



*Credit: Flickr User Andrew Caballero-Reynolds*

## **5.1 INTRODUCTION**

This chapter discusses potential service alternatives to the existing Ozaukee County Transit System for Ozaukee County to consider implementing to improve services for County residents traveling within Ozaukee County and to Milwaukee County, and for County employers seeking workers. These alternatives have been designed to improve the performance of the Ozaukee County Transit System based on the evaluation of the transit system’s performance completed in Chapter 4 of this report, and in careful consideration of the comments and ideas received from the Advisory Committee, Ozaukee County businesses, and the public related to this planning effort.

Future expenses, revenues, and ridership of the two existing services provided by the Ozaukee County Transit System were analyzed to provide a “no-change” alternative that will serve as the base scenario against which potential service changes will be compared. Each section includes a description of the alternative, a discussion of advantages or disadvantages of a particular alternative, and a table containing the expected operating expenses, revenues, and ridership for the duration of this short-range Transit Development Plan, and an annual average for the five-year plan timeframe. This chapter is organized into three alternatives categories: employment-related transit services targeting Ozaukee County businesses; fixed-route service alternatives; and Shared-Ride Taxi service alternatives.

## **5.2 EMPLOYMENT-RELATED TRANSIT SERVICES TARGETING OZAUKEE COUNTY BUSINESSES**

The need to connect Ozaukee County businesses with employees in Milwaukee County was a common theme throughout the development of this plan, including in discussions with Ozaukee County businesses, during two public information meetings, and during numerous Advisory Committee meetings. This section of alternatives provides options that the Advisory Committee considered as part of the planning process and documents the potential benefits and estimated costs of various methods to increase the labor pool and improve access to jobs in Ozaukee County.

### **Flexible or Fixed-Route Shuttles**

As described in Chapter 2, the County's commuter bus service was initially paired with a series of shuttle services that connected residents of Milwaukee County to jobs in Ozaukee County, including shuttles from park-ride lots in Ozaukee County to the Cities of Cedarburg and Mequon, and the Villages of Fredonia, Grafton, and Saukville. These shuttle services operated from 1996 through 2008, with a service reduction in 2001 and ultimate cancellation in 2008, due to continued declines in ridership and the economic recession. Based on input received during development of this plan, there is interest again in considering options to bring back some form of shuttle service to help employers in Ozaukee County attract and retain labor from Milwaukee County by a direct connection between areas of higher unemployment and business parks and corridors.

The flexible service envisioned in this alternative would allow for minor deviations in the route to provide direct access to passengers who live or work in the vicinity of the basic route. The potential service would be offered from 5:00 a.m. to 8:00 p.m. on weekdays and would pick-up and drop-off at any location along the route. It is anticipated that this service would be provided with a smaller vehicle than a full-sized bus, similar to the largest vehicles in the existing Shared-Ride Taxi fleet, with capacity to transport 14 passengers, including two passengers in wheelchairs.

As envisioned, passengers requesting a pick-up not along the main route would be required to make trip requests within two hours of the desired pick-up time. The driver would provide trips to any location within 0.75 miles of the route upon passenger request. This distance was selected based on surveys of providers as documented in Transit Cooperative Research Program (TCRP) Report 140, *A Guide for Planning and Operating Flexible Public Transportation Services* and similar service in Western Kenosha County, but could be modified by the County as needed.<sup>4</sup> For example, Rockwell Automation in Mequon falls just outside the 0.75-mile service area, but if the company wanted to participate in the service, Ozaukee County could consider expanding the service area.

The routes, as shown on Map 5.1, have been designed to serve key employers and destinations within Ozaukee County. The Cedarburg Road route would provide up to eight one-way trips per day with four trips in the morning and four trips in the afternoon and would serve destinations such as the Mequon business park, downtown Cedarburg, John Crane Orion, and Charter Steel. The route along Port Washington Road would serve destinations including MATC-Mequon, Ascension/Columbia St. Mary's, Aurora Medical Center, and the Port Washington Industrial Park, providing up to ten one-way trips per day, with five morning trips and five afternoon trips. Additional flexibility is provided in that, once a run is complete, the vehicle would be available for Shared-Ride Taxi rides beyond the designated route and flexible service area until the next run needs to be made.

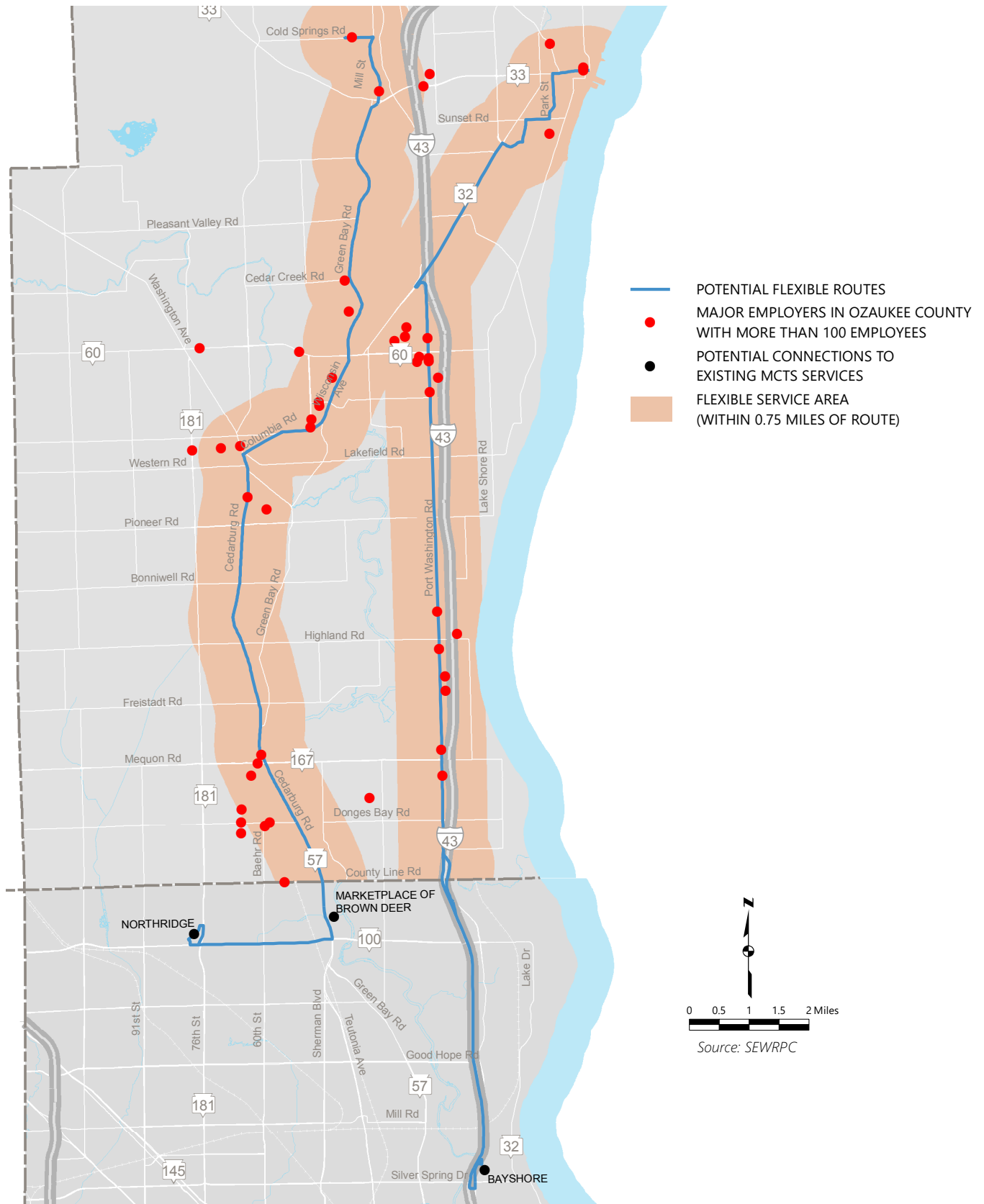
The potential shuttle service would connect with MCTS local bus service at three transfer points located at Bayshore Mall, the Marketplace of Brown Deer (Green Bay Road and Schroeder Drive transfer point), and the former Northridge Mall (Brown Deer Road and Servite Drive). Each of the potential transfer points is currently served by multiple MCTS bus routes.

Chapter 3, Service Objectives and Standards, of this Plan, identifies three objectives to effectively serve Ozaukee County including the following objective, to "serve the travel needs of residents traveling within Ozaukee County, County residents commuting to jobs in Milwaukee County, and County employers seeking workers." Since this potential alternative seeks to connect workforce in Milwaukee County to employees in Ozaukee County, Commission staff analyzed the effectiveness of how well the potential shuttle service performs relative to this objective, including how well the three transfer points serve certain transit-dependent populations, including minority and low-income families within a 15-minute transit ride. Maps 5.2 and 5.3 show the minority and low-income populations within one-quarter mile walk distance from bus routes within a 15-minute transit ride to each potential transfer point. As shown on Map 5.2 and Map 5.3, the Bayshore transfer point would serve approximately 19,311 minority people and approximately 1,665 low-income families. The Northridge transfer point would serve 12,928 minority people and 484 low-income families. The Brown Deer transfer connection would serve 3,437 minority people and 159 low-income families.

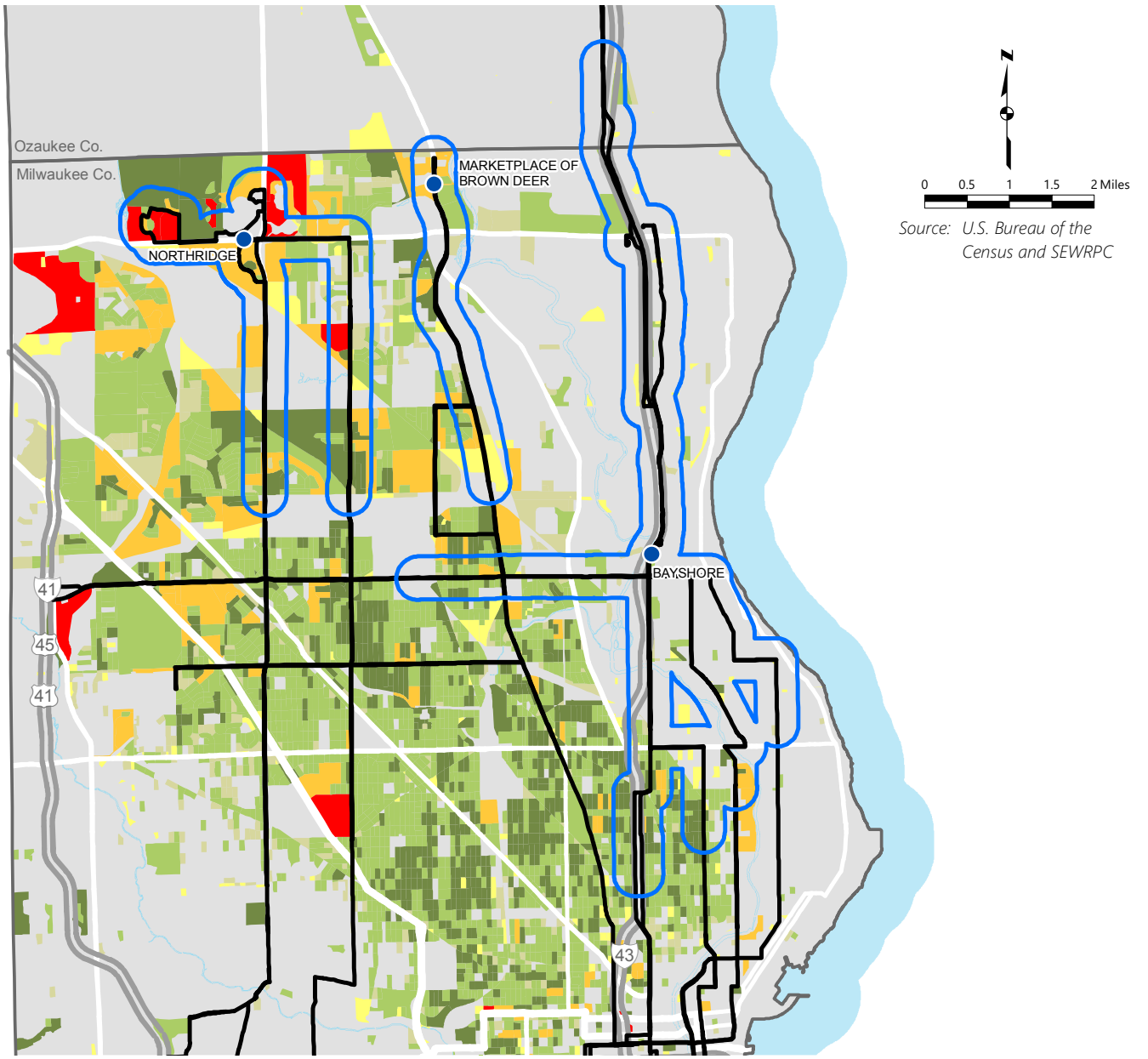
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<sup>4</sup> *TCRP Report 140, A Guide for Planning and Operating Flexible Public Transportation Services, 2010.*

**Map 5.1**  
**Proximity of Employers to the Potential Flexible Route in Ozaukee County**



**Map 5.2**  
**Minority Population Within a 15-Minute Transit Ride from Potential Transit Connections**



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

**TRANSIT SERVICE AREA (2016)**

ONE-QUARTER MILE WALK DISTANCE FROM BUS ROUTES WITHIN A 15 MINUTE TRANSIT RIDE FROM POTENTIAL TRANSIT CONNECTIONS

POTENTIAL TRANSIT CONNECTION

MINORITY PEOPLE SERVED BY ALL TRANSIT ROUTES: 35,676

MINORITY PEOPLE SERVED BY BAYSHORE ROUTE: 19,311

MINORITY PEOPLE SERVED BY BROWN DEER ROUTE: 3,437

MINORITY PEOPLE SERVED BY NORTHRIDGE ROUTE: 12,928

MCTS LOCAL & EXPRESS SERVICE

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

500 OR MORE MINORITY PEOPLE

200 TO 499 MINORITY PEOPLE

100 TO 199 MINORITY PEOPLE

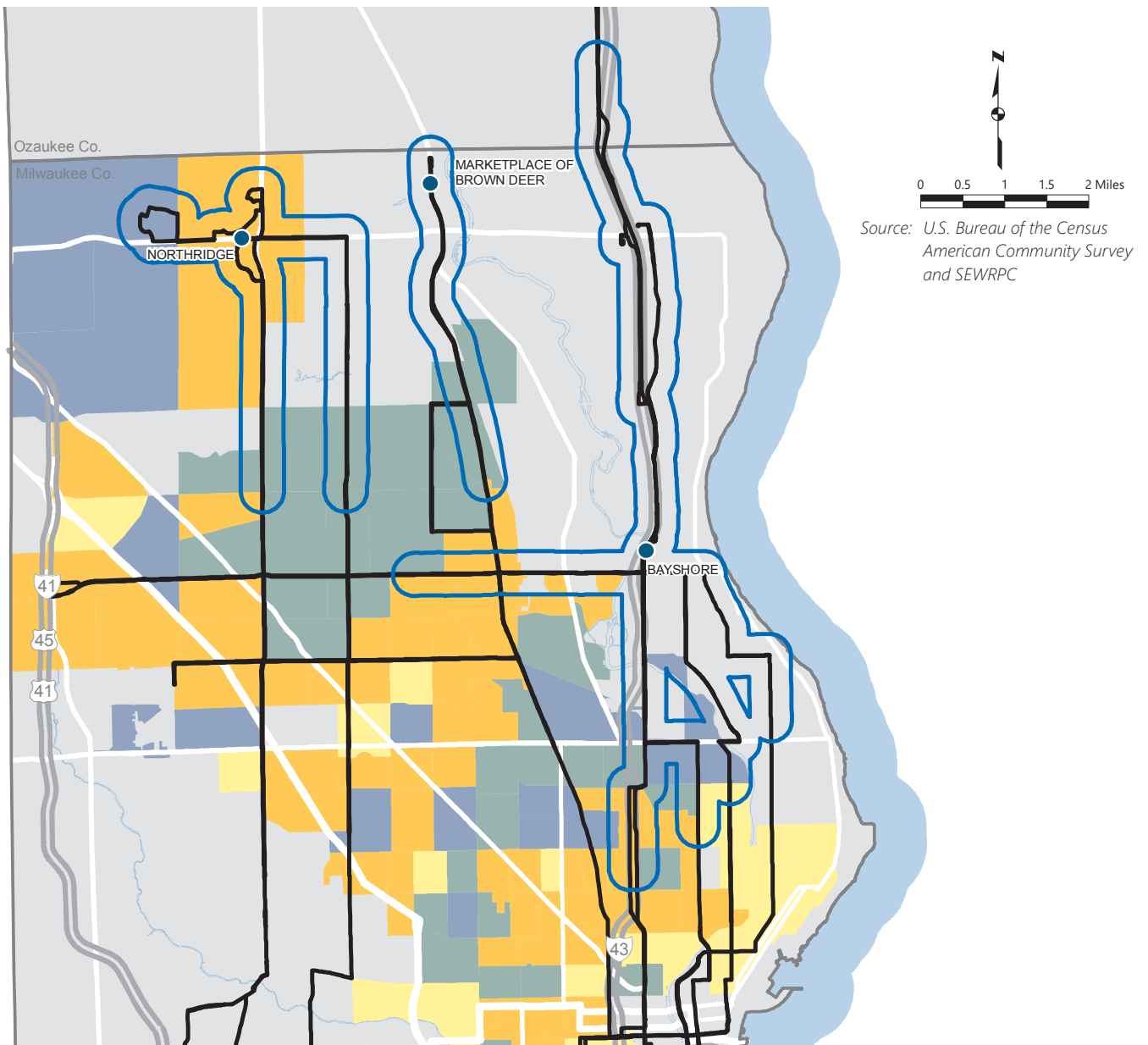
25 TO 99 MINORITY PEOPLE

10 TO 24 MINORITY PEOPLE

1 TO 9 MINORITY PEOPLE

Note: Areas in gray are comprised of census blocks wherein the percentage of minority people, including Hispanic people, is less than or equal to the regional average of 28.9 percent.

**Map 5.3**  
**Low-Income Families Within a 15-Minute Transit Ride from Potential Transit Connections**



0 0.5 1 1.5 2 Miles

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

**TRANSIT SERVICE AREA (2016)**

ONE-QUARTER MILE WALK DISTANCE FROM BUS ROUTES WITHIN A 15-MINUTE TRANSIT RIDE FROM POTENTIAL TRANSIT CONNECTIONS

POTENTIAL TRANSIT CONNECTION

LOW-INCOME FAMILIES SERVED BY ALL TRANSIT ROUTES: 2,308

LOW-INCOME FAMILIES SERVED BY BAYSHORE ROUTE: 1,665

LOW-INCOME FAMILIES SERVED BY BROWN DEER ROUTE: 159

LOW-INCOME FAMILIES SERVED BY NORTHRIDGE ROUTE: 484

MCTS LOCAL & EXPRESS SERVICE

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

FEWER THAN 100 FAMILIES IN POVERTY

100-199 FAMILIES IN POVERTY

200-299 FAMILIES IN POVERTY

300 OR MORE FAMILIES IN POVERTY

Notes: Areas in gray are comprised of census tracts wherein the percentage of families in poverty is less than or equal to the regional average of 10.3 percent.

The information reflected on this map is from the American Community Survey, which is based on sample data from a small percentage of the population. Consequently, the data has a relatively large margin of error that can result in larger census tracts being identified as having concentrations of families in poverty even though there are only small enclaves of such families located within the tract identified.

Table 5.1 provides the annual operating expenses, revenues, and ridership estimates associated with the fixed-flexible routes. Since this service is primarily focused on providing access to employers within Ozaukee County, costs could be shared through a partnership with County employers. The annual cost of the service is estimated to be approximately \$214,000 in 2022, which includes the cost to operate and maintain the vehicles. The capital cost to purchase two mini-buses (at approximately \$110,000), is not included in this total. The fare for the service is assumed to be \$2.00 per ride, for a total of approximately \$20,000 in 2018 and 2022. The farebox revenue could be lower if the County accepts transfers from MCTS. For purposes of this analysis a conservative estimate of 2.6 passenger trips per revenue hour based on the experience of similar services found in the TCRP Report 140, resulting in an estimate of 10,000 passengers per year.

