

## Chapter VII

# SUMMARY AND CONCLUSIONS

### INTRODUCTION

At the request of Washington County, the Regional Planning Commission prepared this transit system operations analysis and short-range service plan for the County. This transit development plan is short-range in nature, covering the period 2015-2019, and is based on a performance review of the existing county transit system, and analyses of the travel habits, patterns, and needs of system users based on travel data and surveys collected in 2012. The plan also includes an analysis of potential transit system alternatives, and proposes a set of recommended service changes for the transit system.

Commission staff prepared the plan in a joint effort with the staff of Washington County. The plan was guided by an Advisory Committee of representatives from the County, local municipalities, and interested business groups and non-profit organizations. After careful study and evaluation, the Advisory Committee developed and approved the transit service recommendations for the Washington County Transit System that are included in this plan.

### EXISTING TRANSIT SERVICES AND TRAVEL PATTERNS

During the planning effort, information was collected on the existing public transit system in Washington County, the travel patterns of existing ridership, and the other major transit services available in the County. The description of the Washington County Commuter Express and Shared-Ride Taxi services includes service operations, vehicle fleet, ridership, and costs. This information provides the basis for the preparation of the remainder of the plan, and the most important findings on the existing transit services are presented below.

#### **Washington County Transit System**

The major provider of local public transit service in the County is the Washington County Transit System, which has operated since January 1998. The system has two major services, the Commuter Express traditional commute service and the Shared-Ride Taxi service. The system is owned by the County and operated by two private contractors under the supervision of the staff of the Washington County Highway Department. The Washington County Board of Supervisors Transportation Committee sets the policies of the transit system, but the ultimate responsibility for review and approval of important matters, including the budget, is with the Washington County Board of Supervisors.

The Washington County Commuter Express consists of two weekday-only traditional commute routes operating from three park and ride lots in Washington County to destinations in Milwaukee County, including downtown Milwaukee, the Milwaukee Regional Medical Center, the Milwaukee County Research Park, and the Veterans

Affairs Medical Center. In 2013, the base adult cash fare for the Commuter Express service was \$3.75 per trip. Between 2003 and 2011, ridership increased more than 150 percent—from 46,600 passengers to 127,600 passengers—despite the amount of service offered remaining nearly flat since 2004.

The Washington County Shared-Ride Taxi service provides county-wide mobility for County residents using a fleet of sedans, accessible vans, and accessible buses to serve trips within the County and into northeastern Waukesha County. This service excludes trips where both trip ends are within the borders of the City of Hartford or within the borders of the City of West Bend. The base adult cash fare for 2013 was distance-based, and ranged between \$4.25 and \$9.00 per trip. After a decade of continuous growth, ridership stabilized in 2008, and remained between 90,000 and 100,000 passengers from then until 2011.

### **Hartford City Taxi**

The Hartford City Taxi serves trips within the City of Hartford, or between the City and any point within one mile of its borders in Washington County and 10 miles of its borders in Dodge County. The City Taxi provided demand-response, curbside-to-curbside, accessible service to 21,000 passengers in 2011. Standard fare was \$3.00 in 2013, with an additional charge of \$1.25 for each mile of travel outside City limits.

### **West Bend Taxi**

The West Bend Taxi provides service for any trip within its borders or within two miles of its borders. The demand-response, curbside-to-curbside service provided 123,000 passenger journeys in 2011, an annual number that has been relatively stable since 2000. The standard fare was \$4.00 in 2013.

## **PUBLIC TRANSIT SERVICE OBJECTIVES AND STANDARDS**

In order to thoroughly evaluate the existing transit services offered by Washington County and any alternatives proposed for the Washington County Transit System, objectives for the transit system were identified and standards were developed that were used to evaluate the existing system. The three following objectives represent the level of transit service and performance desired by the residents of Washington County, as determined by the members of the Advisory Committee.

1. Washington County's public transit system should effectively serve existing travel patterns, meeting the demand and need for transit services, particularly the travel needs of the transit-dependent population.
2. Washington County's public transit system should promote efficient utilization of its services by operating a system that is safe, reliable, convenient, and comfortable for users.
3. Washington County's public transit system should be economical and cost effective, meeting all other objectives at the lowest possible cost. Given limited public funds, achieving this objective may result in some standards listed under Objectives 1 and 2 becoming unattainable.

