaukee

The plan recommends that Racine County consider establishing a commuter bus service between downtown Burlington and downtown Milwaukee over STH 36 and IH 43. The plan proposes providing two round-trips on weekdays, focused on commuters from Burlington to Milwaukee and serving three proposed park-ride lots. The cost of providing the service for the first full year would be an estimated \$203,800, increasing with inflation to about \$229,600 in the fifth year. The County could limit its financial risk by applying for a grant through the Federal CMAQ program, which could fund about 80 percent of the total cost to operate the service for its first three years as a demonstration project. The CMAQ grant funds would require a local match from the County of at least 20 percent, but passenger revenues could be used as local matching funds. Ridership forecasts indicate that passenger revenues may be enough to cover most if not all of the required 20 percent local match. Following the three-year demonstration period, the service would qualify to receive Federal and State transit operating assistance, with the County required to provide local matching funds. When it comes time to transition from CMAQ grant funding to the Federal and State transit operating assistance programs, the County could determine whether to continue or eliminate the service based on its performance and the availability of the necessary level of County funding, which would be an estimated \$38,700 in the fifth year of operations.

## 3. <u>Improve Coordination between City and County Paratransit Services</u>

This recommendation is summarized under City Recommendation 2 above, which recommends that the City of Racine and Racine County work together to improve coordination between their existing paratransit services.

## 4. Continue Existing County Shuttle Service and Monitor Required Level of County Funding

One of the Racine County service improvement alternatives summarized previously proposed that the County continue to fund and pursue refinements to the existing SPARC shuttle service, and operate the shuttle service as a public transit service open to the general public. Public comments were very supportive of the shuttle service, but were overwhelmingly opposed to it being operated as public transit. Given the expressed opposition and the potential for the County to incur additional responsibilities and costs to meet Federal requirements, the plan recommends that the County continue to operate the SPARC shuttle service as it does currently, focused on serving seniors and people with disabilities in areas not served by public transit and allowing the general public to use the service as space permits.

However, the County should monitor the level of County funding required to operate the service and revisit the possibility of operating the shuttle service as public transit open to the general public if Federal capital funding becomes more readily available and if the existing shuttle service can no longer effectively accommodate members of the general public. Operating the shuttle service as a public transit service open to the general public would have the potential to reduce the level of County funding required to operate the service because the service would be eligible to receive Federal and State transit operating assistance funds. If these funds are used, the County would be considered a public transit operator and as such would have additional responsibilities and costs associated with the application for, and administration of, Federal funds, and using wheelchair-accessible vehicles to operate the service.

## 5. Establish Guidelines for Vanpool Programs in Anticipation of Future Demand

The plan recommends that the County apply a proposed set of guidelines for what would be desirable to start a vanpool program in the event there becomes demand for vanpools in the future. With the guidelines established, the County should wait to pursue formation of a vanpool program until interest is expressed by a group of employers or employees. If sufficient interest is expressed, the County could minimize its financial risk by working with a private vanpool provider. Monthly user fees would likely be significantly higher under a private vanpool provider than if the program were to be run by County staff, so the County could subsidize some of the user fees or partner with employers willing to contribute to part of the cost of the service.

## **CONCLUSIONS**

The public transit plan for Racine County recommended by the Advisory Workgroup addresses a number of unmet transit service needs identified within the City of Racine, within Racine County, and between Racine County and surrounding counties. The plan should be viewed as a guide for the provision of transit services, with its recommendations developed to improve transit services for the County's residents to the extent possible given expected local, County, State, and Federal funding levels. Recognizing that funding levels may change over the five-year planning period, the plan includes an element of flexibility, offering options, where appropriate, that could be considered should assumed funding levels increase or decrease. Many of the plan recommendations could be implemented without any additional costs to the City of Racine or Racine County. Those that may entail additional costs, such as the proposed Burlington-Milwaukee commuter bus route, could initially be undertaken on a trial or demonstration basis using Federal funds available for this purpose.

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## Appendix A

## RACINE COUNTY EMPLOYER TRANSPORTATION SURVEY – FALL 2008

The text of the e-mail inviting employers to fill out the online survey:

Dear Racine County Employer,
Please take some time out of your busy day and fill out the following Racine County Employer Transportation Survey. The results could have a direct impact on your business. Simply click on to the following, fill out the survey and return by November 10:
http://www.ypracine.org/survey/TakeSurvey.asp?PageNumber=1&SurveyID=6M2Im54H9m73G.
If you belong to more than one of the following organizations - the Racine Area Manufacturers and Commerce. Burlington Chamber of Commerce, Union Grove Chamber of Commerce and the Waterford Chamber of Commerce you may accidently receive more than one survey. Please just fill out one copy.
Thank you for your cooperation.
Mark Eickhorst Racine County Mobility Manager
The online survey questions:
The Racine Area Manufacturers and Commerce is conducting this survey for use in the Racine County Public Transit Study and Plan which is being prepared at the request of the City and County of Racine. This information is very important as it will be used as one the sources to develop recommendations for transit changes in the near future. Your cooperation in these efforts is greatly appreciated.
Company Name Contact/Title Address Phone No. Type of Business
Questions:
1. Size of your workforce:Under 100100-249250-499500-749750+
2. List each shift's hours and number of workers:  1 <sup>st</sup> Shift:HoursNumber of Workers  2 <sup>nd</sup> Shift:HoursNumber of Workers  3 <sup>rd</sup> Shift:HoursNumber of Workers  Other shift:HoursNumber of Workers
<ol> <li>Do you have problems recruiting workers?YesNo</li> <li>If yes, are transportation problems a factor?YesNo</li> </ol>
4. Do you have problems retaining workers?YesNo If yes, are transportation problems a factor?YesNoYesNo
<ol><li>Can your company be flexible on start and end times of shifts where transportations issues are of concern?YesNo</li></ol>

