

# **A PUBLIC TRANSIT SERVICE PLAN FOR WASHINGTON COUNTY: 1998-2002**

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**COMMUNITY ASSISTANCE PLANNING REPORT  
NUMBER 223**

**A PUBLIC TRANSIT SERVICE PLAN  
FOR WASHINGTON COUNTY: 1998-2002**

Prepared by the

**Southeastern Wisconsin Regional Planning Commission  
P. O. Box 1607  
Old Courthouse  
916 N. East Avenue  
Waukesha, Wisconsin 53187-1607**

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# SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

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December 1, 1996

Mr. Kenneth F. Miller, Chairman, and  
Members of the Washington County Board of Supervisors  
Washington County Courthouse  
432 E. Washington Street, P. O. Box 1986  
West Bend, Wisconsin 53095-7986

Dear Chairman Miller and Members of the Board:

In October 1994, the Washington County Board requested that the Southeastern Wisconsin Regional Planning Commission prepare a plan for improving public transit services within the County. That request was prompted by a perceived need for improved local transit services, as evidenced by increasing demands for the specialized transportation services being provided by the Washington County Office on Aging to elderly and disabled residents, and by problems faced by the Hartford and West Bend shared-ride taxicab systems in serving trip requests from residents of adjoining, unincorporated towns. The request was also prompted by a perceived need for commuter transit services to help Washington County employers overcome labor shortages.

Working with the Washington County Public Transportation Needs Study Advisory Committee, the Commission staff has now completed the requested plan. This report documents the findings of the inventories of the demographic, economic, and land use characteristics of Washington County pertinent to transit system planning, as well as the travel characteristics of County residents; sets forth proposed transit service objectives and performance measures; presents the results of an evaluation of existing transit services provided in the County; describes several alternative transit services considered, including estimates of probable ridership and costs for each alternative; and describes the recommended plan selected by the Advisory Committee.

The recommended plan includes two elements to guide the provision of improved transit services within the County:

- A local transit service element, under which publicly subsidized shared-ride taxicab services would be made available under County administration to residents throughout Washington County through the provision of urban taxicab services provided within the major urban centers of the County; rural taxicab services within the areas outside the major urban centers; and specialized services provided Countywide for those disabled residents unable to access regular taxicab vehicles.
- A commuter transit element, under which transit services would be made available to facilitate work related travel in both directions between Washington and Milwaukee Counties through the provision of bus service over IH 94 and USH 41/45 between central Milwaukee County and park-ride lots in Washington County, along with companion shuttle-bus services from park-ride lots to serve employment centers in the Jackson, Slinger, Hartford, West Bend, Barton, and Kewaskum areas.

The Advisory Committee recommended that the County Board, through its Office on Aging and under the direction of the Washington County Committee on Aging, establish the recommended local taxicab services as soon as possible in 1998, with the services to be supported through passenger revenues, Federal and State transit assistance funds, and a modest increase in the County property tax levy. The Advisory Committee also recommended that the proposed commuter transit services be viewed as a contingency action to be undertaken only should sufficient support materialize in the private sector to fund the costs that would be associated with the services. This recommendation recognized that insufficient private sector interest exists for the County to initiate such services at the present time.

The findings and recommendations set forth in this report were carefully reviewed and approved by the Advisory Committee and are submitted on behalf of that Committee for consideration and action by the County Board. If adopted, the recommended plan should provide valuable guidance to County officials in meeting the emerging public transit needs throughout the County.

The Regional Planning Commission is appreciative of the assistance and support given in the plan preparation process by Washington County staff and by the Advisory Committee. The Commission, of course, stands ready to assist the County in any way possible in considering and in implementing the recommended plan over time.

Sincerely,



Kurt W. Bauer  
Executive Director

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## Chapter I

### INTRODUCTION

#### BACKGROUND

On October 5, 1994, the Washington County Board of Supervisors requested that the Regional Planning Commission conduct a study of transit service needs in the County and of the means by which those needs might best be met. The request was prompted by three factors: 1) the potential for public transit services to meet the perceived needs of major Washington County employers both in terms of filling job vacancies and in terms of meeting a goal of the Federal Clean Air Act Amendments of 1990, which calls for large employers to pursue actions which would reduce travel in single-occupant vehicles to the workplace, 2) increasing demand being placed upon the Washington County Office on Aging in providing specialized transit services to elderly and disabled individuals, in particular to serve work trips made by disabled individuals, and 3) interest in expanding the geographic service areas of the shared-ride taxicab systems operated by the Cities of Hartford and West Bend. The Commission agreed to assist the County in the conduct of the requested study. The findings and recommendations of the study are documented in this report.

The study was carried out within the context of the Commission's continuing regional transportation planning program. It was begun after the completion and adoption by the Commission and the Washington County Board of Supervisors of a new regional transportation system plan with a design year 2010.<sup>1</sup> That regional transportation system plan includes a transit element recommending that certain public transit services be provided within Washington County. More specifically, the regional transportation system plan recommends that rapid-transit service be provided from the central business district of Milwaukee to five proposed public transit stations in the West Bend, Jackson, and Germantown areas of Washington County. The service would be provided by motor buses operating over the USH 41/45 and IH 94 Freeways and would be designed to meet the needs of commuters traveling from Washington County to jobs in the Milwaukee

area. The plan holds out the potential for enhancing that service through the provision of a busway and high-occupancy-vehicle (HOV) lanes that would be constructed along the USH 45 and IH 94 Freeways in Milwaukee County. The plan also holds open the potential for the ultimate provision of commuter-oriented railway passenger train service from West Bend through Jackson and Germantown to the Milwaukee central business district. Both of the latter recommendations would be subject to further evaluation in a more detailed transit corridor study. The commuter-rail service should be viewed as potentially either a supplement to, or a substitute for, the bus-based rapid-transit service.

The plan also recommends that shared-ride taxicab service continue to be provided to serve local travel needs within the West Bend and Hartford urban service areas of the County. The plan recognizes it may also be desirable for such local transit services to be expanded to serve larger geographic areas and for new services to be established in other areas of the County, as warranted.

The Washington County transit study was designed to refine, detail, and extend the regional transportation system plan recommendations, focusing, in particular, on those public transit needs that are generally, but not specifically, addressed in the regional system plan. Accordingly, the focus of the Washington County transit study was on meeting the potential needs of Washington County employers for better access by Milwaukee County residents to jobs in Washington County and for addressing the single-occupant automobile work trip-reduction goals set forth in the Federal Clean Air Act Amendments of 1990, the specialized transportation needs of those residents of Washington County who are largely elderly or disabled, and the needs of rural County residents for access to jobs and services available in the urban centers of the County. As such, the Washington County transit service plan served to amend the adopted regional transportation system plan.

#### STUDY PURPOSE

The requested study was intended for the following purposes:

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<sup>1</sup>See *SEWRPC Planning Report No. 41, A Transportation System Plan for the Southeastern Wisconsin Region: 2010*, December 1994.

1. To identify the need for public transit services within Washington County, with a particular focus on the following elements of that need:
  - a. The needs of those County transit-dependent residents. These are primarily individuals who are of elementary- and secondary-school age; who are elderly or disabled; who reside in low-income households; or who do not own, or have only limited access to, an automobile. These individuals generally are dependent upon others and upon public transit to help them make trips. Specifically excluded from the scope of the study, however, were school trips made by students to and from elementary and secondary schools. Those trips are accounted for in planning processes undertaken by individual school districts.
  - b. The needs of County residents in the rural and developing portions of the County, particularly those who are transit-dependent, for access to jobs and services within the major urban centers of the County. Significant numbers of jobs and facilities providing medical and other essential services are concentrated within the Hartford, West Bend, and Germantown areas of the County. Where pertinent, the need to provide access to job concentrations and facilities providing essential services located outside the major urban centers was also considered.
  - c. The needs of employers within Washington County to fill job vacancies, primarily at the entry level, by tapping a labor pool of unemployed and underemployed individuals residing in neighboring Milwaukee County. These individuals are frequently also transit-dependent because they do not have ready access to an automobile for making the work trip.
  - d. The needs of major employers within Washington County with 100 employees or more at an individual workplace to reduce employee travel in single-occupant vehicles for work-trip purposes in accordance with the goals of the Employee Commute Options (ECO) program mandated by the Federal government and administered by the Wisconsin Department of Natural Resources.
2. To evaluate the extent to which existing transit services in Washington County were able to meet the identified needs to describe and, to the extent practical, to quantify, any unmet needs.
3. To develop a short-range, five-year, plan for providing transit services to meet the needs identified in the study. Over all, that plan was intended to provide a sound basis for providing the needed transit services in Washington County and for making decisions concerning the management of such services, including both capital investment and operating policy decisions. In preparing that plan, consideration was given to the following:
  - a. Modifying or expanding the specialized transit services provided within Washington County during 1995.
  - b. Modifying or expanding the existing public transit services provided within Washington County through shared-ride taxicab on a demand-responsive basis to serve significant portions, or potentially all, of Washington County.
  - c. As warranted, providing for reverse-commute transit services to help the unemployed and underemployed in Milwaukee County to reach jobs at major employment centers in Washington County.
  - d. As warranted, providing for specially designed employer-based transit and ride-share services to meet needs arising from the goals of the Federally mandated ECO program.
4. To provide the documentation necessary to support applications for transit capital and operating assistance funds from State and Federal sources.

#### SCOPE OF WORK

The scope of work of the Washington County, service study consisted of the following:

1. The conduct of the inventories necessary to provide the basic information required for the sound preparation of a County transit service plan. The inventories involved principally the collation of data available from other sources,

with new primary data collection carried out only as indicted below. The following data were assembled:

- a. Resident population, including characteristics of the general and transit-dependent population of the County. These data were collated primarily from the U. S. Census Bureau data sources and Regional Planning Commission files.
- b. Employment, including the locations of job concentrations and of the major employers within the County, along with the approximate number of employees at major employer worksites. These data were collated from Regional Planning Commission files and from information provided to the Wisconsin Department of Natural Resources by the major employers in the County who were subject to the requirements of the ECO program. Information was also gathered by Washington County, with assistance from the Commission staff, on the home addresses and work-shift times of employees at the major employers willing to provide such information. A postcard survey was conducted by the Washington County Economic Development office of all identified major employers. The survey asked whether or not the employer believed it would be useful to have improved and expanded transit services made available to its employees. Those employers who indicated that they supported the concept of new or improved and expanded transit services for their employees were asked to provide information on the home addresses and work hours of the employees at each company worksite. Efforts were made to allay the concerns of employers about providing employee address information by requesting only address information without employee names. The employee addresses were assigned was to U. S. Public Land Survey one-quarter sections to facilitate detailed geographic analysis by the Commission staff. Such information was used in identifying and analyzing the potential for providing transit services to major employment centers.
- c. Existing land use, including identification of major transit trip generators. These

data were collated from Regional Planning Commission files.

- d. Travel habits and patterns of the general population and of the transit-dependent population of the County. These data were collated from a regional travel survey conducted by the Regional Planning Commission in 1991.
  - e. Existing transit services, including general public transit, employee transportation, specialized transportation, and school bus services.
  - f. Transit-related legislation and regulations, primarily at the State and Federal levels of government.
2. The formulation of transit service development objectives and transit performance standards and design criteria.
  3. The conduct of an analysis of the existing transit services provided in the County in 1995. The analysis included an evaluation of the extent to which those services met the needs of the transit-dependent population of the County as well as the potential needs of major employers in the County to provide options for their employees to driving alone by automobile.
  4. The development and evaluation of alternative transit service plans for the five-year period from 1997 through 2001.
  5. The selection of a recommended, service plan, including preparing a program of recommended transit service improvements over the five-year planning period.
  6. The preparation of a financial plan, including the presentation of data on the estimated capital and operating costs, passenger revenues, and operating deficits for the recommended system and on the portions of any associated capital and operating deficits that could be funded through State and Federal assistance programs and the portion that needed to be funded through local taxes or employer contributions.
  7. The identification of the actions needed to be taken by Washington County and by each of the other concerned levels and units of

government to establish the recommended transit services.

## STUDY AREA

The study area consisted of all of Washington County. In addition to the County government, there are 21 local units of government exist within the County, including the Cities of Hartford and West Bend; the Villages of Germantown, Jackson, Kewaskum, Newburg, and Slinger; and the Towns of Addison, Barton, Erin, Farmington, German-town, Hartford, Jackson, Kewaskum, Polk, Richfield, Trenton, Wayne, and West Bend. The total 1990 resident population of Washington County approximated 95,300 persons, of which about 13,800 persons, or about 14 percent, resided within the portion of southeastern Washington County lying within the Milwaukee urbanized area, as defined by the U. S. Bureau of the Census and shown on Map 1. The inclusion of a portion of Washington County within the Milwaukee urbanized area has implications for Federal funding programs, as discussed in Chapter IV of this report.

## STUDY ORGANIZATION

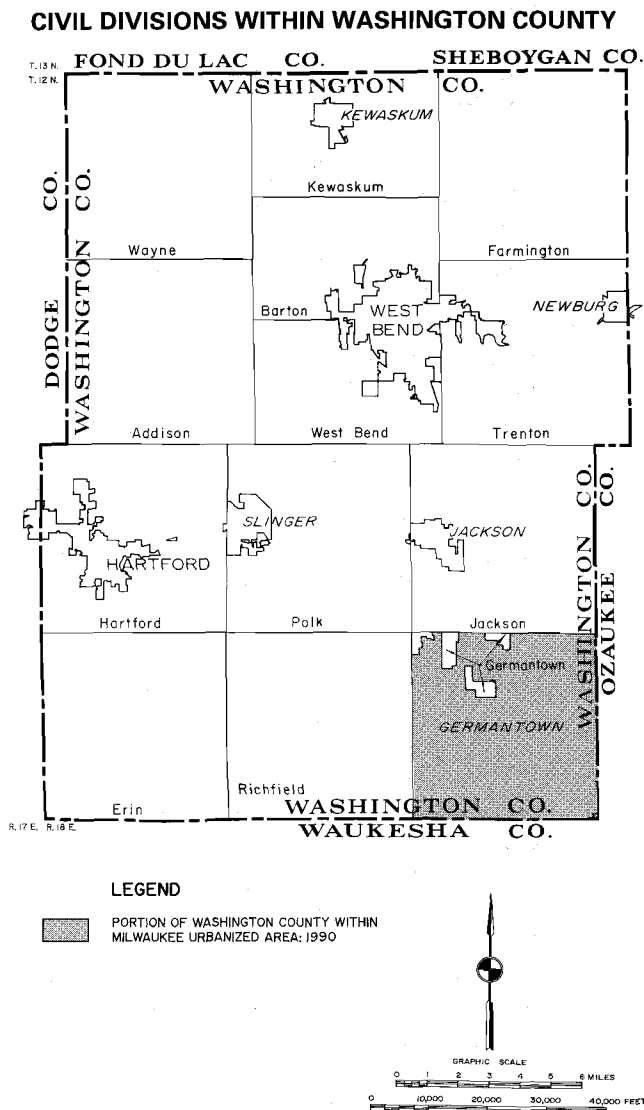
The Washington County transit service study was a joint effort of the staffs of Washington County and of the Southeastern Wisconsin Regional Planning Commission. Additional staff assistance was obtained from the Wisconsin Department of Transportation.

To provide guidance to the technical staff in the conduct of the study and to involve concerned and affected public officials and private sector leaders more directly and actively in the development of transit service policies and improvement proposals, the Washington County Board created a 18-member Washington County Public Transportation Needs Study Advisory Committee. The membership of this Committee is listed on the inside front cover of this report. The Committee met initially in October 1995 and worked over an approximately nine-month period to review staff-prepared materials and approve this report.

## SCHEME OF PRESENTATION

The results of the Washington County transit service study are set forth in this report in eight chapters, in addition to this introductory chapter. These eight chapters are as follows:

Map 1



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

## Chapter II. "Land Use and Travel Patterns"

This chapter describes the pertinent land use, demographic, and economic characteristics of the County. The information presented includes a description of transit-dependent population levels and resident locations within the County, based on 1990 Census data, along with an identification of the principal transit-dependent population trip generators. The locations of major employers, principally those with 100 or more employees, within the County were also identified, along with other major land use trip generators, using the Commission's 1990 employment and land use data files, supplemented with more current information as available. The home locations and workshift characteristics of employees at the major employers

identified under the study were also described, to the extent that such data was made available by each employer to the Washington County Economic Development office. The travel habits and patterns of County residents were also described, using information from the regional travel survey conducted by the Regional Planning Commission in 1991.

### Chapter III. "Existing Transit Services"

This chapter presents a description of the existing transit services within the County during 1995, including descriptions of general public intercity bus and taxicab services, employee transportation services, specialized transportation services for elderly and disabled persons, and yellow school bus service. The information presented for each service includes a description of the service operation, population or clientele served, ridership, and costs, to the extent permitted by the information available. For the existing specialized transit service provided by the Washington County Office on Aging, information from the trip logs for the service for three selected ridership months was analyzed to identify the patterns of trips, including the proportion of trips made between Washington County communities and those made to adjacent counties.

### Chapter IV. "Existing Transit Legislation, Regulations, and Funding Programs"

This chapter summarizes legislation and related regulations at the Federal, State, and local levels affecting the provision of transit service in the County. The chapter includes a description of the State and Federal transit assistance programs which could be drawn upon to provide financial assistance to fund the operation of the recommended transit service improvements.

### Chapter V. "Transit Service Development Objectives and Standards"

This chapter sets forth a set of transit-service objectives and supporting performance standards and design criteria which were used to identify deficiencies in the transit services provided within the County during 1995 and to design and evaluate the alternative transit services considered to alleviate such deficiencies.

### Chapter VI. "Evaluation of Existing Transit Services"

This chapter presents an evaluation of the existing 1995 transit services against the transit-service

objectives and standards, thereby identifying service-related problems and deficiencies. Considered was the service provided to the resident County population and to the major employment and other land use centers in the County, the service provided relative to the location of the transit-dependent population within the County, and the service provided relative to the existing travel habits and patterns of County residents. The chapter concludes with a description of the transit service needs to be addressed in the plan.

### Chapter VII. "Alternative Transit Service Plans"

This chapter identifies, describes, and evaluates alternative transit service improvement plans which were developed for the County. The scope of the alternative service improvements considered included providing a shared-ride taxicab service to the general public, while focusing the service on the needs of the transit-dependent subgroup of the general population; providing rapid-transit bus service between Washington and Milwaukee Counties to serve both traditional commuting patterns and reverse-commute trips between the two counties; and providing special shuttle services to enable unemployed and underemployed persons in Milwaukee County to reach jobs in Washington County and to also address employer transportation needs stemming from the goals of the Federally mandated and State administered ECO program. Transit service options specifically excluded from consideration under this study included rail transit services. The potential to provide these services was considered in the regional transportation planning process.

### Chapter VIII. "Recommended Transit Service Plan"

This chapter sets forth a detailed description of the recommended County transit service plan. Recommendations are included pertaining to the provision of specific transit services for the general public and for elderly and disabled persons. This chapter also includes a financing plan, identifying amounts and sources of public financial assistance needed to fund projected capital costs and operating deficits for the recommended services. Finally, this chapter lists the actions required to be taken by each level and unit of government concerned to carry out the recommended plan in an orderly and a timely manner.

### Chapter IX. "Summary and Conclusions"

This chapter provides a summary of the significant findings and recommendations of the study.

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## Chapter II

### LAND USE AND TRAVEL PATTERNS

#### INTRODUCTION

In order to evaluate properly the existing transit services in Washington County and to identify the potential need for transit service improvements, it is necessary to consider those factors which affect, or are affected by, the provision of transit service. These factors include the extent of existing urban development in the County, along with the size, distribution, and characteristics of the resident population and employment. In addition, the travel habits and patterns associated with the population, employment, and land use distribution within the County must also be considered. This chapter presents the results of an inventory of these important factors in Washington County.

#### POPULATION AND EMPLOYMENT

##### General Population Characteristics

The resident population levels in Washington County and the Southeastern Wisconsin Region over the period 1960 through 1994 are set forth in Table 1. After a period of rapid population growth of about 12 percent from 1960 to 1970, population growth in the Region slowed considerably, resulting in relatively stable population levels in the 1970s and 1980s. The resident population for the Region in 1990, about 1,810,000 persons, represented an increase of only about 54,000 persons over the 1970 population of 1,756,000 persons. The resident population of the Region in 1994 was estimated at about 1,869,000 persons, an increase of about 3 percent over the 1990 level and of about 19 percent over the 1960 level.

The population growth rate in Washington County in the 1960s was higher than that of the Region; the resident population of the County increased by about 38 percent during this period. Unlike the Region as a whole, the County continued to experience a high population growth rate of about 33 percent in the 1970s, but experienced a more modest population growth rate of about 12 percent in the 1980s. The resident population of the County in 1994 was estimated at about 105,100 persons, an increase of about 10 percent over the 1990 population of about 95,300 persons. The rate of population increase in Washington County since 1970 has been the highest of all the counties in the Region. In

terms of absolute population change, only Waukesha County has experienced a greater increase in population since 1970.

Table 2 sets forth population data for the County by municipality for the period from 1960 through 1994. Analysis of this information indicates that about 29 percent of the population growth within the County has occurred in Germantown-Richfield area, comprised of the Village of Germantown and the Towns of Germantown and Richfield. An additional 33 percent of the total population increase of the County occurred in the West Bend area, comprised of the City of West Bend and the Towns of West Bend and Barton. About 14 percent of the total population increase of the County occurred in the Hartford-Slinger area, comprised of the City of Hartford, the Village of Slinger, and the Towns of Hartford and Polk.

Map 2 shows the distribution of the resident population of the County in 1990. The map indicates that, as already stated, most of the County population in 1990 was concentrated within the West Bend, Hartford-Slinger, and Germantown-Richfield areas of the County. In 1994, about three-fourths of the total County population resided in these three areas.

Table 3 indicates the change in the number of households in Washington County and the Region over the period 1960 to 1994. Unlike the trends in population size, growth in the number of households remained high throughout the 1960s, 1970s, and 1980s, both in the Region and in Washington County. In Washington County the percentage increase in the number of households over the period 1960 to 1970, almost 39 percent, was similar to the percentage increase in population over the same period. However, over the period 1970 to 1994, the percentage increase in the number of households in the County was about 80 percent higher than the increase in resident population. The number of households in the County increased by about 54 percent from 1970 to 1980, while the resident population increased by only about 33 percent. Between 1980 and 1990, the number households in the County increased by about 23 percent, while the resident population increased by about 12 percent. In the four years since the 1990 U. S. Census, the

Table 1

**HISTORIC POPULATION LEVELS FOR WASHINGTON COUNTY  
AND THE SOUTHEASTERN WISCONSIN REGION: 1960-1994**

County	Total Population									
	1960		1970		1980		1990		1994 <sup>a</sup>	
	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region
Kenosha .....	100,615	6.4	117,917	6.7	123,137	7.0	128,181	7.1	135,000	7.2
Milwaukee .....	1,036,041	65.9	1,054,249	60.0	964,988	54.7	959,275	53.0	969,200	51.9
Ozaukee .....	38,441	2.4	54,461	3.2	66,981	3.8	72,831	4.0	76,300	4.1
Racine .....	141,781	9.0	170,838	9.7	173,132	9.8	175,034	9.7	181,100	9.7
Walworth .....	52,368	3.3	63,444	3.6	71,507	4.0	75,000	4.1	79,200	4.2
Washington .....	46,119	2.9	63,839	3.6	84,848	4.8	95,328	5.3	105,100	5.6
Waukesha .....	158,249	10.1	231,335	13.2	280,203	15.9	304,715	16.8	323,400	17.3
Region	1,573,614	100.0	1,756,083	100.0	1,764,796	100.0	1,810,364	100.0	1,869,300	100.0

County	Change in Population									
	1960-1970		1970-1980		1980-1990		1990-1994		1960-1994	
	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent
Kenosha .....	17,302	17.2	5,220	4.4	5,044	4.1	6,819	5.3	34,385	34.2
Milwaukee .....	18,208	1.8	-89,261	-8.5	-5,713	-0.6	9,925	1.0	-66,841	-6.5
Ozaukee .....	16,020	41.7	12,520	23.0	5,850	8.7	3,469	4.8	37,859	98.5
Racine .....	29,057	20.5	2,294	1.3	1,902	1.1	6,066	3.5	39,319	27.7
Walworth .....	11,076	21.2	8,063	12.7	3,493	4.9	4,200	5.6	26,832	51.2
Washington .....	17,720	38.4	21,009	32.9	10,480	12.4	9,772	10.3	58,981	127.9
Waukesha .....	73,086	46.2	48,868	21.1	24,512	8.7	18,685	6.1	165,151	104.4
Region	182,469	11.6	8,713	0.5	45,568	2.6	58,936	3.3	295,686	18.8

<sup>a</sup>Wisconsin Department of Administration estimates.

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

number of households in the County is estimated to have increased by about 15 percent, compared with an estimated increase in the County population of about 10 percent. As a result, the average household size in the County decreased from about 3.6 persons per household in 1960 to about 2.9 persons per household in 1990, then to about 2.7 persons per household in 1994. This mirrors a similar trend in declining household size in the Region.

#### Transit-Dependent Population Characteristics

Generally, there are certain segments of the population whose dependence on, and use of, public transit may be expected to be greater than that of the population as a whole. These segments of the population have historically had more limited access to the automobile as a mode of travel than the population in general and, therefore, have had to rely more heavily on alternative transportation modes for mobility. These groups include school-age children, the elderly, the disabled, persons in low-income households, and persons in households with limited automobile availability. One source

of information about these groups in Washington County was the 1990 U. S. Census. Selected population characteristics for the civil divisions in the County are set forth in Tables 4 through 9.

**School-Age Children:** For the purpose of this study, school-age children in the 10- through 18-year age group were considered as potentially transit-dependent, principally for social and recreational trips. Those in the upper end of this age range could also be transit-dependent for work trips. Transit-dependence for trips between home and school was not considered to be significant for this study, since such transportation is currently provided by the individual school districts or by family members. As can be seen from Table 4, school-age children constituted about 14 percent of the total resident population of the County in 1990. For the most part, this population group tended to be relatively evenly distributed among the civil divisions in the County. The proportion of school-age children in the County population has not changed appreciably since 1960, when this group constituted about 7,000 children, or

Table 2

**POPULATION OF WASHINGTON COUNTY  
BY MINOR CIVIL DIVISION: 1960-1994**

Civil Division	Population					Change in Population							
						1960-1970		1970-1980		1980-1990		1990-1994	
	1960	1970	1980	1990 <sup>a</sup>	1994 <sup>b</sup>	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>Cities</b>													
Hartford <sup>c</sup> .....	5,627	6,499	7,159	8,179	8,795	872	15.5	660	10.2	1,020	14.2	616	7.5
Milwaukee <sup>d</sup> .....	--	--	2	--	--	--	--	2	--	-2	-100.0	--	--
West Bend .....	9,969	16,555	21,484	24,470	27,069	6,586	66.1	4,929	29.8	2,986	13.9	2,599	10.6
<b>Villages</b>													
Barton <sup>e</sup> .....	1,569	--	--	--	--	--	--	--	--	--	--	--	--
Germantown .....	622	6,974	10,729	13,658	15,486	6,352	1,021.2	3,755	53.8	2,929	27.3	1,828	13.4
Jackson .....	458	561	1,817	2,486	3,549	103	22.5	1,256	223.9	669	36.8	1,063	42.8
Kewaskum .....	1,572	1,926	2,381	2,514	2,916	354	22.5	455	23.6	133	5.6	402	16.0
Newburg <sup>f</sup> .....	--	--	688	853	940	--	--	688	--	165	24.0	87	10.2
Slinger .....	1,141	1,216	1,612	2,340	3,086	75	6.6	396	32.6	728	45.2	746	31.9
<b>Towns</b>													
Addison .....	2,072	2,375	2,834	3,051	3,174	303	14.6	459	19.3	217	7.7	123	4.0
Barton .....	1,204	1,624	2,493	2,586	2,761	420	34.9	869	53.5	93	3.7	175	6.8
Erin .....	1,133	1,641	2,455	2,817	3,107	508	44.8	814	49.6	362	14.7	290	10.3
Farmington .....	1,433	1,734	2,386	2,523	2,699	301	21.0	652	37.6	137	5.7	176	7.0
Germantown .....	3,984	416	267	258	266	-3,568	-89.6	-149	-35.8	-9	-3.4	8	3.1
Hartford .....	1,870	2,368	3,269	3,243	3,549	498	26.6	901	38.0	-26	-0.8	306	9.4
Jackson .....	1,576	2,844	3,180	3,172	3,329	1,268	80.5	336	11.8	-8	-0.3	157	5.0
Kewaskum .....	897	1,166	1,243	1,139	1,152	269	30.0	77	6.6	-104	-8.4	13	1.1
Polk .....	2,090	2,846	3,486	3,540	3,730	756	36.2	640	22.5	54	1.5	190	5.4
Richfield .....	3,172	5,923	8,390	8,993	9,396	2,751	86.7	2,467	41.7	603	7.2	403	4.5
Trenton .....	2,657	3,178	3,914	3,967	4,211	521	19.6	736	23.2	53	1.4	244	6.2
Wayne .....	1,081	1,214	1,471	1,374	1,437	133	12.3	257	21.2	-97	-6.6	63	4.6
West Bend .....	1,992	2,779	3,588	4,165	4,453	787	39.5	809	29.1	577	16.1	288	6.9
<b>Total</b>	<b>46,119</b>	<b>63,839</b>	<b>84,848</b>	<b>95,328</b>	<b>105,105</b>	<b>17,720</b>	<b>38.4</b>	<b>21,009</b>	<b>32.9</b>	<b>10,480</b>	<b>12.4</b>	<b>9,777</b>	<b>10.3</b>

<sup>a</sup>Based on final adjusted total population figures prepared by the U. S. Bureau of the Census. The total population shown for some communities varies from population used in identifying the transit dependent population within each community shown in Table 4 because only unadjusted population data was available from the 1990 Census for the transit dependant population groups.

<sup>b</sup>Wisconsin Department of Administration estimates.

<sup>c</sup>The population shown is for the Washington County portion only. Total population of the City of Hartford was 7,159 in 1980. Total population of the City of Hartford was 8,188 in 1990, of which 9 resided in a portion of the City which was annexed in 1987 and lies in Dodge County. In 1994, the total population of the City of Hartford estimated to be 8,804, of which 9 resided in Dodge County.

<sup>d</sup>The population shown is for the Washington County portion only. Total population for the City of Milwaukee was 636,297 in 1980, 628,088 in 1990, and 629,296 in 1994.

<sup>e</sup>The Village of Barton was consolidated with the City of West Bend in 1961.

<sup>f</sup>The Village of Newburg was incorporated in 1973 from territory located in both Washington and Ozaukee County. The population shown is for the Washington County portion only. Total population for the Village of Newburg was 783 in 1980, 958 in 1990, and 1,048 in 1994.

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

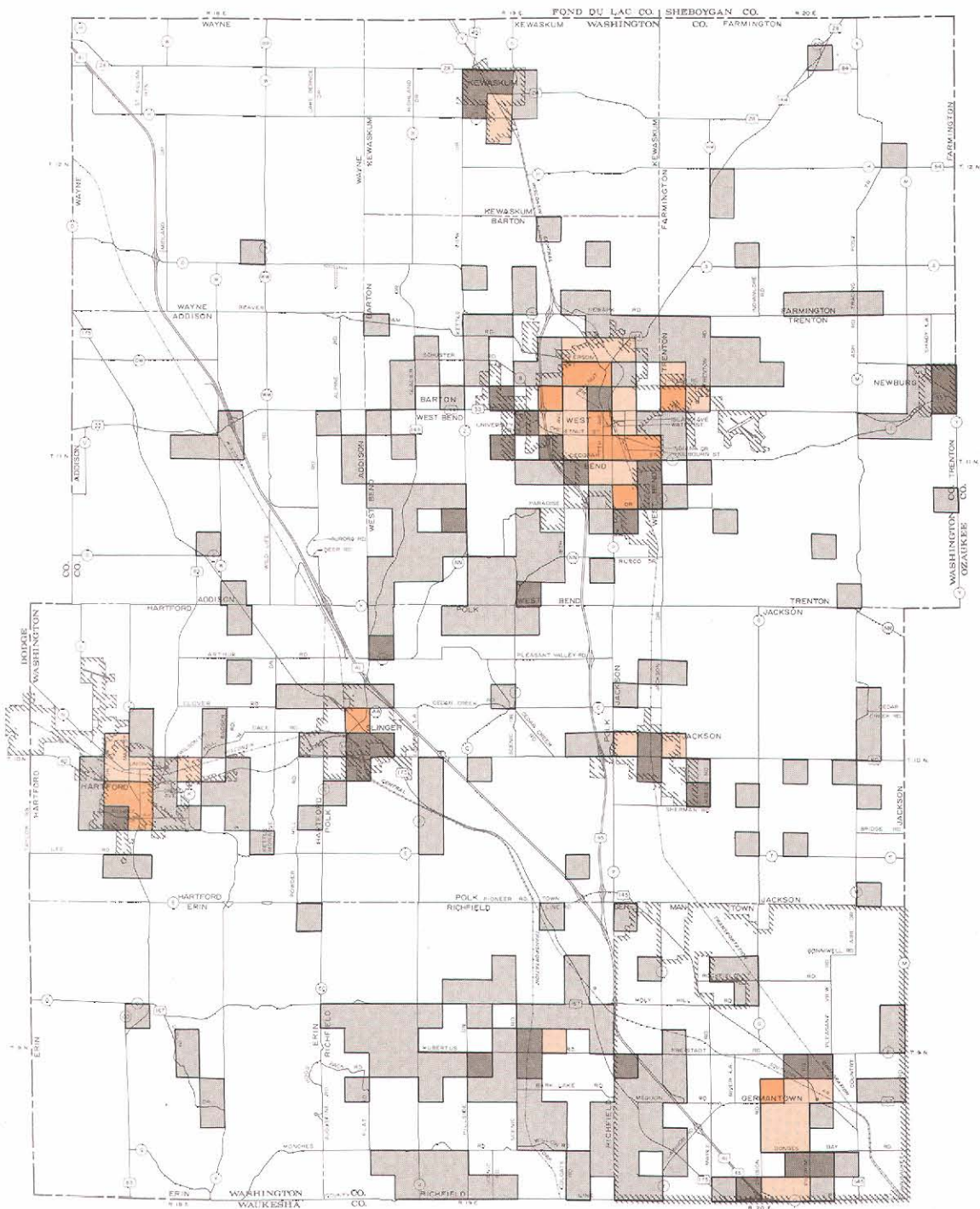
about 15 percent of the total resident population of the County. In terms of absolute numbers, this population group grew somewhat slower than the general population between 1960 and 1990, increasing by about 87 percent between 1960 and 1990, while the total County population increased by about 107 percent.

**Elderly:** Elderly individuals are included in the transit-dependent category because they may be less likely to own or operate an automobile as a result of living on fixed incomes, residing in elderly housing

or retirement complexes, or having impairments which restrict their driving ability. In 1990, approximately 13,500 persons, or about 14 percent of the total County population, were 60 years old or older. The percent of total population which is elderly ranges from a low of about 9 percent, in the Town of Germantown, to a high of about 30 percent, in the Town of West Bend. Elderly persons generally represent between about 10 to 20 percent of the resident population of the municipalities within Washington County. The proportion of elderly persons in the County population has not changed

Map 2

POPULATION DISTRIBUTION IN WASHINGTON COUNTY: 1990



LEGEND

PERSONS PER U. S. PUBLIC LAND  
SURVEY ONE-QUARTER SECTION

	LESS THAN 50		500-999
	50-249		1000 OR MORE
	250-499		



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

Table 3

**TOTAL NUMBER OF HOUSEHOLDS AND AVERAGE HOUSEHOLD SIZE IN  
WASHINGTON COUNTY AND THE SOUTHEASTERN WISCONSIN REGION: 1960-1994**

Year	Total Households				Average Persons per Household			
	Washington County		Region		Washington County		Region	
	Number	Percent Change from Preceding Date	Number	Percent Change from Preceding Date	Number	Percent Change from Preceding Date	Number	Percent Change from Preceding Date
1960	12,532	--	465,913	--	3.64	--	3.30	--
1970	17,385	38.7	536,486	15.1	3.63	-0.3	3.20	-3.0
1980	26,716	53.7	627,955	17.1	3.14	-13.5	2.75	-14.1
1990	32,977	23.4	676,107	7.7	2.86	-8.9	2.62	-4.7
1994 <sup>a</sup>	37,900	14.9	709,400	4.9	2.74	-4.1	2.58	-1.7

<sup>a</sup>Estimated.

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

Table 4

**ELDERLY, SCHOOL-AGE, AND LOW-INCOME POPULATION  
CHARACTERISTICS IN WASHINGTON COUNTY BY MINOR CIVIL DIVISION: 1990**

Civil Division	Total Population <sup>c</sup>	Transit-Dependent Population <sup>a</sup>					
		School-Age Children (ages 10 through 18)		Elderly (age 60 and older)		Persons in Low-Income Households <sup>b</sup>	
		Number	Percent of Civil Division Population	Number	Percent of Civil Division Population	Number	Percent of Civil Division Population
<b>Cities</b>							
Hartford <sup>d</sup> .....	8,179	910	11.1	1,430	17.5	473	5.8
Milwaukee .....	--	--	--	--	--	--	--
West Bend .....	23,916	3,384	14.2	3,730	15.6	1,025	4.3
<b>Villages</b>							
Germantown .....	13,658	1,763	12.9	1,443	10.6	313	2.3
Jackson .....	2,486	234	9.4	365	14.7	124	5.0
Kewaskum .....	2,514	314	12.5	413	16.4	74	2.9
Newburg <sup>e</sup> .....	853	135	15.8	88	10.3	27	3.2
Slinger .....	2,340	295	12.6	438	18.7	85	3.6
<b>Towns</b>							
Addison .....	3,051	500	16.4	382	12.5	75	2.5
Barton .....	2,541	335	13.2	243	9.6	26	1.0
Erin .....	2,817	351	12.5	381	13.5	137	4.9
Farmington .....	2,523	401	15.9	295	11.7	66	2.6
Germantown .....	308	61	19.8	27	8.8	11	3.6
Hartford .....	3,243	530	16.3	356	11.0	121	3.7
Jackson .....	3,172	479	15.1	365	11.5	75	2.4
Kewaskum .....	1,139	172	15.1	160	14.0	47	4.1
Polk .....	3,540	454	12.8	538	15.2	27	0.8
Richfield .....	8,943	1,289	14.4	870	9.7	69	0.8
Trenton .....	4,028	690	17.1	412	10.2	147	3.6
Wayne .....	1,374	262	19.1	179	13.0	77	5.6
West Bend .....	4,703	555	11.8	1,419	30.2	49	1.0
<b>Total</b>	<b>95,328</b>	<b>13,114</b>	<b>13.8</b>	<b>13,534</b>	<b>14.2</b>	<b>3,048</b>	<b>3.2</b>

<sup>a</sup>All figures are based upon Census information derived from sample data.

<sup>b</sup>Represents persons residing in households with a total 1989 family income below Federal poverty thresholds. Poverty thresholds for families in 1989 as defined by the U. S. Bureau of the Census are shown in Table 5.

<sup>c</sup>The total population shown for some communities varies from the final adjusted total population prepared by the U. S. Bureau of the Census shown in Table 2. Only unadjusted population data was available from the 1990 Census for the transit-dependent population groups.

<sup>d</sup>The population shown is for the Washington County portion only. The total population of the City of Hartford was 8,188 in 1990, of which 9 resided in the portion of the City lying in Dodge County.

<sup>e</sup>The population shown is for the Washington County portion only. The total population for the Village of Newburg was 958 in 1990 of which 105 resided in the portion of the City lying in Ozaukee County.

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

Table 5

## FEDERAL POVERTY THRESHOLDS FOR FAMILIES: 1989

Size of Family Unit	Weighted Average Thresholds	Related Children under 18 Years								
		None	1	2	3	4	5	6	7	8 or More
One Person (unrelated Individual) .....	\$ 6,310	--	--	--	--	--	--	--	--	--
Under 65 Years .....	6,451	\$ 6,451	--	--	--	--	--	--	--	--
65 Years and Older .....	5,947	5,947	--	--	--	--	--	--	--	--
Two Persons .....	8,076	--	--	--	--	--	--	--	--	--
Householder under 65 Years .....	7,343	8,303	\$ 8,547	--	--	--	--	--	--	--
Householder 65 Years and Older .....	7,501	7,495	8,515	--	--	--	--	--	--	--
Three Persons .....	9,885	9,699	9,981	\$ 9,990	--	--	--	--	--	--
Four Persons .....	12,674	12,790	12,999	12,575	\$12,619	--	--	--	--	--
Five Persons .....	14,990	15,424	15,648	15,169	14,798	\$14,572	--	--	--	--
Six Persons .....	16,921	17,740	17,811	17,444	17,092	16,569	\$16,259	--	--	--
Seven Persons .....	19,162	20,412	20,540	20,101	19,794	19,224	18,558	\$17,828	--	--
Eight Persons .....	21,328	22,830	23,031	22,617	22,253	21,738	21,084	20,403	\$20,230	--
Nine Persons or More .....	25,480	27,463	27,596	27,229	26,921	26,415	25,719	25,089	24,933	\$23,973

Source: U. S. Bureau of the Census.

appreciably since 1960, when this group numbered about 6,000, or about 13 percent of the total resident population of the County. In terms of absolute numbers, the elderly population grew somewhat faster than the general population between 1960 and 1990, increasing by about 126 percent between 1960 and 1990, while the total County population increased by about 107 percent.

**Persons in Low-Income Households:** An important population characteristic with respect to transit use is income. Generally, greater use of public transit service, in particular local transit service, is made by persons from households with lower incomes. The results of the 1990 U. S. Census indicated that approximately 3,000 persons, or about 3 percent of the total resident population of the County, lived in households with incomes below the Federal poverty level. The most significant concentrations of such individuals, in terms of both absolute numbers and proportion of total population, were found in the Cities of West Bend and Hartford. Other communities with a high proportion of such individuals included the Village of Jackson and the Towns of Wayne, Erin, and Kewaskum. The proportion of individuals in low-income households in the County population also has not changed appreciably since 1960, when this group included about 500 persons, or about 1 percent of the total resident population

of the County. In terms of absolute numbers, this population group grew significantly faster than the general population between 1960 and 1990, increasing by over 500 percent, while the total County population increased by about 107 percent.

It should be noted that, over all, the proportion of individuals in Washington County residing in low-income households is relatively low when compared with the average of 11 percent for the seven-county Southeastern Wisconsin Region. This is indicative of the high household income levels in Washington County recorded by the 1990 U. S. Census. As shown in Table 6, the median household income in the County in 1989 was about \$38,400, or approximately 20 percent higher than the regionwide 1989 median household income level of about \$32,100. Only three communities in the County had a 1989 median income lower than the Regionwide level: the City of Hartford and the Villages of Jackson and Slinger.

**Households with No Automobiles Available:** Another important population characteristic with respect to transit use is the number of vehicles available to households. Particularly important is the number of households with no vehicles available, since such households may be expected to rely on public transit to meet their travel needs. As shown in Table 7,



Table 6

**MEDIAN WASHINGTON COUNTY HOUSEHOLD  
INCOME LEVELS BY MINOR CIVIL DIVISION: 1989**

Civil Division	Median Household Income <sup>a</sup>
<b>Cities</b>	
Hartford <sup>b</sup> .....	\$28,100
Milwaukee .....	--
West Bend .....	34,300
<b>Villages</b>	
Germantown .....	43,500
Jackson .....	30,900
Kewaskum .....	33,300
Newburg <sup>c</sup> .....	33,500
Slinger .....	31,000
<b>Towns</b>	
Addison .....	39,700
Barton .....	41,700
Erin .....	47,400
Farmington .....	40,700
Germantown .....	42,100
Hartford .....	42,400
Jackson .....	48,500
Kewaskum .....	36,800
Polk .....	42,400
Richfield .....	51,100
Trenton .....	41,400
Wayne .....	36,100
West Bend .....	35,000
County Average	\$38,400
Region Average <sup>d</sup>	\$32,100

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

<sup>b</sup>Data are for only the portion of the City of Hartford within Washington County.

<sup>c</sup>Data are for only the portion of the Village of Newburg within Washington County.

<sup>d</sup>The Southeastern Wisconsin Region comprises Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties.

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

there were approximately 1,400 households within Washington County in 1990 with no vehicle available, or about 4 percent of the total households in the County. For the most part, the distribution of these no-automobile households follows the distribution of persons residing in low-income households

in the County, with the most significant numbers of no-automobile households located in the Cities of Hartford and West Bend. Notably, there were approximately 23,400 County households, or about 71 percent of the total households in the County, which had two or more motor vehicles available for travel. The proportion of households in the County with no automobile available has decreased significantly since 1960, when this group included about 1,100 of the total 12,500 County households, or about 9 percent of all County households. In terms of absolute numbers, this group grew much slower than the general population between 1960 and 1990, increasing by about 25 percent, while the total County population increased by about 107 percent.

Another way to consider household vehicle availability in assessing potential transit use is to determine the number of vehicles available in relation to the size of the population 16 years of age and older. If a vehicle is available for travel for each person 16 years of age or older, or each potential licensed driver, the potential for transit use may be less than where the number of persons 16 years of age or older exceeds the number of vehicles available. Table 8 indicates for 1990 the ratio of the number of vehicles available to households in each municipality in Washington County to the size of the population 16 years of age and older in each municipality. As shown in the table, communities with significant no-auto households had the lowest ratios, including the Cities of Hartford and West Bend. In most municipalities in the County, there were generally as many vehicles available to households as there were persons 16 years of age and older. In all of Washington County in 1990, there were approximately 67,400 vehicles and approximately 71,200 persons 16 years of age and older, or approximately 0.95 vehicles available per person 16 years of age or older.

**Disabled Individuals:** Disabled individuals are considered potentially transit-dependent because they may have physical or cognitive disabilities which limit or prohibit their use of an automobile. Limited information on disabled persons was collected as part of the 1990 U. S. Census. A sample of persons 16 years of age and older was asked if they had a mobility limitation which made it difficult for the individual to travel alone. Table 9 presents for each municipality in Washington County the proportion of the population 16 years of age and older which indicated it had a mobility limitation which restricted their ability to travel alone. In 1990, there were approximately 1,600 persons in Washington County who reported they had such a mobility limi-

Table 7

**DISTRIBUTION OF HOUSEHOLDS BY VEHICLES AVAILABLE  
IN WASHINGTON COUNTY BY MINOR CIVIL DIVISION: 1990**

Civil Division	Households <sup>a</sup>						
	Total	With No Vehicle Available		With One Vehicle Available		With Two or More Vehicles Available	
		Number	Percent of Households in Civil Division	Number	Percent of Households in Civil Division	Number	Percent of Households in Civil Division
<b>Cities</b>							
Hartford <sup>b</sup> .....	3,051	276	9.0	1,112	36.4	1,663	54.5
Milwaukee .....	--	--	--	--	--	--	--
West Bend .....	8,686	610	7.0	2,831	32.6	5,245	60.4
<b>Villages</b>							
Germantown .....	4,931	74	1.5	1,136	23.0	3,721	75.5
Jackson .....	953	31	3.3	348	36.5	574	60.2
Kewaskum .....	925	45	4.9	288	31.1	592	64.0
Newburg <sup>c</sup> .....	290	9	3.1	76	26.2	205	70.7
Slinger .....	882	49	5.6	293	33.2	540	61.2
<b>Towns</b>							
Addison .....	943	25	2.7	164	17.4	754	80.0
Barton .....	811	10	1.2	113	13.9	688	84.8
Erin .....	911	24	2.6	104	11.4	783	86.0
Farmington .....	789	14	1.8	102	12.9	673	85.3
Germantown .....	89	12	13.5	14	15.7	63	70.8
Hartford .....	1,105	26	2.4	205	18.6	874	79.1
Jackson .....	995	5	0.5	140	14.1	850	85.4
Kewaskum .....	356	10	2.8	47	13.2	299	84.0
Polk .....	1,136	7	0.6	169	14.9	960	84.5
Richfield .....	2,831	26	0.9	329	11.6	2,476	87.5
Trenton .....	1,236	4	0.3	167	13.5	1,065	86.2
Wayne .....	418	11	2.6	72	17.2	335	80.1
West Bend .....	1,639	109	6.7	511	31.2	1,019	62.2
<b>Total</b>	<b>32,977</b>	<b>1,377</b>	<b>4.2</b>	<b>8,221</b>	<b>24.9</b>	<b>23,379</b>	<b>70.9</b>

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

<sup>b</sup>Data are for only the portion of the City of Hartford within Washington County.

<sup>c</sup>Data are for only the portion of the Village of Newburg within Washington County.

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

tation. This was just over 2 percent of the total County population age 16 and older. For the entire Southeastern Wisconsin, there were approximately 28,100 persons who reported they had such a mobility limitation, about 2.1 percent of the total of about 1,356,500 persons age 16 and older, roughly, the same percentage as indicated by the Census data for Washington County. No data on disabled persons was collected in the 1960 Census which was comparable to the 1990 Census data.

It should be noted that these Census data do not include ambulatory disabled persons whose physical or mental impairment does not prevent them from

traveling without the assistance of others. While many such disabled individuals are clients of the Wisconsin Department of Health and Social Services Division of Vocational Rehabilitation, State law prohibits the release of the names and addresses of disabled clients of the agency. Consequently, information from this agency cannot be obtained to assist in a more complete identification of the residential concentrations of disabled individuals.

#### Employment Characteristics

Employment trends in Washington County and in the Southeastern Wisconsin Region for the period 1960 through 1994 are set forth in Table 10. At the

Table 8

**AVERAGE NUMBER OF VEHICLES AVAILABLE TO WASHINGTON  
COUNTY PERSONS AGE 16 AND OLDER BY MINOR CIVIL DIVISION: 1990**

Civil Division	Total Vehicles Available <sup>a</sup>	Population Age 16 and Older <sup>a</sup>	Average Vehicles per Person Age 16 and Older
<b>Cities</b>			
Hartford <sup>b</sup> .....	5,016	5,984	0.84
Milwaukee .....	--	--	--
West Bend .....	15,203	17,817	0.85
<b>Villages</b>			
Germantown .....	10,610	10,329	1.03
Jackson .....	1,680	1,834	0.92
Kewaskum .....	1,705	1,886	0.90
Newburg <sup>c</sup> .....	598	608	0.98
Slinger .....	1,608	1,768	0.91
<b>Towns</b>			
Addison .....	2,168	2,213	0.98
Barton .....	1,929	1,900	1.02
Erin .....	2,354	2,144	1.10
Farmington .....	1,862	1,842	1.01
Germantown .....	183	197	0.93
Hartford .....	2,465	2,389	1.03
Jackson .....	2,470	2,395	1.03
Kewaskum .....	901	855	1.05
Polk .....	2,691	2,641	1.02
Richfield .....	6,987	6,689	1.04
Trenton .....	2,927	2,923	1.00
Wayne .....	1,020	996	1.02
West Bend .....	3,026	3,784	0.80
<b>Washington County</b>	<b>67,403</b>	<b>71,194</b>	<b>0.95</b>

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

<sup>b</sup>Data are for only the portion of the City of Hartford within Washington County.

<sup>c</sup>Data are for only the portion of the Village of Newburg within Washington County.

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

Regional level, employment increased by about 58 percent, from about 648,000 jobs in 1960 to about 1,020,900 jobs in 1994. Within Washington County, the employment increase has been much more dramatic than in the Region as a whole, increasing from nearly 15,000 jobs in 1960 to about 46,000 jobs in 1994, or by approximately 216 percent. In terms of absolute change in employment numbers, Washington County's total increase of about 31,000 jobs ranked fourth among counties in the Region during this period, behind increases of about 165,000 jobs in Waukesha County, about 81,000

jobs in Milwaukee County, and about 33,000 jobs in Racine County.

The distribution of jobs in the County in 1990, on the basis of jobs per U. S. Public Land Survey one-quarter section is shown on Map 3. As can be seen from this map, the principal concentrations of employment in the County in 1990 were principally within and around the Cities of West Bend and Hartford, with smaller but significant numbers of jobs in the Villages of Germantown, Jackson, Kewaskum, and Slinger.

Table 9

**DISTRIBUTION OF WASHINGTON COUNTY DISABLED PERSONS  
WITH MOBILITY LIMITATIONS BY MINOR CIVIL DIVISION: 1990**

Civil Division	Population <sup>a</sup>				
	Total Population Age 16 and Older	Disabled Persons Age 16 and Older with Mobility Limitations <sup>b</sup>			
		Age 16-64	Age 65 and Older	Total	
				Number	Percent of Civil Division Population Age 16 and Older
<b>Cities</b>					
Hartford <sup>c</sup>	5,984	49	112	161	2.7
Milwaukee	--	--	--	--	--
West Bend	17,817	151	280	431	2.4
<b>Villages</b>					
Germantown	10,329	50	143	193	1.9
Jackson	1,834	8	25	33	1.8
Kewaskum	1,886	10	33	43	2.3
Newburg <sup>d</sup>	608	4	10	14	2.3
Slinger	1,768	23	32	55	3.1
<b>Towns</b>					
Addison	2,213	20	23	43	1.9
Barton	1,900	15	41	56	2.9
Erin	2,144	28	12	40	1.9
Farmington	1,842	20	12	32	1.7
Germantown	197	--	--	--	--
Hartford	2,389	22	13	35	1.5
Jackson	2,395	17	22	39	1.6
Kewaskum	855	17	11	28	3.3
Polk	2,641	10	10	20	0.8
Richfield	6,689	13	86	99	1.5
Trenton	2,923	52	28	80	2.7
Wayne	996	10	16	26	2.6
West Bend	3,784	41	143	184	4.9
<b>Washington County</b>	<b>71,194</b>	<b>560</b>	<b>1,052</b>	<b>1,612</b>	<b>2.3</b>

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

<sup>b</sup>Includes persons with a health condition lasting six or more months which made it difficult to travel alone outside the home.

<sup>c</sup>Data are for only the portion of the City of Hartford within Washington County.

<sup>d</sup>Data are for only the portion of the Village of Newburg within Washington County.

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

## EXISTING LAND USE

### Historic Urban Growth

Utilizing aerial photographs, the Regional Planning Commission has assembled information that documents the historic pattern of urban development in the seven-county Southeastern Wisconsin Region, including Washington County. In 1900, development

in the County was largely confined to settlements within the now- incorporated places of Germantown, Hartford, Kewaskum, Newburg, Slinger, and West Bend. The first half of the 20th Century saw an expansion of the development around most of these original settlements. Suburban development in the southeastern portion of the County was just beginning by 1950. The pace of urban development in the

Table 10

**HISTORIC EMPLOYMENT LEVELS FOR WASHINGTON COUNTY  
AND THE SOUTHEASTERN WISCONSIN REGION: 1960-1994**

County	Total Employment									
	1960		1970		1980		1990		1994 <sup>a</sup>	
	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region
Kenosha .....	40,100	6.2	40,000	5.3	50,100	5.7	46,500	4.7	50,200	4.9
Milwaukee .....	486,200	75.0	507,100	67.3	542,300	61.3	578,200	58.4	567,300	55.6
Ozaukee .....	9,500	1.5	19,800	2.6	25,600	2.9	32,200	3.3	37,000	3.6
Racine .....	48,500	7.5	62,700	8.3	76,100	8.6	82,200	8.3	81,700	8.0
Walworth .....	18,300	2.8	24,500	3.3	31,100	3.5	37,100	3.7	43,600	4.3
Washington .....	14,500	2.2	23,100	3.1	31,400	3.6	41,800	4.2	45,800	4.5
Waukesha .....	30,800	4.8	76,500	10.1	127,600	14.4	172,300	17.4	195,300	19.1
Region	647,900	100.0	753,700	100.0	884,200	100.0	990,300	100.0	1,020,900	100.0

County	Change in Population									
	1960-1970		1970-1980		1980-1990		1990-1994		1960-1994	
	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent	Absolute	Percent
Kenosha .....	-100	-0.2	10,100	25.3	-3,600	-7.2	3,700	8.0	10,100	25.2
Milwaukee .....	20,900	4.3	35,200	6.9	35,900	6.6	-10,900	-1.9	81,100	16.7
Ozaukee .....	10,300	108.4	5,800	29.3	6,600	25.8	4,800	14.9	27,500	289.5
Racine .....	14,200	29.3	13,400	21.4	6,100	8.0	-500	-0.6	33,200	68.5
Walworth .....	6,200	33.9	6,600	26.9	6,000	19.3	6,500	17.5	25,300	138.3
Washington .....	8,600	59.3	8,300	35.9	10,400	33.1	4,000	9.6	31,300	215.9
Waukesha .....	45,700	148.4	51,100	66.8	44,700	35.0	23,000	13.3	164,500	534.1
Region	105,800	16.3	130,500	17.3	106,100	12.0	30,600	3.1	373,000	57.6

<sup>a</sup>Estimated.

Source: Wisconsin Department of Workforce Development, and SEWRPC.

County accelerated after 1950 and has remained rapid since. The 40-year period from 1950 to 1990 saw significant development in the southeastern portion of the County, in what is now the Village and Town of Germantown and Town of Richfield, essentially as an outward expansion of the Milwaukee metropolitan area, and continued development, in and around, the Cities of Hartford and West Bend and the other established outlying urban centers. In addition, this period saw a proliferation of scattered urban enclaves, removed from the historic urban centers, in many areas of the County, particularly after 1963.

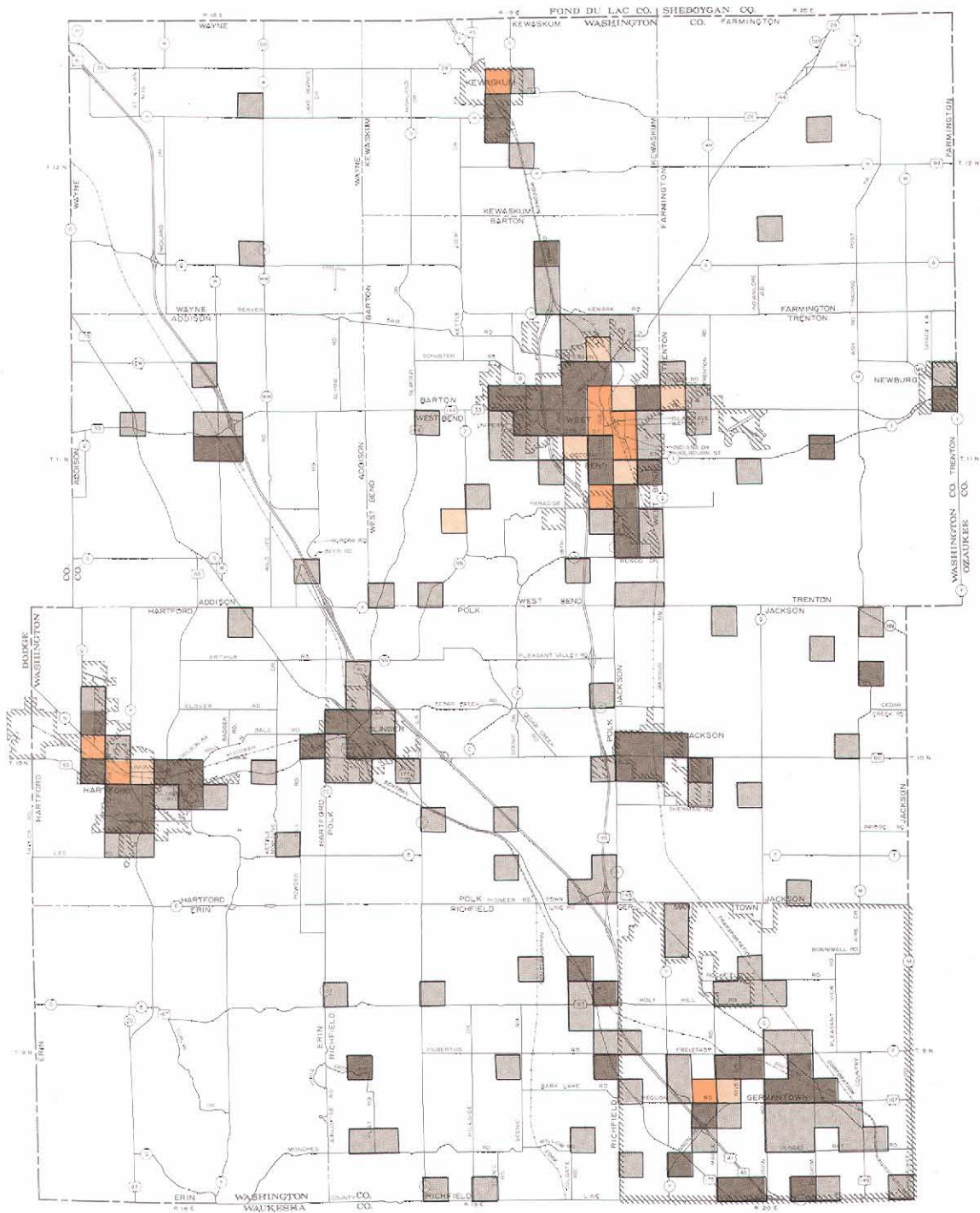
The historic increase in the developed urban land area of the County is quantitatively summarized in Table 11. The steady rate of urban development since 1950 is evident in this table. During the 50-year period from 1900 to 1950, the portion of the County in urban land uses grew from about 0.4 square miles to about 5.5 square miles, an average annual rate of about 0.1 square mile per year. By 1990, the developed area of the County had

increased almost eight-fold and encompassed about 41.1 square miles, an annual average growth rate of about 0.9 square mile per year. The extent of urban development in the County in 1990 is shown on Map 4.

The changes in population densities in the County since 1950 are shown in Table 12. Owing to the threefold increase in total County population between 1950 and 1990, the overall population density of the County increased steadily, from about 72 persons per square mile in 1950 to about 222 persons per square mile in 1990. Population densities in the developed urban areas of the County also increased slightly, from about 4,211 to 4,498 persons per square mile, between 1950 and 1963, as new development continued to occur, largely in, and around, the established urban centers in County. However, with the diffused pattern of urban development which emerged in the County after 1963, the land devoted to urban land uses increased by about 324 percent, while the urban population of the County increased by only 115 percent. Con-

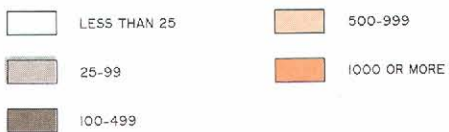
Map 3

EMPLOYMENT DISTRIBUTION IN WASHINGTON COUNTY: 1990

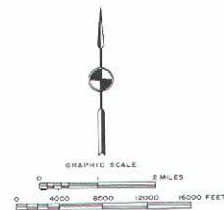


LEGEND

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

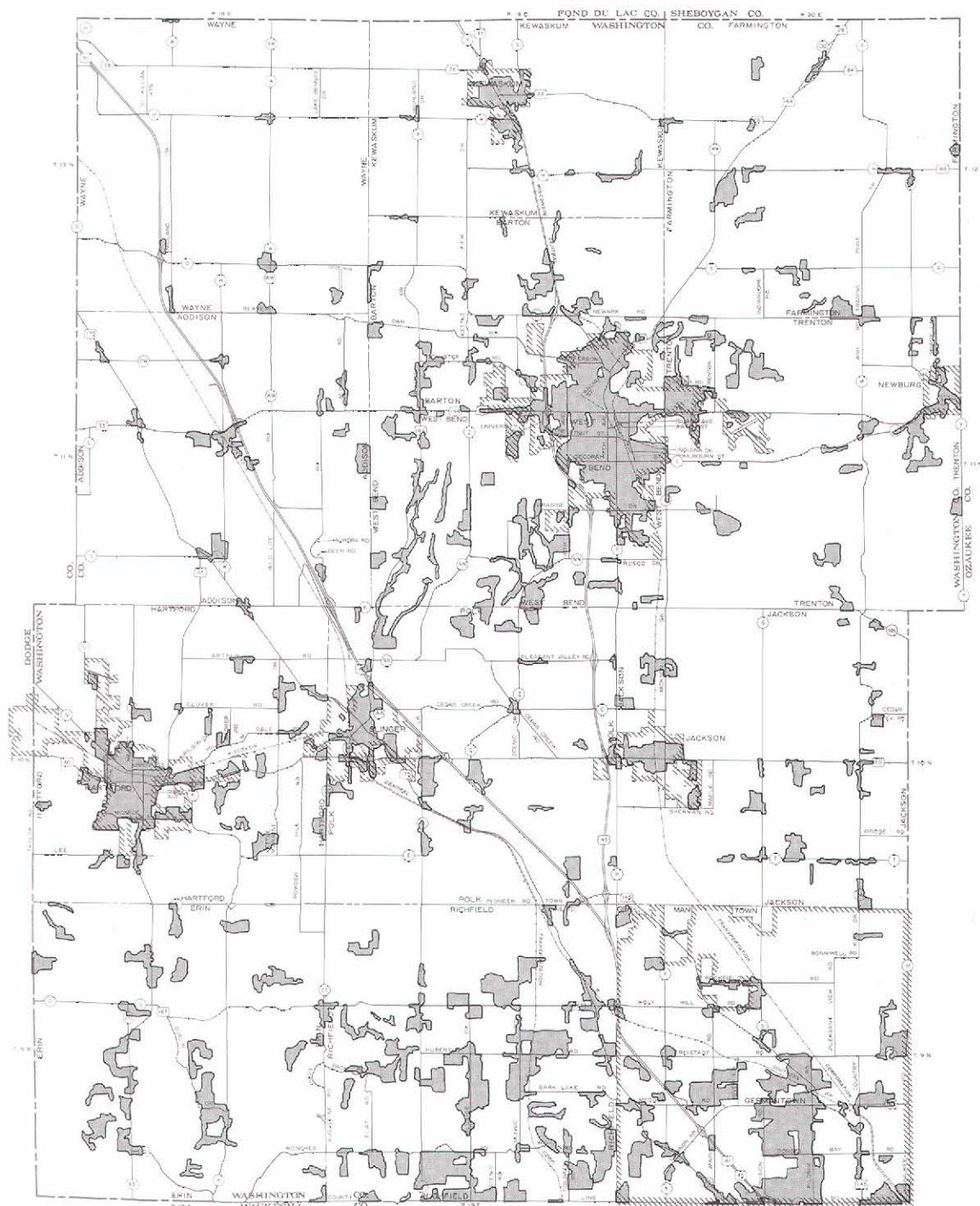


Source: SEWRPC.





### EXTENT OF URBAN DEVELOPMENT IN WASHINGTON COUNTY: 1990

 URBAN DEVELOPMENT

NOTE: URBAN DEVELOPMENT AS DEFINED FOR THE PURPOSES OF THIS ANALYSIS INCLUDES THOSE AREAS OF THE REGION WHEREIN HOUSES OR OTHER BUILDINGS HAVE BEEN CONSTRUCTED IN RELATIVELY COMPACT FORM, THEREBY INDICATING A CONCENTRATION OF RESIDENTIAL, COMMERCIAL, INDUSTRIAL, GOVERNMENTAL OR INSTITUTIONAL LAND USES. THE CONTINUITY OF SUCH DEVELOPMENT WAS CONSIDERED INTERRUPTED IF A QUARTER MILE OR MORE OF NONURBAN TYPE LAND USES SUCH AS AGRICULTURE, WOODLANDS, OR WETLANDS PREVAILED IN WHICH THE ABOVE CONDITIONS WERE GENERALLY ABSENT.

Source: SEWRPC.

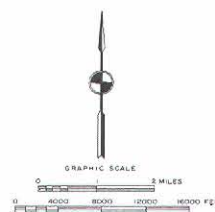


Table 11

## HISTORIC URBAN GROWTH IN WASHINGTON COUNTY: 1900-1990

Year	Urban Development <sup>a</sup>			
	Total Area in Square Miles	Change from Previous Time Date		Average Annual Change From Previous Date (square miles)
		Square Miles	Percent	
1900	0.41	--	--	--
1950	5.53	5.12	1,250.0	0.10
1963	9.67	4.14	74.9	0.32
1970	14.11	4.45	46.0	0.64
1980	30.28	16.17	114.6	1.62
1990	41.11	10.83	35.8	1.08

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

Source: SEWRPC.

Table 12

## POPULATION DENSITY TRENDS IN WASHINGTON COUNTY: 1950-1990

Year	Urban Population <sup>a</sup>		Rural Population		Total Population	Area (square miles)		Persons per Square Mile	
	Number	Percent of Total	Number	Percent of Total		Urban Development <sup>b</sup>	Total County	Urban Development <sup>b</sup>	Total County
1950	23,274	68.7	10,628	31.3	33,902	5.5	429.6	4,211	79
1963	43,479	84.5	7,955	15.5	51,434	9.7	429.6	4,498	120
1970	57,160	89.5	6,677	10.5	63,837	14.1	429.6	4,051	149
1980	81,955	96.6	2,893	3.4	84,848	30.3	429.6	2,707	198
1990	93,339	97.9	1,989	2.1	95,328	41.1	429.6	2,271	222

<sup>a</sup>Includes urban and "rural nonfarm" population.

<sup>b</sup>For the purposes of this analysis, areas of urban development were defined to include those areas of the Region wherein houses or other buildings have been constructed in relatively compact groups, thereby indicating a concentration of residential, commercial, industrial, governmental, or institutional land uses. The continuity of such development was considered interrupted if a quarter-mile area or more of nonurban land uses, such as agriculture, woodlands, or wetlands, prevailed in which the above conditions were generally absent.

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

sequently, the urban population density declined dramatically, dropping to about 2,271 persons per square mile by 1990, or about one-half the 1963 level.

In 1990, the developed area of the County encompassed about 10 percent of the total County area, with the remaining 90 percent of the County still in open, rural land uses. The future pattern of development will be an important determinant of the future need for transit service and of the viability of any public transit services in the County.

Continued increases in residential and commercial development in the County occurred after 1990 and may be expected in the near future based upon recent development trends and proposals. Table 13 and Map 5 identify significant residential and commercial developments in the County that occurred after 1990 and were under construction or had been proposed as of October 1995.

#### Major Potential Transit Trip Generators

The need to serve the local travel demand generated by major potential transit trip generators must also



Table 13

## NEW OR PROPOSED DEVELOPMENT IN WASHINGTON COUNTY: 1990-1995

Number on Map 5	Development by Civil Division <sup>a</sup>	Number of Housing Units	Type of Housing	Status
1	Town of Wayne Residential Fairview Heights .....	20	Single-family	Existing platted subdivision
2	Village of Kewaskum Residential Sunset Estates .....	N/A	Single-family	Existing platted subdivision
3	Pheasant Run .....	11	Single- and multi-family	Existing platted subdivision
4	Multi-family - Kewaskum .....	32	Multi-family	Under construction
5	Rustic Timbers .....	65	Multi-family	Completed
6	North Park Estates .....	N/A	Multi-family	Completed
7	Creekview Estates .....	11	Single-family	Existing platted subdivision
8	Commerical/Industrial Sentry Relocation .....	--	--	Proposed
9	Town of Farmington Residential Star Valley Addition Number One ....	11	Single-family	Existing platted subdivision
10	Town of Addison Residential Riverview Court .....	13	Single-family	Existing platted subdivision
11	City of West Bend Residential Beaver Hollow Subdivision .....	29	Single-family	Existing platted subdivision
12	Parkside Village .....	73	Single-family	Existing platted subdivision
13	Villa Park Addition Number Two ....	41	Single-family	Existing platted subdivision
14	Green Tree Estates .....	37	Single- and two-family	Existing platted subdivision
15	Royal Oaks and Additions .....	64	Single-family	Existing platted subdivision
16	Gatewood Highlands Addition Number Five .....	35	Single-family	Existing platted subdivision
17	Fox Ridge Addition Number One ....	56	Single-family	Existing platted subdivision
18	Vogt Estates South .....	76	Single-family	Existing platted subdivision
19	Hidden Fields .....	30	Single-family	Existing platted subdivision
20	Commons of Ridgeway .....	16	Single-family	Existing platted subdivision
21	South Meadows Estates Subdivision .....	13	Single-family	Existing platted subdivision
22	Minz Park Subdivision .....	31	Single-family	Existing platted subdivision
23	Crestwood Subdivision .....	12	Single-family	Existing platted subdivision
24	Schoenen Hof .....	11	Single-family	Existing platted subdivision
25	Valley Creek Estate Condos .....	24	Two-family	Existing platted subdivision
26	Devon Shire Village Condos .....	142	Multi-family	Existing platted subdivision
27	Michels Subdivision .....	32	Single- and two-family	Existing platted subdivision
28	West Bend Highlands .....	82	Single-family	Existing platted subdivision
29	Rolling Hills .....	29	Single-family	Existing platted subdivision
30	Stonefield Apartments .....	N/A	Multi-family	Completed
31	Commerical/Industrial Blue Dog Golf .....	--	--	Completed
32	Paradise Theater .....	--	--	Completed
33	West Bend Industrial Park-South ....	--	--	Under development
34	West Bend Mutual Insurance Company .....	--	--	Completed
35	Town of West Bend Residential Cedar Bay .....	--	Multi-family	Completed

Table 13 (continued)

Number on Map 5	Development by Civil Division <sup>a</sup>	Number of Housing Units	Type of Housing	Status
36	Town of Trenton Commerical/Industrial Serigraph, Inc. ....	--	--	Under development
37	Village of Newburg Residential Newburg Highlands .....	19	Single-family	Existing platted subdivision
38	Barton Salisbury Meadows Addition Number One .....	16	Single-family	Existing platted subdivision
39	Town of Hartford Residential Edgewood Additions .....	64	Single-family	Existing platted subdivision
40	Countyside Farms Replat First Addition .....	18	Single-family	Existing platted subdivision
41	Erhardt Estates .....	N/A	Single-family	Proposed
42	City of Hartford Residential Hidden Creek and Additions .....	68	Single-family	Existing platted subdivision
43	Park Knoll Estates .....	38	Single-family	Existing platted subdivision
44	Whispering Winds .....	20	Single-family	Existing platted subdivision
45	Cherry Hill and Additions .....	28	Single-family	Existing platted subdivision
46	Lake View Acres First Addition .....	33	Single-family	Existing platted subdivision
47	Monroe Park Addition Number One .....	13	Single-family	Existing platted subdivision
48	Hartford Square Condominiums .....	188	Multi-family	Proposed
49	Chapel Hill .....	108	Single-family	Proposed
50	Commerical/Industrial Dodge Industrial Park .....	--	--	Under development
51	Sentry and Kmart Plaza .....	--	--	Completed
52	Western Industrial Park .....	--	--	Completed
53	Mercury Marine .....	--	--	Proposed
54	Town of Polk Residential Hanes Single-Family .....	N/A	Single-family	Proposed
55	Multi-Family - Polk .....	N/A	Multi-family	Proposed
56	Village of Slinger Residential Elinor's Estates and Additions .....	58	Single- and multi-family	Existing platted subdivision
57	Baron Condos .....	20	Multi-family	Under development
58	Baumgardner Development .....	150	Single- and two-family	Under development
59	Commerical/Industrial Aurora Health Center .....	--	--	Completed
60	Enders Industrial Park .....	--	--	Under development
61	Hanke Industrial Area .....	--	--	Under development
62	Overlook Drive Commercial Development .....	--	--	Under development
63	Slinger Industrial Area .....	--	--	Under development
64	Strip Shopping Mall .....	--	--	Proposed
65	Village of Jackson Residential Highland Meadows Addition Number One .....	13	Single-family	Existing platted subdivision
66	Westfield Subdivision .....	28	Single-family	Existing platted subdivision
67	Parkside Additions .....	45	Single-family	Existing platted subdivision
68	Glen Brooke of Jackson .....	199	Single-family	Existing platted subdivision
69	Pinehurst and Additions .....	95	Single-family	Existing platted subdivision

Table 13 (continued)

Number on Map 5	Development by Civil Division <sup>a</sup>	Number of Housing Units	Type of Housing	Status
	<b>Village of Jackson (continued)</b>			
	<b>Commerical/Industrial</b>			
70	Cedar Creek Business Park .....	--	--	Under development
71	Mixed Commercial Development ....	--	--	Completed
72	Jackson Industrial Park .....	--	--	Under development
	<b>Town of Erin</b>			
	<b>Residential</b>			
73	William L. Lofy and Additions .....	40	Single-family	Existing platted subdivision
	<b>Town of Richfield</b>			
	<b>Residential</b>			
74	Heavenly View Estates .....	30	Single-family	Existing platted subdivision
75	Greystone Fields .....	17	Single-family	Existing platted subdivision
76	White Pine Estates .....	44	Single-family	Existing platted subdivision
77	Pioneer Heights First Addition .....	16	Single-family	Existing platted subdivision
78	Wolf Run .....	34	Single-family	Existing platted subdivision
79	Holy Hill Estates .....	41	Single-family	Existing platted subdivision
80	Park View Estates .....	45	Single-family	Existing platted subdivision
81	Raebel Acres .....	19	Single-family	Existing platted subdivision
82	Stonegate Subdivision .....	18	Single-family	Existing platted subdivision
83	Wooded Ridge Estates .....	63	Single-family	Existing platted subdivision
84	Misty Meadows Estates .....	15	Single-family	Existing platted subdivision
85	St. Augustine Estates .....	38	Single-family	Existing platted subdivision
	<b>Village of Germantown</b>			
	<b>Residential</b>			
86	Rosewood/Rosewood II .....	28	Single-family	Existing platted subdivision
87	Brownstone .....	19	Single-family	Existing platted subdivision
88	High Pointe .....	35	Single-family	Existing platted subdivision
89	Bel Aire .....	11	Single-family	Existing platted subdivision
90	Heritage Hills and Additions .....	138	Single-family	Existing platted subdivision
91	Wooded Hills .....	95	Single-family	Existing platted subdivision
92	Brook Hollow .....	83	Single-family	Existing platted subdivision
93	Willow Wood .....	21	Single-family	Existing platted subdivision
94	Lone Oaks .....	97	Single-family	Existing platted subdivision
95	County Meadows .....	70	Single-family	Existing platted subdivision
96	Country Meadows West .....	69	Single-family	Existing platted subdivision
97	Kostermans Garden .....	11	Single-family	Existing platted subdivision
98	Suunyberry Downs .....	90	Single-family	Existing platted subdivision
99	Windsong at Germantown .....	115	Single-family	Existing platted subdivision
100	Deer Ridge Estates .....	10	Single-family	Existing platted subdivision
101	Stonehedge Apartments .....	176	Multi-family	Completed
102	The Preserve and Additions .....	145	Single-family	Existing platted subdivision
103	Bernhardt Housing Project .....	95	Multi-family	Proposed
104	Autum Ridge .....	136	Single- and two-family	Proposed
105	Oakwood Village .....	44	Two-family	Completed
106	Ashbury Woods .....	115	Multi-family	Completed
	<b>Commerical/Industrial</b>			
107	Germantown Marketplace Shopping Center .....	--	--	Completed
108	Germantown Industrial Park .....	--	--	Under development
109	Germantown Industrial Park East ....	--	--	Proposed

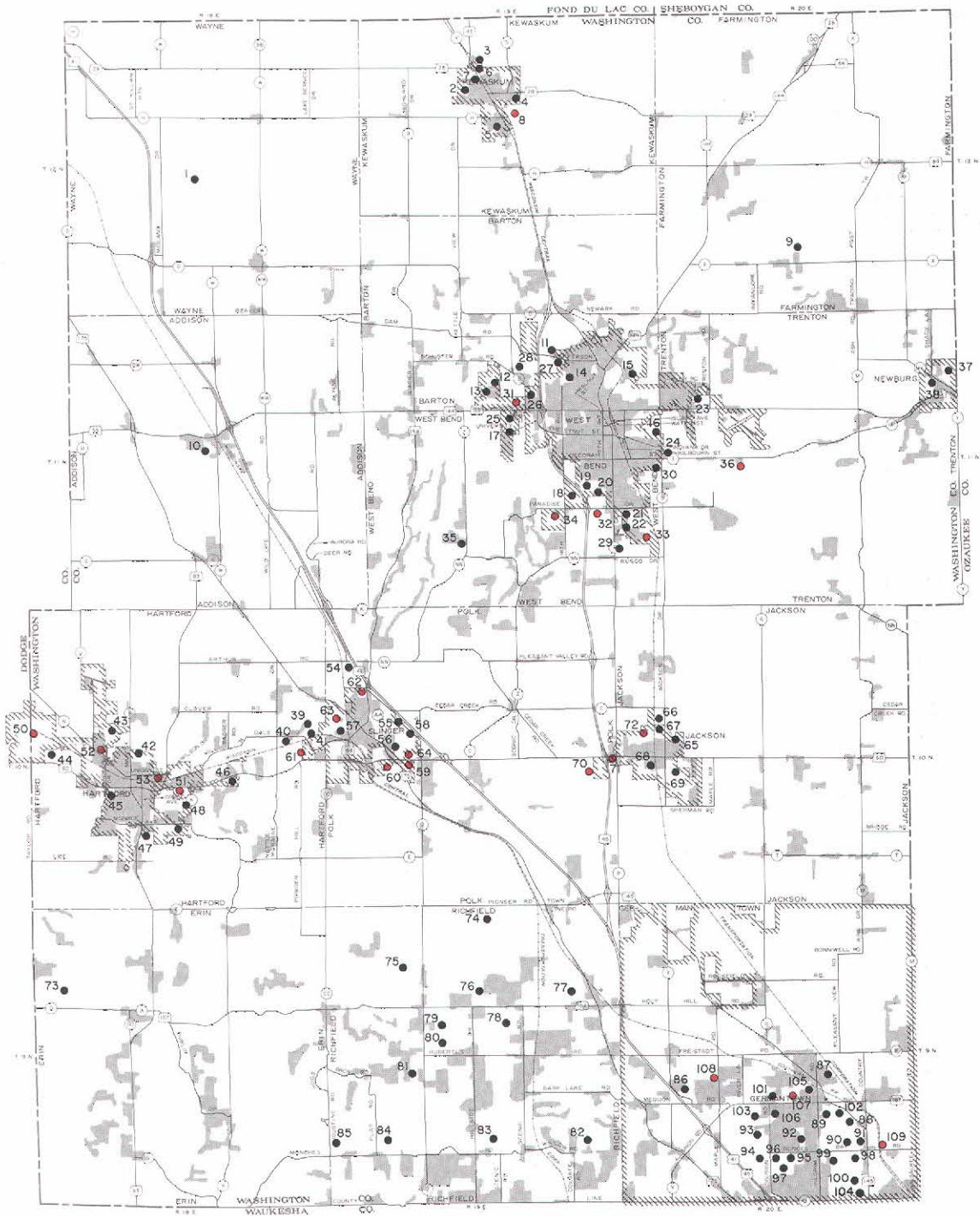
N/A Not applicable.

<sup>a</sup>Residential development in this table includes only that with 10 or more lots or housing units.

Source: SEWRPC.

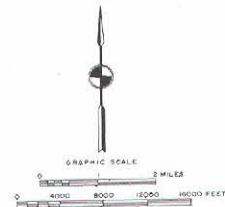
Map 5

NEW OR PROPOSED DEVELOPMENT IN WASHINGTON COUNTY: 1990-1995



LEGEND

- RESIDENTIAL DEVELOPMENT
- COMMERCIAL/INDUSTRIAL DEVELOPMENT
- 109 IDENTIFICATION NUMBER (SEE TABLE 13)
- URBAN DEVELOPMENT: 1990



Source: SEWRPC.

be considered in any transit service planning effort. For transit planning purposes, two basic categories of potential transit trip generators were identified. The first includes facilities serving the elderly, low-income, and disabled transit-dependent population groups. The nature of the population using the identified types of facilities under this category could be expected to generate significant transit use. The second includes specific land uses or concentrations of such land uses which attract a large number of person trips and thus have the potential to attract a relatively large number of transit trips. The major transit trip generators identified within each category are described in the following sections.

#### Transit-Dependent-Population Trip Generators:

Although Census data can be used to provide a general indication of the residential location of transit-dependent persons, it was also considered important to identify specific locations of facilities used by, or serving, transit-dependent groups. Facilities serving the elderly, the disabled, and the low-income transit-dependent population groups were subsequently identified within the County for the year 1995. Places frequently used by the elderly for purposes of care and recreation and the locations of retirement homes, elderly housing complexes, and meal sites are listed in Table 14. The sites frequently used by disabled individuals for housing or residential care, rehabilitation or training, or educational purposes are listed in Table 15. Finally, the locations of special Federally subsidized rental housing for low-income families and individuals are listed in Table 16. The locations of these transit-dependent-population trip generators in the County in 1995 are shown on Map 6.

Major Land Use Trip Generators: For public transit planning purposes, the following types of land uses were identified as major potential transit trip generators within the County: 1) major commercial centers, 2) educational institutions, 3) community and special medical centers, 4) governmental and public institutional centers, 5) major employers, and 6) major recreational areas. The locations of the major land-use trip generators identified within the County in 1995 are shown on Map 7. The specific trip generators identified under each type of land use are discussed below, along with the identification criteria.

Major Commercial Centers: For transit planning purposes, three categories of commercial centers were identified as potential major transit trip generators. The first category consisted of major

regional commercial centers as defined by the Commission, including retail centers and office centers. Major retail centers were defined as concentrations of employment having at least 2,000 jobs in the retail trade sector. Major office centers are defined as concentrations of employment having at least 3,500 jobs in the office and service sectors. While no existing major regional retail commercial centers were identified within the County in 1995, the West Bend central business district was identified as a major office commercial center. The Northridge Shopping Center, which is located in neighboring Milwaukee County, approximately four miles southeast of Washington County, is the closest major retail commercial center which will be expected to attract a large number of daily trips from within Washington County.

The second category of commercial centers identified consisted of major community shopping areas, which were defined as concentrations of retail and service establishments which typically include a junior department store, variety store, or discount store along with a supermarket. Such shopping areas are generally located on sites of 15 to 60 acres with a gross leasable floor space of between 150,000 and 400,000 square feet. It should be noted that a number of business in one of the major community shopping areas identified, the County Line Road (CTH Q) commercial area, are located in the Village of Menomonee Falls in Waukesha County. However, this shopping area may be expected to attract a significant number of shopping trips from the southeastern portion of Washington County.

The third category, minor community shopping areas, were defined as concentrations of retail and service establishments which typically included a grocery store or supermarket and such other establishments as drugstores, hardware stores, dry cleaners, and other service-oriented businesses that are intended to conveniently serve the day-to-day shopping and service needs of nearby residents. Such shopping areas are generally located on sites of three to 15 acres with between 50,000 and 150,000 square feet of gross leasable floor space.