## **EVALUATION OF THE WASHINGTON COUNTY TRANSIT SYSTEM**

As part of preparations to study various alternatives to serve unmet transportation needs and improve or expand existing transit services, the standards developed based on the previously discussed objectives were used to complete a performance evaluation of the Washington County Transit System. The two services provided by the County Transit System were analyzed, including a comparison of the Commuter Express service or the Shared-Ride Taxi service to a peer group, as appropriate. Figure 23 and the following text provide a brief summary of the results of the performance evaluation.

### **Summary of the Performance Evaluation of the Washington County Commuter Express**

Objective No. 1: The Commuter Express service has relatively good performance under the standards associated with Objective No. 1, successfully fulfilling the Rapid Fixed-Route Transit Service Standard, and partially fulfilling the Major Activity Centers, Population, and Employment Standards by meeting the demand and need for

Figure 23

**SUMMARY OF THE RESULTS OF THE PERFORMANCE EVALUATION OF THE WASHINGTON COUNTY TRANSIT SYSTEM**

Objective	Standard	Commuter Express	Shared-Ride Taxi
<u>Objective No. 1</u> Meeting the demand and need for transit services	Rapid Fixed-Route Transit Service	Fulfilled	Not Applicable
	Demand-Responsive Transit Service	Not Applicable	Fulfilled
	Major Activity Centers	Partially Fulfilled	Fulfilled
	Population	Partially Fulfilled	Fulfilled
	Employment	Partially Fulfilled	Fulfilled
<u>Objective No. 2</u> Operating safely, reliably, conveniently, comfortably, and efficiently	Route Design	Partially Fulfilled	Not Applicable
	Bus Stop and Park & Ride Lot Design	Partially Fulfilled	Not Applicable
	Service Frequency and Availability	Partially Fulfilled	Not Fulfilled
	Service Travel Speeds	Fulfilled	Fulfilled
	Passenger Demand	Fulfilled	Fulfilled
	Ridership and Service Effectiveness	Partially Fulfilled	Fulfilled
	On-Time Performance	Fulfilled	Fulfilled
Travel Time	Fulfilled	Fulfilled	
<u>Objective No. 3</u> Achieving the other objectives at the lowest possible cost	Fare Structure	Fulfilled	Fulfilled
	Operating Expenses	Partially Fulfilled	Partially Fulfilled
	Cost Effectiveness	Fulfilled	Partially Fulfilled

Source: SEWRPC.

transit services. Half of the residential facilities for transit-dependent populations in Washington County and over 40 percent of the County’s residents are within three miles of a Commuter Express stop, while approximately one-third of major employers and nearly one-fourth of all jobs in Milwaukee County are accessible from the Commuter Express or a short ride on a connecting local bus service. About 40 percent of Milwaukee County’s major medical facilities and four of the seven institutions of higher education are served by the Commuter Express or a connecting local bus service.

Objective No. 2: The Commuter Express was also relatively successful at fulfilling Objective No. 2, which encourages a system that operates safely, reliably, conveniently, comfortably, and efficiently. The Commuter Express performs particularly well on the passenger miles per vehicle mile measure of the Ridership and Service Effectiveness Standard, indicating that the service fills seats at a higher rate than many of its peers, but does not perform as well under the passengers per capita and passengers per revenue vehicle mile measures due to the limited number of routes operated by the service and the long journey distance for all passengers.

Objective No. 3: This objective recognizes that there are limited public funds available to support public transit, and encourages efficient use of financial resources when providing public transit. The Operating Expenses Standard uses five performance measures to determine whether the Commuter Express is meeting this standard. Operating expenses per total vehicle mile, per total vehicle hour, and per revenue vehicle hour all grew faster than the median of the peer group between 2007 and 2011—failing the standard. However, the unit cost for each of these performance measures is low compared to systems in the peer group. Operating expenses per revenue vehicle mile grew at a slower rate than the median between 2007 and 2011, meeting that standard. Under the fifth

measure of the Operating Expenses Standard, operating assistance per passenger, the Commuter Express performed well, as continued increases in ridership reduced the assistance level to \$6.88 per passenger by 2011. In contrast to the Operating Expenses Standard, the Commuter Express successfully meets all the requirements of the Cost Effectiveness Standard, with an operating cost per passenger, operating cost per passenger mile, and a farebox recovery ratio well within the range recommended by the standard.