6.	What percentage of your workforce resides in municipalities outside your workplace location?under 25%25-50%50-75%over 75%
7.	What percentage of your workforce currently resides in counties other than Racine?under 10%10-25%25-50%over 50%
8.	Have gasoline prices impacted your ability to recruit or retain employees?YesNo If yes, how:
9.	Is your company currently served by a public transportation route?YesNo If so, how well does it meet the needs of your employees?
10.	Do any of your employees rely on regional transportation services (such as the Wisconsin Coach Lines route between Kenosha, Racine and Milwaukee or Amtrak Hiawatha rail service between Milwaukee, Sturtevant and Chicago)YesNo
11.	What type of changes would you like to see on public transportation?  Addition of evening service Addition for other shifts (please identify) Change in bus schedule Expansion of existing routes in your area New routes for your area Other (please identify) None
12.	To the best of your knowledge, how do your employees commute to work? (please indicate the approximate percentage of employees that use each method)  Drive alone%  Transit%  Carpool%  Vanpool%  Walk%  Work at home%  Bicycle%  Motorcycle%  Other%
13.	Would the proposed KRM (Kenosha/Racine/Milwaukee) commuter line benefit your company? Yes No If yes, in what way?
14.	Which of the following transportation related programs or incentives does your company offer? Bicycle parking Variable hours (such as flex time, compressed work week and staggered work hours) Flexible schedules for transit riders Ridesharing (carpooling, & vanpooling) Free, discounted or preferential parking for carpooling & vanpooling Showers for those who bike to work Discounted or free transit passes Work from home Shuttle service Other:

15.	Would your company be willing to make a contribution to expand transportation services to your
	area?YesNo
	If yes, please indicate the types of contributions:
	Provide financial support
	Work with other employers to establish and maintain a privately-sponsored bus route
	Work with other employers to establish a privately-sponsored subscription van service
	Other:
4.0	
16.	Do you have any other additional transportation-related concerns or comments?

Thank you very much for taking the time to complete this survey. Your responses are very valuable to our efforts and are greatly appreciated.

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## Appendix B

# INITIAL TRANSIT SYSTEM ALTERNATIVES FOR THE CITY OF RACINE BELLE URBAN SYSTEM

A number of transit system improvement alternatives were initially developed for the City of Racine Belle Urban System (BUS) for the years 2013-2017 for consideration by the Advisory Workgroup and the City of Racine. Through an iterative development and evaluation process, several of these initial alternatives were eliminated from consideration. Eventually, the City of Racine and the Advisory Workgroup guiding the plan narrowed the possible alternatives down to one preliminary recommended alternative, described in Chapter VI, to be presented to the public for comment. Appendix B describes the initial alternatives that were developed but were ultimately eliminated from consideration. As with the preliminary recommended alternative presented in Chapter VI, operating and capital budgets were developed for each initial alternative, based on estimates of future Federal, State, and local funding.

Similarly to the preliminary recommended alternative for the BUS, the initial alternatives developed—but ultimately eliminated—proposed route alignment changes that attempted to fit all route segments into roundtrip schedules of 60 minutes, or less in some instances, between the downtown transit center and the routes' outlying termini. They reduced inefficiencies in the existing transit system and maintained the transit system's year 2012 reduced service hours, while attempting to make the midday schedule more understandable and to significantly reduce layover time during evenings and weekends. The preliminary recommended alternative presented in Chapter VI was developed to address concerns that City and BUS staff expressed regarding the initial alternatives. In particular, City staff was concerned that the initial alternatives would not provide adequate transit service to the City's downtown area, which tends to be an area that generates high ridership. There was also a desire to provide additional service to St. Mary's Hospital located along Spring Street. In addition, there was concern that some of the proposed route alignments, particularly some routes on the southern portion of the system, would not be able to complete a roundtrip in 60 minutes.

## Route Restructuring under the Initial Alternatives

The proposed route restructuring described below presents two initial alternatives for changing the route segments on the northern part of the City and one alternative for changing the route segments on the southern part of the City. Northern Routes Alternative 1 proposes reconfiguring the existing five route segments into three longer routes that would all fit into a 60-minute round-trip schedule. Northern Routes Alternative 2 proposes one route on a 60-minute schedule and four routes on 30-minute schedules. The Southern Routes Alternative includes changes to make all the southern route segments fit into a 60-minute round-trip schedule and is designed to improve transfers between the routes at a southwest transfer point to be constructed in the Regency Mall area.

Table B-1 and Maps B-1 and B-2 present a detailed explanation of the routing and service changes under the initially proposed transit system alternatives. The route numbers as presented in the table and maps indicate how the proposed route alignments would be based on segments of the current routes. If the proposed route structure were adopted, the BUS would need a new route naming/numbering system. The proposed changes to route alignments are summarized below.

## Northern Routes Alternative 1:

- Eliminate Route No. 1 north of the transit center. Most of the northern areas previously served by Route No. 1 would be served by the newly restructured Route Nos. 3/5/1N and 4/5N.
- Combine Route Nos. 2 and 5 north of the transit center. These two routes were among the weakest-performing routes in the evaluation of the transit system in Chapter V. Most of the northern areas previously served by the two individual routes would be served by the newly restructured Route Nos. 2/5N and 4/5N.