The commercial centers identified within the County in 1995 are listed in Table 17.

Educational Institutions: The education facilities within the County identified as potential transit trip generators for this study included colleges and universities; public high schools, middle schools, and selected elementary schools; and private and parochial schools. Colleges and universities were

Table 14

## FACILITIES FOR THE ELDERLY IN WASHINGTON COUNTY: 1995

Number on Map 6	Facility	Address
	<b>Residential Care/Day Care Facilities</b>	
1	Almost Home Adult Day Care .....	1032 E. Sumner Street, Hartford
2	Cedar Lake Home Campus .....	5595 CTH Z, West Bend
3	Elderserve Adult Day Care .....	140 N. 7th Avenue, West Bend
4	Hartford Care Center .....	1202 E. Sumner Street, Hartford
5	The Samaritan Home .....	531 E. Washington Street, West Bend
	<b>Residential Facilities/Apartment Complexes</b>	
6	Becker Manor .....	N114 W16045 Sylvan Circle, Germantown
7	Cedar Bay .....	5555 CTH Z, West Bend
8	Cedar Ridge Retirement Campus .....	101-125 Cedar Ridge Drive, West Bend
9	The Embassy .....	125 University Drive, West Bend
10	Everly House .....	N168 W22022 Main Street, Jackson
11	Friedenheim .....	227-229 E. Washington Street, Slinger
12	Friendship Manor .....	109 Lone Oak Lane, Hartford
13	Friendship Manor .....	111 Lone Oak Lane, Hartford
14	Harthaven .....	33 High Street, Hartford
15	Hawthorne Manor Apartments <sup>a</sup> .....	275 W. Decorah Road, West Bend
16	Hawthorne Manor .....	321 Hawthorne Drive, West Bend
17	Jackson Bay Apartments <sup>b</sup> .....	N168 W21920 W. Main Street, Jackson
18	Mapledale Manor of Kewaskum <sup>c</sup> .....	1038-1042 Fond du Lac Avenue, Kewaskum
19	Mapledale Manor of Slinger .....	208 E. Washington Street, Slinger
20	Meadow Creek Apartments <sup>b</sup> .....	1119 Roseland Drive, Kewaskum
21	Meadowbrook Manor <sup>b</sup> .....	475 Meadowbrook Drive, West Bend
22	Millpond Apartments .....	1533 Honeysuckle Road, Hartford
23	Park Place Condominiums .....	530 N. Silverbrook Drive, West Bend
24	Regency Manor Apartments .....	6785 Diane Drive, Newburg
25	Scenic View Manor <sup>b</sup> .....	205 Slinger Road, Slinger
26	Sunset Home of Allenton .....	406 Weis Street, Allenton
27	Sunset Home .....	831 E. Washington Street, West Bend
28	Stonefield Apartments .....	840 Weinert Road, West Bend
29	Touchstone on Summit .....	750 Summit Drive, West Bend
30	Tri-Manor Ltd. ....	1937 N. Main Street, West Bend
31	Tri-Manor Ltd. ....	428 Forest Street, Hartford
32	University Apartments .....	230 University Drive, West Bend
33	Wellington Place .....	615 Hilldale Drive, Hartford
	<b>Senior Centers</b>	
34	Germantown Activity Center <sup>b</sup> .....	W162 N11960 Park Avenue, Germantown
35	Hartford Senior Center <sup>b</sup> .....	730 Highland Avenue, Hartford
36	Hartford Recreation Department .....	525 N. Main Street, Hartford
37	Washington County Senior Center <sup>b</sup> .....	401 E. Washington Street, West Bend
	<b>Nutrition Sites</b>	
38	Jackson Town Hall .....	3146 Division Road, Jackson

<sup>a</sup>Site contains assisted living apartments only.

<sup>b</sup>Also serves as a nutrition site.

<sup>c</sup>Site also contains assisted-living apartments.

Source: SEWRPC.

identified because they usually have the large enrollments and may also have resident students with limited access to an automobile. High schools and middle schools were identified because students at this level often are involved in extracurricular

activities or have part-time jobs after school and may be in need of transportation beyond that provided by the local school district or their families. Selected elementary schools, including public as well as private and parochial schools, were also

Table 15

## FACILITIES FOR THE DISABLED IN WASHINGTON COUNTY: 1995

Number on Map 6	Facility	Address
1	Residential Care or Housing Facility	
2	Columbus House .....	5096 Valley Trail, West Bend
3	Drake House .....	1716 Hans Street, West Bend
4	Magellan House .....	4737 Susan Lee Court, West Bend
5	REM Home .....	N116 W16105 Main Street, Germantown
6	REM Home of Hartford .....	862-866 James Court, Hartford
7	REM Home of West Bend .....	505 Meadowbrook Drive, West Bend
8	Washington Street Group Home .....	125 E. Washington Street, West Bend
	West Bend Group Home .....	233 S. 17th Avenue, West Bend
9	Rehabilitation, Training, Employment Facilities	
10	Cedar Haven Rehabilitation Agency .....	5595 CTH Z, West Bend
11	Lutheran Social Service <sup>a</sup> .....	140 N. 7th Avenue, West Bend
12	Moraine Park Technical Institute .....	2151 N. Main Street, West Bend
	The Threshold, Inc. ....	600 N. Rolfs Road, West Bend
13	Referral Agency	
	Comprehensive Community Services	
	Agency of Washington County .....	333 E. Washington Street, West Bend

<sup>a</sup>Agency also provides referral services.

Source: Comprehensive Community Services Agency of Washington County and SEWRPC.

Table 16

## FEDERALLY ASSISTED RENTAL HOUSING FACILITIES IN WASHINGTON COUNTY: 1995

Number on Map 6	Housing Facility <sup>a</sup>	Address
1	Arbor Trace Apartments .....	601 E. Decorah Road, West Bend
2	Dartford Bay Apartments .....	1194-1196 Brooklane Drive, Kewaskum
3	Hartford Highlands Apartments .....	665 E. Monroe Avenue, Hartford
4	Park Hartford Apartments .....	827-841 Evergreen Drive, Hartford
5	Partners Meadowview Townhouses .....	11-47 E. Monroe Avenue, Hartford
6	Timber Ridge Apartments .....	783 Timberline Trail, Hartford
7	Washington Manor .....	N114 W16080 Sylvan Circle, Germantown

<sup>a</sup>The facilities shown are primarily for low-income families. Nine housing facilities for the elderly shown in Table 14 are also low-income housing facilities: Becker Manor, Harthaven, Jackson Bay Apartments, Meadow Creek Apartments, Meadowbrook Manor, Millpond Apartments, Regency Manor Apartments, and University Apartments.

Source: Wisconsin Housing and Economic Development Authority and SEWRPC.

identified if their enrollment included students in middle school grades. Most public elementary schools were not considered major potential transit trip generators for the purpose of this study because their students generally have fewer school-sponsored after-school activities, typically live in relatively close proximity to the school, which permits them to travel by walking or bicycling, or are likely to have transportation regularly provided by the local school district or by their families. The

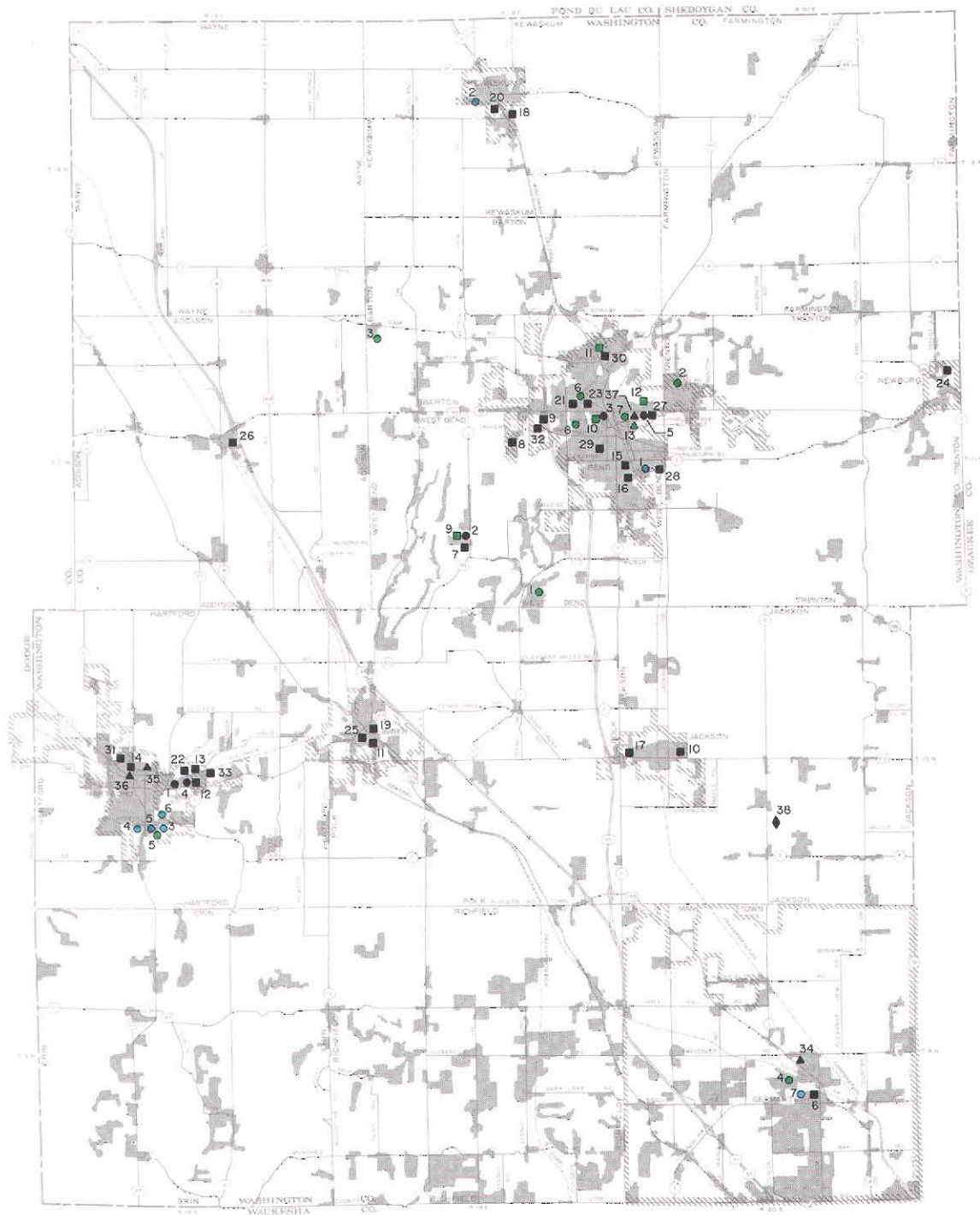
educational institutions identified as major potential transit trip generators in 1995 are listed in Table 18.

**Medical Centers:** For transit planning purposes, community and special medical centers were identified as potential major transit trip generators. A community medical center was defined as a hospital with at least 100 beds providing both in- and out-patient facilities and laboratory and clinical ser-



Map 6

MAJOR-TRANSIT-DEPENDENT-POPULATION TRIP GENERATORS IN WASHINGTON COUNTY: 1995



LEGEND

FACILITIES FOR THE ELDERLY  
(SEE TABLE 14)

- 5 ● RESIDENTIAL CARE-DAY CARE FACILITY
- 33 ■ RESIDENTIAL FACILITY-APARTMENT COMPLEX
- 37 ▲ SENIOR CENTER
- 38 ◆ NUTRITION SITE

FACILITIES FOR THE DISABLED  
(SEE TABLE 15)

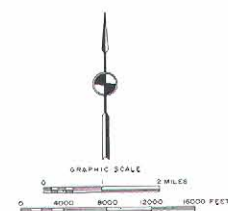
- 8 ● RESIDENTIAL CARE-HOUSING FACILITY
- 12 ■ REHABILITATION-TRAINING-EMPLOYMENT FACILITY
- 13 ▲ REFERRAL FACILITY

FEDERALLY ASSISTED RENTAL HOUSING  
(SEE TABLE 16)

- 7 ● HOUSING FACILITY

URBAN DEVELOPMENT

1990

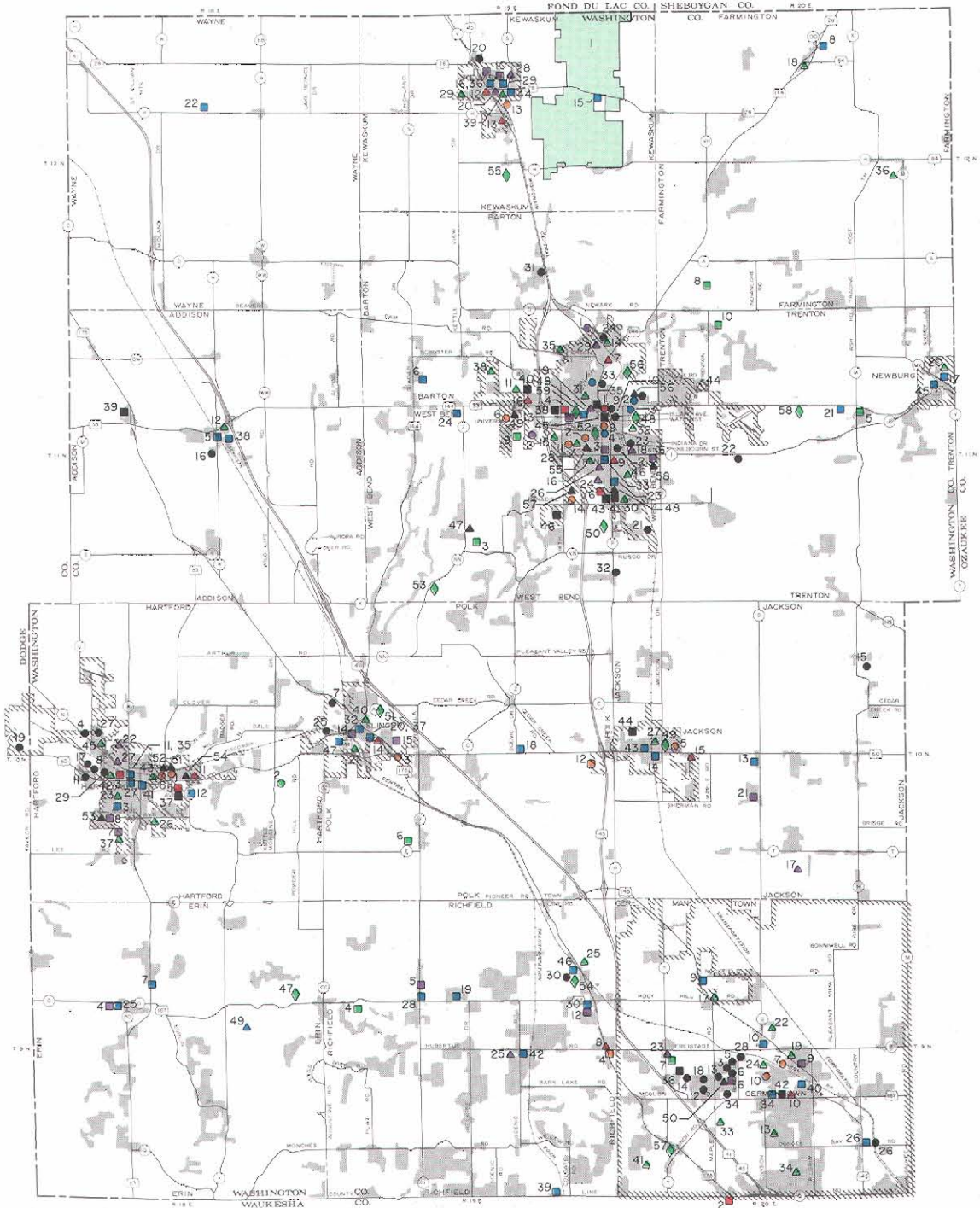


Source: SEWRPC.



Map 7

MAJOR LAND-USE TRIP GENERATORS IN WASHINGTON COUNTY: 1995



LEGEND

COMMERCIAL CENTER  
(SEE TABLE 17)

- 1 ● REGIONAL
- 6 ■ MAJOR COMMUNITY
- 16 ▲ MINOR COMMUNITY

EDUCATIONAL CENTER  
(SEE TABLE 18)

- 2 ● UNIVERSITIES AND COLLEGES
- 16 ■ PUBLIC ELEMENTARY, MIDDLE, AND HIGH SCHOOLS
- 29▲ PAROCHIAL AND PRIVATE SCHOOLS

MEDICAL CENTERS  
(SEE TABLE 19)

- 2 ● COMMUNITY MEDICAL CENTER
- 14 ■ SPECIAL MEDICAL CENTER

GOVERNMENTAL AND PUBLIC INSTITUTIONAL  
CENTER (SEE TABLE 20)

- 4 ● REGIONAL AND COUNTY
- 48■ COMMUNITY
- 49▲ SPECIAL

MAJOR EMPLOYERS (SEE TABLE 21)

- 34 ● INDUSTRIAL/MANUFACTURING
- 46■ RETAIL/SERVICE
- 58▲ GOVERNMENTAL/INSTITUTIONAL

RECREATIONAL AREAS  
(SEE TABLE 25)

- 1 ■ STATE FOREST (REGIONAL)
- 2 ● PARK (REGIONAL)
- 10 ■ COUNTY
- 46■ COMMUNITY
- 59■ OTHER

URBAN DEVELOPMENT

- 1990

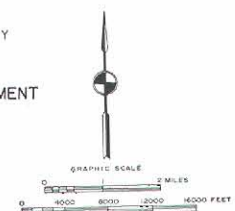


Table 17

## COMMERCIAL CENTERS IN WASHINGTON COUNTY: 1995

Number on Map 7	Commercial Center or Area	Location
1	Regional West Bend Central Business District .....	N. and S. Main Street between 8th Avenue and Walnut Street, West Bend
2	Major Community County Line Road (CTH Q) Commercial Area <sup>a</sup> ....	County Line Road between Rivercrest Drive and Bancroft Drive, Germantown and Menomonee Falls
3	Hartford Central Business District .....	N. and S. Main Street between State Street and Kossuth Street, Hartford
4	Kmart and Fleet-Farm Commercial Area .....	W. Washington Avenue between 15th Avenue and 18th Avenue, West Bend
5	Kmart and Sentry Plaza .....	Bell Avenue between Sell Drive and Novak Street, Hartford
6	Paradise Mall and Westfair Mall .....	S. Main Street between Paradise Dr and Butternut Street, West Bend
7	Minor Community Barton Business District .....	Barton Avenue between Main Street and Schmidt Road, West Bend
8	Chalet Shopping Center and Richfield Square and Richfield Plaza .....	STH 175 and Hubertus Road, Richfield
9	Decorah Shopping Center and West Bend Plaza .....	S. Main Street and Decorah Road, West Bend
10	Germantown Marketplace and Washington Square Mall and Village Plaza .....	Mequon Road between Pilgrim Road and Western Avenue, Germantown
11	Hilldale Plaza .....	Sumner Avenue and Hilldale Road, Hartford
12	Kewaskum Downtown Business District .....	Fond du Lac Avenue between Prospect Street and 1st Street; and Main Street between Fond du Lac Avenue and Park View Drive, Kewaskum
13	Kewaskum Mall .....	Fond du Lac Avenue and Timblin Drive, Kewaskum
14	Piggly Wiggly and Jackson Pharmacy and Jackson Professional Building .....	Main Street and Eagle Drive, Jackson
15	Slinger Centre/Village Square Shopping Centers .....	Washington Street between Slinger Road and Oak View Road, Slinger
16	Westwood Mall .....	W. Washington Street and Mall Drive, West Bend

<sup>a</sup>Includes some businesses located just across the Washington-Waukesha line in the Village of Menomonee Falls including the Crossroads and Crossroads on Bancroft Shopping Centers and the Wal-Mart, Target, and Kohls Department Stores, which are all located on the south side of County Line Road.

Source: SEWRPC.

vices. The special medical center category was defined to include all other types of medical centers and special clinics offering multi-specialty medical facilities and services. The major medical facilities identified in the County in 1995 are listed in Table 19. It should be noted that Community Memorial Hospital of Menomonee Falls, which is located in neighboring Waukesha County, approximately two miles south of Washington County, is a major community medical center which may be expected to attract a large number of daily trips from Washington County.

**Governmental and Public Institutional Centers:** Governmental and public institutional centers were considered potential major transit trip generators because they provide services to which every citizen should have ready access. Three types of government and public institutional centers were identified: major regional and County centers, community centers, and special centers. The major regional and County centers identified in 1995 included the facilities representing the seat of Washington County government, the major public library facility for the County, and the local office of the Federal Social

Table 18

## EDUCATIONAL INSTITUTIONS IN WASHINGTON COUNTY: 1995

Number on Map 7	Educational Institutions	Address	Approximate Enrollment
1	Universities and Colleges		
2	Moraine Park Technical Institute .....	2151 N. Main St., West Bend	4,340
	University of Wisconsin-Washington County .....	400 University Drive, West Bend	630
3	Public Elementary, <sup>a</sup> Middle, and High Schools		
4	Badger Middle School .....	710 S. Main Street, West Bend	910
5	Erin Elementary School .....	6901 CTH O, Hartford	320
6	Friess Lake School .....	1750 CTH J, Hubertus	220
7	Germantown High School .....	W180 N11501 River Lane, Germantown	1,080
8	Hartford Central Middle School .....	1100 Cedar Street, Hartford	540
9	Hartford Union High School .....	805 Cedar Street, Hartford	1,520
10	Kennedy Middle School .....	W160 N11836 Crusader Court, Germantown	790
11	Kewaskum High School .....	1510 Bilgo Lane, Kewaskum	650
12	Kewaskum Middle School .....	1676 Reigle Drive, Kewaskum	430
13	Richfield Elementary School .....	3117 STH 167, Richfield	310
14	Silverbrook Middle School .....	120 N. Silverbrook Drive, West Bend	660
15	Slinger High School .....	209 E. Washington, Slinger	720
16	Slinger Middle School .....	521 Olympic Drive, Slinger	570
	West Bend East and West High Schools .....	1305 E. Decorah Road, West Bend	2,370
17	Parochial and Private Schools <sup>b</sup>		
18	David's Star Evangelical Lutheran School .....	2750 David's Star Drive, Jackson	260
19	Good Shepherd Lutheran School .....	777 S. Indiana Avenue, West Bend	240
20	Holy Angels Grade School .....	230 N. 8 Avenue, West Bend	450
21	Holy Trinity Grade School .....	305 Main Street, Kewaskum	160
22	Kettle Moraine Lutheran High School .....	3399 Division Road, Jackson	300
23	Peace Lutheran Evangelical Lutheran School .....	1025 Peace Lutheran Drive, Hartford	200
24	Saint Boniface Grade School .....	W204 M11940 Goldendale Road, Germantown	140
25	Saint Frances Cabrini School .....	529 Hawthorne Drive, West Bend	420
26	Saint Hubert Grade School .....	3727 Hubertus Road, Hubertus	150
27	Saint John's Lutheran School .....	899 S. 6 Avenue, West Bend	320
28	Saint Kilian School .....	245 High, Hartford	270
29	Saint Lucas Grade School .....	1417 Parkview Drive, Kewaskum	150
	Saint Mary Immaculate Conception School .....	415 Roosevelt Drive, West Bend	180

<sup>a</sup> Includes only those public elementary schools with grades through Grade 8.

<sup>b</sup> Includes only those private and parochial elementary schools with enrollment of 100 or more students with grades through Grade 8.

Source: SEWRPC.

Security Administration. The community centers identified included the seats of government of all the cities, villages, and towns in the County and such other governmental or public facilities as school district offices, local public libraries, and post offices. The only special center identified was Holy Hill, a religious center of importance to tourists. The governmental and public institutional centers are listed in Table 20.

**Major Employers:** Commuting trips, that is, trips from home to work and return, constitute a significant portion of all person trips within the Washing-

ton County. It is, therefore, important for transit planning purposes to identify the major employers within the County as major potential transit trip generators. The major employers identified for this study included 39 employers with 44 individual workplaces who were required to submit Employee Commute Options (ECO) plans to the Wisconsin Department of Natural Resources in accordance with a requirement of the Federal Clean Air Act Amendments of 1990. Such employers include those with 100 or more employees at an individual workplace. The major employers also included 13 other employers with 14 individual workplaces with 100

Table 19

## COMMUNITY AND SPECIAL MEDICAL CENTERS IN WASHINGTON COUNTY: 1995

Number on Map 7	Medical Centers	Address
1	Community Medical Centers <sup>a</sup>	
2	Hartford Memorial Hospital .....	1032 E. Sumner Street, Hartford
	St. Joseph's Community Hospital .....	551 S. Silverbrook Drive, West Bend
3	Special Medical Centers	
4	Aurora Health Center .....	1061 STH 60 East, Slinger
5	Falls Medical Group of Hubertus .....	1274 STH 175, Hubertus
6	General Clinic of Jackson .....	N168 W20060 Main Street, Jackson
7	General Clinic of West Bend, Inc. ....	205 Valley Avenue, West Bend
8	Germantown Family Practice .....	W161 N11629 Church Avenue, Germantown
9	Hartford Parkview Clinic .....	1004 E. Sumner Street, Hartford
10	Kettle Moraine Treatment Center .....	344 S. 6th Avenue, West Bend
11	Medical Associates Health Care .....	W168 N11237 Western Avenue, Germantown
12	Oakbrook Family Physicians, S.C. ....	1201 Oak Street, West Bend
13	West Bend Clinic of Jackson <sup>b</sup> .....	Cedar Creek Business Park, Jackson
14	West Bend Clinic of Kewaskum .....	1040 Fond du Lac Avenue, Kewaskum
	West Bend Clinic, S.C. ....	1700 W. Paradise Drive, West Bend

<sup>a</sup>Not listed in this table is a major community medical center, Community Memorial Hospital, which is located at W180 N8085 Town Hall Road in the Village of Menomonee Falls, approximately two miles south of the Washington-Waukesha County line. Although located in Waukesha County, this facility may be expected to attract a large number of daily trips from Washington County.

<sup>b</sup>Facility under construction, with opening scheduled for Spring 1996.

Source: SEWRPC.

or more employees, who were not required to submit ECO plans because they were exempt from the ECO plan requirement but were considered as major employers for the purposes of this study. Table 21 lists all of the 52 major employers identified for the study, along with the approximate 1995 employment at the 58 worksites identified.

For this study, information was gathered on the home addresses and shift-times of the employees at major employment centers. This information was obtained by Washington County, with assistance from the Commission staff, directly from major employers willing to provide such information. A postcard survey was conducted by the Washington County Economic Development office of all identified major employers. The survey asked whether or not the employer believed it would be useful to have Washington County explore the potential for public transit to serve the work trips made by its employees. Those employers who positively responded to that inquiry were asked to provide information on the home addresses and work hours of their employees at each company worksite.

Table 22 summarizes the responses of the employers to this survey. A total of 33 of the 52 major employers contacted, or about 63 percent, indicated an interest in exploring the provision of transit services to serve employee work trips; 14, or about 27 percent, did not support the concept; and the remaining five, or about 10 percent, did not respond to the survey. Of the 33 employers who responded positively to the inquiry, 27 cooperated by providing information on the home addresses and shift-times of their employees, including 24 of the 39 major employers required to submit ECO plans and three of the 13 other major employers. The 27 employers provided employee address and work-shift information for 32 individual worksites (see Table 21 and Map 8). The 24 responding employers subject to the ECO planning requirements had 29 individual worksites with a total combined employment of approximately 9,400 jobs, including about 7,100 jobs starting or ending between 4:00 a.m. and 10:00 a.m., which includes the hours during which employee travel to work by automobile is to be reduced under work-trip-reduction guidelines. The other three responding employers had a total employment of

Table 20

## GOVERNMENT AND PUBLIC INSTITUTIONAL CENTERS IN WASHINGTON COUNTY: 1995

Number on Map 7	Institutional Center	Address
	<b>Regional and County</b>	
1	Social Security Administration .....	712 Park Avenue, West Bend
2	Washington County Court House .....	432 E. Washington, West Bend
3	Washington County Public Agency Center .....	333 E. Washington, West Bend
4	West Bend Community Memorial Library .....	320 S. 6th Avenue, West Bend
	<b>Community</b>	
	<b>Local Governments</b>	
5	Addison Town Hall .....	127 1st Street, Allenton
6	Barton Town Hall .....	4470 Highview Drive, West Bend
7	Erin Town Hall .....	1846 STH 83, Hartford
8	Farmington Town Hall .....	9422 STH 144, Kewaskum
9	Germantown Town Hall .....	N132 W19051 Rockfield Road, Richfield
10	Germantown Village Hall .....	N122 W17177 Fond du Lac Avenue, Germantown
11	Hartford City Hall .....	109 N. Main Street, Hartford
12	Hartford Town Hall .....	3360 CTH K, Hartford
13	Jackson Town Hall .....	3146 Division Road, Jackson
14	Jackson Village Hall .....	N168 W20733 Main Street, Jackson
15	Kewaskum Town Hall .....	9019 Kettle Moraine Drive, Kewaskum
16	Kewaskum Village Hall .....	204 1st Street, Kewaskum
17	Newburg Village Hall .....	450 Main Street, Newburg
18	Polk Town Hall .....	3680 STH 60, Slinger
19	Richfield Town Hall .....	4128 Hubertus Road, Hubertus
20	Slinger Village Hall .....	220 Slinger Road, Slinger
21	Trenton Town Hall .....	107 STH 33 E., Newburg
22	Wayne Town Hall .....	6030 CTH H, Campbellsport
23	West Bend City Hall .....	1115 S. Main Street, West Bend
24	West Bend Town Hall .....	6355 CTH Z, West Bend
	<b>School Districts<sup>a</sup></b>	
25	Erin Joint School District No. 2 .....	6901 CTH O, Hartford
26	Germantown School District .....	N104 W13840 Donges Bay Road, Germantown
27	Hartford Union High School District .....	23 S. Main Street, Hartford
28	Joint School District No. 11 Friess Lake .....	N1750 CTH J, Hubertus
29	Kewaskum Community School District .....	1450 School, Kewaskum
30	Richfield Joint School District No.1 .....	3117 STH 167, Richfield
31	School District of Hartford Joint No.1 .....	755 S. Rural Street, Hartford
32	School District of Slinger .....	207 E. Washington Street, Slinger
33	West Bend Joint School District No.1 .....	697 S. 5th Avenue, West Bend
	<b>Libraries</b>	
34	Duerrwaechter Memorial Library .....	N112 W16879 Mequon Road, Germantown
35	Hartford Public Library .....	109 N. Main Street, Hartford
36	Kewaskum Public Library .....	204 1st Street, Kewaskum
37	Slinger Public Library .....	220 Slinger Road, Slinger
	<b>U.S. Post Offices</b>	
38	Allenton .....	301 1st Street, Allenton
39	Colgate .....	3392 CTH Q, Colgate
40	Germantown .....	W156 N11301 Pilgrim Road, Germantown
41	Hartford .....	35 E. Sumner, Hartford
42	Hubertus .....	3695 Hubertus Road, Hubertus
43	Jackson .....	N168 W20580 Main, Jackson
44	Kewaskum .....	347 Main Street, Kewaskum
45	Newburg .....	457 Main Street, Newburg
46	Richfield .....	1925 STH 175, Richfield
47	Slinger .....	201 N. Kettle Moraine Drive, Slinger
48	West Bend .....	607 Elm Street, West Bend
	<b>Special</b>	
49	Holy Hill .....	Town of Erin

<sup>a</sup> Only the public school district administrative office locations are listed in this table. Administrative offices for the private and parochial schools are generally located at each school facility. The locations of the principal private and parochial schools in the County in 1995 are identified in Table 18.

Source: SEWRPC.

Table 21

## MAJOR EMPLOYERS IN WASHINGTON COUNTY: 1995

Number on Maps 7 and 8	Employer	Address	Approximate Employment			Registered for Employee Commute Option Program	Provided Employee Home Address and Work-Shift Data <sup>a</sup>
			100-249	250-499	Over 500		
	<b>Industrial/Manufacturing</b>						
1	Amity Leather Products .....	505 Rolfs Road, West Bend		X		X	X
2	Amity Leather Products .....	735 S. Main Street, West Bend	X			X	X
3	Banner Welder, Inc. ....	N117 W18200 Fulton Drive, Germantown	X				
4	Broan Manufacturing Company, Inc. ....	926 W. State Street, Hartford			X	X	X
5	David White, Inc. ....	N11711 River Lane, Germantown	X				
6	Design House, Inc. ....	N11691 River Lane, Germantown	X				
7	Dico, Inc. ....	465 W. Washington Street, Slinger	X			X	
8	Displayone, Menasha Corporation .....	621 Wacker Drive, Hartford	X			X	X
9	Enger-Kress Corporation .....	151 Wisconsin Street, West Bend	X			X	X
10	Gehl Corporation .....	143 Water Street, West Bend		X		X	X
11	Helgessen Industries, Inc. ....	7261 STH 60 West, Hartford	X				X
12	Independent Metals Company, Inc. ....	N115 W18945 Edison Drive, Germantown	X			X	
13	J. W. Speaker Corporation .....	W185 N11315 Whitney Drive, Germantown	X			X	
14	KSM Industries Inc. ....	N115 W19025 Edison Drive, Germantown	X			X	X
15	Level Valley Dairy Company .....	807 Pleasant Valley Road, West Bend	X			X	X
16	Maysteel Corporation .....	6199 CTH W, Allenton		X		X	X
17	Midas International Corporation .....	343 Grant Street, Hartford		X		X	
18	Milwaukee Seasonings, Inc. ....	N114 W18937 Clinton Drive, Germantown	X			X	X
19	Quad/Graphics Inc. ....	1900 West Sumner Street, Hartford		X			X
20	Regal Ware, Inc. ....	1675 Reigle Drive, Kewaskum			X	X	X
21	Serigraph, Inc. ....	2230 Stonebridge Circle, West Bend	X			X	X
22	Serigraph, Inc. ....	1859 Decorah Road, West Bend	X			X	X
23	Serigraph, Inc. ....	760 Indiana Avenue, West Bend	X			X	X
24	Serigraph, Inc. ....	603 Hi Mount Road, West Bend	X			X	X
25	Slinger Manufacturing Company .....	760 Hilldale Road, Slinger	X			X	
26	Smith & Nephew Rolyan .....	N104 W13400 Donges Bay Road, Germantown	X			X	X
27	Steel Craft Corporation .....	1353 Wacker Drive, Hartford	X			X	X
28	Stone Container Company .....	11900 N. River Lane, Germantown	X			X	X
29	W. B. Place .....	368 W. Sumner Street, Hartford	X			X	
30	W. G. Strohwig Tool & Die, Inc. ....	3285 Industrial Road, Richfield	X			X	
31	Weasler Engineering, Inc. ....	7801 STH 45, West Bend	X			X	X
32	Wesbar Corporation .....	4201 CTH P, West Bend	X			X	
33	West Bend Company .....	400 Washington Street, West Bend			X	X	X
34	Zenith Sintered Products, Inc. ....	N112 W18700 Mequon Road, Germantown		X		X	X
	<b>Commercial Retail/Service</b>						
35	B.C. Ziegler and Company .....	215 N. Main Street, West Bend	X			X	X
36	F. Dohmen Company .....	W194 N1181 McCormick Drive, Germantown	X				
37	Kmart Corporation .....	1275 Bell Avenue, Hartford	X				
38	Kmart Corporation .....	230 North 18th Avenue, West Bend	X				
39	Kreikamp Trucking, Inc. ....	6487 STH 175, Allenton	X			X	
40	Pick 'N Save Supermarket, Prescott's Supermarkets, Inc. ....	2380 W. Washington, West Bend	X			X	X
41	Pick 'N Save Supermarket, Prescott's Supermarkets, Inc. ....	1719 S. Main Street, West Bend	X			X	X
42	Pick 'N Save Supermarket, Ultra Mart, Inc. ....	N112 W16200 Mequon Road, Germantown	X			X	
43	Shopko Stores, Inc. ....	1710 South Main Street, West Bend	X				
44	Sundance Photo, Inc. ....	W213 N170010 Industrial Drive, Jackson	X			X	
45	West Bend Daily News .....	100 South 6th Avenue, West Bend	X				
46	West Bend Mutual Insurance Company ....	1900 S. 18th Avenue, West Bend		X		X	X

Table 21 (continued)

Number on Maps 7 and 8	Employer	Address	Approximate Employment			Registered for Employee Commute Option Program	Provided Employee Home Address and Work-Shift Data <sup>a</sup>
			100-249	250-499	Over 500		
	Government/Institutional						
47	Cedar Lake Home Campus .....	5595 CTH Z, West Bend		X		X	X
48	City of West Bend .....	1115 S. Main Street, West Bend	X			X	X
49	General Clinic of West Bend, Inc. ....	205 Valley Avenue, West Bend	X			X	
50	Germantown High School .....	W180 N11501 River Lane, Germantown	X				X
51	Hartford Memorial Hospital .....	1032 E. Sumner Street, Hartford		X		X	X
52	Hartford Parkview Clinic .....	1004 East Sumner Street, Hartford	X			X	
53	Hartford Union High School .....	805 Cedar Street, Hartford	X				
54	Horizon Healthcare Corporation .....	1202 East Sumner Street, Hartford	X				
55	St. Joseph's Community Hospital .....	551 S. Silverbrook Drive, West Bend			X	X	
56	Washington County Courthouse .....	432 East Washington Street, West Bend		X		X	X
57	West Bend Clinic, S.C. ....	1700 W. Paradise Drive, West Bend	X			X	
58	West Bend East and West High Schools ....	1305 E Decorah Road, West Bend	X				

<sup>a</sup>The employers indicated provided information on the home addresses and work-shifts of their employees as part of a special survey of major employers conducted by Washington County and the Commission in the Fall of 1995. The locations of these employers are shown on Map 8.

Source: Wisconsin Department of Natural Resources; 1994 Classified Directory of Wisconsin Manufacturers; 1994 Wisconsin Services Directory; and SEWRPC.

Table 22

## SUMMARY OF RESPONSES TO WASHINGTON COUNTY MAJOR EMPLOYER SURVEY: FALL 1995

Question No. 1		Question No. 2			Total
		Would the firm be willing to provide, on a confidential basis, data on the home addresses and work hours of its employees?			
		No	Yes (data provided)	No Response to Survey	
Would it be useful to the firm to have Washington County explore the potential for providing public transit to serve work trips made by its employees?	No	14	--	--	14
	Yes	6	27	--	33
	No response to survey	--	--	5	5
Total		20	27	5	52

Source: SEWRPC.

about 1,200 jobs, including about 700 jobs starting between 4:00 a.m. and 10:00 a.m. The total employment of about 10,600 jobs at the 32 individual worksites represented about 23 percent of the total estimated 1994 employment within the County, about 45,800 jobs.

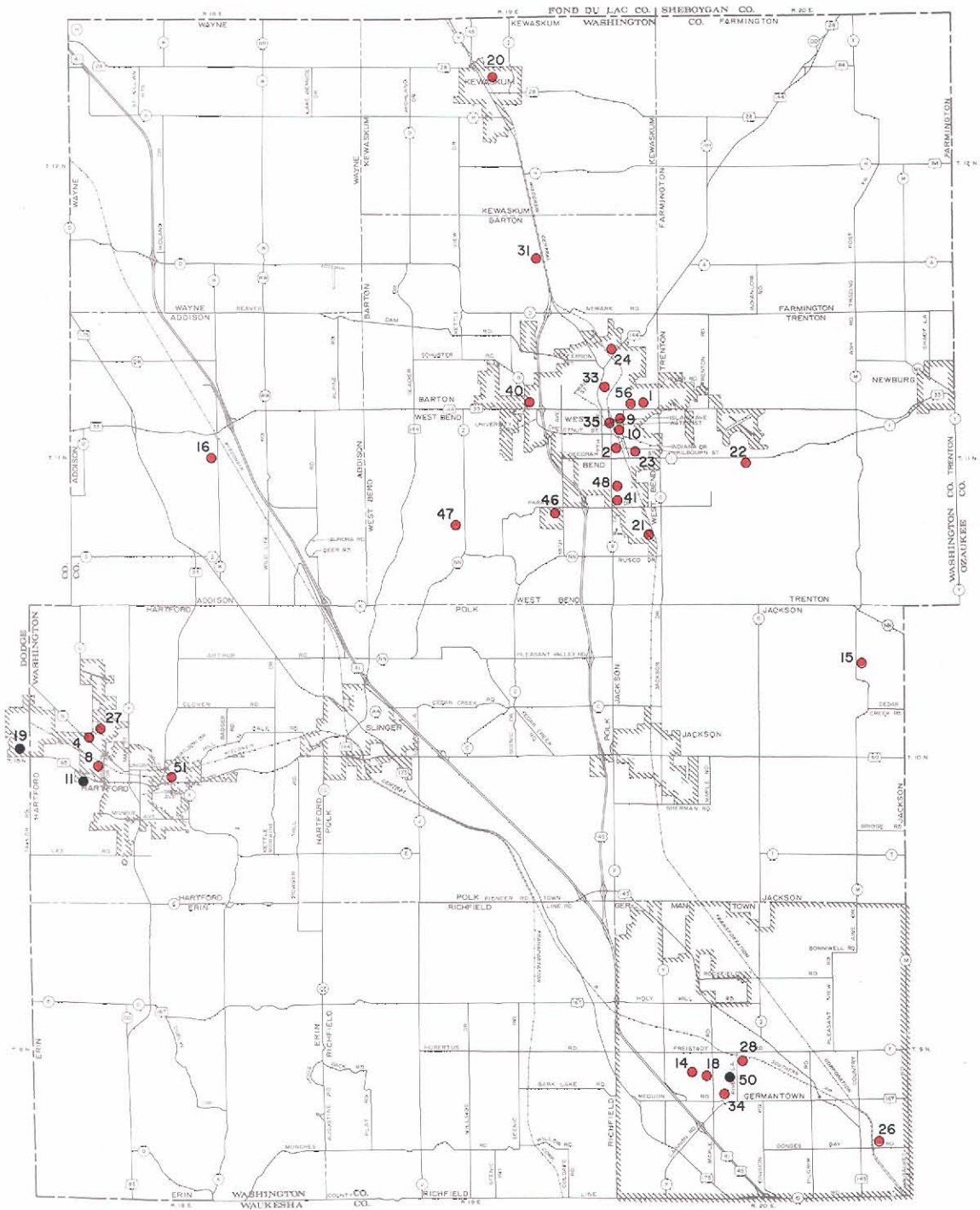
For each employer which provided employee home address information, the addresses of employees were assigned to U. S. Public Land Survey one-

quarter sections to facilitate geographic analyses. This information was used by the Commission staff to identify potential transit options to serve one or more employers. Map 9 is an example of the type of maps prepared for each individual employer which provided employee address and work-shift information. The maps illustrate the location of the home residences of all employees for all shifts at the worksites of the employers responding to the survey, as well for those employees starting or ending their workshift between 4:00 a.m. and 10:00 a.m.



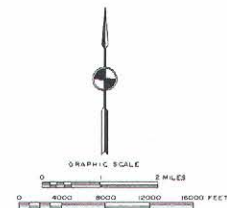
## Map 8

### LOCATION OF MAJOR EMPLOYERS IN WASHINGTON COUNTY RESPONDING TO SPECIAL EMPLOYER SURVEY: FALL 1995



#### LEGEND

- MAJOR EMPLOYER REGISTERED FOR EMPLOYEE COMMUTE OPTIONS PROGRAM
- OTHER MAJOR EMPLOYER
- 56 REFERENCE NUMBER (SEE TABLE 2)



Source: SEWRPC.



Table 23

**COUNTY OF HOME RESIDENCE FOR EMPLOYEES AT MAJOR WASHINGTON  
COUNTY EMPLOYERS RESPONDING TO SPECIAL EMPLOYER SURVEY: FALL 1995**

County of Home Residence Location	Number of Employees at Major Employers			
	With Shift Starting Times between 4:00 a.m. and 10:00 a.m.		Total	
	Number	Percent of Total	Number	Percent of Total
<b>Within Region</b>				
Washington County .....	4,886	63.4	6,527	61.8
Milwaukee County .....	357	4.6	646	6.1
Waukesha County .....	357	4.6	465	4.4
Ozaukee County .....	222	2.9	292	2.8
Kenosha, Racine, and Walworth Counties .....	13	0.2	14	0.1
<b>Subtotal</b>	<b>5,835</b>	<b>75.7</b>	<b>7,944</b>	<b>75.2</b>
<b>Outside Region</b>				
Fond Du Lac County .....	896	11.6	1,152	10.8
Dodge County .....	675	8.8	1,063	10.1
Sheboygan County .....	239	3.1	312	3.0
Other Counties .....	65	0.8	93	0.9
<b>Subtotal</b>	<b>1,875</b>	<b>24.3</b>	<b>2,620</b>	<b>24.8</b>
<b>Total</b>	<b>7,710</b>	<b>100.1</b>	<b>10,564</b>	<b>100.0</b>

Source: SEWRPC.

Although only about one-half of the major County employers cooperated by providing the requested employee information, some patterns of employee residences useful in planning transit services were observed. As shown in Table 23, about 61 percent of the employees at the 27 responding firms resided in Washington County. Not surprisingly, the highest concentrations of employee residences in the County were found in the West Bend, Hartford-Slinger, and Germantown-Richfield areas of the County, which also included the location of 29 of the 32 worksites for the responding firms and about three-fourths of the County's resident population. About 13 percent of the employees at the responding firms resided in other counties in the seven-county Southeastern Wisconsin Region, including about 7 percent in Milwaukee County and about 4 percent in Waukesha County. The remaining 26 percent of the employees at the responding firms resided in counties outside of the Region, including about 12 percent in Fond du Lac County, and about 10 percent in Dodge County.

It was found that about 60 percent of the residences of the employees at the responding firms were located within the principal service areas for the existing shared-ride taxicab services provided by the Cities of Hartford and West Bend. This has some

implications for the potential for the existing shared-ride taxicab services in the County to be used in efforts by the major employers to reduce employee work travel by automobile, in particular by representing a means of providing a guaranteed ride home for employees without automobiles. It was also found that the shift-times varied widely among the responding firms. This has some implications for the potential for providing employer-based transit services, such as subscription bus service, serving many employers.

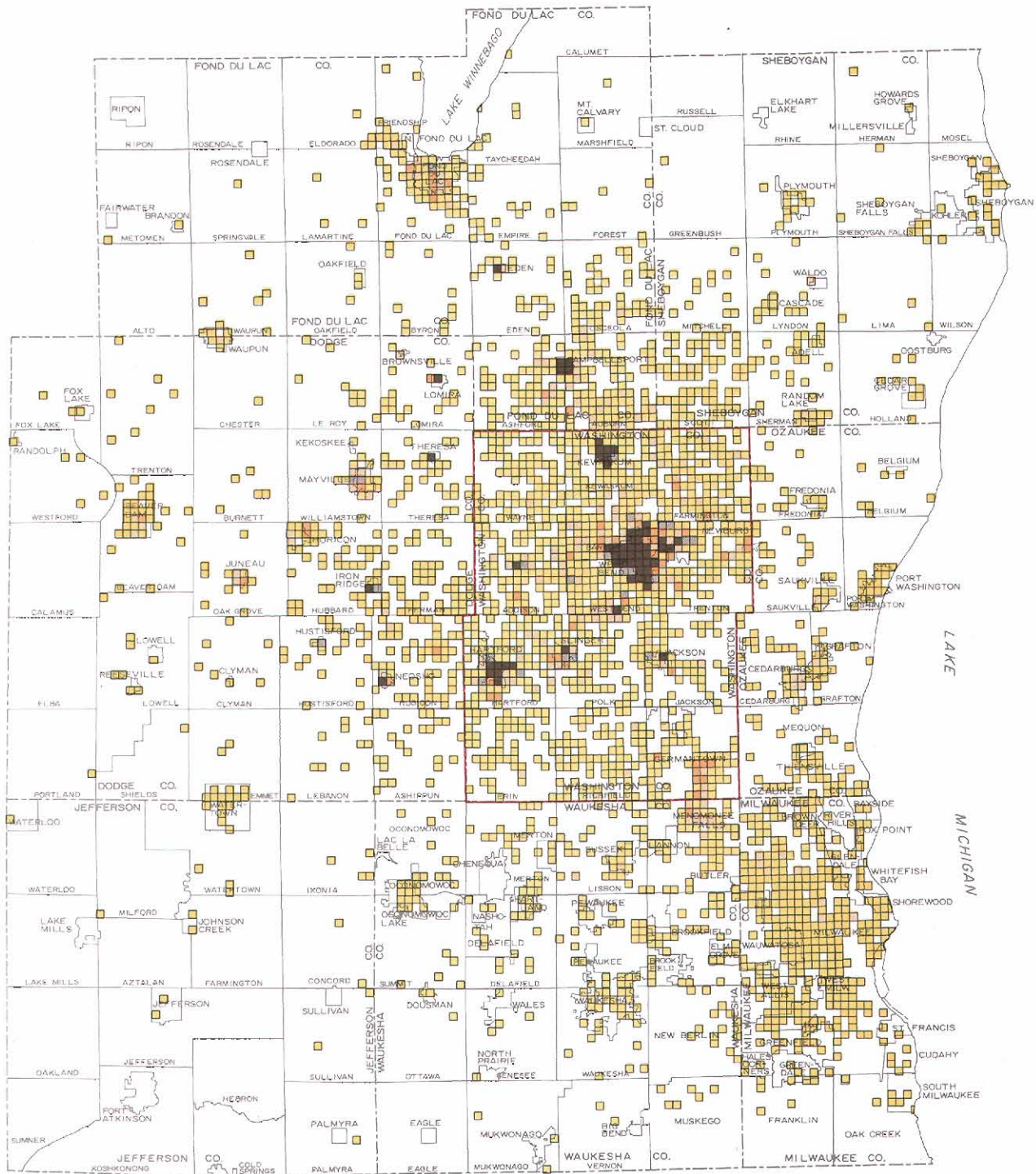
In addition to the major employers identified in Table 21, the locations of major industrial parks within the County were also identified as major employment centers. While most employers within such areas had less than 100 employees, concentrations of such smaller employers in close proximity resulted in combined employment levels within industrial parks which were equal to, or greater than, the largest individual employers identified. The major industrial parks identified within the County in 1995 are presented in Table 24, along with the number of businesses and the estimated total combined employment within each area.

**Recreational Areas:** Recreational areas were also considered to be potential transit trip generators.

Map 9

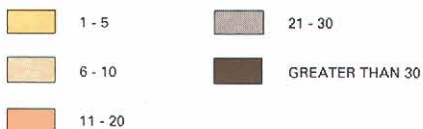
RESIDENCY OF EMPLOYEES OF MAJOR WASHINGTON COUNTY  
EMPLOYERS RESPONDING TO SPECIAL EMPLOYER SURVEY: FALL 1995

ALL EMPLOYEES

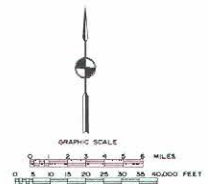


LEGEND

NUMBER OF EMPLOYEES BY U. S. PUBLIC LAND  
SURVEY QUARTER SECTION



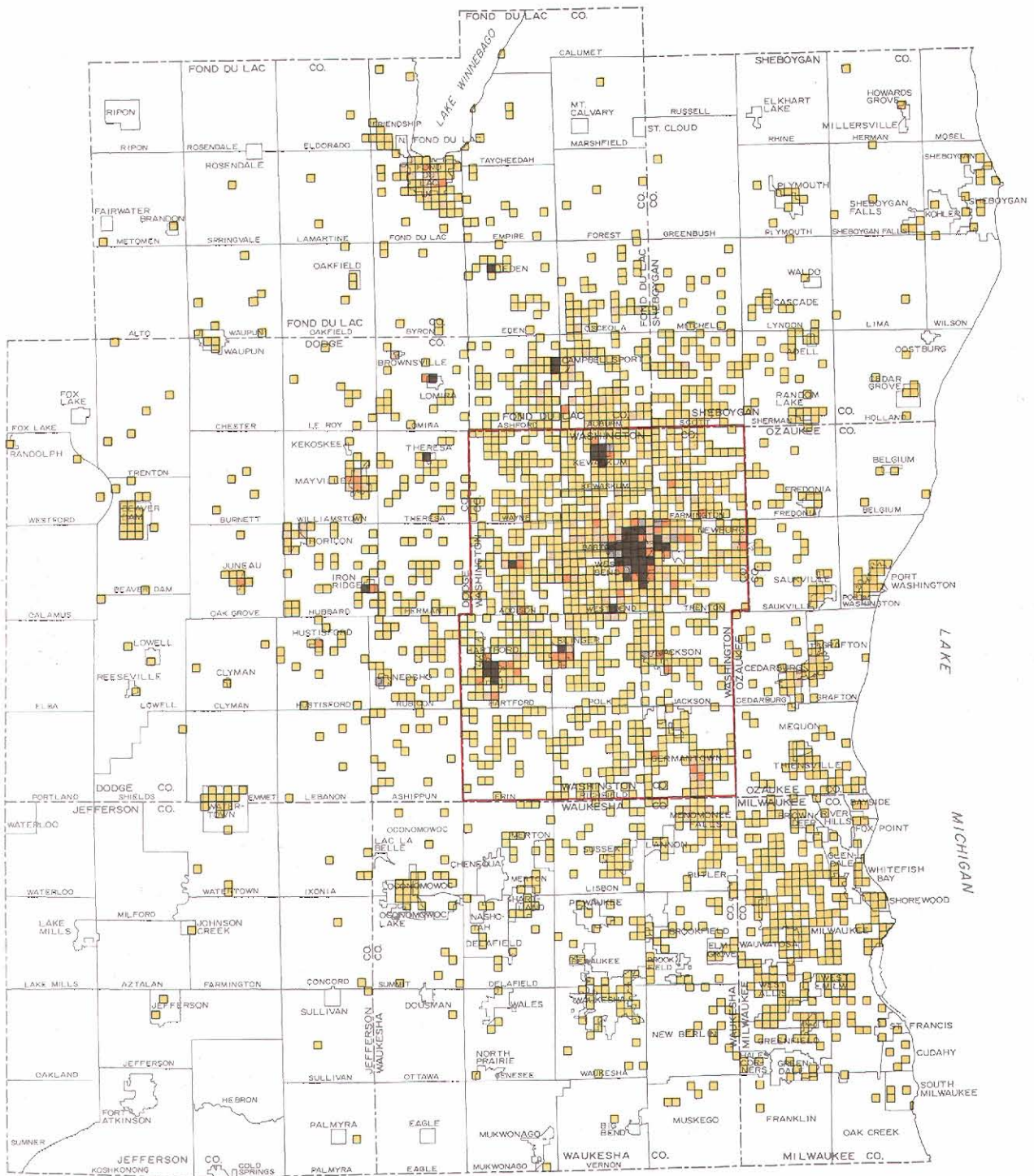
Source: SEWRPC.





# Map 9 (continued)

EMPLOYEES WITH SHIFT STARTING OR  
ENDING TIMES BETWEEN 4:00 A.M. AND 10:00 A.M.



## LEGEND

NUMBER OF EMPLOYEES BY U. S. PUBLIC LAND  
SURVEY QUARTER SECTION



Source: SEWRPC.

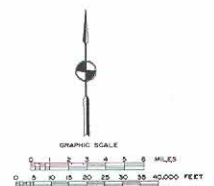


Table 24

## EMPLOYMENT IN MAJOR INDUSTRIAL PARKS IN WASHINGTON COUNTY: 1995

Industrial Park	Community	Number of Businesses	Approximate Total Employment
Cedar Creek Business Park <sup>a</sup> .....	Village of Jackson	--	--
Dodge Industrial Park .....	City of Hartford	2	900
Enders Industrial Park .....	Village of Slinger	7	100
Germantown Industrial Park .....	Village of Germantown	130	3,750
Hanke Industrial Area .....	Village of Slinger	4	400
Jackson Industrial Park .....	Village of Jackson	6	500
Slinger Industrial Area .....	Village of Slinger	1	200
West Bend Industrial Park North .....	City of West Bend	29	500
West Bend Industrial Park South .....	City of West Bend	39	600
Western Industrial Park .....	City of Hartford	11	1,800

<sup>a</sup>Businesses opening in Spring 1996 include: SYSCO Food Service, Rytec Corporation, and the West Bend Clinic.

Source: SEWRPC.

For this study, recreational areas were grouped into three categories. The first consisted of major regional recreational areas, defined as public recreation sites of at least 250 acres offering multiple recreational opportunities. The second was comprised of community recreational areas, defined as multiple-use public recreation sites whose service areas are principally community-oriented and which contain such community recreation facilities as baseball or softball diamonds, swimming pools, or tennis courts. The third was comprised of other recreational areas, including public and private recreational areas or facilities used for special purposes and with broad multi-community service areas. The recreational areas and facilities identified in 1994 are listed in Table 25.

## TRAVEL HABITS AND PATTERNS

### Total Person Travel Characteristics

Information on the quantity and characteristics of total person travel in Washington County was based on the findings of a household travel survey conducted by the Regional Planning Commission in the fall of 1991. This survey was a part of a comprehensive inventory of travel which included, in addition to the household travel survey, a public transit user survey, a truck and taxi survey, and an external cordon survey. Inventories of travel using similar surveys were also conducted by the Commission in 1963 and 1972. The sample size for the 1991 household home interview survey was about 17,500 households, or about 2.5 percent of the total households in the Region. Based on the 1991 household travel survey, about 330,000 person trips<sup>1</sup> were

made on an average weekday in 1991 either within Washington County or between Washington County and other counties within the Southeastern Wisconsin Region. The trips represent an increase of about 275 percent over the approximately 88,000 person trips observed for Washington County in 1963 and an increase of about 99 percent over the approximately 166,000 person trips observed in 1972. The distribution of Washington County person trips by trip purpose for 1963, 1972, and 1991 is shown in Table 26.

In the tables and figures in this section of the report presenting the volume of trips between subareas of Washington County and between Washington County and surrounding counties, the volume of trips is presented as trips from the place of trip production to the place of trip attraction. For trips with one end of the trip at home, the place of trip production is always the home and the place of trip attraction is always the other end of the trip: place of work, shopping, personal business, or other. For a trip which neither begins or ends at home, the place of trip production is the place of origin of the trip and the place of trip attraction is the place of destination of

<sup>1</sup>A person trip was defined as a one-way journey between a point of origin and a point of destination by a person five years of age or older traveling as an auto driver or as a passenger in an auto, taxi, truck, motorcycle, school bus, or other mass transit carrier. To be considered, the trip must have been at least the equivalent of one full city block in length.

Table 25

## RECREATIONAL AREAS IN WASHINGTON COUNTY: 1995

Number on Map 7	Recreational Areas	Civil Division
1	Regional Kettle Moraine State Forest- Northern Unit .....	Town of Kewaskum
2	Pike Lake State Park .....	Town of Hartford
3	County Cedar Lake Wayside .....	Town of West Bend
4	Glacier Hills Park .....	Town of Richfield
5	Goeden Park .....	Town of Trenton
6	Heritage Trails Park .....	Town of Polk
7	Homestead Hollow Park .....	Town of Germantown
8	Lizard Mound Park .....	Town of Farmington
9	Ridge Run Park .....	City of West Bend
10	Sandy Knoll Park .....	Town of Trenton
11	Community Albecker Park .....	City of West Bend
12	Allenton Park .....	Town of Addison
13	Alt Bauer Park .....	Village of Germantown
14	Barton Park .....	City of West Bend
15	Bicentennial Park .....	City of West Bend
16	Decorah Hills Park .....	City of West Bend
17	Dheinsville Historic Park .....	Village of Germantown
18	Fireman's Park .....	Town of Farmington
19	Fireman's Park .....	Village of Germantown
20	Fireman's Park .....	Village of Newburg
21	Fireman's Park .....	Village of Slinger
22	Germantown Little League Park .....	Village of Germantown
23	Gib Mahr Field .....	City of Hartford
24	Haupt Strasse Park .....	Village of Germantown
25	Herman Wolf and Richfield Fireman's Parks .....	Town of Richfield
26	Independence Park .....	City of Hartford
27	Jackson Park .....	Village of Jackson
28	Kenny Park .....	City of West Bend
29	Kiwanis Community Park .....	Village of Kewaskum
30	Maple Wynde Playlot .....	City of West Bend
31	Regner Park .....	City of West Bend
32	Riverside Park .....	City of West Bend
33	Schoenlauffen Park .....	Village of Germantown
34	Spassland Park .....	Village of Germantown

Number on Map 7	Recreational Areas	Civil Division
35	Sunset Park .....	City of West Bend
36	Turner Park .....	Town of Farmington
37	Veteran's Memorial Park .....	City of Hartford
38	Villa Park .....	City of West Bend
39	Village Park .....	Village of Kewaskum
40	Village Park .....	Village of Slinger
41	Weidenback Park .....	Village of Germantown
42	West Side Park .....	City of Hartford
43	Willow Brook Park .....	City of Hartford
44	Wingate Park .....	City of West Bend
45	Woodlawn Union Park .....	City of Hartford
46	Ziegler Park .....	City of West Bend
47	Other <sup>a</sup> Heileger Huegel Ski Club .....	Town of Erin
48	Hughes Burckhardt and Kiwanis Fields .....	City of West Bend
49	Jackson Elementary School Soccer Field .....	Village of Jackson
50	Kettle Moraine Ice Center .....	City of West Bend
51	Little Switzerland Ski Area .....	Village of Slinger
52	McLane Elementary School Soccer Field .....	City of West Bend
53	Milwaukee Ski Club .....	Town of West Bend
54	Pioneer Bowl Softball Complex .....	Town of Richfield
55	Sunburst Ski Area .....	Town of Kewaskum
56	West Bend Company Soccer Complex .....	City of West Bend
57	Willow Creek Soccer Complex .....	Village of Germantown
58	Willow Green Soccer Field .....	Town of West Bend
59	YMCA Inc. ....	City of West Bend

<sup>a</sup>A number of schools listed in Table 17 have soccer and baseball facilities which are used for public leagues or by sports clubs including The University of Wisconsin-Washington County and The Moraine Park Technical College; all public high schools; Badger, Kennedy, Kewaskum, and Slinger Middle Schools; and Friess Lake Elementary, Peace Elementary and St. Killian's Elementary Schools. Soccer or baseball fields used for public leagues or by sports clubs are also located adjacent to four public governmental institutions listed in Table 20 including the Erin, Richfield, and Polk Town Halls, and the Germantown Village Hall.

Source: SEWRPC.

the trip. Thus, the flow of trips shown in the figures and tables in this section no the report show principally the trips between place of residence and place of work, shopping, and other.

**Intracounty Person Travel:** Of the approximately 330,000 person trips made on an average weekday in 1991, about 224,000 trips, or about 68 percent, were intracounty trips made between origins and destinations entirely within Washington County. These trips represent an increase of about 257 percent from the approximately 63,000 intracounty person trips observed in 1963 and an increase of about 89 percent over the approximately 118,000 intracounty person trips observed in 1972.

The largest proportion of these intracounty person trips in 1991 were "home-based other" trips, which would include trips made for medical, personal business, or social and recreational purposes. About

34 percent of all intracounty person trips in the County were made for this purpose on an average weekday. The remaining intracounty person trips were relatively evenly distributed among the work, shopping, nonhome-based, and school trips.

To facilitate additional analysis of intracounty person trip characteristics, the County was divided into eleven subarea analysis areas representing major civil divisions within the County. The generalized pattern of intracounty person trips between these analysis areas is presented in Table 27. As can be seen from this table, the largest number of trips were made entirely within the West Bend-Barton, Hartford, and Germantown analysis areas. These areas include the vast majority of the population and urban development in the County and accounted for about 131,500, or about 59 percent, of the total of 224,000 intracounty person trips. Map 10 illustrates graphically the pattern and

Table 26

**DISTRIBUTION OF AVERAGE WEEKDAY PERSON TRIPS FOR  
WASHINGTON COUNTY BY TRIP PURPOSE: 1963, 1972, AND 1991**

Area	Trip Purpose <sup>b</sup>	Person Trips <sup>a</sup>						Change			
		1963		1972		1991		1963-1991		1972-1991	
		Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent	Number	Percent
Intracounty	Home-based work .....	16,000	25.5	29,600	25.0	39,500	17.6	23,500	146.9	9,900	33.4
	Home-based shopping .....	7,100	11.3	17,100	14.5	34,700	15.5	27,600	388.7	17,600	102.9
	Home-based other .....	21,500	34.3	43,800	37.0	75,300	33.6	53,800	250.2	31,500	71.9
	Nonhome-based .....	7,100	11.4	13,800	11.7	42,000	18.8	34,900	491.5	28,200	204.3
	School .....	11,000	17.5	14,000	11.8	32,400	14.5	21,400	194.5	18,400	131.4
	<b>Total</b>	<b>62,700</b>	<b>100.0</b>	<b>118,300</b>	<b>100.0</b>	<b>223,900</b>	<b>100.0</b>	<b>161,200</b>	<b>257.1</b>	<b>105,600</b>	<b>89.3</b>
Intercounty	Home-based work .....	8,700	34.0	18,000	37.5	42,700	40.3	34,000	390.8	24,700	137.2
	Home-based shopping .....	3,000	11.9	6,800	14.2	12,200	11.5	9,200	306.7	5,400	79.4
	Home-based other .....	9,900	38.5	15,700	32.7	27,700	26.1	17,800	179.8	12,000	76.4
	Nonhome-based .....	3,000	11.4	5,200	10.8	19,700	18.6	16,700	556.7	14,500	278.8
	School .....	1,100	4.2	2,300	4.8	3,700	3.5	2,600	236.4	1,400	60.9
	<b>Total</b>	<b>25,700</b>	<b>100.0</b>	<b>48,000</b>	<b>100.0</b>	<b>106,000</b>	<b>100.0</b>	<b>80,300</b>	<b>312.5</b>	<b>58,000</b>	<b>120.8</b>
Total	Home-based work .....	24,700	28.0	47,600	28.6	82,200	24.9	57,500	232.8	34,600	72.7
	Home-based shopping .....	10,100	11.4	23,900	14.4	46,900	14.2	36,800	364.4	23,000	96.2
	Home-based other .....	31,400	35.5	59,500	35.8	103,000	31.2	71,600	228.0	43,500	73.1
	Nonhome-based .....	10,100	11.4	19,000	11.4	61,700	18.7	51,600	510.9	42,700	224.7
	School .....	12,100	13.7	16,300	9.8	36,100	11.0	24,000	198.3	19,800	121.5
	<b>Total</b>	<b>88,400</b>	<b>100.0</b>	<b>166,300</b>	<b>100.0</b>	<b>329,900</b>	<b>100.0</b>	<b>241,500</b>	<b>273.2</b>	<b>163,600</b>	<b>98.4</b>

<sup>a</sup>The trip data are for trips made within the seven-county Southeastern Wisconsin Region.

<sup>b</sup>The trip data were grouped into five categories of travel purpose: home-based work trips, home-based shopping trips, home-based other trips, nonhome-based trips, and school-based trips. Home-based work trips are defined as trips having one end at the place of residence of the tripmaker and the other end at the place of work. Home-based shopping trips are defined as trips having one end at the place of residence of the tripmaker and the other end at a shopping place of destination. Home-based other trips are defined as trips having one end at the place of residence of the tripmaker and the other end at a place of destination other than home, work, shopping, or school. Such trips would include trips made for social, recreation medical, and personal business. Nonhome-based trips are defined as trips that neither originate or end at home. School-based trips are defined as having at least one end at school.

Source: SEWRPC.

volume of total person travel between the analysis areas in the County in 1991. The largest total person trip movements occurred from the Trenton-Newburg area to the West Bend-Barton area, from the Richfield area to the Germantown area, from the Jackson area to the West Bend-Barton area, from the Slinger-Polk area to the West Bend-Barton area, from the West Bend-Barton area to the Slinger-Polk area, and from the West Bend-Barton area to the Trenton-Newburg area. Together, these trips accounted for over 22,000 person trips, or about 10 percent of all intracounty person trips in 1991.

**Intercounty Person Travel:** Of the approximately 330,000 total person trips made on an average weekday in 1991, about 106,000 trips, or 32 percent, had one trip end in Washington County and the other trip end in a different county in the Southeastern Wisconsin Region. These intercounty trips represent an increase of about 313 percent over the approximately 25,700 intercounty trips observed in 1963 and an increase of about 121 percent over the

approximately 48,000 intercounty trips observed in 1972. These increases in intercounty person travel were significantly greater than the increases of 257 percent which occurred in intracounty person travel between 1963 and 1991 and of 89 percent between 1972 and 1991. The largest absolute increases in intercounty trips occurred in trips made for work purposes, which increased by almost 34,000 trips, or over 390 percent, between 1963 and 1991 and by about 25,000 trips, or about 137 percent, between 1972 and 1991.

Most of these intercounty trips, about 40 percent, were made for work purposes. Trips made for other purposes, including social and recreational, medical and personal business, were also significant, accounting for about 26 percent of the County's intercounty person trips.

To facilitate additional analysis of intercounty person trip travel patterns, the Southeastern Wisconsin Region outside of Washington County was divided



Table 27

## DISTRIBUTION OF AVERAGE WEEKDAY INTRACOUNTY PERSON TRIPS IN WASHINGTON COUNTY: 1991

Area of Trip Production	Area of Trip Attraction											Total
	1	2	3	4	5	6	7	8	9	10	11	
1. Wayne-Addison . . . .	670	230	--	1,400	--	1,110	150	--	--	110	80	3,750
2. Kewaskum . . . . .	70	1,450	--	1,660	--	90	20	100	--	30	130	3,550
3. Farmington . . . . .	160	540	420	1,550	--	70	--	--	70	--	80	2,890
4. West Bend-Barton . . .	2,330	2,000	1,220	98,780	2,460	2,110	2,850	1,310	70	570	1,490	115,190
5. Trenton-Newburg . . .	80	40	--	5,740	880	--	240	220	40	--	--	7,240
6. Hartford . . . . .	340	30	--	1,760	50	17,310	2,340	230	310	650	190	23,210
7. Slinger-Polk . . . . .	250	180	30	2,980	60	2,060	8,280	550	70	460	690	15,610
8. Jackson . . . . .	--	50	20	4,190	50	250	380	5,130	--	370	1,070	11,510
9. Erin . . . . .	30	--	--	80	--	2,360	200	--	510	350	130	3,660
10. Richfield . . . . .	--	--	50	690	--	1,310	1,040	190	770	9,070	4,450	17,570
11. Germantown . . . . .	30	140	60	580	110	840	300	280	100	1,910	15,420	19,770
Total	3,960	4,660	1,800	119,410	3,610	27,510	15,800	8,010	1,940	13,520	23,730	223,950

NOTE: Shaded cells indicate trips made entirely within an analysis area.

Source: SEWRPC.

into 17 analysis areas. The generalized pattern and volume of the person trips made between the County and these subareas in 1991 is presented in Table 28. The pattern of travel between the County and other counties in the Region is graphically illustrated on Map 11. The largest proportion of intercounty person travel occurred from Washington County to Milwaukee County, with a total of about 33,000 trips, or about 31 percent of all intercounty person trips, made between these two counties on an average weekday. As shown on Map 11, about 17,000 of these trips, or about 51 percent, were made for work purposes. The vast majority of the Washington-Milwaukee County trips were made from Washington County to the northern half of Milwaukee County, including the City of Milwaukee central business district.

Significant intercounty person trip movements were also observed from Washington to Waukesha County, with about 31,000 trips made on an average weekday, representing about 29 percent of all intercounty trips. About 12,000 of these trips, or about 39 percent, were made for work purposes. About one-half of the Washington-Waukesha County trips were made between the Menomonee Falls-Lannon analysis area in Waukesha County and the Germantown and Richfield analysis areas of Washington County.

About 10,000 trips, or about 10 percent of all intercounty trips, were made from Washington and Ozaukee Counties in 1991. Trips made for work purposes accounted for nearly 5,000, or about

50 percent, of these trips. The majority of the Washington-Ozaukee County trips were made from Washington County to the southern half of Ozaukee County.

**Interregional Travel:** It should be noted that in addition to the 330,000 person trips in 1991 made either in Washington County or between the County and other areas in the seven-county Southeastern Wisconsin Region, an additional 9,600 interregional person trips were made on an average weekday from the County to other areas outside of the Region and about 14,600 interregional person trips were made on an average weekday from areas outside of the Region to the County. These trips were identified through the external cordon survey conducted by the Commission in the spring of 1992. The 1991 trips represent an increase of about 120 percent over the approximately 11,000 interregional trips observed for Washington County in 1963 and an increase of about 71 percent over the approximately 14,000 interregional trips observed for the County in 1972. The most significant amount of such person trips in 1991 occurred from Dodge County to Washington County, with about 5,700 average weekday person trips, and from Fond du Lac County to Washington County, with about 5,200 average weekday person trips:

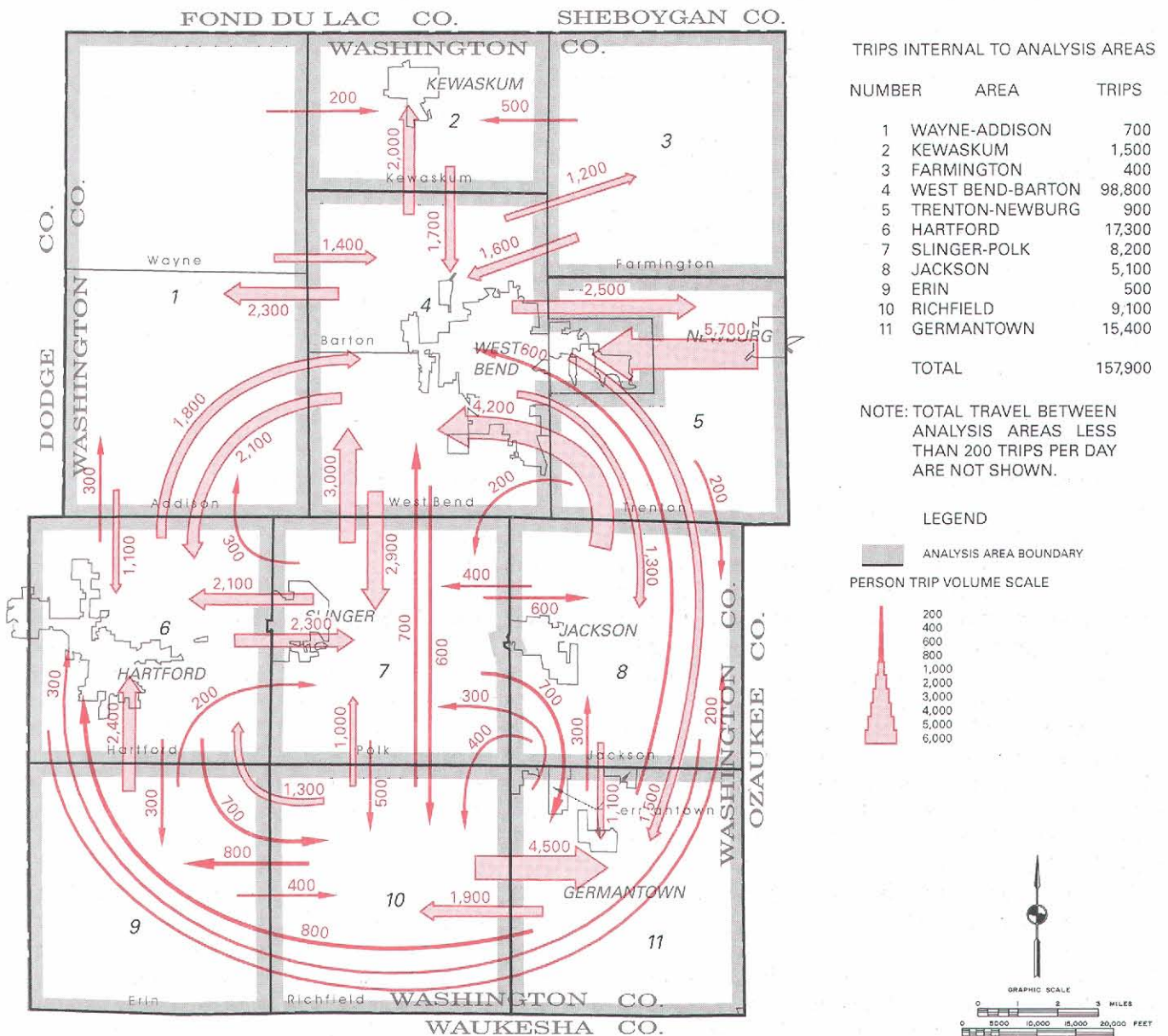
## SUMMARY

This chapter has presented pertinent information on past trends and existing conditions for selected characteristics of Washington County which affect,



Map 10

AVERAGE WEEKDAY INTRACOUNTY PERSON TRIPS BETWEEN SUBAREAS IN WASHINGTON COUNTY: 1991



Source: SEWRPC.

or may be affected by, the provision and use of transit service, including population, employment, land use, and travel habits and patterns. Information on the changes in such key characteristic which were observed between approximately 1960 and 1990 are summarized in Figure 1. The most important findings concerning these characteristics may be summarized as follows:

1. In 1994, the resident population of Washington County stood at about 105,100 persons, an increase of about 10 percent over the 1990 Census level of about 95,300 persons. The County has been growing steadily since 1960, when the population was about 46,100 persons. Over the period from 1960 to 1990, the County population increased by about 107 per-



Table 28

**DISTRIBUTION OF AVERAGE WEEKDAY INTERCOUNTY PERSON TRIPS BETWEEN  
WASHINGTON COUNTY AND OTHER COUNTIES IN THE SOUTHEASTERN WISCONSIN REGION: 1991**

Area of Trip Production		Area of Trip Attraction										
		Milwaukee						Ozaukee				
County	Analysis Area Description	12	13	14	15	16	Subtotal	17	18	19	20	Subtotal
Washington	1. Wayne-Addison	120	40	60	60	--	280	--	30	70	--	100
	2. Kewaskum	60	140	40	--	--	240	--	--	--	--	0
	3. Farmington	190	200	--	--	--	390	110	70	130	290	600
	4. West Bend-Barton	2,430	3,460	160	1,490	320	7,860	270	950	2,000	450	3,670
	5. Trenton-Newburg	340	220	--	90	--	650	--	300	360	130	790
	6. Hartford	330	860	--	400	--	1,590	--	20	110	150	280
	7. Slinger-Polk	650	710	--	260	--	1,620	40	50	290	70	450
	8. Jackson	1,060	1,070	30	360	--	2,520	--	260	1,240	670	2,170
	9. Erin	450	410	30	140	30	1,060	--	--	140	--	140
	10. Richfield	2,140	2,540	280	960	240	6,160	--	--	40	470	510
	11. Germantown	4,360	4,110	110	2,020	40	10,640	--	190	420	1,060	1,670
--	Total	12,130	13,760	710	5,780	630	33,010	420	1,870	4,800	3,290	10,380

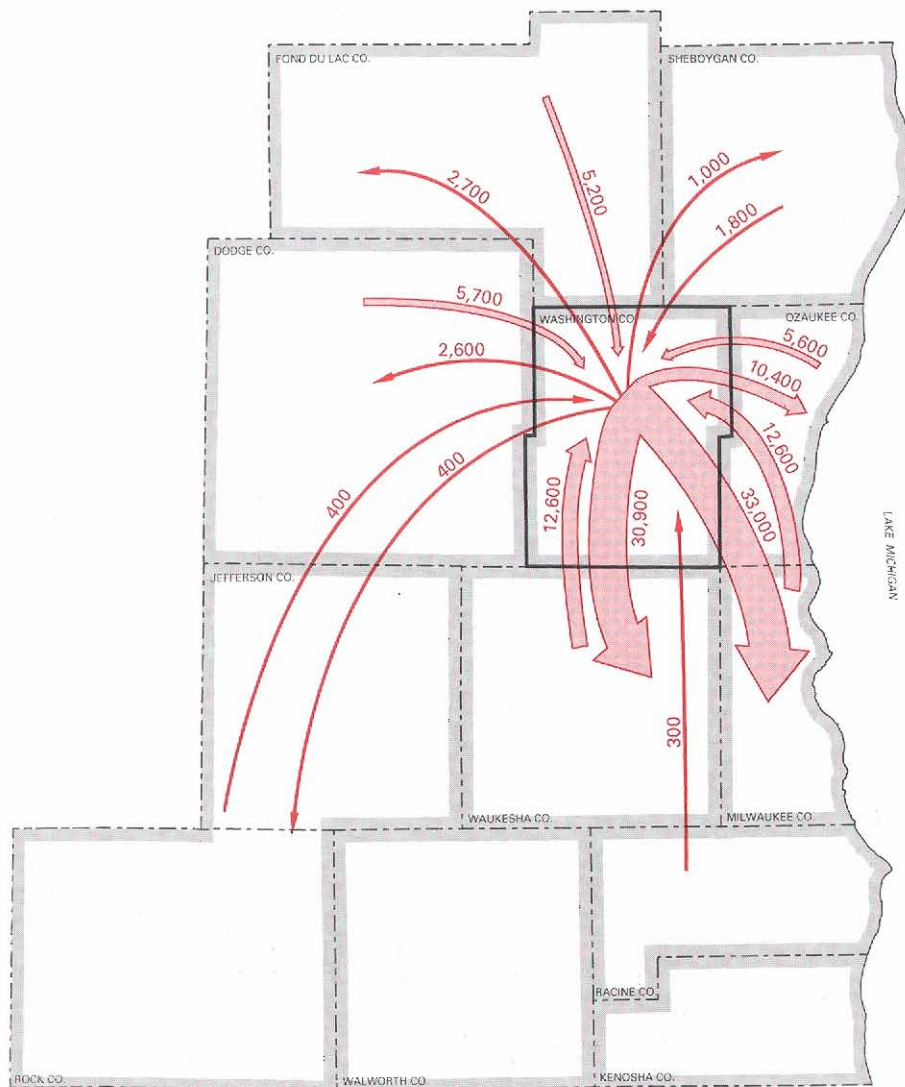
Area of Trip Production		Area of Trip Attraction									
		Waukesha					Racine	Kenosha	Walworth	Total	
County	Analysis Area Description	21	22	23	24	25	Subtotal	26	27	28	Total
Washington	1. Wayne-Addison	--	30	120	100	--	250	--	--	--	630
	2. Kewaskum	70	--	--	--	--	70	--	--	--	310
	3. Farmington	--	--	40	160	--	200	--	--	--	1,190
	4. West Bend-Barton	290	230	2,170	1,480	60	4,230	60	--	--	15,820
	5. Trenton-Newburg	--	180	40	--	--	220	--	--	--	1,660
	6. Hartford	260	160	920	330	--	1,670	60	--	40	3,640
	7. Slinger-Polk	90	70	800	550	--	1,510	0	50	20	3,650
	8. Jackson	--	--	980	390	--	1,370	--	--	--	6,060
	9. Erin	440	110	420	370	--	1,340	30	--	--	2,570
	10. Richfield	480	320	6,270	1,840	30	8,940	80	80	--	15,770
	11. Germantown	--	260	8,780	2,070	30	11,140	40	--	--	23,490
--	Total	1,630	1,360	20,540	7,290	120	30,940	270	130	60	74,790

Area of Trip Attraction		Area of Trip Production											
		Washington											
County	Analysis Area Description	1	2	3	4	5	6	7	8	9	10	11	Total
Milwaukee	12. Northern Milwaukee County	200	--	--	970	80	360	420	350	--	170	2,270	4,820
	13. North Central Milwaukee County	50	--	--	860	--	230	170	50	110	610	2,620	4,700
	14. Milwaukee Central Business District	60	--	--	130	--	--	--	--	--	--	60	250
	15. South Central Milwaukee County	90	--	--	300	160	320	90	350	--	230	1,100	2,640
	16. Southern Milwaukee County	--	--	--	70	30	--	--	--	--	--	90	190
	Subtotal	400	0	0	2,330	270	910	680	750	110	1,010	6,140	12,600
Ozaukee	17. Fredonia-Belgium	--	--	--	550	170	--	60	60	--	--	--	840
	18. Saukville-Port Washington	40	140	40	590	350	--	--	100	--	--	110	1,370
	19. Cedarburg-Grafton	--	40	--	700	20	70	230	870	--	190	250	2,370
	20. Mequon- Thiensville	--	60	--	230	--	--	--	80	--	210	390	970
	Subtotal	40	240	40	2,070	540	70	290	1,110	0	400	750	5,550
Waukesha	21. North West Waukesha County	--	--	--	80	--	360	50	--	140	--	400	1,030
	22. Lisbon-Sussex	--	--	--	30	--	100	40	--	140	380	680	1,370
	23. Menomonee Falls-Lannon	20	--	40	270	--	240	110	170	30	1,680	5,000	7,560
	24. Waukesha-Pewaukee-Brookfield- New Berlin	50	160	--	140	--	110	130	40	--	480	1,370	2,480
	25. Southern Waukesha County	70	--	--	20	--	--	--	--	--	--	70	160
	Subtotal	140	160	40	540	0	810	330	210	310	2,540	7,520	12,600
Racine	26. All Racine County	--	--	--	160	--	20	40	--	--	--	120	340
Kenosha	27. All Kenosha County	--	--	--	--	--	--	40	--	--	--	--	40
Walworth	28. All Walworth County	--	--	--	--	--	--	20	--	--	--	--	20
--	Total	580	400	80	5,100	810	1,810	1,400	2,070	420	3,950	14,530	31,150

Source: SEWRPC.