**Table 5.1**  
**Projected Annual Operating Expenses, Revenues, and Ridership for the Fixed-Flexible Route Alternative**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	78,700	81,500	80,100
Revenue Vehicle Hours	3,800	3,800	3,800
Revenue Passengers			
Total	10,000	10,300	10,150
Passengers per Revenue Vehicle Mile	0.13	0.13	0.13
Passengers per Revenue Vehicle Hour	2.63	2.71	2.67
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$208,500	\$214,000	\$211,250
Farebox Revenues <sup>a</sup>	\$20,000	\$20,600	\$20,300
Percent of Expenses			
Recovered Through Revenues	9.6	9.6	9.6
Operating Assistance			
Federal <sup>a</sup>	\$33,200	\$34,400	\$33,800
State <sup>a</sup>	\$81,500	\$83,300	\$82,400
County <sup>a</sup>	\$73,800	\$75,700	\$74,800
Total <sup>a</sup>	\$188,500	\$193,400	\$191,000
Per Trip Data			
Operating Expenses <sup>a</sup>	\$20.85	\$20.78	\$20.81
Farebox Revenue <sup>a</sup>	\$2.00	\$2.00	\$2.00
Total Operating Assistance <sup>a</sup>	\$18.85	\$18.78	\$18.81

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

Flexible service provides the potential of serving less densely developed areas with transit service by allowing a set route to be modified to respond to customer needs. However, this ability to modify the route may cause the service to be less viable for work trips due to the potential variability in trip times, which would impact on-time arrivals. However, if this service is provided in careful coordination with employers, it could be possible to synchronize scheduling to offer more on-time arrivals when shift changes can be anticipated. This synchronization of schedules may necessitate more trips than are included in the cost estimates in Table 5.1.

### On-Demand Services

Interest in analyzing the initiation of on-demand services was expressed at the business-focused meeting, the public involvement meetings, and during discussions with the Advisory Committee. This alternative enhances the existing Shared-Ride Taxi service by providing a demand-response program for employees needing transportation to or from their workplace. The demand responsive system could be operated in two different ways. One option is through a private contract with a demand-responsive transportation network company such as Lyft or Uber. The second option is to operate the services through the County's Shared-Ride Taxi, either using the County's fleet or contracting the services with a private contractor providing their own vehicle fleet. If provided by the County, the on-demand services would need to ensure capacity exists to accommodate all trips equally, not just employment trips. This is based on Federal regulations that limit prioritizing certain trip purposes over other trip purposes. The alternative to expand the Ozaukee County Shared-Ride Taxi to an on-demand service is described in further detail in the Shared-Ride Taxi section later in this chapter.

### Partnership with a Transportation Network Company

Public transportation operators that have recently partnered with private demand responsive transportation providers can serve as examples for Ozaukee County. Two well-known national examples include Centennial, Colorado, and Pinellas County, Florida. Another recent example is Lone Tree, Colorado, which began a pilot with Uber in August 2017, building on an existing free shuttle service.

Centennial, Colorado, is a low-density suburb of Denver with a population over 109,000. It has one light rail transit station, a park-ride lot, and a dial-a-ride service. However, the community experienced difficulty serving commuters' first and last mile needs. To address these needs, in August 2016, the City of Centennial launched the Go Centennial pilot, a public-private partnership designed as an experiment to enhance and increase transit ridership at the light rail station.

During the six-month pilot period, transit users in a 3.75 square mile service area near the light rail station could take a free Lyft Line ride between the light rail station and any point in the service area. An accessible vehicle with a ramp and a trained driver were present in the service area during all hours of operation to provide service for people with limited mobility. Rides could be booked through smartphone applications or by telephone.

Go Centennial provided rides at no cost to travelers to go to or from the light rail station. Each trip was subsidized at market rate, which was on average \$4.70, ranging from \$2.56 to \$16.24 (eliminating an outlier of \$42.16). By comparison, the cost for the Call-n-Ride service to the same light rail station was subsidized at an average cost of \$18.54 per boarding in 2015. The Go Centennial service resulted in a 78 percent reduction in total costs compared to the Call-n-Ride service operated by the Regional Transit District. The final report for this pilot concluded that with a larger service area that fosters higher ridership and better utilization of the accessible vehicle, a partnership like Go Centennial could cut Call-n-Ride costs in half while providing more responsive service to the same number of riders.

The Pinellas Suncoast Transit Authority (PSTA), located in Pinellas County, Florida, began subsidizing rides on Uber (along with United Taxi and Wheelchair Transport) in February 2016. They are the first transit agency in the United States to partner with Uber, through the Direct Connect program. Although Pinellas County is the most densely populated county in Florida and has approximately 960,000 residents, it includes locations that cannot be reached by the existing bus service. PSTA has been challenged with providing first/last mile transit connections and adequate funding for transit. In an attempt to address these challenges, they developed a partnership with Uber and United Taxi.

Direct Connect allows riders to use Uber, United Taxi, or Wheelchair Transport to connect to the PSTA bus system. Passengers need to apply a promo code in the Uber app, then slide to the "PSTA" option to request a ride. The service hours are 6:00 a.m. until 11:00 p.m., seven days a week. In addition, riders who take Direct Connect to a bus stop can show their Uber/United Taxi/Wheelchair Transport receipt to the bus operator and get the bus ride free within an hour of the initial ride. The program expanded in January 2017 to include all of Pinellas County, including eight zones and eight bus stops, and increased the amount paid by PSTA from \$3.00 per ride to \$5.00 per ride if the trip started and ended within the same zone. In April 2018, PSTA eliminated the zones and increased the number of connecting bus stops from eight to 24.

Lone Tree, Colorado, is a Denver suburb with approximately 10,000 residents, which has launched one of the most recent on-demand pilot programs. In August 2017 the City of Lone Tree began a new pilot with Uber called Lone Tree Link On Demand, to provide free door-to-door on-demand rides within the city limits. The service allows anyone requesting a ride through the Uber app with a pick up location and destination within Lone Tree city limits to select the free Link On Demand option.

The Link On Demand pilot program offers service from 7:00 a.m. through 7:00 p.m. Monday through Thursday with extended hours until 10:00 p.m. on Friday. The service is also available Saturdays and Sundays with service from 10:00 a.m. to 10:00 p.m. and 10:00 a.m. and 8:00 p.m., respectively.

The pilot with Uber builds upon the existing public private partnership with three local employers that provided a free shuttle service to connect major employment hubs with healthcare facilities, retail, and mass transportation stations. The service reassigned one of the existing Link shuttle buses to Uber's server. Since its launch, the service has provided over 1,400 rides in Lone Tree. The pilot ended in December 2017.

In light of these initiatives in other communities, the Commission staff discussed the potential for providing subsidized on-demand service with representatives from Lyft. Based on that conversation, it appears that the most rational way to move forward with partnering with Lyft to provide on-demand service would be for the County to work with Lyft and interested employers to provide subsidized rides between specific

origins and destinations. As described by the Lyft representatives, there would be a coupon code provided to employees, which would allow the County and employers to track usage. In addition, specific pick-up and drop-off locations would be designated, or “geo-fenced” so that the coupon code would only work for those trips. This arrangement would ensure that employers and the County are only responsible for the costs associated with employment-related rides. Payment for the subsidized portion of the rides could come from the County, or directly from the employer being served. If the latter, unique coupon codes could be used in the mobile app to get to and from that specific business.

There are both opportunities and challenges associated with partnering with a private transportation network company. If not subsidized by the County or an employer, the cost would be relatively high per trip for the users and require access to a cell phone and credit card. These barriers could be overcome by allowing users to make reservations over the phone and by working with their employers to arrange payment. For example, a planned pilot between Lyft and the Los Angeles County Metropolitan Transportation Authority will allow customers to call a dispatcher phone number, providing equity to individuals who are either unbanked or non-smartphone users.<sup>5</sup>

Commission staff estimated three illustrative rides on Uber and Lyft. Both companies have a similar fare structure that includes a base fare of \$1.25, a per mile cost of \$1.16, a per minute fare of \$0.20, and a service fee of \$1.75. The costs are provided as ranges due to the travel time variability. Three sample trips were estimated using the websites for each company and listed below:

- Grafton Park & Ride Lot to Aurora Medical Center in Grafton would be between \$7 and \$9. (This one-way trip would cost \$3.00 at the Adult fare on the Ozaukee County Shared-Ride Taxi)
- Saukville Walmart to Charter Steel would be between \$7 and \$10. (This one-way trip would cost \$3.00 at the Adult fare on the Ozaukee County Shared-Ride Taxi)
- Cherrywood Lane to the Mequon Business Park would be between \$7 and \$9. (This one-way trip would cost \$3.00 at the Adult fare on the Ozaukee County Shared-Ride Taxi)

As can be seen from this limited sample, serving destinations in Ozaukee County would be more expensive to subsidize in Ozaukee County than those in the pilots studied by Commission staff. This is largely because the longer trip lengths required to reach many destinations in the County. One option would be to have businesses pay the full cost of the service provided to their employees using a coupon code associated with each business. Another option would be for the County to pay for the service and develop a cost share with the participating businesses.

Regardless of the method chosen, the County would need to work with a selected transportation network company to ensure adequate drivers are available during peak times to provide services. If this alternative is to be further pursued and if the County would be subsidizing any of the cost of the trips under this model, further study of other similar efforts across the nation would be needed to predict ridership levels, and therefore costs to the County.

### **Expanded MCTS Service Including Routes 276, 12, and 68 to Serve Key Employment Destinations**

Based on meetings with the public and businesses, and Advisory Committee discussions, three potential extensions of MCTS local routes were considered to serve Ozaukee County employers. These include an extension of MCTS Route 276 to the Mequon Town Center, an extension of MCTS Route 12 to the Mequon Business Park, and a potential Route 68 to Concordia University and MATC-Mequon. More detail on each alternative is provided in the following text, including service areas, potential costs to Ozaukee County, potential ridership, and the potential employment centers and population served by each route.

#### **Routes 276 and 12**

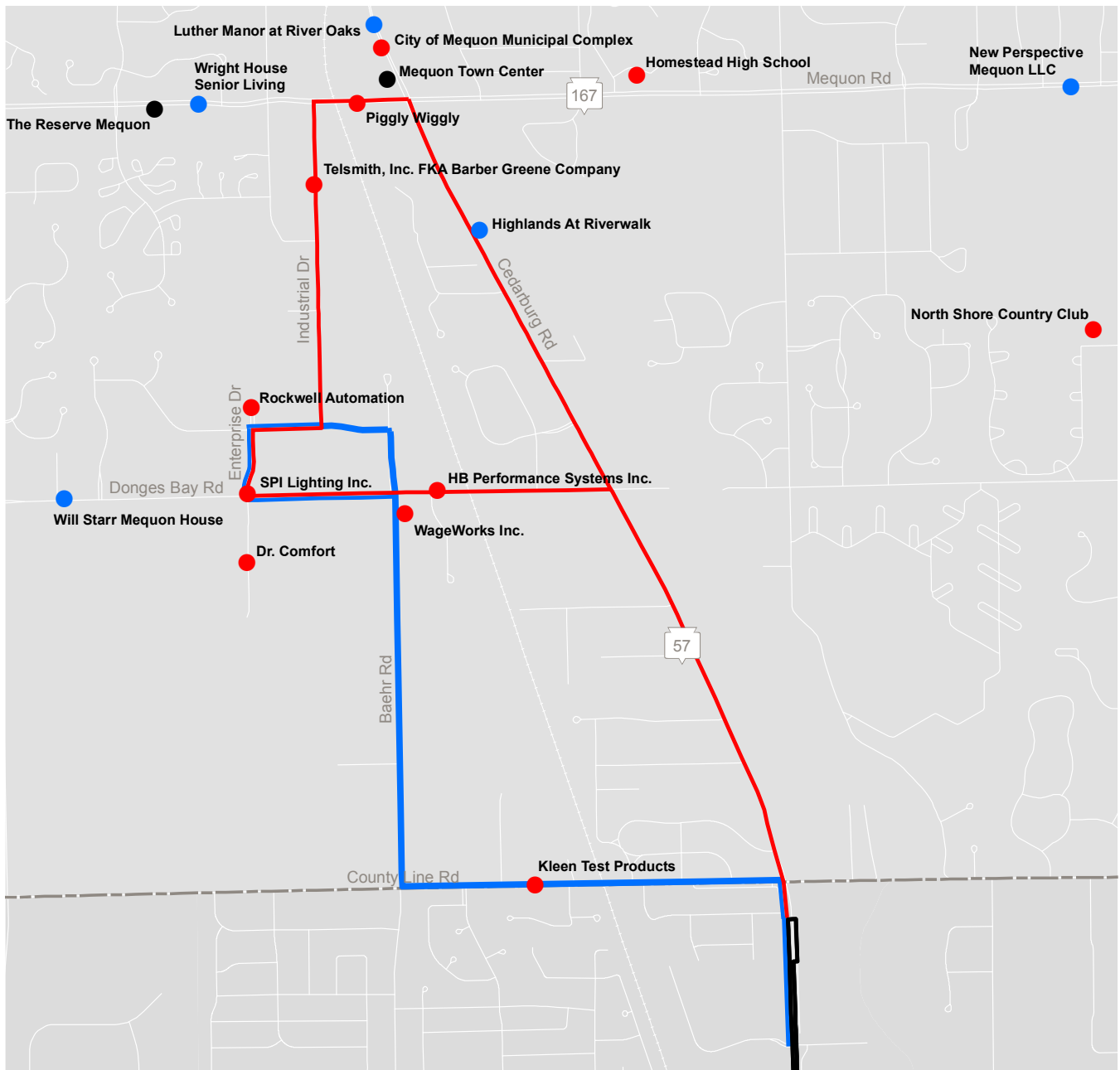
The extension of MCTS Route 276, as shown in red on Map 5.4, would extend an existing route from its current terminus at W. Cherrywood Lane and N. Green Bay Road along Cedarburg Road. The route would travel west on Donges Bay Road to Enterprise Drive, then north on Industrial Drive to Mequon Road. From

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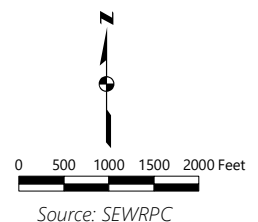
<sup>5</sup> *Shared Used Mobility Policy Database, Two-Region Mobility on Demand Partnership.*



**Map 5.4**  
**Employment and Residential Facilities near the Possible Extension**  
**of Routes 12 and 276 in the City of Mequon**



- EXISTING MCTS ROUTES (12, 49, 276)
- POSSIBLE EXTENSION OF ROUTE 276
- POSSIBLE EXTENSION OF ROUTE 12
- MAJOR EMPLOYERS WITH MORE THAN 100 EMPLOYEES
- RESIDENTIAL FACILITIES FOR SENIORS, PEOPLE WITH DISABILITIES, AND LOW-INCOME HOUSEHOLDS
- OTHER HIGHER DENSITY RESIDENTIAL FACILITIES



Mequon Road, the route would continue to Cedarburg Road, returning to Cherrywood Lane. This route would serve the business park in Mequon, which includes Rockwell Automation and Telsmith, Inc. In addition, there are residential and retail areas, including Mequon Town Center, which would be served by this potential route. This route, as envisioned, would provide all day service on weekdays from 5:00 a.m. to 7:30 p.m.

Two options for operating the extension of Route 276 are presented for comparison. One option would continue to run the route with one bus, which would add 22 minutes to each trip. As a result, the number of total weekday trips in Milwaukee County would be reduced from 29 per weekday to 15 trips per weekday, reducing frequency to approximately every hour. Table 5.2 displays the operating expenses, revenues, and ridership for the extension of Route 276 with one bus. As indicated in Table 5.2, the route is anticipated to generate approximately 12,600 revenue passengers in 2022. The operating costs for the extended Route 276 with one bus would be \$189,600 in 2022. Ozaukee County would be responsible for approximately \$67,000 in 2022. Although roughly hourly bus service may be appropriate for the density of the areas served by this potential route, Milwaukee County may not be interested in decreasing the frequency of service for their residents.

The second option would run the route with two buses to maintain the current frequency of approximately 30 minutes. This option would utilize two buses and provide approximately 34 round trips daily. As shown in Table 5.3, ridership would increase to approximately 19,500 and operating expenses would double. Ridership is expected to increase due to the additional destinations

**Table 5.2**  
**Projected Annual Operating Expenses, Revenues, and Ridership to Extend MCTS Route 276 with Hourly Service: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	11,300	11,300	11,300
Revenue Vehicle Hours	1,800	1,800	1,800
Revenue Passengers			
Total	12,600	12,700	12,700
Passengers per Revenue Vehicle Mile	1.12	1.12	1.12
Passengers per Revenue Vehicle Hour	7.00	7.00	7.00
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$184,900	\$189,600	\$187,300
Farebox Revenues <sup>a</sup>	\$18,100	\$18,300	\$18,200
Percent of Expenses			
Recovered Through Revenues	9.8	9.7	9.7
Operating Assistance			
Federal <sup>a</sup>	\$42,900	\$44,000	\$43,500
State <sup>a</sup>	\$58,800	\$60,300	\$59,600
County <sup>a</sup>	\$65,100	\$67,000	\$66,100
Total <sup>a</sup>	\$166,800	\$171,300	\$169,100
Per Trip Data			
Operating Expenses <sup>a</sup>	\$14.67	\$14.93	\$14.80
Farebox Revenue <sup>a</sup>	\$1.44	\$1.44	\$1.44
Total Operating Assistance <sup>a</sup>	\$13.24	\$13.49	\$13.36

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

**Table 5.3**  
**Projected Annual Operating Expenses, Revenues, and Ridership to Extend MCTS Route 276 with Half-Hourly Service: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	22,700	22,700	22,700
Revenue Vehicle Hours	3,700	3,700	3,700
Revenue Passengers			
Total	19,400	19,500	19,500
Passengers per Revenue Vehicle Mile	0.85	0.86	0.86
Passengers per Revenue Vehicle Hour	7.00	7.00	7.00
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$369,750	\$379,100	\$374,400
Farebox Revenues <sup>a</sup>	\$27,900	\$28,100	\$28,000
Percent of Expenses			
Recovered Through Revenues	7.5	7.4	7.5
Operating Assistance			
Federal <sup>a</sup>	\$85,800	\$88,000	\$86,900
State <sup>a</sup>	\$117,600	\$120,500	\$119,100
County <sup>a</sup>	\$138,450	\$139,300	\$138,900
Total <sup>a</sup>	\$341,850	\$347,800	\$344,900
Per Trip Data			
Operating Expenses <sup>a</sup>	\$19.06	\$19.44	\$19.25
Farebox Revenue <sup>a</sup>	\$1.44	\$1.44	\$1.44
Total Operating Assistance <sup>a</sup>	\$17.62	\$17.84	\$17.73

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

served while maintaining existing service frequencies, expanding the options for employees using the route to reach jobs, particularly jobs within the retail or hospitality industries that have multiple shift changes throughout the day and evening hours. The operating expenses for the second option would be approximately \$379,100 in 2022. As a result, Ozaukee County's share for extending Route 276 with a frequency maintained at 30 minutes would total approximately \$139,300 in 2022.

The extension of MCTS Route 12 to the Mequon business park is shown in blue on Map 5.4. The route would extend from Cherrywood Lane to County Line Road, and then west to Baehr Road. From Baehr Road, the route would make a loop around Executive Drive to Enterprise Drive and back to Donges Bay Road. This route extension would primarily serve businesses in the Mequon Business Park and therefore, the potential route would be limited to the weekday service hours of 6:00 a.m. to 9:00 a.m. and 3:00 p.m. to 6:00 p.m. Table 5.4 shows the anticipated ridership levels at approximately 32,500 and farebox revenues of approximately \$46,800 in 2022. Two additional buses would be needed in order to maintain existing service levels in Milwaukee County of approximately every 25 minutes along the existing length of Route 12. The total operating assistance for extending the service into Ozaukee County would be approximately \$415,100, of which Ozaukee County would be responsible for approximately \$161,100 in 2022.

Map 5.5 illustrates the proximity to jobs for both potential Routes 12 and 276. The routes serve key employment areas, with greater than 1,000 jobs per one-quarter section. Map 5.6 further illustrates the population served, depicting the high number of people residing in and around the Mequon Town Center along the potential route 276.