#### Table B-1

## ROUTING AND SERVICE CHANGES BY ROUTE UNDER THE INITIAL BELLE URBAN SYSTEM ALTERNATIVES: 2013-2017

NORTHERN ROUTES (SEE MAP B-1)

Route No.ª	Potential Restructuring of Routes		Potential Route Schedule and Service Period Adjustments		
	Alternative 1: 3 Regular Routes (All Routes with 60-m	ninute Round-trips)			
1N	Eliminate route. Partially replace with portions of Routes 3/5/1N and 4/5N.	1.	Maintain year 2012 service hours.		
2/5N	Combine Route 2 with part of existing Route 5, with new route serving both Horlick High School and Shorecrest Shopping Center.	2.	Weekday peak service: maintain frequencies of 30 minutes on all three routes.		
3/5/1N	Extend Route 3 north from Horlick High School over Mt. Pleasant St. to Carlton Dr. and Charles St., replacing parts of Routes 1 and 5.	3.	frequencies to uniform 60 minutes on all three		
4/5N	Extend Route 4 from Shorecrest Shopping Center over Three Mile Rd. to Greentree Center, replacing part of Route 5. Operate via Marquette St. and LaSalle St. or Dr. Martin Luther King Dr. and Douglas Ave. between Transit Center and Goold St.	4.	minutes on all three routes.		
5N	Eliminate route. Partially replace with parts of Routes 2/5N, 3/5/1N, and 4/5N.	5.	Sunday service: set frequencies of 60 minutes on new Routes 3/5/1N and 4/5N.		
	Alternative 2: 5 Regular Routes (4 Routes with 30-mi	inute Round-trips)			
1N	Remove loop along South St., Charles St., and Carlton Dr.	1.	Maintain year 2012 service hours.		
2N	No change.	2.	Weekday peak service: maintain frequencies		
3N	Operate via State St. and Northwestern Ave. instead of Hamilton St. and Marquette St. or Dr. Martin Luther King Dr.	3.	3		
4N	No change.		frequencies to uniform 60 minutes on new Route 1N and uniform 30 minutes on other		
5N	Operate via Rapids Dr. instead of High St. and Goold St. Eliminate northern portion, which would be served by part of existing Route 1 to serve		four routes <sup>b</sup> , rather than alternating 30- and 60-minute frequencies.		
	Greentree Center.	4.	Saturday service: set 60-minute frequencies on new Route 1N and maintain 30-minute frequencies on other four routes.		
		5.	Sunday service: set 60-minute frequencies on new Route 1N and maintain 30-minute frequencies on new Routes 3N and 4N.		

## SOUTHERN ROUTES (SEE MAP B-2)

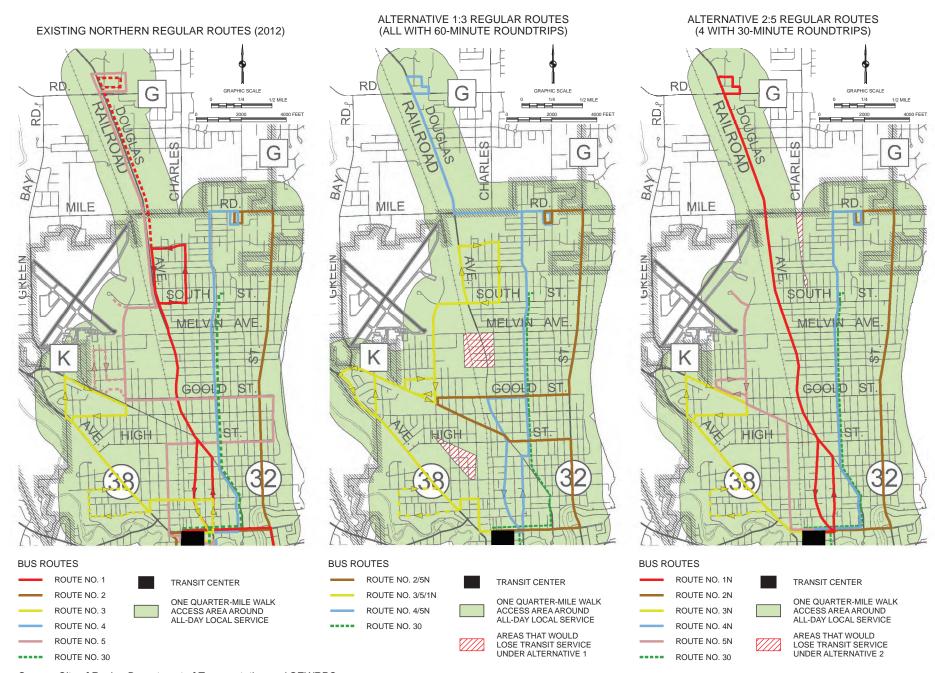
Route No.ª	Potential Restructuring of Routes		Potential Route Schedule and Service Period Adjustments
1S	Operate via Marquette St. and Grand Ave. instead of State St. and Main St.	1.	Maintain year 2012 service hours.
2/5S	Combine Route 2 with part of existing Route 5, creating a one-way loop over Durand Ave., Sheridan Rd., and Lakeshore Dr. to Olsen Industrial Park, then via Knoll Pl. to Durand Ave.	2.	Weekday peak service: maintain 30-minute frequencies on Routes 1S, 2/5S, 3S, 4S, 5S, and 7S, and 60-minute frequencies on Rt. 6S.
3S	To/from Transit Center, operate via State St. and Main St., instead of Marquette St. and 6th St. or 7th St.	3.	Weekday midday/evening service: set frequencies to uniform 60 minutes on all six routes, rather than alternating 30- and 60-
4S	Same alignment, but provide 10 trips daily to Ridgewood Care Center of Racine.	4.	minute frequencies.
5S	Eliminate route. Replace with reconfigured Routes 2/5S and 7S.	] ~.	minutes on all six routes.
6S	Convert the existing Route 86 from a one-way loop to a two-way out-and-back route via Kinzie Ave. and Osborne Blvd. to St. Mary's Hospital.  Between St. Mary's Hospital and Regency Mall, operate in both directions via Ohio St., Washington Ave., Green Bay Rd., and Byrd Ave.	5.	Sunday service: set frequencies of 60 minutes on new Routes 1S, 3S, 4S, 6S, and 7S.
7S	After leaving Transit Center, operate via Marquette St. and Racine St. instead of State St., Main St., and Grand Ave. Trips to Ridgewood Care Center of Racine provided by Route 4S.		