# DISTRIBUTION OF AVERAGE WEEKDAY INTERCOUNTY PERSON TRIPS BETWEEN WASHINGTON COUNTY AND SURROUNDING COUNTIES: 1991

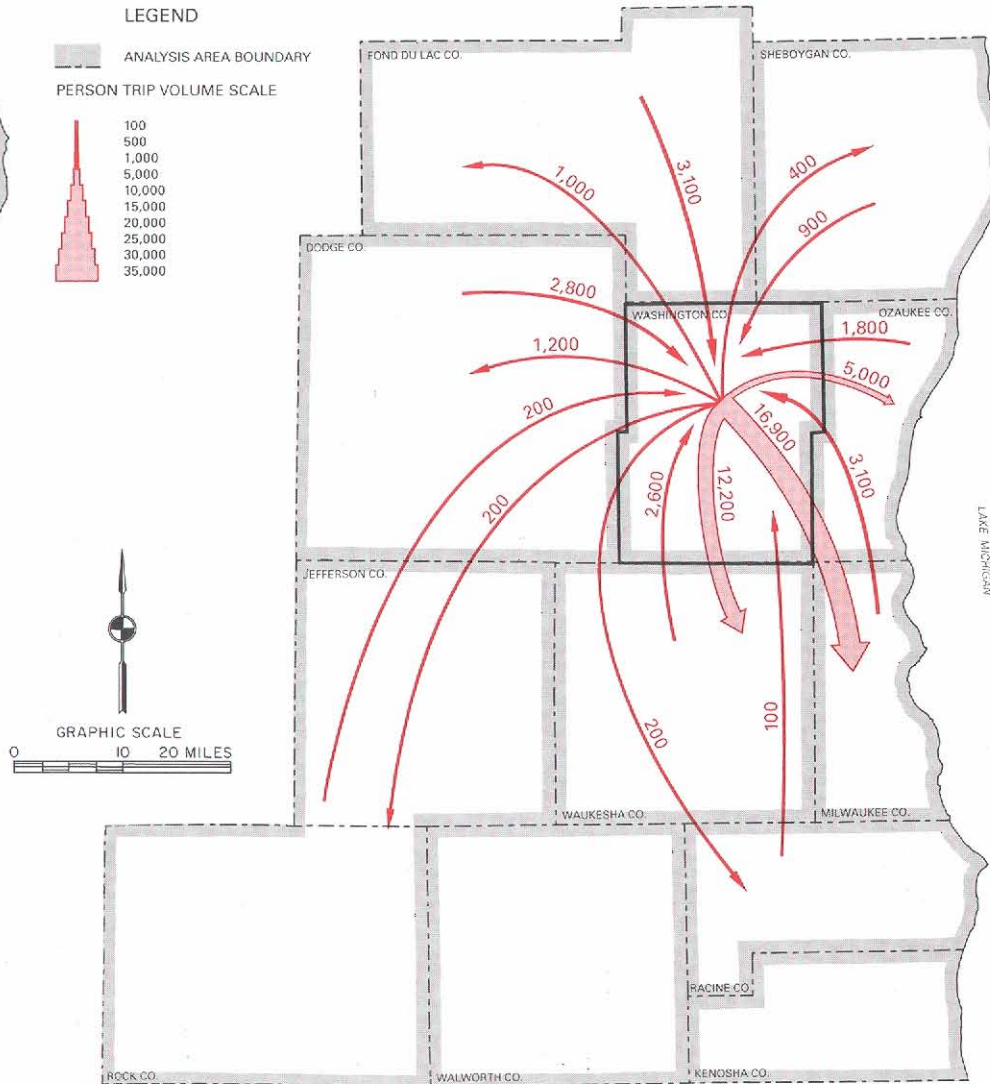
ALL TRIPS



NOTE: TOTAL TRAVEL BETWEEN WASHINGTON COUNTY AND OTHER COUNTIES LESS THAN 300 TRIPS PER DAY ARE NOT SHOWN.

Source: SEWRPC.

HOME-BASED WORK TRIPS



NOTE: TOTAL TRAVEL BETWEEN WASHINGTON COUNTY AND OTHER COUNTIES LESS THAN 100 TRIPS PER DAY ARE NOT SHOWN.

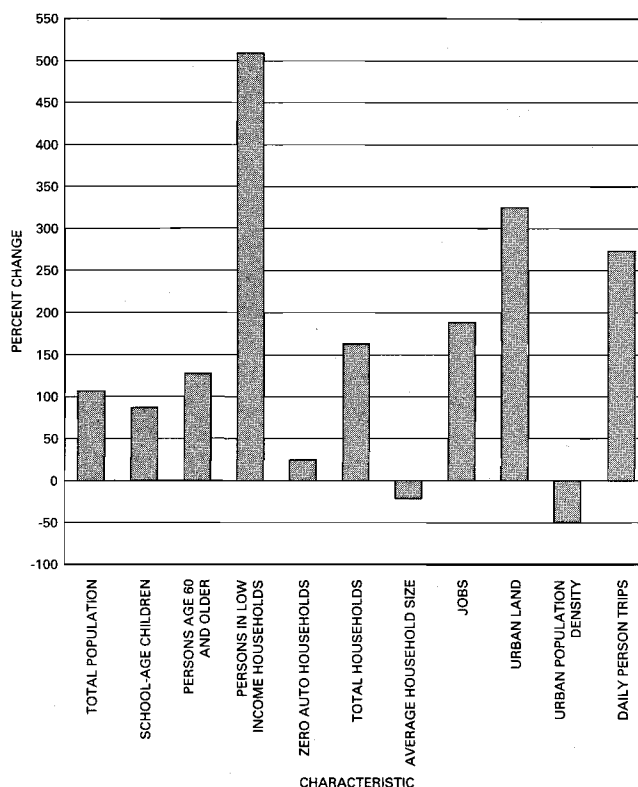
Source: SEWRPC.

cent. The rate of population growth for Washington County has been significantly greater than that of the seven-county Southeastern Wisconsin Region, reflecting the continued decentralization of population in the Region.

2. The number of households in the Washington County has been increasing faster than the resident population. In 1994, the number of households in the County stood at about 37,900, an increase of about 15 percent over the 1990 Census level of about 33,000 households. Between 1960 and 1990, the number of households increased by about 164 percent from the 1960 level of about 12,500 households. Consequently, the average household size decreased from about 3.6 persons in 1960 to about 2.9 persons in 1990, then to about 2.7 persons by 1994. Trip making and, hence, the potential need to serve trips by transit, is strongly related to the number of households and their characteristics.
3. Population subgroups whose dependence on, and use of, public transit service historically has been greater than that of the general population as a whole include school-age children, the elderly, the disabled, persons in low-income households, and households with limited automobile availability. The first three of these transit-dependent subgroups were found to be of significance for transit planning purposes in Washington County. In 1990, school-age children age 10 through 18 accounted for about 14 percent of the total resident population of the County, as compared to about 15 percent in 1960. Elderly persons age 60 years and older also accounted for about 14 percent of the total resident population in 1990, up slightly from about 13 percent in 1960. Disabled persons age 16 and older accounted for about 2 percent of the total resident population of the county in 1990; no comparable data were collected in the 1960 Census. In 1990, these transit-dependent subgroups were about evenly distributed among the minor civil divisions in the County.
4. The number of jobs in Washington County has been growing rapidly. In 1994, the number of jobs in the County stood at about 45,800, an increase of about 10 percent over the 1990 level of about 41,800 jobs. Over the period 1960 to 1990, the number of jobs increased by about 188 percent from the 1960 level of about

Figure 1

**RELATIVE CHANGES IN SELECTED CHARACTERISTICS OF WASHINGTON COUNTY OVER APPROXIMATELY THE LAST THREE DECADES**



Source: SEWRPC.

14,500 jobs. The principal concentrations of employment in the County in 1990 were in and around the Cities of Hartford and West Bend, with smaller but significant concentrations also found in the Villages of Germantown, Jackson, Kewaskum, and Slinger.

5. In 1963, the amount of land within Washington County devoted to urban land uses totaled about 9.7 square miles. By 1990, such developed urban land encompassed about 41.1 square miles, an increase of about 324 percent. The population density of the developed urban area of the County has decreased from about 4,500 to about 2,300 persons per square mile from 1963 to 1990. Despite the steady increase of urban development observed since 1963, the portion of the County developed for urban use in 1990 encompassed only about 10 percent of the total County area. With 90 percent of the County still in open, rural

land uses, the future pattern of development will be an important determinant of the future need for transit service and of the viability of public transit services in the County.

6. Certain major land uses in Washington County generate a large number of person trips on a daily basis. These include commercial centers, educational centers, medical centers, governmental and public institutional centers, employment centers, and recreational areas. These trip generators, which are frequently used by the transit-dependent-population subgroups, were identified in the County in 1995, along with the housing and care facilities for elderly and disabled persons. These trip generators were concentrated in the developed urban areas of the County, particularly in and around the Cities of Hartford and West Bend and the Villages of German-town, Jackson, Kewaskum, and Slinger.
7. According to household travel surveys undertaken by the Regional Planning Commission since 1963, about 88,000 person trips with one or both ends in Washington County were made on an average weekday in 1963. By 1991, about 330,000 such trips were made on an average weekday, an increase of 275 percent. Of the 1991 trips, about 224,000, about 68 percent of the 330,000 total trips, were made between origins and destinations entirely within Washington County. The 1991 intracounty trips represented an increase of about 257 percent over the approximately

63,000 such trips observed in 1963. The largest number of such intracounty trips in 1991, about 59 percent, were made entirely within the West Bend-Barton, Hartford, and German-town areas of the County.

Approximately 106,000 of the 1991 trips, or 32 percent of the 330,000 total trips, were made between the County and other counties within the Southeastern Wisconsin Region. Notably, the 1991 intercounty trips represented an increase of about 313 percent over the approximately 25,000 intercounty trips observed in 1963, which was significantly greater than the increase in intracounty trips observed during this period. About 31 percent of these intercounty trips were made from Washington to Milwaukee County, focusing on the northern half of Milwaukee County and the City of Milwaukee central business district, and about 29 percent were made from Washington to Waukesha County, focusing on the Menomonee Falls-Lannon area of Waukesha County.

In addition to the 330,000 person trips identified based upon the Commission's 1991 household travel survey, the Commission's 1992 cordon survey identified about 24,000 persons trips made on an average weekday between the County and areas outside the Southeastern Wisconsin Region. Trips made from Fond du Lac and Dodge Counties to Washington County accounted for about 10,900, or about 45 percent, of these trips.

## Chapter III

### EXISTING PUBLIC TRANSPORTATION SERVICES

#### INTRODUCTION

An understanding of the existing transit services available to the citizens of Washington County is basic to the preparation of a sound plan for providing improved transit service. This understanding should be based upon pertinent information describing the eligibility, operating, and ridership characteristics of the principal transit services.

This chapter documents the findings of an inventory of the principal programs and services available during 1995 to provide transit services to individuals within Washington County. Presented first is a description of each of the general transit services available to serve the general public in the County during 1995. This is followed by descriptions of special transportation services providing transportation to employees at employment centers within the County. Descriptions of the specialized transportation services for elderly and disabled individuals available during 1995, which comprised the vast majority of the available transit services, are provided third. The chapter concludes with descriptions of yellow school bus services provided by the school districts in the County. Table 29 summarizes the general characteristics of the services identified, including information on the service provider, eligible users, fares, service area, service hours, number and type of vehicles used, and estimated average weekday ridership in 1995.

#### GENERAL TRANSIT SERVICES

The transit services for the general public which were provided on a regular and continuing basis within Washington County during 1995 consisted principally of shared-ride taxicab service provided by the Cities of Hartford and West Bend and inter-city bus service serving Washington County, provided by the private sector (see Map 12).

##### Taxicab Service

City of Hartford Taxicab Service: During 1995, the City of Hartford provided shared-ride taxicab service for travel within the City and between the City and surrounding areas. Operation of the publicly subsidized taxicab service, known locally as

Hartford City Taxi, was initiated by the City of Hartford in January 1981 in response to the City's perceived need for better transportation for its elderly and disabled population. The Hartford system was the first public taxicab system in the seven-county Southeastern Wisconsin Region.

The taxicab system was operated directly by the City, staffed by employees of the Hartford Municipal Recreation Department. The system provided door-to-door transportation service to all individuals for travel within its regular service area, which consisted of the area within the City's corporate limits, and between locations in the City and areas within a distance of up to ten miles outside the City. For such trips, service was provided on demand on the same day the trip request was received. Trips by City residents to Milwaukee air, bus, and railway passenger terminals were also accommodated on a one-week advance-reservation basis, provided a vehicle could be made available without disrupting regular service.

During 1995, taxicab service was provided seven days a week, excluding holidays. Service was available during nonsummer months between 6:00 a.m. and 9:00 p.m. on weekdays, between 8:00 a.m. and 8:00 p.m. on Saturdays, and between 9:00 a.m. and 3:00 p.m. on Sundays. During the months of June, July and August, weekday and Saturday service hours were reduced by one hour at the end of each day. No service was provided on holidays throughout the year.

As shown in Table 30, the base cash fare charged by the Hartford City Taxi service during 1995 was \$1.50 per one-way trip for all passengers aged four and over, with younger children riding free when accompanied by an adult. Prepaid tickets and elderly and disabled "taxi cards," which reduced the base fare to \$1.25 per one-way trip, were also available to City residents. Trips outside the City but within ten miles of its corporate limits were subject to an additional fee of \$1.00 per mile for each passenger. For travel to Milwaukee passenger terminals, the one-way fares were \$35.00 for the first passenger and \$15.00 for each additional passenger.

Table 29

## EXISTING TRANSIT SERVICE PROVIDERS IN WASHINGTON COUNTY: 1995

Service Category	Service Provider	Type of Organization	Type of Service	Eligible Users	Fares <sup>a</sup>	Service Area	Days and Hours of Operation	Number and Type of Vehicles Used	Average Weekday One-way Trips
General Public Transportation Service	City of Hartford--Hartford City Taxi	Public	Door-to-door demand responsive	Anyone	Base fare (age 4 and over): \$1.50 Travel outside City limits (up to 10 miles): \$1.00 per mile Long distance travel to Milwaukee interregional air, bus, and train passenger terminals: \$35.00	City of Hartford and adjacent areas within a radius of 10 miles from City limits; special long-distance service provided to Milwaukee interregional air, bus, and train passenger terminals	<u>September - May</u> Weekdays: 6:00 a.m. to 9:00 p.m. Saturdays: 8:00 a.m. to 8:00 p.m. Sundays: 9:00 a.m. to 3:00 p.m. Holidays: no service <u>June - August</u> Weekdays: 6:00 a.m. to 8:00 p.m. Saturdays: 8:00 a.m. to 7:00 p.m. Sundays: 9:00 a.m. to 3:00 p.m. Holidays: no service	Two accessible minivans and one automobile	70
	City of West Bend--West Bend Taxi	Public	Door-to-door demand responsive	Anyone	Adults (age 18 - 64): \$2.00 Students (age 5 - high school): \$1.50 Elderly (age 65 and over) and Disabled: \$1.00 Travel outside City Limits: \$1.00 per mile	City of West Bend and immediate environs	Weekdays: 6:00 a.m. to 10:00 p.m. Saturdays: 6:00 a.m. to 10:00 p.m. Sundays and holidays: 8:00 a.m. to 2:00 p.m. Holidays: No Service	Four minivans and two accessible full-size vans	265
	Greyhound Lines, Inc.	Private for profit	Fixed-route, fixed-schedule	Anyone	Distance-based	Single stop in Germantown in Washington County with connections through Milwaukee to cities throughout United States	Three bus trips per day in each direction	Long-distance over-the-road motor coaches	12
	Lamers Bus Lines, Inc.	Private for profit	Fixed-route, fixed-schedule	Anyone	Distance-based	Operates nonstop through Washington County between Wausau and Milwaukee	One bus trip per day in each direction	Long-distance over-the-road motor coaches	N/A
	Airport Transportation Service <sup>b</sup>	Private for profit	Door-to-door advance reservation	Anyone	Distance-based	Washington County and other Counties in Southeastern Wisconsin (to and from Milwaukee County's General Mitchell International Airport and Chicago O'Hare International Airport)	Seven days a week, as needed	Full-size vans, minivans, limousines	N/A

Table 29 (continued)

Service Category	Service Provider	Type of Organization	Type of Service	Eligible Users	Fares <sup>a</sup>	Service Area	Days and Hours of Operation	Number and Type of Vehicles Used	Average Weekday One-way Trips
Employee Transportation Service	Job-Ride Transportation Program <sup>c</sup>	Public	Subscription employee transportation	Job-ride clients	\$2.00 (employer pays one-half of fare)	Milwaukee and Washington Counties	Seven days a week, as needed	Full-size vans	90
	JNA Temporary Services, Inc.	Private for profit	Subscription employee transportation	Clients placed with West Bend Company and other companies	\$2.00 (\$20.00 per week)	Milwaukee and Washington Counties	Seven days a week, as needed	Four large school buses, and three full-size vans	280
Specialized Transportation Service	American Cancer Society	Private nonprofit	Door-to-door with one to two day advance reservation	Cancer treatment patients	No charge	Washington County and surrounding counties	Weekdays: 8:00 a.m. - 5:00 p.m.	Automobiles provided by volunteers	2
	American Red Cross-Kettle Moraine Region of Greater Milwaukee Chapter	Private nonprofit	Door-to-door with two week advance reservation	Medical patients principally for cancer treatments, kidney dialysis, and rehabilitation services with priority to elderly and disabled persons	No charge but donations accepted; suggested donations were \$3.00 for trips within County and \$5.00 for trips outside County	Southwestern Washington County including Addison, Polk, Germantown, Hartford, Erin, and Richfield; and surrounding counties	Weekdays: 8:00 a.m. - 5:00 p.m. (Emergency service if driver is available)	One station wagon and one accessible full-size van	13
	American Red Cross-West Bend Chapter	Private nonprofit	Door-to-door with three to five days advance reservation	Medical patients principally for cancer treatments, kidney dialysis, rehabilitation services with priority to elderly and disabled persons	No charge	Northeastern Washington County including West Bend, Jackson, Kewaskum, Barton, Farmington, Trenton and Wayne; and surrounding counties.	Weekdays: 8:00 a.m. - 5:00 p.m. (Emergency service if driver is available)	Two accessible full-sized vans	16
	Cedar Campuses <sup>d</sup>	Private nonprofit	Door-to-door, limited to special events and activities	Residents and clients of facilities operated by organization	No charge	Washington County	As needed for occasional special activities	One small bus	-- <sup>e</sup>
	Handicare, Inc.	Private for profit	Door-to-door with one day advance reservation	Anyone but primarily elderly and disabled for medical trips	Distance-based	Washington County and surrounding counties	As needed	Accessible and non-accessible full-sized vans	4

Table 29 (continued)

Service Category	Service Provider	Type of Organization	Type of Service	Eligible Users	Fares <sup>a</sup>	Service Area	Days and Hours of Operation	Number and Type of Vehicles Used	Average Weekday One-way Trips
Specialized Transportation Service (continued)	Hartford Memorial Hospital Foundation	Private nonprofit	Door-to-door with two day advance reservation	Patients at Hartford Memorial Hospital and associated clinics in Hartford, Slinger, and Hustisford	No charge but donations accepted; suggested donations were \$3.00 for trips within County and \$5.00 for trips outside County	Hartford, Slinger, Hustisford areas	Weekdays: 8:00 a.m. - 5:00 p.m.	One non-accessible full-sized van	5
	Lutheran Social Services	Private nonprofit	Door-to-door with one day advance reservation	Elderly persons participating in adult day care, senior aides, and disabled youth day care programs	Distance-based	Washington County	Weekdays: 7:30 a.m. - 9:00 a.m. and 3:00 p.m. - 5:30 p.m.	One accessible full-sized van	13
	Nichols Medical Transports	Private for profit	Door-to-door with one day advanced reservation	Anyone but primarily elderly and disabled for medical trips	Distance-based	Washington County and surrounding counties	As needed	Accessible full-size vans	2
	Sentry Foods Shuttle	Private for profit	Door-to-door with same day advanced registration	Anyone shopping at Sentry Foods in the City of Hartford	No charge	City of Hartford	Wednesday: 12:30 p.m. - 2:30 p.m. Friday: 12:30 p.m. - 2:30 p.m.	One small bus	14
	Samaritan Home	Public	Door-to-door, limited to special events and activities	Residents at Samaritan Home	No charge	Washington County	As needed for occasional special activities	One small bus	-- <sup>a</sup>
	Specialized Transport Services, Inc.	Private for profit	Door-to-door with one day advance reservation	Anyone but primarily elderly and disabled for medical trips	Distance-based	Washington County and surrounding counties	As needed	Six full-size accessible vans	20
	The Threshold, Inc.	Private nonprofit	Fixed-route, fixed schedule, and door-to-door	Clients participating in programs offered by organizations	\$25.00 per month collected based on ability to pay	Washington County	Weekdays: 6:30 a.m. - 8:00 a.m. 12:00 p.m. - 1:00 p.m. 3:00 p.m. - 5:00 p.m.	Eight large accessible buses, and two accessible full-sized vans	350
	Washington County Department of Social Services	Public	Door-to-door with advance reservation	Low income individuals and foster children for medical and other essential purpose trips	No charge	Washington County	Weekdays: 8:00 a.m. - 5:00 p.m.	Automobile provided by volunteer	2



Table 29 (continued)

Service Category	Service Provider	Type of Organization	Type of Service	Eligible Users	Fares <sup>a</sup>	Service Area	Days and Hours of Operation	Number and Type of Vehicles Used	Average Weekday One-way Trips
Specialized Transportation Service (continued)	Washington County Office on Aging	Public	Door-to-door with two-day advance reservation	Persons 60 years of age and older and disabled of all ages	<u>Elderly Disabled:</u> Within service area: \$1.25 Between service areas: \$2.50  <u>Attendants/Companions</u> All trips: \$2.50	Washington County and the Village of Menomonee Falls in Waukesha County	<u>West Bend Service Area</u> Tuesday-Thursday: 8:30 a.m.-4:00 p.m. Friday: 8:00 a.m.-4:00 p.m.  <u>Hartford Service Area</u> Tuesday, Thursday: 9:00 a.m. - 3:00 p.m. Monday, Wednesday, Friday: 10:30 a.m. - 12:30 p.m.  <u>Germantown Service Area</u> Monday: 10:00 a.m. - 2:00 p.m. Wednesday: 9:30 a.m. - 2:30 p.m.  <u>Work-Related Service</u> Monday-Friday: 6:30 a.m. - 9:30 p.m. 3:00 p.m. - 6:30 p.m.  <u>Adult Day Care Service</u> Monday-Friday: 6:30 a.m. - 9:30 p.m. 3:30 p.m. - 5:30 p.m.	Three xaccessible full-size vans and two non-accessible full-size vans	46
Yellow School Bus Service	Washington County School Districts <sup>f</sup>	Public	Fixed-route, fixed schedule	Students within school districts	No direct charge	Within and between Washington County School districts	Schooldays, 6:00 a.m. to 5:00 p.m.	Yellow school buses and lift-equipped vans	27,000

<sup>a</sup>Unless otherwise noted, fares shown are per one-way trip and reflect full cash fares.

<sup>b</sup>Companies providing airport shuttle/limousine services between Washington County locations and General Mitchell International Airport or O'Hare International Airport included: Airport Car Service, Veteran Express Shuttle Service, Limousine Services, Niemuth Chauffeur Service LTD., and Shooting Star Travels.

<sup>c</sup>Private transportation companies providing employee transportation in Washington County under the Job Ride program included Milwaukee Careers Cooperative, Goodwill Industries of Southeastern Wisconsin, and the Opportunities Industrialization Center.

<sup>d</sup>Includes transportation for Cedar Lake Home, Cedar Bay, and Cedar Ridge Retirement Campus.

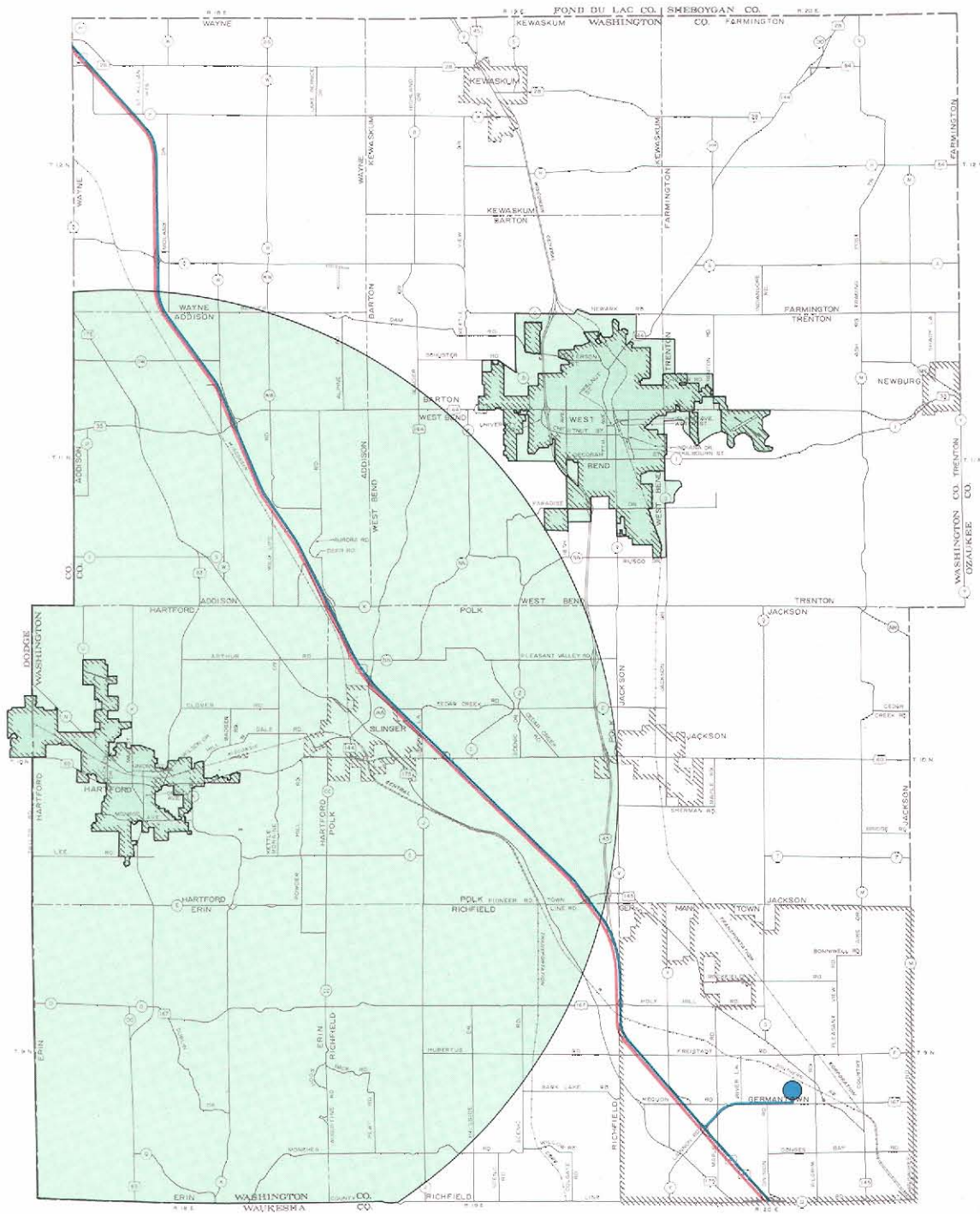
<sup>e</sup>Average of less than one per day

<sup>f</sup>The principal school districts providing yellow school bus service in Washington County in 1995 are identified in Table 40.

Source: SEWRPC

Map 12

INTERCITY BUS AND TAXICAB SERVICES IN WASHINGTON COUNTY: 1995



LEGEND

INTERCITY BUS SERVICE

- GREYHOUND LINES, INC. ROUTE
- LAMERS BUS LINES, INC. ROUTE
- BUS STOP

AREAS SERVED BY PUBLIC TAXICAB SERVICE

- PRIMARY (IN-CITY) SERVICE AREAS FOR HARTFORD AND WEST BEND TAXICAB SERVICES
- SECONDARY (OUTSIDE-CITY) SERVICE AREAS FOR HARTFORD AND WEST BEND TAXICAB SERVICES



Source: SEWRPC.

Table 30

**FARE STRUCTURE FOR THE  
CITY OF HARTFORD TAXICAB SYSTEM: 1995**

Fare Category	Fare per One-way Trip
Base Cash Fare (Ages 4 and over) . . . .	\$1.50
Prepaid Ticket <sup>a</sup> . . . . .	\$1.25
Elderly/Disabled Taxi Card <sup>b</sup> . . . . .	\$1.25
Children (Under Age 4 when accompanied by an adult passenger) . . . . .	Free
Additional Charge for Travel up to 10 miles outside City Limits . . . . .	\$1.00 per mile per person
Charge for Package Delivery (within City limits) . . . . .	\$3.00
Long Distance Service to Milwaukee Passenger Transportation Terminals . . . . .	\$35.00 for first person \$15.00 for each additional passenger

<sup>a</sup>A sheet of 8 tickets is sold for \$10.00 at the Hartford City Hall, the Hartford Recreation Center, and through the taxicab drivers.

<sup>b</sup>Available to City residents who are 60 years of age or older or disabled at no cost from the Hartford Recreation Center.

Source: City of Hartford Municipal Recreation Department and SEWRPC.

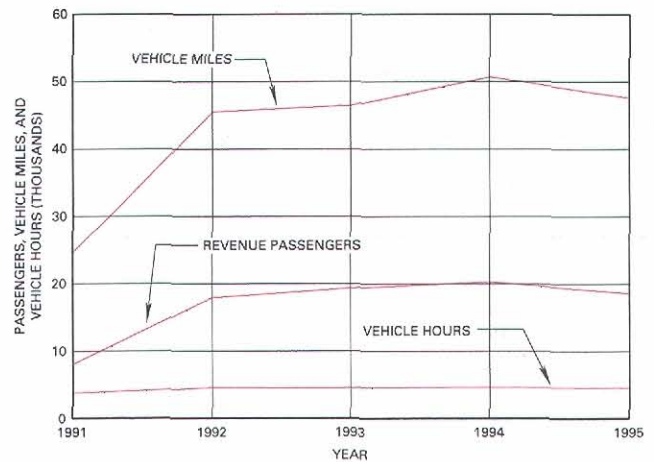
The taxicab service was operated during 1995 using a fleet of three City-owned vehicles, including two 1995 accessible minivans and one 1988 automobile. Typically, the taxicab system required only one vehicle to be in operation daily to provide needed service. From December through April, the months of highest ridership, two vehicles were needed to provide service on weekdays.

The ridership and service levels for the Hartford taxicab system over the past five years are shown in Figure 2. Ridership on the taxicab system increased dramatically in 1992, when base taxicab fares were substantially reduced and mileage charges for in-city travel were eliminated.<sup>1</sup> Increases in the

<sup>1</sup>The 1991 fares for in-city travel included a base fare of \$1.25 per one-way trip plus charges of between \$0.65 and \$1.05 per mile, depending on trip distance. In 1992, the base fare was reduced to \$1.00 per one-way trip and all mileage charges for in-city travel were eliminated.

Figure 2

**RIDERSHIP AND SERVICE LEVELS FOR THE  
CITY OF HARTFORD TAXICAB SYSTEM: 1991-1995**



Source: City of Hartford Municipal Recreation Department and SEWRPC.

base fare per one way trip to \$1.25 in 1993 and \$1.50 in 1995 slowed the growth in ridership on the service. Total ridership on the taxicab system during 1995 was about 18,700 one-way trips, representing an average weekday ridership of about 70 one-way trips. About 80 percent of the trips were made entirely within the City of Hartford and the majority of the out-of-city trips were made to or from locations within one mile of the City's corporate limits.

Table 31 presents the annual ridership and operating costs for the taxicab system for the past five-year period, 1991 through 1995. Ridership on the system over this period increased from about 8,100 one-way trips in 1991 to an estimated 18,700 one-way trips in 1995, or by about 131 percent. The operating expenses for the program increased from about \$78,000 in 1991 to an estimated \$100,200 in 1995, or by about 28 percent. Operating expenses were supported through passenger fares, Federal and State transit operating assistance funds, and local funds, provided by the City of Hartford. Passenger fares increased with system ridership, from about \$16,900 in 1991 to an estimated \$26,400 in 1995, or by about 56 percent. About 26 percent of the system's operating expenses were recovered directly through passenger revenues in 1995, compared with about 22 percent in 1991. The local funds provided by the City of Hartford for

Table 31

## ANNUAL RIDERSHIP AND EXPENDITURES FOR THE CITY OF HARTFORD TAXICAB SYSTEM: 1991-1995

Operating Characteristic	Year				
	1991	1992	1993	1994 <sup>a</sup>	1995 <sup>a</sup>
Service Area Population <sup>b</sup> .....	8,300	8,500	8,600	8,800	8,900
Service Provided					
Total vehicle hours .....	3,800	4,600	4,600	4,700	4,600
Total vehicle miles .....	24,700	45,600	46,600	50,900	47,800
Ridership (one-way trips)					
Revenue passengers .....	8,100	18,000	19,400	20,400	18,700
Operating Costs					
Operating expenses .....	\$78,000	\$91,700	\$97,600	\$101,800	\$100,200
Operating revenues .....	16,900	20,100	22,200	23,400	26,400
Operating deficit					
Federal funds <sup>c</sup> .....	20,500	25,700	27,300	28,500	28,100
State funds <sup>d</sup> .....	30,000	38,500	41,000	42,800	42,100
City Funds .....	10,600	7,400	7,100	7,100	3,600
Total	\$61,100	\$71,600	\$75,400	\$78,400	\$73,800
Capital Expenditures					
Federal funds <sup>c</sup> .....	--	--	--	--	\$57,600
City Funds .....	--	--	--	--	14,400
Total	--	--	--	--	\$72,000
Operating Effectiveness and Efficiency					
Passengers per capita .....	1.00	2.10	2.30	2.30	2.10
Passengers per vehicle hour .....	2.10	3.90	4.20	4.30	4.10
Passengers per vehicle mile .....	0.33	0.39	0.42	0.40	0.39
Operating expense per passenger ....	\$9.63	\$5.09	\$5.03	\$4.99	\$5.36
Operating deficit per passenger .....	\$7.54	\$3.98	\$3.89	\$3.84	\$3.95
Percent of operating expenses recovered through operating revenues .....	21.70	21.90	22.70	23.00	26.30

<sup>a</sup>Financial data are unaudited estimates.

<sup>b</sup>Based on the population of the City of Hartford which constitutes the principal service area for the system.

<sup>c</sup>Reflects funds obtained through the Federal Section 5311 nonurbanized formula transit assistance program.

<sup>d</sup>Reflects funds obtained through the State 85.20 urban mass transportation operating assistance program.

Source: City of Hartford Municipal Recreation Department, Wisconsin Department of Transportation, and SEWRPC.

the operation of taxicab service were expected to total about \$3,600 during 1995, a decrease of about 66 percent from the \$10,600 in local funds needed in 1991.

Federal transit capital assistance funds and local funds provided by the City of Hartford have also been used for the purchase of operating equipment

for the City taxicab system. The City acquired two new 1996 accessible minivans for taxicab vehicles for the system during 1995. Approximately \$57,600, or 80 percent, of the estimated total cost of these vehicles, about \$72,000, was offset by a Federal transit capital assistance grant received by the City in 1994. The remaining 20 percent, about \$14,400, was funded by the City.



**City of West Bend Taxicab Service:** During 1995, the City of West Bend provided shared-ride taxicab service for travel within the City and between the City and surrounding areas. Operation of the publicly subsidized taxicab service, known locally as the West Bend Taxi Service, was initiated by the City of West Bend in late January 1993 on the recommendations of a transit service feasibility study completed by the Regional Planning Commission in February 1991.<sup>2</sup> That study, which identified the service characteristics, ridership, and costs of potential fixed-route and demand-responsive transit services for the City, recommended the creation of a publicly subsidized shared-ride taxicab system, largely to serve the transportation needs of the City's elderly and disabled population.

The taxicab system was operated for the City on a contract basis by a private transit operator, Specialized Transportation Services, Inc., selected by the City through competitive bidding. The contract was administered by public employees within the City Department of Community Development. The system provided door-to-door transportation service to all individuals for travel within its regular service area, which consisted of the area within the City's corporate limits, and between locations in the City and limited areas within one mile outside the City (see Map 12). Service was also provided to selected major traffic generators outside the regular service area, including the Cedar Lake Home, in the Town of West Bend, and the Serigraph, Inc., plant, in the Town of Trenton, if the trips could be scheduled without interfering with service for trips within the City. No service was provided for trips with both the origin and destination entirely outside the City. Service was provided on the same day the trip was requested, within a maximum response time of 30 minutes.

During 1995, taxicab service was provided seven days a week, excluding all holidays which were not on a Sunday. Service was available between 6:00 a.m. and 10:00 p.m. on weekdays and Saturdays and between 8:00 a.m. and 4:00 p.m. on Sundays. As shown in Table 32, the base cash fares per one-way trip charged by the West Bend Taxi Service during 1995 were \$2.00 for adults aged 18

<sup>2</sup>See SEWRPC Community Assistance Planning Report No. 189, *A Transit System Feasibility Study and Development Plan for the City of West Bend: 1992-1996*, February 1991.

Table 32

**FARE STRUCTURE FOR  
THE CITY OF WEST BEND TAXICAB SYSTEM: 1995**

Fare Category	Fare per One-Way Trip
Adult Cash Fare (age 18 through 64) .....	\$2.00
Student Cash Fare (age 5 through high school) .....	\$1.50
Elderly (age 65 and over)/ Disabled Cash Fare .....	\$1.00
Children (under age 5 when accompanied by an adult) .....	Free
Additional Charge for Travel Outside City Limits .....	\$1.00 per mile per taxicab trip
Prepaid Trip Coupons <sup>a</sup>	
Adults .....	\$1.80
Students .....	\$1.35
Elderly/Disabled Persons .....	\$0.90

<sup>a</sup>Prepaid 10-trip coupon books are available at the West Bend City Hall and from taxicab drivers at a cost of \$18.00 for adults, \$13.50 for students, and \$9.00 for elderly and disabled persons.

Source: City of West Bend Department of Community Development and SEWRPC.

through 64 years, \$1.50 for students aged five through high school, and \$1.00 for elderly persons aged 65 and older and disabled persons of all ages. No fare was charged for children under five when accompanied by an adult. Prepaid ticket coupon books, which reduced the base fares by 10 percent in all fare categories, were also available. Trips made outside of the City were subject to an additional fee of \$1.00 per mile for each vehicle trip.

The taxicab service was operated during 1995 using a fleet of six City-owned vehicles, including four 1994 minivans and two 1994 full-size accessible vans. Typically, the taxicab system required all six vehicles to be in operation during peak periods to provide weekday service.

Ridership on the taxicab system has grown rapidly, increasing from about 54,100 one-way trips for eleven months of operation in 1993 to about 78,800 one-way trips for all of 1995, or by about 46 percent. The average weekday ridership on the taxicab system during 1995 was about 265 one-way trips. About 95 percent of the trips were made entirely within the City of West Bend.

Table 33

## ANNUAL RIDERSHIP AND EXPENDITURES FOR THE CITY OF WEST BEND TAXICAB SYSTEM: 1993-1995

Operating Characteristic	Year		
	1993 <sup>a</sup>	1994	1995 <sup>b</sup>
Service Area population <sup>c</sup> .....	26,000	27,100	27,600
Service Provided			
Total vehicle hours .....	15,500	18,500	20,900
Total vehicle miles .....	184,500	243,100	253,800
Ridership (one-way trips)			
Revenue passengers .....	54,100	74,700	78,800
Operating Costs			
Operating expenses .....	\$229,800	\$287,000	\$341,500
Operating revenues .....	59,100	75,800	105,000
Operating deficit			
Federal funds <sup>d</sup> .....	64,300	80,400	93,400
State funds <sup>e</sup> .....	96,500	120,500	143,100
City Funds .....	9,900	10,300	--
Total	\$170,700	\$211,200	\$236,500
Capital Expenditures			
Federal funds <sup>d</sup> .....	--	\$ 88,600	--
City Funds .....	--	22,100	--
Total	--	\$110,700	--
Operating Effectiveness and Efficiency			
Passengers per capita .....	2.10	2.80	2.90
Passengers per vehicle hour .....	3.50	4.00	3.80
Passengers per vehicle mile .....	0.29	0.31	0.31
Operating expense per passenger .....	\$4.25	\$3.84	\$4.33
Operating deficit per passenger .....	\$3.16	\$2.83	\$3.00
Percent of operating expenses recovered through operating revenues .....	25.70	26.40	30.70

<sup>a</sup>Data are for less than 12 months of operation as service was initiated on January 20, 1993. Financial data are unaudited estimates.

<sup>b</sup>Financial data are unaudited estimates.

<sup>c</sup>Based on the population of the City of West Bend which constitutes the principal service area for the system.

<sup>d</sup>Reflects funds obtained through the Federal Section 5311 nonurbanized formula transit assistance program.

<sup>e</sup>Reflects funds obtained through the State 85.20 urban mass transportation operating assistance program.

Source: City of West Bend Department of Community Development, Wisconsin Department of Transportation, and SEWRPC.

Table 33 presents the annual ridership and operating costs for the taxicab system over the past three years. The operating expenses for the service have increased from about \$229,800 in 1993 to an estimated \$341,500 for 1995, or by about 49 percent.

Operating expenses were supported through passenger fares, Federal and State transit operating assistance funds, and local funds, provided by the City of West Bend. Passenger fares increased with system ridership, from about \$59,100 in 1993 to an

estimated \$105,000 for 1995, or by about 78 percent. About 31 percent of the system's operating expenses were recovered directly through passenger revenues in 1995, compared with about 26 percent in 1993. No local funds from the City of West Bend were needed to support the operation of taxicab service during 1995, compared to about \$10,000 in City funds provided in 1993 and 1994.

Federal transit capital assistance funds and local funds provided by the City of West Bend have also been used for the purchase of operating equipment for the City taxicab system, including the six taxicab vehicles and communications equipment used by the system acquired by the City in 1994. Approximately \$88,600, or 80 percent, of the estimated total cost of the vehicles and related equipment of about \$110,700 was offset by a Federal transit capital assistance grant received by the City in 1992. The remaining 20 percent, amounting to about \$22,100, was funded by the City.

#### Intercity Bus and Limousine Service

During 1995 there were two private companies providing intercity motor coach service through Washington County: Greyhound Lines, Inc., and Lamers Bus Lines, Inc. The Greyhound service in Southeastern Wisconsin was centered on the City of Milwaukee central business district, which the carrier uses as a regional hub and at which passengers may transfer to other routes operated by Greyhound Lines or other bus companies. The company operated one route between Milwaukee and Appleton traversing Washington County via USH 41. Service over the route consisted of three daily bus trips in each direction with a single stop within Washington County, in the Village of Germantown. Lamers Bus Lines also operated one route traversing Washington County via USH-41 between Milwaukee and Wausau. However, no stops were made within the County over this route.

Limousine service from locations within Washington County to Milwaukee County's General Mitchell International Airport and Chicago's O'Hare International Airport was also provided during 1995 by a number of private providers, as identified in Table 29. The service was available seven-days a week with a 24-hour advance reservation. Fares for the service were distance-based.

### **EMPLOYEE TRANSPORTATION SERVICES**

#### Job-Ride Transportation Services

Special transit services were provided in 1995 to employees of businesses in Washington County by

several private companies participating in the employment transit assistance program, or "job ride" program, administered by the Wisconsin Department of Workforce Development. This program addresses transportation problems within the Milwaukee metropolitan area which have developed as a result of an increasing mismatch between the location of new jobs and the place of residence of potential workers. The program accomplishes this by encouraging the provision of transit services, other than traditional fixed-route bus services, which can be used to serve work travel by unemployed individuals seeking jobs in areas poorly served or unserved by the existing Milwaukee area fixed-route bus services.

The funds available under the job-ride program are distributed on a competitive basis to private nonprofit and for-profit organizations, local units of government, and local governmental agencies located in Milwaukee County. The funds may be used to offset up to 80 percent of eligible costs for employee transportation services, including costs for service operation, capital equipment, and indirect project administration activities. Under the program, job-ride service providers contract with area employers both to find and to transport individuals to fill openings for permanent jobs. Eligible users of the job-ride transit services, consequently, are individuals who have been either recruited, or placed with an employer, by the service provider. Fares for the transit service cannot exceed \$2.00 per one-way trip; employers must pay at least 50 percent of the fare for the participating employees.

Of the six private organizations receiving State aid under the program in 1995 to provide employee transit services within the greater Milwaukee area, three regularly transported a significant number of individuals residing in central Milwaukee County to job locations within Washington County: Milwaukee Careers Cooperative, Goodwill Industries of Southeastern Wisconsin, and the Opportunities Industrialization Center. These three providers have informally agreed to cooperate with the Milwaukee County Private Industry Council and the Washington-Ozaukee-Waukesha Counties Private Industry Council in providing employee placement at, and transportation services to, job sites in Washington County in a coordinated manner rather than in competition with each other. The two private industry councils have jointly developed a proposal to provide a transportation link to job opportunities in Washington County for a pool of unemployed and underemployed persons in central Milwaukee County. The proposal has been sub-

mitted to the nationwide "Bridges to Work" demonstration program for funding, potentially in 1996. Coordination of the job ride program is seen as a preliminary step in establishing the proposed demonstration transportation service.

The existing transit service provided by these three operators during 1995 was available to meet the specific needs of their clients, generally on weekdays between 4:30 a.m. and 1:00 a.m. All three operators used fleets of full-size vans to serve demand generated by employers within Washington County. On an average weekday the providers served about 92 one-way trips, or about 46 round trips, made by individuals traveling between Milwaukee and Washington Counties. Of these trips, Milwaukee Careers Cooperative provided about 50 trips, Goodwill Industries provided about six trips, and the Opportunities Industrialization Center provided about 36 trips. The trips served by these providers were generally to and from employers located in the Villages of Germantown and Slinger and the Cities of West Bend and Hartford.

The total costs of providing the job-ride transportation service in Washington County was estimated at about \$268,000 in 1995. The costs are covered by passenger fares and State funds provided under the job-ride program.

#### Employment Agency Transportation Services

Employee transit services were also provided in 1995 by a private employment agency to a single business located within the City of West Bend. JNA Temporary Services, Inc., provided transportation for employees of the West Bend Company who resided in south-central Milwaukee County. The employment agency began providing this service in 1992 as part of its employee placement services for the West Bend Company. Beginning by providing transportation services to about 30 temporary employees each weekday in 1992, the transportation service was expanded to serve about 280 full-time and temporary employees each weekday during 1994. In Fall 1995, the employment agency was providing transportation service for approximately 140 employees of the West Bend Company, including 80 permanent and 60 temporary employees.

The employee transportation service was provided on essentially a fixed-route basis, with flexible schedules designed to accommodate employee starting and ending times for first, second, and third shifts. Within Milwaukee County, regular stops

to pick up and discharge employees are made at S. 16th Street and W. Washington Street, S. 11th Street and W. Greenfield Avenue, and at the employment agency office at S. 17th Street and W. Lincoln Avenue. To provide the service, the employment agency uses four large school buses and three full-size vans, all of which were purchased used from an existing school bus operator.

The employment agency charges each patron a fare of \$20.00 per week, or an average fare of \$2.00 per one-way trip, if the individual uses the service to commute to and from work five days per week. Both the West Bend Company and the employment agency estimate that passenger fares cover approximately 80 percent of the costs of the transportation service, with the remaining 20 percent paid for with private funds provided by West Bend Company and the employment agency. The total cost of providing the service during 1995 was estimated at about \$140,000.

Average weekday ridership on the service in Fall 1995 was estimated at about 280 one-way trips per day. In addition to employees of the West Bend Company, JNA Temporary Services, Inc., has also used the transportation service to transport employees it has placed with other West Bend area employers, including Serigraph, Inc. and The Clothes Clinic, as permitted by the work-shifts of the other employers and the available space on its vehicles.

#### **SPECIALIZED TRANSPORTATION SERVICES**

Specialized transportation services in Washington County were provided in 1995 by a number of public and private nonprofit agencies and organizations, as well as by private for-profit transportation companies. In general, most of the specialized transportation services available to County residents were provided on demand rather than on a fixed schedule, with eligibility for service usually limited to clientele of the sponsoring agency or organization, principally elderly or disabled individuals. The specialized transportation services provided in 1995 in the County are described in the following sections.

#### Washington County Office on Aging Services

The principal provider in 1995 of specialized transportation service within Washington County, in terms of the clientele and trip purposes served, was the Washington County Office on Aging Services. The Office on Aging Services offered Countywide,



advance reservation, door-to-door transportation service to elderly persons 60 years of age or older and to persons of any age who had a permanent physical or developmental disability. Only elderly or disabled residents of Washington County and their personal-care attendants or companions were eligible for the service. The County program offered both a general service intended to serve multiple trip purposes and special services designed to serve trips for only work-related and adult day care purposes.

The geographic area served by the County program included all of Washington County. In providing the general service, the Office on Aging restricted the days and times service was available in different areas of the County. The generalized boundaries of these service areas are shown on Map 13. The most extensive general service was provided in the West Bend area, where service was available four days each week, including Tuesday through Thursday between 8:30 a.m. and 4:00 p.m. and Friday between 8:00 a.m. and 4:00 p.m. Within the Hartford and Germantown service areas, the general service was provided only two days each week, with service available in the Hartford area Tuesday and Thursday between 9:00 a.m. and 3:30 p.m. and in the Germantown area Monday and Wednesday between 9:00 a.m. and 3:30 p.m. The service was intended primarily to serve in-County travel, provided only for trips made within or between the defined geographic service areas. Within the Germantown service area, travel outside the County was also allowed to the adjacent Village of Menomonee Falls, in Waukesha County, principally for medical or shopping trips. No other trips to destinations outside the County were eligible for service.

The Office on Aging transportation program also provided some transportation services to accommodate work-related and adult day-care trips typically made outside of the hours when the general transportation service was available. Service for work-related trips by disabled individuals was available within all three service areas and between service areas each weekday between 6:30 a.m. and 9:30 a.m. and between 3:00 p.m. and 6:30 p.m., with the hours varying somewhat within each service area, depending upon individual passenger needs. Transportation for elderly individuals participating in adult day-care programs offered by several organizations within the County was available weekdays between 7:30 a.m. and 9:30 a.m. and between 3:30 p.m. and 5:30 p.m.

Eligible individuals desiring service under the program were required to make a trip reservation at least forty-eight (48) hours, or two workdays, in advance of the time service is needed. The program encouraged individuals who need transportation for medical appointments to make their trip reservations as soon as they knew the time of their medical appointment. Standing reservations for service were allowed for work-related trips and adult day-care trips served by the program. Individuals could also call for same-day service, provided if space was available. Requests for service were scheduled on the basis of specified trip priorities, with medical trips receiving first priority; trips for nutritional activities, including trips for grocery shopping and to meal sites and restaurants, receiving second priority; work-related trips receiving third priority; and trips for social, recreational, or other purposes receiving the lowest priority.

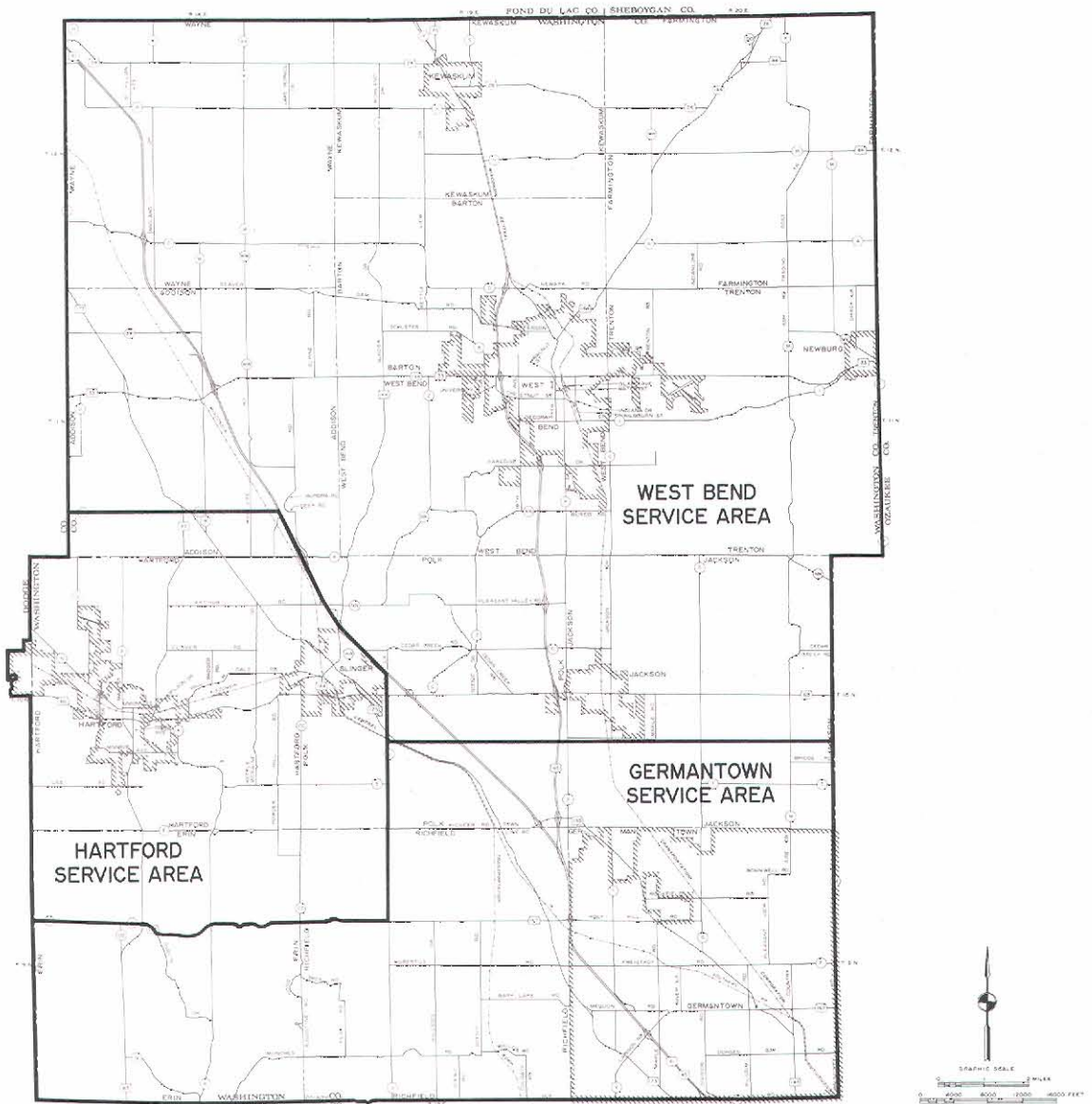
Eligible elderly and disabled individuals using the County's transportation service were charged a fare of \$1.25 per one-way trip for travel within any of the three service areas. A fare of \$2.50 per one-way trip was charged to all individuals traveling between service areas and also to personal-care attendants or companions traveling with eligible users. Elderly and disabled individuals who could not afford the fare could apply for a fare waiver from the Office on Aging. In lieu of using cash fares, passengers could also utilize prepaid tickets which are available from vehicle drivers at a cost of \$25.00 for twenty (20) tickets.

During 1995, Washington County contracted with two private transportation companies to provide the service offered under the program: Handicare, Inc., to provide service within the Hartford and West Bend service areas; and Riteway Bus Service, Inc., to provide service within the Germantown service area. The companies utilized five vehicles to provide service under the program, including three accessible full-size vans and two nonaccessible full-size vans. In addition to providing the vehicles and drivers, the private contractors also provided the staff necessary for taking trip reservations, scheduling service, and dispatching vehicles.

Because the Office on Aging transportation program represented the major publicly supported County-wide transportation service available to County residents in 1995 and was viewed as a potential basis for any new Countywide general public transit service, a detailed analysis of its users and ridership characteristics was undertaken. The annual rider-

Map 13

**GENERALIZED SERVICE AREAS FOR THE WASHINGTON COUNTY  
OFFICE ON AGING SPECIALIZED TRANSPORTATION PROGRAM: 1995**



Source: Washington County Office on Aging and SEWRPC.

ship levels on the Countywide specialized transportation service provided by the Office on Aging from 1991 through 1995 are shown in Figure 3.<sup>3</sup> Rider-

<sup>3</sup>Not reflected in the ridership data shown are trips made under a user-side subsidy program administered by the Office on Aging in 1991 and 1992, which provided reduced fares to elderly and disabled persons using a private taxicab service in

the City of West Bend. About 10,200 and 10,700 one-way trips were made under the user-side subsidy program in 1991 and 1992, respectively. This program was discontinued in 1993 when the City of West Bend began operation of its public shared-ride taxicab system. The base fares charged elderly and disabled persons on the City's public taxicab system were the same as the base fare charged on the private taxicab system under the user-side subsidy program.

Table 34

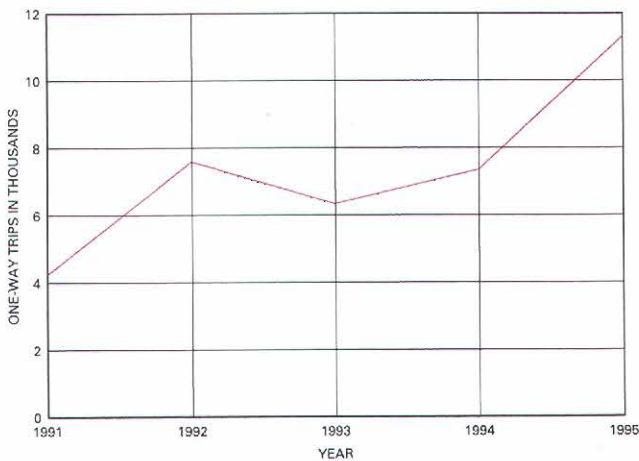
**DISTRIBUTION OF RIDERSHIP ON THE WASHINGTON COUNTY OFFICE ON AGING  
COUNTYWIDE SPECIALIZED TRANSPORTATION SERVICE BY USER TYPE: 1991-1995**

Characteristic	One-Way Trips By Year									
	1991		1992		1993		1994		1995	
	Number of Trips	Percent of Total Trips	Number of Trips	Percent of Total Trips	Number of Trips	Percent of Total Trips	Number of Trips	Percent of Total Trips	Number of Trips	Percent of Total Trips
<b>User Type</b>										
Elderly, Ambulatory .....	3,382	79.2	4,932	64.6	2,777	43.4	2,975	40.2	5,608	49.3
Elderly, Nonambulatory .....	250	5.8	832	10.9	422	6.6	255	3.4	391	3.4
Nonelderly, Ambulatory .....	547	12.8	1,480	19.4	2,830	44.3	3,820	51.7	4,816	42.3
Nonelderly, Nonambulatory .....	89	2.1	274	3.6	367	5.7	114	1.5	76	0.7
Other .....	6	0.1	120	1.5	0	0.0	240	3.2	491	4.3
<b>Total</b>	<b>4,274</b>	<b>100.0</b>	<b>7,638</b>	<b>100.0</b>	<b>6,396</b>	<b>100.0</b>	<b>7,404</b>	<b>100.0</b>	<b>11,382</b>	<b>100.0</b>
<b>Trip Purpose</b>										
Medical .....	470	11.0	1,209	15.8	520	8.1	722	9.8	1,201	10.6
Employment .....	263	6.2	1,764	23.1	2,514	39.3	3,003	40.6	3,392	29.8
Nutrition .....	1,499	35.1	1,685	22.1	2,160	33.8	1,145	15.5	1,072	9.4
Education/Training .....	184	4.3	138	1.8	0	0.0	92	1.2	193	1.7
Social/Recreational .....	1,193	27.9	1,631	21.4	484	7.6	1,170	15.8	3,267	28.7
Shopping/Personal Business .....	660	15.4	943	12.3	354	5.5	995	13.4	2,239	19.7
Other .....	5	0.1	268	3.5	364	5.7	277	3.7	18	0.2
<b>Total</b>	<b>4,274</b>	<b>100.0</b>	<b>7,638</b>	<b>100.0</b>	<b>6,396</b>	<b>100.0</b>	<b>7,404</b>	<b>100.0</b>	<b>11,382</b>	<b>100.0</b>

Source: Washington County Office on Aging and SEWRPC.

Figure 3

**RIDERSHIP ON THE  
WASHINGTON COUNTY OFFICE ON AGING  
SPECIALIZED TRANSPORTATION SERVICE: 1991-1995**



Source: Washington County Office on Aging and SEWRPC.

ship on the service has grown steadily since 1991, increasing by about 163 percent, from about 4,300 one-way trips in 1991 to about 11,300 one-way trips

projected in 1995. During the first nine months of 1995, the service had an average weekday ridership of about 46 one-way trips.

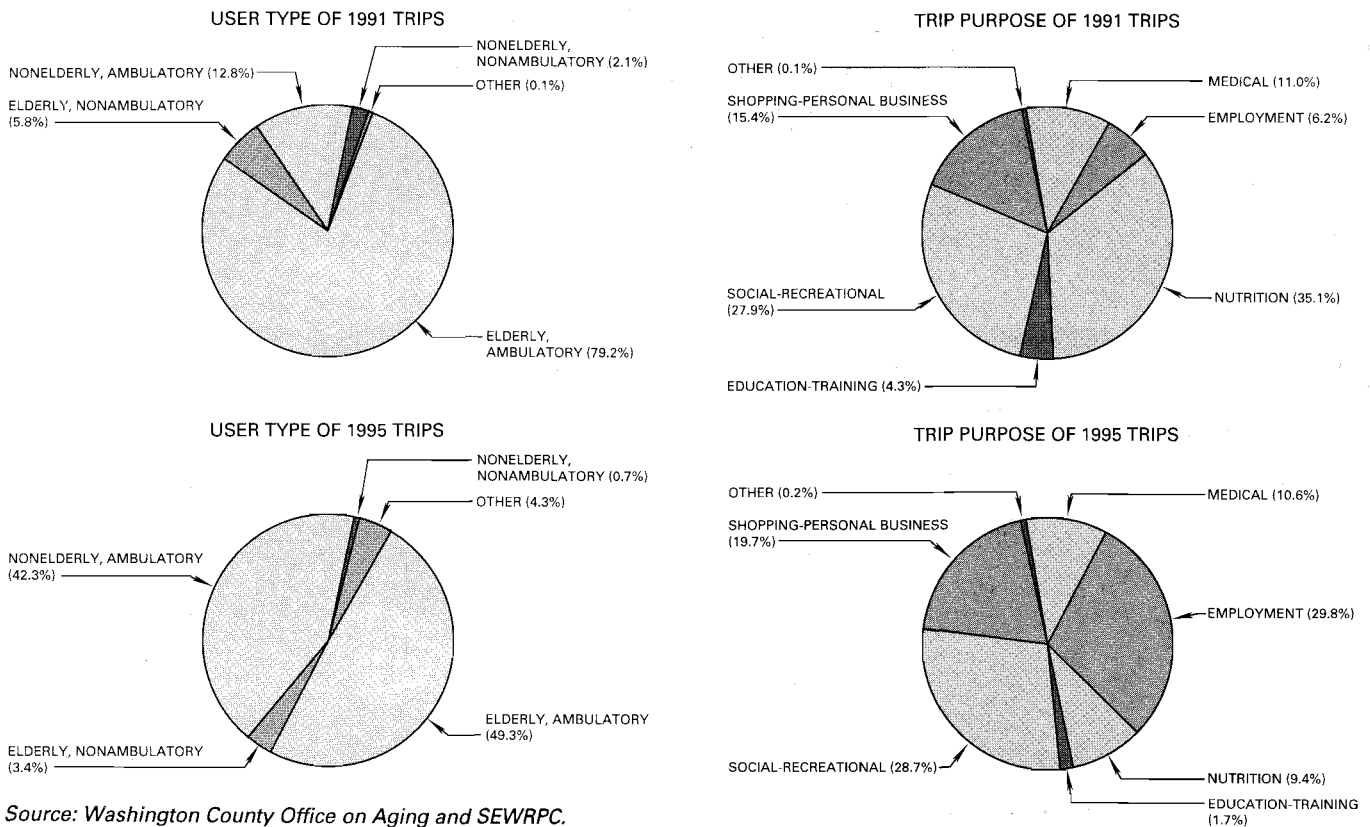
The distribution of ridership on the Countywide transportation service by user type and trip purpose over the period 1991 through the first nine months of 1995 is presented in Table 34. As can be seen from Figure 4, the proportions of one-way trips made on the Countywide service by elderly users and nonelderly disabled users has changed dramatically over this period, with trips made by elderly users in 1995 accounting for about 53 percent of all trips, compared with about 85 percent in 1991. Trips made by nonelderly disabled users in 1995 accounted for about 43 percent of trips, compared with about 15 percent in 1991. Notably, while trips made by elderly, ambulatory users decreased from about 79 percent to about 49 percent of all trips over the period, trips made by nonelderly, ambulatory disabled users increased from about 13 percent to over 42 percent of all trips.

Figure 4 also shows that the proportion of trips made on the service for employment purposes increased from about 6 percent in 1991 to almost 30 percent in 1995. This increase was attributed



Figure 4

**PERCENTAGE DISTRIBUTION OF RIDERSHIP ON THE WASHINGTON COUNTY OFFICE ON AGING  
COUNTYWIDE SPECIALIZED TRANSPORTATION SERVICE BY TRIP PURPOSE AND USER TYPE: 1991 AND 1995**



Source: Washington County Office on Aging and SEWRPC.

largely to increased use of the service by disabled individuals. The increase in trips for these purposes occurred largely at the expense of trips for nutritional purposes, which decreased from about 35 percent of all trips in 1991 to about 9 percent of all trips in 1995. Trips for social and recreational and shopping or personal business also increased slightly over the period, from about 43 percent of all trips in 1991 to about 48 percent in 1995.

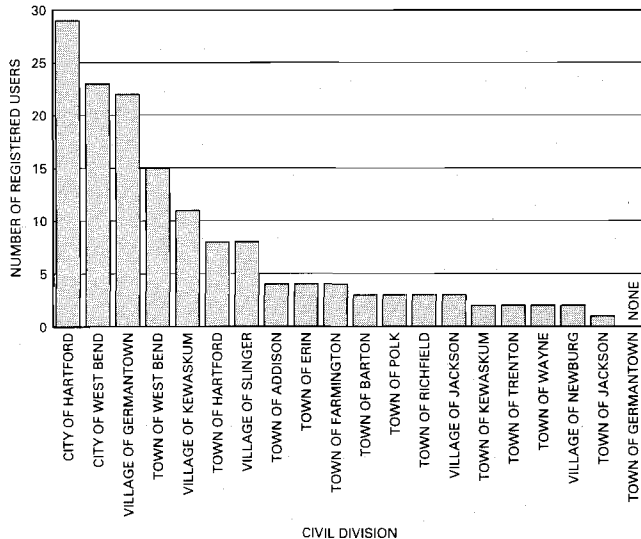
To provide additional information on the amount, purpose, and pattern of trips made by users of the Office on Aging Services Countywide transportation service, the trip logs of the service for the months of June, July, and August 1995 were analyzed. This period was selected for examination by County staff as a period representative of typical service use. Information from the service trip logs for this period was used to develop data on the home residence of users, as well as on the proportion of

trips made on the service entirely within Washington County communities, between Washington County communities, and between Washington County and Waukesha County.

Approximately 149 individuals were identified as users of the Office on Aging Countywide transportation service in the trip log data. The distribution of these users among County communities is shown graphically in Figure 5. About 60 percent of the registered users resided in four communities in the County: the City of Hartford, with about 20 percent of all users; the City of West Bend, with about 15 percent; the Village of Germantown, with about 15 percent; and the Town of West Bend, with about 10 percent. These four communities also had the highest total elderly population levels within the County in the 1990 U.S. Census, accounting for about 59 percent of the total Countywide elderly population.

Figure 5

**NUMBER OF REGISTERED USERS  
OF THE WASHINGTON COUNTY OFFICE  
ON AGING COUNTYWIDE SPECIALIZED  
TRANSPORTATION SERVICE BY MINOR CIVIL  
DIVISION: JUNE THROUGH AUGUST 1995**



Source: Washington County Office on Aging and SEWRPC.

A summary of this distribution of trips observed over the three month period is presented in Table 35. A total of approximately 2,900 one-way trips, representing an average weekday ridership of about 46 one-way trips, were made during the period on the Office on Aging Countywide transportation service. About 2,800 of the 2,900 total one-way trips, or about 97 percent of the total ridership on the service, were intraCounty trips. Only about 100 one-way trips were made during the period, the remaining 3 percent of the total ridership on the service, between the Germantown service area and destinations in the Village of Menomonee Falls in Waukesha County.

Table 36 presents detailed information on the intra-County trips made on the transportation service, indicating the total volume of trips made within and between each County civil division during the three month period, while Figure 6 graphically illustrates this information. Of the 2,800 total intraCounty trips, about 800 one-way trips, representing about 29 percent of the trips made within the County, were made within a single community. The vast majority of these trips were made entirely within the Cities of Hartford or West Bend or the Village of

Table 35

**DISTRIBUTION OF TRIPS ON THE WASHINGTON  
COUNTY OFFICE ON AGING COUNTYWIDE SPECIALIZED  
TRANSPORTATION SERVICE WITHIN WASHINGTON  
COUNTY AND TO AND FROM SURROUNDING  
COUNTIES: JUNE THROUGH AUGUST 1995**

Trip Location	Number of One-Way Trips	Percent of Total Trips
Within Washington County		
Within a Single Community .....	794	27.6
Between Communities .....	1,995	69.3
Subtotal	2,789	96.9
Outside Washington County		
To or from Surrounding Counties ...	90	3.1
Subtotal	90	3.1
Total	2,879	100.0

Source: Washington County Office on Aging and SEWRPC.

Germantown. As noted previously, a significant proportion of the users of the service were found to be residents of these three communities. The majority of the trips made within the City of Hartford were for nutritional purposes to and from the meal site at the Hartford Recreation Center by residents of a local nursing home. The majority of trips within the City of West Bend were made for recreational purposes by disabled persons participating in regular weekly and monthly activities after 5:00 p.m. The majority of the trips within the Village of Germantown were made for work purposes by disabled persons regularly using the service to travel to and from employment locations. Notably, the availability of public taxicab services provided within Cities of Hartford and West Bend did not totally eliminate the need for the Office on Aging transportation service within these communities. Many of the individuals required the individual assistance provided by the Office on Aging transportation service.

The remaining 2,000 of the 2,800 total intraCounty trips, representing about 71 percent of the trips made within the County, were made between communities. Almost 1,600 of these intercommunity trips, representing about 80 percent of the total intercommunity trips, originated in, or were made to, the City of West Bend. The largest number of intercommunity trips, some 600 one-way trips, occurred between the City of West Bend and the

Table 36

**DISTRIBUTION OF INTERNAL TRIPS WITHIN WASHINGTON COUNTY ON THE WASHINGTON COUNTY  
OFFICE OF AGING COUNTYWIDE SPECIALIZED TRANSPORTATION SERVICE: JUNE THROUGH AUGUST 1995**

From Civil Division		To Civil Division																				Total
Number	Name	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	
601	Town of Addison	--	--	--	--	--	--	11	--	--	--	--	--	--	--	--	--	--	11	33	--	55
602	Town of Barton	--	--	--	--	--	--	14	--	--	--	--	--	--	--	--	--	--	78	--	--	92
603	Town of Erin	--	--	--	--	--	--	8	--	--	--	--	--	--	--	--	--	--	--	--	--	8
604	Town of Farmington	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	114	7	--	121
605	Town of Germantown	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0
606	Village of Germantown	--	--	--	--	--	183	--	--	--	--	--	--	--	2	--	--	--	6	--	--	191
607	City of Hartford	11	14	2	--	--	--	304	40	--	--	--	6	1	4	37	--	--	39	--	1	459
608	Town of Hartford	--	--	--	--	--	--	53	--	--	--	--	--	--	--	--	--	--	37	--	--	90
609	Town of Jackson	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	--	--	11
610	Village of Jackson	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	2	--	15
611	Town of Kewaskum	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	12	7	--	19
612	Village of Kewaskum	--	--	--	--	--	--	9	--	--	--	--	--	--	--	--	--	7	165	14	--	195
613	Town of Polk	--	--	--	--	--	--	--	--	--	--	--	--	--	--	13	--	--	--	1	--	14
614	Town of Richfield	--	--	--	--	--	4	6	--	--	--	--	--	--	--	--	--	--	7	--	--	17
615	Village of Slinger	--	--	--	--	--	--	39	--	--	--	--	--	11	--	--	--	--	14	1	--	65
616	Town of Trenton	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	58	--	--	58
617	Town of Wayne	--	--	--	--	--	1	--	--	--	--	--	7	--	--	--	--	--	59	--	--	67
618	City of West Bend	8	76	15	66	--	18	30	41	11	26	63	151	--	7	62	46	6	251	143	8	1,028
619	Town of West Bend	34	--	--	6	--	--	--	--	--	1	8	10	1	--	3	--	--	130	56	--	249
620	Village of Newburg	--	--	--	--	--	--	5	--	--	--	--	--	--	--	--	--	--	30	--	--	35
--	Total	53	90	17	72	0	206	479	81	11	27	71	174	13	13	115	46	13	1,035	264	9	2,789

NOTE: Shaded cells indicate trips made within a community.

Source: Washington County Office On Aging and SEWRPC.

Village of Kewaskum or the Town of West Bend, principally for employment and medical purposes. The majority of the intercommunity trips movements were low in volume, on the average amounting to one trip or less between individual communities on an average weekday.

Table 37 presents detailed information on the total number of trips made between the Germantown service area and the Village of Menomonee Falls. Of the approximately 100 intercommunity trips made during the period, all were between locations in the Village of Germantown or Town of Richfield and the Village of Menomonee Falls in Waukesha County. The vast majority of these trips were made to or from medical facilities and shopping areas in the Village of Menomonee Falls.

Figure 7 summarizes in graphic form the distribution among County communities of all trips made during the period on the service, including

intracommunity and intercommunity trips in Washington County and intercommunity trips between Washington and Waukesha Counties. The figure indicates for each community the percent of the total number of trip ends, that is, both trip origins and destinations, for the service attributable to each community within the County. Not surprisingly, the figure shows that most of the trips made on the service either start or end in the four communities with the highest number of registered users, the Cities of Hartford and West Bend, the Village of Germantown, and the Town of West Bend.

An analysis of the utilization of the transportation service indicating the frequency of travel by individuals using the service between June and August 1995 is presented in Table 38. Of the 149 individuals identified as users the service over this period, a total of 121 individuals, or about 81 percent, made 30 or fewer one-way trips, representing an average of between 2 and 3 trips per week. This

Table 37

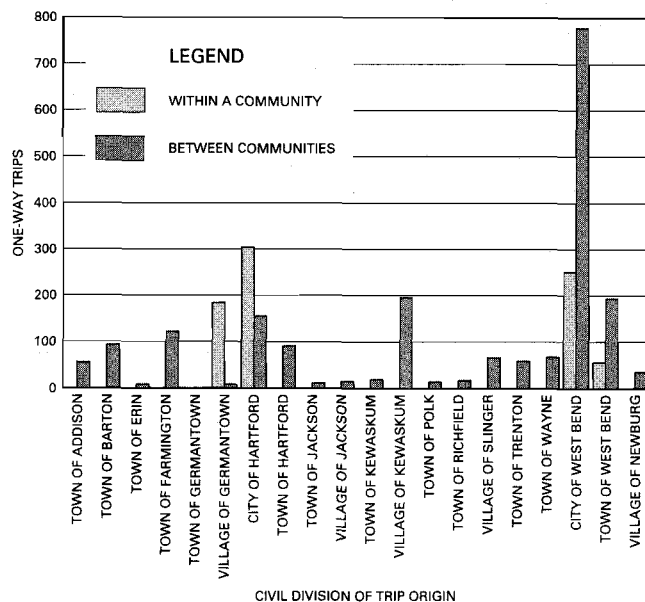
**DISTRIBUTION OF EXTERNAL TRIPS BETWEEN WASHINGTON COUNTY AND  
SURROUNDING COUNTIES IN THE REGION ON THE WASHINGTON COUNTY OFFICE OF  
AGING COUNTYWIDE SPECIALIZED TRANSPORTATION SERVICE: JUNE THROUGH AUGUST 1995**

Civil Division			Civil Division				Total
			603	605	606	614	
County	Number	Name	Town of Erin	Town of Germantown	Village of Germantown	Town of Richfield	
Waukesha	717	Village of Menomonee Falls	--	--	88	2	90
--	--	Total	0	0	88	2	90

Source: Washington County Office on Aging and SEWRPC.

Figure 6

**DISTRIBUTION OF TRIPS ON THE  
WASHINGTON COUNTY OFFICE ON  
AGING COUNTYWIDE SPECIALIZED  
TRANSPORTATION SERVICE BY MINOR  
CIVIL DIVISION: JUNE THROUGH AUGUST 1995**



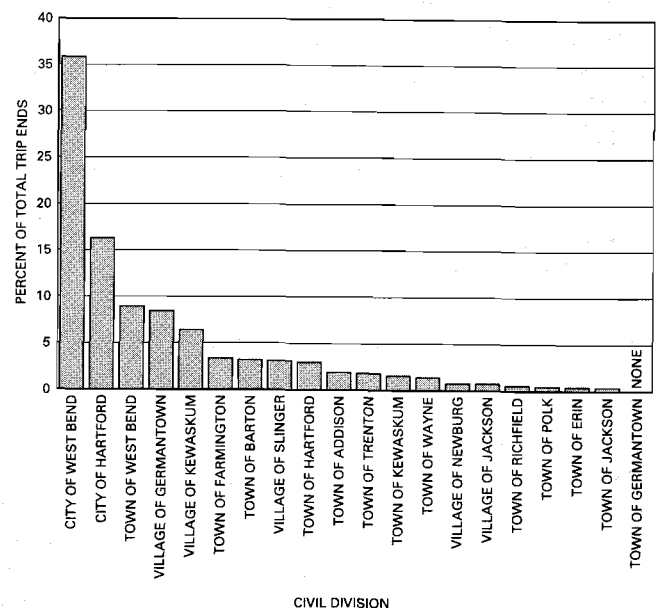
NOTE: ONE-WAY TRIPS WITHIN A COMMUNITY ARE SHOWN FOR THE VILLAGE OF GERMAN TOWN, THE CITY OF HARTFORD, THE CITY OF WEST BEND, AND THE TOWN OF WEST BEND. THERE WERE NO ONE-WAY TRIPS WITHIN THE OTHER COMMUNITIES. ALSO, THERE WERE NO ONE-WAY TRIPS BETWEEN COMMUNITIES FOR THE TOWN OF GERMAN TOWN.

Source: Washington County Office on Aging and SEWRPC.

information indicates that the vast majority of the users of the Office on Aging Countywide transportation service used it only on an occasional basis. Notably, the frequency of use reflects the limited days and hours which the service was available, in particular within the Hartford and German-town service areas.

Figure 7

**PERCENTAGE DISTRIBUTION OF TOTAL  
TRIP ENDS FOR THE WASHINGTON COUNTY  
OFFICE ON AGING COUNTYWIDE SPECIALIZED  
TRANSPORTATION SERVICE BY MINOR CIVIL  
DIVISION: JUNE THROUGH AUGUST 1995**



NOTE: TOTAL TRIP ENDS INCLUDES ALL TRIP ORIGINS AND TRIP DESTINATIONS.

Source: Washington County Office on Aging and SEWRPC.

The annual expenditures and public funding requirements for the Office on Aging Countywide specialized transportation service for the period 1991 to 1995 are shown in Table 39. The total expenses for the service increased from about \$55,100 in 1991 to about \$152,600 in 1995, or by about 177 percent. The service costs are supported

Table 38

**FREQUENCY OF USE OF THE WASHINGTON  
COUNTY OFFICE ON AGING COUNTYWIDE  
SPECIALIZED TRANSPORTATION SERVICE:  
JUNE THROUGH AUGUST 1995**

Number of One-Way Trips	Number of Individuals Making Trips	Percent of Total	Cumulative Percent
1-5	57	38.3	38.3
6-10	18	12.1	50.4
11-15	17	11.4	61.8
16-20	10	6.7	68.5
21-25	15	10.1	78.6
26-30	4	2.7	81.3
31-50	12	8.1	89.4
51-75	9	6.0	95.4
76 or More	7	4.6	100.0
Total	149	100.0	--

Source: Washington County Office on Aging and SEWRPC.

primarily through passenger fares, State aid available through the Wisconsin Department of Transportation's 85.21 Specialized Transportation Assistance Program for Counties, and County tax dollars. The County funds needed to support the service increased from about \$14,200 in 1991 to a projected \$65,300 in 1995, or by about 360 percent.<sup>4</sup>

#### American Red Cross

Two chapters of the American Red Cross provided specialized transportation in Washington County during 1995. The Kettle Moraine Region of the

<sup>4</sup>Not reflected in the 1991 figures are expenditures by the Office on Aging for a user-side subsidy program, which provided reduced fares to elderly and disabled persons using a private taxicab service in the City of West Bend. Including expenditures for this program, total 1991 expenditures for transportation services provided by the Office on Aging were approximately \$89,000, including about \$23,600 in County funds. According to these figures, total expenditures for Office on Aging specialized transportation increased by about 71 percent between 1991 and 1995 and County funds for such services have increased by about 176 percent. The user-side subsidy program was discontinued in 1993, when the City of West Bend began operation of its public shared-ride taxicab system and funds formerly used for the program were shifted to the Countywide transportation service.

Greater Milwaukee Chapter served primarily the southwest one-half of the County, including the Hartford and Germantown areas, and the West Bend Chapter served primarily the northeast one-half of the County, including the West Bend, Jackson, and Kewaskum areas. The transportation service was provided to Washington County residents of any age who were unable to secure transportation through other programs or providers. Only medical trips made within Washington County or between the County and the immediately surrounding counties were served under the program.

The transportation was provided on a door-to-door basis and was generally available on weekdays between 8:00 a.m. and 5:00 p.m., with weekend hours available by special arrangement. Trip requests for service were required to be made in advance, with a three-to-five day advance notice needed by the Kettle Moraine Region and a two week advance notice needed by the West Bend Chapter. During 1995, neither chapter required payment of a fare to receive service, but both accepted donations based on the individual's ability to pay. The Kettle Moraine Region had suggested guidelines for donations of \$3.00 per one-way trip for trips within Washington County and \$5.00 per one-way trip for trips made outside the County. The West Bend Chapter intends to begin requesting a donation of \$5.00 per one-way trip in 1996.

Both chapters used volunteer drivers to provide the service, with vehicles purchased by each local chapter. A total of four vehicles were utilized in providing the service including: two by the Kettle Moraine Region, one 1995 station wagon and one 1990 full-size accessible van, and two vehicles by the West Bend Chapter, one 1996 and one 1987 accessible vans. The vehicles are also used as needed to make blood-collection runs.

Total ridership on the service averaged about 29 one-way trips per weekday during 1995, including about 13 one-way trips on the service provided by the Kettle Moraine Region and about 16 one-way trips on the service provided by the West Bend chapter. The Washington County American Red Cross chapters were the major providers of transportation for out-of-County medical trips, with between 90 and 95 percent of the trips made on the service made to medical facilities in Milwaukee County. The total operating expenses for the transportation services provided by both chapters during 1995 were estimated at about \$58,000. The costs of the service are covered by passenger fares and



Table 39

**ANNUAL OPERATING EXPENDITURES, REVENUES, AND DEFICITS FOR THE WASHINGTON  
COUNTY OFFICE ON AGING COUNTYWIDE SPECIALIZED TRANSPORTATION SERVICE: 1991-1995**

Operating Characteristic	Year				
	1991	1992	1993	1994	1995
<b>Service Provided</b>					
Total vehicle-hours .....	2,600	4,300	5,300	5,700	6,900
Total vehicle-miles .....	21,100	34,700	89,000	109,500	148,800
<b>Ridership (one-way trips)</b>					
Revenue passengers .....	4,300	7,600	6,400	7,400	11,400
<b>Service Cost</b>					
<b>Expenses</b>					
Operating expenses .....	\$49,600	\$77,400	\$110,400	\$125,100	\$152,600
Capital expenditures <sup>a</sup> .....	5,600	--	--	15,000	--
Subtotal	\$55,200	\$77,400	\$110,400	\$140,100	\$152,600
Operating revenue .....	\$ 2,600	\$ 5,200	\$ 6,000	\$ 6,700	\$ 7,500
<b>Deficit</b>					
Operating deficit .....	\$47,000	\$72,200	\$104,400	\$118,400	\$145,100
Total deficit .....	52,600	72,200	104,400	133,400	145,100
<b>Sources of Required Public Funds</b>					
State funds <sup>b</sup> .....	\$38,300	\$45,500	\$83,100	\$92,400	\$79,800
County funds .....	14,300	26,700	19,400	33,100	65,300
Other funds <sup>c</sup> .....	--	--	1,900	7,900	--
<b>Total</b>	<b>\$52,600</b>	<b>\$72,200</b>	<b>\$104,400</b>	<b>\$133,400</b>	<b>\$145,100</b>
<b>Operating Effectiveness and Efficiency</b>					
Passengers per vehicle-hour .....	1.7	1.8	1.2	1.3	1.7
Passengers per vehicle-mile .....	0.20	0.22	0.07	0.07	0.08
Operating expense per passenger .....	\$11.53	\$10.18	\$17.25	\$16.91	\$13.39
Operating deficit per passenger .....	\$10.93	\$ 9.50	\$16.31	\$16.00	\$12.73
Percent of operating expenses recovered through operating revenues .....	5.2	6.7	5.4	5.4	4.9

<sup>a</sup>Reflects funds used in 1991 to purchase computer equipment and reserved for future capital outlays; and funds provided to Lutheran Social Services in 1994 for an accessible full-size van to provide transportation for adult day care and other programs serving elderly and disabled persons. The funds provided in 1994 were from the State 85.21 specialized transportation assistance program for counties.

<sup>b</sup>Reflects funds provided through the State 85.21 specialized transportation assistance program for counties. For 1993, funds shown also include about \$8,200 from the Alzheimer's Family Caregiver Support Program.

<sup>c</sup>Reflects funds provided by the contract transit operators.

Source: Washington County Office on Aging and SEWRPC.

donations from the United Way and private sources. Vehicle purchases have been funded in the past with Federal and State funds available to private nonprofit agencies and organizations providing transportation to elderly and disabled persons.

**The Threshold, Inc.**

The Threshold, Inc., a private nonprofit organization which provides employment and training opportunities to developmentally or physically disabled individuals, provided transportation to indi-

viduals participating in the employment and training programs offered at its facility in the City of West Bend. The agency was the only specialized transportation provider in the County providing regularly scheduled transportation service using a system of fixed routes.

Users of the service who are clients of the Washington County Comprehensive Community Services Agency are charged a monthly fee of \$25.00, which is collected on the basis of the individual's ability to pay. Most of the transportation service was provided during weekdays from 6:30 a.m. to 8:30 a.m., from 12:00 p.m. to 1:00 p.m., and from 3:00 p.m. to 5:00 p.m. Transportation service was also provided as needed for field trips and social and recreational events on weekday evenings and on weekends. The Threshold, Inc., provided the transportation service directly, using its own drivers and a private vehicle fleet of ten vehicles.