### Route 68

As depicted on Map 5.7, the potential Route 68 would depart from Bayshore Town Center and travel north along Port Washington Road to Highland Road. On weekdays, Route 68 would proceed to Concordia University, concluding with service to the MATC-Mequon campus. It would offer service approximately every 30 minutes between 6:00 a.m. and 6:00 p.m. and approximately every 40 minutes between 6:00 p.m. and 12:00 a.m. Weekend service on Route 68 would begin at Bayshore Town Center, continue north along Port Washington Road and conclude with service to Concordia University. The potential Route 68 would operate on Saturdays from 6:00 a.m. to 11:00 p.m., with service every 30 minutes. On Sundays, the potential route would operate from 8:00 a.m. to 7:00 p.m. and offer service every 30 minutes. In order to provide headways of approximately 30 minutes, this route would require three buses between 6:00 a.m. and 6:00 p.m. on weekdays and two buses on the weekend. This route could replace Route 42U. Ozaukee County does not currently contribute toward the operating expenses for Route 42U. Ozaukee County's contribution toward Route 42U or the potential Route 68 could be a point of negotiation. If Route 42U continues along its current route, there is an option to extend Route 68 north to serve Ascension/Columbia St. Mary's Hospital, rather than MATC and Concordia.

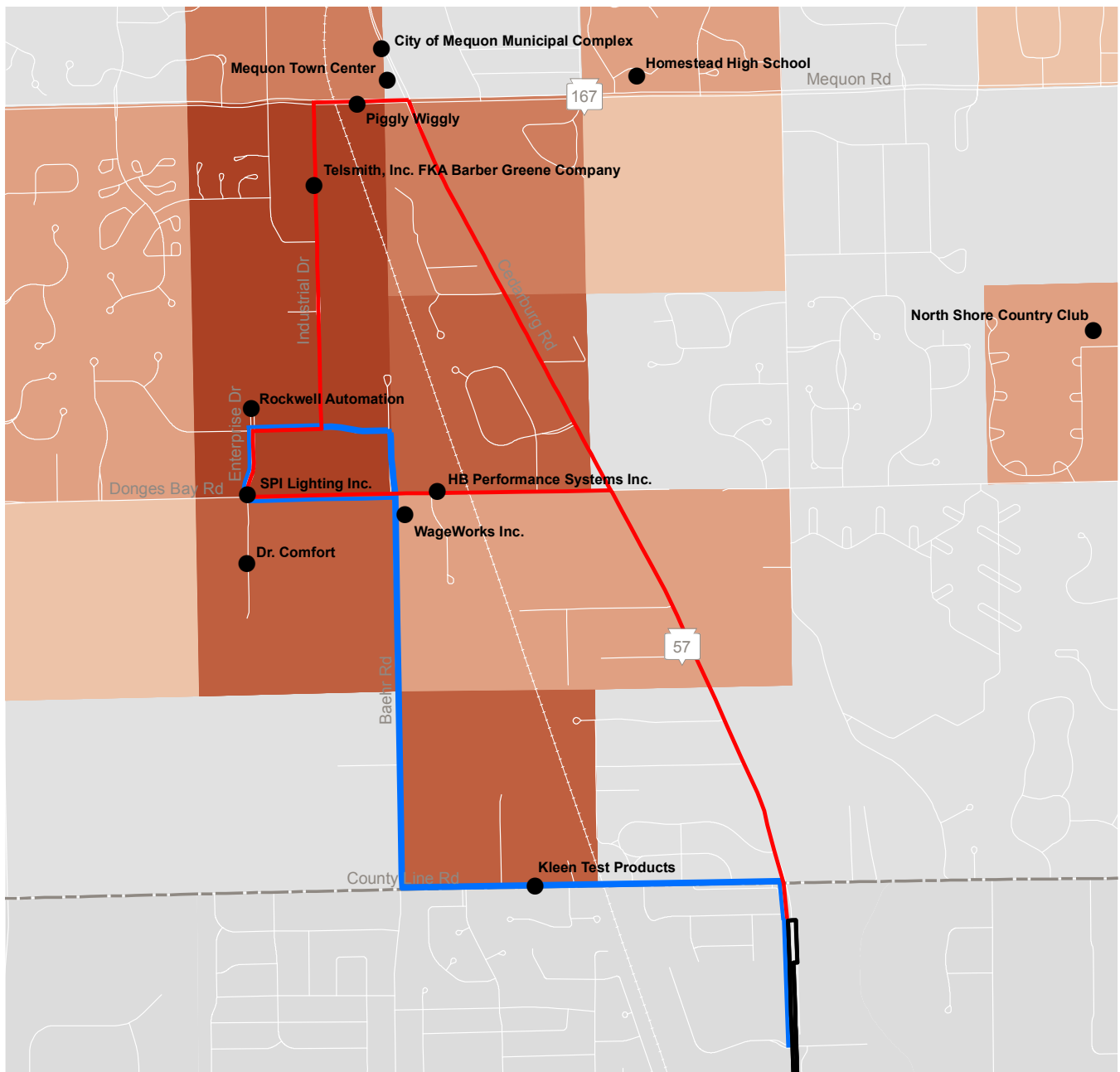
**Table 5.4**  
**Projected Annual Operating Expenses, Revenues, and Ridership to Extend MCTS Route 12: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	19,400	19,400	19,400
Revenue Vehicle Hours	3,800	3,800	3,800
Revenue Passengers			
Total	32,300	32,500	32,400
Passengers per Revenue Vehicle Mile	1.66	1.68	1.67
Passengers per Revenue Vehicle Hour	8.50	8.50	8.50
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$459,000	\$461,900	\$460,500
Farebox Revenues <sup>a</sup>	\$46,500	\$46,800	\$46,700
Percent of Expenses			
Recovered Through Revenues	10.1	10.1	10.1
Operating Assistance			
Federal <sup>a</sup>	\$106,500	\$107,200	\$106,900
State <sup>a</sup>	\$146,000	\$146,800	\$146,400
County <sup>a</sup>	\$160,000	\$161,100	\$160,600
Total <sup>a</sup>	\$412,500	\$415,100	\$413,800
Per Trip Data			
Operating Expenses <sup>a</sup>	\$14.21	\$14.21	\$14.21
Farebox Revenue <sup>a</sup>	\$1.44	\$1.44	\$1.44
Total Operating Assistance <sup>a</sup>	\$12.77	\$12.77	\$12.77

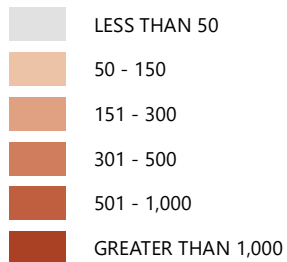
<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

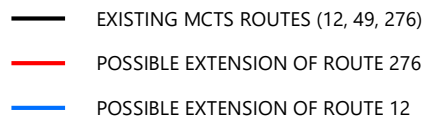
**Map 5.5**  
**Employment Near the Possible Extension of Routes 12 and 276 in the City of Mequon**



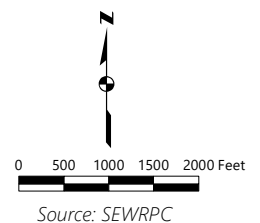
**2010 JOBS PER U.S. PUBLIC LAND SURVEY ONE-QUARTER SECTION**



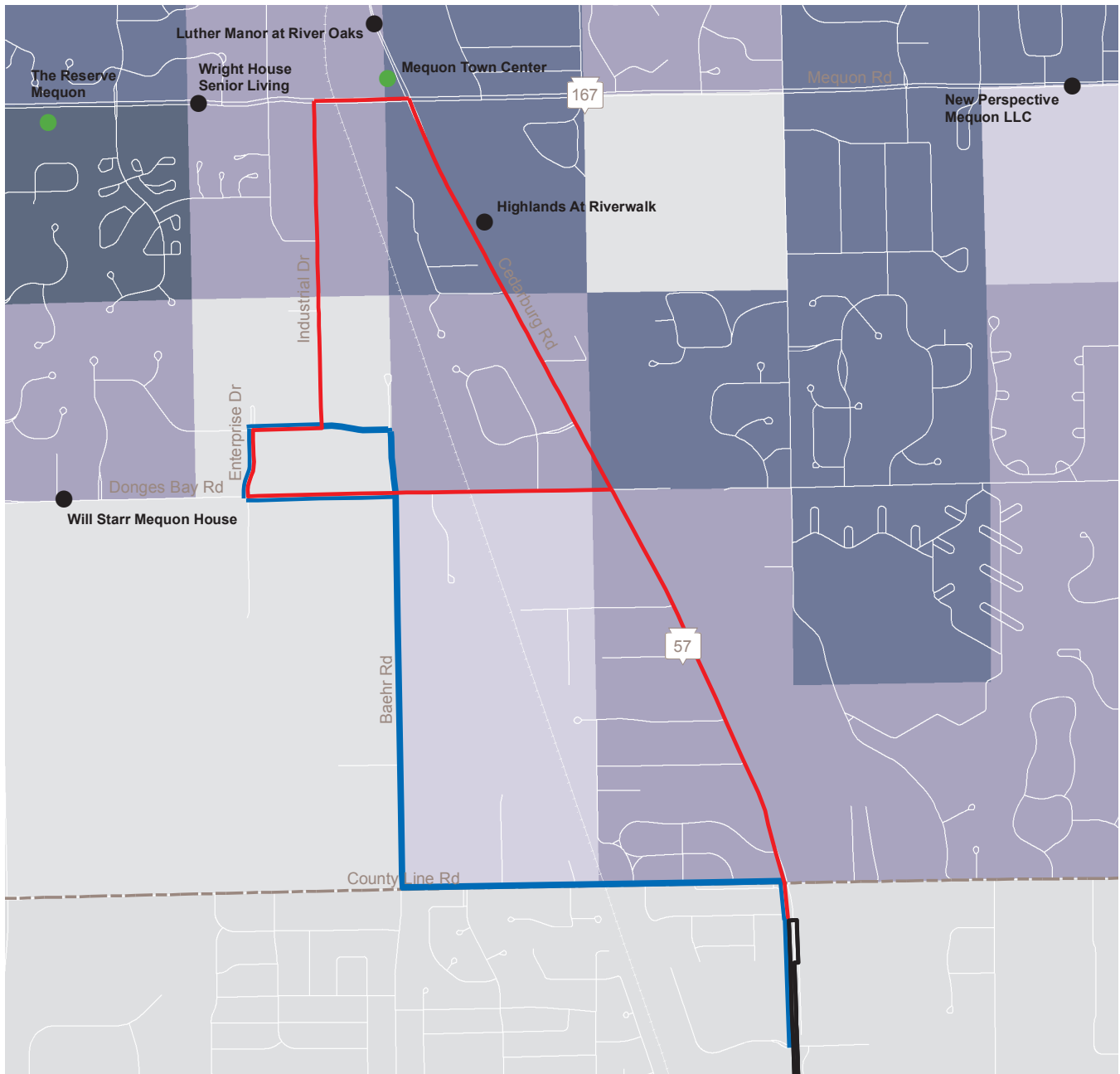
**TRANSIT ROUTES**



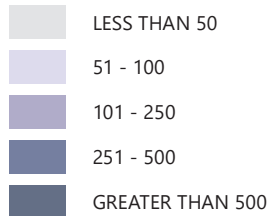
**FACILITIES**



**Map 5.6**  
**Population Near the Possible Extension of Routes 12 and 276 in the City of Mequon**



**2010 POPULATION PER U.S. PUBLIC LAND SURVEY ONE-QUARTER SECTION**



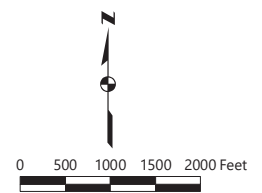
**TRANSIT ROUTES**

- EXISTING MCTS ROUTES (12, 49, 276)
- POSSIBLE EXTENSION OF ROUTE 276
- POSSIBLE EXTENSION OF ROUTE 12

**FACILITIES**

- RESIDENTIAL FACILITIES FOR SENIORS, PEOPLE, WITH DISABILITIES, AND LOW-INCOME HOUSEHOLDS
- OTHER HIGHER DENSITY RESIDENTIAL FACILITIES<sup>a</sup>

<sup>a</sup>The Mequon Town Center and the Reserve Opened After 2010



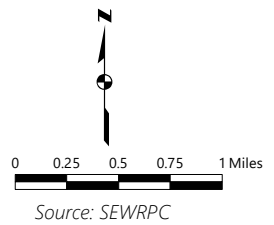
Source: SEWRPC

**Map 5.7**  
**Potential Route 68 in Milwaukee and Ozaukee Counties**



- POTENTIAL WEEKDAY ROUTE 68
- POTENTIAL WEEKEND ROUTE 68
- MCTS ROUTE

To Bayshore Town Center ▼



As shown in Table 5.5, operating expenses for the portion of the potential Route 68 alternative in Ozaukee County are anticipated to be \$868,200 in 2022. It is assumed that Ozaukee County would be responsible for the portion of additional miles within their border, which would be approximately \$318,300 in 2022, with Federal and State funds contributing a total of approximately \$477,500 to the operating costs.

Map 5.8 shows the route and nearby employment density, as well as major employers within a half-mile of Route 68. Map 5.9 shows the population density in proximity to Route 68. It also includes residential facilities for seniors, people with disabilities, and low-income households who may utilize the route. The route would connect areas with high population density in northern Milwaukee County with areas with more than 500 jobs per quarter section, including six major employers in Ozaukee County.

**Table 5.5  
Projected Annual Operating Expenses, Revenues, and Ridership for Potential MCTS Route 68: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	63,400	63,400	63,400
Revenue Vehicle Hours	5,000	5,000	5,000
Revenue Passengers			
Total	50,000	50,300	50,200
Passengers per Revenue Vehicle Mile	0.79	0.79	0.79
Passengers per Revenue Vehicle Hour	10.0	10.0	10.0
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$862,800	\$868,200	\$865,500
Farebox Revenues <sup>a</sup>	\$72,000	\$72,400	\$72,200
Percent of Expenses			
Recovered Through Revenues	8.3	8.3	8.3
Operating Assistance			
Federal <sup>a</sup>	\$200,200	\$201,500	\$200,900
State <sup>a</sup>	\$274,300	\$276,000	\$275,200
County <sup>a</sup>	\$316,300	\$318,300	\$317,300
Total <sup>a</sup>	\$790,800	\$795,800	\$793,400
Per Trip Data			
Operating Expenses <sup>a</sup>	\$17.26	\$17.26	\$17.26
Farebox Revenue <sup>a</sup>	\$1.44	\$1.44	\$1.44
Total Operating Assistance <sup>a</sup>	\$15.82	\$15.82	\$15.82

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

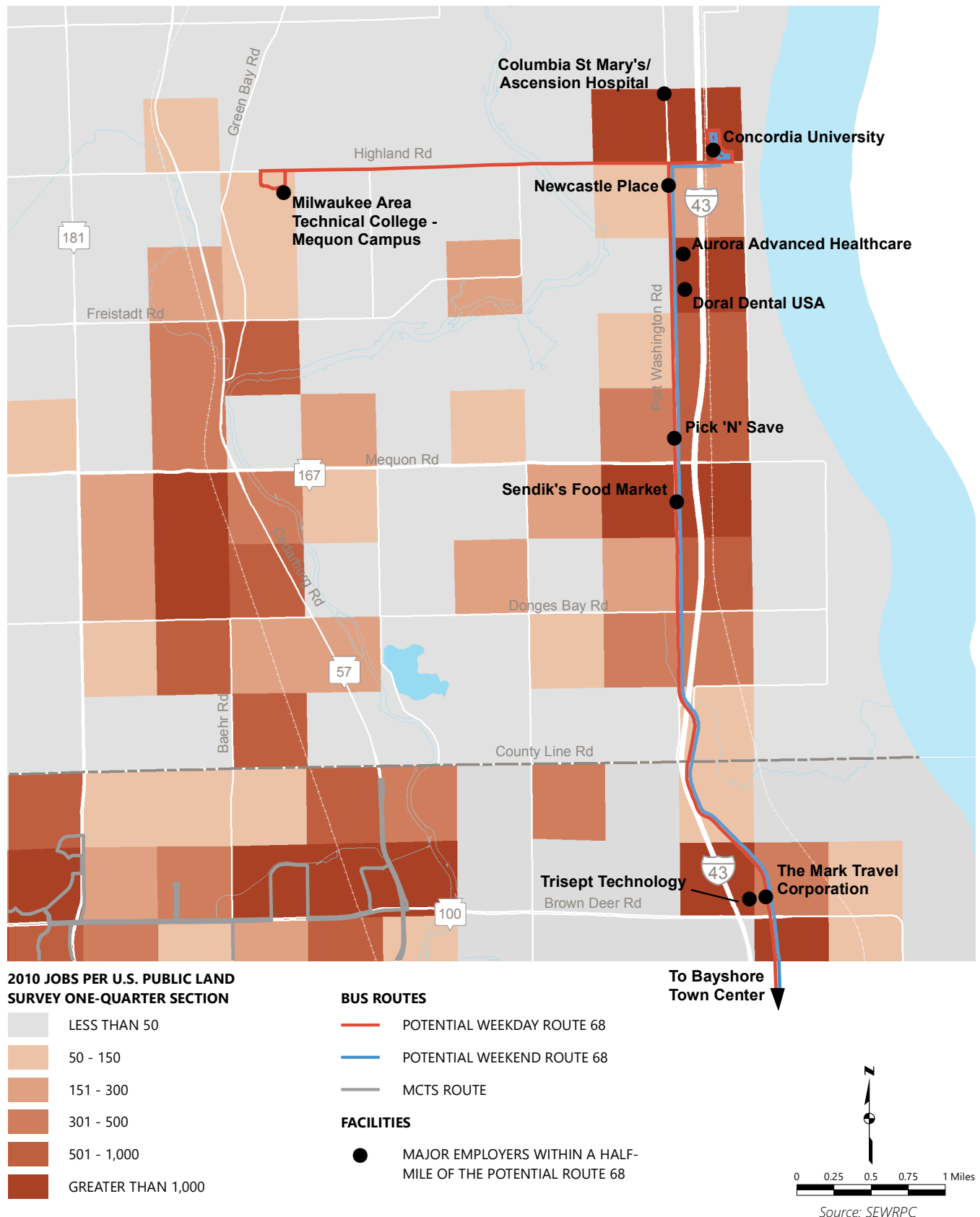
### Expanded Reverse Commute Service from Milwaukee County to Ozaukee County

Based on input received during the public involvement meetings, the business-focused meeting, and discussions with the Advisory Committee, this alternative reviews the possible expansion of reverse commute services from Milwaukee County to Ozaukee County. The County could consider increasing the number of reverse commute runs on the Express to improve service to employers in Ozaukee County. If the County is interested in expanding reverse commute services, it should work with businesses along the route to determine if they have existing or future employees who would benefit from reverse commute service at additional times during the day. If the County discovers that there would be demand for such a service, the following alternative represents an example of a service improvement the County could consider.

This alternative includes three additional reverse commute trips; one in the morning, one in the early afternoon, and one in the evening. Currently, the Ozaukee County Express begins northbound service in downtown Milwaukee at 5:25 a.m., and arrives in the Port Washington Park & Ride Lot at 6:21 a.m. In order to accommodate early shifts, an earlier run could be added, which would leave downtown Milwaukee before 5:00 a.m. and reach the Port Washington lot in time for the existing 5:46 a.m. traditional commute run. The existing afternoon reverse commute runs occur between 3:00 p.m. and 5:00 p.m. Employees using the reverse commute service may benefit from two additional southbound runs at approximately 2:00 p.m. and 5:00 p.m. to accommodate those who need to leave early or stay late on their shifts.

