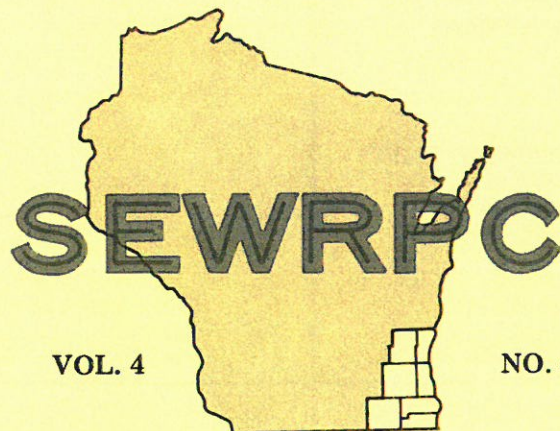


TECHNICAL RECORD



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CHARACTERISTICS OF TRAVEL IN SIX MAJOR ATTRACTORS IN THE SOUTHEASTERN WISCONSIN REGION

by Jean M. Lusk, SEWRPC Planner and John L. Zastrow, SEWRPC Senior Specialist

INTRODUCTION

On an average weekday in 1972 about 4.5 million internal person trips were made in the Southeastern Wisconsin Region. Although considerable study has been directed toward the Milwaukee central business district (CBD),¹ the single largest attractor of these trips in the Region, very little data have been published concerning the other major trip attractors in the Region. An examination of the characteristics of travel to these major trip attractors was deemed desirable to establish not only the location and characteristics of the relatively small areas attracting large numbers of trips, but also the travel habits and patterns of the trip-makers related to the areas. Through such an examination, data could be made available to local enterprises and agencies which may be considered pertinent to community development. Included in this examination were the following travel characteristics as they pertained to each trip attractor: trip volumes, trip origins, temporal distribution of travel, mode of travel, trip purpose of the tripmaker, land use at trip destination, time expended between trips, socioeconomic characteristics of tripmakers, auto availability, and bus passenger usage.

To be considered a major trip attractor as presented in this article, an area must meet the following two criteria:

1. The attractor area must be approximately the size of the Milwaukee CBD (about 1.25 square miles), and;
2. The volume of trips destined to the area must be of significant proportion (no less than one-third of that found in the Milwaukee CBD or 1 percent of the total internal person travel found in the Region on an average weekday).

Application of these criteria to the data compiled by SEWRPC in its 1972 home interview travel survey² resulted in the identification of six such areas. The Milwaukee CBD—the basis for the identification of the areas—attracted about 131,260 person trips, or about 2.9 percent of regional travel, on an average weekday in 1972. The Kenosha trip attractor, as shown in Table 1, drew the next largest volume of person trips in the Region, with about 73,790 person trips, or 1.6 percent of total regional travel. Of the major trip attractors, the Near South Side drew the lowest volume of person trips—about 51,460 person trips, or 1.1 percent of regional travel. Table 2 indicates the percentage distributions of total person trips and bus passenger trips entering and occurring within each trip attractor on an average weekday in 1972. As may be seen in the table, the greatest percentage of total person trips made wholly within an attractor occurred in the Kenosha attractor, and the greatest percentage of bus passenger trips made wholly within an attractor occurred in the Near North Side attractor. The locations of the six major trip attractors that were identified on the basis of the above criteria are shown on Map 1.

¹ See "A Backward Glance: Downtown Yesterdays" by Gerald P. Caffrey, *SEWRPC Technical Record*, Vol. 3, No. 2; "Characteristics of Travel in the Milwaukee Central Business District" by Sheldon W. Sullivan, *SEWRPC Technical Record*, Vol. 3, No. 2; "Characteristics of Travel in the Milwaukee Central Business District: 1963 and 1972" by Sheldon W. Sullivan and Jean M. Lusk, *SEWRPC Technical Record*, Vol. 3, No. 6.

² For information concerning sampling, conduct, and levels of accuracy of the home interview survey, see Chapter IX of *SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin: 2000, Volume One, Inventory Findings*.

The data upon which this article is based were obtained from the 1972 home interview travel survey. The travel data used in preparation of the following summaries have been expanded, adjusted, and linked to represent the total travel occurring on an average weekday in 1972. Only internal person trips are represented—i.e., trips made by residents of the Region which both originated within and were destined for the seven-county Region.

This article discusses each trip attractor separately, with the intent that each section may be utilized as a freestanding description of the area and of the travel associated with it. However, where notable exceptions occur with respect to generally understood travel characteristics or where major differences occur between areas, comparisons between trip attractors are presented. The trip attractors are grouped in sequence according to similar travel characteristics. The first three areas presented—the Kenosha trip attractor, the Racine trip attractor, and the Near South Side trip attractor—share many characteristics, predominantly those associated with central business districts. The next area, the Capitol Court trip attractor, is unique among the six areas presented herein, mainly due to the influence of travel to the Capitol Court Shopping Center. The last two areas—the Marquette-Wisconsin Avenue trip attractor and the UWM-Lower East Side trip attractor—are similar in that they each contain a large university area in the midst of other diverse, highly urbanized development.

THE KENOSHA TRIP ATTRACTOR

The area identified as the Kenosha trip attractor includes and extends outward from the City of Kenosha central business district (CBD). As shown on Map 2, the Kenosha trip attractor is bounded by 67th Street on the south, 30th Avenue on the west, 52nd Street on the north, and Lake Michigan on the east. Located within this area of Kenosha in 1972 were two American Motors complexes, The Anaconda Company—Brass Division, Lake Front Stadium Park, Kenosha Memorial Hospital, G. M. Simmons Main Library, and many governmental buildings such as the U. S. Post Office, the Kenosha County Courthouse, the City of Kenosha Police

Table 1

VOLUMES OF PERSON TRIPS DESTINED FOR SIX MAJOR TRIP ATTRACTORS IN THE SOUTHEASTERN WISCONSIN REGION ON AN AVERAGE WEEKDAY: 1972

Trip Attractor	Person Trips ^a	
	Number	Percent of Regional Travel
Kenosha	73,790	1.6
Racine	54,760	1.2
Near South Side	51,460	1.1
Capitol Court	55,580	1.2
Marquette-Wisconsin Avenue . .	59,330	1.3
UWM-Lower East Side	68,650	1.5
Region	4,504,900	100.0

^a Includes only those trips destined for the attractor.