During 1995, an average of about 350 one-way trips were made per weekday using the transportation service provided by the organization. The agency's 1995 operating budget for transportation was approximately \$278,000. The costs of providing the services were supported by Federal funds, provided through Title XIX of the Social Security Act of 1935; State funds, provided principally through the Wisconsin Department of Health and Social Services, Division of Vocational Rehabilitation; and local funds, provided by Washington and Ozaukee Counties. Vehicle purchases have been funded in the past with Federal and State funds available to private nonprofit agencies and organizations providing transportation to elderly and disabled persons.

#### Lutheran Social Services

Lutheran Social Services provided transportation to individuals participating in the adult day-care, senior aides, and disabled youth day-care services offered at its facility in the City of West Bend. Door-to-door transportation service for adult day-care participants residing up to 20 miles from the center was provided each weekday from 7:30 a.m. to 9:00 a.m. and from 3:30 p.m. to 5:00 p.m. Transportation was also provided between these hours for to elderly persons being served under the senior aides program and for field trips or other occasional activities provided under the organization's adult and disabled youth day-care programs. Fares for day-care transportation are distance-based, ranging

from \$1.00 per one-way trip for trips up to five miles in length to \$4.00 per one-way trip for trips 16 to 20 miles in length.

The organization used one 1994 full-size accessible van to provide the service. Washington County provided partial funding for the vehicle by passing through funds from the State 85.21 specialized transportation assistance program for counties. An average of about 13 one-way trips were made per weekday using the transportation service provided by the organization during 1995.

The cost of the transportation service in 1995 was estimated at approximately \$12,000. The costs of providing service were supported by passenger fares and fees collected for the services provided by the organization.

#### Sentry Foods Shuttle

Sentry Foods, 1201 Bell Avenue in the City of Hartford, provided transportation in 1995 for patrons shopping at the store. The door-to-door transportation service was provided each Wednesday and Friday between 12:30 p.m. and 2:30 p.m. at no charge to users. Reservations for service were accepted by the store through the morning hours of each day transportation was available. The store contracted with a private company, Wittenburger Bus Company, to provide the service with a small school bus type vehicle.

It was estimated that about 14 one-way trips are made each weekday when the service is available. The store funds the total cost of providing the service, estimated at about \$6,000 per year.

#### Hartford Medical Center Transportation

The Hartford Memorial Hospital Foundation, a privately funded organization associated with Hartford Memorial Hospital, provided transportation for medical trips during 1995. Eligible users of the service were limited to patients at Hartford Memorial Hospital and its associated clinics in Hartford, Slinger, and Hustisford. Elderly individuals participating in adult day-care services provided through the hospital were also provided with transportation service.

The service was provided on weekdays between 8:00 a.m. and 5:00 p.m. to patients with appointments for medical or adult day-care services, on a

door-to-door basis, but on 48-hour advance notice basis. Passengers were not required to pay a fare for this service, but donations were encouraged at a suggested level of \$1.50 per one-way trip for travel within the City of Hartford and \$3.00 per one-way trip for travel outside the City. The foundation leased one nonaccessible full-size van to provide the service.

An average of about five one-way trips were provided per weekday by the Foundation transportation service. The cost of the service is covered by passenger fares and private funds generated by the Foundation. Detailed information on the expenditures and passenger revenues for the service in 1995 were not available.

#### Washington County Department of Social Services

The Washington County Department of Social Services provided transportation services to low-income individuals and families and to foster children who were clients of the Department. The services provided for medical and other essential purpose trips between 8:00 a.m. and 5:00 p.m. Monday through Friday and occasionally on weekends. The service was provided at no charge to the user through a volunteer driver who received no compensation using a personal vehicle. It is estimated that an average of two trips per weekday were made using this service.

#### American Cancer Society

The American Cancer Society provided door-to-door transportation service to individuals in Washington County for medical purposes only. Eligible users were limited to cancer patients in need of regular transportation for radiation and chemotherapy treatments.

The service was available on weekdays generally between the hours of 8:00 a.m. and 5:00 p.m. Reservations for service were required be to made one or two days in advance of the time transportation was needed. This service is provided at no charge to the user for trips to and from hospitals both inside and outside of the County. Trips outside the County were generally to hospitals in Milwaukee, Waukesha, or Fond du Lac Counties.

The transportation service was provided by volunteer drivers who received no compensation using personal vehicles. It was estimated that an

average of two one-way trips per weekday were made using this service in the Fall 1995.

#### Cedar Campuses and

#### Washington County Samaritan Home

Limited transportation services were provided during 1995 by Cedar Campuses for their clients and residents at the Cedar Lake Home Campus, the Cedar Ridge Retirement Campus, and the Cedar Bay assisted-living facility, and also by the Washington County Samaritan Home for residents at that facility. The transportation was provided principally for field trips and other recreational outings and occasional shopping activities with the hours and destinations served dictated by the planned activities. Each agency maintained one small bus to provide the transportation service. It was estimated that an average of less than one trip per weekday was provided directly by each agency.

#### Private for-Profit Transportation Services

During 1995, several private for-profit transportation service providers also operated in Washington County. These companies provided transportation services principally to serve elderly or disabled individuals traveling within Washington County and between Washington and Milwaukee Counties. Three such companies, Specialized Transportation Services, Inc., which provided approximately 20 one-way trips per day; Nichols Medical Transports, which provided approximately two one-way trips per day; and Handicare, Inc., which provided about four one-way trips per day, provided such transportation service within Washington County. The transportation service provided was on a door-to-door basis, with reservations normally required to be made at least 24 hours in advance of the time service was needed. Service was also often available on the day requested. Most of the trips served by these operators were for medical purposes. The vehicles used to provide service consisted of wheelchair-accessible vans and ambulances.

Because the operating expenses for the providers were not publicly subsidized, user fares on these transportation services were significantly higher than those charged on the previously described transportation services provided by the public and private nonprofit agencies and organizations, generally starting at about \$15.00 per one-way trip, with additional charges based on mileage. Fares

Table 40

## SCHOOL DISTRICTS IN WASHINGTON COUNTY PROVIDING STUDENT TRANSPORTATION: 1995

School District	Service Provider	1994-1995 Transportation Budget	Number of Students Eligible for Transportation
Erin Joint School District No. 2 .....	Bertz Bus Company	\$ 115,400	344
Germantown School District .....	Riteway Bus Service, Inc.	1,396,400	3,926
Hartford Union High School District .....	Wittenberger Bus Service	374,100	1,076
Joint School District No. 11 Friess Lake .....	Riteway Bus Service, Inc.	78,600	259
Kewaskum Community School District .....	Johnson School Bus Service, Inc.	727,700	1,797
Richfield Joint School District No.1 .....	Goetz Garage	232,500	523
School District of Hartford Joint No. 1 .....	Wittenberger Bus Service	327,800	1,014
School District of Slinger .....	Konrath Bus Service, Inc.	613,800	2,249
West Bend Joint School District No.1 .....	Johnson School Bus Service, Inc.	1,349,000	5,324
Total	--	\$5,215,300	16,512

Source: SEWRPC.

for trips made between Washington and Milwaukee County medical facilities ranged from about \$75.00 to \$100.00 per round trip. In most cases, these fares were eligible for partial or full reimbursement through medical insurance carried by individuals using the private providers.

### SCHOOL DISTRICT TRANSPORTATION

School-related transportation service was provided by all public school districts within Washington County to students attending public and private elementary, middle, and high schools and residing within each district. Eligible students were those who resided 1.5 to 2.0 miles or more from the school they were entitled to attend, or who were enrolled in special education programs offered by each district.

All school districts within the County contracted for transportation services with private companies. The transportation was provided on a regularly scheduled basis on school days to coincide with the start and dismissal times of classes, generally between 6:00 a.m. and 5:00 p.m. School districts also transported disabled students outside of their home school districts to allow them to take part in programs which are not offered through their home school district. Table 40 presents information on the yellow school bus service provided by each school district.

It is estimated that about 27,000 one-way trips were made on yellow school bus services by students residing in Washington County on an average weekday in 1995. The total contract costs for this service during the 1995-1996 school year were estimated at about \$5.2 million. As noted in the discussion of the scope of this study in Chapter I of this report, no improvements in County transit services will be postulated to serve such school trips, which will remain the responsibility of the individual school districts. For this reason, information on local expenditures for school transportation by the various school districts was not collected.

### SUMMARY

This chapter has presented pertinent information on the transit services serving Washington County during 1995, which included: local shared-ride taxicab services and intercity bus and airport transportation services provided to the general public, transit services provided for employees at businesses in the County, specialized transportation services provided primarily to elderly and disabled individuals, and yellow school bus services provided by school districts in the County. A summary of the most important findings concerning the transportation services identified follows.

1. The extent of transit service available for use by the general public was limited. The most

useful service available was public shared-ride taxicab service provided to areas within the Cities of Hartford and West Bend and their environs. The City of Hartford directly operated its shared-ride taxicab system, while the City of West Bend contracted for all elements of operation for its taxicab system from a private transit company. Both taxicab systems operated seven days a week, with service on most weekdays beginning at 6:00 a.m. and extending until 9:00 or 10:00 p.m. Base adult cash fares per one-way trip ranged from \$1.50 in the City of Hartford to \$2.00 in the City of West Bend, with both systems levying a surcharge for trips made outside the City. In total, about 335 one-way trips were made on an average weekday on the taxicab services during 1995. Between 24 and 27 percent of the annual operating costs for each system were recovered directly through passenger fares. The annual operating deficits and capital equipment costs for each system were subsidized with funds from Federal and State transit assistance programs and taxes levied by each city.

2. Special transit services were also provided 1995 to employees of businesses in Washington County by private transit companies. Three such companies participating in the employment transit assistance program, or "job ride" program, administered by the Wisconsin Department of Workforce Development, regularly transported a significant number of individuals residing in central Milwaukee County to job locations within Washington County during 1995: Milwaukee Careers Cooperative, Goodwill Industries of Southeastern Wisconsin, and the Opportunities Industrialization Center. A private employment agency, JNA Temporary Services, Inc., also provided transportation to employees of the West Bend Company. The transit services provided by these companies was offered generally on weekdays to meet the specific needs of their clients, which they either recruited, or placed with, an employer in the County. On an average weekday during 1995, these four companies provided service for about 370 one-way trips made by individuals traveling between Milwaukee and Washington Counties. The service costs of the companies participating in the job-ride program were covered through passenger fares and State funds provided through the job-ride program, while the costs of the

JNA Temporary Services, Inc., transportation were covered through passenger fares and private funds.

3. The vast majority of the transit services identified were specialized transit services intended to serve primarily elderly and disabled persons. There were five principal public or private nonprofit providers of such services operating within Washington County in 1995. The major specialized transit service was the Countywide, advance-reservation, door-to-door transportation service operated by the Washington County Office on Aging. This service was available to elderly persons 60 years of age or older and disabled persons of any age for travel principally within Washington County, with the only trips served outside Washington County being between the Germantown area and the Village of Menomonee Falls in Waukesha County. The County contracted for all elements of service operation from two private transit companies, which provided the service with a fleet of five vans. The average weekday ridership on the service during 1995 was estimated at 46 one-way trips, most of which were made for medical and employment purposes and either started or ended in the four communities with the largest elderly populations: the Cities of Hartford and West Bend, the Village of Germantown, and the Town of West Bend. Fares for the service ranged from \$1.25 per trip for travel within any of three service areas within the County to \$2.50 per trip for travel between areas and could be waived for those not able to pay. Because the service recovered less than 10 percent of its annual contract costs directly through passenger fares, State specialized transportation assistance funds and County taxes provided most of the funding for the service.
4. The second principal provider of specialized transportation service within the County in 1995 was the American Red Cross, which provided advance-reservation, door-to-door transportation service for medical trips through two local chapters serving different sections of the County. Elderly and disabled residents of the County who were in need of transportation for cancer treatments, kidney dialysis, or special therapy services were the primary clientele for the service. The American Red Cross represented the major private nonprofit ser-

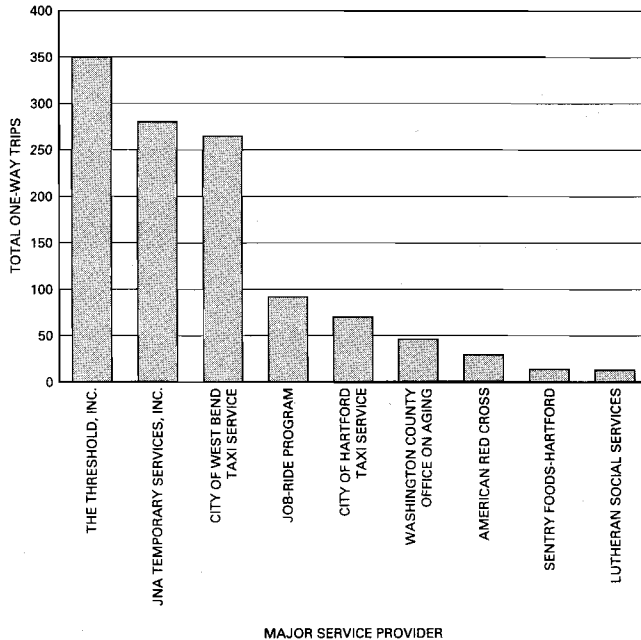
vice provider for out-of-County medical trips, with between 90 and 95 percent of its users being transported outside of the County, primarily to medical facilities in Milwaukee County. In total, the two chapters provided about 29 one-way trips on an average weekday during 1995.

5. The other three principal providers of specialized transportation service within the County in 1995 included The Threshold, Inc., Lutheran Social Services, and Sentry Foods in Hartford. Service by The Threshold, Inc. was limited to those disabled persons participating in employment and training programs offered at its facility in the City of West Bend. On an average weekday, about 350 one-way trips were made on the service available from the agency. Lutheran Social Services provided transportation to individuals participating in the adult day-care, senior aides, and disabled youth day-care services offered at its facility in the City of West Bend. About 13 one-way trips were made on this service on an average weekday. Finally, Sentry Foods in the City of Hartford provided a free shuttle service on two days each week to persons residing in the Hartford area who were store customers. This service provided about 14 one-way trips on an average weekday, made largely by elderly and low-income individuals.
6. A number of other specialized transportation services were also provided within the County in 1995 which were intended to serve individuals on a more case-specific basis and which were utilized to a lesser degree than the previously described services. The Hartford Memorial Hospital Foundation provided transportation for medical appointments at the Hartford Memorial Hospital and associated clinics in Hartford, Slinger, and Hustisford, along with service for adult day-care clients, using a vehicle funded by the Foundation. The American Cancer Society provided transportation through the use of volunteer staff using personal vehicles to County residents who were unable to arrange transportation through other sources for cancer treatment appointments at medical facilities within and outside the County. The Washington County Department of Social Services provided transportation for medical and other essential purposes to foster children and individuals in low-income households who were clients of the Department. The Department relied upon a volunteer using a personal vehicle to provide the service. The Washington County Samaritan Home provided transportation to residents for occasional field trips and special activities using a vehicle it maintains for such trips. Cedar Campuses provided similar occasional transportation to residents and clients of the facilities it operates including the Cedar Lake Home, the Cedar Ridge Retirement Campus, and the Cedar Bay assisted living center, using a vehicle it maintains for such trips. Together these five providers served less than 10 one-way trips on an average weekday in 1995.
7. Three private for-profit transportation companies also provided specialized transportation services within Washington County in 1995: Handicare, Inc., Nichols Medical Transports, and Specialized Transportation Services, Inc. The companies provided services primarily for medical purposes, such as trips to and from hospitals, nursing homes, and physicians offices. Since the operating costs for these services were not funded by public or private agencies and foundations, the transportation charges were significantly higher than those for the other services described, starting at about \$15.00 per one-way trip and reaching \$75 to \$100 for travel into Milwaukee. On an average weekday, a total of about 26 one-way trips were made on the services available from these three service providers.
8. School-related transportation service was also provided during 1995 by all public school districts within Washington County to students residing within each district attending public and private elementary, middle, and high schools. Approximately 27,000 one-way trips were made on an average weekday on yellow school bus services provided by the school districts within the County. However, such trips were not significant for this study because transit service improvements to serve such school trips were not to be considered under this study.
9. Exclusive of school trips made on yellow school bus services provided by school districts, approximately 1,200 one-way trips were made on an average weekday on the transit services identified within the County in 1995. Of these 1,200 one-way trips, about 1,160 trips, or about 96 percent, were made on the services provided by eight transit operators consisting



Figure 8

**AVERAGE WEEKDAY RIDERSHIP  
ON THE MAJOR PUBLIC TRANSPORTATION  
SERVICES IN WASHINGTON COUNTY: 1995**



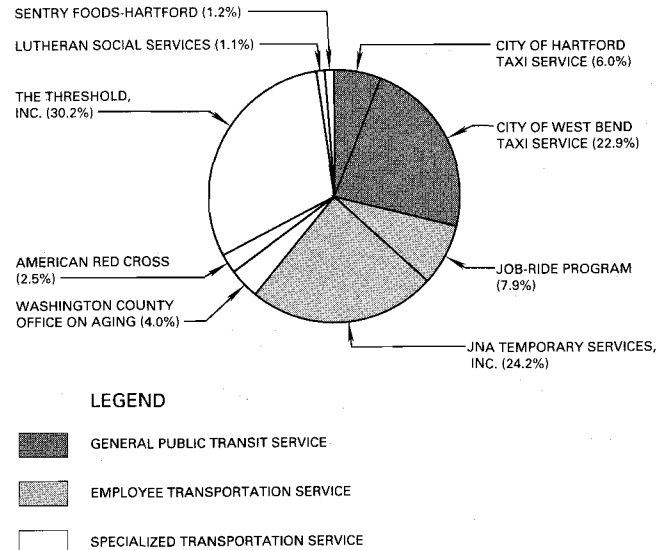
Source: SEWRPC.

of the public and private nonprofit taxicab, employee transportation, and principal specialized transportation service providers identified in the County. The distribution of the average weekday ridership among these eight major transit services is shown in Figures 8 and 9.

10. As shown in Table 41, the eight major transit services for Washington County had an estimated annual cost of almost \$1,439,500 in 1995, including both operating costs and an appropriate average annual allocation of total capital costs. Farebox revenues totaled about \$341,000, resulting in a collective deficit of in 1995 of approximately \$1,098,500. On a per trip basis, the estimated collective annual cost was about \$4.95, with an average fare of about \$1.17 and average deficit of about \$3.78. The per-trip costs of the eight major transit services are shown in Figure 10. By comparison, the per-trip cost of the yellow school bus service provided by school districts in the County was estimated at about \$1.07. The total collective deficit of the major transit services in 1995 of \$1,098,500 was funded in the following manner: about \$822,900, or 75 percent, through Federal and State monies

Figure 9

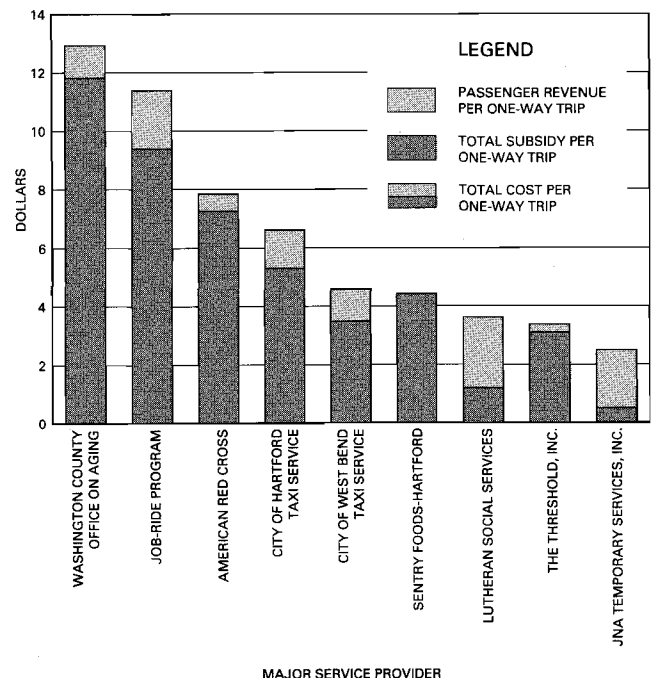
**PERCENTAGE DISTRIBUTION OF  
AVERAGE WEEKDAY RIDERSHIP ON  
THE MAJOR PUBLIC TRANSPORTATION  
SERVICES IN WASHINGTON COUNTY: 1995**



Source: SEWRPC.

Figure 10

**TOTAL EXPENSE AND SUBSIDY PER ONE-WAY  
TRIP ON THE MAJOR PUBLIC TRANSPORTATION  
SERVICES IN WASHINGTON COUNTY: 1995**



Source: SEWRPC.

Table 41

## SELECTED CHARACTERISTICS OF THE MAJOR PUBLIC TRANSPORTATION SERVICES IN WASHINGTON COUNTY: 1995

Service Category	Service Provider	Ridership (one-way trips)		Estimated Total Annual Cost <sup>a</sup>	Estimated Total Annual Fare-box Revenue	Estimated Total Annual Subsidy Required	Provision of Subsidy			Per-trip Data		
		Average Weekday	Total Annual				Federal or State	County or Local	Private	Total Cost <sup>a</sup>	Fare-box Revenue	Subsidy
General Public Transit Service	City of Hartford Taxi Service	70	18,700	\$ 124,200	\$ 26,400	\$ 97,800	\$ 89,400	\$ 8,400	--	\$ 6.64	\$1.41	\$ 5.23
	City of West Bend Taxi Service	265	78,800	378,400	105,000	273,400	266,000	7,400	--	4.80	1.33	3.47
	Subtotal	335	97,500	\$ 502,600	\$131,400	\$ 371,200	\$355,400	\$ 15,800	--	\$ 5.15	\$1.34	\$ 3.81
Employee Transportation Service	Job-ride Program <sup>b</sup>	92	23,500	\$ 268,000	\$47,000	\$ 221,000	\$205,000	--	\$16,000	\$11.40	\$2.00	\$ 9.40
	JNA Temporary Services, Inc. <sup>c</sup>	280	56,100	140,000	112,200	27,800	--	--	27,800	2.50	2.00	0.50
	Subtotal	372	79,600	\$ 408,000	\$159,200	\$ 248,800	\$205,000	--	\$43,800	\$ 5.13	\$2.00	\$ 3.13
Specialized Transportation Service	Washington County Office on Aging	46	11,400	\$ 147,500	\$ 12,700	\$ 134,800	\$ 79,800	\$ 55,000	--	\$12.94	\$1.12	\$11.82
	American Red Cross	29	7,400	58,000	4,300	53,700	15,000	--	\$38,700	7.84	0.58	7.26
	The Threshold, Inc. <sup>d</sup>	350	90,100	305,200	25,400	279,800	164,700	115,100	--	3.39	0.28	3.11
	Lutheran Social Services	13	3,300	12,000	8,000	4,000	3,000	--	1,000	3.64	2.43	1.21
	Sentry Foods-Hartford	14	1,400	6,200	--	6,200	--	--	6,200	4.43	--	4.43
	Subtotal	452	113,600	\$ 528,900	\$ 50,400	\$ 478,500	\$262,500	\$170,100	\$45,900	\$ 4.66	\$0.45	\$ 4.21
--	Total	1,159	290,700	\$1,439,500	\$341,000	\$1,098,500	\$822,900	\$185,900	\$89,700	\$ 4.95	\$1.17	\$ 3.78

<sup>a</sup>Total costs represent all expenses associated with service operation. The figures shown include 1995 reported operating expenses and estimated average annual total capital costs for the operating equipment used by each operator.

<sup>b</sup>Ridership data was estimated from average weekday figures for 1995 provided by the Wisconsin Department of Transportation. Financial data was estimated based on the average cost and State aid per ride for all service providers under the program during 1994 as provided by the Wisconsin Department of Transportation.

<sup>c</sup>Annual ridership is an estimate developed by Commission staff from average weekday figures provided by JNA Temporary Services, Inc. and the West Bend Company. Data on service costs have also been estimated by Commission staff based on an approximate farebox recovery rate of 80 percent as indicated by JNA Temporary Services, Inc. and the West Bend Company.

<sup>d</sup>The County or local funds shown include approximately \$111,100 in direct Washington County tax levy, \$1,000 provided through the Washington County Department of Social Services, and \$3,000 provided by Ozaukee County.

Source: SEWRPC.

made available under various programs; about \$8,400, or 1 percent, through City of Hartford tax-levy monies; about \$7,400, or 1 percent, through City of West Bend tax-levy monies; about \$170,100, or 15 percent, through

County sources, including about \$167,100 through Washington County tax-levy monies and about 3,000 through Ozaukee County; and about \$89,700, or 8 percent, through private contributions.

## Chapter IV

### EXISTING TRANSIT LEGISLATION, REGULATIONS, AND PUBLIC FUNDING PROGRAMS

#### INTRODUCTION

This chapter summarizes the legislative and regulatory framework governing the provision of public transit service in Washington County. Federal legislation and rules govern the availability and distribution of Federal financial aid for capital improvement projects and operating subsidies. State legislation and rules govern the local institutional structures for the provision of public transit services and provide for operating subsidies. Local ordinances can further govern the provision of transit service. Table 42 summarizes the principal Federal and State transit assistance programs which are sources of financial aid for public transit services in Washington County.

#### FEDERAL LEGISLATION AND FUNDING PROGRAMS

##### Federal Transit Administration (FTA) Programs<sup>1</sup>

The Urban Mass Transportation Act of 1964 established a comprehensive program of grants in partial support of the preservation, improvement, and expansion of public transit service in the urbanized areas of the United States.<sup>2</sup> The 1964 Act has been amended several times, most recently by the Federal Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). The Federal transit laws were codified into Chapter 53 of Title 49 of the United States Code in 1994 with the enactment of Public Law 103-272, which changed the citations for the various Federal transit assistance programs but made no substantive changes to the laws. Responsibility for administering the Federal transit programs lies with the Federal Transit Administration of the U. S. Department of Transportation. The authorized programs offer Federal funds to eligible local recipients to assist in carrying out transit projects.

**Section 5309 Capital Program (CP):** Under Section 5309 of the United States Administrative Code, discretionary capital grants are authorized. This is the former Section 3 program. These grants can fund up to 80 percent of the cost of eligible projects, which include rail transit system modernization, construction and extension of new fixed-guideway systems, and bus and bus-related equipment and construction projects. The purchase of specific bus-

related equipment needed to implement the requirements of the Americans with Disabilities Act of 1990 or the Clean Air Act Amendments of 1990 are eligible for up to 90 percent Federal funding.

The Program is the primary source of Federal funding in support of major capital investments in transit infrastructure, in particular rail rapid-transit facilities. Only a small portion of the total CP funds authorized and appropriated nationally are normally available for use in funding bus and bus-related facilities. While Section 5309 originally provided funding for eligible projects at the discretion of the Secretary of the U. S. Department of Transportation, about 90 percent of the available funds have been distributed in the recent past on the basis of Congressional earmarks set forth in Federal appropriations legislation. Accordingly, demand is high for the limited funding which is still distributed on a discretionary basis. Applicants who propose a local matching share significantly greater than the 20 percent required under the program may improve the probability of receiving a Capital Program discretionary grant.

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<sup>1</sup>The description of Federal Transit Administration programs presented in this chapter excludes funds available for technical studies under the Section 5303 Metropolitan Planning Program, formerly the Section 8 Program. These funds are allocated to metropolitan areas and States for use by metropolitan planning organizations, like the Regional Planning Commission, in conducting planning studies like this study for Washington County.

<sup>2</sup>An urbanized area is defined by the U. S. Bureau of the Census as an area with a concentrated population of at least 50,000 persons meeting specific population density criteria. Urbanized areas generally consist of a central city and the surrounding, closely settled, contiguous suburbs. The Milwaukee urbanized area as defined by the 1990 Census includes portions of Milwaukee, Ozaukee, Racine, Washington, and Waukesha Counties. The portion of Washington County included within the Milwaukee urbanized area is shown on Map 1 in Chapter I and includes all of the Village of Germantown.

Table 42

**SUMMARY OF MAJOR FEDERAL AND STATE TRANSIT ASSISTANCE  
PROGRAMS APPLICABLE TO TRANSIT SERVICES WITHIN WASHINGTON COUNTY**

Sponsoring Agency	Program Name	Type of Transit Assistance	Eligible Applicants	Description of Major Program Elements
U. S. Department of Transportation, Federal Transit Administration	Section 5309 Capital Program (formerly Section 3 Program)	Capital	State or local public agencies within urbanized <sup>a</sup> or nonurbanized areas	Federal funds made available through Congressional earmarks and at the discretion of the Secretary of the U. S. Department of Transportation to cover up to 80 percent <sup>b</sup> of total costs of eligible projects, including those for: construction or extension of new fixed-guideway systems, rail system modernization, and bus and bus-related equipment and construction projects
	Section 5307 Urbanized Area Formula Program (formerly Section 9 Program)	Operating or capital planning	State or local public agencies within urbanized <sup>a</sup> areas designated as eligible recipients	<u>Operating:</u> Federal funds made available to cover up to 50 percent <sup>c</sup> of the total operating deficit of eligible transit services <u>Capital:</u> Federal funds made available to cover up to 80 percent of capital project costs <sup>b</sup> <u>Planning:</u> Federal funds made available to cover up to 80 percent of planning and engineering studies
	Section 5310 Elderly and Persons with Disabilities Program (formerly Section 16 Program)	Capital	Private, nonprofit corporations and certain local public agencies	Federal funds made available to cover 80 percent of the costs of capital equipment used in providing specialized transportation service to elderly or disabled persons
	Section 5311 Nonurbanized Area Formula Program (formerly Section 18 Program)	Operating or capital	State agencies, local public bodies, private transportation providers, and Indian reservations within nonurbanized areas	<u>Operating:</u> Federal funds made available to cover up to 50 percent <sup>d</sup> of the total operating deficit of eligible transit services <u>Capital:</u> Federal funds made available to cover up to 80 percent <sup>b</sup> of capital project costs
Federal Highway Administration	Surface Transportation Program (STP)	Capital	State or local public agencies within urbanized or nonurbanized areas	Federal funds made available to cover up to 80 percent of total costs of eligible capital projects including those for: purchase of buses and transit equipment, programs for improved public transit and other traffic control measures identified under Clean Air Act Amendments of 1990, transit safety improvements and programs, car and vanpool projects.
	Congestion Mitigation and Air Quality (CMAQ) Improvement Program	Capital or marketing	State or local public agencies within urbanized and nonurbanized areas in nonattainment areas for Federal air quality standards	Federal funds made available to cover up to 80 percent of total eligible costs of projects which will have a positive impact on improving air quality. Potential projects can include those for public transit, ridesharing, or vanpooling.

**Table 42 (continued)**

Sponsoring Agency	Program Name	Type of Transit Assistance	Eligible Applicants	Description of Major Program Elements
Wisconsin Department of Transportation, Bureau of Transit and Local Roads	Section 85.20 Urban Mass Transit Operating Assistance Program	Operating	Counties, municipalities or towns, or agencies thereof; and transit or transportation commissions or authorities	State funds made available to eligible applicants within State in urban areas having a population of 2,500 or more to cover a portion an eligible transit system's total operating expenses. The amount of State aid provided to an applicant is dependant upon the location of, the population of the urban area served by, and the amount of Federal transit operating assistance available to, each transit system, and the total State funds appropriated for the program. <sup>e</sup>
	Section 85.21 Specialized Transportation Assistance Program for Counties	Operating or capital	Counties	State funds made available to counties within State on a formula basis for use for either operating or capital assistance projects to directly provide transportation for elderly or disabled persons; to aid other agencies or organizations which provide such services; or to create a user-side subsidy program for elderly or disabled persons to purchase transportation from other providers
	Section 85.22 Specialized Transportation Assistance Program for Private Nonprofit Corporations	Capital	Private, nonprofit corporations and certain local public agencies	State funds made available to cover 80 percent of the costs of capital equipment used in providing specialized transportation services to elderly or disabled persons
	Section 85.24 Transportation Demand Management Program	Operating or capital planning	Local governments and public or private organizations	State funds made available for projects involving transportation demand management strategies in areas experiencing significant air quality or traffic congestion problems. Eligible projects can include public transit services and ridesharing or vanpooling services for more than one employer. Funds available to cover up to 80 percent of project costs.
Wisconsin Department of Workforce Development	Section 85.26 Employment - Transportation Assistance Program (Job-Ride)	Operating or capital	Local governments or private organizations	State funds made available to eligible applicants located within Milwaukee County that provide transportation to nontemporary employment sites in the Milwaukee metropolitan area. State funds cover up to 80 percent of costs of projects designed to serve travel by unemployed individuals seeking jobs in areas poorly served or unserved by existing Milwaukee-area fixed-route bus services.

**Table 42 (continued)**

<sup>a</sup>Urban areas having a central city of 50,000 or more population, as designated by the U. S. Bureau of the Census.

<sup>b</sup>The purchase of specific bus-related equipment needed to meet the requirements of the Americans With Disabilities Act of 1990 or the Clean Air Act Amendments of 1990 are eligible for up to 90 percent Federal funding.

<sup>c</sup>The limited amount of Section 5307 operating assistance funds allocated annually to the Milwaukee Urbanized area is not sufficient to the full 50 percent of operating deficits allowed under the program. Section 5307 operating assistance funds are distributed among the designated recipients within the urbanized area based upon the national allocation formula.

<sup>d</sup>The limited amount of Section 5311 funds allocated annually to Wisconsin are not sufficient to cover the full 50 percent of operating deficits allowed under the Program. Operating assistance is limited to the proportion of the sum of the statewide operating expenses of participating transit systems that can be covered by the total amount of operating assistance available statewide under the program. During 1996, the available program funds were sufficient to cover up to about 30 percent of the operating expenses of participating transit systems.

<sup>e</sup>All transit systems participating in the program are grouped into five separate categories, or tiers, based upon the location of the transit system and the population of the urban areas served. State aids are distributed among the transit systems in each tier so that each transit system has an equal percentage of operating expenses funded by the combination of Federal and State transit operating assistance. The percent of operating expenses covered by State aid varies among tiers, and in some cases among transit systems within each tier, based upon the amount of Federal transit operating assistance available to the transit systems in each tier, and the appropriations of State funds to each tier specified under the State budget.

Source: SEWRPC.

Section 5309 grants are available to public agencies that operate transit systems in both urbanized and nonurbanized areas. Applicants for CP funds may also include states applying on behalf of local public agencies. The Wisconsin Department of Transportation has obtained CP grants on behalf of transit operators in the State.

**Section 5307 Urbanized Area Formula Program (UAFP):** Section 5307 of the United States Code, formerly Section 9 of the Urban Mass Transportation Act of 1964, provides for a formula block grant program which makes Federal assistance available to designated transit agencies within urbanized areas. These funds can be used for planning and engineering studies, capital improvements, and operations. The funds are distributed among the Nation's urbanized areas on the basis of a statutory formula. For urbanized areas with a population of 200,000 persons or less, the funds are apportioned on the basis of population and population density. For urbanized areas with a population of over 200,000 persons, such as the Milwaukee urbanized area, formula funds are apportioned on the basis of population and population density; fixed guideway route-miles, either busway or rail; bus and guideway revenue vehicle-miles; and transit system efficiency as measured by passenger-miles of travel and operating expenses.

The annual allocation of Section 5307 funds made to each urbanized area specifies the maximum amount of funds which may be used for transit

operating subsidies, with the remaining funds available for planning and capital assistance projects. Formula program funds allocated to each urbanized area remain available for up to three years past the year for which the allocation was made, a total of four years. Any funds remaining unobligated by the Federal Transit Administration after four years are reapportioned nationally.

The Urbanized Area Formula Program is the primary source of Federal funds for routine bus and rail transit facility replacements, equipment purchases, new facility construction, and system rehabilitation. The Federal share for planning and capital projects may not exceed 80 percent of the eligible project costs, again except for specific bus-related equipment needed to implement the requirements of the Americans with Disabilities Act of 1990 or the Clean Air Act Amendments of 1990 which are eligible for up to 90 percent Federal funding. The formula program is also the sole source of Federal funds for transit operating assistance for urbanized areas, with the maximum Federal share for operating assistance equal to 50 percent of transit system operating deficits.

The Federal Transit Administration also permits grant recipients the option of using urbanized formula program capital assistance, rather than operating assistance, to fund the costs of privately owned capital components of transit services obtained through competitive procurement actions. Eligible capital components are limited to items used in the operation of the contracted transit ser-



vices. Under this policy, the total eligible capital costs are limited to the actual depreciation of the capital items, or to a fixed percentage of the total contract costs, whichever is lower. The Federal Transit Administration has prescribed fixed percentage caps for four different categories of service.<sup>3</sup> Within the Milwaukee urbanized area, Waukesha County currently uses urbanized formula program capital assistance in the manner described above to augment the limited amount of operating assistance it is allocated annually.<sup>4</sup>

For the Milwaukee urbanized area, the Counties of Milwaukee, Ozaukee, Washington, and Waukesha have been jointly designated as "recipients" of funds allocated under the Urbanized Area Formula Program. This designation was made in April 1975 by the Governor upon recommendation of the Southeastern Wisconsin Regional Planning Commission. The designation of each of the four counties was made because the Milwaukee urbanized area included all of, or portions of, the four counties; because there was the strong potential for more than one publicly owned and operated transit system to be developed within the urbanized area; and because each county was viewed as the primary potential operator of transit services within its jurisdiction. In making this designation, it was also envisioned that if local municipalities within a county chose to subsidize private transit operators, or to own and operate their own transit systems, equitable agreements would be amicably negotiated between the municipalities and the county concerned for sharing the urbanized formula program funds available to each county.

Currently, the UAFP funds allocated to the Milwaukee urbanized area are distributed among the designated recipients with subsidized transit

operations within their jurisdictions using a procedure that has been mutually agreed upon by the three public transit operators within the urbanized area, Milwaukee County and Waukesha County, as two of the four designated recipients, and the City of Waukesha as a sub-designee of Waukesha County.<sup>5</sup> Specifically, the UAFP funds available for capital and planning projects are distributed among the three existing transit operators on the basis of need through a "program of projects" jointly developed and mutually agreed upon by these operators. Because the Section 5307 operating assistance funds available within the urbanized area are insufficient to fund the full 50 percent of transit system operating deficits allowed under the program,<sup>6</sup> the funds are distributed by applying within the Milwaukee urbanized area the formula that is used to distribute Formula Program funds among the urbanized areas of the United States. The transit operators, at that time Milwaukee and Waukesha Counties and City of Waukesha, chose this procedure in 1984 after considering several other options for distributing this assistance, including procedures based upon annual transit ridership, annual transit passenger-miles of travel, an equal proportion of operating deficits, an equal proportion of operating expenses, and an equal proportion of farebox revenues and local funds.

The national formula distributes Formula Program funds to urbanized areas with a population of 1,000,000 or more persons, such as the Milwaukee urbanized area, in four distinct "tiers," each tier representing a fixed allocation of funds. The distribution of funds in the first two tiers is based upon the 1990 population and population density of each urbanized area. The allocation of funds in the last two tiers is based upon operating data for the public

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<sup>3</sup>The fixed percentage caps are as follows: 1) 20 percent of total contract costs for elderly and disabled paratransit services and noncommuter paratransit services, 2) 25 percent of total contract costs for regular bus service, 3) 35 percent of total contract costs for commuter services, such as express bus services, and 4) 25 percent of total contract costs for vehicle maintenance services.

<sup>4</sup>The Urbanized Area Formula Program capital assistance used by Waukesha County in 1995 was sufficient to cover about 11 percent of the total operating deficit of the Waukesha County Transit System.

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<sup>5</sup>See SEWRPC Staff Memorandum, Alternative Methods for Allocating Urban Mass Transit Administration Section 9 Formula Transit Assistance to Designated Recipients in the Milwaukee Urbanized Area: 1985, June 1984.

<sup>6</sup>The Urbanized Area Formula Program operating assistance available within the Milwaukee urbanized area in 1996 was sufficient to cover about 4 percent of the operating deficit of the Milwaukee County Transit System, about 4 percent of the operating deficit of the Waukesha County Transit System, and about 6 percent of the operating deficit of the City of Waukesha Transit System.

transit systems within each urbanized area, specifically, total revenue vehicle-miles of service and passenger-miles of travel weighted by an efficiency factor. The efficiency factor measures operating expenses incurred per passenger mile of travel.

A two-step procedure is used to apply this national formula to distribute Formula Program operating assistance funds to the designated recipient counties within the Milwaukee urbanized area. In the first step, each county within the urbanized area is allocated a portion of the total funds, including operating and capital funds, allocated in the four separate funding tiers based upon the national formula and the 1990 population, the 1990 population density, and the transit operating data attributable to the transit systems in each county. The funds available for operating assistance are then distributed among the counties within the urbanized area in proportion to each county's allocated share of the total urbanized area's funds.

Because only Milwaukee and Waukesha Counties currently have subsidized transit operations within their jurisdictions and thus have a need for Urbanized Area Formula Program operating assistance funds, a second step is applied to redistribute the funds allocated to the other counties within the urbanized area, Ozaukee, Racine, and Washington Counties, which have had no such need in the past. The funds initially allocated to these counties are reallocated to Milwaukee and Waukesha Counties on the basis of the proportionate share of the total initial allocation of funds to those two counties. Waukesha County and the City of Waukesha subsequently annually negotiate an agreement on the sharing of the annual allocation of Section 5307 Formula Program transit operating assistance funds between the County and the City.

During 1996, the Milwaukee urbanized area received a total apportionment of approximately \$11.8 million in Urbanized Area Formula Program funds. Only about \$2.5 million was available for transit operating assistance, with the remaining \$9.3 million available for transit capital and planning assistance. As has been the case in virtually every year since 1982, all the formula program operating assistance funds allocated to the Milwaukee urbanized area during 1996 were programmed for use by the existing public transit operators. A portion of the Formula Program capital assistance funds allocated to the Milwaukee urbanized area during 1996 were not programmed and will remain available for up to three more years, or through 1999.

The procedure used to distribute these funds within the Milwaukee urbanized area would provide for an allocation of such funds to Washington County, should the County determine that general public transit services serving the urbanized portion of the County be established. Of the 1996 apportionment of Formula Program operating assistance funds to the Milwaukee urbanized area, Washington County could have been allocated about \$6,000 in Federal operating assistance in 1996.

Section 5310 Elderly and Persons with Disabilities Program: Capital grants are available under the Section 5310 Elderly and Persons with Disabilities Program, formerly the Section 16 Program, to purchase vans, buses, and related equipment needed to meet the specialized transportation needs of the elderly and disabled. These funds are distributed to States in proportion to the elderly and disabled population within each State. Grants are available on an 80 percent Federal-20 percent local matching basis for capital expenditures to support the provision of coordinated specialized transportation services for elderly and disabled persons. This program was established to fill service gaps in areas where transit services for the general public do not operate or do not provide adequate transportation services for these groups.

Eligible applicants for these funds are principally private nonprofit organizations which provide transportation services specifically designed to meet the needs of elderly and disabled persons. A local public body may apply for these funds if it has been approved by the State as a coordinator of human services in a particular area, such as an agency on aging or a transit service provider which the State has identified as the lead agency to coordinate transportation service funded by multiple Federal or State human services programs. A public body which certifies to the Governor that no nonprofit agencies or organizations are readily available to provide service in an area may also be an applicant for these funds. Public bodies may also contract for services from agencies who have received funds under the program. Private for-profit organizations are not eligible to receive funds under the program, but may lease equipment purchased with Program funds from nonprofit organizations.

The Wisconsin Department of Transportation administers the Elderly and Persons with Disabilities Program in Wisconsin. Grants are awarded on a Statewide, competitive basis. The total allocation of such funds to Wisconsin amounted to about \$1.0 million in 1996. Past recipients of these funds

active within Washington County in the past have included The Threshold, Inc., and both chapters of the American Red Cross active in the County.

Section 5311 Nonurbanized Area Formula Program (NAFP): Section 5311 of the United States Code, formerly Section 18 of the Urban Mass Transportation Act of 1964, authorizes a block grant program which makes available Federal assistance for transit services serving the nonurbanized areas of each state. Funds are apportioned to each State on the basis of nonurbanized area population. Within Wisconsin, the Department of Transportation administers the Nonurbanized Area Formula Program.

The rules established to administer the Nonurbanized Area Formula Program in Wisconsin allow the Department of Transportation to reserve up to 10 percent of the State's annual apportionment of NAFP funds earmarked for administrative and technical assistance. Technical assistance includes project planning, program development, management development, coordination of transit programs, and the conduct of such research as the Department deems appropriate to promote effective means of delivering transit services in nonurbanized areas. The balance of the State's annual apportionment is available to support operating and capital improvement projects for transit systems serving local communities and for the provision of intercity transit services.

Eligible applicants for these NAFP funds include counties, cities, villages, and towns; transit or transportation commissions or authorities established by, or pursuant to, law or by interstate compact to provide transit services or facilities; Federally recognized Native American tribal governing bodies; or two or more such bodies acting jointly. Public transit projects eligible for NAFP funds must provide service in a nonurbanized area and could include the following: 1) services intended to transport rural residents to an urban community having a population of less than 50,000 persons or to an urbanized area, 2) services intended to transport passengers within a rural area or within an urban community having a population of less than 50,000 persons, and 3) services intended to transport passengers between urbanized areas which serve at least one stop outside an urbanized area. Services intended principally to transport urbanized area residents to rural areas are not eligible for these funds.

The Federal share of capital projects under the program may not exceed 80 percent of total eligible costs, except for specific bus-related equipment

needed to implement the requirements of the Federal Americans with Disabilities Act of 1990 or the Federal Clean Air Act Amendments of 1990, which are eligible for up to 90 percent Federal funding. To ensure the best use of the limited amount of capital assistance available under the NAFP, capital projects are considered for funding by the Wisconsin Department of Transportation in the following order of priority:

1. Projects to replace vehicles operated by existing systems;
2. Projects to initiate a transit service;
3. Projects to replace maintenance and storage facilities of existing systems;
4. Projects to expand the number of vehicles operated by existing systems;
5. Projects to expand and rehabilitate maintenance and storage facilities of existing systems; and
6. Projects to purchase and install such passenger amenities as shelters and bus stop signs for existing systems.

The maximum Federal share for operating assistance under the program is 50 percent of a transit system's operating deficit. Because the funds allocated to the State under the program in the recent past have been insufficient fully to fund participating systems at this level, the State has distributed the available operating assistance funds among applicants at a lower percentage of the operating expenses. The percent of operating expenses funded annually is determined on the basis of the percentage which the available program funds constitutes of the statewide sum of the operating expenses of the participating transit systems. In recent years this has been a maximum of 28 percent of the total operating expenses of the public transit systems participating. For 1996, it is estimated that the total operating assistance funds available to the State under the program will be sufficient to cover up to about 30 percent of operating expenses.<sup>7</sup>

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<sup>7</sup>The increase in the Federal share for 1996 under the Section 5311 Nonurbanized Area Formula Program resulted from additional Section 5311 funds, originally intended for use to support intercity bus services, being made available for general use.

The State's total 1996 allocation of funds under the Nonurbanized Area Formula Program amounted to approximately \$2.93 million. Within Washington County, NAFPP funds are potentially available to support public transit services operating within that portion of the County outside the Milwaukee urbanized area. Such funds are currently used in Washington County to support the operation of the public shared-ride taxicab systems operated by the Cities of Hartford and West Bend. The transit operating assistance funds provided through the program in 1995 included about \$29,800 for the City of Hartford and about \$95,400 for the City of West Bend. Both cities have also received transit capital assistance grants through the Program in the recent past, with about \$57,600 received by the City of Hartford in 1995 for two new replacement taxicab vehicles and about \$88,600 received by the City of West Bend in 1994 for six new taxicab vehicles.

#### Funding Opportunities for Transit under Other Federal Transportation Programs

The Intermodal Surface Transportation Efficiency Act of 1991 created other opportunities for Federal funding of transit services. The new programs authorized under ISTEA which should be viewed as potential sources of Federal funds for transit projects for Washington County include the Surface Transportation program (STP) and the Congestion Mitigation and Air Quality Improvement (CMAQ) program. Both programs are administered by the Federal Highway Administration through the Wisconsin Department of Transportation.

The Surface Transportation Program provides funding to both urbanized areas, including the Milwaukee urbanized area, and nonurbanized areas for a broad range of highway and transit capital projects. Decisions as to the use of STP funds for highway and transit projects within the Milwaukee urbanized area are made annually by the Commission's Intergovernmental Coordinating and Advisory Committee on Transportation Planning and Programming for the Milwaukee Urbanized Area as an integral part of the preparation of the Transportation Improvement Program for the Region. The Wisconsin Department of Transportation determines the amount of STP funds spent annually on highway and transit projects within the remainder of the Region. All capital projects which might otherwise be eligible for funding under current Federal Transit Administration grant programs are potentially eligible for STP funds. Possible transit and transit-related projects eligible for funding would include: purchases of

rolling stock and other transit equipment; construction, rehabilitation, and improvement of fixed-rail systems and other transit facilities; programs for improved public transit and other transportation control measures defined under the Clean Air Act Amendments of 1990; transit and transit-related planning, research, and development activities; transit safety improvements and programs; and carpool and vanpool projects.

The Congestion Mitigation and Air Quality Improvement program provides Federal funding for projects aimed at reducing congestion and improving air quality in areas identified as not meeting the ozone and carbon monoxide emission standards set forth in the Federal Clean Air Act Amendments of 1990. Because Washington County has been identified as part of the six-county Milwaukee severe air quality nonattainment area for ozone, transit projects proposed by the County may be qualify for CMAQ funds. Eligible projects would include transit or transit-related projects or programs directed at reducing single-occupant automobile travel, thereby assisting in improving air quality and the development of such new traffic demand management programs as carpool and vanpool matching and marketing services and transit marketing services.

Federal funds made available for transit projects under these programs are transferred for administrative purposes from the Federal Highway Administration to the Federal Transit Administration Section 5307 Urbanized Area Formula Program or Section 5311 Nonurbanized Area Formula Program, as appropriate for the area being served by the project. The funds, therefore, become subject to the application requirements and administrative regulations applicable to all Federal Transit Administration programs. Federal funds made available under these programs can cover up to 80 percent of the eligible transit project costs.

#### Federal Administrative Regulations

The availability of Federal funds is restricted by administrative regulations. Below are key regulations relevant to the use of Federal urban transit assistance funds in Washington County:

1. Public Hearing Requirements

All applicants for Federal Transit Administration capital assistance funds available under the Section 5307, 5309, and 5311 programs, and applicants for Federal Transit Administration operating assistance funds who are first-time applicants or who are proposing

significant changes in transit service levels must hold a public hearing on the proposed project. This hearing is to be held to give parties with significant social, economic, or environmental interests an adequate opportunity to publicly present their views on the project.

## **2. Local Share Requirements**

When Federal funds provide a portion of the cost of a project, the remaining portion must come from sources other than Federal funds, with the exception of funds from Federal programs other than Federal Transit Administration programs certified to be eligible as local-share funds. Thus, funds received by transit operators pursuant to service agreements with State or local social service agencies or a private social service organization may be considered, even though the original source of such funds may have been another Federal program.

## **3. Civil Rights Requirements**

All applicants for Federal funds must certify that they will not discriminate on the grounds of race, color, or national origin in the provision of the public transit services for which Federal funding will be used, pursuant to the provisions of Title VI of the Civil Rights Act of 1964.

## **4. ADA Requirements**

All transit operators must comply with current Federal Transit Administration regulations issued to implement the requirements of the Americans with Disabilities Act (ADA) of 1990. These requirements are briefly summarized as follows:

- a. For operators of fixed-route bus services, the regulations require that all new vehicles purchased or leased for the transit system on or after August 25, 1990, must be accessible to disabled individuals using wheelchairs. Transit operators acquiring used vehicles on or after the above date must make demonstrable efforts to acquire accessible used equipment. Vehicles which will be rehabilitated or reconstructed after the above date must, to the maximum extent practical, be made accessible to disabled individuals using wheelchairs. In addition, the regulations require the provision of complementary

paratransit services for disabled individuals unable to use the accessible vehicles operated in regular, noncommuter, fixed-route transit service.

- b. For transit systems providing demand-responsive service, the vehicles purchased or leased for use on the system on or after August 25, 1990, must be accessible to wheelchair-bound individuals unless the system, when viewed in its entirety, provides a level of service to individuals with disabilities which is equivalent to the service which it provides to individuals without disabilities. A demand-responsive system would be deemed to provide equivalent service if the service available to individuals with disabilities is provided in the most integrated setting feasible and is equivalent to the service provided to other individuals with respect to the following service characteristics: 1) response time, 2) fares, 3) geographic area of service, 4) hours and days of service, 5) restrictions based on trip purpose, 6) availability of information and reservations, and 7) any constraints on capacity or service availability.

Waivers from the above requirements may be considered by the Federal Transit Administration. Any waiver granted, however, would be temporary and pertain to a particular transit vehicle procurement, lease, or service contract. The regulations also indicate that private transit operators contracting with a public body to provide a specific transit service would be required to meet the same requirements imposed upon the public body under the regulation.

## **5. Drug and Alcohol Testing Requirements**

All transit operators must comply with current Federal Transit Administration regulations concerning drug and alcohol testing of personnel involved in the provision of public transit services. The regulations require employees in what are considered safety-sensitive positions to undergo tests for various drugs and alcohol use. Safety-sensitive employees would include those who operate the revenue and nonrevenue service equipment involved in the provision of public transit service, those who control the dispatch or movement of revenue service vehicles,

those who are responsible for maintaining revenue service vehicles and equipment, and those who are armed security personnel. Transit systems are required to establish a program of tests for covered employees which would include pre-employment tests; random tests; tests administered when there is reasonable suspicion that the employee has used prohibited drugs or misused alcohol; post-accident tests performed after an accident involving the employee has occurred; return to duty tests performed before a covered employee who has tested positive, or has refused to be tested, can return to his or her job; and followup tests administered after an employee who has previously tested positive has been allowed to return to duty. Employees who are either directly employed by the transit operator or employed by a contractor are subject to the drug and alcohol testing requirements, except for contract maintenance personnel in transit systems funded with Section 5311 assistance.

6. Buy America Requirements

Public transit programs and activities receiving Federal financial assistance must comply with Part 661 of Title 49 of the Code of Federal Regulations, which mandates a preference for the purchase of domestic articles, materials, and supplies, whether manufactured or unmanufactured. These requirements, known as "Buy America," establish that no Federal funds may be obligated for public transit projects unless the steel and other manufactured products are produced in the United States and apply to purchases or projects of \$100,000 or more. Rolling stock items are required to have 60 percent domestic content and be assembled in the United States to qualify as being made in America. Components of products other than rolling stock must be 100 percent American-made. Waivers are available to allow the purchase of foreign-made items under certain circumstances, such as when the purchase of items are in the public interest, when items are not produced in the United States in sufficient quantity or of satisfactory quality, or when the purchase of domestic manufactured items other than rolling stock will increase the cost of the purchase by more than 25 percent.

7. General Procurement Requirements

All contracts executed with Federal funds are subject to the requirements of fundamental procurement principles and applicable laws and regulations. Grant recipients are responsible for ensuring full and open competition and equitable treatment of all potential sources when purchasing operating equipment or contracting for transit services. All grantees are required to follow procedures for procuring goods and services that comply with Federal procurement guidelines. Notably, this policy has important implications for recipients of Federal Transit Administration funds which contract with a transit operator for the provision of eligible public transit service rather than providing the service directly. With few exceptions, such applicants are required to follow a competitive bid process in selecting the contract service provider. A competitive bid process was used by the City of West Bend in procuring a private transit company to operate the City's shared-ride taxicab system. The process involved the distribution of a request for proposals document to all interested transit operators, who then submitted service proposals which documented their qualifications and the bid costs for service operation.

8. Charter Service Requirements

The applicant must certify that it will comply with current Federal Transit Administration regulations pertaining to the provision of charter service by Federally-funded public transit operators. If an applicant desires to provide charter service using Federally-funded equipment or facilities, the applicant must first determine if there are private charter operators willing and able to provide the charter service the applicant desires to provide. To the extent that there is at least one such private operator, the applicant is prohibited from providing charter service using Federal Transit Administration-funded equipment or facilities. Certain exceptions to the general prohibition on providing charter service are allowed, including one for recipients in nonurbanized areas. The Federal Transit Administration allows recipients in nonurbanized areas to petition for an exception if the charter service that would be



provided by willing and able private charter operators would result in a hardship on the customer. Any charter service that an applicant provides under any of the above conditions must be incidental to regular transit service.

9. School Busing Requirements

No Federal assistance may be provided for the purchase or operation of buses unless the applicant agrees not to engage in school bus operations for the exclusive transportation of students and school personnel in competition with private school bus operators. This rule does not apply, however, to "tripper" service provided for the transportation of school children along with other passengers by regularly scheduled bus service at either full or reduced rates.

10. Employee Protection Requirements

No Federal financial assistance may be provided until fair and equitable arrangements have been made, as determined by the U. S. Secretary of Labor, to protect the interests of employees affected by such assistance pursuant to Section 5333(b) of the United States Code, formerly Section 13(c) of the Urban Mass Transportation Act of 1964, as amended. Such arrangements must include provisions protecting individual employees against a worsening of their positions with respect to their employment, collective bargaining rights, and other existing employee rights, privileges, and benefits. Recipients of Federal transit assistance are required to execute special agreements specifying such provisions either with the affected unions in the transit service area or, in the case of recipients of funds under the Section 5311 Nonurbanized Area Formula Program, with the Wisconsin Department of Transportation.

11. Disadvantaged Business Enterprise Requirements

No Federal assistance may be provided until all eligible disadvantaged business enterprises (DBEs) have been afforded the opportunity to participate fairly and equitably in any proposed public transit project. The applicant must provide assurance of its adherence to

meeting specified goals concerning what proportion of work available to outside contractors has been awarded to DBE contractors.

12. Equipment Ownership Requirements

Recipients of Federal capital assistance must assure that the capital equipment and facilities acquired with Federal funds will be owned by a public body and used in a manner consistent with the public transit service for which it was acquired during the useful life of the capital equipment or facilities. In the event that such equipment or a facility is sold or otherwise devoted to another use during its useful life, the recipient may be required to refund a proportionate share of the Federal funds based on the value of the equipment or facilities at the time of sale.

13. Employment Nondiscrimination Requirements

Recipients of Federal funds must agree that, as a condition of receiving Federal financial assistance, they will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or disability, and that they will take affirmative action to ensure that applicants are employed and that employees are treated without regard to their race, color, religion, sex, national origin, or disability during the employment tenure.

## STATE LEGISLATION AND FUNDING PROGRAMS

Two types of legislation which affect the provision of transit services have been enacted by the State of Wisconsin: 1) legislation authorizing financial assistance for the provision of general public and specialized transportation services, and 2) legislation governing the establishment and operation of transit services by county and local units of government. Financial assistance provided by the State for urban transit includes indirect aid, principally in the form of tax relief, and direct aid in the form of operating subsidies and planning grants, principally through several programs administered by the Wisconsin Department of Transportation. The State of Wisconsin currently has no legislation which authorizes a program to provide capital assistance to public transit systems.

### Financial Assistance

Indirect Aid or Tax Relief: Indirect aid to urban public transit systems in Wisconsin began in 1955, when ridership on, and the profitability of, privately operated transit service was declining, and tax incentives to encourage private transit companies to reinvest profits in new capital facilities and stock were first enacted. The Wisconsin Statutes currently in effect which give urban transit systems tax relief are as follows:

1. Section 71.39 of the Wisconsin Statutes, which provides a special method that can be used by privately owned urban transit organizations to calculate State income tax liability in such a way as to encourage reinvestment of profits in new capital facilities and stock.
2. Section 76.54, which prohibits cities, villages, and towns from imposing a license tax on vehicles owned by private urban transit companies.
3. Section 77.54(5), which excludes buses, spare parts and accessories, and other supplies and materials sold to common carriers for use in providing urban transit services from the general sales tax imposed on goods and services.
4. Section 78.01(2)(d), which excludes vehicles engaged in urban public transit service from the fuel tax imposed upon motor fuel, such as diesel fuel, specifically used in transit vehicle operation.
5. Section 78.40(2)(c), which excludes vehicles engaged in urban public transit service from the fuel tax imposed upon special fuel, such as propane gas, specifically used in transit vehicle operation.
6. Section 78.75(1)(a), which allows taxi companies to obtain rebates of the tax paid on motor fuel or special fuel in excess of 100 gallons per year.
7. Section 341.26(2)(h), which requires that each vehicle engaged in urban public transit service be charged an annual registration fee of \$1.00 unless a municipal license has been obtained for the vehicle.

Section 85.20 Urban Mass Transit Operating Assistance Program: Financial aid in the form of transit operating assistance is currently available under

the Wisconsin Urban Mass Transit Operating Assistance Program. The program was established in 1973, when \$5.0 million in general-purpose revenue funds for transit operating assistance was appropriated during the 1973-1975 biennium. The program has been funded at increasing levels in every subsequent budget biennium, a total of \$147.13 million appropriated for the 1995-1997 biennium. The program is authorized under Section 85.20 of the Wisconsin Statutes, and is currently funded by the Wisconsin Transportation Fund, a multi-purpose special revenue fund created to provide funding for transportation-related facilities and modes, with revenues derived from transportation users primarily through taxes on motor fuels and vehicle registration fees.

Under the program, local public bodies in an urban area that directly operate, or contract for the operation of, a public transit system are eligible for State aid from the Wisconsin Department of Transportation as partial reimbursement for the total annual operating expenses of the transit system. "Local public bodies" are defined to include counties, cities, villages, or towns, or agencies thereof; transit or transportation commissions or authorities and public corporations established by law or by interstate compact to provide public transit services and facilities; or two or more such bodies acting jointly. An "urban area" is defined as any area that includes a city, village, or town having a population of 2,500 or more that is appropriate, in the judgment of the Department of Transportation, for service by a public transit system. Eligible transit systems under the program include those serving the general public with fixed-route bus or rail transit service, with shared-ride taxicab service, or with some other public transit or paratransit service. Transit systems may directly operate, or contract for the operation of, a subsystem to provide paratransit services to elderly and disabled persons.

Between 1982 and 1995, State aids were distributed under the program to cover a fixed percentage of an eligible transit system's total operating expenses, not to exceed the audited nonFederal share of the operating deficit, with the percentage specified in the authorizing State statute. State aids covered 42 percent of operating expenses during 1995. As a consequence of provisions of the 1995 State Budget Act, the fixed percentage of operating expenses was eliminated from the authorizing statute and the method of distributing State aids under the program was revised. Beginning in 1996, all transit systems participating in the program are grouped into five categories, or tiers, based on the location of the

Table 43

**ESTIMATED PERCENT OF TRANSIT OPERATING EXPENSES  
FUNDED WITH STATE AIDS UNDER THE SECTION 85.20 URBAN  
MASS TRANSPORTATION OPERATING ASSISTANCE PROGRAM: 1996**

Funding Tier	Transit Systems <sup>b</sup> Included under Funding Tier	Average Percent <sup>a</sup> of Operating Expenses Covered by:	
		State Transit Operating Assistance	Total Federal and State Operating Assistance
I	Milwaukee County Transit System	44	47
II	Madison METRO Transit System	48	50
III	Transit systems in urbanized areas of the State over 200,000 in population which are not included in Tiers I and II	44	48
IV	Transit systems in urbanized areas of State between 50,000 and 200,000 in population	43	55
V	Transit systems in nonurbanized areas of State under 50,000 in population	39	69

<sup>a</sup>Figures shown are preliminary estimates subject to change following completion of reviews of the 1996 applications for state transit operating assistance submitted by each transit operator. The figures shown represent averages for all the transit systems included under each tier. Figures for the individual transit systems or subsystems within each tier may be higher or lower.

<sup>b</sup>Includes paratransit services for disabled persons provided by each transit system to meet Federal ADA requirements.

Source: Wisconsin Department of Transportation and SEWRPC.

transit system and the population of the urban area served. State aids are distributed among the transit systems in each tier so that each transit system has an equal percentage of operating expenses funded by the combination of Federal and State transit operating assistance. The percent of operating expenses covered by State aid varies among tiers, and in some cases among transit systems within each tier, on the basis of the amount of Federal transit operating assistance available to each transit system in each tier and the appropriations of State funds to each tier specified under the State budget. The funding tiers and the estimated proportions of operating expenses funded by Federal and State transit operating assistance under each tier during 1996 are identified in Table 43. Eligible public transit services provided within that portion of Washington County lying within the Milwaukee urbanized area, which consists principally of the Village of Germantown, would qualify for State aids under tier III, while those provided in the remainder of the County would qualify for State aids under tier V.

Eligible transit operating expenses can include the costs of user-side subsidies<sup>8</sup> provided by eligible transit systems to disabled persons and to the general public in urban areas which are served exclusively by shared-ride taxi systems. Eligible expenses can also include profit and return on investment charged by private operators, provided the service contract was awarded using a competitive procurement process approved by the Department of Transportation. Applicants providing fixed-route transit service are required to provide a local match equal to 20 percent of the State aid received as a condition for receiving State funds under the program. No local matching funds are required for applicants

<sup>8</sup>User-side subsidy is defined as financial assistance which is provided directly to a transit user, usually in the form of a voucher from a local public body or sponsoring agency, for use in payment of a fare for a trip taken on a public transit system or specialized transit service.

providing shared-ride taxicab services. Funds from Federal and State sources, farebox revenues, and in-kind services cannot be used as local matching funds. In 1995 within Washington County, the City of Hartford received about \$44,700 and the City of West Bend received about \$143,100 in State transit operating assistance to support the operation of the shared-ride taxicab systems within each community.

Like the Federal funds described previously in this chapter, the availability of State urban mass transit operating assistance funds is restricted by administrative regulations. The most important of these restrictions are as follows:

1. Referendum Requirement

No applicant will be eligible for State aid under the program to support the operation of a fixed-route transit system unless operation or subsidizing the system is approved by action of the governing body and by referendum vote of its electorate. Such approval is not required, however, for shared-ride taxicab service systems.

2. Passenger Service Focus Requirement

The operating assistance project must be for passenger transportation service, with at least two-thirds of the service, measured in terms of vehicle-miles, provided within the boundaries of an appropriate urban area as defined by the Department of Transportation. Package delivery service is also allowed, provided it is incidental to the provision of passenger transportation service.

3. General Public Service Requirement

The public transit service must be provided on a regular and continuing basis and must be open to the general public. Service provided exclusively for a particular subgroup of the general public, such as the elderly, disabled, or school children, is not eligible.

4. Fare Requirements

Fares must be collected for the transportation service in accordance with established fare tariffs. Fixed-route transit systems are also required to provide a reduced fare program for elderly and disabled persons during nonpeak hours of operation, with such reduced fares not to exceed one-half of the adult cash fare. Shared-ride taxicab systems are not required to provide such reduced fares.

5. Private Contracting Limitations

Contracts for transit service awarded to a private transit operator following a competitive bidding process may not exceed five years in length. Negotiated contracts with private transit operators are limited to one year in length.

6. Duration of State Funding Commitment

Commitments of State funds for operating assistance contracts are based upon projections of operating revenues and operating expenses for a calendar-year contract period. Contracts between the Wisconsin Department of Transportation and recipients of State aids may not exceed one year in duration.

7. Management Planning Requirement

Transit systems are required to prepare a "transit management plan" which describes for the contract year how the transit system will be operated, the amount of service which will be provided, the fares to be charged, steps to be taken to make the system operate more efficiently and effectively, and the procedures to be used for counting passenger trips on the transit system. Projections of operating revenues and expenses must be based upon the approved one-year management plan governing the operation of the participating transit system during the contract period.

8. Financial Auditing Requirements

Each participating transit system, except privately owned systems with which a local public body contracts for services on the basis of competitive bids, must allow the Department of Transportation to audit their financial records in order for the Department to determine the actual operating expenses and revenues and the amount of State aid to which the transit system is entitled during the contract period. For privately owned systems, the Department will conduct audits to determine compliance with service contracts, but not financial audits of the private provider's business records.

9. Program of Projects Requirement

Recipients must annually submit to the Department of Transportation a four-year program of transit projects directed toward maintaining or improving the transit service provided by the system. The four-year program must include descriptions of any pro-

posed changes in service levels or fares; capital project needs; and projections of ridership, the amount of service provided, operating expenses and revenues, and the public funding requirement.

10. System Performance Goals Requirement

Each recipient must establish annually service performance goals for a four-year period and assess the effectiveness of its transit system in relation to those goals. At a minimum, systemwide goals must be established for operating expenses per total vehicle mile, operating expenses per revenue passenger, operating expenses per platform vehicle-hour, the proportion of operating expenses recovered through operating revenues, revenue passengers per revenue vehicle-mile, and revenue passengers per service area population.

11. Management Audit Requirement

All transit systems participating in the program must submit to a management performance audit conducted by the Department of Transportation at least once every five years.

Section 85.26 Employment Transit Assistance Program:

Section 85.26 of the Wisconsin Statutes authorizes the State employment transit assistance program, commonly referred to as the "job ride" program. Established during the 1987-89 budget biennium, the program addresses transportation problems which have developed within the Milwaukee metropolitan area as a result of an increasing mismatch between the location of new jobs and the place of residence of potential workers. It has accomplished this by encouraging the provision of transit services, other than traditional fixed-route bus services, which can be used to serve work travel by unemployed individuals seeking jobs in areas poorly served or unserved by the existing Milwaukee area fixed-route bus services. The program was administered by the Wisconsin Department of Transportation from 1987 through July 1, 1996, when this responsibility transferred to the Wisconsin Department of Workforce Development.

The funds available under the job-ride program are distributed on a competitive basis to private nonprofit and for-profit organizations, local units of government, and local governmental agencies in Milwaukee County which propose transportation services judged best to meet the goals of the

program. The main program goals include assisting the unemployed in finding nontemporary work opportunities, thereby reducing their dependence on public assistance; assisting suburban employers in finding permanent employees; and providing an interim transportation service that will lead to lasting transportation solutions to link workers to suburban job locations. The funds available under the program may be used to cover the capital costs of purchasing or leasing vehicles, the direct costs of operating or contracting for transportation services, and the indirect costs of project administration. The State grants available under the program fund up to 80 percent of such eligible project costs. Applicants who propose providing matching funds in excess of the 20 percent required receive more favorable consideration than those providing the 20 percent minimal match.

The transportation services provided must meet certain requirements. Such services must be for access to permanent employment, not temporary jobs. Trips for both job-search and actual employment purposes are eligible. Service provided for probationary employment may not exceed 20 percent of the one-way passenger trips funded under the program. Fares for transportation services cannot exceed \$2.00 per one-way trip; employers must pay at least 50 percent of the fare for the participating employees.

At present, there are six private organizations providing employee transportation services throughout the Milwaukee metropolitan area with the State aid available under the job-ride program: Goodwill Industries of Southeastern Wisconsin, the Governor's Central City Initiative, Milwaukee Careers Cooperative, the Milwaukee Urban League, the Opportunities Industrialization Center of Greater Milwaukee, and United Migrant Opportunity Services. Goodwill Industries of Southeastern Wisconsin, Milwaukee Careers Cooperative, and the Opportunities Industrialization Center of Greater Milwaukee regularly transported individuals residing in central Milwaukee County to jobs in Washington County. The Washington County trips served by these providers were generally to and from employers in the Villages of Germantown and Slinger and the Cities of West Bend and Hartford.

The 1995 State budget appropriated \$1.16 million for the program over the July 1, 1995, through June 30, 1997, biennium. The funds for the job-ride program are derived from special "oil overcharge" revenues received by the State.

**Section 85.24 Transportation Demand Management and Ride-Sharing Program:** A State transportation demand management program was created in 1991. Authorized under Section 85.24 of the State Statutes, the program is intended to encourage public and private organizations to develop and implement transportation demand management programs and approaches. Such programs and approaches would be aimed at reducing traffic congestion, promoting the conservation of energy, improving air quality, and enhancing the efficient use of existing transportation systems. The primary purpose of such actions would be to enhance the movement of people and goods, not of vehicles. A total of \$600,000 was appropriated from the State Transportation Fund for the program during the July 1995-June 1997 budget biennium.

Eligible applicants for funds under this program include local governments and public and private organizations. Eligible projects include those involving transportation demand management strategies or approaches which will be undertaken in areas of Wisconsin experiencing significant air quality or traffic congestion problems. Projects which promote alternatives to automobile travel and encourage the use of high efficiency modes of travel, such as public transit, van pooling and ride-sharing programs serving more than one employer, fall within the type of projects which could be considered for funding under this program. Notably, an important eligibility criterion is that the proposed project would be unlikely to occur without grant funding. State funds are available under the program to cover up to 80 percent of the project costs. The minimum 20 percent applicant matching share may include any combination of Federal, local, or private funding. To be considered for funding, a written endorsement of the project is required from all organizations or governing bodies which will be participating in the project. In addition, evidence must be provided that the transportation demand management strategy or initiative would be scheduled to begin within six months of the date of grant approval. Reasonable assurance is also required that the project, if it is of a demonstration nature, is likely to be continued following the grant period.

Funds made available through the State transportation demand management grant program were used within Washington County in 1995 to establish and fund transportation management associations within the Hartford and Germantown portions of the County.

**Section 85.21 Specialized Transportation Program for Counties:** Section 85.21 of the Wisconsin Statutes authorizes the provision of financial assistance to counties for specialized transportation programs serving elderly and disabled persons who would not otherwise have an available or accessible method of transport. Funds for the program are derived from the State Transportation Fund. A proportionate share of funds under this State program, based on the estimated percentage of the total statewide elderly and disabled population residing in the county, is allocated to each county in Wisconsin. In general, counties may use these funds for either operating assistance or capital projects to provide direct transportation services for the elderly and disabled, to aid other agencies or organizations which provide such services, or to create a user-side subsidy program through which the elderly and the disabled may purchase transportation services from existing providers at reduced rates. Counties must provide a local match equal to 20 percent of their allocations in order to receive their allocations. In addition, a county may hold its allocated aid in trust for the future acquisition or maintenance of transportation equipment.

Transportation services supported by funds available under this program may, at the direction of the county, carry members of the general public on a space-available basis, provided that priority is given to serving elderly and disabled patrons. In addition, Section 85.21 requires that a co-payment, which can be a voluntary donation, be collected from users of the specialized transportation service, and that a means for giving priority to medical, nutritional, and work-related trips be adopted if the transportation service is unable to satisfy all of the demands placed on it.

Funding for this program during the July 1995-June 1997 biennium was established at \$11.5 million in the 1995 State budget. Washington County currently participates in this program to help support the paratransit service operated by the Washington County Office on Aging, which provides an advance-reservation, door-to-door transportation service to elderly and disabled residents of Washington County. The 1996 budget for this paratransit service included approximately \$88,900 allocated to Washington County under this State program.

**Section 85.22 Specialized Transportation Assistance Program for Private NonProfit Corporations:** Section 85.22 of the Wisconsin Statutes authorizes the provision of financial assistance for the purchase of



capital equipment to private, nonprofit organizations that provide paratransit services to the elderly and disabled. This program represents the State counterpart to the previously referenced Federal Section 5310 program for elderly and disabled persons. The State aids available under this program are distributed to applicants in the State on an 80 percent combined State-Federal and 20 percent local matching basis. The program is administered jointly with the Federal Section 5310 program by the Wisconsin Department of Transportation. In all cases, the applicant is responsible for providing the 20 percent local share of capital project costs. A total of \$1.42 million from the State Transportation Fund was appropriated for the program during the July 1995-June 1997 biennium in the 1995 State budget.

#### State Enabling Legislation

In addition to providing financial assistance to public transit systems in the State, the Wisconsin Statutes enable counties and municipalities to operate public transit systems. The more important State legislation defining local governmental powers which can be used to oversee the operation of a public transit system is outlined below:

1. County Contract with Private Transit System Operators. Sections 59.968 (1) through (3) of the Wisconsin Statutes permit county financial assistance of private urban public transit companies operating principally within the county by direct subsidies, purchasing of buses and leasing them back to the private company, and acting as the agent for the private operator in filing applications for Federal aid.
2. County Ownership and Operation of Transit Systems. Sections 59.968(4) through (8), 59.969, and 63.03(2)(x) of the Wisconsin Statutes permit a county to acquire a transportation system by purchase, condemnation, or otherwise, and to provide funds for the operation and maintenance of such systems. The term "transportation system" is defined as all land, shops, structures, equipment, property, franchises, and rights of whatever nature for the transportation of passengers. The acquisition of the system must be approved by a two-thirds vote of a county board. The county has the right to operate into contiguous or "cornering" counties. However, where operation into other counties would compete with the urban or suburban

operations of other existing common carriers of passengers, the county must coordinate the operations with such other carriers to eliminate adverse financial impacts on those carriers. Such coordination may include, but is not limited to, route overlapping, transfers, transfer points, schedule coordinations, joint use of facilities, lease of route service, and acquisition of route and corollary equipment. The law permits a county to use any street for transit operations without obtaining a license or permit from the local municipality concerned. The law requires the county to assume all the employer obligations under any contract between the employees and management of the system and to negotiate an agreement protecting the interest of employees affected by the acquisition, construction, control, or operation of the transit system. This provision for labor protection is similar to Section 13(c) of the Federal Urban Mass Transportation Act of 1964, as amended.

3. County Transit Commission. Section 59.967 of the Wisconsin Statutes provides for the creation of county transit commissions which are authorized to operate a transportation system for the transportation of persons or freight. A county transit commission composed of not fewer than seven members is appointed by the county board. A county transit commission is permitted to extend its transit system into adjacent territory within 30 miles of the county boundary. Counties may also establish by contract a joint municipal transit commission in cooperation with any city, village, or town. County ownership and operation of the transit system is subject to the requirements for municipal operation of transit systems discussed in a subsequent section.
4. Municipal Contract with Private Transit System Operator. Section 66.064 of the Wisconsin Statutes permits a city, village, or town served by a privately owned urban public transit system to contract with the private owners for the leasing, public operation, joint operation, subsidizing, or extension of service of the system.
5. Municipal Operation of Transit System. Section 66.065(5) of the Wisconsin Statutes provides that any city, village, or town may, by action of its governing body and upon a favorable referendum vote, own, operate, or

engage in an urban public transit system. This Statute permits a city or village to establish a separate department to undertake transit operation under municipal ownership or to expand an existing city department to accommodate the responsibility of municipal transit operation.

6. City, Village, or Town Transit Commission.

Section 66.943 of the Wisconsin Statutes provides for the formation of a city, village, or town transit commission composed of not fewer than three members appointed by the mayor, village board, or town board chair and approved by the city council, village board, or town board. No member of the commission may hold any other public office. The Commission is empowered to "establish, maintain, and operate a bus system, the major portion of which is located in, or the major portion of the service is supplied to, such a city, village, or town." Ownership and operation of the transit system is subject to the requirements for municipal operation of a transit system as discussed above. The transit commission is permitted to extend the urban transit system into adjacent territory beyond the city, village, or town, but not more than 30 miles from the corporate limits of the municipality. In lieu of direct provision of transportation services, the transit commission may contract with a private organization for such services.

7. City, Village, or Town Transit and Parking Commission.

Sections 66.068, 66.079, and 66.943 of the Wisconsin Statutes provide for the formation of city, village, or town transit and parking commissions. A combined transit and parking commission may be organized as a single body under this enabling legislation and not only may have all the powers of a city transit commission, but may also be empowered to regulate on-street parking facilities and own and operate off-street facilities as well.

8. Municipal Transit Utility.

Sections 66.066 and 66.068 of the Wisconsin Statutes provide for the creation of a municipal transit utility. The statutes provide for the formation of a management board of three, five, or seven commissioners elected by the city council or village or town board to supervise the general operation of the utility. Ownership and opera-

tion of the transit system is subject to the requirements for municipal operation of a transit system discussed in a preceding section. In cities with populations of less than 150,000, the city council may provide for the operation of the utility by the board of public works or by a municipal officer rather than by the commission.

9. Joint Municipal Transit Commission.

Section 66.30 of the Wisconsin Statutes permits any municipality to contract with another municipality or municipalities for the receipt or furnishing of services or the joint exercise of any power or duty authorized by statute. A "municipality" is defined, for purposes of this law, as any city, village, town, county, or regional planning commission. Thus, the law would permit any county, city, or village to contract with any other county, city, or village to receive or furnish transit services or even to establish a joint municipal transit commission.

Important changes to the aforementioned Wisconsin Statutes defining municipal powers for operation of public transit systems were enacted by the State Legislature in the spring of 1994. For all the above operational structures except the municipal transit utility, the Wisconsin Statutes now prohibit the provision of transit service outside the corporate limits of the public entity or entities which directly provide or contract for transit service unless a contract which provides for financial assistance for the transit service has been executed with the public or private organization receiving transit service. This requirement applies only to new transit services, those which were provided after April 1994.

## LOCAL TRANSIT LEGISLATION IN WASHINGTON COUNTY

Existing transit legislation at the local level in Washington County is confined to the regulation of taxicab services in the Cities of Hartford and West Bend. Applicable sections of the municipal codes of these communities include Sections 32.07 and 41.16 of the City of Hartford Municipal Code and Sections 12.14 and 12.15 of the City of West Bend Municipal Code. These local ordinances specify provisions for the licensing of each taxicab company, licensing requirements for taxicab drivers, and regulations for the operation of taxicab services. The City of

Hartford Municipal Code also specifies penalties for individuals who fail to pay fares for taxicab or other transit services.

## SUMMARY

This chapter has presented information on Federal and State transit-related legislation and regulations, with emphasis upon financial assistance programs for public transit systems. This chapter has also summarized State enabling legislation as it applies to county and local government organizational options for establishing and operating public transit systems. On the basis of this information, the following conclusions may be drawn concerning the provision of public transit services within Washington County:

1. Public transit services provided within that portion of Washington County lying within the Milwaukee urbanized area, which portion consists essentially of the Village of Germantown, would potentially be eligible for financial assistance under the Federal Section 5307 Urbanized Area Formula Program. For such services, Federal assistance could cover 80 percent of the total costs of capital projects and up to 50 percent of operating deficits. Notably, the operating assistance funds available under the program to the Milwaukee urbanized area during 1996 covered only between 4 and 6 percent of the operating deficits of the three public transit service providers operating within the Milwaukee urbanized area.
2. Public transit services provided within the remainder of Washington County would be eligible for financial assistance under the Federal Section 5311 Nonurbanized Area Formula Program. Like the Federal Urbanized Area Formula Program, Federal funds under the Nonurbanized Area Formula Program would potentially be available to cover 80 percent of capital project costs and up to 50 percent of operating deficits. Because the funds allocated to the State under the program in the recent past have been insufficient to fund the operating deficits of participating transit systems fully, at the maximum allowed level, the State has distributed the available operating assistance funds to cover a lower percentage of the operating expenses. In recent years this has been a maximum of 28 percent of the total operating expenses of the public transit systems participating. For 1996, it was estimated that the total operating assistance funds available to the State under the program will be sufficient to cover up to about 30 percent of operating expenses.
3. Public transit services provided throughout all of Washington County would be eligible for financial assistance through the State Section 85.20 Urban Mass Transit Operating Assistance Program. Beginning in 1996, all transit systems participating in the Program will be grouped into five categories, or tiers, based upon the location of the transit system or the population of the urban areas served. State aids are distributed among the transit systems in each tier so that each transit system has an equal percentage of its total eligible operating expenses funded by the combination of Federal and State transit operating assistance, with the percentage of operating expenses covered by State aid varying among tiers. No State program currently exists to provide assistance to public transit systems for capital projects.
4. Funds to support the operation of transportation services designed to serve the special needs of major employers in Washington County may be available through the following Federal and State programs:
  - a. The Federal Congestion Mitigation and Air Quality (CMAQ) Improvement Program, which provides funds to public bodies for projects aimed at reducing congestion and improving air quality in areas identified as not meeting Federal air quality standards. Washington County could access CMAQ funds by initiating, for example, a demonstration project to provide transit, vanpool, or carpool matching services.
  - b. The Section 85.24 Transportation Demand Management and Ride-Sharing Program, which provides funds to local governments and private organizations for projects undertaken in areas of Wisconsin experiencing significant air quality or traffic congestion problems. These projects are to promote alternatives to automobile travel, and, in particular, alternatives to

making work trips by single-occupant vehicle. Washington County could receive funds under this program for a demonstration project providing transit, vanpooling, or ride-sharing services to major employers within Washington County. As a condition for receiving such funds, Washington County would be required to provide assurance that it was committed to continuing the demonstration services once the grant funds are exhausted, assuming that the project is judged successful.

- c. The State Section 85.26 "job ride" employment transit assistance program, which provides funds to private nonprofit and for-profit organizations and to public entities to support transportation services used to serve work travel by unemployed individuals seeking jobs in areas poorly served, or not served at all, by the existing Milwaukee area fixed-route bus services. Washington County could receive funds available under this program to support a demonstration project to bring employees from Milwaukee County to major Washington County employment centers. This program should not, however, be viewed as a source of funds over the long-term.
5. As a condition for the receipt and use of Federal and State transit financial assistance, Washington County would be required to satisfy a number of Federal and State administrative requirements. Among these are vehicle accessibility requirements associated with the Federal Americans with Disabilities Act of 1990; the "Buy America" requirements associated with Part 661 of Title 49 of the Code of Federal Regulations; and such other Federal requirements as employment nondiscrimination, labor protection, drug and alcohol testing for transit operating and maintenance personnel, procurement, and disadvantaged business enterprise.
6. The Wisconsin Statutes provide counties and local municipalities with several organizational alternatives for the operation of public transit services. These include contracting for services with a private operator, public ownership and operation of a municipal utility, and public ownership and operation by single or joint municipal transit commission. Notably, except for those authorizing the creation of a municipal transit utility, the Wisconsin Statutes authorizing organizational alternatives require local municipalities which would provide transit service outside of their corporate limits to have a formal contract with a public body or private organization which provides financial compensation for the transit service operated outside the corporate limits.
7. Local ordinances pertaining to the licensing and operation of taxicab services currently exist in the municipal codes of the Cities of Hartford and West Bend. The former Code also specifies penalties for individuals who fail to pay fares for taxicab or other transit services.

## Chapter V

### PUBLIC TRANSIT SERVICE OBJECTIVES AND STANDARDS

#### INTRODUCTION

One of the critical steps in the preparation of a public transit service plan is the articulation of the objectives to be met by the transit system, together with the identification of supporting standards which can be used to measure the degree of attainment of the objectives. The objectives and standards provide the basis upon which the performance of existing transit services may be assessed, alternative service plans designed and evaluated, and recommendations for the institution or improvement of service. The objectives formulated under this study are, accordingly, intended to represent the level of transit performance desired by the residents of Washington County. Only if the objectives and standards clearly reflect the transit-related goals of the community will the recommended plan provide the desired level of service within the limits of available financial resources.