<sup>&</sup>lt;sup>a</sup>The route numbers as presented in this table and Maps B-1 and B-2 indicate how the proposed route alignments would be based on segments of the current routes. If the proposed route structure were adopted, the transit system could use an entirely new route naming/numbering system.

Source: SEWRPC.

<sup>&</sup>lt;sup>b</sup> Evening service would not be operated on Route No. 2/5N under Northern Routes Alternative 1 or Route Nos. 2N and 5N under Northern Routes Alternative 2.

Map B-1

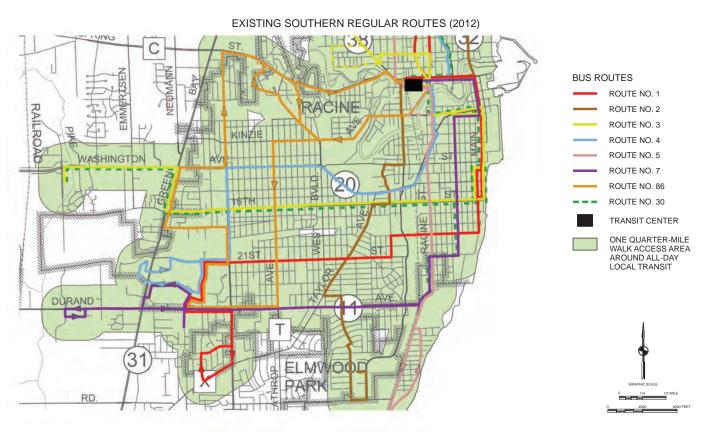


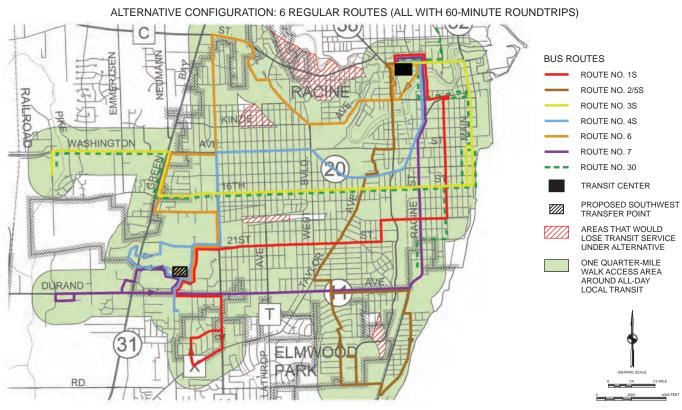
INITIAL ALTERNATIVE ROUTE CONFIGURATION FOR THE NORTHERN PORTION OF THE BELLE URBAN SYSTEM

Source: City of Racine Department of Transportation and SEWRPC.

Map B-2

INITIAL ALTERNATIVE ROUTE CONFIGURATION FOR THE SOUTHERN PORTION OF THE BELLE URBAN SYSTEM





Source: City of Racine Department of Transportation and SEWRPC.

## Northern Routes Alternative 2:

- Remove the Route No. 1 loop on South Street, Charles Street, and Carlton Drive. A primary purpose of
  this loop was to serve Careers Industries on Douglas Avenue, which has now moved to the southwestern
  corner of Washington Avenue and Ohio Street.
- Operate Route No. 5 on Rapids Drive instead of High and Goold Streets and eliminate the northern portion to Greentree Center. These changes would eliminate about nine miles from the round-trip distance and allow the route to complete a one-way trip from the transit center to the route terminus at Huck Industrial Park in 15 minutes. Greentree Center would continue to be served by Route No. 1.

#### Southern Routes Alternative:

- Combine Route Nos. 2 and 5 south of the transit center. These two routes were among the weakest-performing routes in the evaluation of the transit system in Chapter V. Most of the southern areas previously served by the two individual routes would be served by the newly restructured Route Nos. 2/5S and 7S.
- Shorten Route No. 7 by operating it on Racine Street instead of on Main Street and Grand Avenue. This would eliminate about four miles from the round-trip distance and allow the route to complete the trip from the transit center to the route terminus at Wal-mart in 30 minutes.
- Establish a southwest transfer point in the Regency Mall area where passengers can conveniently and comfortably transfer between Route Nos. 1, 4, 6, and 7.
- Convert the existing Route No. 86 from a one-way loop to a two-way out-and-back route ("Route No. 6") serving St. Mary's Hospital, Ohio Avenue, and the Regency Mall area.

Other minor route changes proposed under the initial alternatives were designed to equalize route lengths, in order to address on-time performance problems on the longer routes and leave less "dead time" at the ends of the routes. Altogether, the changes would leave some gaps in the service area of the transit system, so that some of the areas currently served would no longer be within one-quarter mile of a local bus route. However, areas that would be unserved under this proposal are areas that showed very low ridership in the route segment analysis in the evaluation of the BUS in Chapter V.

Similar to the preliminary recommended alternative, the initial alternatives did not propose any changes to Route No. 27 in the western portion of the BUS service area as the BUS implemented changes to the route in September 2012. They did, however, include the same possible configuration for combining Route Nos. 20 and 27 that the BUS could consider should Route No. 27 perform poorly despite the changes made in September 2012.