Source: SEWRPC.

Table 2

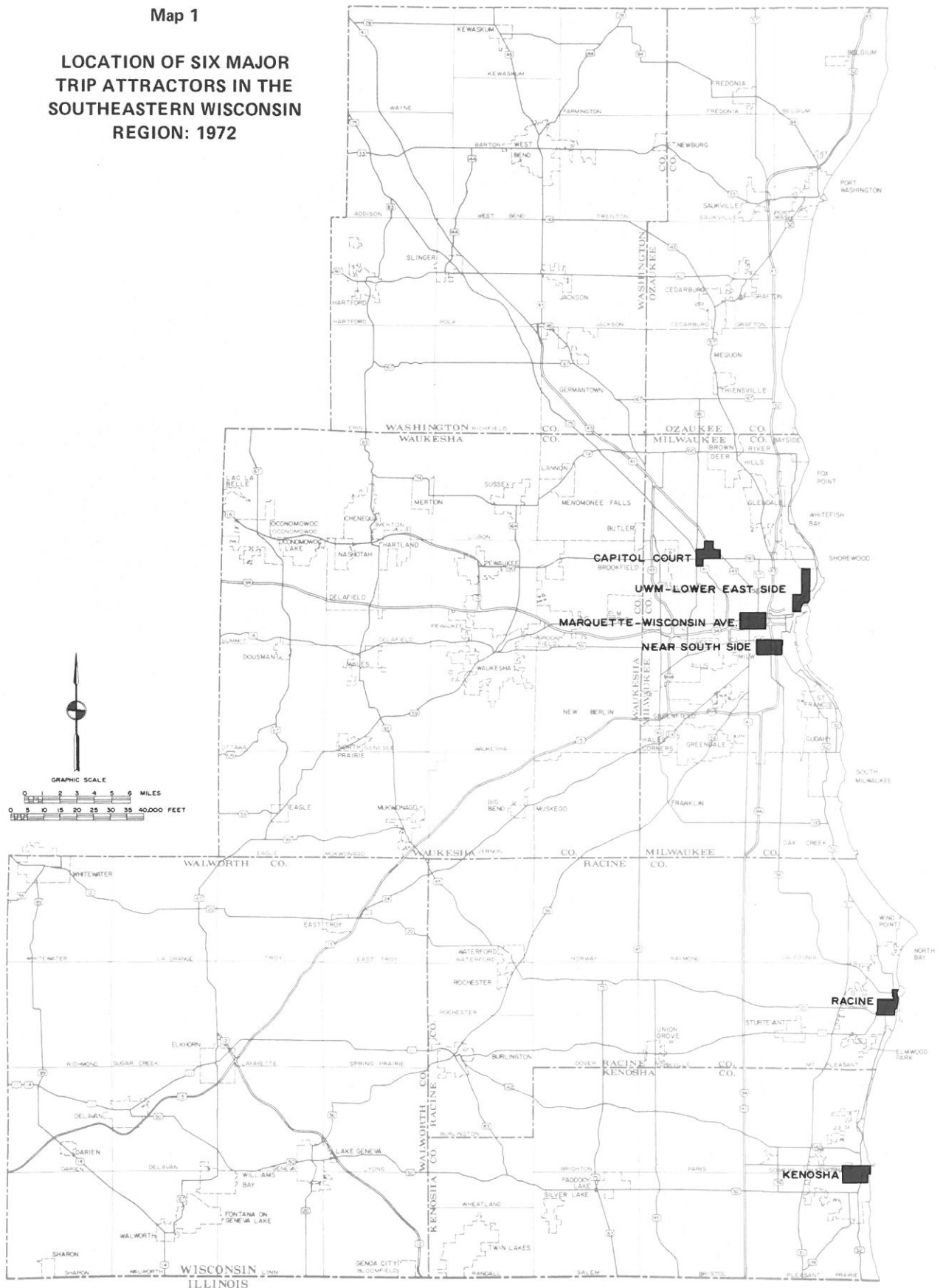
DISTRIBUTION OF PERSON TRIPS AND BUS PASSENGER TRIPS DESTINED FOR EACH TRIP ATTRACTOR ON AN AVERAGE WEEKDAY: 1972

Attractor	Total Person Trips (percent)			Bus Passenger Trips (percent)		
	Entering	Within	Total	Entering	Within	Total
Kenosha	74	26	100	90	10	100
Racine	75	25	100	91	9	100
Near South Side	80	20	100	77	23	100
Capitol Court	84	16	100	96	4	100
Marquette-Wisconsin Avenue . .	81	19	100	88	12	100
UWM-Lower East Side	77	23	100	84	16	100

Source: SEWRPC.