This chapter presents the public transit service objectives, principles, and standards formulated under this study to guide the development of a transit service plan for Washington County. The objectives and supporting standards were used in evaluating existing transit services and in the design and evaluation of alternative service plans.

#### OBJECTIVES

The transit service objectives, principles, and standards set forth herein are intended to reflect the underlying values of the elected officials and residents of the County. The task of formulating objectives, principles, and standards must, therefore, involve interested and knowledgeable public officials and private citizens representing a broad cross-section of interests in the community, as well as individuals familiar with the technical aspects of providing transit service. Accordingly, one of the important functions of the Washington County Public Transportation Needs Study Advisory Committee was to articulate transit service objectives, principles, and supporting standards for the planning effort. By drawing upon the collective knowledge, experience, views, and values of the members of the Committee, it is believed that a meaningful expression of the performance desired for Washing-

ton County public transit services was obtained and a relevant set of transit service objectives and supporting principles and standards was defined.

The specific objectives adopted basically envision public transit services which will effectively serve the specialized transportation needs of the those residents of Washington County, largely the elderly or disabled, and help meet the employee transportation needs of the major employers within the County while minimizing costs. More specifically, the following objectives were adopted by the Advisory Committee:

1. The public transit system should serve the County's travel needs and, in particular, the travel needs of the transit-dependent population and of employers in obtaining needed labor and in reducing employee travel by single-occupant vehicles to the work place.
2. The public transit system should promote the effective use of transit services and provide for user convenience, comfort, and safety.
3. The public transit system should be economical and efficient, meeting all other objectives at the lowest possible cost.

#### PRINCIPLES AND STANDARDS

Complementing each of the foregoing transit service objectives is a planning principle and a set of service and design standards, as set forth in Table 44. The planning principle supports each objective by asserting its validity. Each set of standards is directly related to the transit service objective and serves these purposes: to facilitate quantitative application of the objectives in the evaluation of existing public transit services, to provide guidelines for the consideration of new or improved services, and to provide warrants for capital investment projects. The standards are intended to provide a relevant and important means of measuring the degree to which existing or proposed public transit services contribute to the attainment of each objective.

A number of the service standards set forth in Table 44 can also provide guidance toward meeting

Table 44

**PUBLIC TRANSIT SERVICE OBJECTIVE, PRINCIPLES, AND STANDARDS  
FOR THE WASHINGTON COUNTY PUBLIC TRANSIT SERVICE PLAN**

Objective	Principle	Standards
1. The public transit system should serve the County's travel needs and, in particular, the travel needs of the transit-dependent population and of employers in obtaining needed labor and reducing employee travel by single occupant vehicles to the workplace	Public transit can provide an important means of mobility for all segments of the population, but particularly for low- to middle-income households, the youth and elderly, and the disabled. Transit service can also be important to the economy by providing access to job opportunities for unemployed and underemployed individuals who may not have access to an automobile. Transit service can also provide a travel alternative which could potentially reduce automobile travel and emissions. The most efficient and effective transit services are generally provided within areas which are fully developed for urban land uses	<ol style="list-style-type: none"> <li>Public transit service should be provided primarily to serve existing and potential travel demand generated by the land uses within areas of urban development within the County<sup>a</sup></li> <li>Public transit service to residential neighborhoods and major potential transit trip generators<sup>b</sup> should be maximized. The major potential transit trip generators served should include the following: <ol style="list-style-type: none"> <li>Major regional, community, and neighborhood retail and service centers</li> <li>Educational institutions including universities, colleges, vocational schools, secondary schools, and elementary schools<sup>c</sup></li> <li>Major community and special medical centers</li> <li>Major employment centers</li> <li>Major governmental and public institutional centers</li> <li>Major recreational areas</li> <li>Facilities for the elderly</li> <li>Facilities for the disabled</li> <li>Publicly or privately subsidized rental housing</li> </ol> </li> <li>The population served by public transit, particularly that portion which is transit-dependent, should be maximized</li> <li>The number of jobs served by public transit should be maximized</li> <li>Special fixed-route transit services should be provided to serve travel to and from employment locations.</li> </ol>
2. The public transit system should promote the effective use of transit services and provide for user convenience, comfort, and safety	The benefits of a public transit system are, to a large extent, related to the degree to which it is used. The extent of such use, as measured by ridership, is a function of the degree to which the transit facilities and services provide for user convenience, comfort, and safety	<ol style="list-style-type: none"> <li>Ridership on the public transit system should be maximized</li> <li>The following minimum systemwide effectiveness levels,<sup>d</sup> should be achieved for demand-responsive transit services: <ol style="list-style-type: none"> <li>Three annual rides per capita based upon the resident population of the service area</li> <li>0.3 ride per vehicle mile of service provided</li> <li>Three rides per vehicle hour of service provided</li> </ol> </li> <li>Public transit service should be designed to provide adequate capacity to meet existing and potential demand. The maximum load factor<sup>e</sup> for demand-responsive transit service should not exceed 1.0 at all times of operation</li> <li>The minimum overall travel speed for a local demand-responsive transit service should average 10 miles per hour.</li> <li>The public transit system should provide a level of service commensurate with potential demand. Response time for demand-responsive transit service should not exceed 30 minutes</li> <li>Demand-responsive transit services should be designed and operated to maximize adherence to the scheduled times of service requests and should be "on time" at least 90 percent of the time<sup>f</sup></li> <li>Demand-responsive transit services should minimize the number of trip requests for which service must be denied. Service for subscription trips should be provided only to the extent that at least 50 percent of the capacity of the system remains available during peak periods of use for serving day-of-service trip requests</li> </ol>



**Table 44 (continued)**

Objective	Principle	Standards
2. The public transit system should promote the effective use of transit services and provide for user convenience, comfort, and safety (continued)	The benefits of a public transit system are, to a large extent, related to the degree to which it is used. The extent of such use, as measured by ridership, is a function of the degree to which the transit facilities and services provide for user convenience, comfort, and safety	<p>8. Each public transit vehicle should be rehabilitated or replaced at the end of its normal service life. For vehicles used in providing demand-responsive transportation service, such as automobiles and regular or specialized vans, normal service life should be considered to be 100,000 vehicle-miles</p> <p>9. Preventive maintenance program standards should be established to achieve, at a minimum, 4,000 miles of operation without an in-service breakdown</p>
3. The public transit system should be economical and efficient, meeting all other objectives at the lowest possible cost	The total resources of the County are limited; any undue investment in transportation facilities and services must occur at the expense of other public and private investments. Therefore, total transportation system costs should be minimized for the desired level of transportation service and transportation revenues should be maximized to maintain the financial stability of the system	<p>1. The total operating and capital investment for the public transit system should be minimized and reflect efficient utilization of resources</p> <p>2. The operating expense per total vehicle-mile, per platform-hour, and per revenue passenger; and the operating deficit per revenue passenger should be minimized.<sup>g</sup> Any increase in such costs which may be incurred annually should not exceed the average percentage increase experienced by demand-responsive transportation systems statewide</p> <p>3. Public transit system operating revenues generated from passenger fares and sources other than general public operating subsidies should be maximized. Demand-responsive transit service should recover at least 25 percent of operating expenses from such revenues<sup>h</sup></p> <p>4. Periodic adjustments to passenger fares should be considered to maintain the financial stability of the public transit system<sup>i</sup></p>

<sup>a</sup>The existing and proposed areas of urban development within the County are shown in Maps 4 and 5 in Chapter II of this report.

<sup>b</sup>Residential neighborhoods and major transit trip generators shall be considered as served when they are located within the geographic service area defined for the transit service.

<sup>c</sup>High schools, middle schools, and elementary schools with grades through grade eight were included as potential trip generators for nonschool travel only. Existing yellow school bus services provided by local school districts were assumed to continue under the transit service plans developed for Washington County.

<sup>d</sup>The minimum systemwide effectiveness levels are based upon the estimated average annual ridership per capita, per revenue vehicle-mile, and per revenue vehicle-hour for all shared-ride taxicab systems within Wisconsin.

<sup>e</sup>The maximum load factor is calculated by dividing the number of passengers in the transportation vehicle at the maximum loading point by the seated passenger capacity of the vehicle

<sup>f</sup>For demand-responsive transit service, "on time" is defined as adherence to scheduled pick-up and drop-off times within the range of 10 minutes early and 10 minutes late.

<sup>g</sup>The estimated averages for such costs for the shared-ride taxicab systems within the Southeastern Wisconsin Region during 1995 were as follows: operating expense per total vehicle-mile of service provided, \$1.70; operating expense per total vehicle-hour of service provided, \$18.80; operating expense per revenue passenger, \$4.50; and operating deficit per revenue passenger, \$3.40.

<sup>h</sup>The minimum proportion of operating expenses recovered from operating revenues is based upon the estimated average for the shared-ride taxicab systems operating within the Southeastern Wisconsin Region during 1995.

<sup>i</sup>Adjustments to passenger fares should generally be considered when: 1) the actual cost recovery rate for the transportation system falls below the rate prescribed in Standard No. 3 under Objective No. 3, 2) operating expenses for the transit system have increased by more than 10 percent since fares were last raised, or 3) projected levels of Federal and State operating assistance funds would require an increase in projected local operating assistance levels above that determined to be acceptable by local officials.

Source: SEWRPC.

Table 45

**PUBLIC TRANSIT SERVICE OBJECTIVES AND STANDARDS WHICH  
CAN BE USED TO DEVELOP STATE-REQUIRED SYSTEMWIDE PERFORMANCE GOALS**

Objectives and Standards	Performance Measures
<p><b>Objective No. 2</b>—Promote effective utilization of transit service and provide for user comfort, convenience, and safety</p> <p><b>Standard No. 1:</b> Maximize transit system ridership</p>	<p>For demand-responsive or taxicab service:</p> <ul style="list-style-type: none"> <li>• Three rides per capita based upon the resident population of the service area</li> <li>• 0.3 ride per vehicle mile of service provided</li> <li>• Three rides per vehicle hour of service provided</li> </ul>
<p><b>Objective No. 3</b>—Provide economical and efficient transit service</p> <p><b>Standard No. 2:</b> Minimize operating expenses and operating deficit per unit of service and per passenger</p> <p><b>Standard No. 3:</b> Maximize percent of operating expenses recovered through operating revenues</p>	<p>Increases in operating expenses per total vehicle-mile, per platform-hour, and per revenue passenger and increases in operating deficit per revenue passenger should not exceed the average percentage increase for similar small urban transit systems statewide</p> <p>Recover at least 25 percent of operating expenses from operating revenues for demand-responsive or taxicab service</p>

Source: SEWRPC.

certain requirements which the Wisconsin Department of Transportation has attached to the provision of State urban transit operating assistance funds. As a condition of eligibility for receiving State urban transit operating assistance, applicants must annually establish multi-year service and performance goals, and assess the effectiveness of the applicant's transit system in relation to those goals on a quarterly basis. At a minimum, systemwide goals must be established for the following performance indicators: operating expense per total vehicle-mile, operating expense per platform-hour, operating expense per revenue passenger, the proportion of operating expenses recovered from operating revenues, revenue passengers per revenue vehicle-mile, and revenue passengers per service area population. The service standards formulated under this study which can be drawn upon to establish the State-required performance goals are listed in Table 45.

### OVERRIDING CONSIDERATIONS

The objectives, principles, and standards set forth in Table 44 were intended to be used to guide the evaluation of the performance of existing public transit services and the design and evaluation of service improvements. In the application of the objectives, principles, and standards, several overriding considerations must be recognized.

First, it must be recognized that an overall evaluation of the existing public transit services and the alternative service plans must be made on the basis of cost. Such an analysis may show the attainment of one or more standards to be beyond the economic capability of the community and, therefore, the standards cannot be met practically and must be either modified or eliminated.

Second, it must be recognized that a public transit system is unlikely to meet fully all the standards and that the extent to which each standard is met, exceeded, or violated must serve as the final measure of the ability of the system to achieve the objective which a given standard supports.

Third, it must be recognized that certain intangible factors, including the perceived value of public transit service to the community and potential acceptance by the concerned elected officials, may influence the preparation and selection of a recommended plan. Inasmuch as transit service may be perceived as a valuable service within the community, the community may decide to initiate or retain such services regardless of performance or cost. Only if a considerable degree of such acceptance exists will service recommendations be implemented and their anticipated benefits realized.

## Chapter VI

### EVALUATION OF EXISTING PUBLIC TRANSIT SERVICES

#### INTRODUCTION

This chapter documents an evaluation of the existing public transit services within Washington County on the basis of the transit service objectives and standards set forth in Chapter V of this report, where three basic objectives to be met in the provision of transit service were established. Table 46 lists these objectives and summarizes the key standards used in the performance evaluation to determine whether the objectives were being met by the existing transit services.

The performance evaluation was conducted using the sets of performance measures set forth in Table 47 for each public transit service objective. These measures summarize the quantitative and qualitative application of the standards used in the performance evaluation. Not all the standards listed under each objective were used in the evaluation process, since not all were deemed appropriate for such use. Some standards not used were intended to serve as warrants for providing equipment or as guidelines in providing preventative maintenance for transit equipment. These standards will be used to the extent necessary in the development of a program of capital projects for the recommended transit system plan. Other standards not used were intended to be used in comparing the costs of alternative plans. These standards will be used in evaluating the alternative plans and transit service improvements considered in the following chapter.

The following sections of this chapter present the findings of the performance evaluation. Presented first is an evaluation of the existing transit services based on the standards under Objective No. 1, which measure the transit service provided to County land uses and population groups. This is followed by an evaluation based on the standards under Objective No. 2, which measure the utilization and quality of the existing transit services. As part of this evaluation, the ridership and effectiveness of the public shared-ride taxicab systems operated by the Cities of Hartford and West Bend was compared with averages for the public shared-ride taxicab systems operating within the South-eastern Wisconsin Region as well as those serving other Wisconsin communities. A similar comparison

was used in evaluating the costs of the existing public taxicab systems in the County against the standards under Objective No. 3. The evaluation findings were used to help structure the alternative transit service plans described in Chapter VII of this report.

#### PERFORMANCE EVALUATION FINDINGS

##### Objective 1: Serve Travel Needs of Existing Land Uses and Population Groups within County

The performance measures used to evaluate the existing public transit services provided to Washington County land uses and population groups included measurements of the extent of urban developed land area served, the areas of proposed new or expanding urban development served, the major potential transit trip generators served, the resident population served, the number of jobs served, and the number of work trips currently served by special transit services. The evaluation was conducted against all the standards under Objective No. 1 and was based upon the extent of geographic coverage provided by the general public transit services existing within the County in 1995, as shown on Map 12 in Chapter III. Such coverage included only the areas served by the shared-ride taxicab systems operated by the Cities of Hartford and West Bend. Ideally, the geographic coverage provided by public transit should include the residential concentrations of the general and transit-dependent population, employment concentrations, and the potential major trip generators within the County, particularly within the developed portions of the County. Such areas, population, and employment concentrations and potential transit trip generators were identified in Chapter II. The performance of the existing transit services with respect to the performance measures for Objective No. 1 is summarized in Table 48.

Differences in the taxicab service characteristics for each system were taken into consideration in conducting the evaluation against Objective No. 1. As shown in Table 49, service differences existed with respect to service area and trips served, with the West Bend taxicab system providing service to only small areas outside the City and both systems serving only those trips which have one trip-end in

Table 46

## STANDARDS USED IN THE PERFORMANCE EVALUATION OF EXISTING PUBLIC TRANSIT SERVICES

Objectives and Standards	Standards Used in Performance Evaluation
<b>Objective No. 1: Serve Travel Needs of Existing Land Uses and Resident Population within County</b> Standard 1: Provide transit service primarily to serve land uses within areas of urban development ..... Standard 2: Maximize the residential neighborhoods and major potential transit trip generators served ..... Standard 3: Maximize the population served ..... Standard 4: Maximize the jobs served ..... Standard 5: Provide special transit services to and from employment locations in County .....	X  X X X X
<b>Objective No. 2: Promote Transit Utilization and Provide for User Comfort, Convenience, and Safety</b> Standard 1: Maximize public transit ridership ..... Standard 2: Provide service which meets or exceeds minimum ridership and effectiveness levels ..... Standard 3: Provide adequate capacity so as not to exceed load factors ..... Standard 4: Provide service which meets or exceeds average minimum vehicle speeds ..... Standard 5: Provide demand responsive service with minimum response time of 30 minutes ..... Standard 6: Maximize adherence to the scheduled times of service requests for demand responsive service ..... Standard 7: Minimize the number of trip requests for demand responsive service for which service must be denied ..... Standard 8: Replace public transit vehicles at end of maximum service life for vehicles ..... Standard 9: Minimize in-service breakdowns of revenue vehicles .....	X X X X X X X X --
<b>Objective No. 3: Provide Economical and Efficient Service</b> Standard 1: Minimize total operating and capital costs for public transit ..... Standard 2: Minimize operating expenses and public subsidy per unit of transit service and per transit ride ..... Standard 3: Maximize percent of operating expenses recovered through operating revenues ..... Standard 4: Consider periodic adjustments to passenger fares .....	-- X X X

Source: SEWRPC.

the City; hours of operation, with somewhat more extensive service hours offered by the West Bend taxicab system; and passenger fares, with slightly higher fares charged on average by the Hartford taxicab system and much higher fares charged by both transit systems for trips made outside each City than for in-city trips. The differences affected the amount and quality of the taxicab service provided by each system, in particular within the city and noncity portions of each taxicab system's service area. In general, the development, trip generators, population, and jobs located within the Cities of

Hartford and West Bend, the primary service areas for each taxicab system, were much better served. Those areas outside of the city limits, defined as the secondary service areas, were served only if the taxicab trip originated from, or was destined to, a location within the Cities of Hartford or West Bend, and then at a higher fare. The performance against Objective No. 1 summarized in Table 48, therefore, reflects only those land uses, population groups, and jobs which were located within the primary service areas for each taxicab system and considered as being fully served by transit.

Table 47

## SPECIFIC PERFORMANCE MEASURES USED IN THE PERFORMANCE EVALUATION PROCESS

Objective	Performance Measure
Objective No. 1: Serve Travel Needs of Existing Land Uses and Resident Population within County	1. Extent of existing urban development served 2. Areas of new or proposed development served 3. Major land use trip generators served 4. Major transit-dependant population trip generators served 5. Total population served 6. Transit-dependent-population served 7. Total employment served 8. Average weekday work trips served by special employee transit services
Objective No. 2: Promote Transit Utilization and Provide for User Comfort, Convenience, and Safety	1. Annual revenue passengers 2. Annual ridership per capita 3. Revenue passengers per vehicle-mile 4. Revenue passengers per driver-hour 5. On-time adherence to scheduled pick-up and drop-off times 6. Average weekday trip denials 7. Vehicle fleet age
Objective No. 3: Provide Economical and Efficient Service	1. Annual operating expense per vehicle-mile 2. Annual operating expense per driver-hour 3. Annual operating expense per passenger 4. Annual operating deficit per passenger 5. Average annual percentage change in cost and subsidy measures 6. Percent of annual operating expenses recovered from annual operating revenues 7. Percentage changes in average fare and operating expense per passenger

Source: SEWRPC.

Standard No. 1 under Objective No. 1 indicates that public transit service should be provided primarily to serve the land uses within areas of urban development within the County. The performance measures used for this standard consisted of the extent of existing urban development in Washington County and the proposed areas of new or expanding urban development within the County served by the shared-ride taxicab systems operated by the Cities of Hartford and West Bend. In 1995, the maximum extent of the service areas for these taxicab systems encompassed a total of approximately 197 square miles, or about 46 percent of the total land area of the County, about 430 square miles. Only some 14 square miles, however, or about 3 percent of the total County land area, were located within the primary taxicab service areas. Map 14 shows the extent of urban development within the County which lay within the primary taxicab service areas. About 9 square miles of urban developed land were within the primary taxicab service areas, representing about 22 percent of the approximately

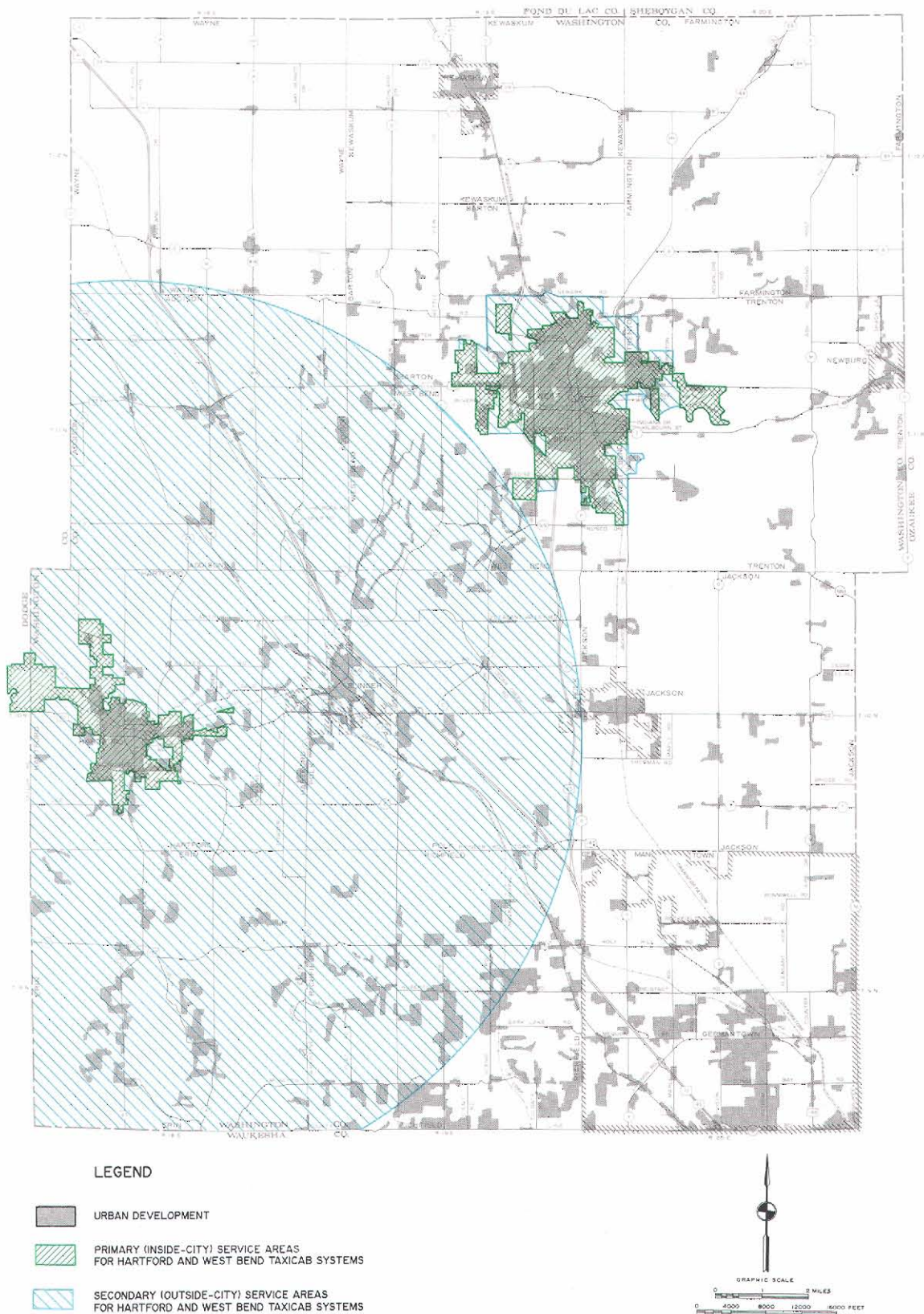
41 square miles of urban developed land area in the County in 1990. An additional 14 square miles, or about 34 percent, of the urban developed land were located within the secondary taxicab service areas and partially served by transit. About 8.5 of the remaining 18 square miles of developed urban land area not served by transit, or almost one-half, were located within the Germantown-Richfield portion of the County.

Map 15 identifies the significant residential and commercial developments in the County that were developed after 1990 or were under development as of October 1995 within the primary taxicab service areas. As shown on this map, 28 of the 87 residential developments and 8 of the 22 commercial developments within the County were located within the primary taxicab service areas. In total, 36 of the 109 developments, or about 33 percent, were considered as fully served by transit. An additional 28 developments, or about 26 percent, were located within the secondary taxicab service areas



Map 14

EXTENT OF URBAN DEVELOPMENT IN WASHINGTON COUNTY SERVED BY PUBLIC TRANSIT: 1995



Source: SEWRPC.



Table 48

## PUBLIC TRANSIT SERVICE PROVIDED TO WASHINGTON COUNTY LAND USES AND POPULATION: 1995

Performance Measure	Systemwide Performance Characteristics
<b>Extent of Urban Development Fully Served</b>	
Developed urban land area served <sup>a</sup> .....	9.2 square miles
Percent of total developed urban land area in County served .....	22.4
<b>Areas of proposed urban development served<sup>b</sup></b>	
Residential development .....	28 of 87
Commercial development .....	8 of 22
<b>Major Potential Transit Trip Generators Fully Served</b>	
<b>Major Land Use Trip Generators Served<sup>c</sup></b>	
Retail, service, and office centers .....	9 of 16
Educational institutions .....	14 of 29
Medical centers .....	7 of 14
Governmental and public institutional centers .....	12 of 49
Employment centers .....	33 of 58
Industrial parks .....	4 of 10
Recreational areas .....	25 of 59
<b>Transit-dependant population trip generators served<sup>d</sup></b>	
Elderly facilities .....	24 of 38
Disabled facilities .....	9 of 13
Federally subsidized rental housing .....	5 of 7
<b>Population Fully Served<sup>e</sup></b>	
Total population served .....	32,649
Percent of total County population served .....	34.2
<b>Transit-dependant population served</b>	
School-age children .....	4,294
Facilities for the Elderly .....	5,160
Facilities for the Disabled .....	592
<b>Percent of total County transit-dependant population served</b>	
School-age children .....	32.7
Elderly .....	38.1
Disabled .....	36.7
<b>Employment Fully Served</b>	
Total jobs served <sup>f</sup> .....	23,100
Percent of total County jobs served .....	55.3
<b>Special Employee Transit Service</b>	
Average weekday work trips served .....	372

<sup>a</sup>Map 14 identifies the extent of urban development within the County which is served and not served by public transit. In 1990, the total developed area of the County approximated 41.1 square miles.

<sup>b</sup>Map 15 identifies the areas of new and proposed urban development within the County which are served and not served by public transit.

<sup>c</sup>Map 16 identifies the major land use trip generators within the County which are served and not served by public transit.

<sup>d</sup>Map 17 identifies the transit-dependant-population trip generators within the County which are served and not served by public transit.

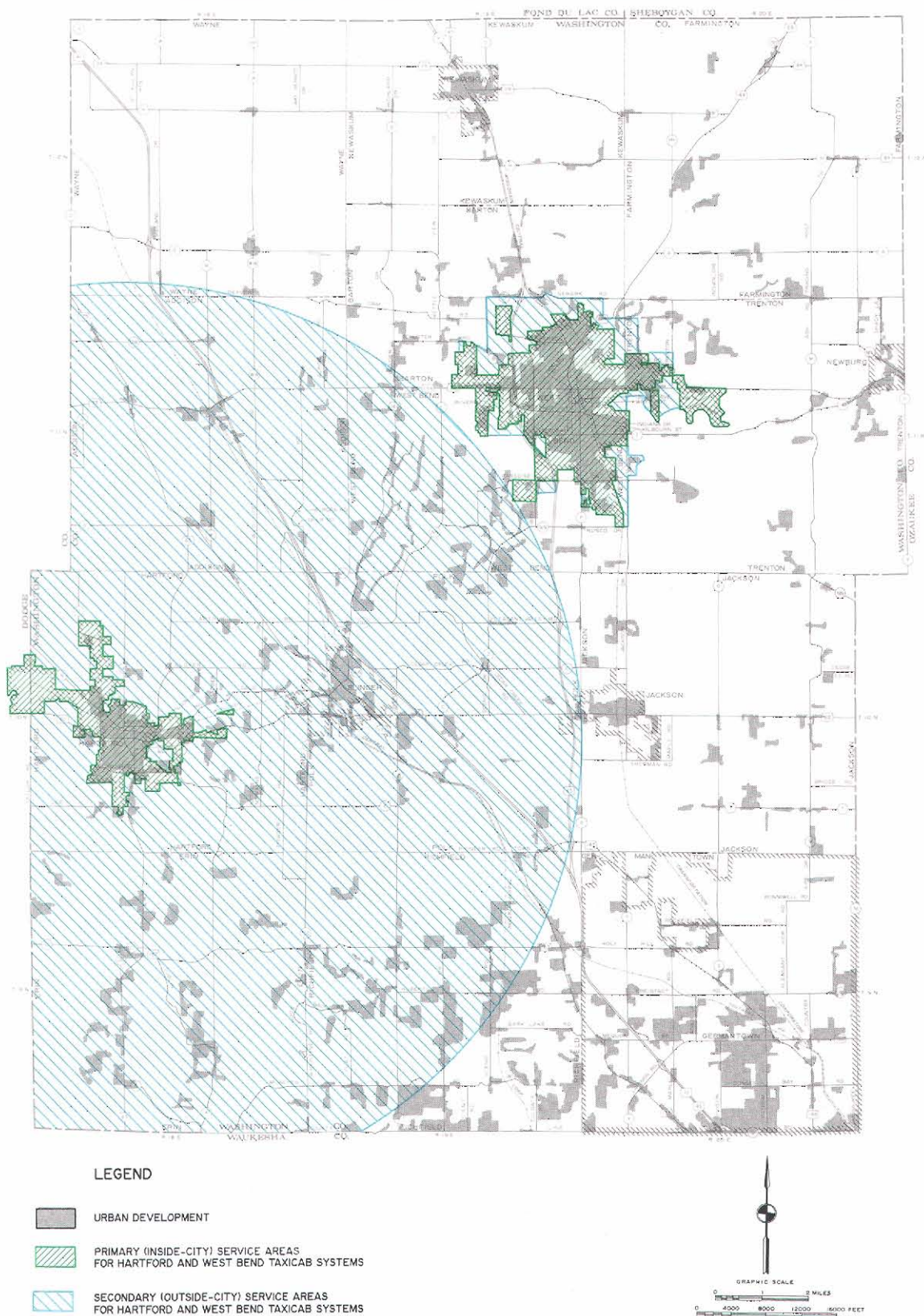
<sup>e</sup>Residential areas were considered served by public transit if they were located within the service areas of the City of Hartford or the City of West Bend shared-ride taxicab services. Population figures are based on the 1990 U. S. Census.

<sup>f</sup>Employment figures shown represent the number of jobs located within the service areas of the City of Hartford or the City of West Bend shared-ride taxicab services. Employment figures are based on 1990 estimates.

Source: SEWRPC.

Map 14

EXTENT OF URBAN DEVELOPMENT IN WASHINGTON COUNTY SERVED BY PUBLIC TRANSIT: 1995



Source: SEWRPC.

Table 49

**COMPARISON OF THE OPERATING CHARACTERISTICS OF THE SHARED-RIDE  
TAXICAB SERVICES PROVIDED BY THE CITIES OF HARTFORD AND WEST BEND: 1995**

Operating Characteristic	City of Hartford Taxicab System	City of West Bend Taxicab System
Service Area .....	Service provided for trips made entirely within City of Hartford, and between City and locations in adjacent areas located up to 10 miles outside City limits; no service provided for trips with both ends outside city	Service provided for trips made entirely within City of West Bend, and between City and locations in adjacent areas located up to approximately one mile outside City limits; no service provided for trips with both ends outside city
Service Levels		
Days and Hours of Operation		
Weekdays .....	6:00 a.m. - 9:00 p.m. (until 8:00 p.m. during summer)	6:00 a.m. - 10:00 p.m.
Saturdays .....	8:00 a.m. - 8:00 p.m. (until 7:00 p.m. during summer)	6:00 a.m. - 10:00 p.m.
Sundays .....	9:00 a.m. - 3:00 p.m.	8:00 a.m. - 4:00 p.m.
Holidays .....	No service	No service except when holiday falls on Sunday
Response Time .....	On demand	Within 30 minutes
Passenger Fares (per one-way trip)		
For in-city travel		
Base Cash Fares		
Adult .....	\$1.50	\$2.00
Student .....	\$1.50	\$1.50
Elderly .....	\$1.50	\$1.00
Disabled .....	\$1.50	\$1.00
Child (with adult or other fare) .....	Under age 4 free	Under age 5 free
With Prepaid Trip Tickets and Coupons or special identification cards		
Adult .....	\$1.25	\$1.80
Student .....	\$1.25	\$1.35
Elderly .....	\$1.25	\$0.90
Disabled .....	\$1.25	\$0.90
For travel outside City .....	Applicable fare plus \$1.00 per mile outside City limits per person	Applicable fare plus \$1.00 per mile outside City limits per taxicab trip
Average fare .....	\$1.41	\$1.33

Source: SEWRPC.

and partially served by transit. A total of 27 of the remaining 45 new or proposed areas of development not served by transit, or about 60 percent, were located within the Germantown-Richfield portion of the County.

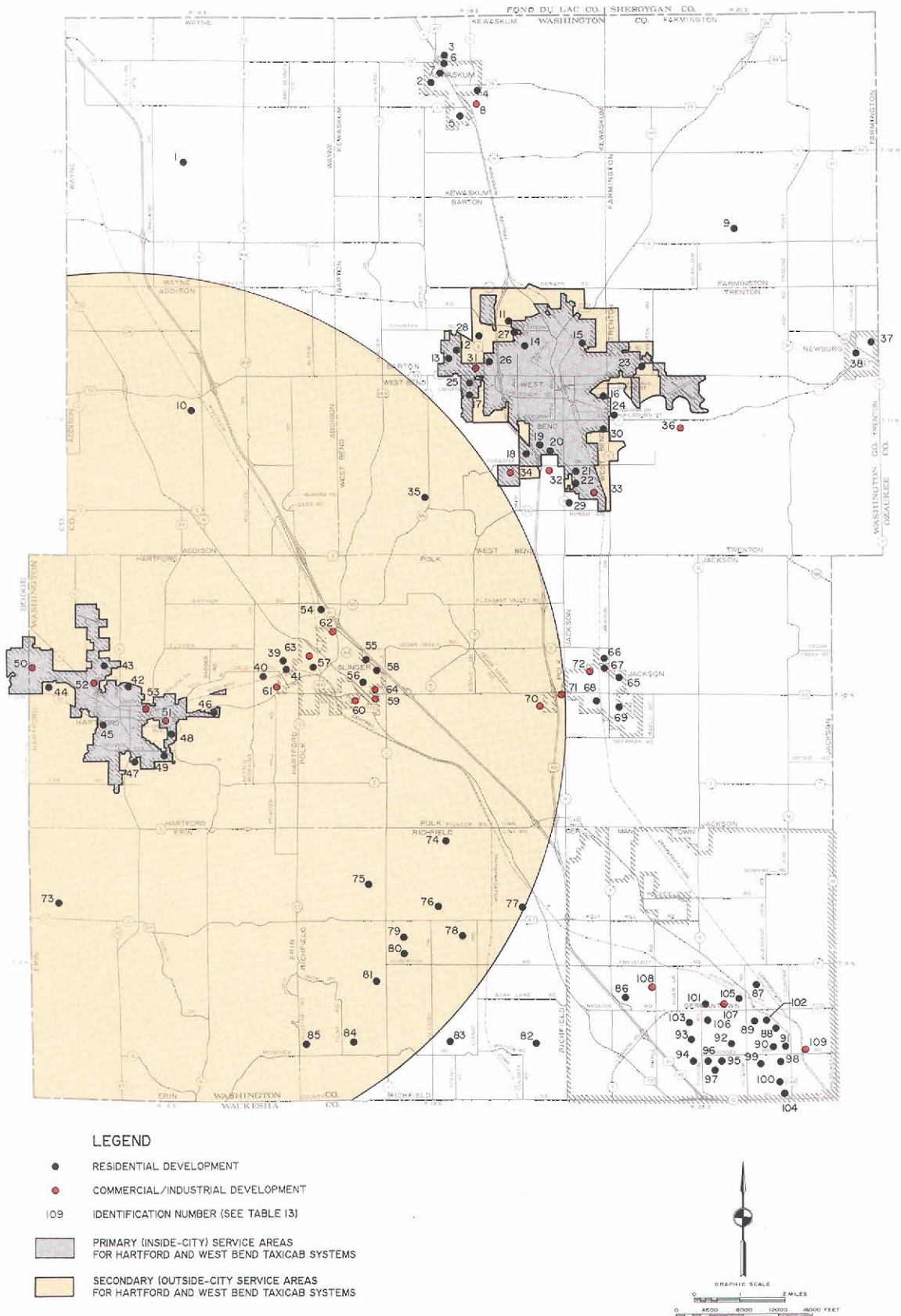
Standard No. 2 states that public transit service to residential neighborhoods and major potential transit trip generators should be maximized. The extent to which transit serves residential areas is best measured by the population served, which is addressed below under Standard No. 3. The potential major transit trip generators identified in Tables 14 through 22 in Chapter II included major

land use trip generators and transit-dependent population trip generators. A total of 142 of the 293 trip generators identified within the County, or about 48 percent, were located within the primary taxicab service areas and considered as fully served by transit. As shown on Maps 16 and 17, this number included 104 of the 235 major land use trip generators identified, or about 44 percent, and 38 of the 58 transit-dependent population trip generators identified, or about 66 percent. An additional 41 of the 293 trip generators identified within the County, or about 14 percent, were located within the secondary taxicab service areas and partially served by transit. Of the 110 major land use and transit-



Map 15

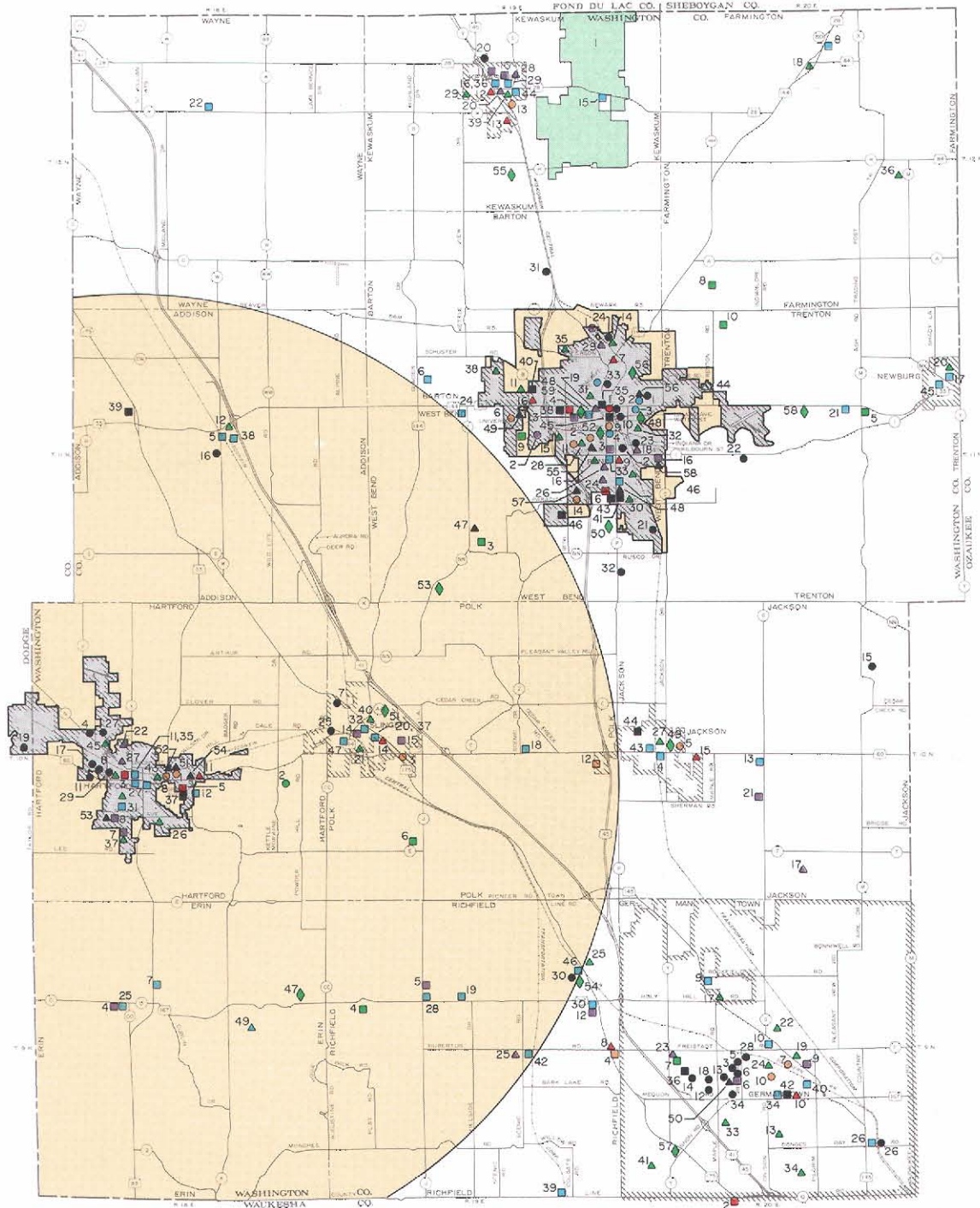
NEW OR PROPOSED DEVELOPMENT IN WASHINGTON COUNTY SERVED BY PUBLIC TRANSIT: 1995



Source: SEWRPC.

Map 16

MAJOR LAND USE TRIP GENERATORS IN  
WASHINGTON COUNTY SERVED BY PUBLIC TRANSIT: 1995



LEGEND

COMMERCIAL CENTER  
(SEE TABLE 17)

- 1 ● REGIONAL
- 6 ■ MAJOR COMMUNITY
- 16 ▲ MINOR COMMUNITY

EDUCATIONAL CENTER  
(SEE TABLE 18)

- 2 ● UNIVERSITIES AND COLLEGES
- 16 ■ PUBLIC ELEMENTARY, MIDDLE, AND HIGH SCHOOLS
- 29 ▲ PAROCHIAL AND PRIVATE SCHOOLS

MEDICAL CENTERS  
(SEE TABLE 19)

- 2 ● COMMUNITY MEDICAL CENTER
- 14 ■ SPECIAL MEDICAL CENTER

GOVERNMENTAL AND PUBLIC INSTITUTIONAL  
CENTER (SEE TABLE 20)

- 4 ● REGIONAL AND COUNTY
- 48 ■ COMMUNITY
- 49 ▲ SPECIAL

MAJOR EMPLOYERS (SEE TABLE 21)

- 34 ● INDUSTRIAL/MANUFACTURING
- 46 ■ RETAIL/SERVICE
- 58 ▲ GOVERNMENTAL/INSTITUTIONAL

RECREATIONAL AREAS  
(SEE TABLE 25)

- 1 ■ STATE FOREST (REGIONAL)
- 2 ● PARK (REGIONAL)
- 10 ■ COUNTY
- 46 ▲ COMMUNITY
- 59 ▲ OTHER

TRANSIT SERVICE AREA

- PRIMARY (INSIDE-CITY) SERVICE AREAS  
FOR HARTFORD AND WEST BEND TAXICAB SYSTEMS
- SECONDARY (OUTSIDE-CITY) SERVICE AREAS  
FOR HARTFORD AND WEST BEND TAXICAB SYSTEMS

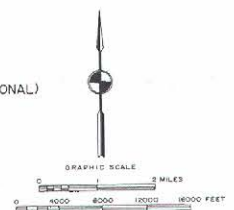


Table 50

## ESTIMATED POPULATION SERVED BY PUBLIC TRANSIT IN WASHINGTON COUNTY: 1995

Area	Total Population <sup>a</sup>	Transit Dependent Population <sup>a</sup>					
		School-Age Children (ages 10 through 18)		Elderly (age 60 and older)		Disabled <sup>b</sup>	
		Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population
Total County .....	95,328	13,114	13.8	13,534	14.2	1,612	1.7
Primary Service Area for Shared-Ride Taxicab Service <sup>c</sup>							
Hartford Taxicab System .....	8,179	910	11.1	1,430	17.5	161	2.0
West Bend Taxicab System ...	24,470	3,384	13.8	3,730	15.2	431	1.8
Total	32,649	4,294	13.2	5,160	15.8	592	1.8
Percent of Total County Population Served .....	34.2	32.7	--	38.1	--	36.7	--

<sup>a</sup>All figures are based upon 1990 census information derived from sample data.

<sup>b</sup>Represents disabled persons aged 16 and over with mobility limitations as reported in Table 9 in Chapter II.

<sup>c</sup>Estimated based on 1990 population of the Cities of Hartford and West Bend.

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

dependent population trip generators not served by transit, a total of 43, or about 39 percent, were located within the Germantown-Richfield portion of the County.

Standard No. 3 states that the population served by public transit should be maximized, particularly that portion which is transit-dependent. According to 1990 Census data, approximately 32,600 persons, representing about 34 percent of the total 1990 County population of about 95,300 persons, were estimated to reside within the primary service areas of the shared-ride taxicab systems operated by the Cities of Hartford and West Bend. An additional 25,400 persons, or about 27 percent, resided within the secondary taxicab service areas and were partially served by transit. About 14,300 of the unserved County population of 37,300 persons, or about 38 percent, resided within the Germantown-Richfield portion of the County.

With respect to the transit-dependent population within the County, the 1990 Census data reviewed in Chapter II of this report indicated that the principal transit-dependent population groups of

significance for planning transit services within the County included the elderly, disabled, and school-age children. Table 50 presents information on the estimated number of such transit-dependent persons residing within the primary taxicab service areas. As can be seen from this table, approximately 33 percent of the school-age children, 38 percent of the elderly population, and 37 percent of the disabled population in the County were estimated to reside within the primary taxicab service areas. An additional 27 percent of the school-age children, 29 percent of the elderly population, and 31 percent of the disabled population in the County were estimated to reside within the secondary taxicab service areas and were partially served by transit. While only that portion of the County's total transit-dependent population which resided within the primary taxicab service areas were fully served by general public transit service, specialized transportation services for elderly and disabled persons serving virtually all of Washington County were also available during 1995. Most of the transit services identified in the preceding chapter were such specialized transportation services provided by public or private agencies or organizations. While



Table 51

**ESTIMATED EMPLOYMENT FULLY SERVED BY  
PUBLIC TRANSIT IN WASHINGTON COUNTY: 1995**

Area	Total Employment <sup>a</sup>
Total County .....	41,800
Primary Service Area for Shared-Ride Taxicab Service	
Hartford Taxicab System .....	6,700
West Bend Taxicab System .....	16,400
Total	23,100
Percent of Total County Employment Served .....	55.3

<sup>a</sup>Estimated based on the basis of Commission data files of estimated 1990 employment allocated to U. S. Public Land Survey quarter sections.

Source: SEWRPC.

serving the entire County, however, the emphasis of many of these services was on providing transportation for medical-related trips and other essential needs. Some were also available only to patients, clients, or residents of specific facilities.

Standard No. 4 states that the number of jobs served by public transit should be maximized. During 1995, the only jobs which could be fully served by general public transit service were those which were in locations within the primary taxicab service areas. As shown in Table 51, there were an estimated 23,100 jobs located within this area in 1990, representing about 55 percent of the total estimated County employment of about 41,800. An additional 7,000 jobs, or about 17 percent of the total County employment, were located within the secondary taxicab service areas and partially served by transit. About 5,000 jobs, representing about 43 percent of the unserved County employment of 11,700 jobs, were located at employers within the Germantown-Richfield portion of the County.

Not all the jobs within the taxicab service areas should be considered as completely served by transit because of the limited hours of operation of the Hartford and West Bend taxicab systems. During 1995, the weekday hours of operation for the taxicab systems extended from 6:00 a.m. until 8:00 or 9:00 p.m. for the Hartford taxicab system and until 10:00 p.m. for the West Bend taxicab system. With

these operating hours, the taxicab services would be convenient for most first-shift starting and ending times, but would not serve the ending times of most second-shift jobs and the starting times of most third-shift jobs.

Standard No. 5 indicates that special transit services, such as subscription bus or van services, should be provided to serve employment locations within the County. Some efforts to provide such services were made during 1995, by private transit companies participating in the employment transit assistance program, or "job ride" program, administered by the Wisconsin Department of Transportation. Three private transit companies, Goodwill Industries of Southeastern Wisconsin, Milwaukee Careers Cooperative, and the Opportunities Industrialization Center of Greater Milwaukee, regularly transported residents of central Milwaukee County to and from job locations within Washington County. Employee transportation services were also provided in 1995 by a private employment agency, JNA Temporary Services, Inc., which provided transportation for employees of the West Bend Company residing in south-central Milwaukee County. It was estimated that a total of about 372 one-way trips were made on an average weekday by the individuals using these services. It was estimated that a total of about 42,700 work trips were made on an average weekday in 1991 between Washington County and the other counties within Southeastern Wisconsin. About 3,200, or 7 percent, of these work trips occurred as "reverse commute" trips between Milwaukee County residences and Washington County employment locations. The above special employee transit services, thus, served about 12 percent of the average weekday reverse-commute work trips made between Milwaukee and Washington County. It is important to note that this percentage is based on the 372 one-way trips made on special employee transit services in the fall of 1995. A significant proportion of the workers making these trips were hired on a short-term, temporary basis to fill seasonal job vacancies. The percentage of reverse commute trips served by transit can be expected to fluctuate during the year in response to seasonal employment levels at Washington County employers.

It was also estimated that there were also approximately 39,500 work trips made on an average weekday in 1991 entirely within Washington County. Notably, there were no special transit services being provided within the County during 1995 to serve these internal work trips.

Table 52

**COMPARISON OF RIDERSHIP AND SERVICE EFFECTIVENESS MEASURES FOR SHARED-RIDE TAXICAB SERVICES IN WASHINGTON COUNTY WITH THE AVERAGE FOR PUBLIC SHARED-RIDE TAXICAB SERVICES IN WISCONSIN**

Performance Measure	Washington County Taxicab Systems: 1995		Average for Public Shared-ride Taxicab Systems in Wisconsin: 1993 <sup>a</sup>
	Hartford Taxicab System	West Bend Taxicab System	
Population of Primary Taxicab Service Area .....	8,600	27,600	9,000
Ridership			
Total annual revenue passengers .....	18,700	78,800	34,300
Annual revenue passengers per capita .....	2.2	2.9	3.8
Service Levels			
Total annual vehicle-miles .....	47,800	253,800	107,900
Total annual driver-hours .....	4,600	20,900	10,100
Annual vehicle-miles per capita .....	5.6	9.2	12.0
Annual driver-hours per capita .....	0.5	0.8	1.1
Average speed (miles per hour) .....	10.4	12.1	10.7
Service Effectiveness			
Annual revenue passengers per vehicle-mile .....	0.39	0.31	0.32
Annual revenue passengers per vehicle-hour .....	4.1	3.8	3.4

<sup>a</sup>Figures shown represent the averages for each measure for 26 other public shared-ride taxicab systems in Wisconsin in 1993.

Source: Wisconsin Department of Transportation and SEWRPC.

**Objective No. 2: Promote Transit Utilization and Provide for User Comfort, Convenience, and Safety**

Performance measures used to evaluate existing public transit service against Standards No. 1 and 2 under this objective consisted of measures of transit ridership and service effectiveness, including total annual transit revenue passengers, annual transit ridership per capita, annual passengers per vehicle-mile, and annual passengers per driver-hour. The existing transit service was also evaluated with respect to the quality and convenience of transit service provided by identifying problems related to service capacity, response time, on-time performance, denial of service for trip requests, and fleet replacement needs as addressed by Standard Nos. 3 through 8

Under Objective No. 2, Standard No. 1 states that public transit ridership should be maximized, while Standard No. 2 indicates that the service provided should meet or exceed certain minimum ridership and effectiveness levels. Performance measures pertaining to these two service standards were used

in evaluating ridership and service levels on the public shared-ride taxicab systems operated in the County in 1995 by the Cities of Hartford and West Bend. The measures used for this purpose included total annual ridership, annual ridership per capita, annual passengers per vehicle-mile, and annual passengers per driver-hour. The observed performance levels for these measures were compared with the minimum performance levels specified under Standard No. 2, which were based upon averages for the public shared-ride taxicab systems operating within the Southeastern Wisconsin Region, and also with the average performance levels for the other public shared-ride taxicab systems within the State. Table 52 presents a comparison of the performance measures for the Hartford and West Bend taxicab systems for calendar year 1995 with averages for the other public shared-ride taxicab systems within the State. The statewide ridership and service data used were for calendar year 1993, which represented the most current year for which actual data were available for the other taxicab systems in the State.

Standard No. 2 under Objective No. 2 specifies minimum ridership levels of three annual rides per capita.<sup>1</sup> In 1995, ridership on the Hartford taxicab system was below this level, at 2.2 rides per capita, while ridership on the West Bend taxicab system was at about the specified level. The rides per capita on both systems were also found to be below those on other Wisconsin public taxicab systems. The lower rides per capita in comparison to the other taxicab systems was attributed largely to differences in service levels, as noted below.

While the primary service area population for the Hartford taxicab system was about 10 percent less than the statewide average for public shared-ride taxicab systems, the total annual ridership and ridership per capita for the Hartford system were between 42 and 45 percent less than the average for the other Wisconsin shared-ride taxicab. This may be directly attributed to a lower level of service provided by the Hartford taxicab system. The total annual vehicle-miles and driver-hours, and the vehicle-miles and driver-hours per capita,<sup>2</sup> for the Hartford taxicab system were between 53 and 55 percent below that observed for the other Wisconsin shared-ride taxicab systems. Many of the other taxicab systems in the State have longer daily service hours than the Hartford taxicab system, provide service on holidays, or provide special services to students or other population groups not provided by the Hartford taxicab system. The hours of operation for the Hartford taxicab system focus on providing service during hours when most of person travel occurs. As such they do not provide service during late evening weekday service periods, extensive service on weekends, or any service on holidays.

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<sup>1</sup>Annual rides per capita is a measure of the level of use of a public transit service by the resident population of its service area, calculated by dividing the annual ridership on the transit system by its service area population.

<sup>2</sup>Annual vehicle-miles per capita and driver-hours per capita are measures of the amount of public transit service provided by a transit system to the resident population of its service area. They are calculated by dividing the annual vehicle-miles or driver-hours operated by the transit system by the population of the service area.

Similar observations can be made with respect to the per capita ridership of the West Bend taxicab system. While the primary service area population for the West Bend taxicab system was about three times greater than the average for other public shared-ride taxicab systems in the State, the total annual ridership on the West Bend system was about double the average for other Wisconsin public taxicab systems. As a result, the annual ridership per capita for the West Bend taxicab system was about 24 percent less than the average for the other Wisconsin public taxicab systems. The annual vehicle-miles and driver-hours per capita for the West Bend taxicab system were also below those of the other Wisconsin shared-ride taxicab systems for basically the same reasons as observed for the Hartford taxicab system. That is, the taxicab service provided by the other Wisconsin public taxicab systems included somewhat longer daily service hours, service on holidays, or special services for certain population subgroups which were not provided by the West Bend taxicab system.

Standard No. 2 under Objective No. 2 also specifies minimum effectiveness levels of 0.3 passengers per vehicle-mile and three passengers per driver-hour. By providing service only during the principal travel periods of each day, both the Hartford taxicab system, despite its lower than average total annual ridership, and the West Bend taxicab system were able to meet or exceed these service effectiveness levels and the observed averages for these measures for the other Wisconsin public taxicab systems.

Standard No. 3 states that adequate capacity should be provided on public transit service so as not to exceed a maximum load factor of 1.0 for demand-responsive services. This standard indicates that in scheduling service for trip requests, total passengers assigned to a vehicle should not exceed the seated capacity of the vehicle. Both the City of Hartford and the City of West Bend shared-ride taxicab systems follow a policy to this effect in scheduling service for trip requests, as does the principal provider of specialized transportation service within the County, the Washington County Office of Aging. This standard is also intended to assure that sufficient vehicles are available to accommodate all trip requests and whether additional vehicles, or vehicles with a higher seating capacity, are needed.

With respect to the Hartford and West Bend taxicab systems, City officials reported that only infrequent problems with the capacity of the vehicles have

occurred, usually because of inclement weather or special events in each City. West Bend officials noted that requests for transportation service on weekday evenings by large groups had strained the system in the past when the two taxicab vehicles in service were needed to transport the group, leaving no vehicles to service other trip requests. The acquisition of a larger capacity taxicab vehicle, such as a 15-passenger van or small bus, to address this problem has been considered by the City in the past but has not been acted upon. Staff from the Washington County Office of Aging indicated that there were no problems of inadequate vehicle capacity for the Countywide specialized transportation service which it provides.

Standard No. 4 indicates that demand-responsive public transit service should be provided with an average minimum vehicle speeds of 10 miles per hour. The average speed for the Hartford and West Bend shared-ride taxicab systems in 1995 was about 10 and 12 miles per hour, respectively. By comparison, the average speed for the Countywide specialized transportation service provided by the Office of Aging Services was about 23 miles per hour in 1995. The higher speed for the specialized transportation service is largely the result of the longer trips served between communities within the County.

Standard No. 5 specifies that demand-responsive public transit services should be provided with a minimum response time of 30 minutes. This standard indicates the maximum time which should be allowed to dispatch a vehicle to respond to a trip request. Both the Hartford and West Bend taxicab systems currently conform to this standard in providing service. By comparison, the specialized transportation service provided by the Washington County Office of Aging requires users to call at least forty-eight (48) hours, two working days, in advance of the time service is needed when making requests for service.

Standards No. 6 and 7 are intended to provide indicators which can be used to measure the quality and convenience of demand-responsive public transit services. Standard No. 6 indicates that such services should be provided in a timely manner with respect to the scheduled pick-up and drop-off times of trips requests. Standard No. 7 indicates that the service should be operated in a manner which minimizes the number of trip requests for which service cannot be scheduled. In particular, Stan-

dard No. 7 is meant to indicate that some service capacity should always be available to respond to trip requests received during the course of each service day even if it means limiting the number of trip requests for which service is provided on a prescheduled, or subscription, basis.

With respect to the Hartford and West Bend shared-ride taxicab systems, both systems indicated no major problems with untimely service. The problems identified were usually the result of the occurrence of inclement weather or special events in each City. Both systems also noted that problems with late pick-ups often were caused by individuals who failed to cancel their trip reservations when service was no longer needed, causing unnecessary wait times for vehicles and delaying service for the next trip request. Both systems did, however, identify occasional problems with scheduling service for all trip requests during peak-usage days or times. On the Hartford taxicab system, such problems typically occurred one day a week when the service is unable to schedule service at the requested time for some trip requests because of insufficient capacity. On the West Bend taxicab system, such problems were more frequent, typically occurring during weekday morning peak use periods and on weekday evenings for large groups of individuals. Use of the taxicab services at these peak times can require users of both systems to reschedule medical appointments, personal business appointments, or other trips for times when taxicab service can be scheduled.

With respect to the Washington County Office of Aging specialized transportation service, no problems with respect to either timeliness of service or trip denials were noted by County staff as currently occurring on a regular basis. Some problems with scheduling service for all trip requests for the work-related service provided under the County program were noted in early 1995. Some potential users were placed on a waiting list when the service was initiated due to insufficient service capacity. The waiting list was eliminated when the contract operator added a new vehicle to its fleet used to provide the service.

Standard No. 8 specifies that vehicles used in providing demand-responsive public transit service should be considered for replacement after they have been in service for three years or have accumulated 100,000 miles. On the basis of this standard, one of the three vehicles in the Hartford taxicab fleet, a 1988 sedan maintained as a spare vehicle,

should be replaced immediately. The remaining two vehicles in the Hartford taxicab fleet, consisting of two 1995 wheelchair-accessible minivans, are the principal vehicles used to provide service and can be expected to accumulate an average of almost 24,000 miles annually on the basis of the 47,800 total vehicle-miles reported for the system for 1995. On the basis of the current service levels for the system, both 1995 vehicles will need to be replaced toward the end of the five-year planning period for this study.

The West Bend taxicab fleet consists of six vehicles, including two 1994 wheelchair-accessible full-size vans and four 1995 nonaccessible minivans. All six vehicles were used regularly and can be expected, on the basis of the 253,800 total vehicle-miles reported for the system for 1995, to accumulate an average of over 42,000 miles annually. On the basis of the current service levels for the system, each of the 1994 vehicles will need to be replaced at least once during the five-year planning period for this study.

#### Objective No. 3: Provide Economical, Efficient Transit Service

The performance measures used to evaluate existing public transit service against Standard Nos. 2 through 4 of Objective No. 3 consisted of measures of the cost-effectiveness and cost-efficiency of transit service. The evaluation against Standards Nos. 2 and 3 was conducted for the public shared-ride taxicab systems in the County, using the performance measures specified for operating costs per unit of service, operating costs and deficits per passenger, and farebox recovery rates. Such measures were developed for the Hartford and West Bend taxicab systems and compared with the minimum performance levels specified under these service standards and with averages of the measures for other Wisconsin taxicab systems. The evaluation against Standard No. 4 was based on a comparison of percentage changes in passenger fares and operating costs for the Hartford and West Bend taxicab systems observed in the recent past.

Standard No. 2 indicates that the operating expenses and public subsidies per unit of transit service and per transit ride should be minimized. The measures specified under this standard included operating expenses of \$1.70 per vehicle-mile, \$18.80 per vehicle-hour, and \$4.50 per passenger and an operating deficit of \$3.40 per passenger, and were based on the estimated 1995 averages for

the public shared-ride taxicab systems operating within the Southeastern Wisconsin Region. The operating costs per unit of service and the costs and deficits per passenger for the Hartford taxicab system in 1995 were between 16 and 24 percent higher than those specified under the service standard. In contrast, these measures for the West Bend taxicab system in 1995 indicate that operating costs per unit of service were between 13 and 21 percent less, and the costs and deficits per passenger were between 4 and 12 percent less, than those specified under the service standard.

The measures developed for the Hartford and West Bend taxicab systems were also compared with the average performance levels of the other public shared-ride taxicab services within Wisconsin. The operating and financial data used for the other Wisconsin taxicab systems was for calendar year 1993, which represented the most recent data for which actual or estimated data was available. A comparison of the financial performance of the Hartford and West Bend taxicab systems in 1995, expressed in constant 1993 dollars, with that observed for the other Wisconsin public shared-ride taxicab systems in 1993 is presented in Table 53. This comparison yields similar findings to those discussed above for Standard No. 2. The cost and subsidy measures for the Hartford taxicab system in 1995 were higher than those observed for the other Wisconsin taxicab systems, with operating costs per unit of service between 34 and 38 percent higher and the costs and deficits per passenger between 12 and 25 percent higher. The cost and subsidy measures for the West Bend taxicab system in 1995 were generally lower than those observed for the other Wisconsin taxicab systems, with the operating cost per vehicle-mile about 12 percent lower and the costs and deficits per passenger between 5 and 9 percent lower. The operating cost per driver-hour for the West Bend taxicab system in 1995 was about 1 percent higher than that observed for the other Wisconsin taxicab systems. Notably, operating costs per unit of service for shared-ride taxicab systems in the Southeastern Wisconsin Region may be expected to be somewhat higher than for systems in other more rural areas of the State because of the higher general wage rates for the Southeastern Wisconsin labor pool.

Standard No. 2 also indicates that increases in operating expenses and public subsidies per unit of transit service and per transit ride experienced by a transit system should not exceed the increase

observed on other Wisconsin systems. The performance of the Hartford taxicab system with respect to this standard was checked by comparing the average percentage change in cost and subsidy measures for the system over the period 1990 through 1993 with the average change observed on the other Wisconsin systems which were in operation over this period. This comparison is shown in Table 54. A similar comparison for the West Bend taxicab system was not possible since the system began operation in 1993 and Statewide data were not available to allow for a meaningful comparison.

The information in the table indicates that the costs and subsidy measures for the other Wisconsin taxicab system increased by an average of between 6 and 10 percent per year from 1990 to 1993. By comparison, the operating cost per vehicle-mile and per driver pay hour for the Hartford taxicab system decreased an average of approximately 12 percent per year from 1990 to 1993, and the operating cost and deficit per passenger for the system decreased an average of approximately 30 percent per year. The decreases for the Hartford taxicab system can be attributed to service and fare reductions implemented in 1991 and 1992 which eliminated unproductive service and increased ridership, thereby greatly improving the effectiveness and efficiency of the taxicab system. In this respect, a shuttle service between the Cities of Hartford and West Bend was eliminated at the end of 1990 of because of extremely low ridership.<sup>3</sup> Ridership on the system more than doubled in 1992 over 1991 levels when base cash fares were substantially reduced and mileage charges for in-city travel were eliminated.

Standard No. 3 indicates that demand-responsive public transit services should recover at least 25 percent of their operating expenses from passenger revenues, on the basis of the estimated 1995 averages farebox recovery rates for the public shared-ride taxicab systems operating within the Southeastern Wisconsin Region. The farebox recovery rates for the Hartford and West Bend shared-ride taxicab systems during 1995 of about 26 percent and 31 percent, respectively, were both above this level. By comparison, the average farebox recovery rate for the other Wisconsin public shared-ride taxicab systems in 1993 was about 34 percent of operating expenses. These differences may be attributed in part to higher than average operating costs per unit of service for the Washington County taxicab systems noted above. In addition, the 1995 average revenue per passenger for the Hartford and West Bend shared-ride taxicab systems, in constant 1993 dollars, of about \$1.32 and \$1.25 per revenue passenger, respectively, was about 15 percent lower than the average of about \$1.52 per revenue passenger observed on the other Wisconsin taxicab systems in 1993. This reflects the fact that the fares charged by the some Wisconsin taxicab systems were higher than those charged on either the Hartford or West Bend taxicab systems. In 1993, seven of the other 26 taxicab systems in the State charged an adult cash fare of between \$2.25 and \$3.30 per one-way trip. Only six of the other Wisconsin taxicab systems charge an adult cash fare which was less than \$2.00 per one-way trip. The base adult cash fares charged on the Hartford and West Bend taxicab systems in 1995 were \$1.50 and \$2.00 per one-way trip, respectively.

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<sup>3</sup>From late 1982 through the end of 1990, the City of Hartford operated a fixed-route shuttle service designed to provide connections to Milwaukee-oriented intercity bus service operated through Washington County. The service was initiated as a result of the elimination of intercity bus service through the City of Hartford and the Village of Slinger by a private intercity bus company. The shuttle service was provided over several route alignments, operating initially between the Hartford-Slinger area and an intercity bus stop in the Village of Menomonee Falls during 1982 and 1983, then between the Hartford-Slinger and the West Bend areas and an intercity bus stop in the Village of Slinger during 1984 through 1986, and finally

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between the Hartford-Slinger area and an intercity bus and other stop locations in the City of West Bend during 1987 through 1990. Two round trips were operated over the routes, one between 8:00 and 11:00 a.m. and one between 4:00 and 7:00 p.m., each weekday, excluding holidays, until the last year of operation, 1990, when service was cut back to operate on only three weekdays. During 1990, the regular fare for the shuttle service ranged from \$3.50 to \$4.50 per one-way trip, with reduced fares of \$3.00 to \$4.00 per one-way trip for elderly or disabled individuals. The ridership on the shuttle service averaged about four one-way trips per day during its best years, 1983 through 1985, and about two one-way trips per day during 1990.



Table 53

**COMPARISON OF FINANCIAL PERFORMANCE MEASURES FOR SHARED-RIDE TAXICAB SERVICES IN WASHINGTON COUNTY WITH THE AVERAGE FOR PUBLIC SHARED-RIDE TAXICAB SERVICES IN WISCONSIN**

Performance Measure	Washington County Taxicab Systems: 1995				Average for Other Wisconsin Public Shared- Ride Taxicab Systems: 1993 <sup>a</sup>
	Hartford Taxicab System		West Bend Taxicab System		
Ridership Total annual revenue passengers .....	18,000		78,800		34,300
Service Levels Total annual vehicle-miles .....	47,800		253,800		107,900
Total annual driver-hours .....	4,600		20,900		10,100
	Actual Dollars	1993 Constant Dollars	Actual Dollars	1993 Constant Dollars	
Service Cost Total annual operating expense .....	\$100,200	\$94,100	\$341,500	\$320,500	\$154,000
Total annual operating revenue .....	26,400	24,800	105,000	98,600	52,000
Total annual operating deficit .....	73,800	69,300	236,500	221,900	102,000
Service Efficiency Operating expense per vehicle-mile .....	\$ 2.10	\$ 1.97	\$ 1.35	\$ 1.26	\$ 1.43
Operating expense per driver-hour .....	21.78	20.46	16.34	15.33	15.25
Operating expense per passenger .....	5.36	5.03	4.33	4.07	4.49
Operating deficit per passenger .....	3.95	3.71	3.00	2.82	2.97
Percent of operating expenses recovered from operating revenues .....	26.3	26.4	30.7	30.8	33.8

<sup>a</sup>Figures shown represent the averages for each measure for 26 other public shared-ride taxicab systems in Wisconsin in 1993.

Source: Wisconsin Department of Transportation and SEWRPC.

Standard No. 4 indicates that periodic adjustments should be made to the fares charged for transit service, with the need for adjustments to be based upon farebox recovery rates, changes in operating expenses, and acceptable local funding levels. Both the Hartford and West Bend taxicab systems have made adjustments to the passenger fares in the recent past in accordance with the intent of this standard. Cash and convenience fares for the Hartford taxicab system were reduced in 1992 to promote ridership on the system, then increased in 1993 and 1995 in response to projected increases in operating expenses and City funding levels. While base cash fares for the West Bend taxicab system have remained unchanged since the system began operation in 1993, convenience fares were increased in 1995 to generate additional revenue to offset a portion of the projected costs of increases in service. With these fare increases, the average fare collected

on the taxicab systems increased by about 26 percent on the Hartford taxicab system between 1992 and 1995, from \$1.12 to \$1.41 per one-way trip, and by about 11 percent on the West Bend taxicab system between 1993 and 1995, from \$1.09 to \$1.33 per one-way trip. Over the same periods, operating costs per one-way trip increased by only about 5 percent on the Hartford taxicab system, from \$5.09 to \$5.36 per one-way trip, and decreased by about 10 percent on the West Bend taxicab system, from \$4.83 to \$4.33 per one-way trip. The fare increases, consequently, resulted in farebox recovery rates for each system in 1995 that were above that specified under Standard No. 3.

### SUMMARY

This chapter has presented an evaluation of the existing public transit service within Washington

Table 54

**COMPARISON OF CHANGES IN FINANCIAL PERFORMANCE MEASURES FOR THE CITY OF HARTFORD SHARED-RIDE TAXICAB SERVICES WITH THE AVERAGE FOR PUBLIC SHARED-RIDE TAXICAB SERVICES IN WISCONSIN**

Financial Performance Measure	Hartford Taxicab System	Average for Public Shared-ride Taxicab Systems in Wisconsin <sup>a</sup>
Operating Expense per Passenger		
1990 .....	\$13.40	\$ 3.42
1993 .....	5.03	4.19
Average annual percentage change 1990-1993 .....	-27.9	7.0
Operating Expense per Vehicle-Mile		
1990 .....	\$ 3.05	\$ 1.20
1993 .....	2.09	1.44
Average annual percentage change 1990-1993 .....	-11.7	6.3
Operating Expense per Driver-Hour		
1990 .....	\$31.05	\$12.31
1993 .....	21.22	15.51
Average annual percentage change 1990-1993 .....	-11.9	8.0
Operating Deficit per Passenger		
1990 .....	\$11.48	\$ 2.06
1993 .....	3.89	2.73
Average annual percentage change 1990-1993 .....	-30.3	9.8

<sup>a</sup>Figures shown represent the averages for each measure for 19 other public shared-ride taxicab systems in Wisconsin which were in operation during the period 1990 through 1993.

Source: Wisconsin Department of Transportation and SEWRPC.

County in 1995 on the basis of the transit service objectives and standards set forth in Chapter V of this report. The major findings of this evaluation may be summarized as follows:

1. The extent of urban development served by public transit service in 1995 included the urban development within the service areas for the Hartford and West Bend shared-ride taxicab systems, which provided the only transit service for the general public available within the County. Only the land area and developments within the primary taxicab service areas, which covered the areas within the Cities of Hartford and West Bend, were considered to be fully served by transit. The primary service areas for these taxicab systems included about 9 square miles, or about 22 percent, of the total estimated urban developed land area within the County of about 41 square miles. In terms of the areas
2. The geographic coverage of the major potential land use transit trip generators identified in the County provided by general public transit service also included those trip generators located within the primary service areas for the Hartford and West Bend taxicab systems. Of the 235 major land use trip generators identified within the County in 1995, 104, or about 44 percent, were considered as fully served by transit.
3. The overall extent of the geographic coverage provided by general public transit service in the County in 1995 is most evident when the proportions of the County's total resident

of new or proposed development identified in the County, 28 of the 87 residential developments and eight of the 22 commercial developments within the County were within the primary taxicab service areas.

population and employment served are considered. Based on the Commission's 1990 Census population data files, it was estimated that approximately 32,600 persons resided within the primary service areas of the Hartford and West Bend taxicab systems, representing about 34 percent of the total 1990 County population of about 95,300 persons. It was estimated that there were approximately 23,100 jobs, or about 55 percent of the total estimated 1990 County employment of 41,800 jobs, at employers located within the primary taxicab service areas. Not all of these jobs, however, should be considered as completely served by transit because of the weekday hours of operation of the Hartford and West Bend taxicab systems, which do not fully serve second- and third-shift jobs.

4. With respect to the transit-dependent population within the County, the principal transit-dependent population groups of significance for this study for planning public transit services within the County included the elderly, the disabled, and school-age children. Approximately 33 percent of the school-age children population group, 38 percent of the elderly population group, and 37 percent of the disabled population group in the County were estimated to reside within the primary taxicab service areas. In addition, 36 of the 58 major transit-dependent population trip generators identified within the County, or about 66 percent, were located within the primary taxicab service areas. While only the portion of the County's total transit-dependent population and those transit-dependent population trip generators which resided or were located within the taxicab service areas were considered as served by general public transit service for this evaluation, specialized transportation services for elderly and disabled persons which served virtually all of Washington County were also available. However, many of these services had limitations which restricted their use by the eligible population groups.
5. Most of the urban development, potential transit trip generators, population, and employment identified as not being served by public transit service in 1995 were located within the Germantown-Richfield portion of the County.

On this basis, the southeastern portion of the County should be considered as priority area for transit service when considering the potential for new or expanded transit services under alternative transit service plans.

6. Some efforts to provide special transit services, such as subscription bus or van services, serving employment locations within the County were under way during 1995 through private transit companies participating in the employment transit assistance program, or "job ride" program, administered by the Wisconsin Department of Transportation and by a private employment agency providing transportation for employees of the West Bend Company. It was estimated that about 372 one-way trips were made on an average weekday by individuals resident in central Milwaukee County who used these services to travel to and from job locations within Washington County. These transit services were, thus, serving almost 12 percent of the estimated 3,200 average weekday reverse commute work trips made between Milwaukee and Washington County. Notably, there were no special transit services being provided within the County during 1995 to serve the approximately 39,500 work trips made on an average weekday entirely within Washington County.
7. It was found that in 1995 both the Hartford and West Bend taxicab systems were able to meet or exceed the service effectiveness levels of 0.3 passengers per vehicle-mile and three passengers per driver-hour specified under the transit service standards, as well as and the observed averages for these measures for the other Wisconsin public taxicab systems. However, while ridership on the West Bend taxicab system was about at the level of three rides per capita specified under the transit service standards, ridership on the Hartford taxicab system was below this level. Per capita ridership on both systems was also below that for the other Wisconsin taxicab systems. This was attributed principally to the fact that less service was being provided by the Hartford and West Bend taxicab systems as a result of somewhat less extensive days and hours of operation in comparison to the other systems.

8. Some minor problems were found regarding to the quality and convenience of the transit service provided by the Hartford and West Bend taxicab systems. On the Hartford taxicab system, occasional problems with scheduling service for all trip requests typically occurred only one day a week. On the West Bend taxicab system, such problem were more frequent, typically occurring during weekday morning peak-use periods and on weekday evenings for large groups of individuals, indicating a potential need for acquisition of additional or larger vehicles. On both systems, use of the taxicab service at these peak times could require users of both systems to reschedule medical appointments, personal business appointments, or other trips for times when taxicab service is available. No problems were found with respect to the quality and convenience of the Countywide specialized transit service provided by the Washington County Office of Aging.

9. It was found that the annual operating expenses per vehicle-mile, per driver-hour, and per passenger and the annual operating deficit per passenger for the Hartford taxicab system were higher than those specified under the transit service standards, reflecting the averages for the taxicab systems in the Southeastern Wisconsin Region. The cost and subsidy measures for the West Bend taxicab system were below the specified levels. In this respect, the total operating expenses per unit of transit service during 1995 were estimated at about \$2.10 per vehicle-mile and about \$21.78 per driver-hour for the Hartford taxicab system, about \$1.35 per vehicle-mile and about \$16.34 per driver-hour for the West Bend taxicab system, and \$1.70 per vehicle-mile and \$18.80 per driver-hour, as specified under the transit service standards. On a per passenger basis, operating expenses

were about \$5.36 per revenue passenger and operating deficits were about \$3.95 per revenue passenger for the Hartford taxicab system, operating expenses were about \$4.33 per revenue passenger and operating deficits were about \$3.00 per revenue passenger for the West Bend taxicab system, and operating expenses were about \$4.50 per passenger and operating deficits were about \$3.40 per passenger, as specified under the transit service standards. The cost and subsidy measures for the Hartford taxicab system were also higher than those for other Wisconsin taxicab systems, while the measures for the West Bend taxicab system were generally less. The City of Hartford has, however, greatly improved the effectiveness and efficiency of its taxicab system since 1990 by eliminating unproductive services and increasing ridership, thereby keeping changes in cost and subsidy measures for the system to substantially below those observed for other Wisconsin taxicab systems.

10. The farebox recovery rate for the Hartford and West Bend taxicab systems during 1995 was estimated at about 26 and 31 percent of operating expenses, respectively. These figures were above the farebox recovery rate of 25 percent of operating expenses specified under the transit service standards, which reflected the average for the taxicab systems in the Southeastern Wisconsin Region, but were below the average of about 34 percent of operating expenses observed for the other taxicab systems in Wisconsin during 1993. The lower farebox recovery rate for the Hartford and West Bend taxicab systems can largely be attributed to higher than average operating expenses and the lower than average fares when compared with the other Wisconsin taxicab systems.

## Chapter VII

### ALTERNATIVE TRANSIT SERVICE IMPROVEMENTS

#### INTRODUCTION

Previous chapters of this report described the land use and travel patterns of Washington County and the public transit services currently available to serve those patterns. This information provided the basis for developing and evaluating alternative transit service improvements for the County. A recommended plan, based upon evaluation of the alternative improvements, was then identified. This chapter describes the alternative transit service improvements considered and the improvements recommended by the Study Advisory Committee.

#### TRANSIT SERVICE ALTERNATIVES

The alternative transit service improvements for Washington County were developed to address the existing and probable future transit service needs within the County. The transit service needs specifically identified in the scope of work for the study presented in Chapter I of this report included:

- The transportation needs of the County's transit-dependent population, principally elderly persons, disabled individuals, and children aged 10-18 for nonschool travel;
- The employee transportation needs of major employers within the County to provide better access for Milwaukee County residents to fill job vacancies in Washington County and to reduce travel by single-occupant vehicles for work trips; and
- The transportation needs of County residents in the developing and rural portions of the County for access to jobs and services within the major urban centers of the County and for access to jobs and services within Milwaukee County.

The alternative transit service improvements were also intended to address deficiencies in the existing transit services provided within the County. The principal transit service deficiencies identified through the evaluation of the existing services included:

- Only the developed urban areas, major potential transit trip-generators, and resident County population of the Cities of Hartford and West Bend are well served by the existing public transit services;
- Special transit service for work trips made to and from employment centers within the County on an average weekday is limited; transit service for work trips made to and from employment centers within Milwaukee County is not available; and
- Occasional capacity problems occur on the public shared-ride taxicab systems operated by the Cities of Hartford and West Bend, limiting the ability of each system to provide service when needed for some trips.

To address these needs, four basic transit service alternatives were developed and evaluated:

- 1) Maintain without change the existing transit services in the County over the planning period;
- 2) Provide expanded local, general-purpose transit services within the principal areas of urban development in the County by means of community-operated shared-ride taxicab systems;
- 3) Provide expanded local, general-purpose transit services serving the entire County by means of a Countywide shared-ride taxicab system;
- 4) Provide transit services designed to help major employers within the County both fill job vacancies and reduce employee travel by single-occupant vehicles for work purposes.

The principal transit service elements and basic operating characteristics of the transit services proposed under each alternative are summarized in Table 55. For all of the alternatives considered, this chapter provides information on the operating characteristics, potential ridership, and estimated costs of the proposed transit services over a five-year planning period extending from 1998 through 2002.

Table 55

**SUMMARY OF MAJOR SERVICE ELEMENTS AND OPERATING CHARACTERISTICS  
OF ALTERNATIVE TRANSIT SERVICES PROPOSED FOR WASHINGTON COUNTY**

Transit Service Element	Alternative 1	Proposed Transit Service Improvement over Alternative 1			
		Alternative 2	Alternative 3	Alternative 4	Subalternative 4A
Shared-Ride Taxicab Service	Existing public shared-ride taxicab services operated by the Cities of Hartford and West Bend maintained at 1996 service levels	Public shared-ride taxicab systems operated by the Cities of Hartford and West Bend expanded to serve more urban development in Hartford-Slinger and West Bend areas  New public shared-ride taxicab system established to serve Germantown-Richfield area	New Countywide public shared-ride taxicab system established and operated under County authority  Countywide system would supplant the existing Hartford and West Bend taxicab systems	--	--
	<u>Service Area</u> Service provided for trips made: Entirely within the Cities of Hartford and West Bend Between the Cities of Hartford and West Bend and adjacent areas 1 to 10 miles outside Cities  No service provided for trips with both ends outside Cities of Hartford and West Bend	<u>Service Area</u> Service provided for trips made: Entirely within the Hartford-Slinger, greater West Bend, and Germantown-Richfield service areas Between City of Hartford and adjacent areas up to 10 miles outside City served by existing system Between Germantown-Richfield service area and northern portion of Menomonee Falls in Waukesha County  No service provided for trips made between each service area or with both ends outside service areas	<u>Service Area</u> Service provided for all trips made: Within and between all communities within the County Between the Germantown-Richfield area and the northern portion of Menomonee Falls in Waukesha County Between City of Hartford and adjacent areas in Dodge County up to 10 miles outside City served by existing system	--	--
	<u>Response Time</u> Maximum of 30 minutes	<u>Response Time</u> Maximum of 30 minutes	<u>Response Time</u> Urban service: maximum of 30 minutes within Hartford-Slinger, West Bend, and Germantown-Richfield areas Rural and intercommunity service: maximum of 60 minutes	--	--
	<u>Service Periods</u> Hartford service area: Weekdays: 6:00 a.m. to 9:00 p.m. <sup>a</sup> Saturdays: 8:00 a.m. to 8:00 p.m. <sup>a</sup> Sundays: 9:00 a.m. to 3:00 p.m. Holidays: no service West Bend service area: Weekdays: 6:00 a.m. to 10:00 p.m. Saturdays: 6:00 a.m. to 10:00 p.m. Sundays: 8:00 a.m. to 4:00 p.m. Holidays: Sundays only	<u>Service Periods</u> Hartford-Slinger service area: Weekdays: 6:00 a.m. to 9:00 p.m. <sup>a</sup> Saturdays: 8:00 a.m. to 8:00 p.m. <sup>a</sup> Sundays: 9:00 a.m. to 3:00 p.m. Holidays: no service West Bend and Germantown-Richfield service areas: Weekdays: 6:00 a.m. to 10:00 p.m. Saturdays: 6:00 a.m. to 10:00 p.m. Sundays: 8:00 a.m. to 4:00 p.m. Holidays: Sundays only	<u>Service Periods</u> Countywide: Weekdays: 6:00 a.m. to 10:00 p.m. Saturdays: 6:00 a.m. to 10:00 p.m. Sundays: 8:00 a.m. to 4:00 p.m. Holidays: Sundays only	--	--



Table 55 (continued)

Transit Service Element	Alternative 1	Proposed Transit Service Improvement over Alternative 1			
		Alternative 2	Alternative 3	Alternative 4	Subalternative 4A
Shared-ride Taxicab Service (continued)	<u>Fares<sup>b</sup></u> Hartford service area: Base fare (age 4 and up): \$1.50 Children (under age 4): Free Outside City: \$1.00 per mile surcharge West Bend service area: Adults (age 18 - 64): \$2.00 Students (age 5 - high school): \$1.50 Elderly (age 65 and older) or disabled: \$1.00 Children (under age 5): Free Outside City: \$1.00 per mile surcharge	<u>Fares<sup>b</sup></u> Hartford-Slinger service area: Base fare (age 4 and up): \$1.50 - \$2.50 Children (under age 4): Free Outside service area: \$1.00 per mile surcharge Greater West Bend service area: Adults (age 18 - 64): \$2.00 - \$3.50 Student (age 5 - high school): \$1.50 - \$2.60 Elderly (age 65 and older) or disabled: \$1.00 - \$2.20 Children (under age 5): Free Germantown-Richfield service area: Adults (age 18 - 64): \$2.00 - \$3.50 Student (age 5 - high school): \$1.50 - \$2.60 Elderly (age 65 and older) or disabled: \$1.25 - \$2.20 Children (under age 5): Free	<u>Fares<sup>b</sup></u> Countywide: Adults (age 18 - 64): \$2.00 - \$6.50 Students (age 5 - high school): \$1.50 - \$4.90 Elderly (age 65 and older) or disabled: \$1.25 - \$4.05 Children (under age 5): Free	--	--
Specialized Transportation Service	Existing services provided by Washington County Office on Aging and other principal service providers maintained at 1996 service levels	Existing service provided by Washington County Office on Aging reduced modestly; service maintained within taxicab service areas for trips needing special assistance not provided by taxicab operators  Existing services provided by other principal service providers maintained at 1996 service levels	Existing service provided by Washington County Office on Aging reduced significantly; service maintained only for trips needing special assistance not provided by taxicab operators  Existing services provided by other principal service providers maintained at 1996 service levels	--	--
Commuter Bus Service	--	--	--	New commuter "freeway flyer" bus routes established between Washington County and the Milwaukee central business district (CBD) and operated under County authority  Routes would serve two park-ride lots in Washington County: USH 45 and Paradise Drive (West Bend) CTH P and STH 60 (Jackson)  Commuter-bus service to be provided in both travel directions: With limited stops via USH 41-45 and IH 94 to serve travel between Washington County and Milwaukee CBD job locations With more frequent stops via major arterial streets for travel between Milwaukee County and Washington County job locations  <u>Service Periods</u> <u>(weekdays only)</u> 4:55 a.m. to 7:45 a.m. 1:30 p.m. to 7:15 p.m. 11:15 p.m. to 1:30 a.m.	Same as Alternative 4

Table 55 (continued)

Transit Service Element	Alternative 1	Proposed Transit Service Improvement over Alternative 1			
		Alternative 2	Alternative 3	Alternative 4	Subalternative 4A
Commuter-Bus Service (continued)	--	--	--	<u>Service Levels (bus trips)</u> Two round trips for commuting between Washington County and Milwaukee CBD job locations Four round trips for commuting between Milwaukee County and Washington County job locations  <u>Fares<sup>b</sup></u> Between USH 45 and Paradise Drive (West Bend) and Milwaukee County: \$2.75 Between STH 60 and CTH P (Jackson) and Milwaukee County: \$2.50	--
Employee Transportation Service	Limited, short-term transportation provided under State employee transportation assistance "Job Ride" program continued	--	--	New shuttle routes established and operated under County authority to connect major Washington County job concentrations with bus service to or from Milwaukee County  New shuttle routes to include: Five shuttles connecting the proposed commuter-bus service with major employment concentrations in the Jackson, Hartford-Slinger, West Bend, and Kewaskum areas of the County A Germantown industrial shuttle connecting major bus routes serving the Northridge Shopping Center in Milwaukee County with major employment locations in the Village of Germantown  Shuttle service to be provided as demand-responsive, route-deviation service with vehicles following a flexible route, deviating to serve specific employers upon request  Transportation provided under State employee transportation assistance "Job Ride" program redirected to serve other areas	Basic shuttle services established as proposed under Alternative 4 to connect major Washington County job concentrations with bus service to or from Milwaukee County  Jackson-Hartford and Kewaskum-West Bend shuttle routes modified Jackson-Hartford route extended to West Bend to serve employees of Hartford businesses residing in West Bend, Jackson, and Slinger areas Kewaskum-West Bend route extended to Campbellsport to serve employees of West Bend businesses residing in Campbellsport and West Bend areas  Shuttle service expanded over above routes to be bidirectional, with longer service hours to better serve first-shift work schedules  Shuttle service to address employer need for transit which could be used reduce employee travel by single-occupant vehicles for work purposes
	--	--	--	<u>Service Periods (weekdays only)</u> 5:30 a.m. to 7:30 a.m. 2:30 p.m. to 4:15 p.m. 10:30 p.m. to 1:00 a.m.	<u>Service Periods</u> Weekdays: 4:00 a.m. to 8:00 a.m. 2:30 p.m. to 8:00 p.m. 10:30 p.m. to 1:00 a.m. Weekends: 5:30 a.m. to 8:00 a.m. 5:30 p.m. to 8:00 p.m.
	--	--	--	<u>Service Levels (vehicle trips)</u> Two to six one-way trips in morning period Four to eight one-way trips in afternoon period Two to four one-way trips in evening period	<u>Service Levels (vehicle trips)</u> Weekdays: Three to seven one-way trips in morning period Three to 10 one-way trips in afternoon period Two to six one-way trips in evening period Weekends (Hartford, Germantown): Four one-way trips in morning period Four one-way trips in afternoon period

Table 55 (continued)

Transit Service Element	Alternative 1	Proposed Transit Service Improvement over Alternative 1			
		Alternative 2	Alternative 3	Alternative 4	Subalternative 4A
Employee Transportation Service (continued)	--	--	--	<b>Fares<sup>b</sup></b> No charge for passengers transferring to or from connecting commuter-bus service \$0.50 for passengers transferring to or from MCTS bus route at the Northridge Shopping Center	<b>Fares<sup>b</sup></b> No charge for passengers transferring to or from connecting commuter-bus service All other passengers: \$1.50

<sup>a</sup>Service provided until only 8:00 p.m. on weekdays and 7:00 p.m. on Saturdays during summer months of June through August.