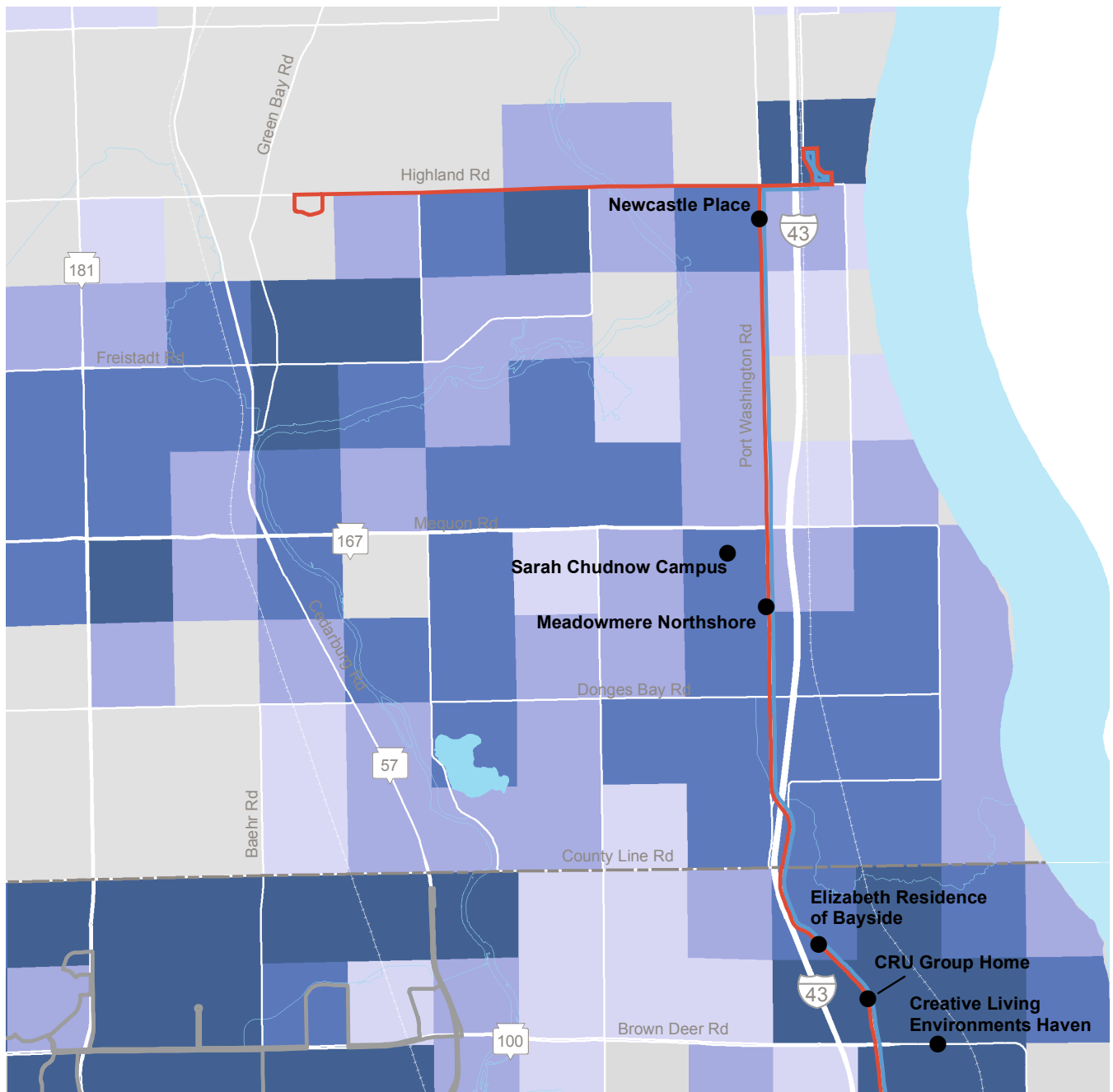
As shown in Table 5.6, the three additional trips would serve approximately 2,300 riders in 2022 and with operating expenses totaling approximately \$78,000 in 2022. Ozaukee County would be responsible for approximately \$30,000 of this total, in addition to Federal and State funds. Ridership is anticipated to be relatively low at approximately three passengers per revenue vehicle hour, which is a conservative estimate based on current reverse commute ridership. Based on the low ridership, Commission staff does not recommend this alternative at this time. However, ridership could expand with marketing of the service and as employment opportunities grow in Ozaukee County. In addition, if Ozaukee County decides to pursue this

**Map 5.8**  
**Employment Near the Potential Route 68 in Milwaukee and Ozaukee Counties**





**Map 5.9**  
**Population Near the Potential Route 68 in Milwaukee and Ozaukee Counties**



**2010 POPULATION PER U.S. PUBLIC LAND SURVEY ONE-QUARTER SECTION**

- LESS THAN 50
- 51 - 100
- 101 - 250
- 251 - 500
- GREATER THAN 500

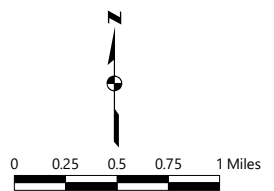
**BUS ROUTES**

- POTENTIAL WEEKDAY ROUTE 68
- POTENTIAL WEEKEND ROUTE 68
- MCTS ROUTE

**FACILITIES**

- RESIDENTIAL FACILITIES FOR SENIORS, PEOPLE WITH DISABILITIES, AND LOW-INCOME HOUSEHOLDS

To Bayshore  
 Town Center



Source: SEWRPC

alternative, they could collaborate with Ascension/Columbia St. Mary's and local retailers to verify the shift times and commuter needs of their employees to ensure higher ridership before initiating the expanded service.

### Expanded Marketing of Transit Options

As discussed at multiple Advisory Committee meetings and during discussions with businesses and the public, there are opportunities to educate the public about transit options in Ozaukee County, particularly for potential and current employees. This alternative identifies various options to reach the target audience and potential costs for these options.

Ozaukee County currently spends about \$10,000 to \$12,000 annually for advertisements in Ozaukee County newspapers. Development of content and placement of advertisements is done by a consultant, who currently spends

approximately 10 hours annually. If the target audience is expanded to include residents in Milwaukee County, the amount of time and money needed can be expected to increase. In addition, if Spanish-speaking populations are targeted as part of the marketing campaign, the materials should be translated. For example, based upon the Commission's recent experience, the outside costs to translate materials for publication in print and/or on the Commission's website is estimated to be approximately \$3,000 annually.

One option to help inform potential employees about transit options would be to extend advertisements to newspapers that target communities that may be interested in transit services to jobs in Ozaukee County. The Milwaukee Courier has a readership of 160,000, of which 95 percent are African American. The Milwaukee Courier has a weekly circulation of 40,000 locations including businesses, churches, and community centers primarily in Milwaukee. The cost of advertising in the Milwaukee Courier is approximately \$2,400 for a full page advertisement (10" x 18") to \$200 for a partial page advertisement (3.25" x 5"), with an additional \$150 per color for color display advertising. In addition, the weekly newspaper El Conquistador serves the Latino Community and distributes approximately 12,500 newspapers. The cost for a full page black and white advertisement is \$875 and \$126 for a partial page advertisement (3.75" x 4").

In developing potential marketing campaigns, there are a number of nationally recognized examples to consider. The Chicago RTA's Ride On campaign was popular for its clever phrasing such as, "Try the Chicago-style dogs. Skip the Chicago-style traffic." Another example from The Rapid in Grand Rapids, Michigan used the concept of building stronger communities through transit with the There's More to the Ride campaign. In addition, the 2011 publication by EMBARQ, *From Here to There: A Creative Guide to Making Public Transport the Way to Go*, identified eight tactics to successfully market public transportation. These include: brand and identity, internal communication, user education, user information systems, marketing campaigns, public relations and external communications, user feedback systems, and online engagement. They highlight successful marketing campaigns such as RTC Transit in Las Vegas, Nevada that used endorsements to encourage and promote ridership and Los Angeles Metro that had a clear message and brand to promote the Orange Line route. Although these campaigns may not apply directly to Ozaukee County based on their

**Table 5.6**  
**Projected Annual Operating Expenses, Revenues, and Ridership for Expanded Reverse Commute Service on the Ozaukee County Express: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	90,700	90,700	90,700
Revenue Vehicle Hours	765	765	765
Revenue Passengers			
Total	2,300	2,300	2,300
Passengers per Revenue Vehicle Mile	0.03	0.03	0.03
Passengers per Revenue Vehicle Hour	3.0	3.0	3.0
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$76,500	\$78,400	\$77,450
Farebox Revenues <sup>a</sup>	\$5,800	\$5,800	\$5,800
Percent of Expenses			
Recovered Through Revenues	7.6	7.4	7.5
Operating Assistance			
Federal <sup>a</sup>	\$17,800	\$18,200	\$18,000
State <sup>a</sup>	\$24,300	\$24,900	\$24,600
County <sup>a</sup>	\$28,600	\$29,500	\$29,100
Total <sup>a</sup>	\$70,700	\$72,600	\$71,700
Per Trip Data			
Operating Expenses <sup>a</sup>	\$33.26	\$34.09	\$33.67
Farebox Revenue <sup>a</sup>	\$2.52	\$2.52	\$2.52
Total Operating Assistance <sup>a</sup>	\$30.74	\$31.57	\$31.15

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

size and budget, the selected campaigns offer concepts to consider if the County decides to pursue an expanded transit marketing effort.

There are also opportunities to leverage existing community events or link to other websites that may help increase awareness about transit options. For example, job fairs have been mentioned by Advisory Committee members as one opportunity to continue to share information about transit options with potential employees. In addition, the Rideshare program provided by the State of Wisconsin, which connects commuters together to carpool, could be promoted at the same time. This program could be another option for employees to share rides, including for first and last mile connections. Lastly, MCTS just launched their new app, which could allow for greater marketing of transit services in Ozaukee County, including to both potential employees and employers.

Social media platforms such as Facebook, Twitter, Instagram, Flickr, and YouTube provide opportunities for Ozaukee County Transit to connect with customers and promote services. Some uses of social media that may be relevant for Ozaukee County include sharing service updates, providing information about projects and planning efforts, and interacting with customers informally. Within the region, a number of transit providers have an active social media presence including MCTS, RYDE Racine, and Western Kenosha County Transit. Their content ranges from daily updates provided by MCTS to updates on planning activities or promoting events where transit is available in Western Kenosha County. Maintaining an active social media presence requires staff time. Based on a survey of transit agencies, 86 percent of small urban and rural transit agencies reported a time commitment of up to 40 hours per month.<sup>6</sup> If Ozaukee County uses social media to provide real-time service updates, the staff time required could increase. In addition to staffing issues, the County may want to consider developing social media policies to provide guidance on issues such as account management, acceptable use, content review, security, and user conduct.

As indicated during discussions at the business-focused meeting and at Advisory Committee meetings, employers and their human resource managers may be unaware of existing transit services that could provide access to their business. Staff could be made available from Ozaukee County Transit Services or Ozaukee Economic Development to offer trip planning advice for employers, recruiters, and human resources staff. For example, individual trip planning combined with the recently developed Ozaukee County Shared-Ride Taxi poster and updated website could help businesses identify transit options for their employees based on shift times. In addition, there are tax incentives for employers who support commuter options called Commuter Tax Benefits. These benefits allow employers to use pretax dollars to pay for transit passes, vanpool fares and parking. These benefits are promoted as a way to recruit and retain good employees. Local resources for commuter benefit options are the Wisconsin Department of Transportation, through their commuter options webpage, and MCTS, on their commuter value pass webpage. Nationally, there are resources from the National Center for Transit Research at the University of South Florida and their National Transportation Demand Management and Telework Clearinghouse/Best Workplaces for Commuters Support Center.

Initiating and sustaining a successful marketing and outreach effort would likely require additional staff, which could potentially be accomplished through staffing at Ozaukee Economic Development or with assistance of a mobility manager. The *Public Transit-Human Services Transportation Coordination Plan for Ozaukee County: 2016* identified strategies to address unmet travel needs within Ozaukee County and between Counties. One strategy listed in that plan included providing funding for a mobility manager position, with the individual filling the position responsible for promoting the availability of transportation services, gathering and analyzing data to evaluate the transportation options for seniors, people with disabilities, and low-income residents, coordinating transportation services across county lines, coordinating community engagement in the transportation planning process, and dispersing information on transit services to the public. The cost of a mobility manager position varies by County and organization but the annual salary may be in the range of \$35,000 - \$60,000 based on the duties and background of the incumbent, and federal funds are typically available to reimburse up to 80 percent of the cost of the position.

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<sup>6</sup> *TCRP Synthesis 99, Uses of Social Media in Public Transportation – A Synthesis of Transit Practice, 2012.*

### **5.3 FIXED-ROUTE SERVICE ALTERNATIVES FOR THE OZAUKEE COUNTY EXPRESS**

Based on the evaluation of existing services in Chapter 4, meetings with the public and businesses, and Advisory Committee discussions, the following potential fixed-route service alternatives and improvements were analyzed for the Advisory Committee to consider for inclusion in the recommended transit system development plan. These alternatives include modifications or enhancements to the current Express service and additional fixed-route service that could be provided by Ozaukee County.

#### **No Changes to the Ozaukee County Express**

Given the evaluation of existing Express bus services in Chapter 4, the County could choose to continue the existing service without modification for the time period considered under this plan. The current system is the result of continual refinement by the County, and given the current financial resources available at all levels of government, may be the most appropriate type and level of service to provide unless more resources become available. This alternative also serves as the base against which the remaining fixed-route service alternatives will be compared.

This evaluation assumes that operating expenses per service hour will grow at a rate of 2 percent each year, and that the percentage of operating expenses covered by a combination of Federal and State funds will remain at approximately 55 percent. Fare increases will be necessary at the beginning of 2018 and again at the beginning of 2022 if the County wishes for fares to keep pace with inflation.

As shown in Table 5.7, ridership numbers for the Express are expected to stay constant but may fluctuate if an unexpected spike in gas prices occurs. The increases in ridership in between 2015 and 2018 reflect current trends. If these fare increases are implemented, the County can expect its level of funding in year-of-expenditure dollars to be about the same in 2022 as in 2018, meaning a decrease in funding in constant dollars. The increases in the County's level of assistance from 2015 to 2018 is due to a change in how federal and state funds are distributed between the Express and Shared-Ride Taxi that began in 2016.

#### **Improvements to Bus Stops**

Comments received from the public and the Advisory Committee indicated that improvements to some of the bus stops within Ozaukee County may be desirable to improve the usability of the stops and their accessibility for people with disabilities. As requested by the Advisory Committee, this potential alternative provides cost estimates for bus stop improvements along the Port Washington Road segment of Route 143 and also identifies potential funding sources for the improvements.

Commission staff inventoried each bus stop along Route 143 and identified eight locations that are in need of improvements to increase accessibility for people with disabilities, including bus pads and connecting sidewalks. The bus stop locations and associated improvements are included in Table 5.8. These locations and current amenities are also shown on Map 5.10. The improvements are estimated to cost \$177,000 based on the costs from other projects provided by MCTS. The estimates do not include costs associated with relocating utilities, traffic signals or other impediments. If the Advisory Committee selects this alternative and the County pursues its implementation, it is recommended that preliminary engineering be undertaken to develop more refined cost estimates.

In addition to an inventory of bus stop improvements, the Advisory Committee requested additional information on funding options. The Commission staff identified two sources of funding including FTA Section 5307 and FTA Section 5310. The following discussion outlines the eligible activities and local match requirements for these potential funding sources.

#### **FTA Section 5307**

In 2017 Ozaukee County received \$611,673 in FTA Section 5307/5340 Urbanized Area Formula Funds. Eligible activities that can utilize these funds include planning, engineering, design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment, and construction of maintenance and passenger facilities; and capital investments in new and

**Table 5.7**  
**Projected Annual Operating Expenses, Revenues, and**  
**Ridership for the Ozaukee County Express Service: 2018-2022**

Characteristics	Actual	Projected		
	2015	2018	2022	Average
Services Provided				
Revenue Vehicle Miles	182,900	182,900	182,900	182,900
Revenue Vehicle Hours	7,200	7,200	7,200	7,200
Revenue Passengers				
Total	92,500	110,000	110,000	110,000
Passengers per Revenue Vehicle Mile	0.51	0.60	0.60	0.60
Passengers per Revenue Vehicle Hour	12.85	15.28	15.28	15.28
Expenses and Revenues				
Operating Expenses <sup>a</sup>	\$1,253,800	\$1,542,700	\$1,592,700	\$1,567,700
Farebox Revenues <sup>a</sup>	\$196,300	\$265,100	\$282,700	\$273,900
Percent of Expenses				
Recovered Through Revenues	15.7	17.2	17.7	17.5
Operating Assistance				
Federal <sup>a</sup>	\$515,000	\$497,000	\$483,000	\$490,000
State <sup>a</sup>	\$441,300	\$397,500	\$407,500	\$402,500
County <sup>a</sup>	\$101,200	\$383,100	\$419,500	\$401,300
Total <sup>a</sup>	\$1,057,500	\$1,277,600	\$1,310,000	\$1,293,800
Per Trip Data				
Operating Expenses <sup>a</sup>	\$13.55	\$14.02	\$14.48	\$14.25
Farebox Revenue <sup>a</sup>	\$2.12	\$2.41	\$2.57	\$2.49
Total Operating Assistance <sup>a</sup>	\$11.43	\$11.61	\$11.91	\$11.76

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

**Table 5.8**  
**Bus Stop Improvement Locations and Estimated Costs**

Map Number	Location	Improvements	Estimated Cost
1	Columbia St. Mary's Hospital (West side of Port Washington Road)	400' x 8' sidewalk	\$96,000
		6' x 8' bus pad	\$2,000
2	Columbia St. Mary's Hospital (East side of Port Washington Road)	6' x 8' bus pad	\$2,000
3	Port Washington Road/Highland Road (SW)	66' x 8' sidewalk connecting to bus pad and shelter	\$15,840
4	Port Washington Road/Highland Road (SE)	142' x 8' sidewalk connecting to Newcastle Place Senior Housing	\$34,080
		82' x 8' sidewalk connecting to bus pad and shelter	\$19,680
5	Port Washington Road/Glen Oaks Lane (NW)	6' x 8' bus pad to connect to sidewalk	\$2,000
6	Port Washington Road/Glen Oaks Lane (SE)	12' x 6' bus pad to connect to sidewalk	\$2,160
7	Port Washington Road/Mequon Road (NE)	10' x 10' bus pad to connect to sidewalk	\$3,000
Estimated Total			\$176,760

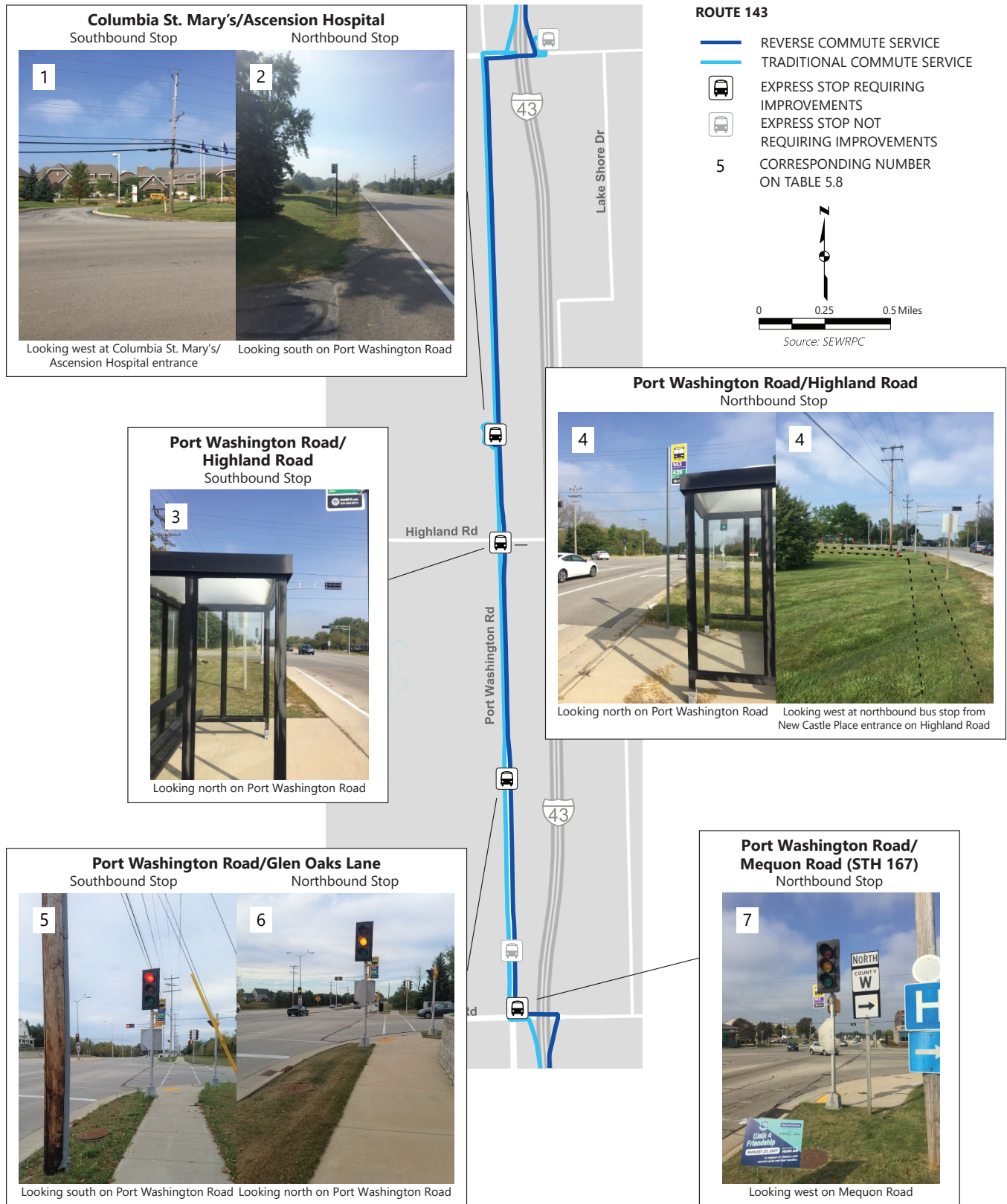
Note: Unit costs provided by the Milwaukee County Transit System were utilized to develop the costs associated with the recommended bus stop improvements to comply with the American with Disabilities Act are as follows:

6' x 8' flat bus pad = \$1,500 - \$2,000 (used \$2,000 in estimate)

Concrete = \$30/square foot

Source: SEWRPC

**Map 5.10**  
**Potential Bus Stop Improvements for the Ozaukee County Express**  
**Along Port Washington Road in the City of Mequon**



existing fixed guideway systems, including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software.<sup>7</sup>

Additional eligible projects include what are called, “associated transit improvements,” by the FTA. The County and other transit operators in the Milwaukee Urbanized Area are collectively required to spend at least 1 percent of their annual share of Section 5307 funds on associated transit improvements, such as bus shelters, landscaping and streetscaping, pedestrian access and walkways, and enhanced access for people with disabilities to public transportation. Pedestrian paths located within 0.5 miles of a transit stop or station and bicycle paths located within three miles of a transit stop or station are eligible capital projects and qualify as associated transit improvements. Projects outside this distance may be eligible if they are within the distance that a person could be expected to safely and conveniently walk or bicycle to the particular stop or station.<sup>8</sup>

For capital expenditures, the Federal share cannot exceed 80 percent of the net project costs, though the Federal share can account for 90 percent of the net project costs for vehicle-related equipment attributable to compliance with the Americans with Disabilities Act and the Clean Air Act. The Federal share may not exceed 50 percent of the net project cost for operating assistance.