Map 1

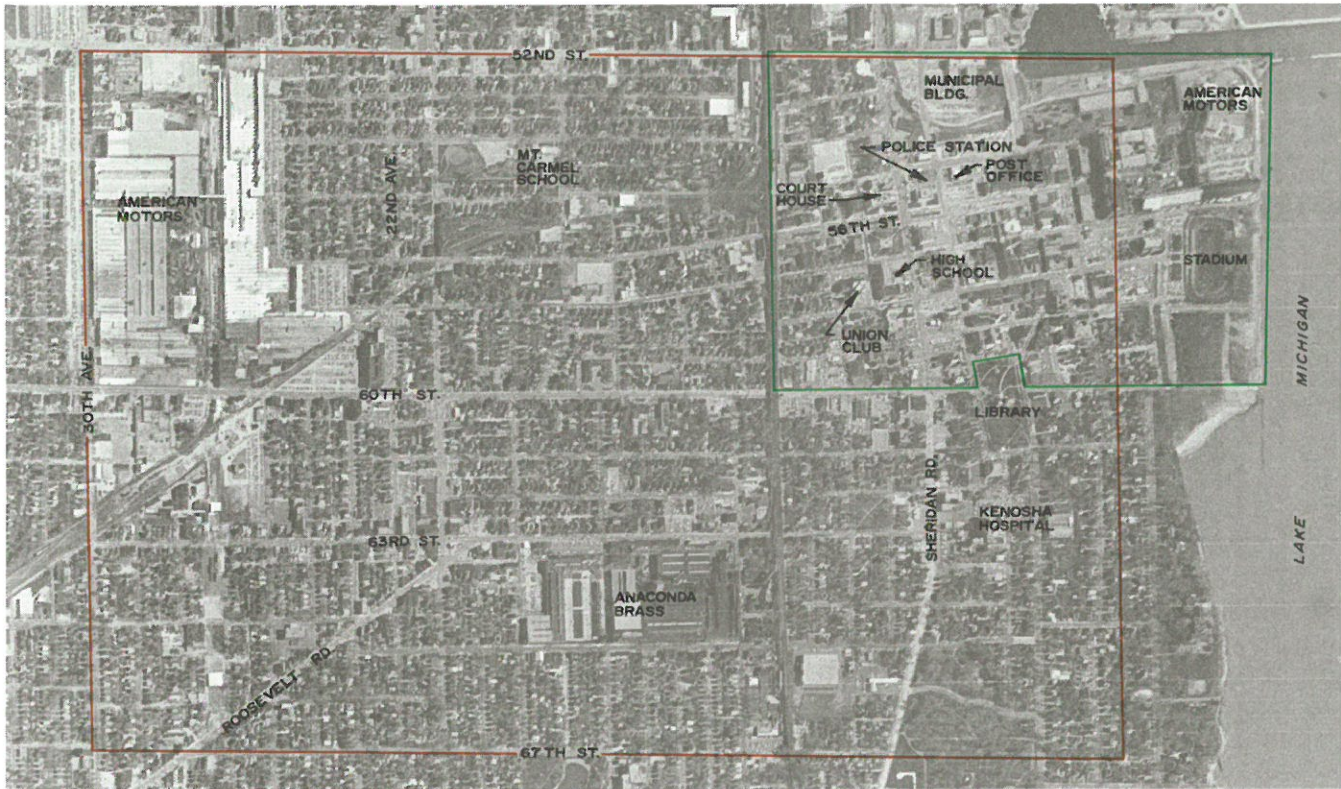
**LOCATION OF SIX MAJOR
TRIP ATTRACTORS IN THE
SOUTHEASTERN WISCONSIN
REGION: 1972**



Source: SEWRPC.

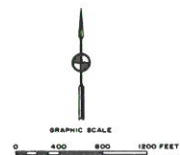
Map 2

LOCATION OF THE KENOSHA TRIP ATTRACTOR



LEGEND

- ATTRACTOR BOUNDARY
- CENTRAL BUSINESS DISTRICT BOUNDARY



Source: SEWRPC.

Department, and the Municipal Office Building, as well as hundreds of small businesses, offices, and residences. The principal streets providing access to and within the area included Roosevelt Road, Sheridan Road (STH 32), 22nd Avenue, 30th Avenue, 52nd Street, 60th Street, and 56th Street.

Total Internal Person Trips

As shown in Table 3, about 129,380 internal person trips entered, exited, and occurred within the Kenosha trip attractor on an average weekday in 1972. Of these person trips, about 55,000 entered and 55,000 exited the trip attractor and about 19,000 were made within the boundaries of the trip attractor. Therefore, 74,000 of these trips had destinations within the trip attractor on an average weekday; about 74 percent of these 74,000 trips were made by persons entering the trip attractor and about 26 percent were made by persons traveling from place to place within the trip attractor.

Table 3 indicates that the distribution of trips entering and leaving and made within the trip attractor by mode of travel was similar to that of total trips made to, from, and within the Kenosha trip attractor. About 71 percent of the person trips were made as auto drivers, almost 27 percent were made as auto passengers, and only 1 percent were made as bus passengers. Another 1 percent were made by other modes. As shown in Table 3, there were higher percentages of auto driver travel, about 75 percent, and of auto passenger travel, about 25 percent, for those trips made entirely within the trip attractor, with only a negligible percentage of travel occurring by bus or by other modes.

Table 3

**DISTRIBUTION OF INTERNAL PERSON TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN
THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL: 1972**

Direction of Travel	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other ^a			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Entering . .	38,550	70.4	14,840	27.1	610	1.1	760	1.4	54,760	100.0
Leaving . . .	39,370	70.8	14,610	26.3	700	1.3	910	1.6	55,590	100.0
Within . . .	14,180	74.5	4,760	25.0	70	0.4	20	0.1	19,030	100.0
Total	92,100	71.2	34,210	26.4	1,380	1.1	1,690	1.3	129,380	100.0

^a Includes passenger travel by school bus, taxi, truck, motorcycle, and charter bus.

Source: SEWRPC.

Origins of Internal Person Trips

In 1972 travel to the Kenosha trip attractor originated in areas close to or within the trip attractor itself, as reflected by the patterns of internal person trip origins by traffic analysis zone shown on Map 3. About 99 percent of the internal person trips to this trip attractor originated within Kenosha and Racine Counties: about 92 percent of the trips began in Kenosha County and about 7 percent began in Racine County. Furthermore, 97 percent of the internal person trips to the area originated east of IH 94: about 66,500 trips, or 90 percent, began east of IH 94 in Kenosha County, and about 4,900 trips, or slightly less than 7 percent, began east of IH 94 in Racine County. Since tripmaking between two areas is reciprocal, the distributional pattern of trip origins shown on Map 3 also serves as a representation of the distributional pattern of internal person trips leaving the trip attractor.