<sup>b</sup>Fares shown reflect full cash fares per one-way trip unless otherwise noted. Reduced fares would continue to be offered where currently available and would be made available for new services.

Source: SEWRPC.

The basic assumptions concerning the factors affecting transit ridership and the required local funding levels which were applied in the analysis of each alternative are presented in Table 56.

#### Alternative 1: Maintain Existing Services

The first transit service alternative considered was simply to continue the existing transit services provided within the County during 1996. The principal transit service providers were identified within Chapter III of this report. Under this alternative, the publicly subsidized shared-ride taxicab systems serving the Cities of Hartford and West Bend would continue to comprise the only local transit service available to the general public within the County. Specialized transit services for priority population groups would continue to be offered by public and private agencies and organizations. A limited amount of special employee transit services for reverse-commute travel between Milwaukee and Washington County would continue to be provided through the Wisconsin Department of Workforce Development Employment Transit Assistance, or "Job Ride" program, and private employment agencies. However, Washington County and its local municipalities would not undertake any projects which would require the expenditure of public funds to subsidize any new or improved transit services.

The projected average annual ridership and operating expenditures over the planning period for maintaining the existing operations of the principal transit service providers within the County are shown in Table 57. Average annual ridership on all the identified services would be expected to total

about 294,000 one-way trips per year. Given no changes in the scope of the existing transit services provided by each provider, total operating expenses for the services may be expected to average about \$1,448,000 per year over the planning period. The cost of providing these services may be expected to continue to be supported by the fares charged for their use, by public funds from various Federal and State programs, and through private sources, all as currently provided in the budgets of the sponsoring public and private agencies. The total operating deficits, or subsidies, related to these services may be expected to average \$1,099,000 per year over the planning period. Funding from various Federal and State programs and from private sources may be expected to cover a substantial portion of the projected operating subsidies, with only about \$196,000 per year being directly provided by the local units of government within the County.

Some replacement capital equipment and facility needs would have to be met during the planning period to maintain the transit services concerned. Costs for the capital equipment and facilities used in providing employee transportation services and the Washington County Office on Aging specialized transportation service are included in the operating expenses charged by the private contract operators of these services. Projections of the capital equipment and facility needs and the associated expenditures for the other service providers are presented in Table 58. It was estimated that a total of almost \$794,000, or an average of about \$159,000 per year over the five-year planning period, would be required for the purchase of replacement operating equipment and facilities by the principal direct service providers. With funding from Federal and

Table 56

**ASSUMPTIONS CONCERNING BASIC FACTORS AFFECTING  
FORECAST TRANSIT RIDERSHIP AND REQUIRED LOCAL FUNDS**

Factor	Assumption
Economic Conditions	Modest growth in local economy resulting from continuation of current urban development trends within County
Motor Fuel Prices	Stable over planning period
Transit Operating Expenses, Passenger Revenues, Capital Costs	Presented in constant 1996 dollars
Transit Vehicles	<p>Shared-Ride Taxicab Service Additional vehicles needed for service start-up or expansion to be leased on a short-term basis until new vehicles purchased with public funds are delivered with lease costs reflected in operating expenses for first two years</p> <p>Commuter-Bus and Employee-Transit Services Vehicles to be provided by contract service operators with lease costs reflected in operating expenses</p>
Federal Transit Assistance	<p>Capital Assistance Sufficient funds continue to be available through existing programs to cover a base of 80 percent of total capital costs</p> <p>Operating Assistance Funds continue to be available through urbanized and nonurbanized area formula programs at 1996 levels, with potential funds limited to \$6,000 within urbanized portion of County and 30 percent of total operating expenses within remainder of County; additional funds potentially available in 1998 through Congestion Mitigation and Air Quality (CMAQ) Improvement Program on a competitive basis</p>
State Transit Assistance	<p>Operating Assistance Sufficient funds continue to be available at 1996 levels through State urban mass transit operating assistance program to fund 43 percent of operating expenses within urbanized portion of County and 39 percent of operating expenses within remainder of County; additional funds potentially available on a competitive basis through State Transportation Demand Management Program</p>

Source: SEWRPC

State programs and the private sector, it was estimated that a total of about \$96,000, or about \$19,200 per year, in direct local public funding would be required.

The total cost of maintaining the operation of the transit services concerned under Alternative 1 would, therefore, be estimated at approximately \$1,607,000 per year over the planning period. With funding from various Federal and State programs, from fares, and from private sources, about \$215,000 per year in direct funding would be required from the local units of government within the County.

**Alternative 2: Provide Expanded Shared-Ride Taxicab Service for only Major Urban Communities**

Alternative 2 would address deficiencies in the current local transit services within the County by expanding the availability of shared-ride taxicab service within the County. The service expansion would occur only within the major urban communities of the County, with increased service provided for the areas of urban development within, and immediately surrounding, the Cities of Hartford and Village of Slinger, the City of West Bend, and the Village of Germantown and Town of Richfield. The taxicab systems under this alternative would be community-based, serving all trips made

Table 57

**PROJECTED AVERAGE ANNUAL RIDERSHIP AND OPERATING COSTS FOR THE PRINCIPAL  
TRANSPORTATION SERVICES WITHIN WASHINGTON COUNTY UNDER ALTERNATIVE 1: 1998-2002**

Service Category	Service Provider	Annual Ridership (one-way trips)	Operating Costs and Revenues <sup>a</sup>			
			Annual Operating Expenses	Annual Operating Revenue	Total Annual Operating Deficit	Local Public Funds
General Public Transit Service	City of Hartford Taxi Service .....	19,000	\$ 114,000	\$27,000	\$ 87,000	\$ 8,300
	City of West Bend Taxi Service .....	83,000	399,000	110,000	289,000	13,700
	Subtotal	102,000	\$ 513,000	\$137,000	\$ 376,000	\$ 22,000
Employee Transportation Service	Job Ride Program .....	23,000	\$ 270,000	\$ 46,000	\$ 224,000	--
	JNA Temporary Services, Inc. ....	56,000	144,000	112,000	32,000	--
	Subtotal	79,000	\$ 414,000	\$158,000	\$ 256,000	--
Specialized Transportation Service	Washington County Office on Aging .....	12,000	\$ 166,000	\$ 8,000	\$ 158,000	\$ 69,100
	American Red Cross .....	7,000	41,000	18,000	23,000	--
	The Threshold, Inc. ....	90,000	296,000	20,000	276,000	105,000
	Lutheran Social Services .....	3,000	12,000	8,000	4,000	--
	Sentry Foods-Hartford .....	1,000	6,000	--	6,000	--
	Subtotal	113,000	\$ 521,000	\$ 54,000	\$ 467,000	\$174,100
--	Total	294,000	\$1,448,000	\$349,000	\$1,099,000	\$196,100

<sup>a</sup>Costs are expressed in constant 1996 dollars. The figures shown for the employee transportation service providers and for the Washington County Office on Aging service include both operating expenses and capital depreciation costs for the operating equipment used by the contract service operators.

Source: SEWRPC.

Table 58

**PROJECTED CAPITAL NEEDS AND COSTS FOR THE PRINCIPAL TRANSPORTATION  
SERVICES WITHIN WASHINGTON COUNTY UNDER ALTERNATIVE 1: 1998-2002**

Service Provider	Capital Equipment or Project	Number	Unit Cost <sup>a</sup>	Estimated Total Cost <sup>a</sup>	Estimated Local Public Cost <sup>a</sup>
City of Hartford Taxicab System	Wheelchair-accessible minivans .....	3	\$37,500	\$112,500	\$22,500
	New office space (400 sq. ft.) .....	--	65 per sq. ft.	26,000	5,200
	Subtotal	3	--	138,500	27,700
City of West Bend Taxicab System	Wheelchair-accessible full-size vans .....	3	35,000	105,000	21,000
	Nonaccessible seven-passenger minivans .....	6	20,000	120,000	24,000
	Subtotal	9	--	225,000	45,000
American Red Cross	Wheelchair-accessible full-size vans .....	3	35,000	105,000	--
	Automobile .....	1	20,000	20,000	--
	Subtotal	4	--	125,000	--
The Threshold, Inc.	Wheelchair-accessible full-size van .....	1	35,000	35,000	2,800
	Wheelchair-accessible large buses .....	5	50,000	250,000	20,000
	Subtotal	6	--	285,000	22,800
Lutheran Social Services.	Nonaccessible seven-passenger minivans .....	1	20,000	20,000	--
--	Total	23	--	\$793,500	\$95,500

<sup>a</sup>Costs are expressed in 1996 constant dollars. Capital costs for the operating equipment used by the contract service operators for the employee transportation services and for the Washington County Office on Aging service are included in the operating expenses shown in Table 57.

Source: SEWRPC.

Table 59

**PROPOSED OPERATING CHARACTERISTICS OF COMMUNITY-OPERATED  
SHARED-RIDE TAXICAB SYSTEMS UNDER ALTERNATIVE 2**

Operating Characteristics	Hartford-Slinger Taxicab System	West Bend Taxicab System	Germantown-Richfield Taxicab System
Service Administration .....	Public administration, with service provided through Hartford Recreation Department	Public administration, with service provided through contract with private transit operator	Public administration, with service provided through contract with private transit operator
Response Time .....	Maximum of 30 minutes	Maximum of 30 minutes	Maximum of 30 minutes
Service Periods			
Weekdays .....	6:00 a.m. to 9:00 p.m. <sup>a</sup>	6:00 a.m. to 10:00 p.m.	6:00 a.m. to 10:00 p.m.
Saturdays .....	8:00 a.m. to 8:00 p.m. <sup>a</sup>	6:00 a.m. to 10:00 p.m.	6:00 a.m. to 10:00 p.m.
Sundays .....	9:00 a.m. to 3:00 p.m.	8:00 a.m. to 4:00 p.m.	8:00 a.m. to 4:00 p.m.
Holidays .....	No Service	Sundays Only	Sundays Only
Vehicle Requirements			
For Peak Service			
Existing system .....	2	6	--
Proposed system .....	3	8	4
Additional vehicles needed .....	1	2	4
Vehicle Fleet Composition			
Wheelchair-accessible minivans .....	2	--	--
Nonaccessible seven-passenger minivans .....	1	4	3
Wheelchair-accessible full-size vans .....	--	2	1
Nonaccessible full-size vans .....	--	2	--
Passenger Fares			
Cash Fares per One-Way Trip <sup>b</sup>	<u>Adult</u> <u>Elderly/ Disabled</u>	<u>Adult</u> <u>Student</u> <u>Elderly/ Disabled</u>	<u>Adult</u> <u>Student</u> <u>Elderly/ Disabled</u>
Five miles or less .....	\$1.50      \$1.25	\$2.00      \$1.50      \$1.00	\$2.00      \$1.50      \$1.25
Over five miles .....	\$3.50      \$2.20	\$3.50      \$2.60      \$1.75	\$3.50      \$2.60      \$2.20
For travel outside service area .....	\$1.00 Per Mile	Service Not Available	Service Not Available

<sup>a</sup>During June through August, service would be provided only until 8:00 p.m. on weekdays and 7:00 p.m. on Saturdays.

<sup>b</sup>Special convenience fares which provide for discounts from regular cash fares would continue to be available.

Source: SEWRPC

within and between the sponsoring communities, as long as both trip ends were within the primary taxicab service areas. Generalized definitions of the primary taxicab service areas proposed under this alternative are shown on Map 18. The service areas shown should be refined in subsequent facilities planning efforts to relate properly the service area boundaries to readily identifiable geographic features, such as major streets and highways, should this alternative ultimately be recommended for implementation.

**Operating Characteristics:** The responsibility for developing and implementing the expanded and new taxicab services would be placed on the respective local communities. The City of Hartford would be responsible for expanding its existing system to serve travel made within and between the Village of Slinger and immediately surrounding areas in the Towns of Hartford and Polk. Similarly, the City of West Bend would be responsible for expanding

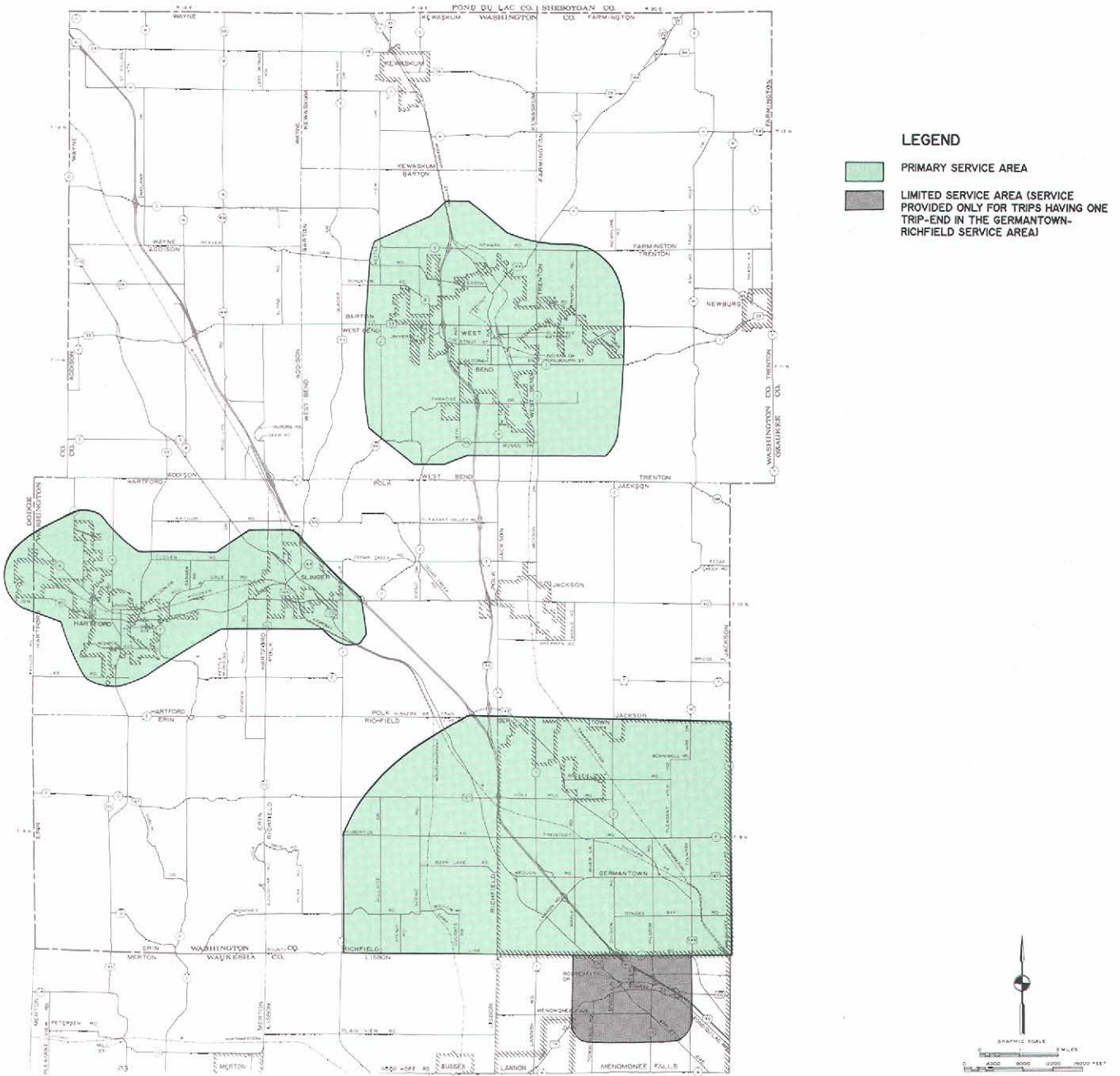
its existing system to serve travel made within and between immediately surrounding areas in the Towns of West Bend, Barton, and Trenton. The Village of Germantown would act to create the shared-ride taxicab systems for the Germantown-Richfield area and act as lead community and formal public sponsor of the taxicab system. Intergovernmental agreements would need to be executed between the lead community and the other communities within the each proposed service area to ensure an equitable distribution of the costs entailed in operating the taxicab systems.

The basic operating characteristics of the public taxicab systems proposed under this alternative are presented in Table 59. Aside from an expanded service area and a modified fare structure, no significant changes would be made the existing operating characteristics of the Hartford and West Bend taxicab systems. The modified fare structure for the existing systems would distance-based, with



Map 18

POTENTIAL SERVICE AREAS FOR COMMUNITY SHARED-RIDE  
TAXICAB SYSTEMS PROPOSED UNDER ALTERNATIVE 2



Source: SEWRPC.

fares for trips of over five miles priced between 75 and 133 percent higher than existing fares. Fares for trips of five miles or less, which represent most trips currently made on the existing systems, would be the same as existing fares. The operating characteristics for the Germantown-Richfield taxicab system would be modeled on the West Bend taxicab system. This would include contracting for the

operation of the taxicab service with a private transportation company selected on the basis of competitive bids. In all three areas, taxicab service would be available seven days a week, excluding most holidays.

Under this alternative, one additional vehicle to supplement the two existing vehicles would be

Table 60

**RIDERSHIP AND FINANCIAL PERFORMANCE OF COMMUNITY-OPERATED  
SHARED-RIDE TAXICAB SYSTEMS WITHIN WASHINGTON COUNTY UNDER ALTERNATIVE 2**

Operating Characteristic	1996 Estimated			Projected <sup>a</sup>							
				1998				2002			
	Hartford Taxicab System	West Bend Taxicab System	County Total	Hartford- Slinger Taxicab System	Greater West Bend Taxicab System	Germantown- Richfield Taxicab System	County Total	Hartford- Slinger Taxicab System	Greater West Bend Taxicab System	Germantown- Richfield Taxicab System	County Total
<b>Service Provided</b>											
Total annual vehicle-hours . . . .	4,870	22,260	27,130	8,900	29,200	14,000	52,100	9,500	30,000	15,000	54,500
<b>Annual Ridership</b> . . . . .	19,000	83,000	102,000	27,000	96,000	32,000	155,000	28,000	99,000	39,000	166,000
<b>Annual Operating Costs and Revenues<sup>b</sup></b>											
Operating costs . . . . .	\$114,000	\$399,000	\$513,000	\$200,000	\$524,000	\$272,000	\$996,000	\$207,000	\$517,000	\$263,000	\$987,000
Passenger revenues . . . . .	27,000	110,000	137,000	45,000	137,000	51,000	233,000	47,000	140,000	62,000	249,000
Total operating deficit . . . . .	87,000	289,000	376,000	155,000	387,000	221,000	763,000	160,000	377,000	201,000	738,000
<b>Potential Sources of Public Funds</b>											
<b>Federal</b>											
FTA Section 5307 <sup>c</sup>	--	--	--	--	--	\$ 6,000	\$ 6,000	--	--	\$ 6,000	\$ 6,000
FTA Section 5311 <sup>d</sup>	\$ 34,200	\$119,700	\$153,900	\$ 60,000	\$157,200	--	217,300	\$ 62,100	\$155,100	--	217,200
Subtotal	\$ 34,200	\$119,700	\$153,900	\$ 60,000	\$157,200	\$ 6,000	\$223,300	\$ 62,100	\$155,100	\$ 6,000	\$223,200
<b>State</b>											
Urban public transit operating assistance <sup>e</sup> . . . .	\$ 44,500	\$155,600	\$200,100	\$ 78,000	\$204,400	\$117,000	\$399,600	\$ 80,700	\$201,600	\$113,100	\$395,400
Local (City, Village, Town) . . . . .	8,300	13,700	22,000	17,000	25,400	98,000	140,100	17,200	20,300	81,900	119,400
<b>Total</b>	\$ 87,000	\$289,000	\$376,000	\$155,000	\$387,000	\$221,000	\$763,000	\$160,000	\$377,000	\$201,000	\$738,000
<b>Service Effectiveness and Efficiency</b>											
Annual passengers per vehicle-hour . . . . .	3.9	3.7	3.8	3.0	3.3	2.3	3.0	2.9	3.3	2.6	3.0
Total expense per passenger . . . . .	\$6.00	\$4.81	\$5.03	\$7.41	\$5.46	\$8.50	\$6.43	\$7.39	\$5.22	\$6.74	\$5.95
Total revenue per passenger . . . . .	1.42	1.33	1.34	1.67	1.43	1.59	1.50	1.68	1.41	1.59	1.50
Total deficit per passenger . . . . .	4.58	3.48	3.69	5.74	4.03	6.91	4.92	5.71	3.81	5.15	4.45
Percent of expenses recovered through operating revenues . .	23.7	27.6	26.7	22.5	26.1	18.8	23.4	22.7	27.1	23.6	25.2

<sup>a</sup> Assumes taxi service would be provided with the operating characteristics shown in Table 59.

<sup>b</sup> All costs and revenues presented in constant 1996 dollars.

<sup>c</sup> Reflects Washington County's total potential share of \$6,000 in FTA Section 5307 Urbanized Area Formula Program operating assistance based on the funds allocated to the Milwaukee urbanized area in 1996. If any of the urbanized area transit services proposed under other alternatives would also be implemented, the limited funds available would need to be allocated among the eligible transit services.

<sup>d</sup> Assumes sufficient Federal transit operating assistance would be available through the FTA Section 5311 Nonurbanized Area Formula Program to cover 30 percent of the operating expenses of the shared-ride taxicab service operated within the portions of Washington County outside the Milwaukee urbanized area.

<sup>e</sup> Assumes that sufficient State transit operating assistance would be available through the State Urban Mass Transit Operating Assistance Program to cover up to 39 percent of the operating expenses of the shared-ride taxicab services operated within the nonurbanized portion of the County, and up to 43 percent of the operating expenses of the shared-ride taxicab services operated within the urbanized portion of the County.

Source: SEWRPC.

needed for the Hartford-Slinger taxicab system. Two additional vehicles would be needed for the taxicab system serving the greater West Bend area, to supplement six existing vehicles. A total of four vehicles would be needed to provide the service within the Germantown-Richfield service area. As a result, a total of 15 vehicles would be needed to provide service within the three service areas.

**Ridership and Costs:** Projections of the service levels, ridership, and financial performance of the shared-ride taxicab services proposed under this alternative are presented in Table 60. These assume that proposed expansion of taxicab services would be implemented at the beginning of calendar 1998, which represents the earliest that State and Federal transit operating assistance funds may be expected

Table 61

**PROJECTED CAPITAL NEEDS AND COSTS FOR THE COMMUNITY-OPERATED SHARED-RIDE TAXICAB SYSTEMS WITHIN WASHINGTON COUNTY UNDER ALTERNATIVE 2: 1998-2002**

Capital Equipment	Number	Unit Cost <sup>a</sup>	Hartford-Slinger Taxicab System	West Bend Taxicab System	Germantown-Richfield Taxicab System	County Total
<b>Replacement Taxicab Equipment Required under Alternative 1 to Maintain Existing Services</b>						
Wheelchair accessible minivans .....	3	\$37,500	\$112,500	--	--	\$112,500
Nonaccessible seven-passenger minivans .....	6	20,000	--	\$120,000	--	120,000
Wheelchair accessible full-size vans .....	3	35,000	--	105,000	--	105,000
New office space (400 sq. ft.) .....	--	\$65 per sq. ft.	26,000	--	--	26,000
Subtotal	12	--	\$138,500	\$225,000	--	\$363,500
<b>Additional Equipment Required to Provide New or Expanded Shared-Ride Taxicab Services</b>						
Nonaccessible seven-passenger minivans .....	4	\$20,000	\$ 20,000	--	\$ 60,000	\$ 80,000
Nonaccessible fourteen-passenger full-size vans .....	2	23,000	--	\$ 46,000	--	46,000
Wheelchair accessible full-size vans .....	1	35,000	--	--	35,000	35,000
Subtotal	7	--	\$ 20,000	\$ 46,000	\$ 95,000	\$161,000
<b>Total</b>	<b>19</b>	<b>--</b>	<b>\$158,500</b>	<b>\$271,000</b>	<b>\$ 95,000</b>	<b>\$524,500</b>
Federal Share of Costs <sup>b</sup> .....	--	--	\$126,800	\$216,800	\$ 76,000	\$419,600
Local Share of Costs .....	--	--	31,700	54,200	19,000	104,900

<sup>a</sup>Costs are expressed in constant 1996 dollars.

<sup>b</sup>Assumes 80 percent of the total capital costs of the vehicles needed to provide general public shared-ride taxicab service would be funded through Federal Transit Administration grant programs.

Source: SEWRPC.

to become available to help defray the attendant operating costs. With the expanded taxicab services, taxicab service levels within the County, as measured by vehicle-hours, would be expected to double over the planning period, from about 27,100 vehicle-hours Countywide in 1996 to about 54,500 vehicle-hours by 2002. Annual ridership on the proposed systems would be expected to increase from a total of about 102,000 revenue passengers Countywide in 1996 to about 166,000 revenue passengers by 2002, or by about 63 percent. Total operating expenses would be expected to increase from about \$513,000 Countywide in 1996 to about \$987,000 by 2002, or by about 92 percent; total operating deficits would be expected to increase from about \$376,000 in 1996 to about \$738,000 by 2002, or by about 96 percent; and local operating deficits would be expected to increase from about \$22,000 in 1996 to about \$119,000 by 2002, or by about 440 percent.

The projected capital costs for the operating equipment needed to provide the expanded taxicab services proposed under this alternative are presented in Table 61. The total cost of the equipment

needed Countywide may be expected to approximate \$525,000, including about \$364,000 for replacement equipment for by the existing Hartford and West Bend systems and about \$161,000 for the proposed service expansion. Assuming that 80 percent of these costs could be funded through Federal transit capital assistance programs, the local funding required Countywide would total about \$105,000.

**Other Impacts:** The expansion of the Hartford and West Bend taxicab systems and the creation of a new Germantown-Richfield taxicab system proposed under this alternative would be expected to impact the Washington County Office on Aging's specialized transportation program for the elderly and disabled. It may be expected that some trips currently made using the County's specialized transportation service would be made on the expanded general public taxicab services, including the vast majority of the trips currently made on the County service in the program's Germantown service area, which would be served by the proposed new Germantown-Richfield taxicab service for the

Table 62

**RIDERSHIP AND FINANCIAL PERFORMANCE OF WASHINGTON COUNTY OFFICE ON  
AGING SPECIALIZED TRANSPORTATION SERVICE ASSUMING SERVICE REDUCTIONS  
IN RESPONSE TO EXPANDED TAXICAB SERVICES UNDER ALTERNATIVE 2: 1998-2002**

Operating Characteristic	Projected	
	1996 with Existing Program	1998-2002 with Reduced Program
Service Provided		
Total Annual Vehicle-Hours .....	6,900	5,200
Annual Ridership .....	12,000	9,000
Annual Operating Costs and Revenues <sup>a</sup>		
Operating costs .....	\$166,000	\$127,000
Passenger revenues .....	8,000	6,000
Total operating deficit .....	158,000	121,000
Potential Sources of Public Funds		
State funds <sup>b</sup> .....	\$ 88,900	\$ 88,900
Local funds .....	69,100	32,100
Total	\$158,000	\$121,000
Service Effectiveness and Efficiency		
Annual passengers per vehicle-hour .....	1.7	1.7
Total expense per passenger .....	\$13.83	\$14.11
Total revenue per passenger .....	0.67	0.67
Total deficit per passenger .....	13.17	13.44
Percent of expenses recovered through operating revenues .....	4.8	4.7

<sup>a</sup>All costs and revenues presented in constant 1996 dollars.

<sup>b</sup>Reflects funds provided through the State 85.21 specialized transportation assistance program for counties.

Source: SEWRPC.

general public. In total, it was estimated that about 3,000 one-way trips, representing about 25 percent of the total annual ridership on the County's specialized transportation service, would be made, instead, on the expanded taxicab services.

Faced with this probable ridership loss, the County could chose to redirect service under the program to other areas of need identified by County staff. As an alternative, the County could also chose to offset expected ridership losses on the specialized transportation service with service reductions. Table 62 presents projections of the service levels, ridership, and financial performance of the County's specialized transportation program, assuming reductions to the program would be made in response to expanded taxicab services proposed under this alternative. The reductions assumed eliminating about 90 percent of the service currently provided in

the program's Germantown service area and about 10 percent of the service provided in the program's Hartford and West Bend service areas. With these reductions, it was estimated that the County could reduce the operating expenses for the program from about \$166,000 to about \$127,000 per year, or by about 23 percent; the operating deficits from about \$158,000 to about \$121,000 per year, or by about 23 percent; and the County share of the operating deficit from about \$69,000 to about \$32,000 per year, or by about 53 percent.

**Alternative 3: Provide Countywide  
Shared-Ride Taxicab Service**

Alternative 3 would address deficiencies in the current local transit services within the County by expanding the availability of shared-ride taxicab service to the entire County. This would be accomplished by converting the existing specialized

transportation service for elderly and disabled individuals provided by the Washington County Office on Aging into a shared-ride taxicab service open to the general public. This Countywide system would supplant the existing taxicab systems operated by the Cities of Hartford and West Bend.

**Operating Characteristics:** Under this alternative the County would act as the lead agency in establishing publicly subsidized Countywide shared-ride taxicab services. It is envisioned that the Countywide system would include urban taxicab subsystems, similar to those proposed under Alternative 2, which would focus on serving trips made by the general public within the principal areas of urban development within the County. In addition to these urban taxicab services, the County would also provide shared-ride taxicab service both for trips made between locations within the major urban areas of the County and between locations in the rural portions of the County. The Countywide system would also serve trips made between the Germantown-Richfield area and the northern portion of the Village of Menomonee Falls, Waukesha County, as proposed under Alternative 2, and would provide limited service between the City of Hartford and portions of Dodge County, as currently provided by the Hartford taxicab system. The taxicab services would be operated in a coordinated manner to allow any surplus capacity in one area to be used to provide service in another area. Since the majority of the trips made by elderly and disabled individuals within the County would be made on the proposed Countywide shared-ride taxicab system, the County's elderly and disabled specialized transportation program could be significantly reduced, as described in a following section.

The basic operating characteristics of the Countywide taxicab system proposed under this alternative are presented in Table 63. The operating characteristics of the Countywide service would be modeled largely after those for the existing West Bend taxicab system. This would include contracting with a private transportation company, selected on the basis of competitive bids, for the operation of the taxicab service. Taxicab service would be available seven days a week, excluding holidays not falling on a Sunday. In the Hartford area, the proposed days and hours of operation would represent a modest increase in service over that offered by the existing Hartford taxicab system.

The fare structure for the Countywide service would use distance-based fares, increasing every five

miles of travel. Fares for trips of five miles or less, which represents most trips currently made on the existing systems, would be represent a "blend" of the fares charged for the existing taxicab services or for the County's specialized transportation service. The proposed adult fare of \$2.00 per one-way trip would be the same as the existing adult cash fare on the West Bend taxicab system, but \$0.50 higher than the adult cash fare of \$1.50 per one-way trip on the Hartford taxicab system. Similarly, the proposed elderly and disabled fare of \$1.25 per one-way trip would be the same as the existing elderly and disabled fare on the Hartford taxicab system and on the County's specialized transportation service, but \$0.25 higher than the current elderly and disabled cash fare of \$1.00 per one-way trip on the West Bend taxicab system. The elderly and disabled fares for cross-county trips of over 10 miles would also be somewhat higher than the maximum fare of \$2.50 per one-way trip currently charged for such trips on the County's specialized transportation service.

A total of 20 vehicles would be needed to operate the Countywide system. This would include the 15 vehicles identified under Alternative 2 needed to provide service within the principal urban service areas plus five vehicles to provide service for trips between locations in the County's major urban areas and between locations in the rural portions of the County. It was assumed that the eight vehicles used by the Cities of Hartford and West Bend taxicab systems would be acquired by the County to operate the Countywide taxicab system, leaving a total of 12 vehicles to be acquired for the service.

**Ridership and Costs:** Projections of the service levels, ridership, and financial performance of the shared-ride taxicab services proposed under this alternative are presented in Table 64. The projections assume that proposed Countywide taxicab service would be implemented at the beginning of calendar 1998, which represents the earliest that State and Federal transit operating assistance funds may be expected to become available to help defray the attendant operating costs. With a Countywide system, taxicab service levels within the County, as measured by vehicle-hours, would be expected increase by about 168 percent over the planning period, from about 27,100 vehicle hours Countywide in 1996 to about 72,700 vehicle hours by 2002. Annual ridership on the proposed systems would be expected to increase from a total of about 102,000 revenue passengers Countywide in 1996 to about 179,000 revenue passengers by 2002,

Table 63

**PROPOSED OPERATING CHARACTERISTICS OF COUNTYWIDE  
SHARED-RIDE TAXICAB SYSTEM UNDER ALTERNATIVE 3**

Operating Characteristic	Proposed Under Countywide System		
Service Administration .....	Public administration with service provided through contract with private transit operator		
Response Time .....	Maximum of 30 minutes within Hartford-Slinger, West Bend and Germantown-Richfield areas; maximum of 60 minutes within all other areas		
Service Periods			
Weekdays .....	6:00 a.m. to 10:00 p.m.		
Saturdays .....	6:00 a.m. to 10:00 p.m.		
Sundays .....	8:00 a.m. to 4:00 p.m.		
Holidays .....	Sundays Only		
Vehicle Requirements			
For Peak Service			
With existing systems .....	8		
With proposed system .....	20		
Additional vehicles needed .....	12		
Vehicle Fleet Composition			
Wheelchair-accessible minivans .....	2		
Nonaccessible seven-passenger minivans .....	8		
Wheelchair-accessible full-size vans .....	4		
Nonaccessible full-size vans .....	2		
Automobiles .....	4		
Passenger Fares			
Cash Fares per One-Way Trip <sup>a</sup>	<u>Adult</u>	<u>Student</u>	<u>Elderly/ Disabled</u>
Five miles or less .....	\$2.00	\$1.50	\$1.25
5.1 to 10.0 miles .....	3.50	2.60	2.20
10.1 to 15.0 miles .....	4.75	3.55	2.95
15.1 to 20.0 miles .....	5.75	4.70	3.60
over 20.0 miles .....	6.50	4.90	4.05
For travel outside service area .....	\$1.00 per mile		

<sup>a</sup>Special convenience fares which provide for discounts from regular cash fares would continue to be available.

Source: SEWRPC

or by about 75 percent. Total operating expenses would be expected to increase from about \$513,000 Countywide in 1996 to about \$1,288,000 by 2002, or by about 151 percent. The total operating deficit would be expected to increase from about \$376,000 in 1996 to about \$984,000 by 2002, or by about 162 percent. The local share of the operating deficit would be expected to increase from about \$22,000 in 1996 to about \$158,000 by 2002, or by about 618 percent.

The projected capital costs for the operating equipment needed to provide the expanded taxicab services proposed under this alternative are presented in Table 65. The total cost of the equipment

needed Countywide may be expected to approximate \$606,000, including about \$338,000 for replacement of equipment acquired from the existing Hartford and West Bend systems and about \$268,000 for additional equipment needed for the proposed expansion to provide Countywide service. Assuming that 80 percent of these costs could be funded through Federal transit capital assistance programs, the local funding required would total about \$121,000.

Other Impacts: This alternative envisions that the majority of the trips made by elderly and disabled individuals within the County would be made on the proposed Countywide shared-ride taxicab sys-



Table 64

**RIDERSHIP AND FINANCIAL PERFORMANCE OF COUNTYWIDE  
SHARED-RIDE TAXICAB SYSTEM UNDER ALTERNATIVE 3: 1998-2002**

Operating Characteristic	1996 Estimated			Projected <sup>a</sup>					
				1998			2002		
	Hartford Taxicab System	West Bend Taxicab System	County Total	Nonurbanized Area Taxicab Service	Urbanized Area Taxicab Service	County Total	Nonurbanized Area Taxicab Service	Urbanized Area Taxicab Service	County Total
Service Provided									
Total Annual Vehicle Hours .....	4,870	22,260	27,130	55,400	14,000	69,400	57,700	15,000	72,700
Annual Ridership .....	19,000	83,000	102,000	133,000	32,000	165,000	140,000	39,000	179,000
Annual Operating Costs and Revenues <sup>b</sup>									
Operating costs .....	\$114,000	\$399,000	\$513,000	\$1,045,000	\$272,000	\$1,317,000	\$1,025,000	\$263,000	\$1,288,000
Passenger revenues .....	27,000	110,000	137,000	230,000	51,000	281,000	242,000	62,000	304,000
Total operating deficit .....	87,000	289,000	376,000	815,000	221,000	1,036,000	783,000	201,000	984,000
Potential Sources of Public Funds									
Federal									
FTA Section 5309 <sup>c</sup> .....	--	--	--	--	\$ 6,000	\$ 6,000	--	\$ 6,000	\$ 6,000
FTA Section 5311 <sup>d</sup> .....	\$ 34,200	\$119,700	\$153,900	\$ 313,500	--	313,500	\$ 307,500	--	307,500
Subtotal	\$ 34,200	\$119,700	\$153,900	\$ 313,500	\$ 6,000	\$ 319,500	\$ 307,500	\$ 6,000	\$ 313,500
State									
Urban public transit operating assistance <sup>e</sup> .....	\$ 44,500	\$155,600	\$200,100	\$ 407,600	\$117,000	\$ 524,500	\$ 399,800	\$113,100	\$ 512,900
County .....	8,300	13,700	22,000	93,900	98,000	192,000	75,700	81,900	157,600
Total	\$ 87,000	\$289,000	\$376,000	\$ 815,000	\$221,000	\$1,036,000	\$ 783,000	\$201,000	\$ 984,000
Service Effectiveness and Efficiency									
Annual passengers per vehicle-hour .....	3.9	3.7	3.8	2.4	2.3	2.4	2.4	2.6	2.5
Total expense per passenger .....	\$6.00	\$4.81	\$5.03	\$7.86	\$8.50	\$7.98	\$7.32	\$6.74	\$7.20
Total revenue per passenger .....	1.42	1.33	1.34	1.73	1.59	1.70	1.73	1.59	1.70
Total deficit per passenger .....	4.58	3.48	3.69	6.13	6.91	6.28	5.59	5.15	5.50
Percent of expenses recovered through operating revenues .....	23.7	27.6	26.7	22.0	18.8	21.3	23.6	23.6	23.6

<sup>a</sup>Assumes taxi service would be provided with the operating characteristics shown in Table 63.

<sup>b</sup>All costs and revenues presented in constant 1996 dollars.

<sup>c</sup>Reflects Washington County's total potential share of \$6,000 in FTA Section 5307 Urbanized Area Formula Program operating assistance based on the funds allocated to the Milwaukee urbanized area in 1996. If any of the urbanized area transit services proposed under other alternatives would also be implemented, the limited funds available would need to be allocated among the eligible transit services.

<sup>d</sup>Assumes sufficient Federal transit operating assistance would be available through the FTA Section 5311 Nonurbanized Area Formula Program to cover 30 percent of the operating expenses of the shared-ride taxicab service operated within the portions of Washington County outside the Milwaukee urbanized area.

<sup>e</sup>Assumes that sufficient State transit operating assistance would be available through the State Urban Mass Transit Operating Assistance Program to cover up to 39 percent of the operating expenses of the shared-ride taxicab services operated within the nonurbanized portion of the County and up to 43 percent of the operating expenses of the shared-ride taxicab services operated within the urbanized portion of the County.

Source: SEWRPC.

tem. The County could chose to redirect service under the program to other areas of need identified by County staff. However, a substantial reduction in the County's elderly and disabled specialized transportation program would also warrant consideration. With the availability of Countywide taxicab service for routine trips, the County's specialized

transportation program could be reduced to providing service only for group trips, such as trips to and from nutrition sites or for recreational activities, for adult day care programs, and for individuals needing special door-through-door assistance which would not be provided by taxicab operators. These services would be the same as

Table 65

**PROJECTED CAPITAL NEEDS AND COSTS FOR COUNTYWIDE  
SHARED-RIDE TAXICAB SYSTEM UNDER ALTERNATIVE 3: 1998-2002**

Capital Equipment	Number	Unit Cost <sup>a</sup>	County Total
Replacement Taxicab Equipment Required under Alternative 1 for Existing Taxicab Operations			
Wheelchair-accessible minivans .....	3	\$37,500	\$112,500
Nonaccessible seven-passenger minivans .....	6	20,000	120,000
Wheelchair-accessible full-size vans .....	3	35,000	105,000
Subtotal	12	--	\$337,500
Additional Equipment Required to Provide New Countywide Shared-Ride Taxicab Service			
Nonaccessible seven-passenger minivans .....	4	\$20,000	\$ 80,000
Nonaccessible fourteen-passenger full-size vans .....	2	23,000	46,000
Wheelchair-accessible full-size vans .....	2	35,000	70,000
Automobiles .....	4	18,000	72,000
Subtotal	12	--	\$268,000
Total	24	--	\$605,500
Federal Share of Costs <sup>b</sup> .....	--	--	\$484,400
Local Share of Costs .....	--	--	121,100

<sup>a</sup>Costs are expressed in constant 1996 dollars.

<sup>b</sup>Assumes 80 percent of the total capital costs of the vehicles needed to provide shared-ride taxicab service to the general public would be funded through Federal Transit Administration grant programs.

Source: SEWRPC.

those currently provided by the County program within the existing Hartford and West Bend taxicab service areas.

Table 66 presents projections of the service levels, ridership, and financial performance of the County's specialized transportation program, assuming reductions to the program would be made in response to the Countywide taxicab service proposed under this alternative. The reductions assumed eliminating about 75 percent of the service currently provided under the program Countywide. With this reduction, it was estimated that the ridership on County's specialized transportation service would decrease from about 12,000 passengers per year to about 2,500 passengers per year, or by about 79 percent. The operating expenses for the program would be reduced from about \$166,000 to about \$44,000 per year, or by about 73 percent; the operating deficits from about \$158,000 to

about \$42,000 per year, or by about 73 percent; and the County share of the operating deficit from about \$69,000 to about \$7,000 per year, or by about 90 percent.

**Alternative 4: Provide Employment-Oriented Commuter Transit Services**

Alternative 4 would address the need for transit services to serve work-commutation travel between Washington and Milwaukee Counties. The alternative proposes that a limited level of commuter-bus service be provided between park-ride lots in Washington County and central Milwaukee County to serve weekday work travel. The needs of Washington County employers for employee transit services to help them fill job vacancies would be specifically addressed by providing for commuting between Milwaukee County and Washington County. Specially designed shuttle transit services, which would connect with the proposed commuter-

Table 66

**RIDERSHIP AND FINANCIAL PERFORMANCE OF WASHINGTON COUNTY OFFICE  
ON AGING SPECIALIZED TRANSPORTATION SERVICE ASSUMING SERVICE REDUCTIONS  
IN RESPONSE TO COUNTYWIDE TAXICAB SYSTEM UNDER ALTERNATIVE 3: 1998-2002**

Operating Characteristic	Projected	
	1996 with Existing Program	1998-2002 with Reduced Program
Service Provided		
Total Annual Vehicle-Hours .....	6,900	1,500
Annual Ridership .....	12,000	2,500
Annual Operating Costs and Revenues <sup>a</sup>		
Operating costs .....	\$166,000	\$ 44,000
Passenger revenues .....	8,000	1,700
Total operating deficit .....	158,000	42,300
Potential Sources of Public Funds		
State funds <sup>b</sup> .....	\$ 88,900	\$ 35,200
Local funds .....	69,100	7,100
Total	\$158,000	\$ 42,300
Service Effectiveness and Efficiency		
Annual passengers per vehicle-hour .....	1.7	1.7
Total expense per passenger .....	\$13.83	\$17.60
Total revenue per passenger .....	0.67	0.68
Total deficit per passenger .....	13.17	16.92
Percent of expenses recovered through operating revenues .....	4.8	3.9

<sup>a</sup>All costs and revenues presented in constant 1996 dollars.

<sup>b</sup>Reflects funds provided through the State 85.21 specialized transportation assistance program for counties.

Source: SEWRPC.

bus service or with other Milwaukee County Transit System (MCTS) bus routes, would be provided for this purpose. A subalternative proposing expanded shuttle transit services which could be used by employees residing within Washington County and would be directed toward reducing work-related employee travel by single-occupant vehicles, is also presented at the end of this section.

**Commuter-Bus Route:** The commuter-bus service proposed under this alternative would represent the first stage of the commuter-bus service recommended under regional transportation system plan for the design year 2010, adopted by the Regional Planning Commission in December 1994 and by the Washington County Board of Supervisors on June 28, 1995.<sup>1</sup> The regional plan recommends that commuter-bus service be provided in the rapid "freeway flyer" mode between the Milwaukee central business district (CBD) and three public transit

stations in central Washington County over a single route. The commuter service was added to the final plan at the specific request of officials of the City of West Bend.

The alignment of the commuter-bus routes proposed under Alternative 4 and the locations of the two park-ride lots proposed to be served by the routes within Washington County are shown on Map 19. The routes would originate in the central business district of the City of West Bend at a stop located on Island Avenue between Water Street and Washington Avenue and operate with limited stops over

<sup>1</sup>See SEWRPC Planning Report No. 41, *A Regional Transportation System Plan for Southeastern Wisconsin: 2010*, December 1994.



Main Street and Paradise Drive in the City to a proposed park-ride lot in the vicinity USH 45 and Paradise Drive, within, or just outside, the City of West Bend. A new park-ride facility at this location, which has long been recommended in the adopted regional transportation system plan, would be designed and constructed under this alternative to accommodate bus service. Buses operating over the routes would also serve an existing carpool parking lot located at STH 60 and CTH P, in the Village of Jackson, which would ultimately need to be reconstructed to allow for internal bus circulation. Until reconstruction of this lot was completed, buses operating over the routes would need to drop off and pick up passengers at a temporary stop sited on CTH P at the entrance to the existing facility. Buses would operate nonstop over USH 45 between the STH 60 and CTH P park-ride lot and Milwaukee County.

Bidirectional commuter-bus service would be provided over the routes to serve both Washington County residents commuting to jobs in the Milwaukee central business district (CBD) and Milwaukee County residents commuting to job locations in Washington County. In order to serve these different markets most conveniently, the proposed routes would have different alignments in Milwaukee County. To serve passengers commuting to and from jobs in the Milwaukee CBD, one route would operate nonstop over USH 45 and IH 94 between the STH 60 and CTH P (Jackson) park-ride lot and the Milwaukee CBD. In the Milwaukee CBD, buses would operate over Wisconsin Avenue between N. 10th Street and N. Cass Street to drop off and pick up passengers and to allow connections with other MCTS bus routes serving the downtown area. To serve passengers commuting to and from jobs in Washington County, a second route would operate over major arterial streets within central Milwaukee County, with buses making limited stops along S. 6th Street, W. Greenfield Avenue, N. and S. 27th Street, and W. Fond du Lac Avenue. This routing would provide for the best access to the route for the potential Milwaukee County labor pool, allowing for direct-walk access and connections with numerous intersecting bus routes serving central Milwaukee County. In addition, buses operating over this route at its northern terminus in the City of West Bend would deviate from the regular route to drop off and pick up passengers at major employers located near the route terminus including the West Bend Company, thereby supplanting the service currently provided to company employees by an employment agency. Other companies, such as the Serigraph, Inc., Indiana

Avenue plant and the Gehl Corporation plant, could also be directly served if sufficient demand existed.

The County would act as the lead agency in establishing the publicly subsidized commuter-bus service which would be provided under contract by an existing transit operator selected on the basis of competitive bids. The contract transit operator would be responsible for all aspects of service provision, including the necessary operating equipment. This arrangement would be similar to that currently used by Waukesha County, which contracts with two existing transit operators, the publicly owned and operated Milwaukee County Transit System and the privately owned Wisconsin Coach Lines, Inc., to provide commuter-bus service for Waukesha County. The MCTS would represent a logical contract service operator for the proposed commuter routes because it currently operates 10 rapid-transit "freeway flyer" bus routes within Milwaukee County and the proposed route would be designed to provide connections with other MCTS local and express bus routes serving central Milwaukee County. The existing private transit operators with which Waukesha County contracts for rapid-transit bus services, or with which Washington County contracts with for specialized transportation service, would also represent potential contract service operators for the Washington County commuter-bus service.

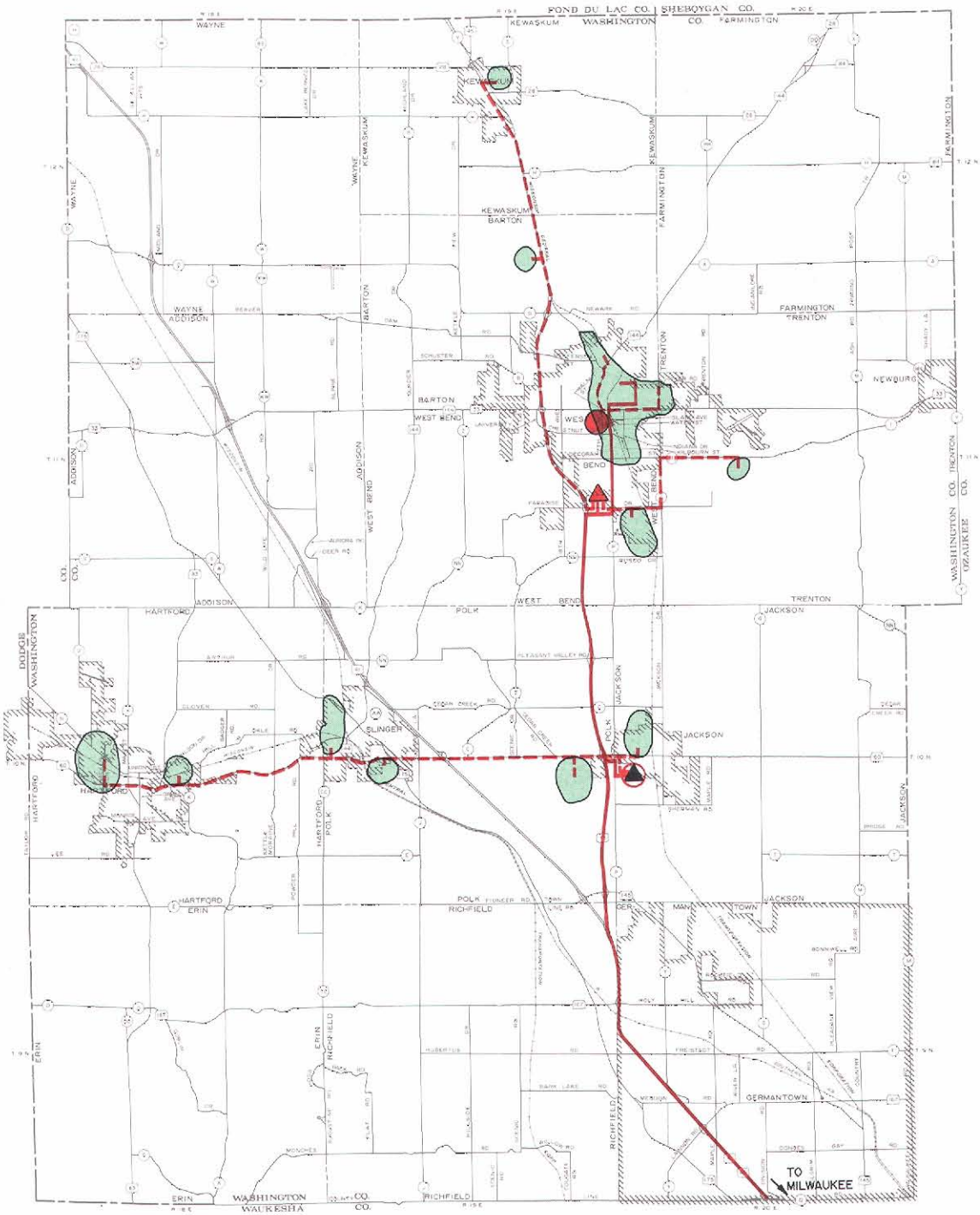
**Employee-Shuttle Transit Routes:** Special shuttle-transit routes would also be provided under this alternative to assist County employers in filling job vacancies. The proposed shuttle routes would be designed to connect with the proposed commuter-bus route operating through central Milwaukee County at the two park-ride lots within Washington County and with major express and local bus routes of the MCTS at the Northridge Shopping Center in Milwaukee County. The shuttle services would serve individuals traveling between Milwaukee County and Washington County job locations and would be developed cooperatively with Washington County employers. To ensure the most cost-effective operation of shuttle services, it was envisioned that the proposed shuttle routes would, at least initially, focus on serving the major employment concentrations located within the developed urban portions of the County.

This alternative proposes the development of up to five shuttle routes to connect with the proposed commuter-bus route serving central Milwaukee County, as shown on Map 20. These routes would be redefined as necessary to meet the needs of



Map 20

**COMMUTER-BUS SHUTTLE ROUTES AND SERVICE AREAS PROPOSED  
UNDER ALTERNATIVE 4 FOR WASHINGTON COUNTY EMPLOYMENT CENTERS**



**LEGEND**

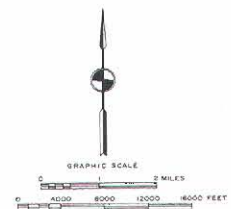
- PROPOSED COMMUTER BUS ROUTE
- - - PROPOSED ROUTE-DEVIATION SHUTTLE BUS ROUTES
- EMPLOYMENT AREA SERVED

**PARK-RIDE LOT**

- EXISTING TO BE MODIFIED
- ▲ PROPOSED

**MAJOR STOP WITHOUT PARKING**

- TRANSFER POINT WITH COMMUTER BUS ROUTE

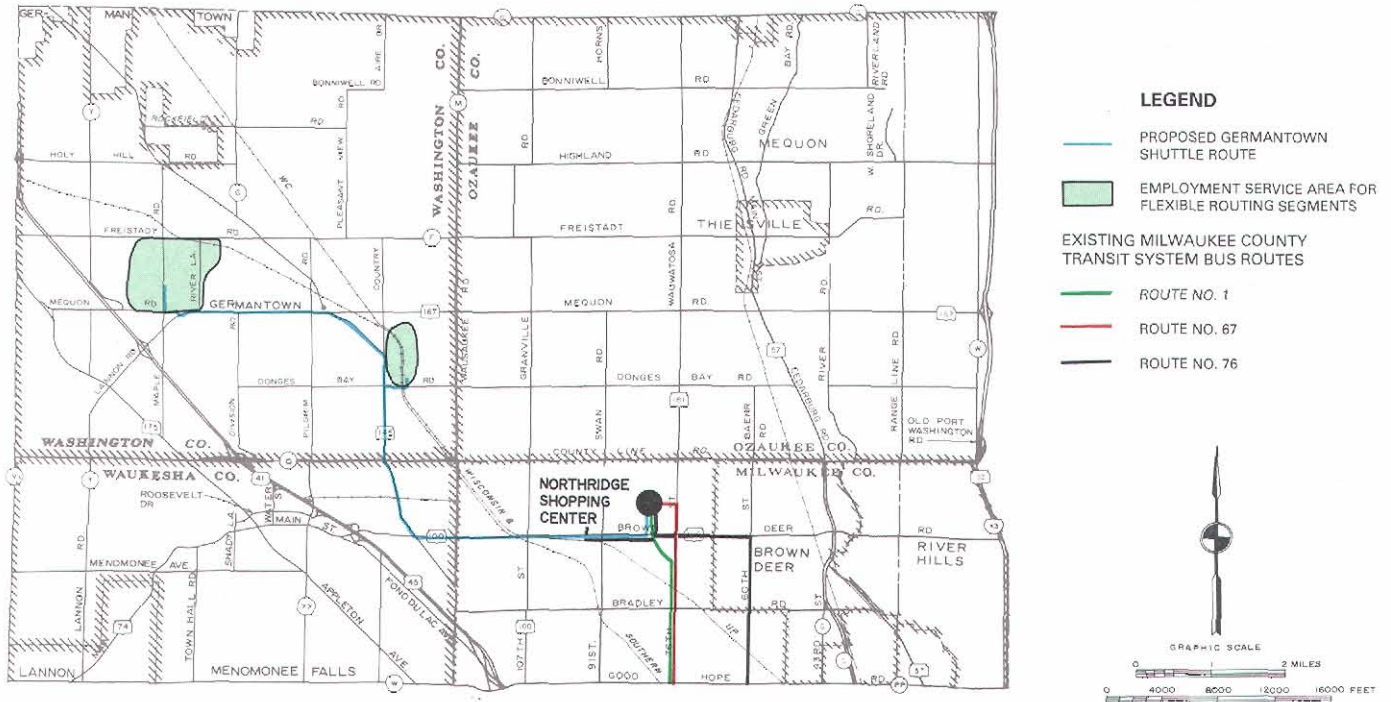


Source: SEWRPC.



Map 21

# GERMANTOWN INDUSTRIAL SHUTTLE ROUTE AND SERVICE AREA PROPOSED UNDER ALTERNATIVE 4



Source: SEWRPC.

the employees transported as experience with the operation of the shuttle services is gained. The five shuttle routes initially envisioned would include:

- Two routes serving the STH 60-CTH P (Jackson) park-ride lot, one providing service to employers in the Hartford area and one providing service to employers in the Jackson and Slinger areas;
- Two routes serving the USH 45-Paradise Drive (West Bend) park-ride lot, one providing service to employers in the southern and eastern portions of the City of West Bend and one providing service to employers in the Kewaskum area; and
- One route serving the Island Avenue commuter-bus stop and providing service to employers in the central portions of the City of West Bend.

A shuttle route connecting with the proposed commuter-bus route at either of two exiting park-ride lots in the Menomonee Falls and Germantown

areas, the USH 41/45 and Pilgrim Road park-ride lot or the USH 41/45 and Lannon Road park-ride lot, was also considered to carry passengers to and from employment centers in the Germantown Industrial Park. However, to serve the principal first-and second-shift starting and ending times of Hartford, West Bend, Kewaskum and Germantown area employers conveniently would result in scheduling conflicts unless additional bus trips over the commuter-bus routes were provided. Instead, it was considered to be more effective and efficient to operate a sixth shuttle route, shown on Map 21, between the Northridge Shopping Center in Milwaukee County and major employers located within the Village of Germantown, principally within the Germantown Industrial Park. This proposed shuttle route would be designed to connect with a major MCTS express bus route serving the Northridge Shopping Center, Route No. 1, the Metrolink Northwest Express. This route provides frequent, limited-stop express bus service through central and northern Milwaukee County and connects with other MCTS bus routes along E. and W. Wisconsin Avenue, N. 12th Street, W. Fond du Lac Avenue, and N. 76th Street. The shuttle route could also

Table 67

**PROPOSED OPERATING CHARACTERISTICS OF COMMUTER-BUS  
AND SHUTTLE SERVICES UNDER ALTERNATIVE 4**

Operating Characteristics	Commuter-Bus Service	Shuttles Connecting with Commuter-Bus Service	Germantown Industrial Park Shuttle
Service Administration .....	Public administration, with service provided through contract with private transit operator	Public administration, with service provided through contract with private transit operator	Public administration, with service provided through contract with private transit operator
Total Route-Miles (round trip) .....	108	--	--
Service Periods (weekdays only) For commuting between Washington County and the Milwaukee CBD jobs .....	6:15 a.m. to 7:45 a.m. 4:45 p.m. to 6:15 p.m.	--	--
For commuting between Milwaukee County and Washington County jobs .....	4:45 a.m. to 7:45 a.m. 1:30 p.m. to 6:15 p.m. 11:15 p.m. to 1:30 a.m.	5:30 a.m. to 8:00 a.m. 2:30 p.m. to 5:15 p.m. 11:00 p.m. to 1:00 a.m.	5:30 a.m. to 7:00 a.m. 2:30 p.m. to 4:15 p.m. 10:30 p.m. to 1:00 a.m.
Service Levels For commuting between Washington County and the Milwaukee CBD jobs .....	Two morning inbound bus trips Two afternoon outbound bus trips	--	--
For commuting between Milwaukee County and Washington County jobs .....	Three morning outbound bus trips Two afternoon outbound bus trips Three afternoon inbound bus trips Two evening inbound bus trips	Three morning trips to employers Two afternoon trips to employers Three afternoon trips from employers Two evening trips from employers	Three morning trips to employers Three morning trips from employers Four afternoon trips to employers Four afternoon trips from employers Two evening trips to employers Two evening trips from employers
Vehicle Requirements for Peak Service .....	Three	Five	Two
Passenger Fares (cash fares per one-way trip) <sup>a</sup> .....	Between USH 45 and Paradise Drive (West Bend) and Milwaukee County: \$2.75 Between STH 60 and CTH P (Jackson) and Milwaukee County: \$2.50	No charge with transfer from commuter-bus route	\$0.50 with transfer from MCTS bus route

<sup>a</sup>Special convenience fares which provide for discounts from regular cash boarding fares would also be made available.

Source: SEWRPC.

connect with two local MCTS bus routes at the Northridge Shopping Center, Routes No. 67 and 76, which provide north-south northside service through central and northern Milwaukee County over N. 76th and N. 60th Streets.

Service over all six shuttle routes would be operated as fixed-route-deviation service. The routes would operate on a fixed schedule between the shuttle route termini at the park-ride lots or the Northridge Shopping Center and the Washington County employment concentrations, but would follow a flexible route allowing for deviation at the specific request of the individuals using the service or the employers served.

Like the proposed commuter-bus routes, the shuttle routes would be operated on a contract basis by existing transit operators selected on the basis

of competitive bids, with the necessary operating equipment provided by the operator. Potential operators could include taxicab service operators, yellow school bus operators, or operators of employee transportation services under the State employee transportation assistance "job ride" program. The County, with the assistance of area employers or business organizations, would act as the lead agency in establishing the publicly subsidized shuttle service.

**Operating Characteristics:** The proposed operating characteristics of the commuter-bus and shuttle services are presented in Table 67. Service provided over the first commuter-bus route to serve traditional commuter travel by Washington County residents employed in the Milwaukee central business district would consist of two round trips each weekday, scheduled to arrive in the Milwaukee

CBD around 7:15 a.m. and 7:45 a.m. and depart around 4:45 p.m. and 5:15 p.m. The service that would be provided over the second commuter-bus route and each of the connecting shuttle routes to serve travel by Milwaukee County residents employed in Washington County would consist of five round trips each weekday over each route, scheduled to serve the principal weekday first- and second-shift starting and ending times at the major employers in the Hartford, West Bend, and Kewaskum areas. These services, consequently, would focus on serving first-shift starting times of 6:00 a.m., 7:00 a.m., and 8:00 a.m.; first-shift ending and second-shift starting times of 3:00 p.m., 3:30 p.m., and 4:30 p.m.; and second-shift ending times of 11:00 p.m. and 12:00 midnight. The service that would be provided over the Germantown shuttle route would be designed to serve first-, second-, and third-shift starting and ending times at the major employers in the Germantown area on weekdays.

The fares charged for the proposed commuter-bus and connecting shuttle services would be distanced-based, ranging from \$2.50 to \$2.75 per one-way trip, comparable to fares charges on other routes providing long-distance commuter-bus service to areas outside Milwaukee County within Waukesha County lying a similar distance from the Milwaukee CBD. These fares would include use of the shuttle routes connecting with the commuter-bus route. Fares for the Germantown shuttle route would be set at \$0.50 per trip for passengers transferring from MCTS bus routes. Such fares would keep the total cost of the trip for individuals commuting to entry-level positions with Washington County employers to reasonable levels, considering both the cost of the shuttle service and the connecting commuter, express, or local bus services. Convenience fares, such as tickets and weekly or monthly passes, would also be available and offer regular users discounts of 10 to 15 percent off the full cash fares. Special arrangements could also be made with employers to subsidize a portion of the fares paid by employees each weekday to assist individuals with transportation costs.

A total of 10 vehicles would be required to provide all the proposed commuter-bus and shuttle services. Either standard urban transit buses or over-the-road motor coaches with seating for at least 40 passengers would be appropriate for providing the commuter-bus service. It is envisioned that the shuttle services could be operated using 12- to 15-passenger vans.

**Ridership and Costs:** Projections of the ridership and financial performance for the proposed commuter-bus and shuttle services are provided in Table 68. The projections assume that the County would initiate the commuter-bus and shuttle services in 1998 on a two-year trial, or demonstration, basis as a project funded with Federal funds potentially available through the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. It is assumed that continuation of the services beyond the demonstration period would be dependent on actual service performance. Assuming continuous operation of the commuter and shuttle services over the entire planning period, the total annual ridership on all the proposed services would be expected to be about 109,000 revenue passengers by 2002. The operating expenses for all services would be expected to total about \$779,000 by 2002, the operating deficits would be expected to total about \$559,000 by 2002, and the local share of the operating deficits would be expected to total almost \$81,000 by 2002.

Because the contract transit service operator would be responsible for supplying the operating equipment for the route, there would be no capital costs entailed for transit vehicles. However, some capital costs would be entailed by the construction of the new West Bend park-ride lot in the vicinity of USH 45 and Paradise Drive and the potential expansion of the existing 30-space Jackson carpool parking lot at the intersection STH 60 and CTH P to allow for additional parking and internal bus circulation. The park-ride lots at both locations would need to accommodate approximately 50 cars for transit commuters and carpoolers and should be designed to allow for circulation of buses through the park-ride lot. A boarding platform for passengers equipped with a passenger waiting shelter, telephone service, and a bus information display or kiosk would also need to be provided. It is estimated that the total cost both park-ride lots would be about \$350,000, including about \$250,000 for the new West Bend park-ride lot and about \$100,000 for the expanded Jackson park-ride lot. Those costs have not been included in the costs for this alternative since they were included in the adopted regional transportation system plan.

#### **Subalternative 4A-Provide Bidirectional**

**Washington County Shuttle Transit Services:** This subalternative proposes that the commuter-bus shuttle service described above be expanded to address the need expressed by major employers in Washington County for transit services to reduce

Table 68

**PROJECTED RIDERSHIP AND FINANCIAL PERFORMANCE OF THE COMMUTER-BUS AND SHUTTLE-TRANSIT SERVICES FOR WASHINGTON COUNTY PROPOSED UNDER ALTERNATIVE 4: 1998-2002**

Operating Characteristic	Projected 1998 <sup>a</sup>				Projected 2002 <sup>a</sup>			
	Commuter-Bus Service	Commuter-Bus Shuttle Services	Germantown Shuttle Service	Total	Commuter-Bus Service	Commuter-Bus Shuttle Services	Germantown Shuttle Service	Total
<b>Service Provided</b>								
Total annual vehicle-hours .....	6,500	9,300	3,000	18,800	6,500	9,300	3,000	18,800
Annual Ridership <sup>a</sup> .....	69,000	28,000	14,000	83,000	86,000	42,000	23,000	109,000
<b>Annual Operating Costs and Revenues<sup>b</sup></b>								
Operating costs .....	\$425,000	\$278,000	\$76,000	\$779,000	\$425,000	\$278,000	\$76,000	\$779,000
Passenger revenues .....	166,900	--	7,000	173,900	208,100	--	11,500	219,600
Total Operating Deficit .....	258,100	278,000	69,000	605,100	216,900	278,000	64,500	559,400
<b>Potential Sources of Public Funds</b>								
<b>Federal</b>								
Congestion Mitigation/Air Quality Improvement (CMAQ) Program <sup>c</sup> .....	\$59,100	\$147,900	\$29,800	\$236,800	--	--	--	--
FTA Section 5307 Urbanized Area Formula Program <sup>d</sup> .....	--	--	--	--	--	--	\$ 6,000	\$ 6,000
FTA Section 5311 Nonurbanized Area Formula Program <sup>e</sup> .....	--	--	--	--	\$100,400	\$ 65,600	--	166,000
Subtotal .....	\$59,100	\$147,900	\$29,800	\$236,800	\$100,400	\$ 65,600	\$ 6,000	\$172,000
<b>State</b>								
Urban public transit operating assistance <sup>f</sup> .....	\$165,800	\$108,400	\$32,700	\$306,900	\$165,800	\$108,400	\$32,700	\$306,900
<b>Local</b>								
Private sector .....	33,200	21,700	6,500	61,400	(49,300)	104,000	25,800	80,500
<b>Total</b>	<b>\$258,100</b>	<b>\$278,000</b>	<b>\$69,000</b>	<b>\$605,100</b>	<b>\$216,900</b>	<b>\$278,000</b>	<b>\$64,500</b>	<b>\$559,400</b>
<b>Service Effectiveness and Efficiency</b>								
Annual passengers per vehicle-hour .....	10.6	3.0	4.7	4.4	13.2	4.5	7.7	5.8
Total expense per passenger .....	\$6.16	\$9.93	\$5.43	\$9.39	\$4.94	\$6.62	\$3.30	\$7.15
Total revenue per passenger .....	2.42	0.00	0.50	2.10	2.42	0.00	0.50	2.02
Total deficit per passenger .....	3.74	9.93	4.93	7.29	2.52	6.62	2.80	5.13
Percent of expenses recovered through operating revenues .....	39.3	--	9.2	22.3	49.0	--	15.1	28.2

<sup>a</sup>Total ridership figures for 1998 and 2002 exclude passengers transferring between the commuter bus route and connecting commuter shuttle services.

<sup>b</sup>All costs and revenues presented in constant 1996 dollars.

<sup>c</sup>Assumes sufficient Federal funds would be available through the Congestion Mitigation and Air Quality Improvement Program to offset 80 percent of the nonState-funded portion of the total operating deficits of the services during 1998 through 2000.

<sup>d</sup>Reflects Washington County's total potential share of \$6,000 in FTA Section 5307 Urbanized Area Formula Program operating assistance based on the funds allocated to the Milwaukee urbanized area in 1996. If any of the urbanized area transit services proposed under other alternatives would also be implemented, the limited funds available would need to be allocated among the eligible transit services.

<sup>e</sup>Assumes sufficient Federal transit operating assistance would be available through the FTA Section 5311 Nonurbanized Area Formula Program to cover 30 percent of the operating expenses of the commuter-bus and shuttle transit service operated within the portions of Washington County outside the Milwaukee urbanized area.

<sup>f</sup>Assumes that sufficient State transit operating assistance would be available through the State Urban Mass Transit Operating Assistance Program to cover up to 39 percent of the operating expenses of the commuter-bus and shuttle transit services operated within the nonurbanized portion of the County, and up to 43 percent of the operating expenses of the commuter-bus and employee-shuttle transit services operated within the urbanized portion of the County.

Source: SEWRPC.

work-related employee travel by single-occupant vehicles. The expanded shuttle services would focus on serving intercommunity travel by persons employed at major employment centers within Washington County who reside in close proximity and work in the same employment centers. Concentrations of employee residences would be con-

nected with major employment centers in the Cities of Hartford and West Bend.

An assessment of the potential for providing expanded shuttle transit services was made using employee residence and work-shift data collected through the special survey of the major employ-

ers in the County described in Chapter II of this report. The assessment focused on transit services for first-shift employees, identified as the primary need by employers. Working with the major employers providing employee data, groupings of employers located in the Cities of Hartford and West Bend and the Village of Germantown with work shifts that could be effectively served by transit were identified. The residences of all first-shift employees at the employers in each of the three employer groups were then analyzed to identify significant concentrations of employee residences and major employee travel corridors. On the basis of this analysis, significant travel corridors were identified between Hartford employers and the West Bend area through the Jackson and Slinger areas, between West Bend employers and the Campbellsport area in Fond du Lac County through the Kewaskum area, and between Germantown employers and central Milwaukee County through northwestern Milwaukee County and the Menomonee Falls area of Waukesha County.

To serve each of these corridors, this subalternative proposes modifications to three of the six bus shuttle transit services in order to provide expanded service, as proposed under Alternative 4:

- The route serving the STH 60-CTH P (Jackson) park-ride lot providing service to employers in the Hartford area;
- The route serving the USH 45-Paradise Drive (West Bend) park-ride lot providing service to employers in the Kewaskum area; and
- The route serving the Northridge Shopping Center in Milwaukee County providing service to employers in the Germantown Industrial Park.

No modifications to the alignment of Germantown Industrial Park shuttle would be needed for the route to serve the purpose envisioned under this subalternative. However, the alignments of the two shuttle routes serving Hartford and Kewaskum area employers would need to be extended to serve larger areas, as shown on Map 22. The Jackson-to-Hartford employer shuttle route would be extended to the City of West Bend, thus becoming a West Bend-to-Hartford employer shuttle route, serving employees commuting from residences in the West Bend, Jackson, and Slinger areas to employers in the City of Hartford. Similarly, the West Bend-Kewaskum shuttle route would be extended to the City

of Campbellsport, in Fond du Lac County, thus becoming a Campbellsport-to-West Bend employer shuttle route, serving employees commuting from residences in the Campbellsport and Kewaskum areas to employers in the City of West Bend.

It is envisioned that vehicles providing service over the West Bend-to-Hartford and Campbellsport-to-West Bend shuttle routes would circulate through the Cities of West Bend and Campbellsport, then operate over flexible routes to the employers served, deviating one to two miles off the main route to pick up and drop off passengers in the Jackson, Slinger, and Kewaskum residential areas. Regular stops would also be made to allow for access by individuals living in residential areas more than one to two miles from the route. The shuttle service between park-ride lots and Hartford and Kewaskum employers originally proposed for these routes under Alternative 4 would be incorporated into the service schedules of the modified routes.

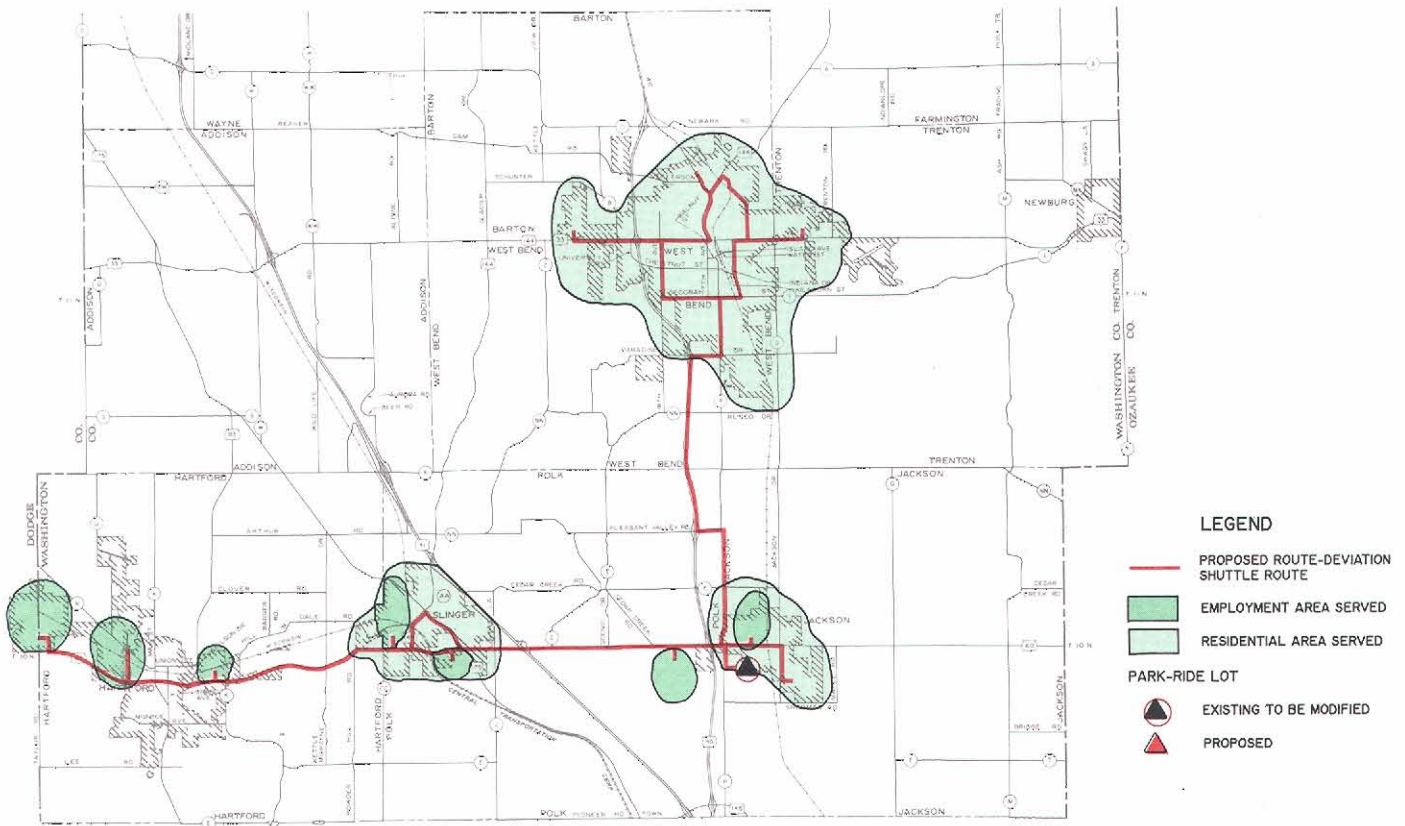
The proposed operating characteristics of the commuter-bus and expanded shuttle services under this subalternative are presented in Table 69. Service over the commuter-bus routes and the three shuttle routes providing connections to employers in the Jackson and Slinger areas, in the southern and eastern portions of the City of West Bend, and in the central portions of the City of West Bend would be the same as under Alternative 4. However, service over the three shuttle routes described above would be expanded. Bidirectional shuttle-bus service would be provided over both the West Bend-to-Hartford and the Campbellsport-to-West Bend employer shuttle routes to serve both Milwaukee County residents commuting to jobs in Washington County, as originally proposed under Alternative 4, and Washington County residents in the communities served commuting to jobs in the Cities of Hartford and West Bend. Bidirectional shuttle-bus service would also be provided over the Germantown Industrial Park shuttle route, as proposed under Alternative 4. To serve the shift-times identified in the major employer survey best, additional weekday service would be added to all three shuttle routes. Between four and five additional vehicle trips in each direction would be added over each of the routes serving Hartford and West Bend employers each weekday and one additional vehicle-trip in each direction over the route serving Germantown employers each weekday. Four additional vehicle-trips in each direction would also be required on weekends over routes serving Hartford and Germantown employers to serve the



## Map 22

### BIDIRECTIONAL ROUTES FOR HARTFORD AND WEST BEND EMPLOYERS PROPOSED UNDER SUBALTERNATIVE 4A

#### HARTFORD EMPLOYER ROUTE



#### WEST BEND EMPLOYER ROUTE

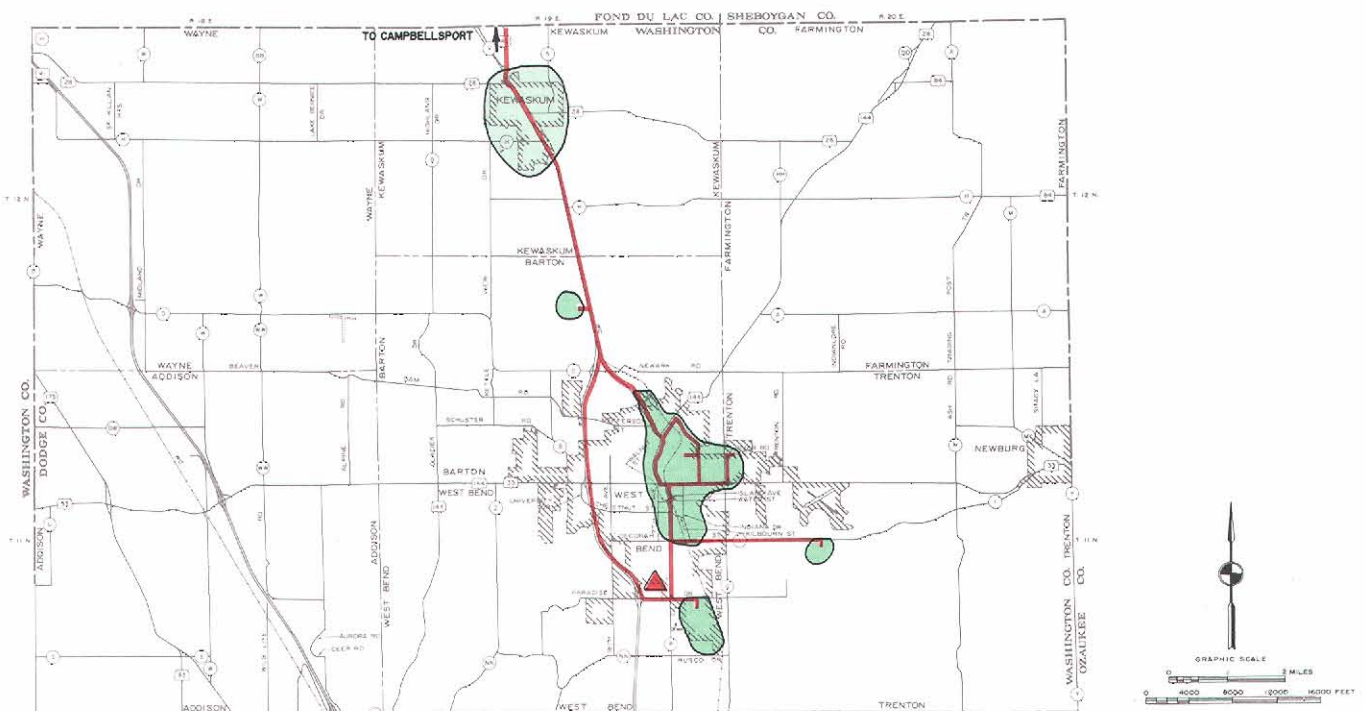




Table 69

**PROPOSED OPERATING CHARACTERISTICS OF COMMUTER-BUS  
AND EXPANDED SHUTTLE SERVICES UNDER SUBALTERNATIVE 4A**

Operating Characteristics	Commuter-Bus Service	Shuttles Connecting with Commuter-Bus Service	Germantown Industrial Park Shuttle
Service Administration .....	Public administration, with service provided through contract with private transit operator	Public administration, with service provided through contract with private transit operator	Public administration, with service provided through contract with private transit operator
Total Route Miles (round trip) .....	108	--	--
Service Periods (weekdays only) For Commuting between Washington County and the Milwaukee CBD jobs Weekdays only .....	6:15 a.m. to 7:45 a.m. 4:45 p.m. to 6:15 p.m.	--	--
For Commuting to and from Washington County jobs Weekdays .....	4:45 a.m. to 7:45 a.m. 1:30 p.m. to 6:15 p.m. 11:15 p.m. to 1:30 a.m.	4:00 a.m. to 8:00 a.m. 2:30 p.m. to 8:00 p.m. 11:00 p.m. to 1:00 a.m.	5:30 a.m. to 7:00 a.m. 2:30 p.m. to 4:15 p.m. 5:30 p.m. to 6:30 p.m. 10:30 p.m. to 1:00 a.m.
Saturdays and Sundays .....	--	6:00 a.m. to 8:00 a.m. 8:00 p.m. to 8:00 p.m.	5:30 a.m. to 6:30 a.m. 5:30 p.m. to 6:30 p.m.
Service Levels For Commuting between Washington County and the Milwaukee CBD jobs Weekdays only .....	Two morning inbound bus trips Two afternoon outbound bus trips	--	--
For Commuting to and from Washington County jobs Weekdays .....	Three morning outbound bus trips Two afternoon outbound bus trips Three afternoon inbound bus trips Two evening inbound bus trips	Three to four morning trips to employers Two to five afternoon trips to employers Three to five afternoon trips from employers Two evening trips from employers	Three morning trips to employers Three morning trips from employers Four afternoon trips to employers Four afternoon trips from employers Three evening trips to employers Three evening trips from employers
Saturdays and Sundays .....	--	One morning trip to employers One morning trip from employers One evening trip to employers One evening trip from employers	One morning trip to employers One morning trip from employers One evening trip to employers One evening trip from employers
Vehicle Requirements for Peak Service ...	Three	11	Two
Passenger Fares (cash fares per one-way trip) <sup>a</sup> .....	Between USH 45 and Paradise Drive (West Bend) and Milwaukee County: \$2.75 Between STH 60 and CTH P (Jackson) and Milwaukee County: \$2.50	No charge with transfer from commuter-bus route All other passengers: \$1.50	With transfer from MCTS bus route: \$0.50 All other passengers: \$1.50

<sup>a</sup>Special convenience fares which provide for discounts from regular cash boarding fares would also be made available.