Reductions in Emissions and Traffic Volume: Although it is not included as an objective for the transit system, the operations of the fixed-route part of the County’s transit system were initially funded by Federal Congestion Mitigation and Air Quality (CMAQ) grants. Washington County continues to receive CMAQ funding for marketing and therefore an estimate of the reduction in traffic volumes and emissions due to the Commuter Express is included in this Chapter. Approximately 482 private automobile trips per day and 14,700 vehicle miles of travel per day were removed by the Commuter Express in 2012. The Commuter Express prevents 1,254 pounds of volatile organic compounds, 2,092 pounds of nitrous oxide, and 268 pounds of particulate matter 2.5 microns or less in size from entering the atmosphere each year.

### **Summary of the Performance Evaluation of the Washington County Shared-Ride Taxi**

Objective No. 1: The Shared-Ride Taxi completely fulfills Objective No. 1 by meeting the demand and need for transit across all of Washington County. All major activity centers, residents, and jobs are served by the Shared-Ride Taxi service.

Objective No. 2: Objective No. 2 encourages operating a system that is safe, comfortable, reliable, convenient, and efficient, and the Shared-Ride Taxi successfully fulfills this objective in all but one applicable standard. This one standard is the Service Frequency and Availability Standard, which requires that a demand-response service pick up customers within 45 minutes of being called in an urban area and within four hours of being called in a rural area. As the Shared-Ride Taxi only guarantees service if a reservation is made 24 hours ahead of the travel time, it does not meet this standard.

Objective No. 3: The Shared-Ride Taxi is less successful in meeting the third objective, which involves using limited public funds cost effectively. None of the five performance measures under the Operating Expenses Standard are within the acceptable range for annual percentage changes in operating expenses and operating assistance. Despite this result, the Shared-Ride Taxi service has the least expensive unit costs in 2011 among its peers under four of the five measures (all but operating assistance per passenger). The service meets the standard for two performance measures under the Cost Effectiveness Standard—operating cost per passenger and operating cost per passenger mile—but does not meet the standard for farebox recovery. The low farebox recovery ratio, combined with the rapid growth in operating assistance per passenger under the Operating Expenses Standard, indicates that the County may want to consider raising the fare for the Shared-Ride Taxi to improve performance under both measures.

## **TRANSIT SERVICE ALTERNATIVES**

The study included numerous potential service alternatives for Washington County to consider implementing as part of the Washington County Transit System, in an effort to improve services for County residents and increase accessibility to a number of locations in counties adjacent to Washington County. These alternatives also sought to improve the performance of the Washington County Transit System in response to the evaluation of the transit system discussed previously, and in response to comments and ideas received from the Advisory Committee for this planning effort. Future expenses, revenues, and ridership on the two existing services provided by the County Transit System were analyzed to provide a “no-change” alternative and to provide a base scenario to which potential service changes could be compared.

### **Summary of the Fixed-Route Service Alternatives for the Washington County Transit System**

A number of fixed-route service alternatives—either suggested by the Advisory Committee or in response to known unmet transportation needs—and the evaluation of existing services are described on the next page.

### ***No Changes to the Washington County Commuter Express***

The no-change alternative projected a relatively stable budget for the Commuter Express, with County funding expected to be flat between 2015 and 2019. Under this alternative, ridership would be expected to fall slightly during the study period, with assumed fare increases in 2016 and 2019 being the main cause. County expenses were expected to increase when compared to 2012, but this is due to the loss of 9,000 riders between 2012 and 2013.