Time Pattern of Travel

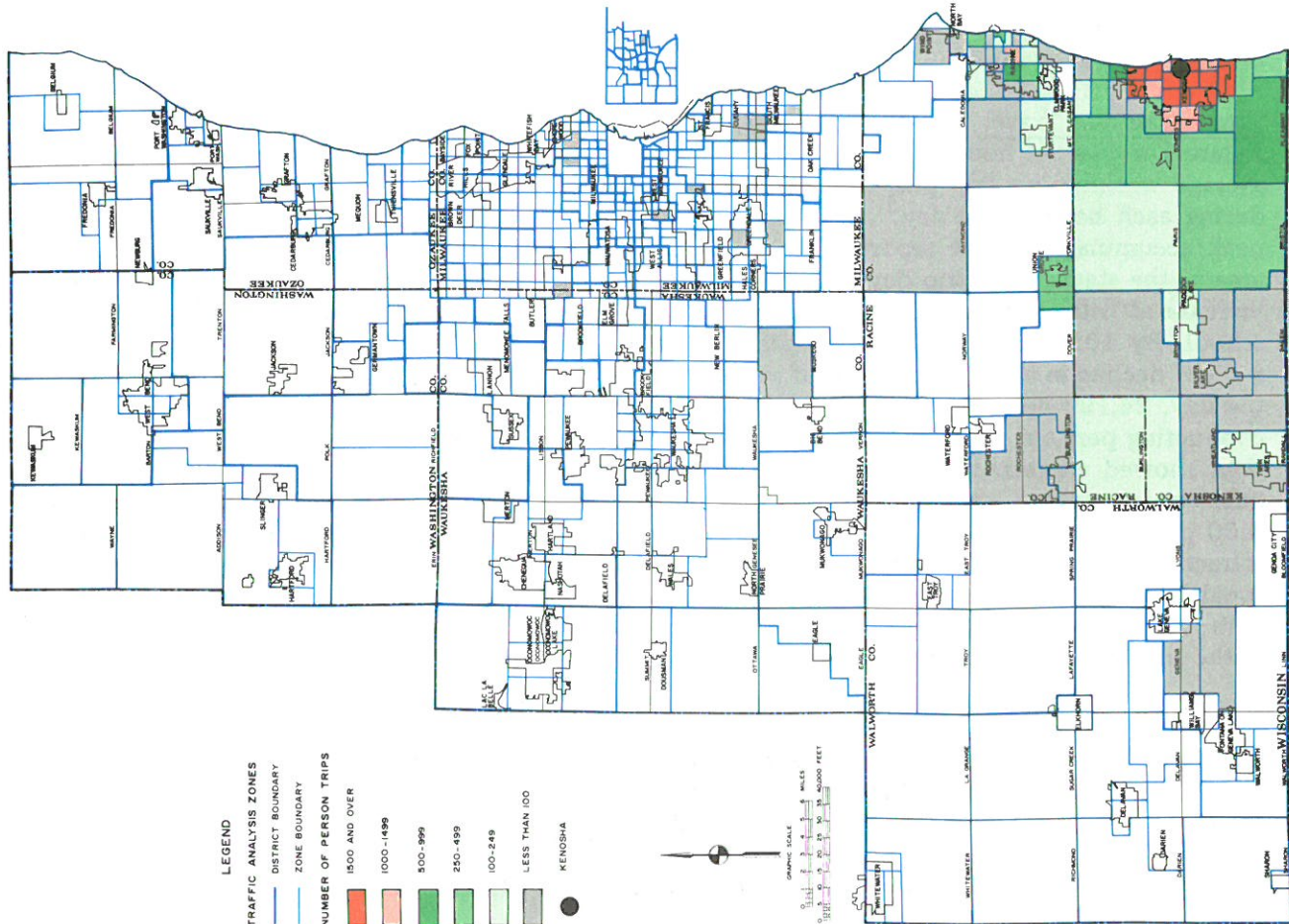
Figure 1 shows the hourly flow of total person trips entering and leaving the Kenosha trip attractor on an average weekday by trip purpose and the accumulation of persons within the boundary of the attractor during each hour of the day.³ As indicated in the figure, about 15,160 persons—about 63 percent of the peak accumulation—were reported by the 1972 home interview survey to be area residents⁴ and in the area at the start of the trip day. The relative inactivity of the early morning hours was followed by a sharp increase at 6:00 a.m. and 7:00 a.m. in persons entering the area, as commuters journeyed to work and school. By 10:00 a.m., the morning peak accumulation, about 23,300 persons, was reached, followed by a slight decline in the accumulation of persons during the noon hour. The peak accumulation of persons for the day, 24,120 persons, occurred between 2:00 p.m. and 3:00 p.m. Travel into the area for the purpose of conducting personal business remained fairly constant during the later morning and early afternoon hours, then showed a substantial increase at 3:00 p.m. and 4:00 p.m. The influence of the increased personal business tripmaking into the area was offset by a sharp increase in tripmakers leaving the area between 3:00 p.m. and 6:00 p.m. As illustrated in Figure 1, the primary purpose of trips leaving the Kenosha trip attractor was to return home. During the evening hours, as tripmakers entered the trip attractor for personal business, social-recreational, and shopping purposes, the accumulation of persons increased slightly, with a minor peak of approximately 18,180 persons occurring at 7:00 p.m., followed by a general decline in the accumulation into the night.

³ The pattern formed by the accumulation of persons is very similar to the pattern found for the Milwaukee CBD as reported in "Characteristics of Travel in the Milwaukee Central Business District, 1963 and 1972," by Sheldon W. Sullivan and Jean M. Lusk, SEWRPC *Technical Record* Vol. 3, No. 6.

⁴ In comparison, the 1970 population of the Kenosha trip attractor was 13,670 persons, according to the U. S. Bureau of the Census.