Source: SEWRPC.

nontraditional work shifts of Quad/Graphics, Inc., in the City of Hartford, and Zenith Sintered Products, Inc., in the Village of Germantown, both of which schedule employees to work 12-hour shifts on a three-day-on, three-day-off schedule.

Individuals using the route-deviation aspect of the service provided over the West Bend-to-Hartford and Campbellsport-to-West Bend employer shuttle routes to travel between their residences and place of employment would need to make reservations

one day prior to the time service was needed in order to allow efficient service scheduling. Base cash fares for the service would be set at \$1.50 per one-way trip. Full-size 12- to 15-passenger vans would be used to provide the service. The shuttle routes would be operated on a contract basis by existing transit operators selected on the basis of competitive bids, as proposed under Alternative 4.

Projections of the ridership and financial performance for the proposed employer-based transit

services with the expanded shuttle transit services proposed under this subalternative are provided in Table 70. As assumed under Alternative 4, the projections for this subalternative assume that the County would initiate the commuter-bus and expanded shuttle services in 1998 on a two-year trial, or demonstration, basis through 1999 as a project funded with Federal funds potentially available through the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. Continuation of the services beyond 1999 would be dependent on actual service performance during the demonstration period. Assuming continuous operation of the commuter and shuttle bus services over the entire planning period, the total annual ridership on all the proposed services would be expected to be about 135,000 passengers by 2002. The operating expenses for the services would be expected to total about \$968,000 by 2002, the operating deficits would be expected to total about \$716,300 by 2002, and the local share of the operating deficits would be expected to total about \$106,300 by 2002.

As required for Alternative 4, capital costs totaling about \$350,000 would also be incurred for the construction of the new West Bend park-ride lot in the vicinity of USH 45 and Paradise Drive and the potential expansion of the existing Jackson carpool parking lot at the intersection of STH 60 and CTH P. These costs were included in the adopted regional transportation system plan and, thus, have not been included in the costs for this subalternative.

## EVALUATION OF TRANSIT SERVICE IMPROVEMENTS

An evaluation of the transit service improvement alternatives for Washington County was conducted in view of the transit service objectives set forth in Chapter V of this report. The evaluation consisted of an assessment of the performance of the alternatives against standards supporting each objective. Only those standards which were readily quantifiable and which provided information allowing a comparison between the alternatives were used in the evaluation. Standards not used included those that would be completely met because those standards were used in the design of the plans or could be met through proper local or project level planning and plan implementation. The standards used provided a sound basis for determining the relative ability of the alternative plans to meet the transit service objectives.

Alternatives 2, 3, and 4 proposed that the deficiencies identified in the existing transit services within the County, described as Alternative 1, be remedied through the provision of new or expanded publicly subsidized transit service, with the transit service improvements proposed under these alternatives focusing on different potential transit travel markets. Alternatives 2 and 3 proposed the expansion of existing publicly subsidized taxicab services to address the need for local transit service largely by transit-dependent persons and largely for nonwork-trip purposes. Alternative 4 proposed the development of new transit services to serve work trip-oriented travel between Washington and Milwaukee Counties and within Washington County. The differences in the markets to be served makes it inappropriate to compare directly all the transit service improvement alternatives with each other. Therefore, the evaluation of the transit service improvement alternatives was conducted in two steps: first, by comparing the performance of the transit services proposed under Alternatives 2, 3, and 4 with that of similar existing transit services included under Alternative 1; and, second, by comparing the performance of the transit service improvement alternatives which proposed similar transit services with each other. The evaluations, thus, provide information which the Advisory Committee could use to assess the merits of each proposed transit service improvement over the appropriate existing transit services and to select from among alternatives proposing similar transit services in structuring a final recommended transit service plan for Washington County.

### Comparisons with Alternative 1

The performance of the expanded local taxicab services and the County elderly and disabled specialized transportation service proposed under Alternatives 2 and 3 was compared with that of the existing taxicab services and the County specialized transportation service included under Alternative 1. Similarly, the performance of the new commuter-oriented bus and shuttle transit services proposed under Alternative 4 and Subalternative 4A was compared with that of the existing employee transportation services included under Alternative 1. These comparisons are summarized in Tables 71 through 76.

The information presented in Tables 71 and 72 indicates that Alternatives 2, 3, and 4 would provide a substantial improvement over the existing transit services proposed to be maintained under Alternative 1 with respect to serving the existing land use

Table 70

**PROJECTED RIDERSHIP AND FINANCIAL PERFORMANCE OF THE COMMUTER-BUS AND SHUTTLE-TRANSIT SERVICES FOR WASHINGTON COUNTY PROPOSED UNDER SUBALTERNATIVE 4A: 1998-2002**

Operating Characteristic	Projected 1998 <sup>a</sup>				Projected 2002 <sup>a</sup>			
	Commuter-Bus Service	Commuter-Bus Shuttle Services	Germantown Shuttle Service	Total	Commuter-Bus Service	Commuter-Bus Shuttle Services	Germantown Shuttle Service	Total
Service Provided								
Total annual vehicle-hours .....	6,500	15,000	3,700	25,200	6,500	15,000	3,700	25,200
Annual Ridership <sup>a</sup> .....	69,000	41,000	17,000	99,000	86,000	63,000	28,000	135,000
Annual Operating Costs and Revenues <sup>b</sup>								
Operating costs .....	\$425,000	\$450,000	\$93,000	\$968,000	\$425,000	\$450,000	\$93,000	\$968,000
Passenger revenues .....	166,900	18,000	8,500	193,400	208,100	29,800	13,800	251,700
Total operating deficit .....	258,100	432,000	84,500	774,600	216,900	420,200	79,200	716,300
Potential Sources of Public Funds								
Federal								
Congestion Mitigation/Air Quality Improvement (CMAQ) Program <sup>c</sup> .....	\$ 59,100	\$221,400	\$36,500	\$317,000	--	--	--	--
FTA Section 5307 Urbanized Area Formula Program <sup>d</sup> .....	--	--	--	--	--	--	\$ 6,000	\$ 6,000
FTA Section 5311 Nonurbanized Area Formula Program <sup>e</sup> .....	--	--	--	--	\$108,200	\$114,500	--	222,700
Subtotal	\$ 59,100	\$221,400	\$36,500	\$317,000	\$108,200	\$114,500	\$ 6,000	\$228,700
State								
Urban public transit operating assistance <sup>f</sup> .....	\$165,800	\$175,500	\$40,000	\$381,300	\$165,800	\$175,500	\$40,000	\$381,300
Local								
Private sector .....	33,200	35,100	8,000	76,300	(57,100)	130,200	33,200	106,300
Total	\$258,100	\$432,000	\$84,500	\$774,600	\$216,900	\$420,200	\$79,200	\$716,300
Service Effectiveness and Efficiency								
Annual passengers per vehicle-hour .....	10.6	2.7	4.6	3.9	13.2	4.2	7.6	5.4
Total expense per passenger .....	\$6.16	\$10.98	\$5.47	\$9.78	\$4.94	\$7.14	\$3.32	\$7.17
Total revenue per passenger .....	2.42	0.44	0.50	1.96	2.42	0.47	0.49	1.86
Total deficit per passenger .....	3.74	10.54	4.97	7.82	2.52	6.67	2.83	5.31
Percent of Expenses Recovered through Operating Revenues .....	39.3	4.0	9.1	20.0	49.0	6.6	14.8	26.0

<sup>a</sup>Total ridership figures for 1998 and 2002 exclude passengers transferring between the commuter bus route and connecting commuter shuttle services.

<sup>b</sup>All costs and revenues presented in constant 1996 dollars.

<sup>c</sup>Assumes sufficient Federal funds would be available through the Congestion Mitigation and Air Quality Improvement Program to offset 80 percent of the nonState-funded portion of the total operating deficits of the services during 1998 through 2000.

<sup>d</sup>Reflects Washington County's total potential share of \$6,000 in FTA Section 5307 Urbanized Area Formula Program operating assistance based on the funds allocated to the Milwaukee urbanized area in 1996. If any of the urbanized area transit services proposed under other alternatives would also be implemented, the limited funds available would need to be allocated among the eligible transit services.

<sup>e</sup>Assumes sufficient Federal transit operating assistance would be available through the FTA Section 5311 Nonurbanized Area Formula Program to cover 30 percent of the operating expenses of the commuter-bus and shuttle transit service operated within the portions of Washington County outside the Milwaukee urbanized area.

<sup>f</sup>Assumes that sufficient State transit operating assistance would be available through the State Urban Mass Transit Operating Assistance Program to cover up to 39 percent of the operating expenses of the commuter-bus and shuttle transit services operated within the nonurbanized portion of the County, and up to 43 percent of the operating expenses of the commuter-bus and employee-shuttle transit services operated within the urbanized portion of the County.

Source: SEWRPC.

pattern within the County and the travel needs of the resident County population for work and other trip purposes. The existing local shared-ride taxicab services serve only about 9 percent of the area devoted to urban land uses within the County, about one-half of the major trip-generators within

the County, about one-third of the resident County population, and about 55 percent of the places of employment within the County. The expanded local taxicab services proposed under Alternatives 2 and 3 would serve between 66 and 100 percent of the area devoted to urban development within

Table 71

**COMPARISON OF RELATIVE ABILITY OF EXPANDED SHARED-RIDE TAXICAB SERVICES  
PROPOSED UNDER ALTERNATIVES 1, 2, AND 3 TO MEET TRANSIT SERVICE OBJECTIVE NO. 1**

Supporting Standards under Objective No. 1: Service Travel Needs of Existing Land Uses and Population	Alternative 1	Alternative 2	Alternative 3
<b>Extent of Urban Development Served</b>			
Developed urban land area served <sup>a</sup> .....	9 square miles	27 square miles	41 square miles
Percent of total developed urban land area in County served .....	22	66	100
<b>Areas of proposed urban development served</b>			
Residential development .....	28 of 87	64 of 87	All served
Commercial development .....	8 of 22	18 of 22	All served
<b>Major Potential Transit Trip Generators Served</b>			
<b>Major land use trip generators served</b>			
Retail, service, and office centers .....	9 of 16	13 of 16	All served
Educational institutions .....	14 of 29	21 of 29	All served
Medical centers .....	7 of 14	11 of 14	All served
Governmental and public institutional centers .....	12 of 49	28 of 49	All served
Employment centers .....	33 of 58	52 of 58	All served
Industrial parks .....	4 of 10	All served	All served
Recreational areas .....	25 of 59	42 of 59	All served
<b>Transit-dependent population trip generators served</b>			
Elderly facilities .....	24 of 38	31 of 38	All served
Disabled facilities .....	9 of 13	12 of 13	All served
Federally subsidized rental housing .....	5 of 7	6 of 7	All served
<b>Population Served<sup>b</sup></b>			
Total population served .....	32,600	63,800	95,300
Percent of total County population served .....	34	67	100
<b>Transit-dependent population served</b>			
School-age children .....	4,300	8,600	13,100
Elderly .....	5,200	9,100	13,500
Disabled .....	600	1,100	1,600
<b>Percent of total County transit-dependent population served</b>			
School-age children .....	33	66	100
Elderly .....	38	67	100
Disabled .....	37	69	100
<b>Employment Served</b>			
Total County job locations served <sup>c</sup> .....	23,100	31,600	41,800
Percent of total County job locations served .....	55	76	100
Major employment center job locations served <sup>d</sup> .....	9,200	12,800	14,800
Percent of major employment center job locations served .....	62	86	100

<sup>a</sup>Reflects developed urban land area within primary taxicab service areas. All figures are based on Commission data files of historic urban growth and developed land through 1990.

<sup>b</sup>Reflects County population within primary taxicab service areas. All figures are based on Commission data files of total 1990 population from the U. S. Census allocated to U. S. Public Land Survey quarter sections.

<sup>c</sup>Reflects total County employment within primary taxicab service areas based on Commission data files of total estimated 1990 employment allocated to U. S. Public Land Survey quarter sections.

<sup>d</sup>Based on the estimated 1995 employment at the major employers listed in Table 21 in Chapter II within primary taxicab service areas.

Source: SEWRPC.

the County, between about 80 and 100 percent of the major trip generators within the County, between 67 and 100 percent of the resident population of the County, and between 76 and 100 percent of the jobs located within the County. The limited employee transportation services under Alternative 1 serve about one-sixth the major

employment centers within the County and 370 work-trips on an average weekday. The new commuter-oriented transit services proposed under Alternative 4 would serve between one-half and two-thirds of the major employment centers within the County, including all the existing industrial parks in the County and between 375 and 450

Table 72

**COMPARISON OF RELATIVE ABILITY OF NEW COMMUTER-ORIENTED TRANSIT SERVICES  
PROPOSED UNDER ALTERNATIVE 4 TO MEET TRANSIT SERVICE OBJECTIVE NO. 1**

Supporting Standards under Objective No. 1: Service Travel Needs of Existing Land Uses and Population	Alternative 1	Alternative 4	Subalternative 4A
<b>Extent of Urban Development Served</b>			
Developed urban land area served <sup>a</sup> .....	--	8 square miles	15 square miles
Percent of total developed urban land area in County served .....	--	20	37
<b>Major Land Use Trip Generators Served</b>			
Employment centers .....	10 of 58	28 of 58	38 of 58
Industrial parks .....	3 of 10	All served	All served
<b>Population Served<sup>b</sup></b>			
Total County population served .....	--	24,500	41,800
Percent of total County population served .....	--	26	44
<b>Employment Served</b>			
Major employment center job locations served <sup>c</sup> .....	--	8,000	11,600
Percent of major employment center job locations served .....	--	53	77
<b>Special Employee Transit Service</b>			
Average weekday work trips served .....	370	375	450

<sup>a</sup> Reflects developed urban land area within three-mile driving distance of park-ride lots proposed under Alternative 4 and within service areas of park-ride lots and route-deviation shuttle routes serving Hartford and West Bend employers proposed under Subalternative 4A. All figures are based on Commission data files of historic urban growth and developed land through 1990.

<sup>b</sup> Reflects County population within three-mile driving distance of park-ride lots proposed under Alternative 4 and within service areas of park-ride lots and route-deviation shuttle routes serving Hartford and West Bend employers proposed under Subalternative 4A. All figures are based on Commission data files of total 1990 population from the U. S. Census allocated to U. S. Public Land Survey quarter sections.

<sup>c</sup> Based on the estimated 1995 employment at the major employers listed in Table 21 in Chapter II which could be directly served by commuter bus and employee shuttle routes proposed under Alternative 4 and Subalternative 4A.

Source: SEWRPC.

work trips on average weekday, increases of between 1 and 22 percent over the trips made by the employee transportation services offered under Alternative 1.

With the major improvement in transit services provided under Alternatives 2, 3, and 4, ridership on public transit services serving the County may be expected to increase significantly over that on the existing services. As shown in Table 73, the average annual ridership for the expanded local taxicab services proposed under Alternatives 2 and 3 may be expected to represent increases of between 57 and 69 percent over the ridership which would be expected on the existing taxicab services. As shown in Table 74, the average annual ridership for the new commuter-oriented transit services proposed under Alternative 4 may be expected to represent increases of between 22 and 47 percent over the ridership which may be expected on the existing limited employee transportation services.

Significant increases in expenditures for general public transit service would, however, be associated with all the transit improvement alternatives, as shown in Tables 75 and 76. The taxicab services proposed under both Alternatives 2 and 3 may be expected to reduce the scope of service and costs of the County's specialized transportation service for elderly and disabled persons. The combined costs of both the proposed taxicab and County specialized transportation services were, therefore, considered in the evaluation. The taxicab and County specialized transportation services proposed under Alternatives 2 and 3 may be expected to have average annual total costs, including expenditures for service operation and capital equipment and facilities, which would be between 63 and 95 percent higher; average annual total subsidies which would be between 61 and 94 percent higher; and average annual local subsidies from the County or local municipalities which would be between 73 and 98 percent higher than those projected over the

Table 73

**COMPARISON OF RELATIVE ABILITY OF SHARED-RIDE TAXICAB SERVICES PROPOSED  
UNDER ALTERNATIVES 1, 2, AND 3 TO MEET TRANSIT SERVICE OBJECTIVE NO. 2**

Supporting Standards under Objective No. 2: Promote Transit Utilization and Provide for User Comfort, Convenience, and Safety	Alternative 1	Alternative 2	Alternative 3
Average Annual Ridership: 1998-2002			
Shared-ride taxicab service .....	102,000	160,500	172,000
Washington County specialized transportation service ...	12,000	9,000	2,500
<b>Total</b>	<b>114,000</b>	<b>169,500</b>	<b>174,500</b>
Average Annual Ridership per Vehicle-Hour			
Shared-ride taxicab service .....	3.8	3.0	2.4
Washington County specialized transportation service ...	1.7	1.7	1.7
<b>Total</b>	<b>3.4</b>	<b>2.9</b>	<b>2.4</b>

Source: SEWRPC.

Table 74

**COMPARISON OF RELATIVE ABILITY OF COMMUTER-ORIENTED TRANSIT SERVICES  
PROPOSED UNDER ALTERNATIVE 4 TO MEET TRANSIT SERVICE OBJECTIVE NO. 2**

Supporting Standards under Objective No. 2: Promote Transit Utilization and Provide for User Comfort, Convenience, and Safety	Alternative 1	Alternative 4	Subalternative 4A
Average Annual Ridership: 1998-2002			
Commuter-bus service .....	--	77,600	77,600
Employee-shuttle service .....	79,000	53,500	73,900
<b>Total</b>	<b>79,000</b>	<b>96,000<sup>a</sup></b>	<b>116,400<sup>a</sup></b>
Average Annual Ridership per Vehicle-Hour			
Commuter-bus service .....	--	11.9	11.9
Employee-shuttle service .....	N/A	4.4	4.0
<b>Total</b>	<b>N/A</b>	<b>5.1</b>	<b>4.6</b>

NOTE: N/A indicates data not available.

<sup>a</sup>Ridership figures exclude passengers transferring between the commuter bus route and connecting commuter shuttle services.

Source: SEWRPC.

planning period for the existing services. The new commuter-oriented transit services proposed under Alternative 4 may be expected to have average annual total costs which would be between 88 and 134 percent higher, average annual total subsidies which would be between 127 and 191 percent higher, and average annual local subsidies from the County or the private sector which would be

between 39 and 77 percent higher than those projected for the existing employee transportation services.

**Comparison of Alternative 2 with Alternative 3**

In comparing the expanded local taxicab services within the County proposed under Alternatives 2 and 3, significant differences between these alterna-



Table 75

**COMPARISON OF RELATIVE ABILITY OF SHARED-RIDE TAXICAB SERVICES PROPOSED UNDER ALTERNATIVES 1, 2, AND 3 TO MEET TRANSIT SERVICE OBJECTIVE NO. 3**

Supporting Standards under Objective No. 3: Minimize Costs	Alternative 1			Alternative 2			Alternative 3		
	Shared-Ride Taxicab Service	Washington County Specialized Transportation Service	Total	Shared-Ride Taxicab Service	Washington County Specialized Transportation Service	Total	Shared-Ride Taxicab Service	Washington County Specialized Transportation Service	Total
<b>Average Annual Costs, Revenues, and Subsidies: 1998-2002</b>									
Operating expenses .....	\$513,000	\$166,000	\$679,000	\$ 991,500	\$127,000	\$1,118,500	\$1,302,500	\$44,000	\$1,346,500
Capital costs .....	72,700	--	72,700	104,900	--	104,900	121,100	--	121,100
Total costs .....	585,700	166,000	751,700	1,096,400	127,000	1,223,400	1,423,600	44,000	1,467,600
Farebox revenues .....	137,000	8,000	145,000	241,000	6,000	247,000	292,500	1,700	294,200
Total subsidy required .....	448,700	158,000	606,700	855,400	121,000	976,400	1,131,100	42,300	1,173,400
Percent of total costs recovered through farebox revenues ...	23	5	19	22	5	20	21	4	20
<b>Anticipated Distribution of Average Annual Subsidy among Potential Funding Sources</b>									
Federal .....	\$212,100	--	\$212,100	\$ 307,200	--	\$ 307,200	\$ 410,400	--	\$ 410,400
State .....	200,100	\$88,900	289,000	397,500	\$88,900	486,400	518,700	\$35,200	553,900
City, Village, or Town .....	36,500	--	36,500	150,700	--	150,700	--	--	--
County .....	--	69,100	69,100	--	32,100	32,100	202,000	7,100	209,100
<b>Average Annual Costs, Revenues, and Subsidies per Trip</b>									
Total costs .....	\$5.74	\$13.83	\$6.59	\$6.83	\$14.11	\$7.22	\$8.28	\$17.60	\$8.41
Farebox revenues .....	1.34	0.66	1.27	1.50	0.67	1.46	1.70	0.68	1.69
Total subsidy required .....	4.40	13.17	5.32	5.33	13.44	5.76	6.58	16.92	6.72

Source: SEWRPC.

Table 76

**COMPARISON OF RELATIVE ABILITY OF COMMUTER-ORIENTED TRANSIT SERVICES PROPOSED UNDER ALTERNATIVE 4 TO MEET TRANSIT SERVICE OBJECTIVE NO. 3**

Supporting Standards under Objective No. 3: Minimize Costs	Alternative 1	Alternative 4			Subalternative 4A		
	Employee Transportation Service	Commuter-Bus Service	Employee-Shuttle Service	Total	Commuter-Bus Service	Employee-Shuttle Service	Total
<b>Average Annual Costs, Revenues, and Subsidies: 1998-2002</b>							
Operating expenses .....	\$414,000	\$425,000	\$354,000	\$779,000	\$425,000	\$543,000	\$968,000
Capital costs .....	--	-- <sup>a</sup>	-- <sup>a</sup>	-- <sup>a</sup>	-- <sup>a</sup>	-- <sup>a</sup>	-- <sup>a</sup>
Total costs .....	414,000	425,000	354,000	779,000	425,000	543,000	968,000
Farebox revenues .....	158,000	187,700	9,200	196,900	187,700	34,900	222,600
Total subsidy required .....	256,000	237,300	344,800	582,100	237,300	508,100	745,400
Percent of total costs recovered through farebox revenues .....	38	44	3	25	44	6	23
<b>Anticipated Distribution of Average Annual Subsidy among Potential Funding Sources</b>							
Federal .....	--	\$73,100	\$132,800	\$205,900	\$73,600	\$201,900	\$275,500
State .....	\$206,000	165,800	141,100	306,900	165,800	215,500	381,300
Local .....	50,000	(1,600)	70,900	69,300	(2,100)	90,700	88,600
<b>Average Annual Costs, Revenues, and Subsidies per Trip</b>							
Total costs .....	\$5.24	\$5.48	\$19.24	\$8.11	\$5.48	\$13.99	\$8.32
Farebox revenues .....	2.00	2.42	0.50	2.05	2.42	0.89	1.92
Total subsidy required .....	3.24	3.06	18.74	6.06	3.06	13.10	6.40

<sup>a</sup>The total costs associated with construction of the two park-ride lots proposed under Alternative 4 and Subalternative 4A were estimated at about \$350,000. Because these costs were included in the adopted regional transportation system plan, they have not been included for these alternatives.

Source: SEWRPC.

tives were found with respect to their proposed service areas, projected public subsidies and operating efficiency, and anticipated ease of implementation. Table 77 summarizes these differences in terms of the relative major advantages of each alternative.

The major advantage of the taxicab service proposed under Alternative 3 would be its Countywide scope of service. The service would provide virtually complete coverage of the urban development, resident population, major trip generators, and job sites within the County and would serve trips made within and between all urban and rural portions of the County. County operation would more readily achieve full geographic service coverage than the individual community-operated systems proposed under Alternative 2. The latter would require intergovernmental service agreements between the sponsoring communities and other communities in the service area for service to be provided outside the jurisdiction of the sponsoring community.

The major advantage of Alternative 2 would be its lower public cost. Because the taxicab services proposed under both Alternatives 2 and 3 may be expected to reduce the scope of service and costs of the County's specialized transportation program, the combined costs of both the proposed taxicab and County specialized transportation services were considered in the evaluation. The average annual total subsidy for taxicab and County specialized transportation services under Alternative 2 would be about 17 percent less, and the average annual local subsidy would be about 13 percent less, than the average annual subsidies which may be expected with the taxicab and County specialized transportation services proposed under Alternative 3 (see Table 75). The taxicab and specialized transportation services proposed under Alternative 2 may also be expected to be somewhat more efficient, with average annual total and local subsidies per trip which would be about 15 percent less than the average annual total and local subsidies per trip for the services envisioned under Alternative 3.

The service efficiency of Alternatives 2 and 3 was also evaluated in terms of the average annual incremental costs per trip associated with the taxicab and County specialized transportation services proposed under each alternative. The average annual incremental costs of Alternatives 2 and 3 over Alternative 1 costs, and Alternative 3 over Alternative 2 costs, are presented in Table 78. Under Alternative 2, the additional average

annual total and local subsidies required over Alternative 1 would be about \$6.66 and \$1.39, respectively, per additional trip, or between 19 and 29 percent less than the additional average annual total and local subsidies of about \$9.37 and \$1.71, respectively, per trip under Alternative 3. Of greater significance would be the additional average annual total and local subsidies required under Alternative 3 over Alternative 2, which would amount to about \$39.40 and \$5.26, respectively, per additional trip.

The high incremental subsidies per trip for the additional service provided under Alternative 3 over Alternative 2 reflect the low ridership associated with providing service within the less densely populated rural portions of the County. Notably, the Countywide taxicab service proposed under Alternative 3 would serve nearly 50 percent more of the County's total resident population than if taxicab service was provided only within the County's major urban communities, as proposed under Alternative 2. However, the additional population served under Alternative 3 would have much lower transit-dependent-population levels than the County's major urban communities, with much of that population already using the County's specialized transportation service. As a result, the combined average annual ridership on the taxicab and County specialized transportation services proposed under Alternative 3 would be only about 5,000 trips, or about 3 percent, above the ridership on the services under Alternative 2. The extensive service hours and days proposed under Alternative 3, which may not be warranted outside the urban areas of the County, make the rural service very inefficient.

#### Comparison of Alternative 4 with Subalternative 4A

The transit services envisioned under Alternative 4 and Subalternative 4A may be expected to serve average weekday work-related travel between Washington and Milwaukee Counties equally well, both for individuals commuting between Washington County and jobs in central Milwaukee County and for individuals commuting between Milwaukee County and jobs in Washington County. Significant differences between these two alternatives were found only with respect to the potential users of the proposed services and the projected public subsidies. Table 79 summarizes these differences in terms of the relative major advantages of each alternative.

The major advantage of Subalternative 4A would be the ability of the proposed bidirectional employee-shuttle routes to serve work trips made by County

Table 77

**SUMMARY OF MAJOR ADVANTAGES OF EXPANDED LOCAL  
TAXICAB SERVICES PROPOSED UNDER ALTERNATIVES 2 AND 3**

Criterion	Alternative 2: Only Provide Taxicab Services within Major Urban Communities	Alternative 3: Provide Countywide Taxicab Service
Service Area	--	Would serve larger area and population, and more of the travel needs of County population than with only the major community taxicab systems (serve entire County and its resident population and travel within and between all County communities versus serving population and travel only within the Hartford-Slinger, West Bend, and Germantown-Richfield areas)
Public Cost	Would have lower total combined subsidy requirements for service operation and capital equipment for public shared-ride taxicab service and Washington County specialized transportation service than for Countywide system (average annual total subsidy of \$976,400 versus \$1,173,400 for Countywide system; and average annual local subsidy of \$182,800 versus \$209,100 for Countywide system)	--
Efficiency	Would have lower combined average annual subsidy per trip, particularly incremental subsidy per trip, for public shared-ride taxicab service and Washington County specialized transportation service than with Countywide system (average annual total and local subsidies per trip of \$7.22 and \$5.76, respectively, for taxicab and County specialized transportation service versus \$8.41 and \$6.72 for Countywide system; and average annual incremental total and local subsidies per trip for taxicab and County specialized transportation services under Alternative 3 would be \$39.40 and \$5.26, respectively, over Alternative 2)	--
Ease of Implementation	--	Would require less intergovernmental agreements than with the major community taxicab systems (County already has authority to operate service within all areas of County while Hartford, West Bend, and Germantown would need to negotiate and enter into intergovernmental service agreements with adjacent communities to be served before expanding or providing the services proposed under Alternative 2)

Source: SEWRPC.

residents to and from major employment concentrations within the County. An additional 17,300 persons within the County would be served by the commuter transit services proposed under Subalternative 4A. Consequently, the total average annual ridership on the proposed commuter services

may be expected to be about 21 percent higher and the average annual ridership on just the proposed employee-shuttle services, including commuter-bus transfer passengers, may be expected to be about 38 percent higher, than the ridership on the services proposed under Alternative 4.

Table 78

**INCREMENTAL AVERAGE ANNUAL RIDERSHIP, COSTS, AND SUBSIDIES FOR THE SHARED-RIDE TAXICAB AND WASHINGTON COUNTY SPECIALIZED TRANSPORTATION SERVICES PROPOSED UNDER ALTERNATIVES 2 AND 3**

Evaluative Measure	Alternative 2		Alternative 3			
	Increment over Alternative 1		Increment over Alternative 1		Increment over Alternative 2	
	Amount	Percent	Amount	Percent	Amount	Percent
Additional County Population Served	31,200	95.7	62,700	192.3	31,500	49.4
Average Annual Ridership						
Total .....	55,500	48.7	60,500	53.1	5,000	3.0
Per Incremental population served .....	1.8	--	1.0	--	0.2	--
Average Annual Costs						
Total .....	\$471,700	62.8	\$715,900	95.2	\$244,200	20.0
Per incremental trip .....	\$8.50	--	\$11.83	--	\$48.84	--
Average Annual Subsidy						
Total .....	\$369,700	60.9	\$566,700	93.4	\$197,000	20.2
Per incremental trip .....	\$6.66	--	\$ 9.37	--	\$39.40	--
Average Annual Local Funds						
Total .....	\$ 77,200	73.1	\$103,500	98.0	\$26,300	14.4
Per incremental trip .....	\$1.39	--	\$ 1.71	--	\$ 5.26	--

Source: SEWRPC.

Table 79

**SUMMARY OF MAJOR ADVANTAGES OF NEW COMMUTER-BUS AND EMPLOYEE-SHUTTLE SERVICES PROPOSED UNDER ALTERNATIVE 4**

Criterion	Alternative 4: Provide Commuter-Bus and Employee-Shuttle Services between Washington and Milwaukee Counties	Subalternative 4A: Provide Commuter-Bus and Bidirectional Employee-Shuttle Services within Washington County and between Washington and Milwaukee Counties
Users	--	Bidirectional shuttle routes would serve more potential users, particularly County residents commuting to and from major employment concentrations in County. As a result, employee shuttle services may be expected to have a higher annual ridership than under Alternative 4 (average annual ridership of 73,900 trips versus 53,500 trips under Alternative 4)
Public Cost	Would have lower total subsidy requirements for service operation and capital facilities than under Subalternative 4A (average annual total subsidy of \$582,100 versus \$745,400 under Subalternative 4A; and average annual local subsidy of \$69,300 versus \$88,600 under Subalternative 4A)	--

Source: SEWRPC.

Table 80

**INCREMENTAL AVERAGE ANNUAL RIDERSHIP, COSTS, AND SUBSIDIES FOR COMMUTER-BUS  
AND EMPLOYEE SHUTTLE TRANSPORTATION SERVICES PROPOSED UNDER ALTERNATIVE 4**

Evaluative Measure	Alternative 4		Subalternative 4A			
	Increment over Alternative 1		Increment over Alternative 1		Increment over Alternative 4	
	Amount	Percent	Amount	Percent	Amount	Percent
Additional County Population Served	24,500	--	41,800	--	17,300	70.6
Average Annual Ridership						
Total .....	17,000	21.5	37,400	47.3	20,400	21.3
Per incremental population served .....	0.7	--	0.9	--	1.2	--
Average Annual Costs						
Total .....	\$365,000	88.2	\$554,000	133.8	\$189,000	24.3
Per incremental trip .....	\$21.47	--	\$14.81	--	\$9.26	--
Average Annual Subsidy						
Total .....	\$326,100	127.4	\$489,400	191.2	\$163,300	28.1
Per incremental trip .....	\$19.18	--	\$13.09	--	\$8.00	--
Average Annual Local Funds						
Total .....	\$19,300	38.6	\$ 38,600	77.2	\$ 19,300	27.9
Per incremental trip .....	\$ 1.14	--	\$ 1.03	--	\$0.95	--

Source: SEWRPC.

The major advantage of Alternative 4 would be its lower public cost. The average annual total and local subsidies for commuter-bus and employee-shuttle transportation services under Alternative 4 would be about 22 percent less than the average annual subsidies which may be expected with the commuter-bus and employee-shuttle services proposed under Subalternative 4A (see Table 76).

No significant differences in the overall efficiencies of the commuter-oriented transit services were found between Alternative 4 and Subalternative 4A. The average annual total and local subsidies per trip varied by only about 6 percent between alternatives. Some differences were found with respect to the average annual incremental costs per trip associated with the transit services proposed under each alternative. As shown in Table 80, the additional annual total subsidy per trip required over Alternative 1 would be about 46 percent higher for Alternative 4 than for Subalternative 4A, but the additional local subsidy per trip would be similar for both alternatives. The additional average annual subsidies per trip required for Subalternative 4A over Alternative 4 would be somewhat less than the incremental subsidies per trip observed for both alternatives over Alternative 1.

#### Staff Recommendation

On the basis of the comparative evaluation of the alternatives, it may be concluded that the transit services proposed under Alternatives 2, 3, and 4 would all provide substantial improvements in general public transit services within the County, albeit at significant increases in cost when compared with the cost of maintaining the existing transit services proposed under Alternative 1. Some expansion in the existing transit services and attendant increases in transit service expenditures were viewed as desirable, however, if the County is to address the transit service needs and existing service deficiencies identified during the course of the study.

If it is determined to expand local taxicab transit service to address the largely nonwork-trip needs of the County's transit-dependent population, then the Commission staff recommends that the expansion of taxicab services within the major urban centers of the County proposed under Alternative 2 become the basis for the local transit services included in a final recommended plan. This recommendation recognizes that the incremental cost per trip for the extensive Countywide taxicab service proposed under Alternative 3 is high. Further,

because the probability of implementation of expanded urban taxicab services would be enhanced if such services were provided under County sponsorship, it is recommended that the County accept responsibility for administration and operation of all taxicab services in the County, including the existing taxicab systems serving the Cities of Hartford and West Bend and the new taxicab system proposed to serve the Germantown-Richfield area.

If it is determined to address the identified largely nonwork-trip needs of the County transit-dependent population in the remaining rural and small urban areas of the County, then it is recommended that the County's specialized transportation service for elderly and disabled persons comprise the basis for such service, converting that service to a general public transit service with more limited service periods and longer response times than the urban-oriented taxicab service.

If it is determined to provide service to accommodate work trip-oriented travel, then it is recommended that the commuter-oriented transit services proposed under Subalternative 4A be adopted and implemented. The proposed new commuter-bus and bidirectional employee-shuttle services would most fully address the need for transit services to serve work travel between Washington and Milwaukee Counties, as well as within the major travel corridors identified within Washington County. The incremental cost per trip for the additional services proposed under Subalternative 4A are reasonable in comparison with those for Alternative 4; they would be warranted by the more complete service.

Accordingly, the recommended plan would include the following elements, depending upon the extent to which financial resources could be found to support an expanded transit effort in Washington County:

- The expansion of publicly subsidized shared-ride taxicab service within the Hartford-Slinger, greater West Bend, and Germantown-Richfield areas of the County, with Washington County to be responsible for the administration and operation of such services;
- The conversion of the County's specialized transportation service for elderly and disabled individuals into a shared-ride taxicab service for the general public, to serve principally the nonwork-trip travel needs of transit-dependent persons residing in the rural and small urban areas of the County;

- The development of new commuter-bus routes operated between central Milwaukee County and the City of West Bend to provide service both for Washington County residents from park-ride lots in Washington County to the Milwaukee CBD and for Milwaukee County residents from central Milwaukee County to job locations in Washington County; and
- The development of bidirectional employee-shuttle transit services which would connect major employment concentrations within Washington County with reverse-commute transit service provided over the recommended commuter-bus route and with similar bus service provided over other Milwaukee County transit system bus routes terminating in the vicinity of the Northridge Shopping Center in Milwaukee County; as well as serve Washington County residents commuting to and from job locations in many of the job centers of the latter County.

#### Advisory Committee Recommendation

Following careful review of the alternative transit service plans considered, the Washington County Public Transportation Needs Study Advisory Committee determined that maintaining the existing transit services, as proposed under Alternative 1, would not adequately address the transit service needs identified in the study, and accordingly rejected that alternative. The Advisory Committee unanimously concurred with the Commission staff recommendations for providing different taxicab service levels in the urban and rural portions of the County as the basis for the design of the local transit services to be included in a final recommended transit service plan for the County. The Committee directed the Commission staff to refine the characteristics of the recommended shared-ride taxicab services, in particular identifying changes to the County's specialized transportation service for elderly and disabled residents necessary to provide an adequate level of taxicab service to the rural portions of the County. The Advisory Committee recognized that the County would also need to continue to provide some specialized transportation service for those elderly and disabled County residents with special assistance needs who would be unable to use the proposed shared-ride taxicab services.

The Advisory Committee also indicated that its support for the employee transportation services proposed under both Alternative 4 and Subalternative 4A was contingent upon an expectation that the local costs of any such services, or that portion



of total costs not covered by passenger fares or by Federal and State assistance, would be directly funded by the private businesses benefiting from the service, thus requiring no County tax-levy support. Given the required funding commitment from employers for the alternatives considered, the Advisory Committee recommended that the commuter services proposed under Alternative 4 be included in the final recommended transit service plan for the County. The potential to provide the more extensive services proposed under Sub-alternative 4A would be held open under the plan, should the initial commuter-bus and shuttle services prove to be successful.

## SUMMARY

This chapter has described alternative transit service improvement plans which were developed for Washington County, a comparative evaluation of those alternatives, and the recommendation of the Advisory Committee concerning the transit service improvements which should be included in a final recommended transit service plan for the County. Four transit service improvement alternatives were developed and evaluated:

- A status quo alternative, Alternative 1, which represented a continuation of the existing transit services provided in the County in 1996;
- An alternative which proposed the expansion of local transit services, Alternative 2, through the provision of publicly subsidized shared-ride taxicab service within the major urban service areas of the County;
- An alternative which proposed the expansion of local transit services, Alternative 3, through the provision of publicly subsidized shared-ride taxicab service throughout the entire County;
- An alternative which proposed new commuter-oriented transit services, Alternative 4, through the provision of publicly subsidized commuter-bus and employee-shuttle transit services serving travel between Washington and Milwaukee Counties, with a subalternative, Subalternative 4A, which proposed expanded employee-shuttle services to serve travel within Washington County.

The major elements of each alternative plan were described in the preceding sections of this chapter

and are summarized in Table 55. The average annual ridership levels and public costs attendant to each alternative considered are presented in Tables 73 through 76.

### Alternative 1

Under Alternative 1, the existing transit services provided in the County during 1996 were assumed to continue over the planning period. The existing transit services included the publicly subsidized shared-ride taxicab services provided within the Cities of Hartford and West Bend, which would continue to be the only transit service available to the general public in the County; specialized transportation services for priority population groups offered by public and private agencies and organizations, including the services offered by the Washington County Office on Aging; and limited special employee transit services provided by private transit operators participating in the State Employment Transportation Assistance "Job Ride" program and by private employment agencies.

The average annual ridership on these transit services over the planning period may be expected to total about 294,000 one-way trips per year. The average annual operating and capital costs may be expected to total about \$1,607,000 per year, or about \$5.47 per one-way trip; the average annual total subsidy may be expected to approximate \$1,258,000 per year, or about \$4.28 per one-way trip. With assistance from Federal and State funding programs and from private contributions, about \$215,000 per year, or about \$0.73 cents per one-way trip, would need to be provided directly by Washington County or other local units of government in the County to support the existing services.

### Alternative 2

Under Alternative 2, publicly subsidized shared-ride taxicab service would be expanded to serve the areas of urban development within, and immediately surrounding, the City of Hartford and the Village of Slinger, the City of West Bend, and the Village of Germantown and the Town of Richfield. The taxicab systems under this alternative would be community-based, serving all trips made within and between the sponsoring communities, so long as both trip ends were within the primary taxicab service areas shown on Map 18. Aside from expanded service areas and slightly modified fare structures, no significant changes would be made to the existing operating characteristics of the Hartford and West Bend taxicab systems. The operating characteristics for the new Germantown-Richfield taxicab system would be modeled on the West Bend

taxicab system. The expanded taxicab services for the general public would enable the Washington County Office on Aging to reduce modestly the specialized transportation service it provides to elderly and disabled County residents.

The combined average annual ridership on the expanded taxicab services and the County's specialized transportation service may be expected to total about 170,000 one-way trips per year over the planning period. The combined average annual operating and capital costs for these services may be expected to total about \$1,223,000 per year, or about \$7.22 per one-way trip; the average annual total subsidy for the services may be expected to approximate \$976,000 per year, or about \$5.76 per one-way trip. With assistance from available Federal and State funding programs, about \$183,000 per year, or about \$1.08 per one-way trip, would need to be provided directly by Washington County and other local units of government to support the operation of the taxicab and specialized transportation services.

#### Alternative 3

Under Alternative 3, the availability of publicly subsidized shared-ride taxicab service would be expanded to include the entire County. This would be accomplished by transforming most of the existing Washington County Office on Aging specialized transportation service for elderly and disabled individuals into a shared-ride taxicab service open to the general public. This Countywide system would supplant the existing taxicab systems operated by the Cities of Hartford and West Bend. The operating characteristics of the Countywide service would be modeled largely on those for the existing West Bend system. With the Countywide taxicab service, the County's specialized transportation program could be reduced to providing service for group trips, such as trips to and from nutrition sites or for recreational activities, for adult day care programs, and for individuals needing special door-through-door assistance which would not be provided by the taxicab system.

The average annual ridership on the Countywide taxicab service and the County's reduced specialized transportation program may be expected to total about 175,000 one-way trips per year over the planning period. The combined average annual operating and capital costs for these services may be expected to total about \$1,468,000 per year, or about \$8.41 per one-way trip; the average annual public subsidies for the services would be expected to approximate \$1,173,000 per year, or about \$6.72 per

one-way trip. With assistance from available Federal and State funding programs, an average of about \$209,000 per year, or about \$1.19 per one-way trip, would need to be provided by the County to support the operation of the proposed services.

#### Alternative 4

Under Alternative 4, new commuter-oriented transit services would be provided over two routes to serve work-commute travel between Washington and Milwaukee Counties. A limited level of commuter-bus service would be provided between two park-ride lots in Washington County and central Milwaukee County (see Map 19), along with specially designed employee-shuttle transit services provided over six routes which would connect with the proposed commuter-bus service (see Map 20) or with other MCTS bus routes (see Map 21). These transit services would be designed to serve Washington County residents commuting to jobs in central Milwaukee County and Milwaukee County residents commuting to jobs within Washington County. In particular it was assumed that the proposed commuter service would supplant existing reverse-commute employee transportation services provided by the State and private employment agencies to such Washington County employers as the West Bend Company.

The average annual ridership on the commuter-oriented transit services proposed under Alternative 4 may be expected to total about 96,000 one-way trips per year over the planning period. The total average annual operating costs for the services may be expected to be about \$779,000 per year, or about \$8.11 per one-way trip; the average annual subsidy for the services may be expected to be \$582,000 per year, or about \$6.06 per one-way trip. With assistance from available Federal and State funding programs, an average of about \$69,000 per year, or about \$0.72 cents per one-way trip, would need to be provided directly by the County or the private sector to support the operating and capital expenditures for the services.

#### Subalternative 4A

Subalternative 4A was proposed to address the need expressed by major employers in Washington County for transit services to reduce work-related employee travel in single-occupant vehicles. The employee-shuttle transit services proposed under Alternative 4 would be expanded to focus on serving intercommunity travel by persons employed at major employment centers within Washington County who reside in close proximity and work in the same employment centers (see Map 22).

Concentrations of employee residences would be connected with major employment centers in the Cities of Hartford and West Bend and Village of Germantown by modifying three of the six shuttle routes proposed under Alternative 4 to provide bidirectional service, operate for longer periods each weekday, or operate for limited periods on weekends. Service over the two commuter-bus routes and the other shuttle routes would remain as proposed under Alternative 4.

The average annual ridership on these transit services may be expected to be about 116,000 one-way trips per year over the planning period. The total average annual operating costs may be expected to be \$968,000 per year, or about \$8.32 per one-way trip; the average annual subsidies for the services may be expected to be \$745,000 per year, or about \$6.40 per one-way trip. With assistance from available Federal and State funding programs, about \$89,000 per year, or about \$0.76 cents per one-way trip, would need to be provided directly by the County or the private sector to support the operation of the proposed transit services.

#### Evaluation of Alternatives

The transit service improvement alternatives were evaluated by scaling measures of their performance against the transit service objectives and standards set forth in Chapter V. The evaluation found that the transit service improvements proposed under Alternatives 2, 3, and 4 would provide for substantial improvement over the existing transit services included under Alternative 1 with respect to serving the existing land uses within the County and the travel needs of the resident County population for work and other trip purposes. Significant increases in expenditures for general public transit services would, however, be associated with all the transit improvement alternatives.

The evaluation found that differences between Alternatives 2 and 3, both of which proposed expanded shared-ride taxicab services to address the need for local transit services largely by transit-dependent persons and largely for nonwork-trip purposes, were related principally to their proposed service areas, projected public subsidies and operating efficiency, and anticipated ease of implementation. The major advantage of the taxicab service proposed under Alternative 3 would be its Countywide scope of service, which would provide for virtually complete coverage of the urban development, resident population, and general travel patterns within the County. Given County juris-

diction, inter-governmental service agreements with the local communities would not be necessary. The major advantage of Alternative 2 would be the lower subsidy requirements for the proposed taxicab services and the County specialized transportation program. The combined total and local average annual subsidies for such services under Alternative 2 would be between 13 and 17 percent less than those expected under Alternative 3. The average annual total and local subsidies per trip for the services proposed under Alternative 2 would also be about 15 percent less than the average annual subsidies per trip with the services envisioned under Alternative 3.

The evaluation also found that both Alternative 4 and Subalternative 4A would be expected to serve equally well the average weekday work-related travel between Washington and Milwaukee Counties. Significant differences between these alternatives were found only with respect to the potential users of the proposed services within Washington County and the projected public subsidies. The major advantage of Subalternative 4A would be the ability of the proposed bidirectional employee-shuttle routes to serve work trips made by County residents to and from major employment concentrations within the County, resulting in a total average annual ridership expected to be about 21 percent higher than the ridership on the services proposed under Alternative 4. The major advantage of Alternative 4 would be its lower average annual total and local subsidy requirements, which may be expected to be about 22 percent below those for the services proposed under Subalternative 4A. No significant differences were found between Alternative 4 and Subalternative 4A with respect to the overall average annual subsidies per trip for the proposed commuter services.

#### Recommendations

On the basis of the evaluation findings, the Commission staff presented a recommended set of transit improvements for acceptance, modification, or rejection by the Advisory Committee, depending on what transit services the Advisory Committee determined should be included in the final County transit service plan. More specifically, the Commission staff recommended that:

- If it was determined to expand local taxicab service to address the largely nonwork-trip needs of the County's transit-dependent population, then the County should expand taxicab service within the major urban centers of the

County as proposed under Alternative 2 and assume responsibility for the administration and operation of these and any other taxicab services in the County in order to enhance the probability of implementation of the expanded urban taxicab services;

- If it was determined to provide local taxicab service to address the largely nonwork-trip needs of the County transit-dependent population in the remaining rural and small urban areas of the County, then the County should transform its specialized transportation service for elderly and disabled County residents into a rural shared-ride public taxicab service which would operate with somewhat less extensive service than the recommended urban taxicab services.
- If it was determined to provide transit service to accommodate work-trip- oriented travel, then the County should develop new commu-

ter-bus and employee-shuttle transit services as proposed under Subalternative 4A.

Following careful review of the alternative transit service improvements, the Washington County Public Transportation Needs Study Advisory Committee rejected Alternative 1, maintaining the existing transit services within the County, as inadequate to address the transit service needs and deficiencies identified in the study. The Advisory Committee unanimously concurred with the Commission staff recommendations for providing different taxicab service levels in the urban and rural portions of the County as the basis for the design of the local transit services to be included in a final recommended transit service plan for the County. The Advisory Committee also recommended that the employee transportation services proposed under Alternative 4 be included in the final plan, with employers having the option of providing the more extensive services proposed under Subalternative 4A should the initial commuter-bus and shuttle services prove successful. The final plan is documented in the following chapter of this report.

## Chapter VIII

### RECOMMENDED TRANSIT SERVICE PLAN

#### INTRODUCTION

This chapter describes the transit service plan for Washington County as recommended by the Washington County Public Transportation Needs Study Advisory Committee. The plan has two elements: 1) a local service element which builds upon the successful shared-ride taxicab services currently provided in the West Bend and Hartford areas of the County, extending such services to the resident population of the entire County, and 2) a commuter service element designed to serve work trip-oriented travel between Washington and Milwaukee Counties. The recommended plan is summarized in Table 81. The plan is for the five-year period from 1998 through 2002.

The remainder of this chapter consists of six sections. The first describes the two plan elements. The second summarizes the anticipated performance of each of the recommended services, including information on ridership, farebox revenues, and costs. The third sets forth recommended plan implementation responsibilities. The fourth presents a summary of the significant comments on the plan received at public informational meetings and hearings held on the plan by the Advisory Committee. The fifth reports the response of the Advisory Committee to the public comments received. The chapter concludes with a brief summary.

#### PLAN DESCRIPTION

##### Local Transit Services

The local transit service element of the recommended plan proposes to make shared-ride taxicab services available to residents throughout Washington County. This plan element consists of the following services:

- Urban Service

Shared-ride taxicab services provided at an appropriate level within the major urban centers of the County, that is, within the West Bend, Hartford-Slinger, and Germantown-Richfield<sup>1</sup> areas (see Map 23). Service would be provided seven days a week, excluding those holidays which do not fall on a Sunday. Service would be provided on weekdays and Saturdays from 6:00 a.m. to 10:00 p.m. and

on Sundays from 8:00 a.m. to 4:00 p.m. Trip requests would be fulfilled within a 30-minute maximum response time. Both trip ends would have to lie within one of the urban service areas shown on Map 23. These services would supplant the existing services provided by the Cities of Hartford and West Bend.

- Rural Service

Shared-ride taxicab services would be provided at an appropriate level within the rural areas of the County. Service would be provided from 6:00 a.m. to 6:30 p.m. five days a week, excluding weekends and holidays. Trip requests would be fulfilled within a four-hour maximum response time. This service would accommodate trips with both ends within the rural service area, trips with one end within the rural service area and the other within one of the three urban service areas, and trips between the urban service areas.

- Specialized Service

Specialized taxicab services would be provided throughout the County for residents who are physically or developmentally disabled and therefore are unable to gain access to the regular shared-ride taxicab services. These individuals typically require door-through-door assisted service. Trip requests would be accommodated on a 24-hour advance-reservation basis. Service would be provided five days a week, excluding weekends and holidays, between the hours of 8:00 a.m. and 4:30 p.m.

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<sup>1</sup>The Germantown-Richfield area includes the northern portion of the Village of Menomonee Falls, where many Germantown and Richfield residents purchase goods and services. Service could be extended to residents of the Village of Menomonee Falls within that area, or perhaps within an expanded area, if a cooperative agreement on an appropriate level of fiscal support for the service were reached with either Waukesha County or the Village of Menomonee Falls.

Table 81

**SUMMARY OF MAJOR TRANSIT SERVICE ELEMENTS UNDER THE  
RECOMMENDED TRANSIT SYSTEM PLAN FOR WASHINGTON COUNTY**

Plan Element	Plan Recommendations			
Local Transit Services	<ul style="list-style-type: none"> <li>New Countywide public shared-ride taxicab system established and operated under County authority</li> <li>Countywide system would supplant the existing Hartford and West Bend taxicab systems and the Washington County Office on Aging specialized transportation service for elderly and disabled persons</li> <li><u>Service Area</u> <ul style="list-style-type: none"> <li>Urban Area Service: All trips made by general public within Hartford-Slinger, greater West Bend, or Germantown-Richfield areas; and between the Germantown-Richfield area and the northern portion of Menomonee Falls in Waukesha County</li> <li>Rural Area Service: All trips made by general public within rural and small urban areas of County outside urban service areas and between urban and rural service areas</li> <li>Specialized Service: Trips made by disabled individuals who require special door-through-door assistance from taxicab operator within all of Washington County and between Germantown-Richfield area and the northern portion of the Village of Menomonee Falls in Waukesha County</li> </ul> </li> </ul>			
	<u>Response Time</u>	<u>Urban Area Service</u>	<u>Rural Area Service</u>	<u>Specialized Service</u>
	Maximum time to respond to a trip request	30 minutes	Four hours	One-day advance reservation
	<u>Service Hours</u>			
	Weekdays:	6:00 a.m.-10:00 p.m.	6:00 a.m.-6:30 p.m.	8:00 a.m.-4:30 p.m.
	Saturdays:	6:00 a.m.-10:00 p.m.	--	--
	Sundays:	8:00 a.m.-4:00 p.m.	--	--
	Holidays:	Sundays Only	--	--
	<u>Fares (per one-way trip)<sup>a</sup></u>	<u>Adult<sup>b</sup></u>	<u>Student<sup>b</sup></u>	<u>Elderly or Disabled<sup>b</sup></u>
	Five miles or less	\$2.00	\$1.50	\$1.25
Commuter Transit Services	<ul style="list-style-type: none"> <li>A new commuter "freeway flyer" bus route to be established between Washington County and central Milwaukee County and operated under County authority</li> <li>Commuter-bus route to serve two park-ride lots in Washington County: <ul style="list-style-type: none"> <li>USH 45 and Paradise Drive (West Bend)</li> <li>CTH P and STH 60 (Jackson)</li> </ul> </li> <li>Commuter-bus service to be provided in both travel directions: <ul style="list-style-type: none"> <li>With appropriately located stops along major arterial streets within central Milwaukee County to serve persons traveling between Milwaukee County and Washington County job locations</li> <li>With limited stops via USH 41/45 and IH 94 to serve persons traveling between Washington County and Milwaukee CBD job locations</li> </ul> </li> <li>New route-deviation shuttle services to be established and operated under County authority to connect major Washington County job concentrations with commuter bus route or other existing Milwaukee County Transit System bus routes <ul style="list-style-type: none"> <li>Five routes to link persons using recommended commuter-bus route with job locations in the Jackson, Slinger, Hartford, West Bend, Barton, and Kewaskum areas</li> <li>One route to link persons using major bus routes serving the Northridge Shopping Center in Milwaukee County with job locations in the Village of Germantown</li> </ul> </li> </ul>			
	<u>Service Periods</u>	<u>Milwaukee County to Washington County Commuter-Bus Service</u>	<u>Commuter Bus Connecting Shuttle Service</u>	<u>Germantown Industrial Shuttle Service</u>
	Weekdays only:	4:40 a.m. - 7:45 a.m. 1:35 p.m. - 6:00 p.m. 10:30 p.m. - 1:30 a.m.	5:30 a.m. - 7:55 a.m. 2:30 p.m. - 5:00 p.m. 11:05 p.m. - 12:40 a.m.	5:30 a.m. - 7:30 a.m. 1:30 p.m. - 4:00 p.m. 10:30 p.m. - 1:00 a.m.
	<u>Service Levels</u>			<u>Washington County to Milwaukee County Commuter-Bus Service</u>
	Weekdays only:	Three morning outbound bus trips Two afternoon outbound bus trips Three afternoon inbound bus trips Two late evening inbound bus trips	Three morning trips to employers Two afternoon trips to employers Three afternoon trips from employers Two late evening trips from employers	Two morning inbound bus trips Two afternoon outbound bus trips
			Three morning trips to employers Three morning trips from employers Four afternoon trips to employers Four afternoon trips from employers Two late evening trips to employers Two late evening trips from employers	



Table 81 (continued)

Plan Element	Plan Recommendations			
Commuter Transit Services (continued)	<ul style="list-style-type: none"> <li><u>Fares<sup>a</sup></u></li> </ul>	<u>Milwaukee County to Washington County Commuter-Bus Service</u> \$2.75 between Milwaukee County and USH 45 at Paradise Drive (West Bend) park-ride lot and City of West Bend  \$2.50 between Milwaukee County and STH 60 at CTH P (Jackson) park-ride lot	<u>Commuter Bus Connecting Shuttle Service</u> No charge for passengers transferring to or from connecting commuter bus service <sup>c</sup>	<u>Germantown Industrial Shuttle Service</u> \$0.50 for passengers transferring to or from connecting bus service <sup>c</sup>  <u>Washington County to Milwaukee County Commuter-Bus Service</u> \$2.75 between City of West Bend and USH 45 at Paradise Drive (West Bend) park-ride lot and Milwaukee County  \$2.50 between STH 60 at CTH P (Jackson) park-ride lot and Milwaukee County

<sup>a</sup>Fares shown are one-way cash fares. Special convenience fares with discounts from regular cash fares would continue to be available for taxicab service, and could also be made available for commuter transit services.

<sup>b</sup>Adults age 18 to 59; students age five through high school; elderly age 60 and over; and disabled of all ages. Children age 4 and under would ride free when accompanied by an adult.

<sup>c</sup>Potentially, the shuttle services could be used by persons not transferring to or from connecting bus services. The County may consider charging a different fare for such users.

Source: SEWRPC.

The recommended plan includes a uniform fare structure for all three shared-ride taxicab services. The recommended structure, set forth in Table 81, is based on distance. The basic fare for trips of up to five miles would be \$2.00 for adults, \$1.50 for students, and \$1.25 for elderly, age 60 and older, and disabled individuals. The fares would increase with each increment of five miles to a maximum adult fare of \$6.50.<sup>2</sup>

A total of 21 vehicles would be required to deliver the three shared-ride taxicab services (see Table 82). Of this total, 15 would be assigned to urban area service, five to rural area service, and one to specialized service.

#### Commuter Transit Services

The commuter transit services element of the recommended plan is intended to facilitate work-

related travel in both directions between Washington and Milwaukee Counties. The Advisory Committee recommended that commuter services be sponsored by Washington County only if private-sector firms commit themselves to paying the local share of the cost of providing such services, thus ensuring that no County property-tax monies would be required. This element of the plan consists of the following services:

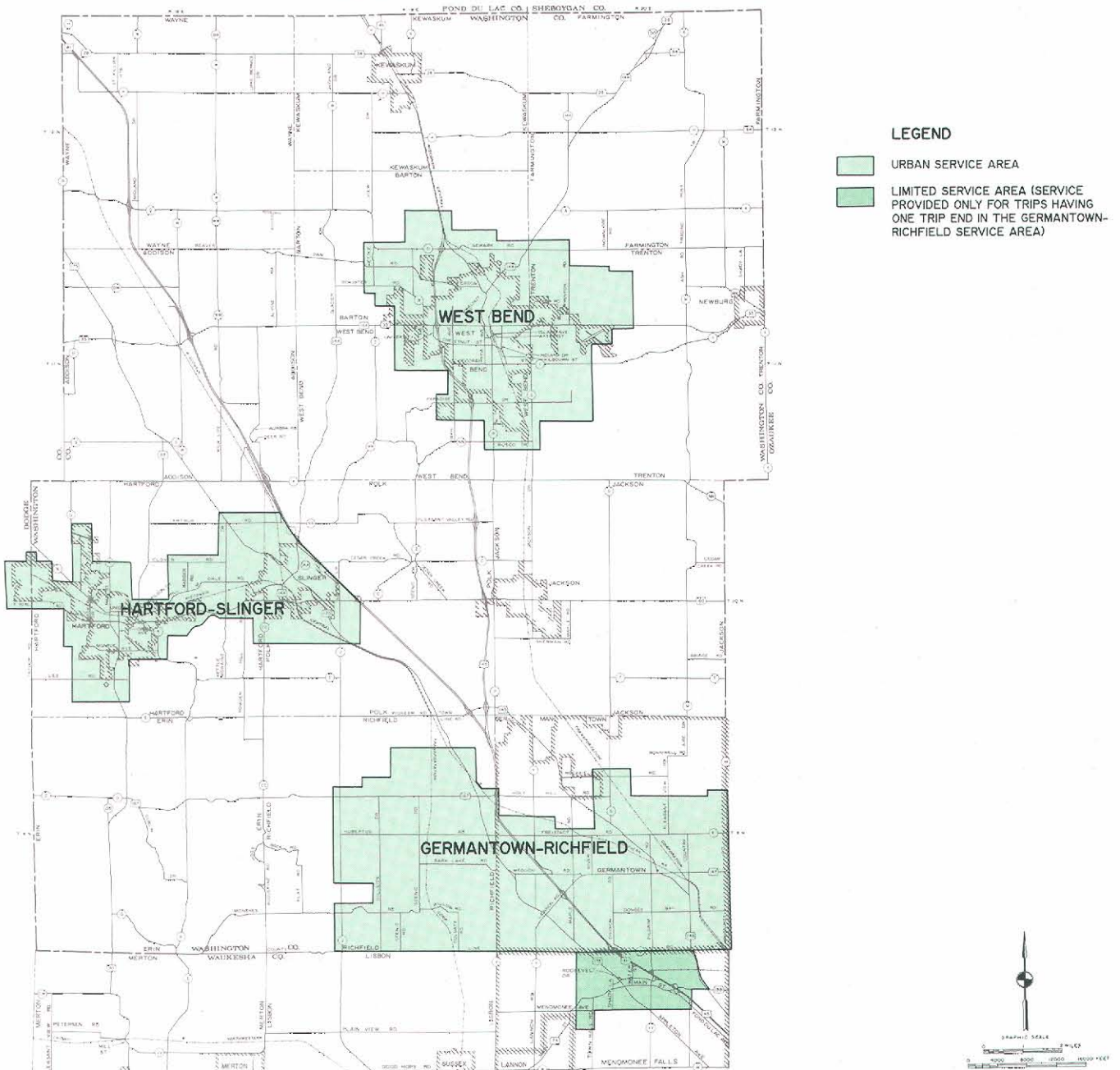
- Milwaukee County-to-Washington County Service

Commuter-bus service from Milwaukee County to Washington County would be provided to serve the first and second shifts at major firms located in Washington County. The service would be provided on all normal workdays over the route identified on Map 24. Buses would begin the route at the intersection of S. 6th Street and W. Lincoln Avenue in the City of Milwaukee and continue in a local collection mode along S. 6th Street, west on W. Greenfield Avenue, north on S. and N. 27th Streets, and west on W. Fond du Lac Avenue to N. 76th Street, where the buses would access the freeway system. The buses would then travel nonstop on the STH 145 and USH 45 Freeways to an initial stop at the Wisconsin Department of Transportation park-ride lot at the intersection of STH 60 and

<sup>2</sup>In the West Bend area, the present fares per trip are: \$2.00 for adults, \$1.50 for students, and \$1.00 for elderly and disabled individuals. In the Hartford area the present fares are: \$1.50 for adults and students and \$1.25 for elderly and disabled individuals. For the Washington County specialized service, the present fare is \$1.25.

# Map 23

## URBAN SERVICE AREAS FOR RECOMMENDED LOCAL TRANSIT SERVICE IN WASHINGTON COUNTY



Source: SEWRPC.

Table 82

**PROPOSED VEHICLE FLEET NEEDED TO PROVIDE THE RECOMMENDED  
LOCAL TRANSIT SERVICES IN WASHINGTON COUNTY: 1998-2002**

Vehicle Type	Number of Vehicles in Shared-Ride Taxicab Fleet <sup>a</sup>			
	Urban Service	Rural Service	Specialized Service	Total
Wheelchair-Accessible Full-Size Van . . . . .	3	1	1	5
Nonaccessible 14-Passenger Full-Size Van . . . . .	2	--	--	2
Wheelchair-Accessible Minivan . . . . .	2	--	--	2
Nonaccessible Seven-Passenger Minivan . . . . .	8	--	--	8
Automobile . . . . .	--	4	--	4
<b>Total</b>	<b>15</b>	<b>5</b>	<b>1</b>	<b>21</b>

<sup>a</sup>Assumes that vehicles in the existing fleets of the urban taxicab systems operated by the Cities of Hartford and West Bend would be acquired. These fleets presently consist of two accessible minivans operated by the City of Hartford and two accessible full-size vans and four seven-passenger minivans operated by the City of West Bend.

Source: SEWRPC.

CTH P in the Village of Jackson.<sup>3</sup> The bus would reenter the freeway and continue north to the Paradise Drive exit in the West Bend area.

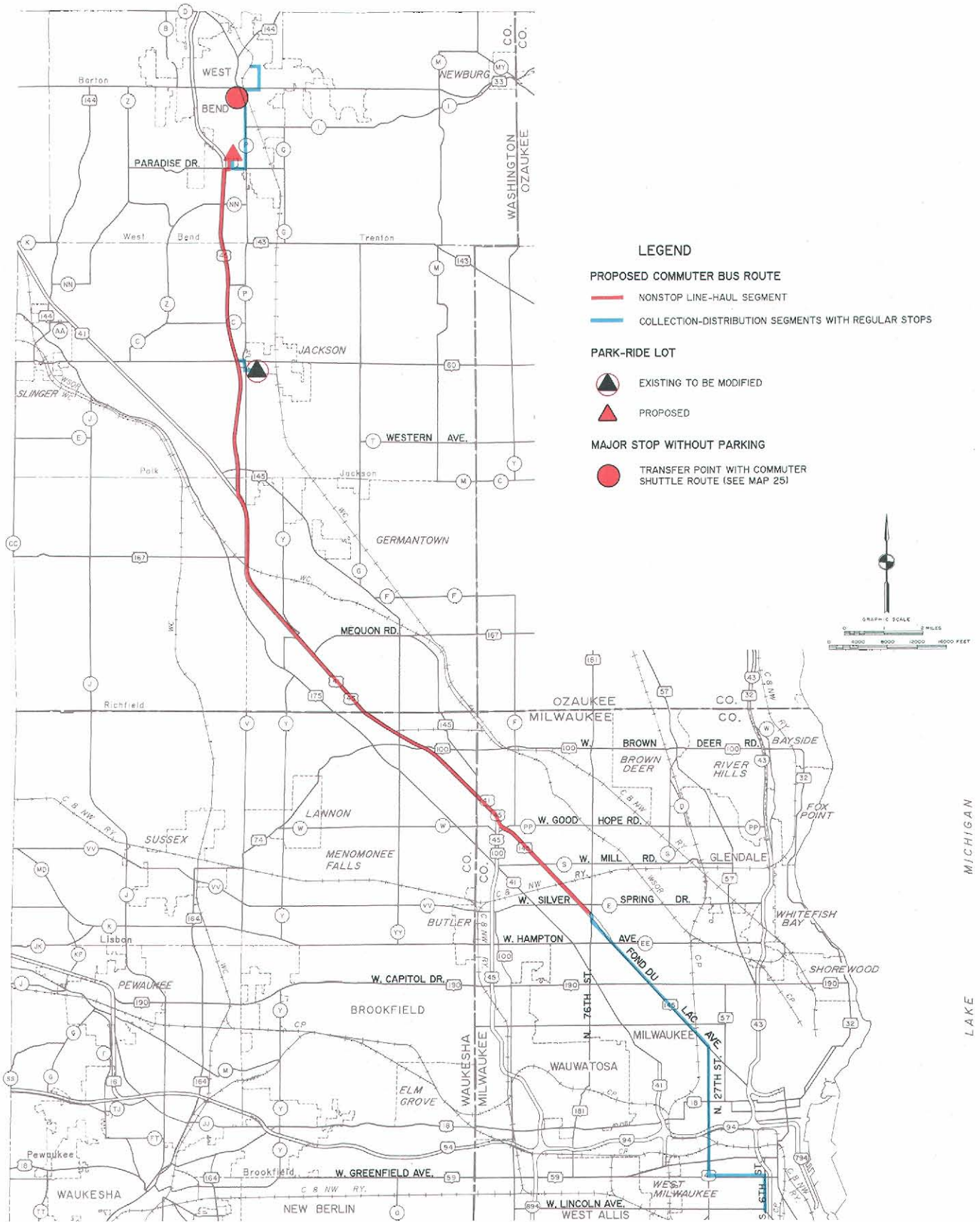
A park-ride lot would be provided at the Paradise Drive location. Ideally, Washington County would work with the Wisconsin Department of Transportation to locate and construct the lot, which has long been recommended for this location in the adopted regional transportation system plan. In the absence of such a lot, Washington County would have to negotiate for the location of a transfer station either with the owner of the

commercial center located at the Paradise Drive location or with the City of West Bend for a station located along a local street. After making the Paradise Drive stop, the commuter bus would operate in a local distribution mode in the West Bend area along Main Street, Water Street, and Island Avenue to a transfer station located at the former West Bend Outlet Mall. From there the bus would continue on to Washington Street and Schmidt Road to a terminus at the West Bend Company, Inc., plant.

A total of five shuttle-bus routes would be used to connect the commuter-bus stops to employment-related destinations not directly served by the commuter-bus route (see Map 25). Two shuttle-bus routes would operate out of the Jackson park-ride lot, one to serve industries in the Jackson and Slinger areas and the other to serve industries in the Hartford area. Two additional shuttle-bus routes would operate out of the Paradise Drive location, one to serve industries in the southern West Bend industrial area and the other to serve industries north of West Bend, in Barton and Kewaskum. The latter route would operate over USH 45. A fifth route would operate from the transit stop on

<sup>3</sup>The present configuration of the Jackson carpool parking lot is such that a commuter bus cannot readily enter and exit the lot. Until that lot is reconstructed to permit its direct use by buses, it would be necessary for the commuter bus to exit the USH 45 Freeway at STH 145 and travel east on STH 145 and north on CTH P to a stop along the shoulder of CTH P at that lot. The bus would then continue north on CTH P and west on STH 60 to reenter the USH 45 Freeway.

**RECOMMENDED COMMUTER-BUS ROUTE TO SERVE MILWAUKEE COUNTY RESIDENTS COMMUTING TO WASHINGTON COUNTY JOBS**



Source: SEWRPC.

Island Avenue, to serve additional industries located in the northern and eastern parts of West Bend.<sup>4</sup>

Independent of the commuter-bus service, a sixth shuttle-bus route is proposed to serve industries in the Germantown area. This route would operate out of an existing Milwaukee County Transit System (MCTS) terminal at the Northridge Shopping Center (see Map 26). Three MCTS bus routes serve that location.

Three commuter-bus trips would be operated to serve the three predominant first shift starting times in Washington County, 6:00 a.m., 7:00 a.m., and 8:00 a.m. The three commuter buses would leave S. 6th Street and W. Lincoln Avenue at 4:40 a.m., 5:35 a.m., and 6:30 a.m. The total trip time for passengers boarding at the initial stop may be expected to range from about 55 minutes to about 75 minutes, depending upon the destinations in Washington County. Three commuter-bus trips serving the first shift would leave West Bend at 3:15 p.m., 3:45 p.m., and 4:45 p.m. for the return trip.

Two commuter-bus trips would be operated to serve the second-shift starting times of 3:00 p.m. and 3:30 p.m. The two buses would leave S. 6th Street and W. Lincoln Avenue at 1:35 p.m. and 2:00 p.m. The return buses would leave West Bend at 11:15 p.m. and 12:15 a.m.

Shuttle buses would meet all commuter buses in Jackson and West Bend and would return from the designated industrial areas in time to meet the inbound commuter buses. In the Germantown area, continuous shuttle-bus service would be provided between 5:30 and 7:30 a.m., 1:30 and 4:00 p.m. and 10:30 p.m. and 1:00 a.m. in order to make connections with MCTS bus routes.

Commuter-bus fares would be set at \$2.50 between Milwaukee and Jackson and \$2.75 between Milwaukee and West Bend. This fare would include transfer privileges to the connecting shuttle services. For the shuttle-bus service to the Germantown area from the Northridge Shopping Center, the fare would be set at 50 cents.

- Washington County-to-Milwaukee County Service

Commuter-bus service for Washington County residents working in downtown Milwaukee would also be provided. The service would be provided on all normal work days over the route identified on Map 27. The route would begin at the Island Avenue stop near the former West Bend Outlet Center and continue south along Main Street to the proposed park-ride lot at the Paradise Drive interchange with the STH 45 Freeway. The buses would then go south on that freeway, making one stop at the Jackson park-ride lot at the intersection of STH 60 and CTH P before continuing on to the Milwaukee Central Business District over the freeway system. The bus would exit the IH 94 Freeway at N. 13th Street and operate in a local distribution mode over W. and E. Wisconsin Avenue between N. 10th Street and N. Cass Street.

Two trips would be made each workday, leaving West Bend at 6:15 a.m. and 6:45 a.m. in order to arrive in the Milwaukee Central Business District at 7:15 a.m. and 7:45 a.m. The departing buses for the return trips would leave Milwaukee at 4:45 p.m. and 5:15 p.m. and reach the West Bend terminal at about 5:45 p.m. and 6:15 p.m. The travel time between West Bend and Milwaukee on the bus route would approximate 60 minutes and between Jackson and Milwaukee, about 45 minutes. The commuter-bus fares would be set at \$2.75 between Milwaukee and West Bend and \$2.50 between Milwaukee and Jackson.

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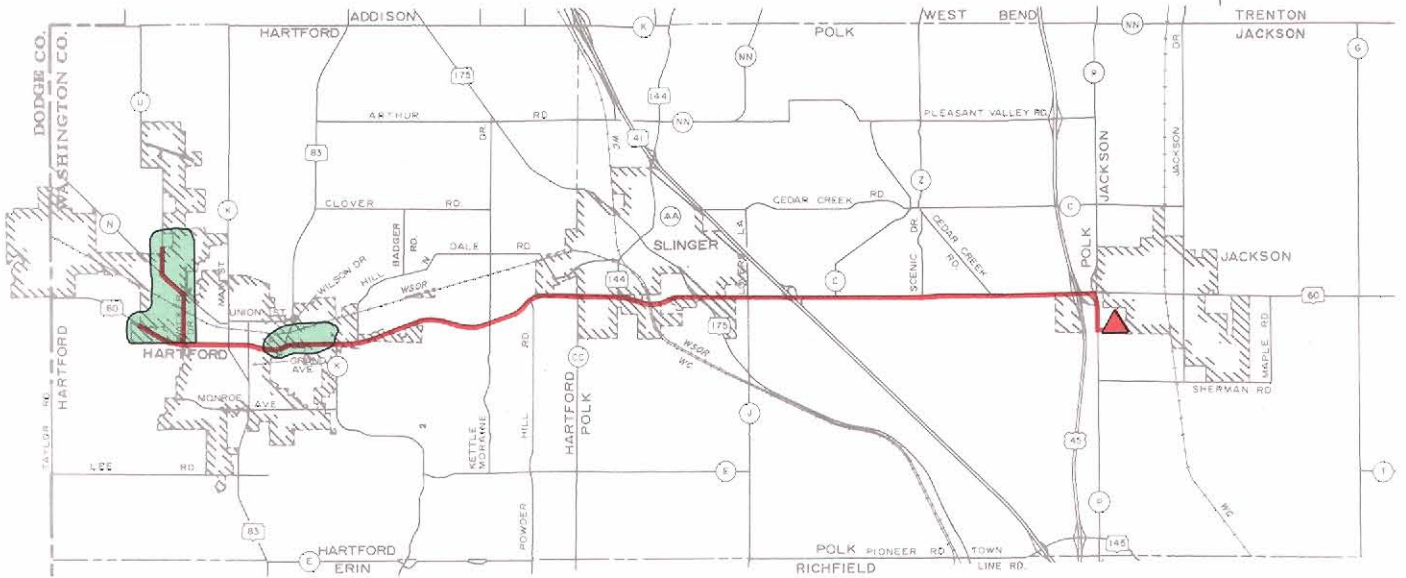
<sup>4</sup>Two of the five shuttle-bus routes, from Jackson to Hartford and from West Bend to Kewaskum, have the potential to be extended and to provide enhanced service focused on travel to work by Washington County residents. This potential service was described in the preceding chapter of this report under Subalternative 4A. Should the shuttle services be established to serve primarily Milwaukee County residents who are seeking to travel to job locations in Washington County, and should that shuttle service prove to be successful and become permanent, the Advisory Committee recommended that consideration then be given to extending and enhancing these shuttle-bus services to serve work trips by Washington County residents to and from employment locations within Washington County as well.



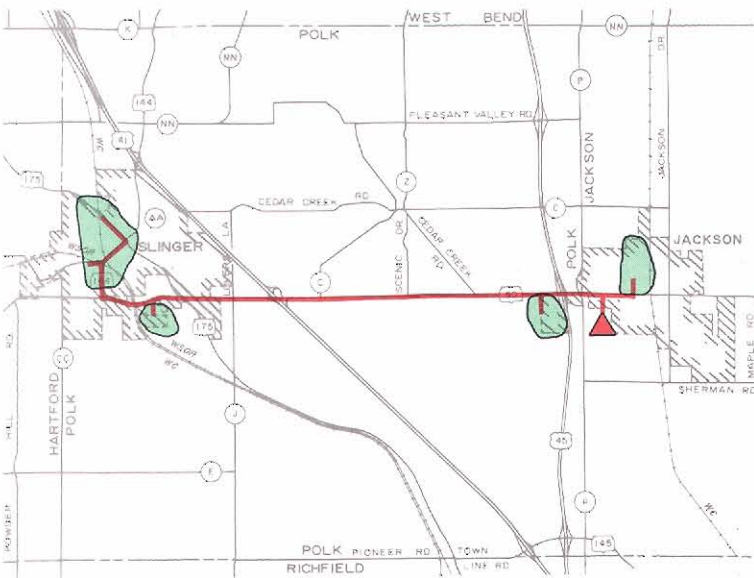
# Map 25

## RECOMMENDED COMMUTER-BUS SHUTTLE ROUTES FOR WASHINGTON COUNTY EMPLOYMENT CENTERS

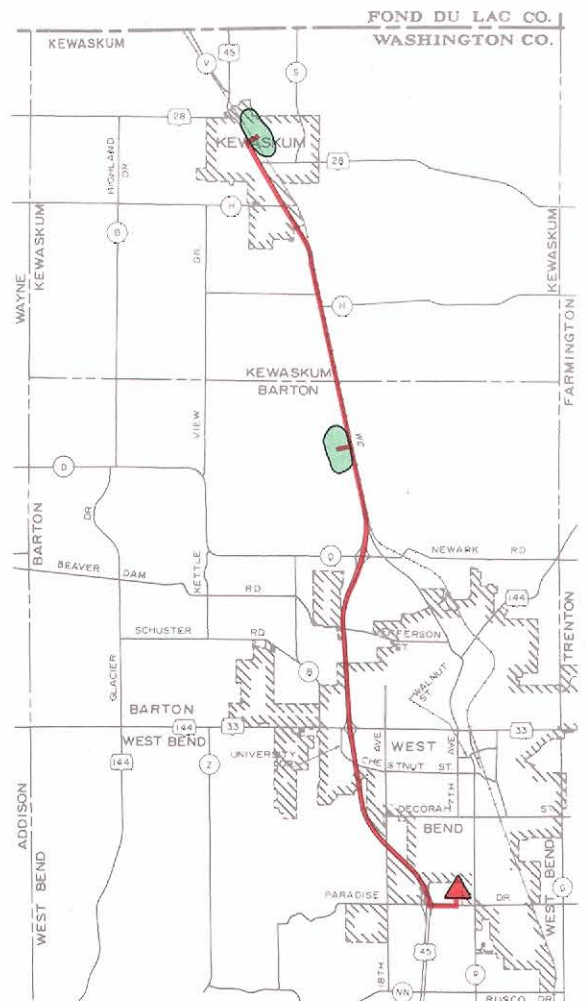
### HARTFORD ROUTE



### JACKSON-SLINGER ROUTE

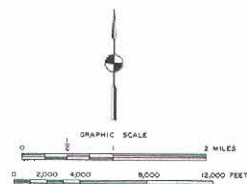


### BARTON-KEWASKUM ROUTE



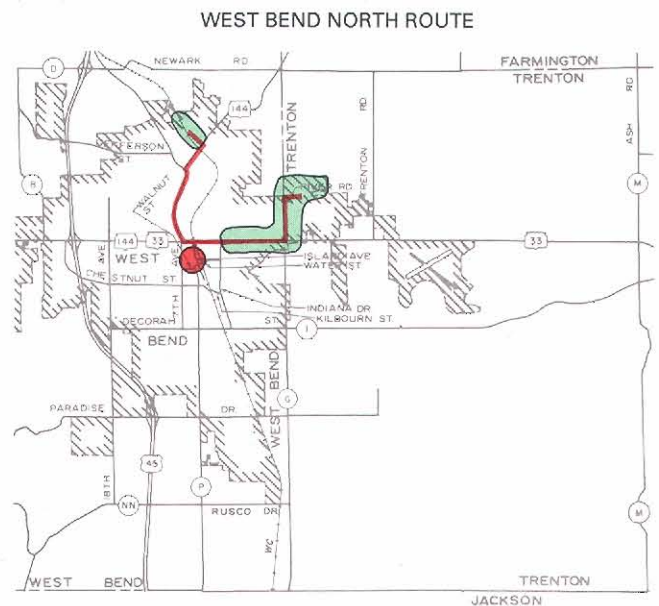
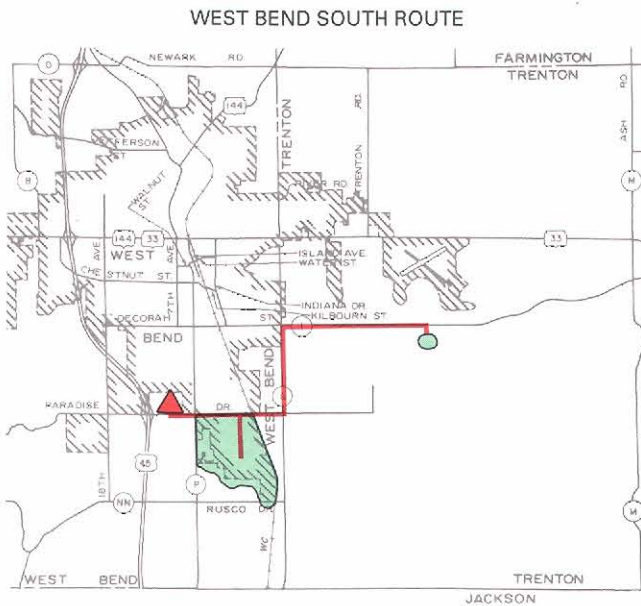
### LEGEND

- PROPOSED SHUTTLE ROUTE
- EMPLOYMENT SERVICE AREA FOR FLEXIBLE ROUTING SEGMENTS
- MAJOR STOP**
- ▲ PARK-RIDE LOT
- NONE TRANSFER POINT WITHOUT PARKING





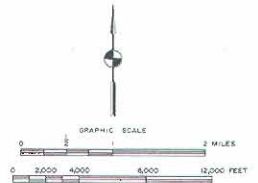
Map 25 (continued)



#### LEGEND

- PROPOSED SHUTTLE ROUTE
- EMPLOYMENT SERVICE AREA FOR FLEXIBLE ROUTING SEGMENTS
- MAJOR STOP
- ▲ PARK-RIDE LOT
- TRANSFER POINT WITHOUT PARKING

Source: SEWRPC.