### **FTA Section 5310**

The Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program seeks to improve mobility by removing barriers to transportation services and expanding upon transportation mobility options. Eligible activities for nontraditional Section 5310 projects include building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features. Within the Milwaukee Urbanized Area, the Commission manages the competitive application process for the selection of projects that receive 5310 funds, and Ozaukee County would be eligible to apply for those funds. The Federal share of eligible capital costs may not exceed 80 percent, and 50 percent for operating assistance. Section 5310 Program funds are awarded on a biennial cycle, with the open application period typically occurring during the summer months of even-numbered years. The application period for 2019 and 2020 projects is anticipated to open in June 2018.

### **Implement Bus on Shoulder along IH 43**

There are numerous benefits to implementing bus on shoulder (BOS). In addition to reducing congestion-related reliability problems, BOS applications also improve the competitive travel times for buses versus cars; they reduce bus running times; they are relatively low cost and easy to implement; they do not require new rights-of-way; and they are not obtrusive. There are approximately 20 BOS projects in North America, including the Minneapolis-St. Paul Twin Cities area, Miami-Dade, Florida, and Columbus, Ohio. This section presents the feasibility and the potential benefits of implementing BOS along IH 43 and describes the likely next steps for Ozaukee County and its partners, including WisDOT, should there be interest in pursuing this alternative. In particular, there are several factors that will need to be considered in order to safely implement BOS. These include potential changes to state law, existing shoulder widths within the corridor, bus driver training operating protocols, and training.

As envisioned, the BOS alternative would allow buses to use the shoulder along IH 43 during peak congestion periods to bypass congestion in the general purpose traffic lanes, reducing congestion-related reliability issues and providing a more attractive alternative to the automobile. Nationally, BOS projects typically limit bus use of the shoulder to times when traffic on the highway is congested and moving very slowly. In addition, most BOS applications place a limit on the speed a bus can travel while on the shoulder. For example, many of the BOS systems limit shoulder usage to when traffic in the general travel lanes slows to less than 35 miles per hour and restrict BOS speeds to ten to 15 miles per hour faster than general traffic with a maximum speed of no more than 45 miles per hour. In the Twin Cities, shoulder usage is restricted to times when speed slows to 35 miles per hour. When buses use the shoulders in the Twin Cities area, they are allowed to travel 15 miles per hour faster than general traffic, up to a maximum of 35 miles per hour.

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<sup>7</sup> FTA, *Fact Sheet: Urbanized Area Formula Program Grants 49 U.S.C. Chapter 53, Section 5307 & 5340*.

<sup>8</sup> FTA *Circular 9030.1E, Urbanized Area Formula Program: Program Guidance and Application Instructions, January 16, 2014*.

With regard to the shoulder width requirements, the minimum shoulder width to implement BOS will be governed by the width of the bus, however most agencies have used ten feet as a minimum operational lane width as buses are typically nine feet wide. It is recommended that should BOS be pursued, the desirable shoulder width should be 12 feet to allow for safe air space around the bus, including bus mirrors, with a minimum acceptable width of ten feet. For example, the BOS facilities in Miami, Florida had a minimum design standard of ten feet but required 12 feet on facilities where there were significant truck volumes. Additionally, continuous, consistent shoulder widths are required to effectively implement BOS as structural impediments would necessitate merging into congested traffic, adding delay and potentially negating the travel time benefit of BOS.

### ***Inventory of Current Operations, Shoulder Widths, and Impediments Along IH 43***

The Commission staff reviewed the historic travel speeds and congestion levels, shoulder widths, and structural impediments within the IH 43 segments utilized by the Ozaukee County Express. The year 2016 travel speed data utilized for this analysis was obtained from Federal Highway's National Performance Management Research Data Set. In addition, WisDOT provided data on shoulder widths along IH 43. BOS best practices and comparisons were informed by Transit Cooperative Research Program (TCRP) Report 151, *A Guide for Implementing Bus on Shoulder Systems*.

#### Travel Speeds/Congestion Levels

As delays caused by congestion impact the reliability of the Ozaukee County Express, BOS and the attendant improvement in reliability has the potential to increase ridership. As noted in the TCRP Report on Bus on Shoulder Systems, transit riders will build buffer time into their travel schedules to account for anticipated congestion. This buffered travel time is used by commuters to help make mode choice decisions. Although it is difficult to isolate ridership changes based on BOS implementation, applications in more congested corridors appear to have increased ridership due to increased reliability.

Figures 5.1 and 5.2 show a series of maps to illustrate the congestion levels at 15-minute intervals during the morning and afternoon commutes. As shown in Figure 5.1, the peak morning commute occurs between 7:15 a.m. and 8:15 a.m. when multiple segments of southbound IH 43 are extremely congested, or operating more than ten miles per hour below free flow speed. The series of maps illustrate how the congestion levels increase on IH 43 during the peak commuting period. In the afternoon, Figure 5.2 shows that segments of IH 43 are extremely congested in the northbound direction south of Good Hope Road.

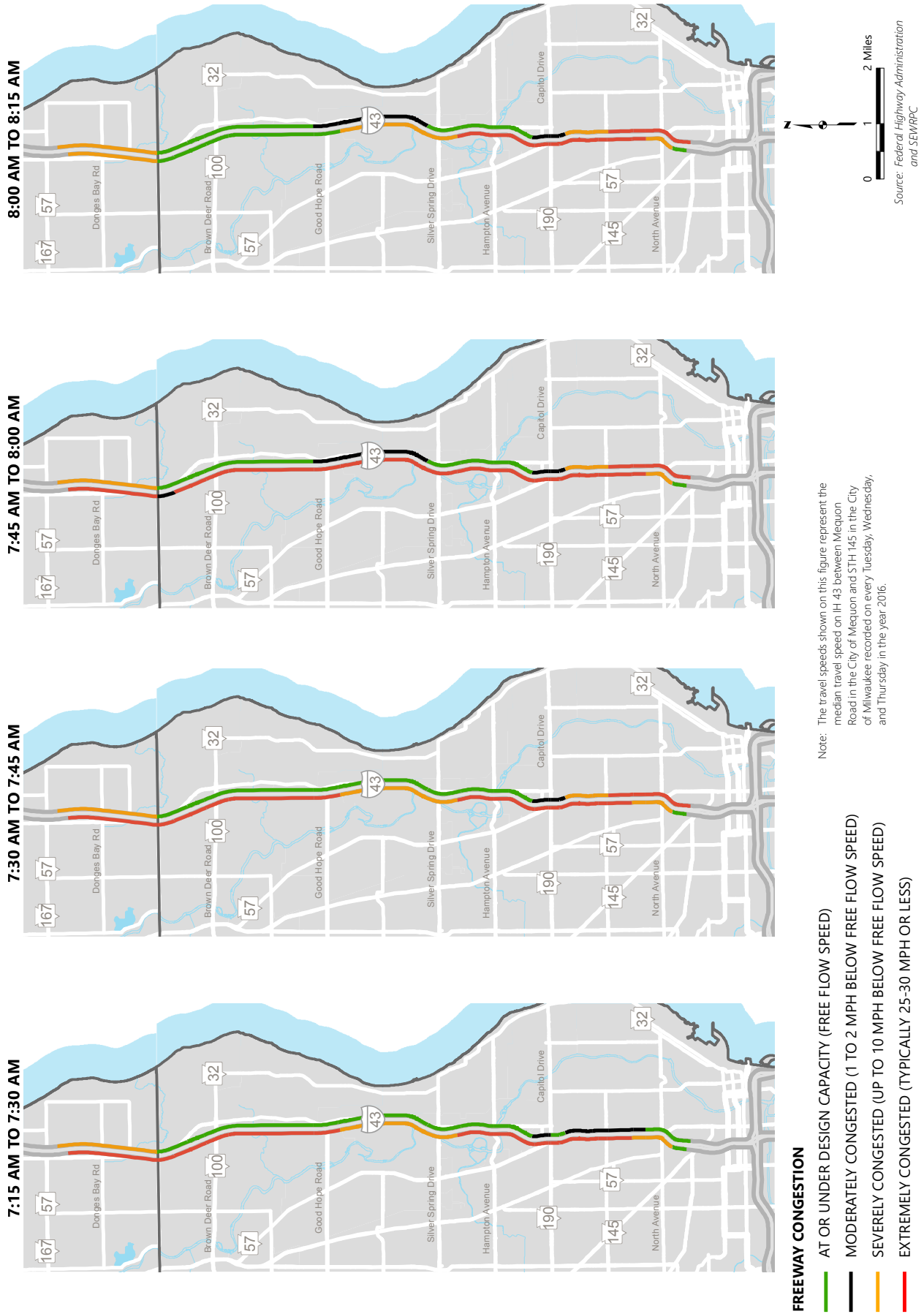
Table 5.9 compares observed travel times along IH 43 to potential time savings if BOS is implemented with speeds of 35, 40, or 45 miles per hour. Shoulder use at 45 miles per hour is shown for comparison purposes. However, a majority of the examples studied in the TCRP Report have shoulder-use speed limits of 35 miles per hour. One exception is Ottawa, Ontario, which allows speeds up to 62 miles per hour (or 100 kilometers per hour). Since bus volumes are very high on their system (up to 100 buses per hour), the higher bus volumes improve safety by minimizing surprises to motorists in the adjacent general purpose lanes.

The frequency of recorded speeds for each segment along IH 43 are shown in Figures 5.3 and 5.4. The data shown reflects speeds for every Tuesday, Wednesday, and Thursday in 2016, as reported in the National Performance Management Research Data Set. The color intensity in the horizontal bars show how often the speed occurs. For example, the segment from Silver Spring Drive to Hampton Avenue on Figure 5.3 experiences speeds under 23 miles per hour 50 percent of the time. Figure 5.3 also shows that if BOS were implemented at 40 miles per hour, the bus would operate at speeds greater than the general travel lanes 75 percent of the time, resulting in a more reliable bus trip. Figure 5.4 shows that there would be fewer reliability benefits for IH 43 northbound. For example, the segment from Hampton Avenue to Silver Spring Drive experiences speeds above 34 miles per hour over 50 percent of the time. Therefore, there would be lesser reliability benefits if BOS is implemented along that segment of IH 43 northbound.

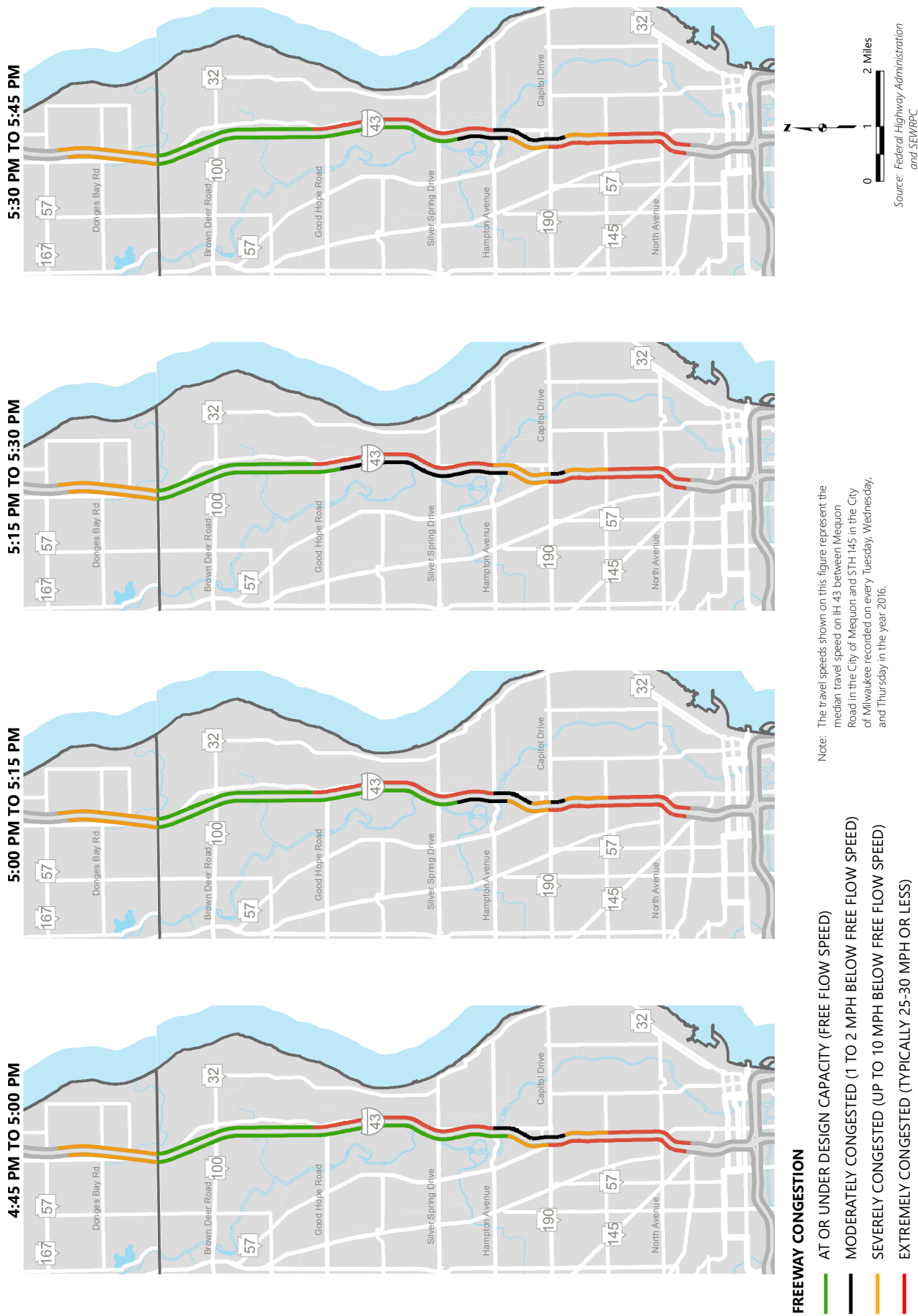
The majority of BOS benefits related to potential travel time savings would occur in the southbound direction. The congestion along the corridor results in median travel time delays of approximately 11 minutes as shown in Table 5.9. If BOS is implemented with a 35 miles per hour operating speed, the median travel times for southbound bus trips would be improved by over three minutes. If the BOS is implemented allowing speeds of 45 miles per hour, the median time savings would be increased to six minutes. The southbound travel time peak occurs at 7:30 a.m., with a travel time of approximately 32 minutes from Mequon Road and STH



**Figure 5.1**  
**Congestion Experienced on IH 43 on an Average Weekday: 7:15 a.m. to 8:15 a.m.**



**Figure 5.2**  
**Congestion Experienced on IH 43 on an Average Weekday: 4:45 p.m. to 5:45 p.m.**



**Table 5.9  
Comparison of Potential Bus-On-Shoulder (BOS) Travel Times to Median Observed Travel Times on an Average Weekday Along IH 43 Between Mequon Road and STH 145**

Southbound (11.48 Miles)												
Travel Time (Minutes)	Time Period (AM)											
	6:30	6:45	7:00	7:15	7:30	7:45	8:00	8:15	8:30	8:45	9:00	
Mainline Freeway <sup>a</sup>	11:30	12:00	14:00	20:30	23:00	21:30	19:00	18:00	16:00	14:00	12:00	
Delay <sup>b</sup>	--	--	2:00	8:30	11:00	9:30	7:00	6:00	4:00	2:00	--	
BOS at 45 MPH <sup>c</sup> Time Savings	--	--	--	5:00	7:30	6:00	3:30	2:30	0:30	--	--	
BOS at 40 MPH <sup>c</sup> Time Savings	--	--	--	3:30	6:00	4:30	2:00	1:00	--	--	--	
BOS at 35 MPH <sup>c</sup> Time Savings	--	--	--	1:00	3:30	2:00	--	--	--	--	--	

Northbound (11.72 Miles)															
Travel Time (Minutes)	Time Period (PM)														
	3:00	3:15	3:30	3:45	4:00	4:15	4:30	4:45	5:00	5:15	5:30	5:45	6:00	6:15	6:30
Mainline Freeway <sup>a</sup>	12:00	12:30	13:00	14:00	14:00	15:00	16:00	16:30	17:30	17:30	17:00	15:30	13:30	12:00	12:00
Delay <sup>b</sup>	--	--	0:30	1:30	1:30	2:30	3:30	4:00	5:00	5:00	4:30	3:00	1:00	--	--
BOS at 45 MPH <sup>c</sup> Time Savings	--	--	--	--	--	--	0:30	1:00	2:00	2:00	1:30	--	--	--	--

<sup>a</sup> The mainline freeway travel time is the median travel time observed on an average weekday in the year 2016.

<sup>b</sup> Delay is the difference between the free flow travel time—12:00 minutes traveling southbound and 12:30 minutes traveling northbound—and the observed travel time on the mainline freeway. The free flow travel time is based on the speed limit of each segment.

<sup>c</sup> The travel time for a Bus-On-Shoulder traveling southbound is 15:30 minutes at 45 MPH, 17:00 minutes at 40 MPH, and 19:30 minutes at 35 MPH; and the travel time for a Bus-On-Shoulder traveling northbound is 15:30 minutes at 45 MPH.

Source: Federal Highway Administration and SEWRPC

145. In summary, the travel time benefits if BOS is implemented on IH 43 could range from approximately three minutes to seven minutes, depending on the operating speed.

Table 5.9 also shows median travel time delays of five minutes during northbound travel during the afternoon commute. For northbound trips, the peak travel times are more evenly spread throughout the afternoon. Therefore, the travel time savings are reduced to under one minute, if the buses on the shoulder are allowed to travel at 45 miles per hour. The time savings benefits of BOS at different times of the day that are shown in Table 5.9 are also illustrated in Figure 5.5. The northbound travel time peak is approximately 22 minutes and occurs for a longer period between approximately 4:45 p.m. and 5:30 p.m. As a result, the travel time benefits from BOS will likely be less advantageous during the afternoon commute.