Map 3

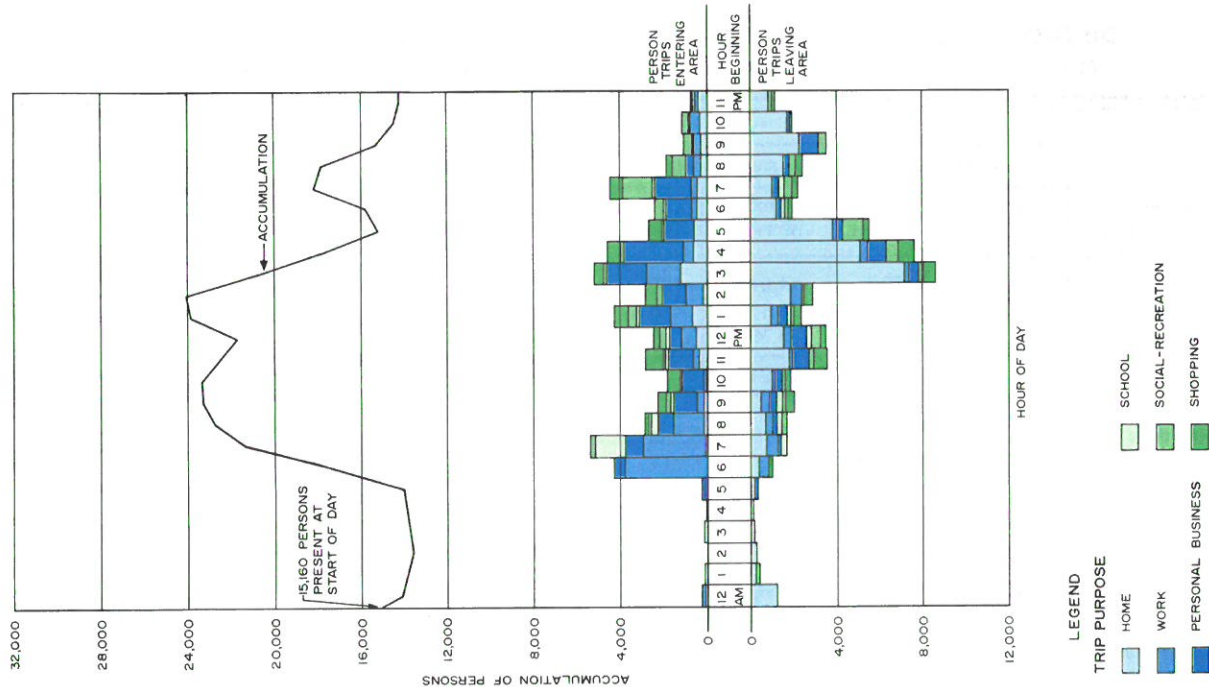
ORIGINS OF INTERNAL PERSON TRIPS TO THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Figure 1

ACCUMULATION OF PERSONS AND NUMBER OF PERSON TRIPS ENTERING AND LEAVING THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY AND TRIP PURPOSE: 1972



Source: SEWRPC.

Mode of Travel by Trip Purpose

Of the 73,790 internal person trips destined for the Kenosha trip attractor on an average weekday, auto driver travel accounted for about 52,730 trips, or 71 percent; auto passenger travel accounted for about 19,600 trips, or 27 percent; bus passenger travel accounted for about 680 trips, or about 1 percent; and travel by other modes accounted for about 780 trips, or about 1 percent. As shown in Table 4, auto driver travel to the Kenosha trip attractor consisted primarily of trips to work and personal business trips. The primary purpose of auto passenger travel to this trip attractor was to conduct personal business, while bus passenger trips were made primarily for shopping purposes, to attend school, and to conduct personal business. In total, trips to conduct personal business accounted for about 24,180 trips, or 33 percent of the total person trips destined to this trip attractor. Trips to work accounted for about 19,940, or 27 percent, of the total person trips. Finally, trips to return home accounted for 11,900 person trips, or 16 percent of the total; shopping trips accounted for 7,760 person trips, or 11 percent of the total; trips for social-recreational purposes accounted for 7,750 person trips, or 11 percent of the total; and trips to school accounted for 2,260 person trips, or 3 percent of the total.

Land Use

Of the 74,000 person trips destined for the Kenosha trip attractor, about 32,500, or 44 percent, were made to commercial establishments; about 16,010 trips, or 22 percent, ended at residences; about 12,350, or 17 percent, were made to governmental-institutional facilities; about 11,650, or 16 percent, were made to industrial sites; and about 1,280, or 2 percent, were made to a variety of other land uses. Trips to commercial land uses and governmental-institutional land uses were made primarily to conduct personal business; trips to residential land uses were made primarily for the purpose of returning home; and trips to industrial land uses were made primarily to attend work. Within the Kenosha trip attractor, about 50 percent of the trips to work were destined for industrial land uses. On the other hand, about 58 percent of the personal business trips, about 52 percent of the trips made for social-recreational purposes, and about 99 percent of the shopping trips were destined for commercial land uses (see Table 5).

Time Expended for Trip Purposes

As shown in Table 6, persons traveling to the Kenosha trip attractor for the purpose of attending work or school spent the longest period of time in the area prior to making another trip. Of the trips to the trip attractor for work or school purposes, about 70 percent resulted in visits of longer than four hours. The school-purpose visits tended to be of shorter duration than the work visits. About 50 percent of the work-purpose visits lasted eight hours or longer, and about 61 percent of the school-purpose visits lasted from four hours to eight hours. In contrast, a minimum of 95 percent of the visits made for personal business, social-recreational, and shopping purposes lasted less than four hours, with social-recreational visits lasting the longest: about 52 percent of the social-recreational visits lasted from one to four hours, and about

Table 4

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND TRIP PURPOSE: 1972

Trip Purpose	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	8,510	16.1	3,120	15.9	--	--	270	34.6	11,900	16.1
Work	16,510	31.3	3,170	16.2	70	10.3	190	24.4	19,940	27.0
Personal Business . . .	16,630	31.5	7,400	37.7	150	22.1	--	--	24,180	32.8
School	570	1.1	1,210	6.2	160	23.5	320	41.0	2,260	3.1
Social-Recreational . .	4,780	9.1	2,840	14.5	130	19.1	--	--	7,750	10.5
Shopping	5,730	10.9	1,860	9.5	170	25.0	--	--	7,760	10.5
Total	52,730	100.0	19,600	100.0	680	100.0	780	100.0	73,790	100.0

Source: SEWRPC.