## Adjustments to Route Frequency or Service Periods under the Initial Alternatives

Table B-1 presents the proposed adjustments to the route alignments, as well as to the schedules and service hours for all the routes under each initial alternative. Tables B-2 and B-3 present the operating and service characteristics of each of the proposed routes assuming Northern Routes Alternative 1 and Northern Routes Alternative 2, respectively. All routes shown in the two tables would have running times of 30 minutes between the transit center and the outlying route termini, with the exception of Routes 2N, 3N, 4N, and 5N in Table B-3, which would have running times of 15 minutes. Route Nos. 20 and 27 would continue to be operated as they do as of September 2012 and Route No. 30 would continue to provide service to and from middle and high schools. The following key points can be made about the proposed frequency and service periods for the routes under the initial alternatives:

Nearly all of the regular routes would have morning and afternoon peak service frequencies of 30 minutes, with off-peak service frequencies of 60 minutes. The exceptions would be Route Nos. 2N, 3N,

#### Table B-2

## OPERATING AND SERVICE CHARACTERISTICS BY ROUTE UNDER THE INITIAL BELLE URBAN SYSTEM ROUTE ALTERNATIVES: 2013-2017

## NORTHERN ROUTES ALTERNATIVE 1 AND SOUTHERN ROUTES ALTERNATIVE

#### WEEKDAY SERVICE

	Round-						Buses Required			
Route Number	Trip Route Length (miles)	Service Hours	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period
2/5N	11.6	5:40 a.m. – 7:10 p.m.	30	60	30		2	1	2	
3/5/1N	10.0	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
4/5N	11.5	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
1S	15.2	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
2/5S	11.4	5:40 a.m. – 6:40 p.m.	30	60	30		2	1	2	
3S	14.9	5:10 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
4S	12.9	5:10 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
6	15.1	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
7	13.5	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
Other <sup>a</sup>	Varies	Varies	N/A	N/A	N/A	N/A	9	1	9	1
Systemwide							26	10	26	8

#### SATURDAY SERVICE<sup>b</sup>

Route Number	Service Hours	Service Frequency	Buses Required
2/5N	6:10 a.m. – 6:40 p.m.	60	1
3/5/1N	5:40 a.m. – 6:40 p.m.	60	1
4/5N	5:40 a.m. – 6:40 p.m.	60	1
1S	5:40 a.m. – 6:40 p.m.	60	1
2/5S	5:40 a.m 6:40 p.m.	60	1
3S	5:40 a.m. – 6:40 p.m.	60	1
4S	5:40 a.m. – 6:40 p.m.	60	1
6	5:40 a.m. – 6:40 p.m.	60	1
7	5:40 a.m. – 6:40 p.m.	60	1
Systemwide			9

#### SUNDAY SERVICE<sup>b</sup>

Route Number	Service Hours	Service Frequency	Buses Required
3/5/1N	9:40 a.m 6:40 p.m.	60	1
4/5N	9:40 a.m 6:40 p.m.	60	1
1S	9:40 a.m. – 6:40 p.m.	60	1
38	9:40 a.m. – 6:40 p.m.	60	1
4S	9:40 a.m 6:40 p.m.	60	1
6	9:40 a.m. – 6:40 p.m.	60	1
7	9:40 a.m. – 6:40 p.m.	60	1
Systemwide			7

a"Other" refers to Route Nos. 20, 27, and 30. These routes would not be changed under any of the initial alternatives.

Source: SEWRPC.

4N, and 5N under Northern Routes Alternative 2 with service frequencies of 30 minutes all day (due to their 15 minute running times between the transit center and the outlying route termini) and Route No. 6 under the Southern Routes Alternative with 60-minute service frequencies all day.

• Under Northern Routes Alternative 1, where all the reconfigured northern and southern routes would be on a 60-minute round-trip schedule, the routes would be combined so that the longest routes serving the southern portion of the City (Route Nos. 1S and 3S) would be paired with the shortest routes serving the northern part of the City (Route Nos. 3/5/1N and 4/5N). The benefit of this pairing would be to provide drivers with sufficient recovery time at least once every hour to maintain a higher level of on-time performance on the longer southern routes.

<sup>&</sup>lt;sup>b</sup>The Saturday and Sunday round-trip route lengths would not differ significantly from the Weekday round-trip route lengths.

#### Table B-3

## OPERATING AND SERVICE CHARACTERISTICS BY ROUTE UNDER THE INITIAL BELLE URBAN SYSTEM ROUTE ALTERNATIVES: 2013-2017

## NORTHERN ROUTES ALTERNATIVE 2 AND SOUTHERN ROUTES ALTERNATIVE

#### WEEKDAY SERVICE

	Round-			Service F	requency			Buses F	Required	
Route Number	Trip Route Length (miles)	Service Hours	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period	A.M. Peak Period	Midday Period	P.M. Peak Period	Night Period
1N	9.0	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
21N	7.8	5:40 a.m. – 7:10 p.m.	30	30	30		1	0.5	1	
3N	4.3	5:40 a.m. – 10:10 p.m.	30	30	30	30	1	0.5	1	0.5
4N	7.3	5:40 a.m. – 10:10 p.m.	30	30	30	30	1	0.5	1	0.5
5N	5.6	5:40 a.m. – 7:10 p.m.	30	30	30		1	0.5	1	
1S	15.2	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
2/5S	11.4	5:40 a.m. – 6:40 p.m.	30	60	30		2	1	2	
3S	14.9	5:10 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
4S	12.9	5:10 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
6	15.1	5:40 a.m. – 10:10 p.m.	60	60	60	60	1	1	1	1
7	13.5	5:40 a.m. – 10:10 p.m.	30	60	30	60	2	1	2	1
Other <sup>a</sup>	Varies	Varies	N/A	N/A	N/A	N/A	9	1	9	1
Systemwide							26	10	26	8

#### SATURDAY SERVICE<sup>b</sup>

Route Number	Service Hours	Service Frequency	Buses Required
1N	5:40 a.m 6:40 p.m.	60	1
2N	6:10 a.m 6:40 p.m.	30	0.5
3N	5:40 a.m. – 6:40 p.m.	30	0.5
4N	5:40 a.m 6:40 p.m.	30	0.5
5N	6:10 a.m 6:40 p.m.	30	0.5
1S	5:40 a.m 6:40 p.m.	60	1
2/5S	5:40 a.m. – 6:40 p.m.	60	1
3S	5:40 a.m 6:40 p.m.	60	1
4S	5:40 a.m 6:40 p.m.	60	1
6	5:40 a.m. – 6:40 p.m.	60	1
7	5:40 a.m 6:40 p.m.	60	1
Systemwide			9

## SUNDAY SERVICE<sup>b</sup>

Route Number	Service Hours	Service Frequency	Buses Required
1N	9:40 a.m. – 6:40 p.m.	60	1
3N	9:40 a.m. – 6:40 p.m.	30	0.5
4N	9:40 a.m. – 6:40 p.m.	30	0.5
1S	9:40 a.m. – 6:40 p.m.	60	1
3S	9:40 a.m. – 6:40 p.m.	60	1
4S	9:40 a.m. – 6:40 p.m.	60	1
6	9:40 a.m. – 6:40 p.m.	60	1
7	9:40 a.m. – 6:40 p.m.	60	1
Systemwide			7

Source: SEWRPC.