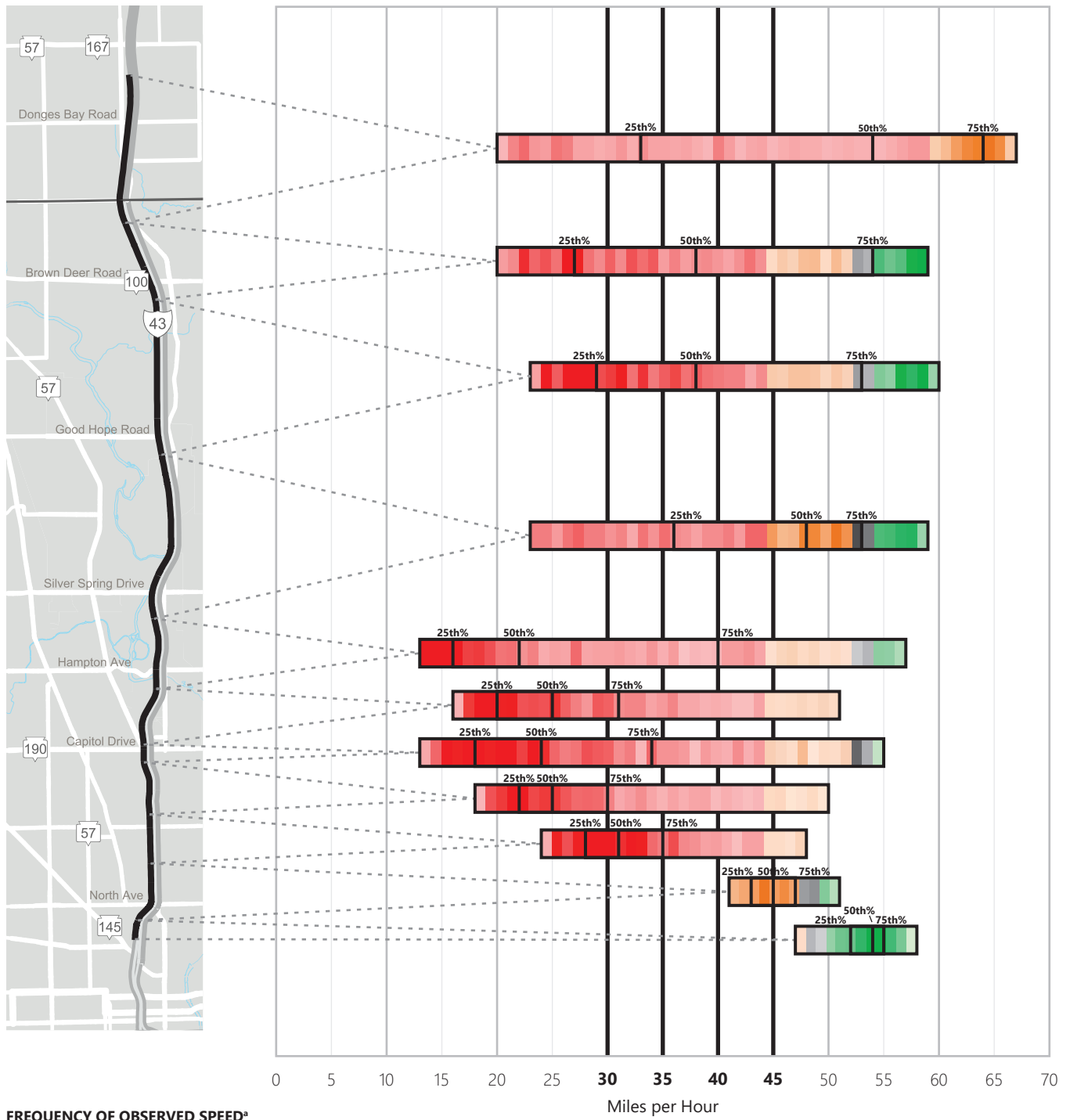
### Shoulder Widths/Structural Impediments

Map 5.11 shows the shoulder widths and structural barriers along the corridor. For purposes of this analysis, it was assumed that the bus would operate on the right shoulder. This prevents the bus from needing to cross multiple lanes of traffic to exit the freeway, adding potential delay and negating the travel time benefits of BOS. As noted above, the preferred width for BOS is 12 feet, with a minimum acceptable width of ten feet. The majority of impediments shown are bridges, where the bridge piers or concrete walls currently prohibit the use of the shoulder for buses. Map 5.11 also indicates locations on IH 43 into which the general purpose travel lanes could potentially be shifted to provide additional width to the right shoulder. For example, the northbound and southbound segment between County Line Road and Good Hope Road could be restriped to allocate three feet from the left shoulder to a wider right shoulder. Therefore, it may be possible to accommodate the necessary shoulder width in certain areas without major construction. It should be noted that any restriping recommendations would need to be reviewed and potentially implemented by WisDOT, the owner and operator of IH 43, in order for Ozaukee County to implement BOS.

### Policy Changes to Implement Bus on Shoulder

As discussed previously, future discussions about BOS would have to include WisDOT, as well as the Federal Highway Administration to understand any budgetary, legal, and operational concerns. In addition,

**Figure 5.3**  
**Observed Traffic Speed (mph) on an Average Weekday in 2016 Along**  
**Southbound IH 43 from Mequon Road to STH 145: 7:15 a.m. to 8:15 a.m.**



**FREQUENCY OF OBSERVED SPEED<sup>a</sup>**

LESS OFTEN      MORE OFTEN

- AT OR UNDER DESIGN CAPACITY (FREE FLOW SPEED)
- MODERATELY CONGESTED (1 TO 2 MPH BELOW FREE FLOW SPEED)
- SEVERELY CONGESTED (UP TO 10 MPH BELOW FREE FLOW SPEED)
- EXTREMELY CONGESTED (MORE THAN 10 MPH BELOW FREE FLOW SPEED)

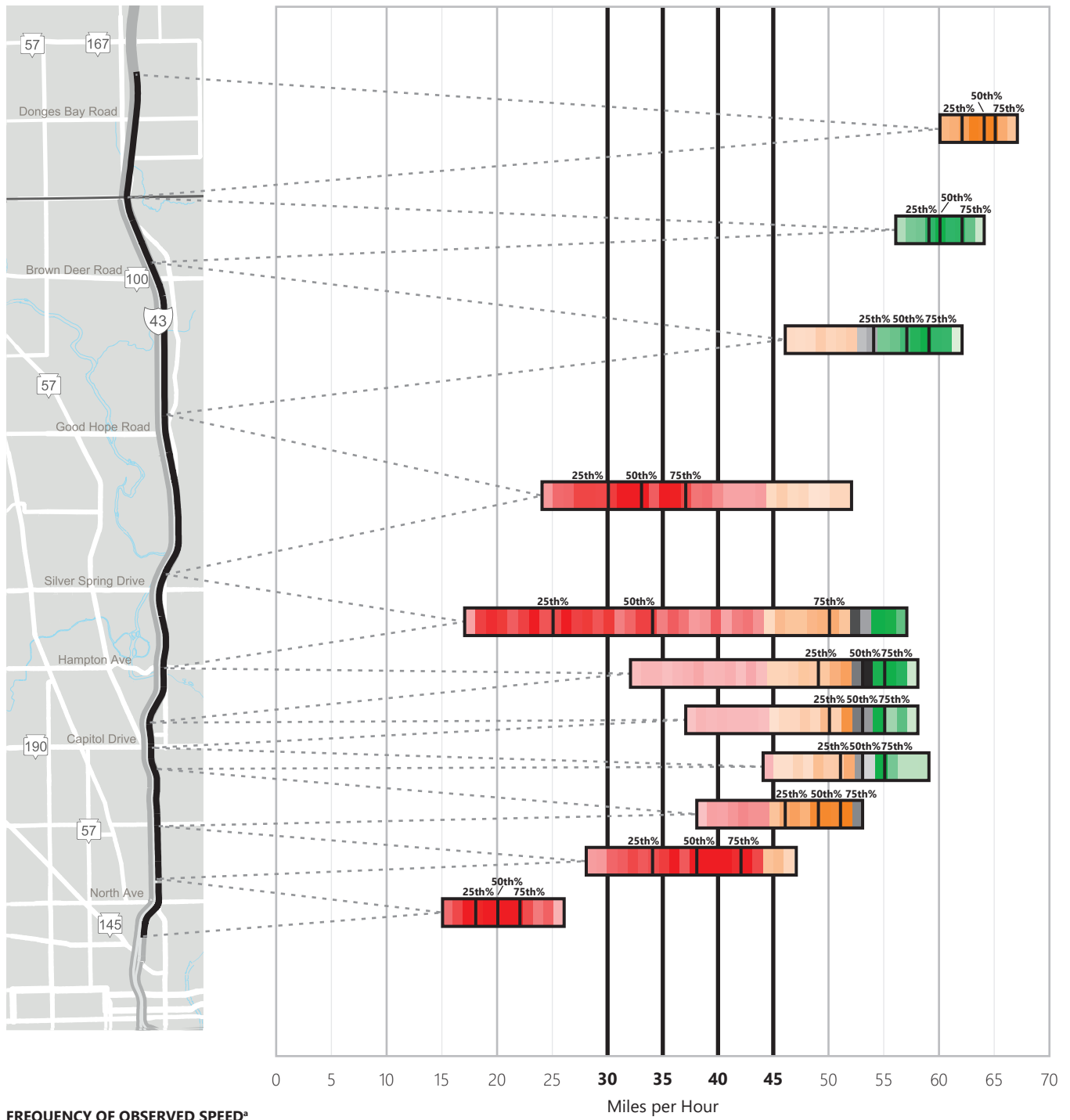
— POTENTIAL TRAVEL SPEEDS OF BOS

Note: The travel times shown in this figure represent the observed travel times on IH 43 between Mequon Road in the City of Mequon and STH 145 in the City of Milwaukee recorded on every Tuesday, Wednesday, and Thursday in the year 2016.

Source: Federal Highway Administration and SEWRPC

<sup>a</sup>The color intensity reflects how often that travel speed occurred within each individual segment.

**Figure 5.4**  
**Observed Traffic Speed (mph) on an Average Weekday in 2016 Along**  
**Northbound IH 43 from STH 145 to Mequon Road: 4:45 p.m. to 5:45 p.m.**



**FREQUENCY OF OBSERVED SPEED<sup>a</sup>**

LESS OFTEN	MORE OFTEN	
		AT OR UNDER DESIGN CAPACITY (FREE FLOW SPEED)
		MODERATELY CONGESTED (1 TO 2 MPH BELOW FREE FLOW SPEED)
		SEVERELY CONGESTED (UP TO 10 MPH BELOW FREE FLOW SPEED)
		EXTREMELY CONGESTED (MORE THAN 10 MPH BELOW FREE FLOW SPEED)

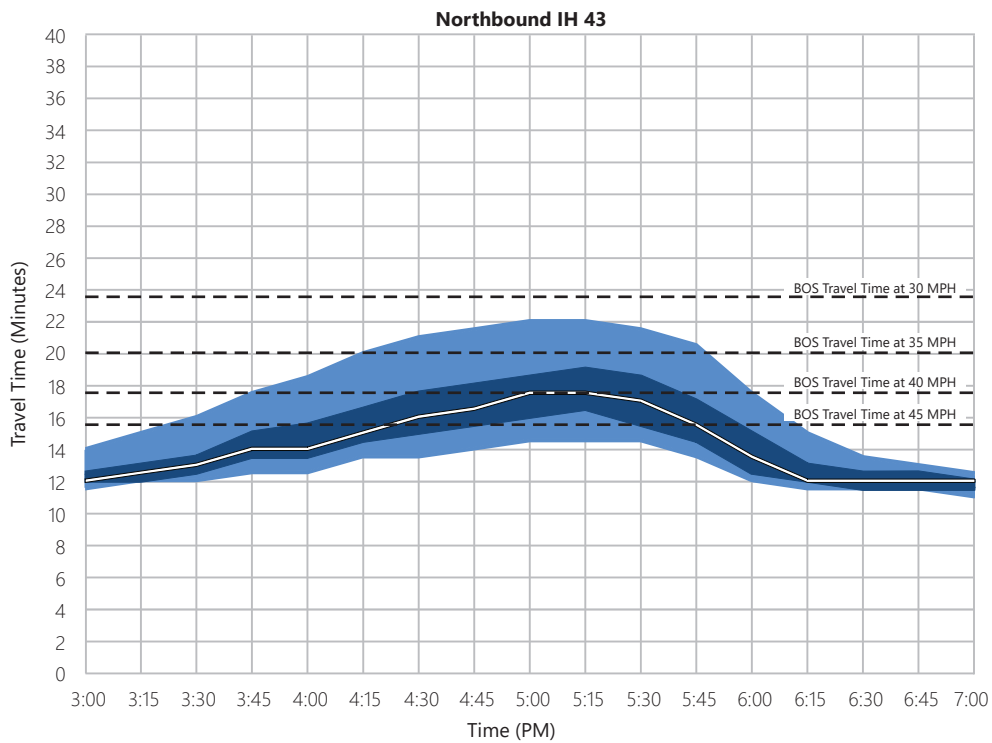
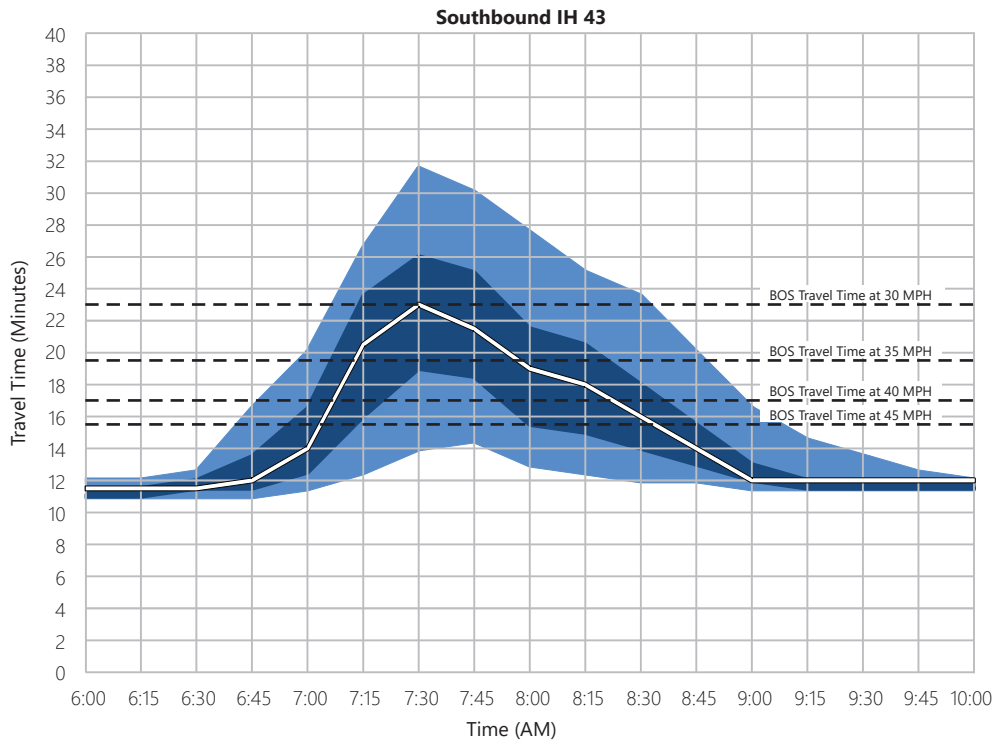
— POTENTIAL TRAVEL SPEEDS OF BOS

Note: The travel times shown in this figure represent the observed travel times on IH 43 between Mequon Road in the City of Mequon and STH 145 in the City of Milwaukee recorded on every Tuesday, Wednesday, and Thursday in the year 2016.

Source: Federal Highway Administration and SEWRPC

<sup>a</sup>The color intensity reflects how often that travel speed occurred within each individual segment.

**Figure 5.5**  
**Comparison of Potential Bus-On-Shoulder Travel Times to the Observed Travel Times on an Average Weekday Along IH 43 Between Mequon Road to STH 145**

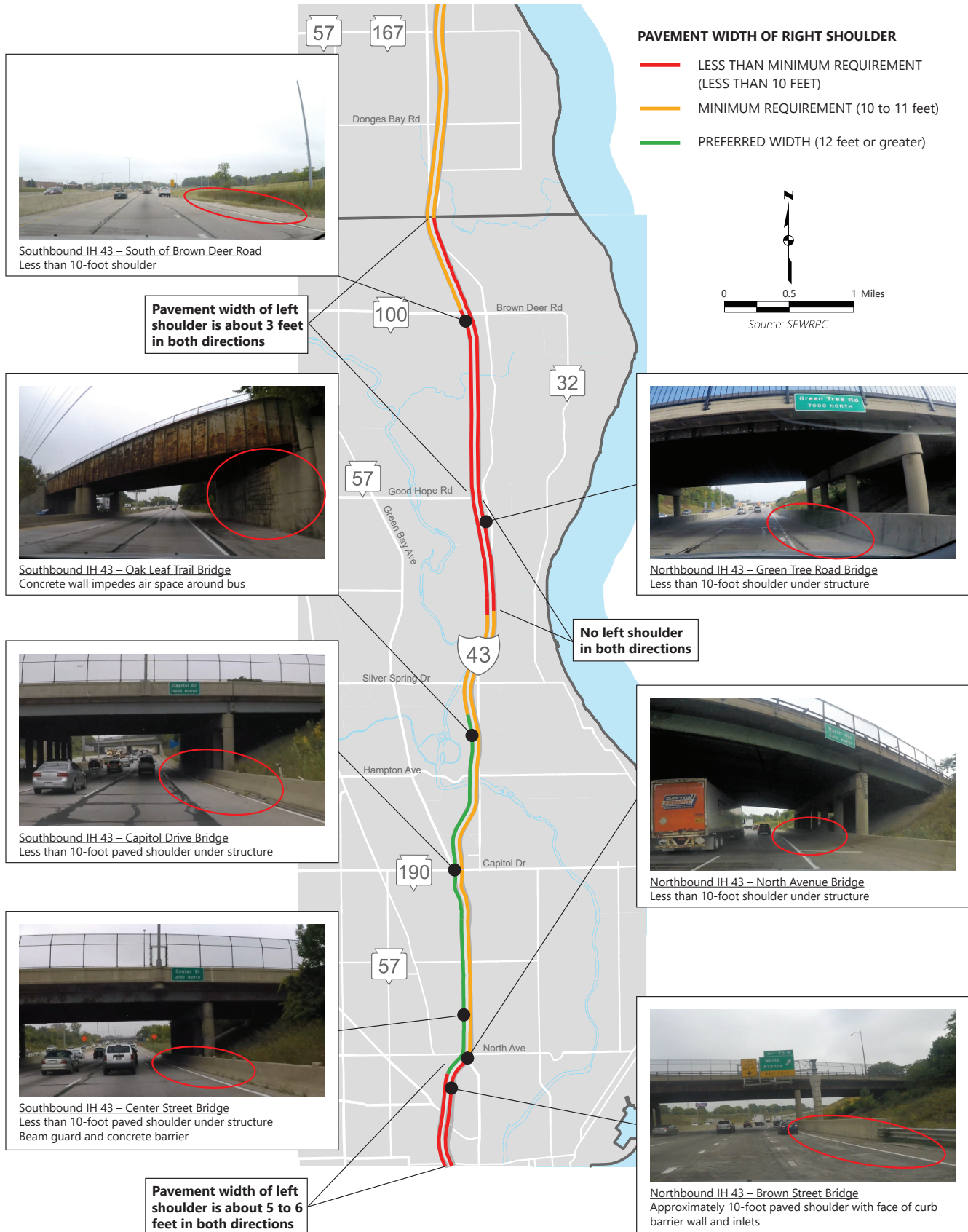


- RANGE OF TRAVEL TIME ON IH 43
- 25TH PERCENTILE TO 75TH PERCENTILE TRAVEL TIME
- MEDIAN TRAVEL TIME

Note: The travel times shown in this figure represent the observed travel times on IH 43 between Mequon Road in the City of Mequon and STH 145 in the City of Milwaukee recorded on every Tuesday, Wednesday, and Thursday in the year 2016.

Source: Federal Highway Administration and SEWRPC

**Map 5.11**  
**Geometric Constraints for Potential Bus-On-Shoulder (BOS) Along IH 43**



MCTS, the contract operator of the Ozaukee County Express, would be an important partner to ensure the BOS design and operation will meet their needs, as well as addressing training for the bus drivers. While developing the BOS alternative, the Commission coordinated with WisDOT to review the preliminary draft. Although based on the initial review no major issues were identified, WisDOT will continue to be engaged in the process and provide input on BOS implementation including, but not limited to, funding and operations.