43 percent lasted less than one hour. The visits for personal business purposes tended to be shorter in duration, with about 32 percent lasting from one to four hours and about 64 percent lasting less than an hour. The briefest visits to the Kenosha trip attractor were made by shoppers. Slightly less than 25 percent of the shoppers made visits of from one to four hours, whereas about 75 percent of the shoppers initiated another trip within less than one hour after reaching their shopping trip destination. Of all the trip purposes combined, about 72 percent of the trips to the trip attractor resulted in visits of less than four hours and 28 percent in visits of four hours or longer. The most frequently occurring visit to the Kenosha trip attractor lasted less than one hour. Such trips represented about 43 percent of total travel to the trip attractor.

Socioeconomic Characteristics

As indicated in data presented below, tripmakers to the Kenosha trip attractor—as would be expected in a central business district area—are representative of the broad spectrum of socioeconomic characteristics generally found in the Southeastern Wisconsin Region.

Licensed Driver Status: As shown in Figure 2, about 55 percent of the trips to this attractor were made by males and about 45 percent were made by females. Almost 85 percent of the total trips to the area were made by licensed drivers—about 50 percent by males and 35 percent by females. Although males made most of the total trips to the area, females made most of those trips that were made by persons who do not

Table 5

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE AND TRIP PURPOSE: 1972

Trip Purpose	Land Use										Total	
	Residential		Commercial		Industrial		Governmental-Institutional		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	11,900	100.0	--	--	--	--	--	--	--	--	11,900	100.0
Work	330	1.6	6,750	33.9	9,990	50.1	2,850	14.3	20	0.1	19,940	100.0
Personal Business . . .	1,950	8.1	14,060	58.1	1,570	6.5	6,260	25.9	340	1.4	24,180	100.0
School	--	--	--	--	--	--	2,260	100.0	--	--	2,260	100.0
Social-Recreational . .	1,830	23.6	4,040	52.1	--	--	960	12.4	920	11.9	7,750	100.0
Shopping	--	--	7,650	98.6	90	1.2	20	0.2	--	--	7,760	100.0
Total	16,010	21.7	32,500	44.1	11,650	15.8	12,350	16.7	1,280	1.7	73,790	100.0

Source: SEWRPC.

Table 6

DISTRIBUTION OF TIME EXPENDED FOR EACH TRIP PURPOSE ON AN AVERAGE WEEKDAY IN THE KENOSHA TRIP ATTRACTOR: 1972

Duration of Visit (hours)	Percent of Time per Trip Purpose ^a					
	Work	Personal Business	School	Social-Recreational	Shopping	Total
Less than 1.0	11.1	63.8	1.4	42.8	74.5	42.5
1.0 - 1.9	2.2	16.4	13.8	33.5	17.0	14.0
2.0 - 3.9	16.7	15.4	14.8	18.7	8.0	15.3
4.0 - 7.9	20.0	2.7	60.6	4.8	--	10.6
8.0 and More	50.0	1.7	9.4	0.2	0.5	17.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

^a Trips to home are not included.

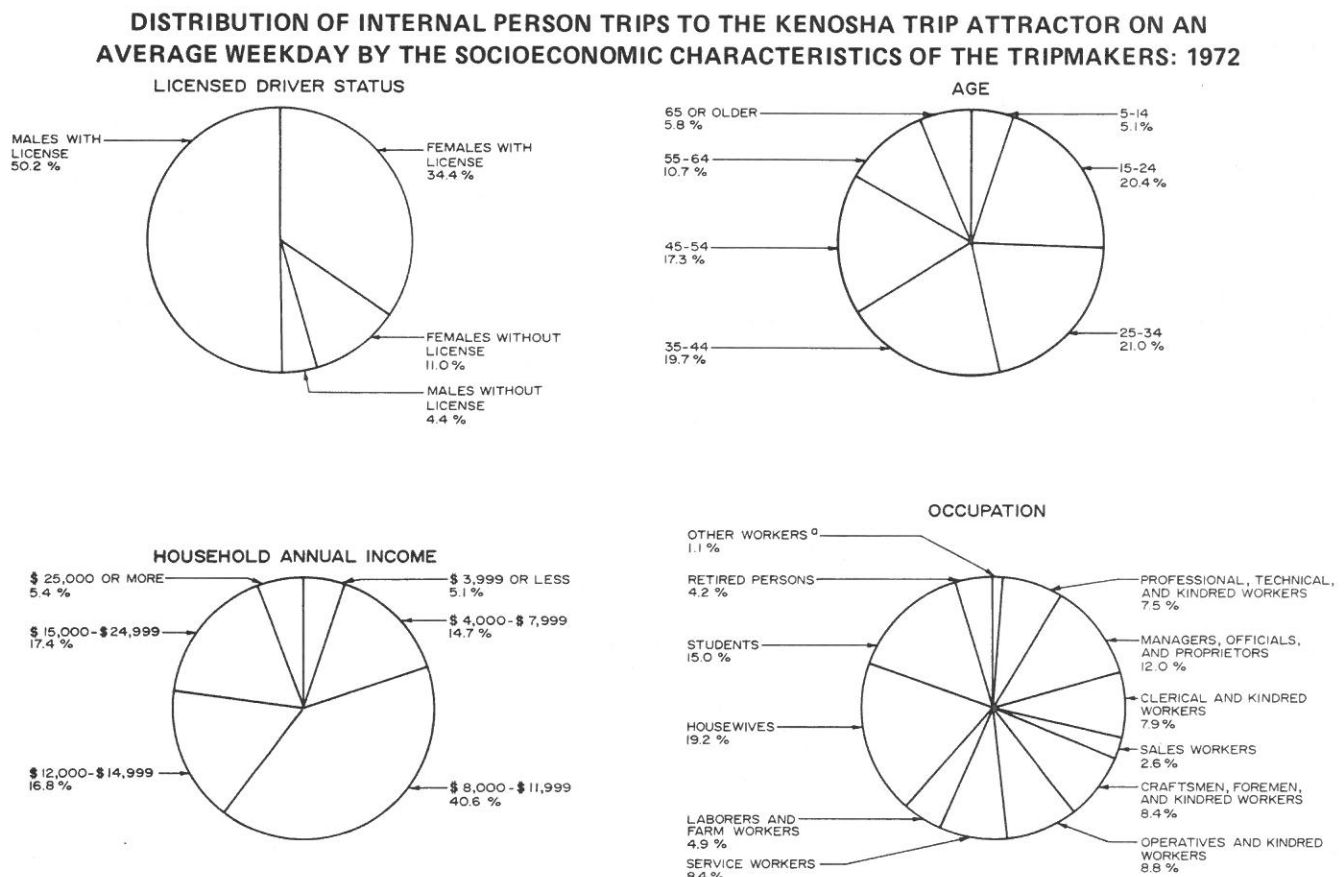
Source: SEWRPC.