### ***Reduce Service on the Washington County Commuter Express***

Three alternatives were considered in case the County needed to reduce its level of funding for the Commuter Express. These alternatives included consideration of a \$0.25 fare increase, which was expected to reduce both the required County assistance and ridership. Another alternative presented for consideration was reducing service, either by eliminating the Medical Center Route, or by eliminating the lowest performing runs from both the Medical Center Route and the Downtown Route. Eliminating the Medical Center Route was expected to reduce the required amount of annual County assistance by \$73,000, and decrease ridership by 27,500 annual revenue passengers by 2019. No longer operating the eight lowest-performing runs, all of which average 10 or fewer revenue passengers each day, was expected to save the County \$91,000 each year by 2019, and reduce annual revenue passengers by 21,000.

### ***Increase and Improve Service on the Washington County Commuter Express***

Several alternatives were considered that would have increased service, added additional destinations to the Commuter Express services, or improved the efficiency of existing services. The first alternative encouraged the County to continue to increase service frequency to meet demand, as it has done in the past. The Committee also considered alternatives that would have added service to Mayfair Mall and nearby offices, the Park Place office complex, Kohl's Corporate Headquarters, the University of Wisconsin-Milwaukee, and General Mitchell International Airport. All of these alternatives would have required additional annual operating funding from the County.

Two alternatives were considered that would have provided Commuter Express service originating in the City of Hartford. Under these alternatives, the Commuter Express would have served two leased park and ride lots along STH 60 in the City of Hartford and the Village of Slinger. Service to those lots either would have used a shuttle to connect passengers to existing Commuter Express services at the Richfield Park and Ride Lot, or would have provided direct service to downtown Milwaukee. The former option would have allowed Hartford-area residents to transfer to nearly every run on the existing Downtown and Medical Center Routes, and was expected to be the higher ridership option of the two.

Two alternatives also were considered that would have provided reverse-commute service to Washington County businesses from Milwaukee County. Under the first alternative, a local shuttle service would have left from the terminus of the Milwaukee County Transit System BlueLine to provide access to the jobs located in the Germantown Industrial Park. A second alternative would have provided an express route along W. Fond du Lac Avenue to the Germantown Industrial Park and the City of West Bend, and would have generated more ridership at costs not significantly greater than the local shuttle.

The final service improvement alternative considered in this study would have provided service from the City of West Bend to the City of Fond du Lac's transit system's transfer point, as well as numerous educational institutions located in the City of Fond du Lac. The service would have left from a leased park and ride lot in the center of the City of West Bend, stopped in Kewaskum, and then provided service to the Fond du Lac Transit transfer zone and the City of Fond du lac.

### **Summary of the Shared-Ride Taxi Service Alternatives for the Washington County Transit System**

Alternatives for the Shared-Ride Taxi service included making no changes to the service, increasing fares if the County needs to reduce funding for the service, and expanding or improving service in a variety of ways.

### ***No Changes to the Washington County Shared-Ride Taxi***

If no changes were made to the existing service, ridership was assumed to be flat while the required County contribution would have increased by \$85,800 by 2019. Capital expenses were predicted to be manageable, assuming the County was able to continue utilizing Federal Section 5307 funds to provide an 80 percent match for vehicle purchases.

### ***Reduce Funding for the Washington County Shared-Ride Taxi***

If the County needed to reduce its level of assistance to the Shared-Ride Taxi service, this alternative indicated that options would be limited to finding operational efficiencies or increasing fares. To keep the level of County assistance at or below the level provided in 2012, the County would have needed to increase fares an average of \$1.25 over the timeframe of the plan.

### ***Expand or Improve Service on the Washington County Shared-Ride Taxi***

The Advisory Committee considered merging the County Shared-Ride Taxi with the Hartford City Taxi and West Bend Taxi, merging the County Shared-Ride Taxi with the Ozaukee County Shared-Ride Taxi, providing an additional taxi depot in or near the Village of Germantown, and extending the service hours of the County Shared-Ride Taxi. Merging either or both of the municipal taxi services with the County Shared-Ride Taxi has been discussed prior to this study due to uncertainties in State and Federal transit funding. Three alternatives were analyzed as part of this study, one that kept the existing higher level of service within West Bend and Hartford, one that proposed an advanced-reservation service across the County, and one that provided demand response service across the entire County. All three options were expected to increase the amount of funds required from the County tax levy.