• Under Northern Routes Alternative 2, the four northern routes that would be on a 30-minute round-trip schedule would be combined so that the longest routes (Route Nos. 2N and 4N) would be paired with the shortest routes (Route Nos. 3N and 5N), allowing one bus to operate each route pair. Route No. 1N and all southern routes would then operate as individual routes providing out-and-back service between the transit center and their respective termini.

<sup>&</sup>lt;sup>a</sup>"Other" refers to Route Nos. 20, 27, and 30. These routes would not be changed under any of the initial alternatives.

<sup>&</sup>lt;sup>b</sup>The Saturday and Sunday round-trip route lengths would not differ significantly from the Weekday round-trip route lengths.

- The reduced service hours established in January 2012 would be maintained<sup>1</sup>. On weeknights, the last trips would leave the transit center at 9:10 p.m. On Saturdays and Sundays, the last trips would leave the transit center at 6:10 p.m.
- Under the 2012 transit service schedule, a total of 28 buses are required during weekday peak service. Under each alternative, the number of buses required for weekday peak service would be reduced to 26 due to the combination of Route Nos. 2 and 5 and the elimination of the northern portion of Route No. 1. The number of buses required on Saturdays would decrease from 11 to nine, and the number of buses required on Sundays would decrease from nine to seven.

Similar to the preliminary recommended alternative, the initial alternatives suggested that the proposed changes should all be implemented at the same time in order to maintain service to all areas currently served by the routes and maintain the pulse schedule system. The initial alternatives assumed all changes would occur in January, 2013.

## Performance Measures and Costs of the Initial Alternatives

Commission staff developed forecasts of ridership, operating costs, operating revenues, and transit assistance needs of the transit system under the initially proposed alternatives, using the assumptions summarized in Figure B-1. Table B-4 shows the systemwide performance measures and costs for the proposed transit system alternatives, with the levels of service and ridership expected to be approximately equivalent regardless of which northern routes alternative is implemented. Under the initial alternatives, the transit system would undergo some significant changes in performance measures and costs:

- The transit system's annual revenue miles (888,000) and revenue hours (67,200) of fixed-route service would be about 15-20 percent lower than the service levels in the 2012 budget (1,039,000 revenue miles and 81,200 revenue hours). Most of the decrease in service levels is due to the reductions in midday service frequency and the combination of Route Nos. 2 and 5.
- Ridership on the system is estimated to decline by about 9 percent, from 1,059,000 in 2012 to 959,000 in 2013. About half of the passengers affected by the proposed service cuts are likely to be able to continue to use the transit system by making their trips at a different time. The transit system is forecast to carry about 1.1 passengers per vehicle-hour and 14 passengers per vehicle-mile of service provided, which is slightly more efficient than the existing transit system. The increase in efficiency is due to the elimination of long layover times on evenings and weekends, the reduction of service during periods that had low ridership, and the combination and elimination of low-ridership routes.
- The total cost of operating the transit system with the proposed service changes is estimated to decrease by about 13 percent in the first year, from \$7.14 million in the 2012 budget to \$6.20 million in 2013. About \$1.43 million, or about 23 percent, would be recovered by passenger fares and other revenues including advertising, leaving about \$4.78 million in needed public assistance in 2013. By the end of the five-year planning period in 2017, the increases in operating costs per revenue hour of transit service would increase total operating expenses of the transit system to about \$6.58 million. The amount of money recovered from passenger fares and other revenues would increase slightly, leaving about \$5.09 million in needed public assistance in 2017.

<sup>&</sup>lt;sup>1</sup>Prior to the January 2012 service cuts, the last trips for most of the BUS routes left the transit center at 11:40 p.m. on weeknights. On Saturdays, the last trips left at 10:10 p.m.; on Sundays, at 6:40 p.m.

## Figure B-1

# ASSUMPTIONS USED IN DEVELOPING FORECASTS OF RIDERSHIP, EXPENSES, AND REVENUES FOR THE INITIAL BELLE URBAN SYSTEM ALTERNATIVES: 2013-2017

Commission staff developed forecasts of ridership, expenses, and revenues under the initial transit system alternatives for the years 2013-2017 based on the following assumptions:

- The proposed routing alignments and service changes would be in effect for the entire calendar year 2013. The City of Racine may choose to implement the changes before or after that date, but this assumption makes it easier to compare service levels from year to year.
- For every 1 percent increase in fares, ridership would decrease by 0.43 percent. For every 1 percent decrease in revenue miles of service, ridership would decrease by 0.5 percent. These measures of elasticity of demand for transit service have been established through many studies and are widely accepted in the transit industry. These measures of elasticity of demand for transit service were applied to the ridership on the system during different periods of the day. Most of the proposed service reductions would occur during the midday period, which has lower ridership than the morning and afternoon peak periods.
- The operating cost per revenue vehicle hour of fixed-route service would be expected to increase by about 5 percent during 2013 (due to the system's contraction) followed by increases of 1.5 percent per year over the five-year planning period (due to inflation). On average, the operating expense per vehicle hour on the Belle Urban System increased by 1.5 percent annually between 2007 and 2011. The operating expense per unit of service tends to increase during system contraction because, even though the transit system is providing less service, there are still fixed costs that must be paid, including salaries for the system's dispatching, administrative, and mechanic positions.
- Fares would not be increased above the January 2012 levels.
- The combination of Federal Section 5307 and State Section 85.20 transit operating assistance funds will be available to cover 55.3 percent of the system's operating expenses in 2012. The share of operating expenses covered by State and Federal transit assistance funds will decrease to 55.0 percent in 2013 and remain flat throughout the five-year planning period.