hold a driver's license. About 4 percent of the trips to the area were made by males who are not licensed to drive, and about 11 percent of the trips to the area—about 8,000 trips a day—were made by females who are not licensed to drive. Interestingly, analysis of more detailed data summaries indicated that unlicensed females made approximately 600 mass transit trips a day. In other words, females who do not hold driver's licenses were responsible for about 89 percent of the total bus passenger travel recorded to be destined for this area on an average weekday.

Age: Figure 2 indicates that tripmakers destined for the Kenosha trip attractor were fairly evenly distributed among all age groups from 15 through 54 years of age. Almost 21 percent of the trips were made by persons 25 through 34 years of age; about 20 percent each were made by persons 15 through 24 years of age and 35 through 44 years of age; about 17 percent were made by persons 45 through 54 years of age; about 11 percent were made by persons 55 through 64 years of age; about 6 percent were made by persons 65 years of age or older; and about 5 percent were made by children 5 through 14 years of age. In total, about 69 percent of the trips to the Kenosha trip attractor were made by persons between 25 and 65 years of age. Tripmaking by persons less than 5 years of age was not recorded in the 1972 home interview survey.

Income: As shown in Figure 2, in 1972 the greatest proportion of total trips to the Kenosha trip attractor, about 41 percent, was made by persons from households with incomes of from \$8,000 through \$11,999 a year. Of the remaining income categories, persons from households with annual incomes of from \$15,000 through \$24,999 and from \$12,000 through \$14,999 each made about 17 percent of the trips to the trip

Figure 2



100% INTERNAL PERSON TRIPS = 73,790
^a INCLUDES UNEMPLOYED WORKERS

Source: SEWRPC.

attractor. Persons from households earning from \$4,000 through \$7,999 a year made about 15 percent of the person trips. Those households with annual incomes in excess of \$25,000 and less than \$4,000 each contributed approximately 5 percent of the total person trips.

Occupation: Shown in Figure 2 is the diversity to be found in the occupations of tripmakers to the Kenosha trip attractor. The predominant occupational group was housewives, who made 19 percent of the total trips to the area. About 15 percent of the trips were made by students and 4 percent were made by retired persons. In total, then, about 38 percent of the person trips to this trip attractor were made by persons who were not formally employed. The remaining 62 percent of the trips were made by a variety of workers who were categorized in nine occupational groups, the largest of which consisted of managers, officials, and proprietors.

Automobile Availability

As shown in Table 7, about 95 percent of the person trips made to the Kenosha trip attractor on an average weekday were made by persons from households with one or more automobiles available for personal use. About 46 percent of the total trips were made by persons from households with one auto available; about 41 percent by persons with two autos available; and about 8 percent by persons with three or more autos available. This distribution is very similar to that found in the Racine trip attractor, as described later in this article. As would be expected, tripmaking from households with no autos available, representing about 5 percent of the total person travel, accounted for only 1 percent of the auto driver travel to the area, but for 13 percent of the auto passenger travel and 28 percent of the bus passenger travel to the area. In total, about 91 percent of the auto driver trips and 81 percent of the auto passenger trips were made by persons from one- and two-auto households, while about 85 percent of the bus passenger trips were made by persons from households with one auto or no autos.

Table 8 presents the distribution of person trips destined for the Kenosha trip attractor by the number of automobiles available by trip purpose. There is a notable correlation between the number of autos available per household and the percentage of trips made to the trip attractor for the purpose of returning home. Trips returning home accounted for about 27 percent of the tripmaking by persons from households with no auto; about 20 percent of the tripmaking by persons from one-auto households; about 12 percent of the trips by persons from two-auto households; and about 8 percent of the travel by persons from three-or-more-auto households.

The largest volumes of person trips to the area were made by persons from two-auto and one-auto households for the purpose of conducting personal business, about 11,490 and 10,470 trips, respectively. Next in frequency were trips to work by persons from one-auto and two-auto households, about 9,210 trips and 7,940 trips, respectively, and trips to home made by persons from one-auto households, about 6,730 trips. No more than 3,900 trips were recorded in any other category of trip purpose by automobile availability.

Table 7

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE KENOSHA
TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND
THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD: 1972**

Autos Available per Household	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
0	590	1.1	2,560	13.1	190	27.9	140	17.9	3,480	4.7
1	25,490	48.3	7,850	40.0	390	57.4	230	29.5	33,960	46.0
2	22,190	42.1	8,110	41.4	30	4.4	240	30.8	30,570	41.4
3 or More	4,460	8.5	1,080	5.5	70	10.3	170	21.8	5,780	7.9
Total	52,730	100.0	19,600	100.0	680	100.0	780	100.0	73,790	100.0

Source: SEWRPC.