There are legal considerations that will need to be addressed by the Wisconsin State Legislature. Currently, the Wisconsin Rules of the Road Section 346.08 prohibits the passing on the right using any part of the shoulder. In order to implement bus on shoulder, the Wisconsin State Legislature would have to amend state statute in order to formalize BOS operations.

### **Next Steps to Implement BOS**

If this alternative is selected, final implementation will likely occur beyond the planning horizon of this 5-year plan. However, based on BOS development processes in other states, the Commission recommends coordinating with key stakeholders, including the Federal Highway Administration, WisDOT, and MCTS to review policy, budget, operational protocols, and training as a first step. If the BOS concept is pursued on IH 43 or other highways, the Commission also recommends a marketing and educational campaign to acquaint motorists using the general purpose lanes of the reasons that buses should be given priority and how they will operate. The Commission can provide refined analyses to determine where BOS could be implemented immediately with restriping and work with WisDOT to quantify costs.

### **Increased Service Frequency and Service Hours**

In the event the County decides to increase service on the Ozaukee County Express, the Commission analyzed MCTS ridership data and travel patterns to determine where runs could be added. Based on the high volume of southbound riders boarding at the Grafton Commons stop in the morning, a run could be added from Grafton Commons at 6:30 a.m. In addition, a northbound run could be added in the evening at 4:38 p.m. based on the higher than average ridership around that time.

Table 5.10 shows the expected incremental operating expenses, revenues, and ridership on the Ozaukee County Express for 2018-2022 associated with this alternative. Adding the two runs discussed above is expected to cost approximately \$102,600 in 2022, with Ozaukee County's portion of the operating cost estimated at \$29,700. The estimated number of additional riders is 6,600 in 2022. The additional frequency would provide existing riders with greater flexibility and thereby would improve the quality of service for existing riders, in addition to attracting new riders.

### **Increased Fares at a Rate Greater than Inflation to Reduce the County's Level of Assistance**

Should the County need to reduce its level of assistance to the Express Service, the County would likely need to increase fares at a rate greater than inflation. Raising fares would slightly discourage ridership as the service becomes more expensive to users.

Table 5.11 displays the expected changes in operating expenses, revenues, and ridership under this alternative. Fares would be raised \$0.75 over the course of the plan, with increases in 2018, 2020, and 2022. As a result of increasing fares, the County level of assistance is projected to be approximately \$10,000 less in 2022 when compared to the "no change" alternative. Due to the increase in fares, 2,900 fewer revenue passengers would be estimated to use the service in 2022 than under the "no change" alternative.

### **Reduced Service on the Ozaukee County Express**

As noted in Chapter 2, Existing Transit Services and Travel Patterns, Ozaukee County eliminated parts of Route 143 in 2002 to improve the efficiency of the service based on the recommendations of a route performance evaluation. In addition, the route was further refined within the past few years to optimize the stops served and which runs served each stop. As a result, the current Route 143 operates efficiently, as further described in Chapter 4, Evaluation of the Ozaukee County Transit Services. However, in order to provide Ozaukee County with options should the amount of available funding for the Express be reduced, the Commission has prepared an analysis of potential reductions for consideration.

This alternative would remove a pair of round trips with the least revenue passengers per run based on 2016 and 2017 ridership data from MCTS. The morning round trip that would be eliminated includes



the northbound run that starts at W. Walnut Street and N. 5th Street at 7:34 a.m. and averages approximately one passenger per run. The southbound run that starts at the Grafton Park & Ride Lot at 8:06 a.m. and averages approximately nine passengers per run would also be eliminated. In addition, ridership data from MCTS indicates that the afternoon northbound run from W. Walnut Street and N. 5th Street at 1:41 p.m. averages six passengers per run, and its paired southbound run from the Port Washington Park & Ride Lot at 3:05 p.m. averages approximately three passengers per run. This afternoon round trip would also be eliminated under this alternative.

Table 5.12 shows the expected decrease in operating expenses, revenues, and ridership on the Ozaukee County Express for 2018 through 2022 under this alternative. As shown in Table 5.12, the elimination of these runs could reduce operating expenses in 2022 by approximately \$89,900. By eliminating low performing runs, the County can expect its level of County assistance to decrease by approximately \$37,300 in 2022.

Eliminating the two existing runs would result in less schedule flexibility for riders, reducing the morning reverse commute options at Walnut Street and 5th Street to only one run. Similarly, eliminating the northbound run at 1:41 p.m. would reduce flexibility, including options for employees traveling to Ozaukee County for employment or Ozaukee County residents requiring an early return trip from Milwaukee.

#### 5.4 SHARED-RIDE TAXI SERVICE ALTERNATIVES FOR THE OZAUKEE COUNTY TRANSIT SYSTEM

The following Shared-Ride Taxi service modifications were analyzed as potential service alternatives and improvements for the Advisory Committee to consider including in the recommended transit system development plan. These alternatives are based on the evaluation of existing services in Chapter 4, as well as input received during the public involvement meetings, the business-focused meeting, and discussions with the Advisory Committee.

##### No Changes to the Ozaukee County Shared-Ride Taxi

Under this alternative, the County could choose to continue the existing Shared-Ride Taxi service for the time period considered under this plan. The current service's ridership and revenue hours of service are expected to continue to increase due to employment growth and increases in the senior populations. Costs are also expected to increase based on the historical trend of operating expenses per revenue vehicle hours. This alternative also serves as the base against which other alternatives can be considered.

Table 5.13 shows the expected operating expenses, revenues, and ridership on the Shared-Ride Taxi, assuming that ridership will increase slightly as a result of projected growth in the senior population and employment growth in Ozaukee County. This table assumes that operating expenses will increase 1 percent each year, and that the percentage of operating expenses covered by Federal and State sources will remain

**Table 5.10**  
**Projected Changes in Annual Operating Expenses, Revenues, and Ridership for Increased Frequency on the Ozaukee County Express: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	28,200	28,200	28,200
Revenue Vehicle Hours	1,020	1,020	1,020
Revenue Passengers			
Total	6,600	6,600	6,600
Passengers per Revenue Vehicle Mile	0.23	0.23	0.23
Passengers per Revenue Vehicle Hour	13.00	13.00	13.00
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$102,000	\$102,600	\$102,300
Farebox Revenues <sup>a</sup>	\$16,500	\$16,500	\$16,500
Percent of Expenses			
Recovered Through Revenues	16.2	16.1	16.1
Operating Assistance			
Federal <sup>a</sup>	\$23,700	\$23,800	\$23,800
State <sup>a</sup>	\$32,400	\$32,600	\$32,500
County <sup>a</sup>	\$29,400	\$29,700	\$29,600
Total <sup>a</sup>	\$85,500	\$86,100	\$85,800
Per Trip Data			
Operating Expenses <sup>a</sup>	\$15.45	\$15.55	\$15.50
Farebox Revenue <sup>a</sup>	\$2.50	\$2.50	\$2.50
Total Operating Assistance <sup>a</sup>	\$12.95	\$13.05	\$13.00

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

approximately 55 percent. Under this alternative, a fare increase of \$0.25 would be needed in 2020 to keep pace with inflation. If these assumptions prove accurate, the County can expect its level of funding to increase by about \$62,000 between 2015 and 2022.

**Extend Shared-Ride Taxi Service Hours to 4:00 a.m. in the Morning and 12:00 a.m. in the Evening**

A potential unmet need that has been raised during the Advisory Committee meetings, the business meeting, and public involvement meetings is the lack of transportation options for individuals outside of the current Shared-Ride Taxi service hours. This includes both transportation to social activities and employment. To address this concern, this alternative would extend the service hours of the Shared-Ride Taxi until 12:00 a.m. on both weekdays and weekends, and begin service at 4:00 a.m. on weekdays.

**Table 5.11  
Projected Changes in Annual Operating Expenses, Revenues, and Ridership for Increased Fares at a Rate Greater Than Inflation for the Ozaukee County Express: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	0	0	0
Revenue Vehicle Hours	0	0	0
Revenue Passengers			
Total	17,500	14,600	16,050
Passengers per Revenue Vehicle Mile	0.10	0.08	0.09
Passengers per Revenue Vehicle Hour	-0.53	-0.93	-0.73
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$288,900	\$338,900	\$313,900
Farebox Revenues <sup>a</sup>	\$68,800	\$96,100	\$82,450
Percent of Expenses			
Recovered Through Revenues	1.53	2.70	2.12
Operating Assistance			
Federal <sup>a</sup>	-\$18,000	-\$32,000	-\$25,000
State <sup>a</sup>	-\$43,800	-\$33,800	-\$38,800
County <sup>a</sup>	\$281,900	\$308,600	\$295,250
Total <sup>a</sup>	\$220,100	\$242,800	\$231,450
Per Trip Data			
Operating Expenses <sup>a</sup>	\$0.47	\$1.32	\$0.89
Farebox Revenue <sup>a</sup>	\$0.29	\$0.61	\$0.45
Total Operating Assistance <sup>a</sup>	\$0.18	\$0.71	\$0.45

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

Table 5.14 shows that the additional service, fuel, and maintenance costs would result in an increase in total operating expenses of \$133,600 in 2022. The extended service also results in an additional cost of \$11,900 for the County in 2022, in addition to Federal and State funds. This alternative assumes two vehicles would be required to be available to accommodate the additional service hours.

**On-Demand Transportation Services Provided by the Ozaukee County Shared-Ride Taxi**

Based on discussions with the Advisory Committee and input from the business meetings and public involvement meetings, the Commission staff analyzed an alternative whereby the Ozaukee County Shared-Ride Taxi would operate as an on-demand service. This alternative assumes rides would be provided with two hours' notice of the request.

On-demand services could offer more timely service for employment-based trips, allowing employers or employees to schedule rides that would meet their business hours and needs, including accommodating overtime. At the business-focused meeting and the public involvement meetings, it was further suggested that subscription-based services could potentially offer employers the opportunity to reserve rides on the Ozaukee County Shared-Ride Taxi on a regular basis. This could help ensure that their employees have a ride exactly when they need it and provide Ozaukee County with the ability to plan for the needed service. Employers could identify employees who would subscribe.

Upon review of the public comments received during the meetings in June 2017, the Advisory Committee suggested that the Commission staff contact the Federal Transit Administration (FTA) to determine if Federal law allows subscription-based services to give a priority to work trips. Commission staff discussed this question with FTA staff as directed by the Advisory Committee. In response, FTA staff indicated that subscription based services are allowed, however Ozaukee County would not be able to prioritize trips for employment unless certain criteria are met. Specifically, the Code of Federal Regulations, Title 49, Part 37, Transportation Services for Individuals with Disabilities, Part 37.133, Subscription Service, allows for a subscription service component as a part of an entity's paratransit service. However, this section identifies provisions that

Ozaukee County will need to address, should this option be implemented. This section stipulates that “at any time of day, this component may not absorb more than 50 percent of available capacity on the total system.” Therefore, in order to implement a subscription-based system for employment-based trips, Ozaukee County would be required to track the number of subscription trips to ensure that the required amount of capacity remains for all users of the Shared-Ride Taxi service. FTA indicated that the trips, including non-subscription capacity, would need to be documented in a Paratransit Service Plan. On-demand rides would benefit both employment trips (if they meet FTA’s requirements) and non-employment related trips. Therefore, the Commission has analyzed an alternative that includes on-demand service for all trips on the Shared-Ride Taxi. If this alternative is pursued by the County, Commission staff can offer input on the design and tracking of the program to meet Federal requirements.

**Table 5.12**  
**Projected Decreases in Annual Operating Expenses, Revenues, and Ridership for Reduced Service on the Ozaukee County Express Service: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	-25,000	-25,000	-25,000
Revenue Vehicle Hours	-900	-900	-900
Revenue Passengers			
Total	-1,300	-1,300	-1,300
Passengers per Revenue Vehicle Mile	0.05	0.05	0.05
Passengers per Revenue Vehicle Hour	5.00	5.00	5.00
Expenses and Revenues			
Operating Expenses <sup>a</sup>	-\$89,300	-\$89,900	-\$89,600
Farebox Revenues <sup>a</sup>	-\$3,200	-\$3,200	-\$3,200
Percent of Expenses			
Recovered Through Revenues	3.6	3.6	3.6
Operating Assistance			
Federal <sup>a</sup>	-\$20,700	-\$20,900	-\$20,800
State <sup>a</sup>	-\$28,400	-\$28,500	-\$28,500
County <sup>a</sup>	-\$37,000	-\$37,300	-\$37,200
Total <sup>a</sup>	-\$86,100	-\$86,700	-\$86,400
Per Trip Data			
Operating Expenses <sup>a</sup>	\$68.69	\$69.15	\$68.92
Farebox Revenue <sup>a</sup>	\$2.46	\$2.46	\$2.46
Total Operating Assistance <sup>a</sup>	\$66.23	\$66.69	\$66.46

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

The Pace On Demand service, in suburban Chicago, is an example that may offer insights as to how on-demand services could be implemented in Ozaukee County. The Pace shared-ride taxi initially started as a call and ride service that provided transit options for those that may not be well-served by traditional fixed route bus service. In August 2018, the Pace Call-n-Ride program updated its service to the new Pace On Demand brand name. The update was a result of a new online booking system allowing rides to be reserved both by phone and online. The service continues to provide reservation-based, curb-to-curb, public transportation service for the general public traveling anywhere within one of the 11 designated service zones. In addition, reservations for rides can still be made at least one hour in advance and subscription trips are available to accommodate regular trips without having to call and make a reservation each time. The new online reservation system is likely in response to customers’ desire for web-based services similar to those offered by transportation network companies, such as Lyft and Uber. Prices are \$2.00 one-way when using the Ventra card or \$2.25 if paying with cash. Transfers from fixed-route buses are \$0.30 with the Ventra card. The Pace On Demand service times vary by zone but typically run from 6:00 a.m. to 6:30 p.m. on weekdays, with two of the 11 service zones offering service on weekends.

Implementing this alternative is expected to require that Ozaukee County purchase at least five new vehicles, which would cost approximately \$50,000 each. This amount is not included in Table 5.15, which shows the projected changes in annual operating expenses, revenues, and ridership for the Ozaukee Shared-Ride Taxi if On-Demand Service is implemented. As indicated in Table 5.15, on-demand service is expected to serve approximately 38,500 passengers in 2022 and operating expenses would total approximately \$542,500 in 2022. Ozaukee County would be responsible for approximately \$53,100 of this total, in addition to Federal and State funds. The ridership numbers were projected using the difference in rides per capita between the Port Washington Taxi in 2011 and the Ozaukee County Shared-Ride Taxi in 2012. This analysis sought to reasonably estimate the number of new rides that could be expected from providing on-demand service

**Table 5.13**  
**Projected Annual Operating Expenses, Revenues, and Ridership**  
**for the Ozaukee Shared-Ride Taxi: 2018-2022**

Characteristics	Actual	Projected		
	2015	2018	2022	Average
Services Provided				
Revenue Vehicle Miles	1,151,900	1,242,600	1,313,800	1,278,200
Revenue Vehicle Hours	54,891	59,000	62,400	60,700
Revenue Passengers				
Total	108,500	116,800	123,500	120,200
Passengers per Revenue Vehicle Mile	0.09	0.09	0.09	0.09
Passengers per Revenue Vehicle Hour	1.98	1.98	1.98	1.98
Expenses and Revenues				
Operating Expenses <sup>a</sup>	\$1,772,100	\$1,848,800	\$2,074,500	\$1,961,700
Farebox Revenues <sup>a</sup>	\$496,500	\$550,100	\$612,600	\$581,400
Percent of Expenses				
Recovered Through Revenues	28.0	29.8	29.5	29.6
Operating Assistance				
Federal <sup>a</sup>	\$2,100	\$92,000	\$102,400	\$106,200
State <sup>a</sup>	\$974,800	\$938,500	\$980,800	\$959,700
County <sup>a</sup>	\$298,700	\$268,200	\$360,700	\$314,500
Total <sup>a</sup>	\$1,275,600	\$1,298,700	\$1,491,900	\$1,380,300
Per Trip Data				
Operating Expenses <sup>a</sup>	\$16.33	\$15.83	\$16.80	\$16.31
Farebox Revenue <sup>a</sup>	\$4.58	\$4.71	\$4.96	\$4.84
Total Operating Assistance <sup>a</sup>	\$11.76	\$11.12	\$11.84	\$11.48

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

County wide. Ridership would be expected to ramp up over a period of time as awareness of the additional mobility option grows. If this service is complemented with a marketing campaign at the outset, ridership would be expected to increase at a faster pace. The County may also consider partnering with Ozaukee County businesses to pay a portion of the operating expenses and vehicle purchases, which would total approximately \$792,500 in 2022.

### **Increase Fares at a Rate Greater Than Inflation on the County Shared-Ride Taxi Service**

If the County needs to reduce its level of assistance to the Shared-Ride Taxi service, the County would likely need to increase fares at a rate greater than inflation. Given that operating expenses for transit services are largely a function of the amount of service provided, and that the amount of service provided by a shared-ride taxi service is largely dependent on the number of rides provided, the County would need to increase fares in order to reduce its expenses.

Raising fares would decrease the amount of operating assistance per revenue passenger, and it would also slightly discourage ridership as the service becomes more expensive to its users. Without savings from changes in operating procedures or lower wages and benefits for taxi operators, raising fares is the County's only option to reduce its level of operating assistance.

Table 5.16 displays the projected changes in operating expenses, revenues, and ridership under this alternative. As discussed under the "no change" alternative, raising fares at the rate of inflation would result in an average fare increase of \$0.25 in 2020. Holding County operating assistance under the 2015 level of \$298,700 would require the County to increase fares \$0.25 in 2018, 2020, and 2022, resulting in an increase of \$0.75 over the plan timeframe.

Due to the increase in fares, 120,400 revenue passengers are estimated to use the service in 2022, which is 3,100 fewer revenue passengers than under the alternative that increases fares at the rate of inflation.

## Merging the Ozaukee County and Washington County Shared-Ride Taxi Services

At the request of the Ozaukee County Board of Supervisors and the Washington County Board of Supervisors, the Commission staff prepared a memorandum for consideration at a Joint Meeting of the Ozaukee County and Washington County Public Works Committees on November 16, 2017. The memorandum included an assessment of the benefits, costs, and impacts of combining the Ozaukee County and Washington County transit systems and serves as the basis for the following discussion. At the joint meeting, the two Committees voted against a motion to continue investigating a regional transit partnership between the Counties. However, in the event a merger of the transit systems is considered during the five-year planning horizon of this plan, the following information may assist Ozaukee County.

**Table 5.14  
Projected Changes in Annual Operating Expenses, Revenues,  
and Ridership for the Ozaukee Shared-Ride Taxi to  
Extend Hours to 4:00 a.m. and 12:00 a.m.: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	63,500	64,600	64,100
Revenue Vehicle Hours	4,800	4,900	4,900
Revenue Passengers			
Total	9,600	9,800	9,700
Passengers per Revenue Vehicle Mile	0.15	0.15	0.15
Passengers per Revenue Vehicle Hour	2.00	2.00	2.00
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$130,800	\$133,600	\$132,200
Farebox Revenues <sup>a</sup>	\$47,200	\$48,200	\$47,700
Percent of Expenses			
Recovered Through Revenues	0.36	0.36	0.36
Operating Assistance			
Federal <sup>a</sup>	\$30,400	\$31,000	\$30,700
State <sup>a</sup>	\$41,500	\$42,500	\$42,000
County <sup>a</sup>	\$11,700	\$11,900	\$11,800
Total <sup>a</sup>	\$83,600	\$85,400	\$84,500
Per Trip Data			
Operating Expenses <sup>a</sup>	\$13.63	\$13.63	\$13.63
Farebox Revenue <sup>a</sup>	\$4.92	\$4.92	\$4.92
Total Operating Assistance <sup>a</sup>	\$8.71	\$8.71	\$8.71

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

## Benefits of Merging

As noted in SEWRPC Community Assistance Planning Report No. 317, *Washington County Transit System Development Plan*, a merger between the Ozaukee County and Washington County transit systems would provide current and future passengers of the two shared-ride taxi services with greater access and mobility, allowing residents of either county to access both counties' employment opportunities, medical facilities, and other resources. Existing shared-ride taxi users who travel between the two counties would typically experience quicker trips, as transferring in Newburg would no longer be required. A merger would also allow businesses in both counties access to a greater labor pool, potentially assisting with the current labor shortage being experienced by many businesses.