Source: SEWRPC.

• Federal and State funds may be expected to provide about 55.0 percent (\$3.41 million) of the total operating expenses in 2013. The remaining public assistance needed (\$1.52 million, or 22 percent) would be provided by local sources, including the City of Racine, the surrounding municipalities served by transit, and the Racine Unified School District. By the end of the five-year planning period in 2017, Federal and State funds may be expected to provide about \$3.62 million of the total operating expenses. Local sources would likely need to increase their contributions to \$1.47 million (22 percent of expenses) in order to make up the gap in public assistance needed.

## Capital Needs for the Belle Urban System under the Initial Alternatives

The capital needs for the preliminary recommended alternative assumes that the BUS will retain 35 full-sized buses in its fleet. Under the initially proposed alternatives, the BUS would need to maintain an active fleet of between 32 and 34 buses for its fixed-route service. Despite this slight reduction in buses, the necessary capital investments over the next five years under the initial alternatives would be essentially the same as that of the

Table B-4

ESTIMATED OPERATING EXPENSES, REVENUES, AND PUBLIC ASSISTANCE
FOR THE INITIAL BELLE URBAN SYSTEM ALTERNATIVES: 2013-2017

			Fore	cast <sup>a</sup>
Characteristic	2011 Estimate	2012 Budgeted	2013	2017
Fixed-Route Annual Service				
Revenue Vehicle-Miles	1,120,000	1,039,000	888,000	888,000
Revenue Vehicle Hours	88,000	81,200	67,200	67,200
Systemwide Ridership				
Revenue Passengers	1,217,000	1,059,000	959,000	1,008,000
Passengers per Revenue Vehicle-Mile	1.09	1.02	1.08	1.14
Passengers per Revenue Vehicle-Hour	13.8	13.0	14.3	15.0
Systemwide Operating Costs, Revenues, and Assistance				
Operating Expenses	\$7,567,000	\$7,141,000	\$6,203,000	\$6,584,000
Passenger and Other Revenues	1,712,000	1,647,000	1,426,000	1,496,000
Required Public Assistance	5,855,000	5,494,000	4,777,000	5,088,000
Farebox Recovery (percent)	22.6	23.1	23.0	22.7
Sources of Public Assistance				
Federal	\$2,445,000	\$2,132,000	\$1,928,000	\$2,046,000
State	2,049,000	1,816,000	1,484,000	1,575,000
Federal/State Share of Operating Expenses (percent)	58.6	55.3	55.0	55.0
Local				
City of Racine	\$1,100,000	\$1,101,000	\$ 901,000	\$ 971,000
Town of Yorkville	6,000	5,000	7,000	7,000
Village of Caledonia	29,000	29,000	25,000	26,000
Village of Mt. Pleasant	173,000	174,000	153,000	164,000
Village of Sturtevant	53,000	52,000	39,000	41,000
Other <sup>b</sup>		185,000	240,000	258,000
Subtotal Local Assistance	\$1,361,000	\$1,546,000	\$1,365,000	\$1,467,000
Total	\$5,855,000	\$5,494,000	\$4,77,000	\$5,088,000
Per Passenger Trip Data				
Operating Costs	\$6.22	\$6.74	\$6.47	\$6.53
Total Public Assistance	\$4.81	\$5.19	\$4.98	\$5.05

<sup>&</sup>lt;sup>a</sup>The year 2013 and 2017 forecasts of ridership, revenues, and costs were based on the assumptions presented in Figure B-1.

Source: City of Racine and SEWRPC.

preliminary recommended alternative, including maintainenance of the transit system facilities and establishing a southwest transfer point in the Regency Mall area. The Federal share for capital funding over the five-year period would be approximately 80 percent, or \$8.78 million. The City of Racine's projected local share would be \$2.20 million.

## Options for Service Improvements or Additional Service Reductions or Fare Increases

All of the potential service improvements identified and evaluated for the preliminary recommended alternative in Chapter VI, which could be considered should additional funding become available, would still be applicable under the initially proposed alternatives. These would include adding service on the new Route No. 6, providing service to the Village of Sturtevant, establishing express bus service between the Cities of Racine and Kenosha,

<sup>&</sup>lt;sup>b</sup>Other sources of local public assistance include the Racine Unified School District and a local radio station. Prior to the year 2012 budget, the amount that the Racine Unified School District paid the transit system for student transportation was counted under "passenger revenues". In the year 2012 budget and later, this contribution is counted under Local Public Assistance. This change will not affect State or Federal funding levels, but will make the transit system's farebox recovery rate appear lower than it actually is.

and extending Saturday service hours to 9:40 p.m. All of the further service reductions and fare increases identified and evaluated in Chapter VI, should the City determine that it become necessary to further reduce the local funding that it provides to the transit system over the planning period, would also still be applicable. These would include eliminating Route No. 2/5 on Saturdays, eliminating Route No. 1S after 6:30 p.m. on weeknights, eliminating Route No. 1S on Saturdays and/or Sundays, and increasing cash fares by \$0.25 (about 12 percent). The City could also still evaluate after implementation of the proposed alternatives whether to reduce weeknight and/or weekend service on the newly-revised Route No. 6, depending on the performance of that new route. The option to cut back regular routes from operating with 30-minute service frequencies during peak periods to operating with 60-minute service frequencies during all time periods would also still be applicable under the initially proposed alternatives.