Merging the two county shared-ride taxi systems would have provided improved service to the residents of each county, but would have required creating a uniform fare policy and uniform service hours, as well as the signing of intergovernmental agreements detailing the funding and management of the system. Based on existing travel on all modes between Washington and Ozaukee County, an estimate of 7,100 additional annual passenger trips on the merged shared-ride taxi service was calculated. Another alternative—the operation of a secondary depot in or near Germantown—was estimated to save the County some operating costs, but additional capital and other operating costs could be expected to offset much, if not all, of the possible operating cost savings.

The final alternative considered by the Committee was providing longer service hours on the County Shared-Ride Taxi (until 1 a.m. on Saturday and Sunday mornings), which would have offered an alternative to unsafe driving for patrons of dining and entertainment establishments and would provide County residents with more flexibility in their travel schedules. Requests for late-night service do not lend themselves to an advanced reservation service, so this alternative proposed that the County operate a demand-response service between 10 p.m. and 1 a.m. on Friday and Saturday nights, with drivers available to respond to requests for service on short notice.

## **RECOMMENDED TRANSIT SERVICE PLAN**

Following the consideration of the alternatives, and of the public input provided during and after three public information meetings, the Advisory Committee for this study determined the alternatives to include in the Recommended Transit Service Plan for the Washington County Transit System. The recommended plan contains elements that should be considered for implementation between 2015 and 2019, depending on the amount of funding the County has available for transit services. The recommended plan also identifies transit service alternatives that could be explored further to determine whether they warrant implementation.

### **Recommended Transit Services if Funding is Maintained**

If funding for the transit system remains relatively stable during this plan's timeframe, the following changes to the transit system are recommended:

- Extending the Commuter Express Downtown Route to the Schlitz Park office complex;
- Modifying the Commuter Express Medical Route to serve the Summit Place office complex;

- Coordinating with the Milwaukee County Transit System (MCTS) to allow free or reduced-fare transfers between the Commuter Express routes and MCTS services; and
- A fare increase of \$0.25 in 2016 and 2019 for both the Shared-Ride Taxi and the Commuter Express services, which would raise fares at the rate of inflation for the duration of this plan.

#### **Summary of the Recommended Transit Services if Funding is Reduced**

If the County is unable to maintain existing funding levels, or if costs grow more quickly than projected, the following changes to the transit system are recommended:

- Increasing fares at a rate faster than inflation; and
- Eliminating the lowest performing runs from both Commuter Express routes.

#### **Summary of the Recommended Transit Services if Funding is Increased**

If more funding becomes available for transit services in Washington County, the following changes to the transit system are recommended:

- Adding additional vehicles and runs to the Commuter Express to meet demand, increase service hours, and increase frequency;
- Connecting the City of Hartford and the Village of Slinger to the Richfield Park and Ride Lot and the existing Commuter Express services;
- Providing a reverse commute service connecting employers in Washington County with the labor force in Milwaukee County; and
- Extending the service hours of the Shared-Ride Taxi to provide service until 3 a.m. on weekend mornings.

#### **Summary of the Transit Services Requiring Further Study**

Implementing the following transit services is complicated by a number of factors, and therefore further study is recommended before determining whether implementation is appropriate:

- Extending Commuter Express service to the University of Wisconsin-Milwaukee;
- Providing an additional evening run on the Commuter Express Medical Center Route by including Medical Center Route stops on a Downtown Route run; and
- Merging the Washington County Shared-Ride Taxi service with the Ozaukee County Shared-Ride Taxi service.

## **CONCLUSIONS**

This short-range transit service plan for Washington County—as recommended to the County by the Advisory Committee—provides a guide for the modification and improvement of the County’s transit system, with its recommendations intended to prepare the County with reasonable courses of action under a range of Federal, State, and local funding scenarios. The elements of the recommended plan provide the County with flexibility in the face of increases or decreases in funding levels, assisting the County in making sound transit services choices for the plan’s timeframe.