## PLAN PERFORMANCE AND COSTS

### Basic Assumptions and Determinations

The analyses of the anticipated performance of the transit services comprising the recommended plan for Washington County and the cost and funding estimates associated with those services are predicated upon the following assumptions and determinations:

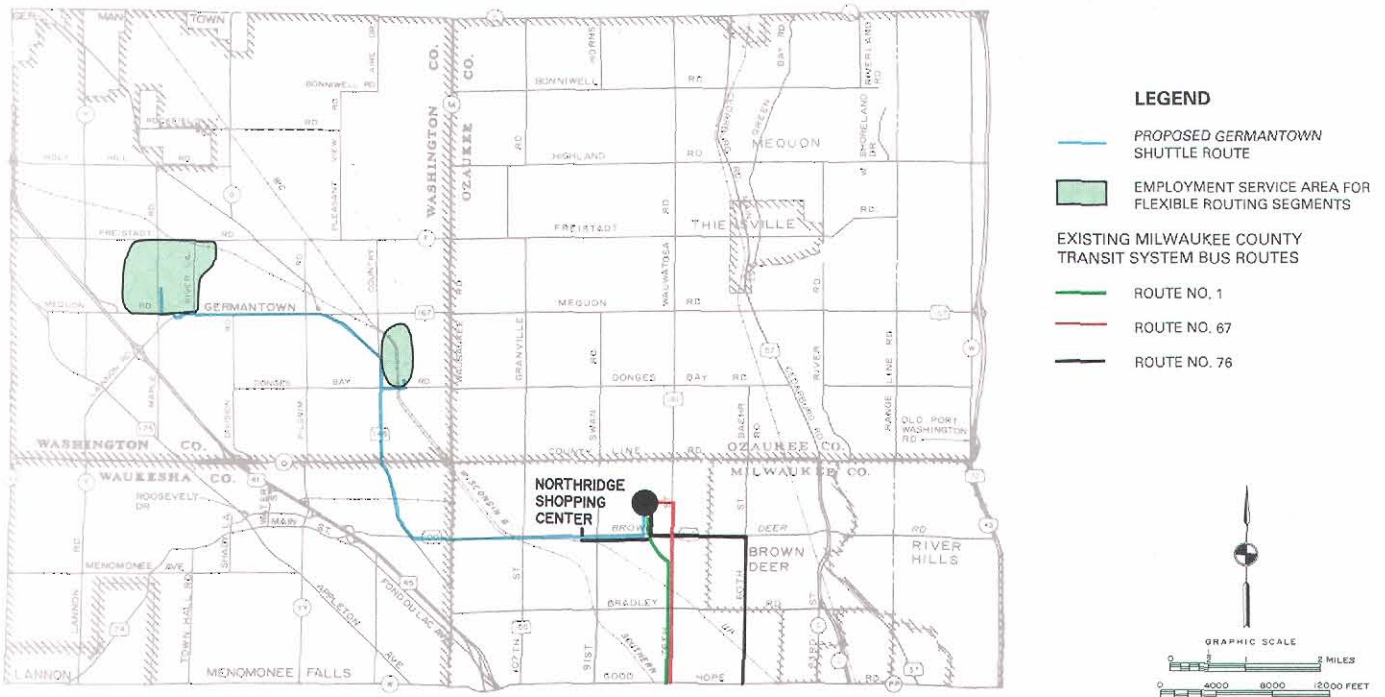
- The work-trips currently being accommodated under programs supported by the Wisconsin "Job Ride" Program and by the West Bend Company would instead be accommodated on the recommended commuter services.
- The costs of constructing properly configured park-ride lots at the STH 60 and Paradise Road interchanges on the USH 45 Freeway,

estimated at \$350,000, have not been included in the costs of implementing the transit service plan. Those costs were included in the adopted regional transportation system plan. While not essential to providing the recommended commuter transit services, the park-ride lots would facilitate those services and should be put in place under a cooperative effort by Washington County and the Wisconsin Department of Transportation as soon as possible.

- All costs are expressed in 1996 dollars. The cost and funding estimates herein provided represent average annual costs over the five-year plan implementation period from 1998 through 2002. Detailed information on capital and operating costs and on anticipated ridership over the five-year period are provided in Appendix A.

Map 26

# RECOMMENDED SHUTTLE ROUTE FOR GERMANTOWN EMPLOYMENT CENTERS



Source: SEWRPC.

- The Federal and State governments will significantly change neither the transit and related capital and operating assistance programs that are now in place nor the level of funding made available under those programs.

## Local Transit Services

The anticipated operating characteristics and costs and revenues associated with the recommended local transit services are set forth in Table 83. The following observations may be made on the basis of an examination of the information presented in this table:

- About 70,700 vehicle-hours of service would be required annually to provide the recommended Countywide shared-ride taxicab services. This represents about twice the number of vehicle-hours of service provided in 1995 by the three existing systems, the Hartford and West Bend shared-ride taxicab systems and the Washington County specialized transit system.
- The Countywide shared-ride taxicab system may be expected to accommodate about

173,000 rides annually. This compares with the total ridership in 1995 on the three existing systems of about 109,000.

- Over all, the number of riders per vehicle-hour of service may be expected to approximate 2.4 under the recommended plan, lower than the comparable ratios of 4.1 and 3.8 for the Hartford and West Bend taxicab systems, respectively, in 1995. This is to be expected, given the lower density of development and the longer trips associated with the rural portions of Washington County.
- The cost of operating the recommended Washington County shared-ride taxicab system is estimated at \$1.4 million annually. Of this total, about \$292,000, or about 20 percent, may be expected to be recovered by farebox revenues. Accordingly, the required subsidy would approximate \$1.1 million.
- Federal and State funds totaling over \$1.1 million may be expected to be available to provide about 89 percent of the required subsidy.

Table 83

**SELECTED CHARACTERISTICS OF THE RECOMMENDED  
LOCAL TRANSIT SERVICES IN WASHINGTON COUNTY: 1998-2002**

Characteristic	Countywide Shared-Ride Taxicab Services			
	Urban Areas	Rural Areas	Specialized	Total
<b>Service and Ridership</b>				
Vehicle-Hours of Service Provided . . . . .	53,900	14,700	2,100	70,700 <sup>a</sup>
Daily Ridership . . . . .	535	50	10	595 <sup>b</sup>
Annual Ridership . . . . .	156,500	14,000	2,500	173,000 <sup>c</sup>
Riders per Vehicle-Hour of Service . . . . .	2.9	1.0	1.7	2.4 <sup>d</sup>
<b>Costs and Revenues</b>				
Cost <sup>e</sup> . . . . .	\$1,059,200	\$311,900	\$54,000	\$1,425,100
Farebox Revenue . . . . .	253,500	34,500	4,200	292,200
Subsidy Required . . . . .	805,700	277,400	49,800	1,132,900
Percent of Cost Returned through Farebox . . . . .	23.9	11.1	7.8	20.5 <sup>f</sup>
<b>Anticipated Source of Subsidy</b>				
Federal . . . . .	\$290,400	\$104,300	\$16,900	\$411,600
State . . . . .	447,000	132,100	21,700	600,800
County . . . . .	68,300	41,000	11,200	120,500 <sup>g</sup>
<b>Per Trip Data</b>				
Cost . . . . .	\$6.77	\$22.27	\$21.60	\$8.23
Farebox Revenue . . . . .	1.62	2.46	1.68	1.67
Subsidy . . . . .	5.15	19.81	19.92	6.56

<sup>a</sup>In 1995, the Hartford shared-ride taxicab system provided 4,600 vehicle-hours of service, the West Bend shared-ride taxicab system provided 20,900 vehicle-hours of service, and the Washington County specialized transit service provided 6,900 vehicle-hours of service. In total, the three systems provided 32,400 vehicle-hours of service.

<sup>b</sup>In 1995, daily ridership on the Hartford, West Bend, and Washington County transit systems was 70, 265, and 45, respectively, for a total of 380.

<sup>c</sup>During 1995, annual ridership on the Hartford, West Bend, and Washington County transit systems was 18,700, 78,800 and 11,400, respectively, for a total of 108,900.

<sup>d</sup>During 1995, the number of riders per vehicle-hour of service on the Hartford, West Bend, and Washington County transit systems was 4.1, 3.8, and 1.7, respectively.

<sup>e</sup>Includes operating expenses and capital costs; all costs presented in constant 1996 dollars.

<sup>f</sup>In 1995, the percent of cost returned through farebox revenues for the Hartford, West Bend, and Washington County systems was 21, 28, and 9, respectively.

<sup>g</sup>During 1996, about \$104,200 in local funds was provided for operating subsidies and average annual capital costs of local transit services in the County. This amount included about \$70,000 expended by Washington County in support of its specialized transit services and about \$13,100 and \$21,100 by the Cities of Hartford and West Bend, respectively, in support of their shared-ride taxicab systems.

Source: SEWRPC.

The remaining 11 percent, or about \$120,500 annually, would have to be provided by Washington County. In 1996, Washington County is expected to expend about \$70,000 in County tax-levy monies to support its specialized transportation program. In addition, local tax-levy support of the Hartford and West Bend

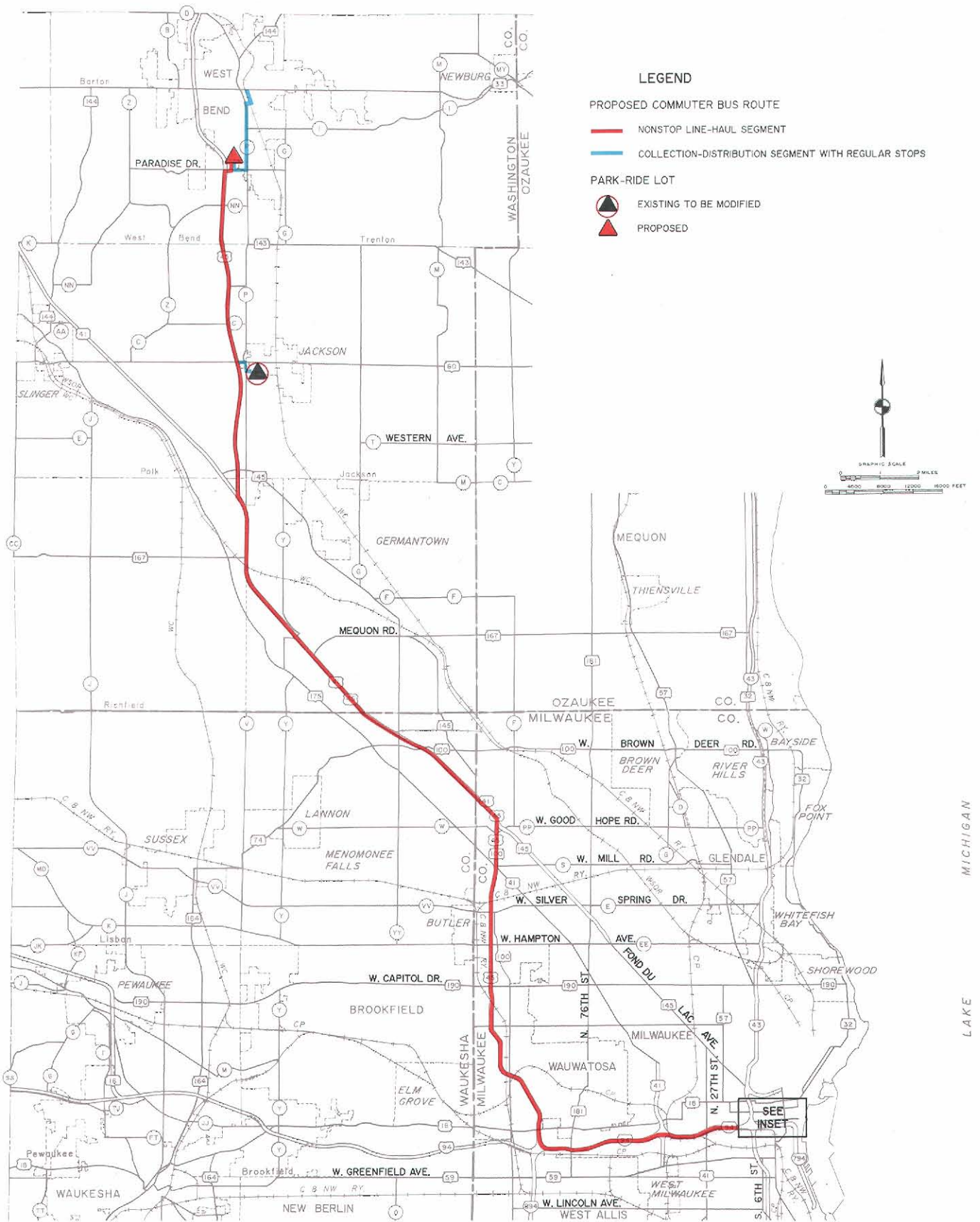
taxicab systems is expected to approximate \$13,100 and \$21,100, respectively.

- The required Washington County subsidy would represent an increase of about 16 percent over the local funds provided for transit during 1996 by the County and the Cities of

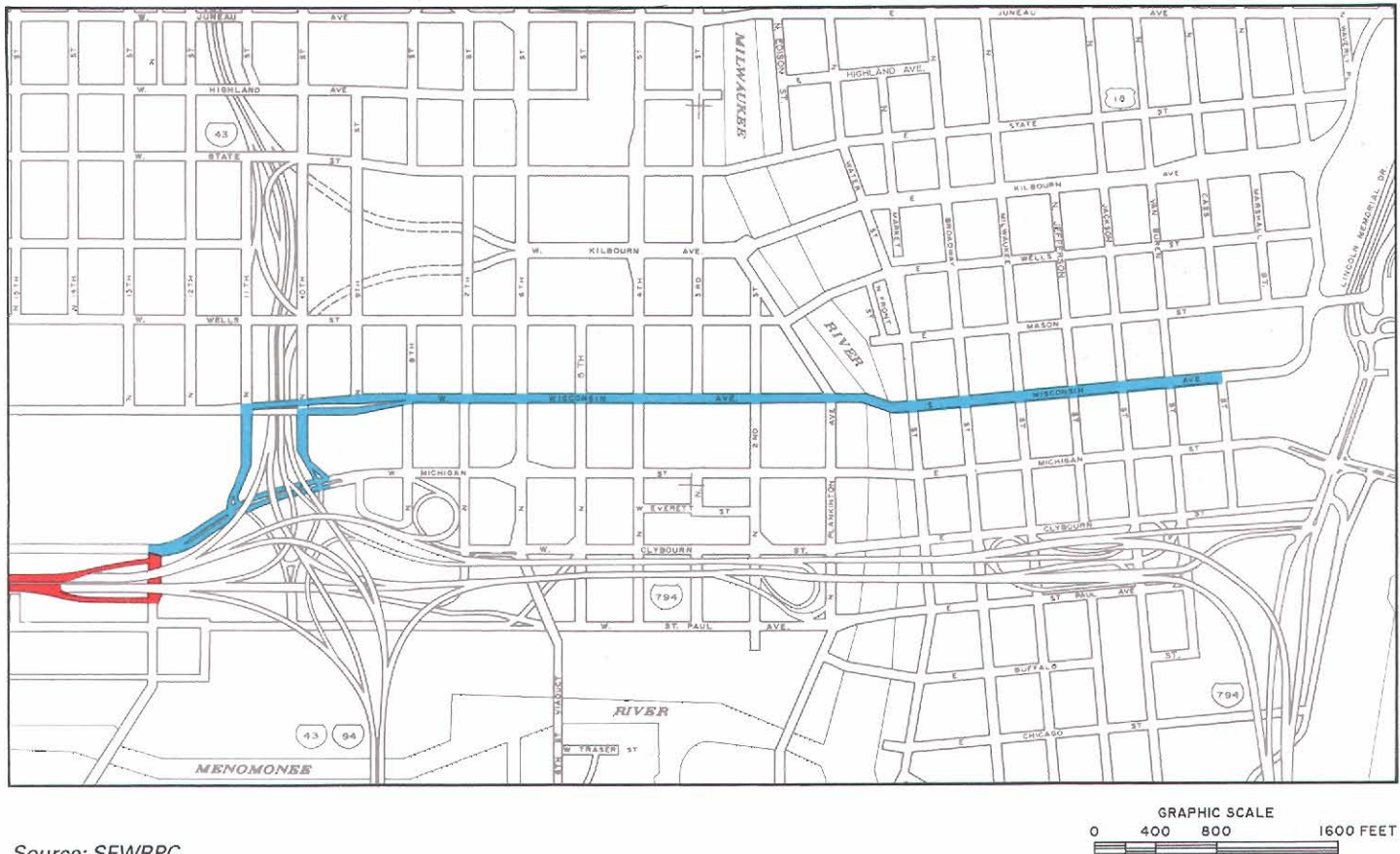


# Map 27

## RECOMMENDED COMMUTER-BUS ROUTE TO SERVE WASHINGTON COUNTY RESIDENTS COMMUTING TO MILWAUKEE COUNTY JOBS



Inset to Map 27



Hartford and West Bend. This relatively modest increase would provide for an increase in the vehicle-hours of service of about 118 percent over 1995 levels for the three existing systems through expanded taxicab services in the Hartford-Slinger and greater West Bend areas and new taxicab service in the Germantown-Richfield area and in the rural and small urban areas of the County. This service expansion would, in turn, be expected to increase ridership by nearly 60 percent over 1995 levels for the three existing systems.

#### Commuter Transit Services

The anticipated operating characteristics and costs and revenues associated with the recommended commuter transit services are set forth in Table 84. The following observations may be made on the basis of an examination of the information provided in this table:

- About 18,800 vehicle-hours of service would be required annually to provide the recommended commuter services. Nearly 90 percent of the service would be provided in the form of commuter-bus and shuttle-bus services oriented to bringing Milwaukee County residents to job locations in Washington County.
- The commuter system may be expected to accommodate 96,000 riders annually. About 93 percent of those rides would be made by Milwaukee County residents.
- The number of riders per vehicle-hour of service is expected to approximate 5.1 under the recommended plan.
- The cost of operating the recommended commuter-bus and related shuttle-bus services annually is estimated at \$779,000. Of this total, about \$196,900, or about 25 percent,

Table 84

**SELECTED CHARACTERISTICS OF THE RECOMMENDED COMMUTER  
TRANSIT SERVICES IN WASHINGTON COUNTY: AVERAGE ANNUAL, 1998-2002**

Characteristic	Commuter-Bus Services		
	Milwaukee County-to-Washington County Oriented Service	Washington County-to-Milwaukee County Oriented Service	Total
<b>Service and Ridership</b>			
Vehicle-Hours of Service Provided .....	16,900	1,900	18,800
Daily Ridership .....	350	25	375
Annual Ridership .....	89,200	6,800	96,000
Riders per Vehicle-Hour of Service .....	5.3	3.6	5.1
<b>Costs and Revenues</b>			
Cost <sup>a</sup> .....	\$656,000	\$123,000	\$779,000
Farebox Revenue .....	180,400	16,500	196,900
Subsidy Required .....	475,600	106,500	582,100
Percent of Cost Returned through Farebox .....	27.5	13.4	25.3
<b>Anticipated Source of Subsidy</b>			
Federal .....	\$162,300	\$ 42,400	\$204,700
State .....	258,900	48,000	306,900
Private .....	54,400	16,100	70,500
<b>Per Trip Data</b>			
Cost .....	\$7.35	\$18.09	\$8.11
Farebox Revenue .....	2.02	2.43	2.05
Subsidy .....	5.33	15.66	6.06

<sup>a</sup>Includes operating expenses and capital costs; all costs presented in constant 1996 dollars.

Source: SEWRPC.

may be expected to be recovered by farebox revenues. Accordingly, the required subsidy would approximate \$582,100.

- Federal and State funds totaling \$511,600 may be expected to be available to provide nearly 88 percent of the required subsidy. The remaining 12 percent, or about \$70,500 annually, would have to be provided by the private sector.

## PLAN ADOPTION AND IMPLEMENTATION

### Plan Adoption

Adoption or endorsement of the recommended Washington County transit service plan is important to ensuring a common understanding among the concerned units and agencies of government and to enable the staffs of those governments to work cooperatively toward plan implementation. Accordingly, the following plan adoption actions are recommended:

- Washington County  
The Washington County Board of Supervisors should act formally to adopt the plan as a guide to the provision of transit services in the County. The adoption action should be certified to the Southeastern Wisconsin Regional Planning Commission with a request that the plan be incorporated into the regional transportation system plan.
- Southeastern Wisconsin Regional Planning Commission  
Upon receipt of notification of adoption of the plan from Washington County, the Southeastern Wisconsin Regional Planning Commission should adopt the plan as an amendment and extension of the regional transportation system plan and formally certify such adoption to all of the local units of government in Washington County, to the Wisconsin Department of Transportation, and to the Federal Transit Administration.



- Wisconsin Department of Transportation  
Upon receipt of the certification by the Regional Planning Commission, the Wisconsin Department of Transportation should act to endorse the plan as a guide for the programming, administration, and granting of State transit assistance funds.
- Federal Transit Administration  
Upon endorsement of the plan by the Wisconsin Department of Transportation, the Federal Transit Administration should endorse the plan as a guide for the programming, administration, and granting of Federal transit funds.
- Local Units of Government in Washington County  
Upon receipt of the certified plan, the concerned common councils, village boards, and town boards in Washington County should act to adopt the plan, thereby indicating support to the County in the implementation of that plan. In particular, the Common Councils of the Cities of Hartford and West Bend, by their plan adoption actions, would be signifying a willingness to negotiate the transfer to Washington County of the transit vehicle fleets currently in use to provide shared-ride taxicab services in those communities.

#### Plan Implementation:

##### Local Transit Services Element

It is recommended that Washington County take the following steps toward implementation of the local transit services element of the recommended plan:

- Designation of Responsibility  
The County Board should designate its Office on Aging and the related oversight committee, the Washington County Committee on Aging, as the responsible parties for implementation of the local transit services element of the plan. The Office of Aging presently has the responsibility to operate the specialized transportation service and thus should have the requisite knowledge and experience required to convert that service into the Countywide shared-ride taxi service as recommended in the plan.
- Negotiations with Cities of Hartford and West Bend  
Washington County should undertake negotiations with the Cities of Hartford and

West Bend relative to the assumption by the County in 1998 of responsibility for the continued provision of urban shared-ride taxicab services to those two communities and their environs. In particular, the County would seek to reimburse each of the Cities for the salvage value at the end of 1997 of the two vehicle fleets concerned, under an assumption that ownership of the vehicles would be transferred to Washington County at that time.

- Selection of Service Providers

Washington County should undertake the steps necessary to select one service provider or more for the Countywide shared-ride taxicab system beginning in 1998. It is recommended that the County provide such services through one or more contracts with private-sector firms and that a competitive procurement process be undertaken toward that end. It should be assumed that Washington County would own the necessary vehicle fleet and lease that fleet to the service providers. The procurement process should be structured to meet all Federal or State requirements.

- Federal and State Grant Applications

During 1997, Washington County should prepare operating and capital budgets to support applications for Federal and State grant funds. Such applications would need to be prepared annually on a schedule designed to meet the requirements of the agencies concerned.

#### Plan Implementation:

##### Commuter Transit Services Element

It is recommended that Washington County take the following steps toward implementation of the commuter transit services element of the recommended plan:

- Designation of Responsibility

The County Board should designate its Office on Economic Development and the related oversight committee, the Washington County Economic Development Program Advisory Committee, as the responsible parties for possible implementation of the commuter transit services element of the plan. This recommendation is made in light of the recommendation noted above that Washington County sponsor this element of the plan only on the condition that private-sector firms commit to providing the local funding required to effect the services. The Office on

Economic Development is the logical Washington County agency to work with the private-sector firms, local chambers of commerce, and transportation management associations in the County in obtaining the necessary private-sector funding.

- Discussions with Private-Sector Interests

The Office of Economic Development should undertake appropriate discussions with private-sector agencies and firms to determine if there is sufficient interest in supplying the requisite local funding to implement the commuter transit services element of the plan. Should there be insufficient interest, then no further steps toward plan implementation would be undertaken. Should sufficient interest be expressed, then a County-wide private-sector organization, perhaps a Washington County Transportation Management Association, should be created and charged with the responsibility of implementing the commuter services element of the plan.

- Specific Implementing Actions Required

Assuming that sufficient interest is expressed by the private sector to initiate the desired commuter transit services and that a County-wide agency is created to provide the institutional framework for providing those services, the following specific actions would need to be taken:

1. The private-sector Countywide agency established to implement the plan should select a provider for the commuter-bus and shuttle-bus services. It is recommended that a competitive procurement process be undertaken toward that end. Since any such service would be undertaken on a demonstration basis probably for a two-year period, it should be assumed that the firm selected to provide the service would supply the necessary vehicles. The procurement process should be structured to meet all Federal and State requirements.
2. The responsible private-sector agency should prepare an operating budget to support applications for Federal and State grant funds, as well as to put into place appropriate arrangements for securing the necessary private-sector matching funds.

3. The Washington County Board would be required formally to sponsor the service.

Plan Implementation: Park-Ride Lots

The Wisconsin Department of Transportation and Washington County should undertake a cooperative effort directed at the construction of park-ride lots at the Paradise Drive and STH 60 interchanges on the USH 45 Freeway. Both facilities should be properly configured to facilitate the provision of the recommended commuter-bus services. The establishment of park-ride lots at these locations has long been recommended in the Commission's adopted regional transportation system plan to serve as transit stations and convenient park-pool lots.

**PUBLIC REACTION TO  
THE RECOMMENDED PLAN**

The preliminary findings and recommendations of the Washington County transit service plan were presented at a series of three public hearings held by the Advisory Committee during October 1996. The purpose of these hearings was to provide public officials and interested citizens an opportunity to ask questions about, and provide comments on, the proposed transit service plan. The hearings were held on October 15, 1996, at 6:00 p.m. at the Hartford City Hall; on October 16, 1996, at 6:00 p.m. at the Germantown Village Hall; and on October 18, 1996, at 3:00 p.m. at the Washington County Public Agency Center in West Bend. Each hearing was preceded by an "open house," an informational meeting beginning one hour before the public hearing. This afforded interested individuals an opportunity to review the findings and recommendations of the proposed plan, to discuss the proposed plan directly with County and Commission staff, and to ask questions about the plan. Each public hearing began with a staff presentation on the plan, after which comments were received from those present. The record of the hearings was kept open to November 1, 1996, to facilitate the submission of written comments.

A summary report presenting the findings and recommendations of the Washington County transit planning effort was prepared. Copies of this report were widely distributed by the Washington County Economic Development Office and were available for public review at numerous locations within the County including: all city, village, and town halls; the major public libraries and senior centers; the Washington County Department of Aging; and the Washington County Courthouse. Copies of the

report were also provided directly to members of the Washington County Board of Supervisors and to interested private parties upon request.

To announce the public hearings, a news release was sent to six daily and weekly newspapers and two radio stations which serve Washington County. The major cable television systems in the County were also notified of the schedule of public hearings. The news release contained a brief summary of the preliminary plan recommendations and provided the schedule for the public hearings. Several newspapers published articles concerning the preliminary plan and hearings. In addition, a paid display advertisement announcing the hearings appeared in the three major newspapers covering the County: in the October 10, 1996, edition of the Hartford Times Press; in the October 14, 1996, edition of the Germantown News; and in the October 16, 1996, edition of the West Bend News. In total, 111 individuals attended the public hearings. A total of 46 oral or written comments were received on the preliminary plan from 42 individuals. The record of the public hearings, together with attendant correspondence and supporting materials, was published by the Commission for distribution to the Advisory Committee and County Board members and is available for review at both the Commission offices and the offices of Washington County Economic Development.<sup>5</sup> The following sections of this chapter summarize the public reaction to the preliminary recommended Washington County transit service plan.

#### Comments Related to the Local Transit Service Element

Of the 46 comments received, 30 addressed the Countywide shared-ride taxicab services recommended in the local transit service element of the plan. The comments indicate widespread support for the proposal to extend shared-ride taxicab services to the entire County.

Those individuals who expressed support cited in particular the transportation needs of elderly and disabled residents in the rural portions of the County and the potential transportation needs of those County residents who will be subject to the

work requirements of the State's "W-2" welfare program. The City of Hartford expressed support for the plan provided that the high level of taxicab service in the City would be maintained and urged that a way be found to include the present City employees who drive taxicabs in the operation of the proposed County system. The City also asked that it be compensated for its investment in taxicab vehicles if the County assumes responsibility for providing taxicab service in the Hartford area.

Only three comments were received that expressed concern about the proposed provision of Countywide taxicab services. Two individuals questioned whether there was a significant need or desire on the part of County residents for the proposed services. In addition, the West Bend Economic Development Corporation, while expressing support for the present West Bend shared-ride taxicab program, expressed concern about the Countywide taxicab service proposal. The Corporation indicated it would oppose any changes in the quality, efficiency, and cost of the existing West Bend taxicab service.

#### Comments Related to the Commuter-Transit Service Element

Of the 46 comments received, 33 addressed the commuter-bus and shuttle-bus transit services proposed under the preliminary plan. These comments indicated both considerable support for, and considerable opposition to, the proposed commuter- and shuttle-bus services.

Most of those individuals expressing support did so on behalf of individual business concerns or business organizations. Statements made in favor of the commuter services generally cited the need to provide public transit services to bring residents of Milwaukee County to jobs in Washington County. Other statements indicated support, in principle, for the concept of transporting residents of Milwaukee County to jobs in Washington County, but suggested that the services had the potential to be self-funded through user fares, thereby eliminating the need for any public subsidy. While expressing support for this aspect of the plan, the City of Hartford requested that the proposed Hartford shuttle-bus route be extended to serve the Dodge Industrial Park, lying partly in Dodge County, on the west side of the City.

Most of those expressing opposition to the proposed commuter-bus services either do not want Washington County to provide bus service outside the County, and thereby contribute to creating the potential for a regional transit system funded

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<sup>5</sup>See Record of Public Informational Meetings and Public Hearings—Preliminary Public Transit Service Plan for Washington County: 1998-2002, published by SEWRPC.

through a multi-county taxing authority, or simply oppose providing public subsidies for services that indirectly benefit private-sector enterprises. Many such comments suggested that the operation and funding of the proposed commuter transit services should be the total responsibility of the private businesses. Some expressing opposition also questioned whether the service would be used, given the long travel times for commuting between Milwaukee and Washington Counties. Others suggested that the services would not be needed if employers would hire workers at wages equivalent to those earned by most Washington County residents, since the workers would then be able to afford automobiles.

#### ADVISORY COMMITTEE RESPONSE TO PUBLIC COMMENT ON THE PLAN

The Advisory Committee considered the need to modify the transit services proposed under the proposed plan in response to the public comments received. The following documents the Committee's deliberations and determinations in this respect.

##### Local Transit Service Element

With respect to the local transit service recommendations contained in the plan, the Advisory Committee determined that no changes should be made as a result of the public comments received. The widespread support expressed for the recommended Countywide shared-ride taxicab services provided a good indication of both the need and desire for improved local transit services to County residents. Concerns raised by the City of Hartford and the West Bend Economic Development Corporation about maintaining high-quality taxicab services in the Hartford and West Bend areas and for including present City of Hartford employees who drive taxicabs in the operation of the proposed County system represent items that will need to be addressed during the process of plan implementation by the Washington County Department on Aging and its oversight committee, the Washington County Committee on Aging. The concern of the City of Hartford that it be compensated for its investment in a taxicab vehicle fleet was addressed in the plan recommendation, which called for County reimbursement for the salvage value of the existing taxicab vehicle fleets as a condition of the transfer of ownership of the vehicles to Washington County.

##### Commuter Transit Service Element

The Advisory Committee also determined that no changes should be made to the commuter transit service element of the plan as a result of the public comments received.<sup>6</sup>

The Committee gave careful consideration to all the comments, noting that while there was considerable opposition to the proposed services, there was also considerable support for the services, particularly in terms of viewing the proposed commuter transit services as a contingency action to be undertaken only should sufficient support materialize in the private sector to fund the costs that would be associated with the services. On balance, the Committee believed that Washington County should not foreclose the possible future establishment of public commuter-bus services, recognizing that at the present time insufficient private-sector interest exists for the County to initiate such services.

In making its determination, the Advisory Committee further took note of the following:

1. Several Washington County employers are presently meeting employee transportation needs either completely in the private sector through arrangements with employment agencies or partly in the public sector through the Wisconsin Job Ride Program. The Committee encourages the continued use of such arrangements and programs which would forestall the need to establish the type of publicly-sponsored commuter-bus system represented in the plan.
2. The "Bridges to Work" demonstration project recently funded in part by the Federal government may also help alleviate labor shortages in Washington County and thereby

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<sup>6</sup>The Advisory Committee took note of the comment made by the City of Hartford relative to the extension of the proposed Hartford shuttle-bus service to the Dodge Industrial Park. The Advisory Committee determined that the proposal by the City represented a modest refinement of the shuttle bus alignment set forth in the plan and that such a refinement could be easily taken into account at such time as the commuter- and shuttle-bus services element was implemented.

forestall the need to create a broader publicly supported commuter-bus system.<sup>7</sup>

3. Adoption of the plan by the Washington County Board of Supervisors would not commit the County to implement the commuter- and shuttle-bus services element of the plan, but would ensure that basic planning requirements were met should the County at some future date determine to implement the plan because of significant interest by private-sector firms in initiating and funding the services. If the County were to choose to implement the plan, the County would serve only as the formal sponsor of the program. Service delivery would be overseen by a proposed Washington County Transportation Management Association or similar organization which would conduct a competitive bidding process to select a service provider.
4. Implementation of the commuter- and shuttle-bus services as proposed would not in any way commit Washington County to participation in a multi-county regional transportation authority. Any such an arrangement would have to be separately approved by the State Legislature and, depending upon the legislation, also by the Washington County Board of Supervisors.

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<sup>7</sup>The "Bridges to Work" demonstration program is a joint venture of the Washington-Ozaukee-Waukesha Counties and the Milwaukee County Private Industry Councils. The four-year program began in October 1996 and is designed to recruit and place approximately 400 workers in jobs in Washington and Waukesha Counties where public transit service is not available. Transportation to and from the workplace, along with other support services, would be provided for such workers. The total four-year cost of the project is projected to be \$1,549,000, with about \$1,134,000, or 73 percent, funded through a grant from the U. S. Department of Housing and Urban Development. The remaining \$415,000, or 27 percent, would include approximately \$50,000 provided by the Wisconsin Department of Transportation and \$365,000 provided by the two Councils through other sources, including the Wisconsin Department of Workforce Development.

## SUMMARY

This chapter has set forth a transit service plan for Washington County as recommended by the County Public Transportation Needs Study Advisory Committee. The plan may be summarized as follows:

1. The plan recommends that shared-ride taxicab services be made available to residents throughout the County. Under County sponsorship, shared-ride taxicab services would be provided seven days a week within defined urban areas of the County, West Bend, Hartford-Slinger, and Germantown-Richfield, and five days a week in the rural areas of the County. In addition, Washington County would provide special, personalized transportation services throughout the County to physically and developmentally disabled individuals who are unable to access the regular shared-ride taxicab services. The recommended Countywide service program would supplant the existing taxicab services provided by the Cities of West Bend and Hartford, as well as the specialized elderly and disabled services provided by Washington County. Fares would be based on distance, ranging from \$2.00 to \$6.50, with discounts for students and elderly and disabled individuals. The entire service would be open to the general public and should, accordingly, qualify for State and Federal funding.
2. The plan recommends that commuter-bus and related shuttle-bus services be initiated under County sponsorship. Such services, which are recommended to be provided on a demonstration basis over an initial period of two years, would facilitate work-related travel between Washington County and Milwaukee County. Private-sector firms would have to commit to paying the local cost of such services. The buses would serve both Washington County residents who work in downtown Milwaukee and Milwaukee County residents who work at a number of job locations in Washington County.

Timed to serve both the first and second shifts, commuter buses serving Milwaukee County residents would begin on the south side of the City of Milwaukee, operate in a

collection mode through the central city, and then operate over the freeway system to Jackson and West Bend, where vans would meet the buses and take riders directly to job sites in Jackson, Slinger, Hartford, West Bend, Barton, and Kewaskum. Reverse service would be provided at the ends of the first and second shifts.

In addition, independent van service would operate from the terminus of MCTS bus routes at the Northridge Shopping Center in the City of Milwaukee to serve Germantown job locations. The fare on this shuttle service would be 50 cents.

A separate commuter-bus route serving Washington County residents would operate from West Bend to downtown Milwaukee with a stop in Jackson. Two buses would be provided in the morning to serve shifts starting before 8:00 a.m., with two return buses in the afternoon. The fares charged would be the same in either direction, \$2.50 between Milwaukee and Jackson and \$2.75 between Milwaukee and West Bend.

3. The recommended Countywide shared-ride taxicab service would more than double the amount of service now provided in the County as measured by vehicle-hours of service and may be expected to accommodate 173,000 trips annually. The total annual cost of the Countywide system is estimated at \$1.4 million, of which about 20 percent may be expected to be covered by farebox revenues. About 89 percent of the required subsidy of \$1.1 million may be expected to be provided by Federal and State funds, assuming no significant changes in Federal and State transit aid programs. About \$120,500 annually would have to be provided by Washington County. This represents an increase of about \$16,300, or 16 percent, over the total of \$104,200 expected to be expended during 1996 by Washington County and the Cities of Hartford and West Bend in providing the present level of shared-ride taxicab and specialized transportation services.
4. About 90 percent of the recommended commuter-bus services as measured by

vehicle-hours of service would accommodate trips being made by Milwaukee County residents to job locations in Washington County, with the remaining 10 percent designed to accommodate trips being made by Washington County residents to jobs in downtown Milwaukee. The cost of the bi-directional commuter-bus service recommendation is estimated at \$779,000 annually, of which about 25 percent may be expected to be recovered by farebox revenues. Of the required subsidy of \$582,100, Federal and State funds may be expected to provide about 88 percent, or about \$511,600. This would leave about \$70,500 annually to be raised from the private sector.

5. Following adoption of the recommended Washington County transit service plan, the County Board should designate its Office on Aging as the responsible party to implement the Countywide shared-ride taxicab element of the plan. Washington County should undertake negotiations with the Cities of Hartford and West Bend to assume responsibility for service provision in those communities beginning in 1998. The Advisory Committee recommends that Washington County select one service provider or more for the Countywide system via a competitive procurement process.
6. Washington County should designate its Office of Economic Development as the responsible party to seek implementation of the commuter service element of the plan. Should sufficient interest be expressed in the private sector in funding the local share of such services, then it would be desirable to create a Countywide transportation management association to assume operational responsibility to implement this element of the plan.
7. The Wisconsin Department of Transportation and Washington County should undertake a cooperative effort directed at the construction of park-ride lots at the Paradise Drive and STH 60 interchanges on the USH 45 Freeway configured to facilitate transit service.



8. The recommended plan was the subject of three public informational meetings and public hearings held by the Advisory Committee on October 15, 1996 in the City of Hartford; on October 16, 1996 in the Village of Germantown; and on October 18, 1996 in the City of West Bend. The meetings and hearings were attended by over 100 persons. A total of 25 speakers provided testimony at the hearings and a total of 21 written comments were received for the record.

The record of the public hearings indicated widespread support for, and very little opposition to, the Countywide shared-ride taxicab services recommended under the local transit service element of the plan. The record also indicated both considerable support for, and considerable opposition to, the proposed commuter and shuttle-bus services recommended in the plan. Most of those individuals expressing support for the commuter services element represented single firms or business organizations, while most of those expressing opposition were op-

posed to Washington County providing bus services outside the County or to providing public subsidies that indirectly benefit private-sector firms.

9. After reviewing the public record of the hearings, the Advisory Committee determined to make no changes to the plan. With respect to the proposed Countywide shared-ride taxicab service element of the plan, the Committee recommended that concerns expressed in both the Hartford and West Bend areas related to the transition from local to County responsibility for providing such services be addressed by the Washington County Department of Aging as part of the implementation process. With respect to the proposed commuter- and shuttle-bus services, the Committee recommended that the County Board adopt the plan and view the transit services for commuters as a contingency action to be undertaken only if significant support materializes in the private sector for the County to sponsor, and private firms to fund, such services.

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## Chapter IX

### SUMMARY AND CONCLUSIONS

#### INTRODUCTION

This report sets forth the findings and recommendations of a study of transit service needs in Washington County and of the means by which those needs might best be met. The study was carried out over the period from October 1995 to November 1996 within the context of the adopted design year 2010 regional transportation system plan. That plan includes a public transit element which recommends that improved transit services be provided within Washington County. The Washington County study was designed to refine, detail, and, as may be found desirable, amend and extend the regional transportation system plan.

In conducting the study, several tasks were performed, including an inventory and analysis of the existing transit services in the area; analyses of the existing land uses and of the current travel habits, patterns, and needs of the residents and employers of the area; and an evaluation of alternative means for providing the needed transit services. The study culminated in the preparation of a recommended public transit service plan for Washington County.

#### STUDY PURPOSE

The study was intended to serve the following purposes:

1. To identify and, to the extent possible, quantify the need for public transit services in Washington County, with a particular focus on the needs of those County residents who are transit-dependent, the needs of those County residents in the rural and developing portions of the County for access to jobs and services within the major urban centers of the County, and the needs of major employers within Washington County to overcome a labor shortage.
2. To evaluate the extent to which existing transit services in Washington County are able to meet the identified needs and to identify and quantify any unmet needs.
3. To develop a short-range, five-year transit service plan that best meets the needs identified in the study.

#### STUDY ORGANIZATION

The conduct of the study was a joint effort of the staffs of Washington County and the Southeastern Wisconsin Regional Planning Commission. Additional staff assistance was obtained from certain other agencies concerned with transit system development in the study area, including the Wisconsin Department of Transportation.

To provide guidance to the technical staffs in the conduct of the study and to involve concerned and affected public officials and citizen leaders in the study, more directly and actively, the Washington County Board created an 18-member Washington County Public Transit Planning Advisory Committee. The full membership of the Committee is listed on the inside front cover of this report.

#### EXISTING LAND USE, SOCIOECONOMIC CHARACTERISTICS AND, TRAVEL PATTERNS

##### Study Area

The study area included all of Washington County, consisting of the following 21 local units of government: the Cities of Hartford, West Bend and Milwaukee; the Villages of Germantown, Jackson, Kewaskum, Newburg and Slinger; and the Towns of Addison, Barton, Erin, Farmington, Germantown, Hartford, Jackson, Kewaskum, Polk, Richfield, Trenton, Wayne, and West Bend. The county encompasses 430 square miles, the southeastern portion of which lies within the Milwaukee urbanized area (see Map 1 in Chapter I).

##### Land Use

During the 63-year period from 1900 to 1963, urban land uses within the County increased gradually from about 0.4 square mile to about 9.7 square miles, an average annual rate of about 0.1 square mile per year. By 1990, the developed area of the County had increased to about 41.1 square miles, an increase of about 325 percent, reflecting an annual average growth rate over the 27-year period 1963 to 1990 of about 1.2 square miles per year.

The period from 1963 to 1990 saw significant development in the southeastern portion of the County, essentially as an outward expansion of the Milwaukee metropolitan area, and continued development in, and around, the Cities of Hartford and West Bend. At the same time, the population density of the developed urban area decreased from about 4,500 to about 2,300 persons per square mile. Continued increases in residential and commercial development within the County, along with decreases in population density, may be expected in the foreseeable future, based upon recent development trends and proposals.

The extent of urban development in the County in 1990 is shown on Map 4 in Chapter II. In 1990, the developed area of the County encompassed about 10 percent of the total County land area, with the remaining 90 percent of the County still in open, rural land uses.

#### Population

The resident population of the County increased from about 46,100 persons in 1960 to about 95,000 persons in 1990, an increase of about 107 percent. The resident population of the County in 1994 was estimated at about 105,100 persons, an increase of about 10 percent over the 1990 population. The majority of the population growth within the County has occurred in the Germantown-Richfield area, comprised of the Village of Germantown, the Towns of Germantown and Richfield; the West Bend area, comprised of the City of West Bend and the Towns of West Bend and Barton; and the Hartford-Slinger area, comprised of the City of Hartford, the Village of Slinger, and the Towns of Hartford and Polk. Over three-fourths of the total population growth within the County from 1960 to 1994 occurred in these communities. The number of households in the County increased from about 12,500 in 1960 to about 37,900 in 1994, an increase of about 203 percent, exceeding the rate of population growth during the same time period.

Five population groups which typically exhibit high dependence on transit service for mobility were identified: school-age children, the elderly, the disabled, persons in low-income households, and households with limited automobile availability. The first three of these transit-dependent-population subgroups were found to be of significance for transit planning purposes in Washington County. Available data indicated that these subgroups were generally evenly distributed among the civil divisions within the County.

#### Employment

The number of jobs in Washington County has been rapidly growing. In 1994, the number of jobs in the County stood at about 45,800, an increase of about 10 percent over the 1990 level of about 41,800 jobs. Over the period 1960 to 1990, the number of jobs increased by about 188 percent from the 1960 level of about 14,500 jobs. The principal concentrations of employment in the County in 1990 lay in, and around, the Cities of Hartford and West Bend, with smaller but significant concentrations also found in the Villages of Germantown, Jackson, Kewaskum, and Slinger.

#### Major Traffic Generators

The location of all major potential transit trip generators in the County were identified. These included facilities specifically serving, or frequently used by, elderly or disabled persons and persons residing in low-income households. The major potential transit trip generators also included commercial centers, educational institutions, medical centers, governmental and public institutional centers, major employment concentrations, and major recreational areas. These potential transit trip generators are shown on Maps 6 and 7 in Chapter II. Identification of the locations of all the potential major transit trip generators in 1995 indicated that the majority were concentrated in the developed urban areas of the County, particularly in, and around, the Cities of Hartford and West Bend and the Villages of Germantown, Jackson, Kewaskum, and Slinger.

#### Travel Habits and Patterns

Regional Planning Commission studies indicate that about 330,000 person-trips were made on an average weekday in 1991, either within Washington County or between Washington County and the other six counties within the Southeastern Wisconsin Region. About 224,000, or over 68 percent, of these trips were intracounty trips, having both their origins and destinations within Washington County. Approximately 59 percent of these intracounty person-trips, or about 132,000 trips, were made entirely within the portions of the County including the West Bend-Barton, Hartford, and Germantown analysis areas. Map 10 in Chapter II illustrates the pattern and volume of intracounty person-trips made on an average weekday in 1991. The remaining 106,000, or about 32 percent, of the 330,000 total person-trips were intercounty trips, made between the County and other counties within the Southeastern Wisconsin Region. About 43 percent of these intercounty trips, or about 46,000 trips, were made between Washington and Mil-

waukee Counties. Significant intercounty person-trips were also observed between Washington and Waukesha Counties, with almost 44,000 trips, or about 42 percent, of all the intercounty trips made on a weekday. The generalized pattern and volume of all these intercounty person-trips is shown on Map 11 in Chapter II.

In addition to the 330,000 person-trips in 1991 made either within Washington County or between the County and the other counties in the Region, about 24,000 interregional person-trips were made on an average weekday between the County and other areas outside the Region. The most significant amount of such person-trips in 1991 occurred between Washington County and Dodge and Fond du Lac Counties, with about 8,300 and 7,900 average weekday person-trips, respectively.

## EXISTING TRANSIT SERVICES

### General Public Transit Services

Transit services for the general public provided on a regular and continuing basis within Washington County during 1995 consisted of local shared-ride taxicab services serving the Cities of Hartford and West Bend and their environs and intercity bus and limousine services provided through the County. The portion of the County served by public transit in 1995 is shown in Map 12 in Chapter III. As a result, the extent of public transportation service available for use by the general public was limited.

The most useful service available was public shared-ride taxicab service provided in the Cities of Hartford and West Bend and their environs. The City of Hartford directly operated its shared-ride taxicab system, while the City of West Bend contracted for all elements of operation of its taxicab system from a private company. Both systems operated seven days a week, with service on most weekdays beginning at 6:00 a.m. and extending until 9:00 p.m. (Hartford) or 10:00 p.m. (West Bend). Base adult cash fares per one-way trip were \$1.50 on the Hartford system and \$2.00 on the West Bend system, with both systems levying a surcharge for trips made outside each City. In total, about 335 one-way trips were made on an average weekday on the taxicab services during 1995. Between 21 and 28 percent of the annual operating and capital costs for each system were recovered directly through passenger fares. The annual operating deficits and capital equipment costs for each system were subsidized with funds from Federal and State transit assistance programs and property taxes levied by each city.

### Employee Transportation Services

During 1995, four private firms provided specialized work-trip transit services to employees of businesses and industries located in Washington County. Three firms, Milwaukee Careers Cooperative, Goodwill Industries of Southeastern Wisconsin, and the Opportunities Industrialization Center, provided such services under the Job-Ride program administered by the Wisconsin Department of Workforce Development. A private employment agency, JNA Temporary Services, Inc., also provided transportation to employees of the West Bend Company. On an average weekday, these providers together served about 370 trips made by individuals who live in Milwaukee County and work in Washington County. The State Job-Ride program is by design meant to be short-term in nature, serving the needs of employees and employers until such time as alternative private or public transportation can be arranged. Operating deficits under this program are paid by the Wisconsin Department of Workforce Development.

### Yellow School Bus Service

Yellow school bus service was provided in 1995 by all the public school districts within Washington County to eligible students residing within each district attending public and private elementary, middle, and high schools. Eligible students were those who either resided one and one-half to two miles or more from the school they were entitled to attend or were enrolled in special-education programs offered by each district. All school districts within the County contracted for transportation services with private companies. It was estimated that about 27,000 one-way trips, or about 13,500 round trips, were made within Washington County on yellow school bus services on an average weekday in 1995.

### Specialized Transportation Services

The vast majority of the public transportation services identified were specialized transportation services intended to serve primarily elderly and disabled persons. There were five principal public or private nonprofit providers of such services operating within Washington County in 1995.

The major public specialized transportation service was the Countywide, advance- reservation, door-to-door transportation service operated by the Washington County Office on Aging. This service was available to persons 60 years of age or older and disabled persons of any age for travel principally within Washington County, with the only trips served outside Washington County being between

the Germantown area and the Village of Menomonee Falls in Waukesha County. The County contracted for all elements of service operation with two private companies which provided the service with a fleet of five vans.

The average weekday ridership on the service during 1995 was estimated at 46 one-way trips, most of which were made for medical and employment purposes and either started or ended in the four communities with the largest elderly populations, the Cities of Hartford and West Bend, the Village of Germantown, and the Town of West Bend. Fares for the service ranged from \$1.25 per trip for travel within any of three service areas within the County to \$2.50 per trip for travel between areas. The service recovered about 9 percent of its annual contract costs directly through passenger fares, with State specialized transportation assistance funds and County property taxes providing most of the remaining funding.

The other four principal providers of specialized transit services to elderly and disabled persons in Washington County were The Threshold, Inc., the American Red Cross, Lutheran Social Services, and Sentry Foods in Hartford. Service provided by The Threshold, Inc., was limited to those disabled individuals participating in employment and training programs offered at its facility in the City of West Bend. That program served about 350 trips on an average weekday in 1995. Service provided by the American Red Cross was available to elderly and disabled residents of the County who were in need of transportation for cancer treatments, kidney dialysis, or special therapy services. About 29 trips on an average weekday were served by this program during 1995, with between 90 and 95 percent of its users being transported outside of the County, primarily to medical facilities in Milwaukee County. Lutheran Social Services provided transportation to individuals participating in the adult day care, senior aides, and disabled youth day care services offered at its facility in the City of West Bend. About 13 one-way trips were made on this service on an average weekday in 1995. Sentry Foods in the City of Hartford provided a free shuttle service on two days each week to store customers residing in the Hartford area who were largely elderly and low-income individuals. About 14 one-way trips were made on an average weekday in 1995 on this service.

Other providers of specialized services in the County include five public and private agencies, the Hartford Memorial Hospital Foundation, American

Cancer Society, Washington County Department of Social Services, Washington County Samaritan Home, and Cedar Campuses, and three private for-profit companies, Handicare, Inc.; Nichols Medical Transports, Inc.; and Specialized Transportation Services, Inc. Together, these eight providers served about 35 trips on an average weekday in 1995.

#### Countywide Costs of Transit Services

As shown in Table 41 in Chapter III, the eight major transit services for Washington County had an estimated combined annual cost of almost \$1,439,500 in 1995, including both operating costs and an appropriate average annual allocation of total capital costs. Farebox revenues totaled nearly \$341,000, resulting in a total deficit in 1995 of approximately \$1,098,500. Per trip, the estimated annual cost was nearly \$4.95, with an average fare of \$1.17 and an average deficit of \$3.78. The total combined deficit of the major transit services in 1995, \$1,098,500, was funded in the following manner: about \$822,900, or 75 percent, through Federal and State monies made available under various programs; about \$8,400, or 1 percent, through City of Hartford tax-levy monies; about \$7,400, or 1 percent, through City of West Bend tax-levy monies; about \$170,100, or 15 percent, through county sources including about \$167,100 through Washington County and about \$3,000 through Ozaukee County tax-levy monies; and about \$89,700, or 8 percent, through private contributions.

#### EXISTING TRANSIT LEGISLATION AND REGULATIONS

Federal and State legislation and rules provide for the availability and distribution of financial aid for transit services. A summary of the major Federal and State transit assistance programs available in 1995 for Washington County transit services are presented in Table 42 in Chapter IV.

Federal programs which could help Washington County provide transit service include the Section 5307 Program administered by the Federal Transit Administration. This program provides operating and capital funds on a formula basis to the Milwaukee urbanized area. The southeastern portion of Washington County lies within that urbanized area and, accordingly, is eligible to draw its fair share of those funds. Similarly, the Section 5311 Program administered by the Federal Transit Administration provides operating and capital funds to the State for use in supporting rural and small urban area transit systems. Washington County is also eligible



to draw those funds and, indeed, such funds are currently used by the Cities of Hartford and West Bend to support shared-ride taxicab systems. In addition, the Congestion Mitigation and Air Quality Improvement Program (CMAQ), administered by the Federal Highway Administration, provides Federal funds to help initiate transit services in air-quality-nonattainment areas, including Southeastern Wisconsin. These funds can be used for up to three years to support transit services intended to reduce automobile travel and thereby exert a positive air quality impact. Finally, Washington County is eligible to apply for State urban mass transit operating assistance funds intended to support general public services. The Cities of Hartford and West Bend already draw on that source of funding in support of their shared-ride taxicab systems. Federal and State transit funding programs, as well as the levels of funding provided under such programs, change frequently, thereby making it difficult for county and local governments to commit to new and improved public transit systems.

The Wisconsin Statutes were found to provide several organizational alternatives to counties and local municipalities for the provision of public transit services. Local legislation specifically pertaining to transit service was limited to sections of individual municipal codes governing the licensing and operation of taxicab services in the Cities of Hartford and West Bend.

#### TRANSIT SERVICE DEVELOPMENT OBJECTIVES AND STANDARDS

A set of transit service objectives was formulated to provide a sound basis for evaluating the performance of the existing transit services, for postulating alternative service options and plans, and for developing recommendations for consideration by the elected officials concerned. Complementing each of the objectives was a supporting principle and a set of service and design standards. Each set of standards was directly related to the objectives and served to facilitate quantification and evaluation of the performance of the existing transit services and of the design, test, and evaluation of alternative transit system plans.

The following three objectives were adopted by the Advisory Committee:

1. The public transit system should serve the County's travel needs and, in particular, the travel needs of the transit-dependent population and of employers in obtaining needed

labor and reducing employee travel by single-occupant vehicles to the workplace.

2. The public transit system should promote the effective use of transit services by providing for user convenience, comfort, and safety.
3. The transit system should be economical and efficient, meeting all other objectives at the lowest possible cost.

#### EVALUATION OF EXISTING TRANSIT SERVICES

A performance evaluation of the existing public transit services provided in the County in 1995 was undertaken to determine how well the transit needs of the resident population were being met. The evaluation was conducted by using performance measures related to the attainment of key transit service objectives and standards. The major findings of this evaluation may be summarized as follows:

1. In 1995, the Hartford and West Bend shared-ride taxicab services provided the only transit service open to the general public in the County. Consequently, the urban land uses, population, and employment within the County served by general public transit service was limited to that within the service areas of these two taxicab systems (see Maps 14 through 18 in Chapter VI). The taxicab primary service areas, which consisted of the areas within the Cities of Hartford and West Bend, included about 9 square miles, or about 22 percent, of the total estimated urban developed land area within the County; about 32,600, or about 34 percent of the 1990 resident County population of about 95,300 persons; a total of 104, or about 44 percent, of the 235 major land use trip generators identified within the County in 1995; and about 23,100 jobs, or about 55 percent, of the 41,800 jobs in the County in 1990. The majority of the urban development, potential transit trip generators, population, and employment which was identified as not being served by public transit service in 1995 was located within the Germantown-Richfield portion of the County.
2. Specialized transportation services serving all of Washington County were also available during 1995 to serve the transportation needs of elderly and disabled individuals. However, the primary focus of the services was in

providing transportation for medical and other essential needs. Some of these services were available only to patients, clients, or residents of specific nursing or other medical facilities.

3. Some efforts to provide special transit services, such as subscription bus or van services, serving employment locations within the County were underway during 1995 through private transit companies participating in the State Job Ride program, administered by the Wisconsin Department of Workforce Development and by a private employment agency providing transportation for employees of the West Bend company. It was estimated that about 372 one-way trips were made on an average weekday by individuals who resided in central Milwaukee County and used these services to travel to and from job locations within Washington County. These transit services were, thus, serving almost 12 percent of the estimated 3,200 average weekday reverse-commute work trips between Milwaukee and Washington County. Notably, there were no special transit services being provided within the County during 1995 to serve the approximately 38,600 work trips made on an average weekday entirely within Washington County.
4. The performances of the Hartland and West Bend shared-ride taxicab systems during 1995 were evaluated against transit service standards measuring quality and convenience of service, ridership, and cost effectiveness and efficiency. It was found that in 1995 both the Hartford and West Bend taxicab systems were able to meet or exceed the service effectiveness levels specified under the transit service standards, although per capita ridership on both systems was somewhat below that for the other Wisconsin taxicab systems serving similar-sized communities. Some minor problems were found with respect to the quality and convenience of the transit service provided by these two taxicab systems owing to the heavy use of both systems during weekday peak periods. The financial performance of both taxicab systems was somewhat below those for the group of comparable taxicab systems, in part because of higher operating costs per unit of transit service, and lower farebox recovery rates. Nevertheless, both systems have been viewed as successes by local officials.

## ALTERNATIVE TRANSIT SERVICES PLANS

In order to evaluate fully the feasibility of providing improved transit services in Washington County, four basic transit service improvement alternatives were developed and evaluated (see Table 55 in Chapter VII):

1. A status quo alternative, Alternative 1, which represented a continuation of the existing transit services provided in the County in 1996;
2. An alternative which proposed the expansion of local transit services, Alternative 2, through the provision of publicly subsidized shared-ride taxicab service within the major urban service areas of the County;
3. An alternative which proposed the expansion of local transit services, Alternative 3, through the provision of publicly subsidized shared-ride taxicab service throughout the entire County;
4. An alternative which proposed new commuter-oriented transit services, Alternative 4, through the provision of publicly subsidized commuter-bus and employee-shuttle services serving travel between Washington and Milwaukee Counties, with a subalternative, Subalternative 4A, which proposed expanded employee shuttle services to serve travel within Washington County.

The alternative transit service plans were evaluated by scaling measures of their performance against the transit service objectives and standards set forth in Chapter V (see Tables 71 through 80 in Chapter VII). On the basis of the evaluation findings, the Advisory Committee rejected Alternative 1, maintaining the existing transit services within the County to be inadequate to address the transit service needs and deficiencies identified in the study. The Advisory Committee unanimously concurred with the Commission staff recommendations calling for providing expanded taxicab services in the major urban centers of the County, as proposed under Alternative 2; for providing less extensive taxicab services in the rural and small urban areas than proposed under Alternative 3, and for basing that service of the County on the characteristics of the specialized transit service provided by the Washington County office on Aging; and for the County to assume responsibility for the admin-

istration and operation of the urban and rural taxicab services in the County in order to enhance their probability of implementation. The Advisory Committee also recommended that the employer transportation services proposed under Alternative 4 be included in the final plan, with employers having the option of providing the more extensive services proposed under Subalternative 4A, should the initial commuter-bus and employee-shuttle services prove successful.

## RECOMMENDED TRANSIT SERVICE PLAN

The Advisory Committee's recommended transit service plan for Washington County includes the following elements (see Table 81 in Chapter VIII):

- Local Transit Services

Shared-ride taxicab services would be made available to residents throughout Washington County through the provision of the following services:

1. Urban-area service would be provided within the major urban centers of the County, that is, within the West Bend, Hartford-Slinger, and Germantown-Richfield areas. Service would be provided seven days a week, excluding those holidays which do not fall on a Sunday, from 6:00 a.m. to 10:00 p.m. on weekdays and Saturdays, and from 8:00 a.m. to 4:00 p.m. on Sundays, with trip requests fulfilled within a 30-minute maximum response time. Both trip ends would have to lie within one of the urban service areas (see Map 23 in Chapter VIII). These services would supplant the existing taxicab services provided by the Cities of Hartford and West Bend.
2. Rural-area service would be provided within the areas of the County outside the major urban centers. Service would be provided on weekdays only, excluding holidays, from 6:00 a.m. to 6:30 p.m., with trip requests fulfilled within a four-hour maximum response time. This service would accommodate trips with both ends within the rural service area, trips having one end within the rural service area and the other end within one of the three urban service areas, and trips between the urban service areas.

3. Specialized service would be provided throughout the entire County for those residents who are physically or developmentally disabled and therefore unable to gain access to the regular shared-ride taxicab services. Service would be provided on weekdays only, excluding holidays, from 8:00 a.m. and 4:30 p.m., with trip requests accommodated on a 24-hour advance-reservation basis. This service, in combination with the urban and rural services, would supplant the existing specialized transit service provided by the County through the Office on Aging.

Fares on all three shared-ride taxicab services would be applied from a uniform, distance-based fee schedule, with adult fares ranging from \$2.00 to \$6.50 per trip and reduced fares charged to the elderly, age 60 and older, the disabled, and students. Washington County would contract for the provision of the taxicab services from one private-sector service provider or more, using a vehicle fleet purchased by the County and leased to the service providers.

- Commuter-Transit Services

Commuter-transit services would be made available to facilitate work-related travel in both directions between Washington and Milwaukee Counties through the provision of the following services:

1. Milwaukee County-to-Washington County commuter-bus and shuttle services would be provided on a weekday-only basis to serve the first and second shifts at major firms located in Washington County. The commuter buses would begin on the south side of the City of Milwaukee, operate in a collection mode through the central city, and then operate over the freeway system to Jackson and West Bend (see Map 24 in Chapter VIII). Stops in Washington County would include an existing park-ride lot at the intersection of STH 60 and CTH P in the Village of Jackson and a proposed lot at the intersection of USH 45 and Paradise Drive within the City or Town of West Bend, both of which would serve as transfer stations for connecting shuttle bus routes. In the City of West Bend, commuter buses would operate in

a local distribution mode over arterial streets and serve a third transfer station located at the former West Bend Outlet Mall as well as the West Bend Company, Inc., plant. A total of five shuttle-bus routes would be used to connect the commuter-bus stops to work place destinations not directly served by the commuter-bus route (see Map 25 in Chapter VIII). Service over the commuter-bus route would consist of five round trips each day, three to serve first-shift workers and two to serve second-shift workers, with shuttle buses meeting all of the outbound and inbound commuter-bus trips at the three transfer stations. The fares for the commuter-bus and connecting shuttle-bus services would be set at \$2.75 per trip between Milwaukee and West Bend, Barton, or Kewaskum, and \$2.50 per trip between Milwaukee and Jackson, Slinger, or Hartford.

Independent of the commuter-bus service, a sixth shuttle-bus route is proposed to serve industries in the Germantown area. This route would operate out of an existing Milwaukee County Transit System (MCTS) terminal at the Northridge Shopping Center (see Map 26 in Chapter VIII) where connections with three MCTS bus routes could be made for a fare of 50 cents per trip. Service would be provided on a weekday-only basis to serve first- and second-shift workers.

2. Washington County-to-Milwaukee County commuter-bus service would be provided on a weekday-only basis for Washington County residents working in downtown Milwaukee. This service would operate from West Bend to downtown Milwaukee principally over the USH 41-45 and IH 94 Freeways (see Map 27 in Chapter VIII), with a stop in Jackson. Service over the route would consist of two round trips each day scheduled to serve first-shift jobs in downtown Milwaukee. Fares would be set at \$2.75 per trip between Milwaukee and West Bend, and \$2.50 per trip between Milwaukee and Jackson.

The proposed commuter services, which are recommended to be provided on a demonstration basis over an initial period of two

years, would be sponsored by Washington County only if private-sector firms commit to paying the local share of the cost of providing such services, thus ensuring that no County property-tax monies would be required. Washington County would contract for the provision of the commuter services with a service provider who would supply the necessary vehicles.

## PLAN IMPLEMENTATION

The Advisory Committee made the following recommendations concerning implementation of the plan proposals:

- Local Transit Service Element

The County Board should designate its Office on Aging and the related oversight committee, the Washington County Committee on Aging, as the responsible parties for implementation of the local transit services element of the plan. The County should implement proposed Countywide taxicab services no earlier than January 1, 1998. In the meantime, the Cities of Hartford and West Bend should continue to operate their shared-ride taxicab systems and Washington County should continue to provide the present level of specialized transit services to elderly and disabled individuals. During 1997, the County should: 1) undertake negotiations with the Cities of Hartford and West Bend relative to the assumption by the County in 1998 of responsibility for the continued provision of urban shared-ride taxicab services to those two communities and their environs, 2) undertake the steps necessary to select one or more service providers for the Countywide shared-ride taxicab services beginning in 1998, following prescribed Federal and State procurement procedures, and 3) prepare operating and capital budgets for the taxicab services to support applications for Federal and State grant funds.

- Commuter-Transit Service Element

The County Board should designate its Office on Economic Development and the related oversight committee, the Washington County Economic Development Program Advisory Committee, as the responsible parties for possible implementation of the commuter-transit services element of the plan. As its first action, the Office of Economic Development should undertake appropriate discussions

with private-sector agencies and firms to determine if there is sufficient interest in supplying the requisite local funding to implement the proposed commuter-transit services. Should sufficient interest be expressed, then a Countywide private sector organization, perhaps a Washington County Transportation Management Association, should be created and charged with the responsibility of implementing the commuter services for an appropriate demonstration period.

- Park-Ride Lots

The Wisconsin Department of Transportation and Washington County should undertake a cooperative effort directed at the construction of park-ride lots at the Paradise Drive and STH 60 interchanges on the USH 45 Freeway configured to support transit service.

## PLAN PERFORMANCE AND COSTS

Given the foregoing assumptions attendant to the implementation of the transit service plan recommendations made by the Advisory Committee, the costs of providing the proposed local and commuter-transit services, respectively, were estimated (see Tables 83 and 84 in Chapter VIII). The cost figures represented average annual estimates of both operating and capital costs, expressed in constant 1996 dollars, over the five-year period from 1998 through 2002. The following observations may be made concerning the performance and costs of the proposed transit services:

- Local Transit Service Costs

The recommended Countywide shared-ride taxicab service would increase the amount of service to about 70,500 vehicle-hours of service, up by about 118 percent from the 32,400 vehicle hours of service provided by the Washington County specialized transit service and the Hartford and West Bend Taxicab systems in 1995. In turn, the expanded service would be expected to increase its ridership to about 173,000 trips annually, up by nearly 60 percent from the 108,900 trips on the three existing services in 1995. The total annual cost of the Countywide system is estimated at \$1.4 million, of which about 20 percent may be expected to be covered by farebox revenues. About 89 percent of the required subsidy of \$1.1 million may be expected to be provided by Federal and State funds, assuming no sig-

nificant changes in Federal and State transit aid programs or the level of funding made available under those programs. About \$120,500 annually would have to be provided by Washington County. This represents an increase of about \$16,300, or 16 percent, over the \$104,200 expected to be expended during 1996 by Washington County and the Cities of Hartford and West Bend in providing the present level of shared-ride taxicab and specialized transportation services.

- Commuter-Transit Service Costs

The recommended commuter-transit services would require about 18,800 vehicle-hours of service, about 90 percent of which would accommodate trips by Milwaukee County residents to jobs in Washington County. The services would accommodate 96,000 trips annually, of which about 93 percent would be made by Milwaukee County residents. The cost of the bidirectional commuter-bus and shuttle-bus services was estimated at \$779,000 annually, of which about 25 percent may be expected to be recovered by farebox revenues. Of the required subsidy of \$582,100, Federal and State funds may be expected to provide about 88 percent, or about \$511,600, assuming no significant changes in Federal and State transit aid programs or the level of funding made available under those programs. This would leave about \$70,500 annually to be raised from private-sector interests.

## PUBLIC REACTION TO THE RECOMMENDED PLAN

The plan was the subject of three public informational meetings and public hearings held by the Advisory Committee on October 15, 1996, in the City of Hartford; on October 16, 1996, in the Village of Germantown; and on October 18, 1996, in the City of West Bend. The meetings and hearings were attended by over 100 persons. A total of 25 speakers provided testimony at the hearings and a total of 21 written comments were received for the record.

The record of the public hearings indicated widespread support for, and very little opposition to, the Countywide shared-ride taxicab services recommended under the local transit service element of the plan. The record also indicated both considerable support for, and considerable opposition to, the

proposed commuter-bus and shuttle-bus services recommended in the plan. Most of those expressing support for the commuter services element represented single firms or business organizations, while most of those expressing opposition were opposed either to Washington County providing bus services outside the County or to providing public subsidies that indirectly benefit private-sector firms.

#### ADVISORY COMMITTEE RESPONSE TO PUBLIC COMMENT ON THE RECOMMENDED PLAN

After reviewing the public record of the hearings, the Advisory Committee determined to make no changes to the plan. With respect to the proposed Countywide shared-ride taxicab services element of the plan, the Committee recommended that concerns expressed in both the Hartford and West Bend areas attendant to the transition from local to County responsibility for providing such services be addressed by the Washington County Department on Aging as part of the implementation process. With respect to the proposed commuter-bus and shuttle-bus services, the Committee recommended that the County Board adopt the plan and view the commuter-transit services as a contingency action to be undertaken only if significant support materialize in the private sector for the County to sponsor, and private firms to fund, such services.

#### CONCLUSION

The recommended transit service plan for Washington County addresses both the growing travel needs of an expanding resident population in Washington County and the needs of those Washington County employers who are seeking to fill jobs in an expanding County and regional economy. The plan would seek to maximize use of available Federal and State transit aid programs, recognizing that changes in such programs may lie ahead. While the Federal and State programs will help defray the costs of providing improved transit services throughout Washington County, there will also be a need to increase local public financial support and to obtain new financial support from the private sector if the transportation needs are to be addressed.

Adoption and implementation of the shared-ride taxicab recommendations set forth in the plan will provide those Washington County residents who must rely on public transit as their primary means of meeting travel needs with increased accessibility to the entire County. The potential commuter-bus and shuttle-bus services provide Washington County with a viable plan should a sufficient number of private-sector firms express to the County Board a desire for the County to sponsor such services and a willingness to fund the local share of the cost of providing the services.



## **APPENDICES**

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# Appendix A

## PROJECTIONS OF RIDERSHIP, REVENUES, AND COSTS FOR THE RECOMMENDED WASHINGTON COUNTY TRANSIT SERVICES

Table A-1

### RIDERSHIP AND FINANCIAL PERFORMANCE OF THE RECOMMENDED LOCAL TRANSIT SERVICE FOR WASHINGTON COUNTY: 1998-2002

Operating Characteristic	1996 Estimated				Projected											
	Shared-Ride Taxicab Service		Washington County Specialized Transportation Service	Total	1998				2002				Average Annual: 1998-2002			
	Hartford	West Bend			Urban Areas	Rural Area	Specialized Service	Total County	Urban Areas	Rural Area	Specialized Service	Total County	Urban Areas	Rural Area	Specialized Service	Total County
Service Provided																
Total Annual Vehicle-Hours	4,870	22,260	6,900	34,030	52,700	14,200	2,100	69,000	55,000	15,200	2,100	72,300	53,900	14,700	2,100	70,700
Annual Ridership	19,000	83,000	12,000	114,000	151,000	13,000	2,500	166,500	162,000	15,000	2,500	179,500	156,500	14,000	2,500	173,000
Annual Operating Costs and Revenues <sup>a</sup>																
Operating Costs	\$114,000	\$399,000	\$166,000	\$679,000	\$967,000	\$297,000	\$50,000	\$1,314,000	\$952,000	\$284,000	\$44,000	\$1,280,000	\$959,500	\$290,500	\$47,000	\$1,297,000
Passenger Revenues	27,000	110,000	8,000	145,000	245,000	4,200	4,200	281,200	262,000	37,000	4,200	303,200	253,500	34,500	4,200	292,200
Total Operating Deficit	87,000	289,000	158,000	534,000	722,000	265,000	45,800	1,032,800	690,000	247,000	39,800	976,800	706,000	256,000	42,800	1,004,800
Potential Sources of Public Funds																
Federal																
FTA Section 5307 Urbanized Area Formula Program <sup>b</sup>	--	--	--	--	\$ 3,000	--	--	\$ 3,000	\$ 3,000	--	--	\$ 3,000	\$ 3,000	--	--	\$ 3,000
FTA Section 5311 Nonurbanized Area Formula Program <sup>c</sup>	\$ 34,200	\$119,700	--	\$153,900	208,400	\$ 89,100	\$12,000	309,500	206,800	\$ 85,200	\$10,600	302,600	207,600	\$ 87,200	\$11,300	306,100
Subtotal	\$ 34,200	\$119,700	--	\$153,900	\$211,400	\$ 89,100	\$12,000	\$ 312,500	\$209,800	\$ 85,200	\$10,600	\$ 305,600	\$210,600	\$ 87,200	\$11,300	\$ 309,100
State																
Urban Public Transit Operating Assistance <sup>d</sup>	\$ 44,500	\$155,600	--	\$200,100	\$388,000	\$115,800	\$19,900	\$ 523,700	\$381,800	\$110,800	\$17,500	\$ 510,100	\$384,900	\$113,300	\$18,700	\$ 516,900
Specialized Transportation Assistance Program for Counties <sup>e</sup>	--	--	\$ 88,900	88,900	61,700	19,000	3,200	83,900	62,400	18,600	2,900	83,900	62,100	18,800	3,000	83,900
Subtotal	\$ 44,500	\$155,600	\$ 88,900	\$289,000	\$449,700	\$134,800	\$23,100	\$ 607,600	\$444,200	\$129,400	\$20,400	\$ 594,000	\$447,000	\$132,100	\$21,700	\$ 600,800
Local Funds																
City	\$ 8,300	\$ 13,700	--	\$ 22,000	--	--	--	--	--	--	--	--	--	--	--	--
County	--	--	\$ 69,100	69,100	\$ 60,900	\$ 41,100	\$10,700	\$ 112,700	\$ 36,000	\$ 32,400	\$ 8,800	\$ 77,200	\$ 48,400	\$ 36,700	\$ 9,800	\$ 94,900
Subtotal	\$ 8,300	\$ 13,700	\$ 69,100	\$ 91,100	\$ 60,900	\$ 41,100	\$10,700	\$ 112,700	\$ 36,000	\$ 32,400	\$ 8,800	\$ 77,200	\$ 48,400	\$ 36,700	\$ 9,800	\$ 94,900
Total	\$87,000	\$289,000	\$158,000	\$534,000	\$722,000	\$265,000	\$45,800	\$1,032,800	\$690,000	\$247,000	\$39,800	\$ 976,800	\$706,000	\$256,000	\$42,800	\$1,004,800
Service Effectiveness and Efficiency																
Annual Passengers per Vehicle-Hour	3.9	3.7	1.7	3.4	2.9	0.9	1.2	2.4	2.9	1.0	1.2	2.5	2.9	1.0	1.2	2.4
Total Expense per Passenger	\$6.00	\$4.81	\$13.83	\$5.96	\$6.40	\$22.85	\$20.00	\$7.89	\$5.88	\$18.93	\$17.60	\$7.13	\$6.13	\$20.75	\$18.80	\$7.50
Total Revenue per Passenger	\$1.42	\$1.33	\$0.67	\$1.27	\$1.62	\$2.46	\$1.68	\$1.69	\$1.62	\$2.47	\$1.68	\$1.69	\$1.62	\$2.46	\$1.68	\$1.69
Total Deficit per Passenger	\$4.58	\$3.48	\$13.17	\$4.68	\$4.78	\$20.38	\$18.32	\$6.20	\$4.26	\$16.47	\$15.92	\$5.44	\$4.51	\$18.29	\$17.12	\$5.81
Percent of Expenses Recovered through Operating Revenues	23.7	27.6	4.8	21.4	25.3	10.8	8.4	21.4	27.5	13.0	9.5	23.7	26.4	11.9	8.9	22.5

<sup>a</sup>All costs and revenues presented in constant 1996 dollars.

<sup>b</sup>Reflects one-half Washington County's total potential share of \$6,000 in FTA Section 5307 Urbanized Area Formula Program operating assistance based on the funds allocated to the Milwaukee urbanized area in 1996. The remaining portion of the allocation would be used for the commuter transit services proposed under the plan.

<sup>c</sup>Assumes sufficient Federal transit operating assistance would be available through the FTA Section 5311 Nonurbanized Area Formula Program to cover 30 percent of the operating expenses of the local transit services operated within the portions of Washington County outside the Milwaukee urbanized area.

<sup>d</sup>Assumes that sufficient State transit operating assistance would be available through the State Urban Mass Transit Operating Assistance (85.20) Program to cover up to 39 percent of the operating expenses of the local transit services operated within the nonurbanized portion of the County, and up to 43 percent of the operating expenses of the local transit services operated within the urbanized portion of the County.

<sup>e</sup>Assumes that Washington County would continue to receive over the planning period an annual allocation of funds through the State Specialized Transportation Assistance (85.21) Program for Counties which would be at least equal to its 1996 program allocation of \$88,900. Based on past County practice, it was also assumed that the County would set aside \$5,000 of each annual allocation for future capital outlays either by the County or by private nonprofit organizations providing specialized transportation services for County programs. The remaining \$83,900 would be available to support the annual operating costs of the recommended local transit services.

Table A-2

## CAPITAL PROJECT EXPENDITURES FOR THE RECOMMENDED LOCAL TRANSIT SERVICES: 1998-2002

Capital Equipment	Total Number of Vehicles to Be Acquired	Unit Cost <sup>a</sup>	Total Cost <sup>a</sup>				Average Annual Cost <sup>a</sup>			
			Urban Areas	Rural Area	Specialized Service	Total	Urban Areas	Rural Area	Specialized Service	Total
Replacements for Existing Public Equipment										
Wheelchair-Accessible Minivans . . . . .	3	\$37,500	\$112,500	--	--	\$112,500	\$22,500	--	--	\$ 22,500
Nonaccessible Seven-Passenger Minivans . . . . .	6	20,000	120,000	--	--	120,000	24,000	--	--	24,000
Wheelchair Accessible Full-Size Vans . . . . .	3	35,000	105,000	--	--	105,000	21,000	--	--	21,000
Subtotal	12	--	\$337,500	--	--	\$337,500	\$67,500	--	--	\$ 67,500
Additional Equipment Required to Provide Expanded Urban and New Rural Taxicab Service										
Nonaccessible Seven-Passenger Minivans . . . . .	4	\$20,000	\$ 80,000	--	--	\$ 80,000	\$16,000	--	--	\$ 16,000
Nonaccessible 14-Passenger Full-Size Vans . . . . .	2	23,000	46,000	--	--	46,000	9,200	--	--	9,200
Wheelchair-Accessible Full-Size Vans . . . . .	2	35,000	35,000	\$ 35,000	--	70,000	7,000	\$ 7,000	--	14,000
Automobiles . . . . .	4	18,000	--	72,000	--	72,000	--	14,400	--	14,400
Subtotal	12	--	\$161,000	\$107,000	--	\$268,000	\$32,200	\$21,400	--	\$ 53,600
Total	24	--	\$498,500	\$107,000	--	\$605,500	\$99,700	\$21,400	--	\$121,100
Replacements for Private Equipment										
Wheelchair-Accessible Full-Size Vans . . . . .	1	\$35,000	--	--	\$35,000	\$ 35,000	--	--	\$7,000	\$ 7,000
Total	25	--	\$498,500	\$107,000	\$35,000	\$640,500	\$99,700	\$21,400	\$7,000	\$128,100
Federal Share of Costs <sup>b</sup>	--	--	\$398,800	\$ 85,600	\$28,000	\$512,400	\$79,800	\$17,100	\$5,600	\$102,500
Local Share of Costs	--	--	\$ 99,700	\$ 21,400	\$ 7,000	\$128,100	\$19,900	\$ 4,300	\$1,400	\$ 25,600

<sup>a</sup>Costs are expressed in constant 1996 dollars.

<sup>b</sup>Assumes that at least 80 percent of the total capital costs of the vehicles needed to provide general public shared-ride taxicab service would be funded through Federal Transit Administration grant programs.

Source: SEWRPC.

Table A-3

## PROJECTED RIDERSHIP AND FINANCIAL PERFORMANCE OF THE RECOMMENDED COMMUTER TRANSIT SERVICES FOR WASHINGTON COUNTY: 1998-2002

Operating Characteristic	Projected 1998 <sup>a</sup>					Projected 2002 <sup>a</sup>					Average Annual: 1998-2002				
	For Commuting to Washington County Jobs			For Commuting to Milwaukee County Jobs	Total	For Commuting to Washington County Jobs			For Commuting to Milwaukee County Jobs	Total	For Commuting to Washington County Jobs			For Commuting to Milwaukee County Jobs	Total
	Commuter-Bus Service	Commuter-Bus Shuttle Services	Germantown Shuttle Service	Commuter-Bus Service		Commuter-Bus Service	Commuter-Bus Shuttle Services	Germantown Shuttle Service	Commuter-Bus Service		Commuter-Bus Service	Commuter-Bus Shuttle Services	Germantown Shuttle Service	Commuter-Bus Service	
Service Provided															
Total Annual Vehicle-Hours	4,600	9,300	3,000	1,900	18,800	4,600	9,300	3,000	1,900	18,800	4,600	9,300	3,000	1,900	18,800
Annual Ridership <sup>a</sup>	64,000	28,000	14,000	5,000	83,000	78,000	42,000	23,000	8,000	109,000	70,800	35,100	18,400	6,800	96,000
Annual Operating Costs and Revenues <sup>b</sup>															
Operating Costs	\$302,000	\$278,000	\$76,000	\$123,000	\$779,000	\$302,000	\$278,000	\$76,000	\$123,000	\$779,000	\$302,000	\$278,000	\$76,000	\$123,000	\$779,000
Passenger Revenues	154,800	--	7,000	12,100	173,900	188,700	--	11,500	19,400	219,600	171,200	--	9,200	16,500	196,900
Total Operating Deficit	147,200	278,000	69,000	110,900	605,100	113,300	278,000	64,500	103,600	559,400	130,800	278,000	66,800	106,500	582,100
Potential Sources of Public Funds															
Federal															
Congestion Mitigation/Air Quality Improvement (CMAQ) Program <sup>c</sup>	\$ 5,800	\$147,900	\$29,800	\$ 53,300	\$236,800	--	--	--	--	--	\$ 1,300	\$ 86,200	\$17,200	\$ 30,400	\$135,100
FTA Section 5307 Urbanized Area Formula Program <sup>d</sup>	--	--	--	--	--	--	--	\$ 3,000	--	\$ 3,000	--	--	\$ 1,200	--	\$ 1,200
FTA Section 5311 Nonurbanized Area Formula Program <sup>e</sup>	--	--	--	--	--	\$ 71,300	\$ 65,600	--	\$ 29,100	\$166,000	\$ 29,400	\$ 27,000	--	\$ 12,000	\$ 68,400
Subtotal	\$ 5,800	\$147,900	\$29,800	\$ 53,300	\$236,800	\$ 71,300	\$ 65,600	\$3,000	\$ 29,100	\$169,000	\$ 30,700	\$113,200	\$18,400	\$ 42,400	\$204,700
State															
Urban Public Transit Operating Assistance <sup>f</sup>	\$117,800	\$108,400	\$32,700	\$ 48,000	\$306,900	\$117,800	\$108,400	\$ 32,700	\$ 48,000	\$306,900	\$117,800	\$108,400	\$32,700	\$ 48,000	\$306,900
Local															
Private Sector	\$ 23,600	\$ 21,700	\$ 6,500	\$ 9,600	\$ 61,400	\$-75,800	\$104,000	\$ 28,800	\$ 26,500	\$3,500	\$-17,700	\$ 56,400	\$15,700	\$ 16,100	\$ 70,500
Total	\$147,200	\$278,000	\$69,000	\$110,900	\$605,100	\$113,300	\$278,000	\$ 64,500	\$103,600	\$559,400	\$130,800	\$278,000	\$66,800	\$106,500	\$582,100
Service Effectiveness and Efficiency															
Annual Passengers per Vehicle-Hour	13.9	3.0	4.7	2.6	4.4	17.0	4.5	7.7	4.2	5.8	15.4	3.8	6.1	3.6	5.1
Total Expense per Passenger	\$4.72	\$9.93	\$5.43	\$24.60	\$9.39	\$3.87	\$6.62	\$3.30	\$15.38	\$7.15	\$4.27	\$7.92	\$4.13	\$18.09	\$8.11
Total Revenue per Passenger	\$2.42	\$0.00	\$0.50	\$2.42	\$2.10	\$2.42	\$0.00	\$0.50	\$2.43	\$2.02	\$2.42	\$0.00	\$0.50	\$2.43	\$2.05
Total Deficit per Passenger	\$2.30	\$9.93	\$4.93	\$22.18	\$7.29	\$1.45	\$6.62	\$2.80	\$12.95	\$5.13	\$1.85	\$7.92	\$3.63	\$15.66	\$6.06
Percent of Expenses Recovered through Operating Revenues	51.3	--	9.2	9.8	22.3	62.5	--	15.1	15.8	28.2	56.7	--	12.1	13.4	25.3

<sup>a</sup>Total ridership figures for 1998, 2002, and average annual over the period excludes passengers transferring between the commuter-bus route and connecting commuter-shuttle services.

<sup>b</sup>All costs and revenues presented in constant 1996 dollars.

<sup>c</sup>Assumes sufficient Federal funds would be available through the Congestion Mitigation and Air Quality Improvement Program to offset 80 percent of the nonstate-funded portion of the total operating deficits of the services during 1998 through 2000.

<sup>d</sup>Reflects one-half Washington County's total potential share of \$6,000 in FTA Section 5307 Urbanized Area Formula Program operating assistance based on the funds allocated to the Milwaukee urbanized area in 1996. The remaining portion of the County's allocation would be used for the urbanized area local transit services proposed under the plan.

<sup>e</sup>Assumes sufficient Federal transit operating assistance would be available through the FTA Section 5311 Nonurbanized Area Formula Program to cover 30 percent of the operating expenses of the commuter bus and shuttle transit service operated within the portions of Washington County outside the Milwaukee urbanized area.

<sup>f</sup>Assumes that sufficient State transit operating assistance would be available through the State Urban Mass Transit Operating Assistance Program to cover up to 39 percent of the operating expenses of the commuter-bus and shuttle-bus transit services operated within the nonurbanized portion of the County and up to 43 percent of the operating expenses of the commuter-bus and employee-shuttle transit services operated within the urbanized portion of the County.

Source: SEWRPC.