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## Appendix C

# SUMMARY OF MOST RECENT PROPOSAL FOR A COMMUTER RAIL LINE BETWEEN KENOSHA, RACINE, AND MILWAUKEE

## **Introduction and Background**

There have been a number of studies prepared on possible major transportation improvements for the Kenosha-Racine-Milwaukee (KRM) corridor area. Appendix C presents a summary of the most recent proposal for a potential commuter rail line between Kenosha, Racine, and Milwaukee.

In 1998, the Southeastern Wisconsin Regional Planning Commission completed a feasibility study and concluded that establishing a commuter rail service from Kenosha through Racine to Milwaukee was technically and financially feasible. In 2003, an initial alternatives analysis of commuter rail and bus alternatives for the KRM corridor was completed, followed by public hearings at which there was overwhelming support for the commuter rail alternative.

In February of 2005, an Intergovernmental Partnership (IGP) was formed among the County Executives and Mayors of Kenosha, Milwaukee, and Racine, the Secretary of the Wisconsin Department of Transportation (WisDOT), and the Chairman of the Southeastern Wisconsin Regional Planning Commission. The IGP agreed to conduct the necessary technical and environmental studies to permit the project to proceed to implementation. Each member of the IGP, other than the Regional Planning Commission, appointed a representative to serve on the KRM Project Steering Committee with the Regional Planning Commission serving as lead agency, project manager, and fiscal agent for the next phase of the KRM study. In July of 2005, the State Legislature and Governor enacted legislation creating a Regional Transit Authority (RTA) serving Kenosha, Racine, and Milwaukee Counties which was to recommend a sponsor for the KRM project and a source to provide the necessary local funding for the project.

In July of 2007, alternative analysis of commuter rail and bus alternatives was completed, including all technical work for a Draft Environmental Impact Statement (DEIS). A subsequent application to the Federal Transit Administration (FTA) for approval of the DEIS was withdrawn by the RTA because the 2007-2009 Wisconsin State budget did not create a permanent RTA with the authority to construct and operate a commuter rail line in the KRM corridor and did not provide a local dedicated funding source for the project.

In anticipation that the 2009-2011 Wisconsin State budget would provide a permanent RTA, the "temporary" RTA created in July of 2005 and the IGP continued to work on obtaining approval for the DEIS, updating the alternatives analysis, and preparing to apply for a Federal "New Starts" grant for the project's capital funding.

In the 2009-2011 Wisconsin State budget, a permanent Southeastern Regional Transit Authority (SERTA) was created. SERTA was given the authority to construct and operate the KRM commuter rail line and to levy a vehicle rental fee of up to \$18 per transaction in each of Milwaukee, Racine, and Kenosha Counties.

In June of 2010, SERTA submitted an application to the FTA requesting permission to initiate preliminary engineering for the KRM commuter rail project under the FTA's discretionary "New Starts" funding program. In June of 2011, the State Legislature and Governor repealed the State law creating SERTA, and required SERTA to dissolve in September 2011. In July of 2011, SERTA withdrew the "New Starts" application submitted to the FTA to enter into preliminary engineering in anticipation of its dissolution and, since then, the project has been indefinitely postponed.

## Description of Proposed Kenosha-Racine-Milwaukee Commuter Rail Line

The "New Starts" application submitted by SERTA to the FTA in 2010 presented the most recent description of the proposal for the KRM commuter rail project. In the application, the KRM commuter rail line was envisioned to have the following characteristics:

- Commuter rail service connecting Milwaukee and Racine to the existing Metra Chicago-Kenosha commuter rail service;
- Thirty-three-mile route using existing Union Pacific Railroad (UP) and Canadian Pacific Railway (CP) freight lines;

#### Nine stations in Wisconsin:

- Existing Metra Kenosha Station, recently renovated transit center in Racine, and the new Milwaukee Intermodal Station; and
- New stations at Somers, Caledonia, Oak Creek, South Milwaukee, Cudahy-St. Francis, and Milwaukee's South Side.

#### Level of service:

- Service provided in both directions during all weekday time periods;
- A total of 30 daily weekday trains; and
- Average speed of 38 mph.

## • Shuttle service:

- Dedicated service between Milwaukee Intermodal Station and various points in Milwaukee central business district; and
- Dedicated service between General Mitchell International Airport (GMIA) and Cudahy-St.
   Francis station.
- Shuttle service assumed to be provided with buses, but streetcar could potentially provide the downtown shuttle service linking KRM commuter rail with downtown Milwaukee should it be implemented.

## • Train operation:

- Service would meet existing Metra trains at Kenosha, allowing cross-platform transfers;
- Contract with UP Railroad or a third party contractor.
- Diesel-multiple-unit cars ("DMUs" or self-propelled coaches).

Map C-1 presents the alignment of the proposed KRM commuter rail line.

The KRM commuter rail line was forecast to carry up to 8,300 riders per day by the year 2035, for an annual ridership of approximately 2.1 million, with more than 90 percent of trips for commuting purposes. Project capital costs for KRM commuter rail were estimated to be about \$284.1 million in year-of-expenditure dollars, based on an estimate of about \$233.2 million in 2009 dollars. Capital funding sources were expected to include the discretionary FTA Section 5309 "New Starts" program, the Federal Highway Administration Congestion Mitigation and Air Quality (CMAQ) program, the State Section 85.064 Commuter Rail Development program, the State Section 85.11 Southeast Wisconsin Transit Capital Assistance program, and SERTA vehicle rental transaction fee proceeds and bonds.

The total annual operating and maintenance costs for the KRM commuter rail service were estimated to be about \$13.4 million in constant 2009 dollars. Operating funding sources were expected to primarily include the FTA Section 5307 Urbanized Area Formula program, the State Section 85.20 Mass Transit Operating Assistance program, project farebox revenues, and the SERTA vehicle rental transaction fee.

Map C-1
KRM COMMUTER RAIL ALIGNMENT



Source: SEWRPC.