In addition, merging services may result in increased efficiencies for the transit systems, such as the potential for reducing the number of empty shared-ride taxi vehicles traveling to or from the Newburg transfer point. The current contract operator for both counties' shared-ride taxi services has indicated that they may be able to reduce dispatch costs if they were providing one unified service, perhaps saving approximately \$50,000 per year. Although it may not lead to direct cost savings, merging would also reduce the amount of administrative reports currently associated with managing each transit system. Each operator must currently report data annually to and be intensively reviewed once every three years by the Federal Transit Administration (FTA), and work with the Wisconsin Department of Transportation to sign grant agreements, provide quarterly and yearly summary reports, and respond as needed to annual audits. The total amount of reports related to Federal and State requirements would be reduced if the two transit systems were merged. Merging would also allow the two separate shared-ride taxi contracts to be combined, reducing the total amount of reporting related to contract management.

## Costs and Impacts of Merging

It is expected that if a merger between the Ozaukee County and Washington County transit systems is implemented, the greater freedom to move between the two counties would result in an increase in trips across county lines over what is currently experienced by each existing shared-ride taxi service individually.

Commission staff has previously provided an estimate of the increased ridership and estimated costs associated with merging the two taxi services as part of developing SEWRPC Community Assistance Planning Report No. 317, *Washington County Transit System Development Plan*. As part of producing this memorandum, Commission staff refined those estimates, including estimating potential ridership increases using information from the regional travel demand models, the regional household travel survey, and existing taxi trip logs. Producing these more refined estimates resulted in a range of values, with the expectation that future ridership on the merged systems will fall somewhere within this range within the first two to three years after a merger would be implemented.

**Table 5.15**  
**Projected Changes in Annual Operating Expenses, Revenues, and Ridership for the Ozaukee Shared-Ride Taxi with On-Demand Service: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	330,800	339,100	334,950
Revenue Vehicle Hours	15,900	19,900	17,900
Revenue Passengers			
Total	30,800	38,500	34,700
Passengers per Revenue Vehicle Mile	0.09	0.09	0.09
Passengers per Revenue Vehicle Hour	1.97	1.97	1.97
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$433,400	\$542,500	\$487,950
Farebox Revenues <sup>a</sup>	\$152,800	\$191,000	\$171,900
Percent of Expenses			
Recovered Through Revenues	0.35	0.35	0.35
Operating Assistance			
Federal <sup>a</sup>	\$100,600	\$125,900	\$113,300
State <sup>a</sup>	\$137,800	\$172,500	\$155,200
County <sup>a</sup>	\$42,200	\$53,100	\$47,700
Total <sup>a</sup>	\$280,600	\$351,500	\$316,100
Per Trip Data			
Operating Expenses <sup>a</sup>	\$14.07	\$14.09	\$14.08
Farebox Revenue <sup>a</sup>	\$4.96	\$4.96	\$4.96
Total Operating Assistance <sup>a</sup>	\$9.11	\$9.13	\$9.12

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

Table 5.17 shows the estimated ridership increase, and the estimated operating costs (in 2017\$) associated with these new trips. It is expected that these trips will be more expensive per trip to operate than the current average trip, as the average length of these new trips is likely to be longer than the average length of existing trips. Table 5.17 includes estimates of the total costs associated with the trips, and also includes an estimate of the additional fare revenue generated by the trips and the additional Federal, State, and local funding associated with the trips. Excluding any one-time startup costs and any potential savings at the contractor or in county staffing, it is estimated that merging the transit service would cost the counties a combined additional \$22,800 through \$36,400. It is not expected that the full costs of the merger would occur in the first year, as a ramp-up period can be expected when introducing new transit services. However, depending on the timing of initiation of new services, the transit commission may not be able to rely on the additional State and Federal funding shown in the table below during the first year of operation. Therefore, the counties may be responsible for up to \$81,300 through \$129,700 in the first year of operation, although due to the ramp-up period discussed earlier, these full amounts seem unlikely.

In addition to increased operating costs, it is likely that a significant portion of these new trips will occur during time periods when the two existing taxi fleets are already near capacity, requiring the potential transit commission to acquire additional taxi vehicles. If the distribution of the new trips throughout the day is similar to the distribution of existing trips, up to three additional vehicles may need to be purchased. It is expected that the additional vehicles will cost approximately \$75,000 to \$150,000, depending on the number and size of vehicle required. It is likely that these vehicles will be purchased partially with Federal funds, leaving a local cost of approximately \$15,000 to \$30,000.

There would be additional potential impacts associated with merging the transit systems beyond the expected additional costs associated with providing greater mobility. Many of these items are discussed below under the "Additional Decision Items" section, but some impacts not included in that section would include the need to combine the financial systems for the transit systems and the need to rebid the shared-ride taxi contracts to create a merged service from an operational perspective. Combining the dispatch systems of the existing shared-ride taxi services is expected to cost approximately \$8,000 to \$10,000, according to the vendor of the system both services are currently utilizing. There may be other administrative costs associated

with these efforts that could not be absorbed in the regular work of the staff of the potential transit commission, leading to additional one-time costs.

#### Additional Federal Requirements

If any single organization using FTA funds spent more than \$1,000,000 in FTA funds in the previous year and has more than 50 individual employees doing transit-related work, that organization would need to produce an equal employment opportunity (EEO) plan. It is possible, although not certain, that the contractor operating the merged shared-ride taxi service may meet both of these thresholds, and therefore need to produce an EEO plan to have on file in case it is reviewed by the FTA during the triennial review process. The type of EEO plan required in this instance, called an abbreviated EEO program, is relatively straightforward, but would represent an additional effort that STS, as the current contractor for both taxi services, does not have to currently produce.

**Table 5.16**  
**Projected Change in Annual Operating Expenses, Revenues, and Ridership for the Ozaukee Shared-Ride Taxi if Fares are Increased at a Rate Greater Than Inflation: 2018-2022**

Characteristics	Projected		
	2018	2022	Average
Services Provided			
Revenue Vehicle Miles	106,700	197,100	151,900
Revenue Vehicle Hours	4,809	9,109	6,959
Revenue Passengers			
Total	8,300	11,900	10,100
Passengers per Revenue Vehicle Mile	0.00	0.00	0.00
Passengers per Revenue Vehicle Hour	0.00	0.00	0.00
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$98,700	\$355,600	\$227,150
Farebox Revenues <sup>a</sup>	\$82,800	\$160,900	\$121,850
Percent of Expenses			
Recovered Through Revenues	2.9	2.9	2.9
Operating Assistance			
Federal <sup>a</sup>	\$106,400	\$121,300	\$113,850
State <sup>a</sup>	-\$52,500	\$74,200	\$10,850
County <sup>a</sup>	-\$38,000	-\$800	-\$19,400
Total <sup>a</sup>	\$15,900	\$194,700	\$105,300
Per Trip Data			
Operating Expenses <sup>a</sup>	-\$0.32	\$1.34	\$0.51
Farebox Revenue <sup>a</sup>	\$0.38	\$0.88	\$0.63
Total Operating Assistance <sup>a</sup>	-\$0.70	\$0.46	-\$0.12

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC

#### Funding a Merged Service

As shown in Table 5.17, it is expected that a merger would result in slightly more Federal and State funds, but not enough additional funds to cover the entire cost of the expanded service. Even if potential cost savings in other areas occur, the counties or the future transit commission would need to determine how to distribute the cost of providing transit services. Commission staff would propose that if a merger is pursued, each county provide the local funding necessary to the transit commission to operate the bus services that serve that respective county. Similarly, Commission staff would also encourage that each county provide the transit commission with the funds needed to cover the costs incurred to provide taxi services for trips entirely within that county. If the counties agree with these relatively straightforward suggestions, the remaining issue would be how to fund the local (non-Federal and non-State) cost of the new trips that would travel between the two counties. Two possible options are discussed in the following paragraphs, but additional options could certainly be explored by the counties or the transit commission.

One possible approach to funding the intercounty trips would be to bill each county for the portion of the trip that takes place in each county on a per-mile or per-hour basis. Fare revenue for these trips could be distributed in the same fashion, based on what portion of the overall trip occurred in each county. This approach would likely be the most equitable, but may require information that is not readily available from the two services' current dispatch software. Therefore, this option may not be technically feasible.

Another possible approach would provide a slightly lower level of equity, but would not require the technical capacity of the first approach. The counties or the transit commission could choose to simply split costs and fare revenue for any trip that crosses the county line in half. The major population centers in each county are roughly the same distance from the county line, and these population centers are likely to produce and attract most of the intercounty trips. This approach is likely to be simpler to implement than the per-mile or per-hour approach discussed above.

### Creating a Transit Commission

Fully merging the two transit systems would require the creation of a transit commission, the only option allowed under current State law for the creation of a multi-county transit systems. There are five other multi-county transit commissions in the State, and their charters and bylaws were studied as part of developing the draft charter text included in the memorandum presented at the joint meeting of the Public Works Committees, which Ozaukee County and Washington County could consider as a starting point if they choose to pursue a transit commission.

To create a transit commission, each county's Board of Supervisors would need to pass identical resolutions. This resolution would likely need to reference a charter similar to that included in the memorandum. Passing this resolution would require that the counties agree upon

the number and position of the members of the transit commission's board, among other items. The other multi-county transit commissions in Wisconsin generally have three or four board members from each county on their board, and State Statutes require that a transit commission have at least seven members. Different transit commissions have different policies regarding whether all the board members from each county must be elected officials representing that county (such as County Supervisors) or if some board members should be transit riders or members of the public from each county. Alternatively, the Counties could look to their existing Joint Board of Health structure, with nine members (four from Ozaukee County and five from Washington County), at least four of which are not elected officials or staff of either County.

State Statutes require that initial transit commission members must be appointed for staggered three-year terms, and after that, the term of office of each member of the commission be three years. A commission's members cannot be financially involved in any corporation subject to the commission's jurisdiction. All commission members must be appointed by the County Boards, County Board Chair, or governing board of any municipality that joins a commission.

Following a decision to create a transit commission, the counties would request that SEWRPC pass a resolution indicating SEWRPC's support of designating the transit commission as a recipient for FTA funds. Following SEWRPC passing the needed resolution, the counties would make a request the Wisconsin Department of Transportation that the Governor designate the transit commission. If he agrees, the Governor would notify the FTA of his decision, making the transit commission eligible to receive the Federal funds currently collected by each county. In 2017, Ozaukee County received approximately \$0.70 million and Washington County received approximately \$1.03 million in FTA formula funds for their transit services. If the Governor designates the transit commission as a recipient of FTA funds in place of both counties, the transit commission would receive at least that amount of money in the future.

### Additional Decision Items

In addition to determining the makeup of the potential transit commission, there are a number of decisions that will need to be made by the County Boards or the future transit commission. The following items have been identified by Commission and County staff, although this is likely not an exhaustive list.

#### Transfer of Assets

Currently, each county owns the vehicles needed to provide their respective shared-ride taxi services. In addition, Ozaukee County owns a dispatch and vehicle storage facility. It is likely that all of these assets should be transferred from the counties to the new transit commission, although whether one of the

**Table 5.17**  
**Estimated Additional Annual Operating Expenses, Revenues, and Ridership for a Merged Ozaukee County-Washington County Shared-Ride Taxi Service**

Characteristics	Estimated Amounts		
	Low	High	Average
Services Provided			
Revenue Vehicle Miles	113,900	180,200	147,100
Revenue Vehicle Hours	4,200	6,700	5,500
Revenue Passengers	6,700	10,600	8,700
Expenses and Revenues			
Operating Expenses <sup>a</sup>	\$106,300	\$169,600	\$138,000
Farebox Revenues <sup>a</sup>	\$25,000	\$39,900	\$32,500
Percent of Expenses			
Recovered Through Revenues	23.5	23.5	23.5
Operating Assistance			
Federal <sup>a</sup>	\$31,400	\$49,800	\$40,600
State <sup>a</sup>	\$27,100	\$43,500	\$35,300
County <sup>a</sup>	\$22,800	\$36,400	\$29,600
Total <sup>a</sup>	\$81,300	\$129,700	\$105,500

<sup>a</sup> Expenses and revenues are expressed in estimated year-of-expenditure dollars.

Source: SEWRPC



counties will act as the fiscal agent for the transit commission would need to be determined by the counties or the transit commission.

### Vehicle Storage and Dispatch

Ozaukee County's taxi vehicles are stored in and dispatched from a County-owned facility in Port Washington. Washington County's taxi vehicles are stored at and dispatched from a facility leased by STS in West Bend. If the systems are merged, the counties or the transit commission will need to determine if the vehicles should be stored in different locations, and whether it is reasonable to consolidate dispatch centers. Washington County currently pays a slightly higher rate to STS than Ozaukee County, partially due to the need for STS to lease space for dispatch staff and to store Washington County's vehicles. It may be possible to reduce this cost difference if dispatch or storage can be reasonably consolidated.

### Vehicle Maintenance

Currently, Ozaukee County maintains its shared-ride taxi vehicles at its Highway Department maintenance facility using Highway Department staff, while Washington County's vehicles are maintained at a Johnson Bus facility by their staff. Based on conversations with Ozaukee County staff, it appears that there is not currently capacity for a large number of additional vehicles to be maintained by the Ozaukee County Highway Department, and therefore the counties or the transit commission would need to determine the most efficient way to maintain the consolidated fleet, if a merger is pursued.

### Branding

If the counties decide to merge their transit systems, it is likely that a new name, logo, and brand for the merged service would be appropriate. A new name, brand, and logo could be chosen by the counties, or the decision could be delegated to the transit commission members. Information provided by Ozaukee County staff indicates that the designing a new logo and implementing a new website would cost approximately \$4,000, while replacing the logos and information on the side of each taxi vehicle would cost approximately \$400 per vehicle. The counties or the transit commission would need to decide if it makes sense to pursue a full rebranding immediately, or if, for instance, the vehicles could simply be branded with the new logo and information as part of the ongoing replacement of vehicles that have reached the end of their useful life.

### Fare Structure

Currently, Ozaukee County has a zone-based fare system, while Washington County has a distance-based fare system. In many cases, the differing fare structures result in similar fees being paid by riders in both counties, but there are examples where a zone system and a distance system can result in very different charges for similar length trips. In an extreme example, it is possible for a short trip in Ozaukee County to cover three zones, but be less than five miles in trip length. Under Ozaukee County's fare structure and rates, that trip would cost a senior \$4.25, while under Washington County's fare structure and rates, the same trip would cost a senior \$2.50. Similarly, the longest one zone trip in Ozaukee County is approximately 14 miles, costing a senior \$2.50 under Ozaukee County's fare structure and rates, but \$4.25 under Washington County's fare structure and rates.

In addition to the idiosyncrasies of each fare structure, Washington County's taxi fares for adults are currently higher, on average, than Ozaukee County's taxi fares (as shown in Table 5.18). Washington County adult fares range from \$4.25 to \$9.00, while Ozaukee County adult fares range from \$3.00 to \$6.75. Student fares are also slightly higher in Washington County than Ozaukee County, while fares for seniors and people with disabilities are similar between the two counties.

In 2016, Ozaukee County collected an average of \$0.48 in passenger fare revenue per revenue mile of service, while Washington County collected an average of \$0.33 in passenger fare revenue per revenue mile of service. Some of this difference can be explained by the larger number of short trips that Ozaukee County provides now that the City of Port Washington. In addition, a larger proportion of its passengers of the Ozaukee County Shared-Ride Taxi are adults without a disability, meaning that more riders are paying the full adult fare in Ozaukee County than Washington County.

The counties or the transit commission would need to determine the appropriate fare structure for the merged system. If the counties or the transit commission choose to pursue a distance-based system, it

**Table 5.18**  
**Existing Fares for Passengers on the Ozaukee County Shared-Ride Taxi**  
**Service and the Washington County Shared-Ride Taxi Service**

Taxi System	Zones or Distance Traveled	Fare Category		
		Adult	Senior or Person with Disability	Student
Ozaukee County	Within 1 Zone	\$3.00	\$2.50	\$2.75
	Within 2 Zones	\$4.00	\$3.50	\$3.50
	Within 3 Zones	\$5.50	\$4.25	\$4.25
	Within 4 or More Zones	\$6.75	\$5.50	\$5.50
Washington County	5.0 miles or less	\$4.25	\$2.50	\$3.25
	5.1 to 10.0 miles	\$5.75	\$3.50	\$4.75
	10.1 to 15.0 miles	\$6.00	\$4.25	\$6.00
	15.1 to 20 miles	\$7.00	\$5.00	\$7.00
	20.0 miles or more	\$8.00	\$5.75	\$8.00

Source: SEWRPC

would make sense for additional fare categories to be considered, including a lower fare for trips shorter than 3 miles such as those entirely within the City of Port Washington, and higher fare categories for trips between 20 and 25 miles in length, between 25 and 30 miles in length, and greater than 30 miles in length. If the counties or the transit commission choose to pursue a zone-based system, zones would need to be identified for Washington County, and five, six, and seven zone fare categories would likely need to be identified. The counties or the transit commission would also need to resolve the differences in fares between the two counties for adults under 65 and students.

#### Staffing Levels

If a transit system merger is pursued, either the counties or the transit commission would need to determine the level of staffing required to manage the joint shared-ride taxi systems and the two bus services. In discussions with Ozaukee County and Washington County staff, it became clear that it may be possible to manage the merged system and fulfill all State and Federal requirements with less than 2.0 FTEs, but that it would require more than 1.0 FTE. Staff also indicated that an individual with an accounting or bookkeeping background would be desirable, at least on a part time basis.

#### Service Hours

Currently, service hours differ between the two shared-ride taxi services, as shown in Table 5.19. It is likely that the counties or the transit commission would want to unify the service hours if the services are merged. If this results in hours being expanded in either county, there would be additional new operating costs associated with the merger beyond those described in Table 5.13. If this unification results in hours being cut, it is likely that operational cost savings would occur. The counties or the transit commission would need to weigh the cost increases or decreases against the increase or decrease in mobility for residents resulting from adding or reducing service hours.

#### Operational Policies

There are a number of small differences in operational policies between the two services that would need to be modified by the counties or a transit commission if a merger is pursued. Examples of some of the differences include:

- Ozaukee County allows the first child five and under to ride free, with any additional children five and under being charged the student rate, while Washington County allows any children four and under to ride free
- The counties have differing penalties for repeat “no-show” clients
- The counties have differing policies regarding how much time a client might be expected to wait for a taxi to arrive to pick them up

### Radio systems

At the November 16, 2017, Joint Meeting of the Ozaukee and Washington Counties Public Works Committees, the adequacy of existing radio systems to provide coverage in both Counties was raised, since dispatch updates would be critical to serving residents in both Counties. Therefore, if a merger is considered in the future, the radio capabilities and needs of a potential merged transit system should be further studied.

**Table 5.19**  
**Existing Service Hours on the Ozaukee County Shared-Ride Taxi Service and the Washington County Shared-Ride Taxi Service**

Day of the Week	Taxi System	
	Ozaukee County	Washington County
Mondays – Fridays	5:00 a.m. – 10:00 p.m.	5:00 a.m. – 11:00 p.m.
Saturdays	8:30 a.m. – 10:00 p.m.	5:00 a.m. – 11:00 p.m.
Sundays	8:00 a.m. – 6:00 p.m.	8:00 a.m. – 4:00 p.m.

Source: SEWRPC

### Next Steps

Should both Ozaukee County and Washington County determine to proceed with a merger, the counties would need to determine which of the above items they feel should be decided by the Boards of Supervisors, and which items should be delegated to a transit commission. In addition, it may make sense to identify the appropriate membership of the transit commission, and begin to develop and refine the transit commission’s charter.

Because of the timing of such a changeover, it may make sense to wait to truly integrate the services until the beginning of a calendar year, to ease the transition with State and Federal agencies, and match the county budgetary cycle. It may also be possible to provide a unified service to passengers earlier, while working to financially and legally unify the “behind the scenes” operations of the service. Commission staff are available to assist the counties if they determine to proceed further.

## **5.5 CONCLUSIONS**

The alternatives discussed in this chapter deserve the Advisory Committee’s full consideration, but few would be able to be implemented without additional Ozaukee County funding. Further discussion with Ozaukee County businesses may provide opportunities for public-private partnerships, particularly for the employment-related transit services, including flexible or fixed route shuttles or partnering with a Transportation Network Company, such as Lyft or Uber. As the County considers these alternatives and the recommended transit plan that results from this process, it will need to balance all service objectives outlined in Chapter 3, Public Transit Service Objectives and Standards, while minimizing costs.