Table 8

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE
KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE NUMBER
OF AUTOMOBILES AVAILABLE PER HOUSEHOLD AND TRIP PURPOSE: 1972**

Trip Purpose	Autos Available per Household								Total	
	0		1		2		3 or More			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home.	930	26.7	6,730	19.8	3,760	12.3	480	8.3	11,900	16.1
Work	570	16.4	9,210	27.1	7,940	26.0	2,220	38.4	19,940	27.0
Personal Business . . .	1,120	32.2	10,470	30.9	11,490	37.6	1,100	19.0	24,180	32.8
School	220	6.3	720	2.1	720	2.3	600	10.4	2,260	3.1
Social-Recreational . .	460	13.2	2,930	8.6	3,730	12.2	630	10.9	7,750	10.5
Shopping.	180	5.2	3,900	11.5	2,930	9.6	750	13.0	7,760	10.5
Total	3,480	100.0	33,960	100.0	30,570	100.0	5,780	100.0	73,790	100.0

Source: SEWRPC.

Bus Passenger Profile

In 1972 the Kenosha trip attractor was provided transit service by the City of Kenosha Transit and Parking Commission.⁵ The home interview survey recorded about 610 bus passenger trips entering the Kenosha trip attractor, about 700 bus passenger trips leaving the attractor, and about 70 bus passenger trips originating within and destined for the trip attractor. In total, therefore, about 1,380 bus passenger trips with at least one trip end within the attractor boundary were made on an average weekday in 1972. These 1,380 bus passenger trips represent about 48 percent of the 2,900 bus passenger trips reported in the home interview survey⁶ to be made daily within the service area of the Kenosha transit system and about 1 percent of the 129,380 person trips made to, from, and within the Kenosha trip attractor on an average weekday.

Time Pattern of Travel: As shown in Table 9, the time pattern of bus passenger travel entering and leaving the Kenosha trip attractor on an average weekday reflects the time pattern of total person travel presented earlier. Most bus passenger trips were made into the trip attractor in the morning and out of the trip attractor in the afternoon. The peak period of bus passenger trips into the attractor was 6:00 a.m. through 9:59 a.m., and the peak period of bus passenger trips out of the attractor was 3:00 p.m. through 5:59 p.m. Bus passenger trips entering the attractor from 6:00 a.m. through 9:59 a.m. represented about 52 percent of the total bus passenger trips into the area; from 10:00 a.m. through 2:59 p.m., about 44 percent; and from 3:00 p.m. through 5:59 p.m., about 3 percent. No bus passenger trips entering the attractor after 6:00 p.m. were reported in the home interview survey. Bus passenger trips leaving the attractor from 6:00 a.m. through 9:59 a.m. accounted for about 4 percent of the total bus passenger trips out of the trip attractor; from 10:00 a.m. through 2:59 p.m., about 31 percent; from 3:00 p.m. through 5:59 p.m., about 46 percent; and from 6:00 p.m. through 5:59 a.m., about 19 percent.

⁵In 1972 the Kenosha Transit and Parking Commission operated six local city transit routes and six special routes primarily for serving schools.

⁶In 1972 the SEWRPC also conducted special one-day surveys of mass transit passengers. The survey findings indicated that on the day of the Kenosha area survey, about 1,400 passengers were carried on the Kenosha transit system. However, this survey excluded school "trippers" or bus runs designed to accommodate school-age children. The home interview survey included such school-purpose travel.

Trip Purpose: No predominant purpose was found for bus passenger trips entering and occurring within the Kenosha trip attractor, i.e., those trips destined for the trip attractor. As shown in Table 10, the largest volume of bus passenger trips was made for shopping purposes, about 170 trips, or 25 percent of the total. Bus trips to attend school accounted for about 160 trips, or 24 percent of the total; personal business trips for about 150 trips, or 22 percent of the total; social-recreational trips for 130 trips, or 19 percent of total; and work trips for 70 trips, or about 10 percent of total. It should be noted that no bus passenger trips destined for the attractor were reported in the home interview survey to have a purpose of going home. In contrast, about 81 percent of the bus passenger trips leaving the attractor were made for the purpose of returning home. In comparison to total person trips destined for the attractor, more bus passenger trips were destined for the attractor for school, social-recreational, and shopping purposes, and fewer were made for home, work, and personal business purposes.

Land Use: The influence of the numerous retail establishments and government facilities in the Kenosha trip attractor is clearly demonstrated in the land use distribution of bus passenger travel, as shown in Table 11. Of the 680 bus passenger trips with destinations in the attractor, about 44 percent were made to commercial establishments, about 37 percent were made to governmental-institutional facilities, and about 19 percent were made to residential locations. No bus passenger trips to industrial land uses or to other land uses were recorded. It was found through detailed data summaries that bus passenger trips to residential locations were for social-recreational purposes. Trips to commercial establishments were predominantly for shopping purposes and, to a lesser extent, for personal business and work purposes. Bus passenger trips to governmental-institutional land uses were for the purposes of attending school, conducting personal business, and attending work.

Table 9

DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING AND LEAVING THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY: 1972

Time of Day	Bus Passenger Trips			
	Entering		Leaving	
	Number	Percent	Number	Percent
6:00 a.m. through 9:59 a.m.	320	52.4	30	4.3
10:00 a.m. through 2:59 p.m.	270	44.3	220	31.4
3:00 p.m. through 5:59 p.m.	20	3.3	320	45.7
6:00 p.m. through 5:59 a.m.	--	--	130	18.6
Total	610	100.0	700	100.0

Source: SEWRPC.

Table 10

DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TRIP PURPOSE: 1972

Trip Purpose	Bus Passenger Trips							
	Entering		Within		Total Trips Destined for Trip Attractor		Leaving	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Home.	--	--	--	--	--	--	570	81.4
Work	70	11.5	--	--	70	10.3	--	--
Personal Business	150	24.6	--	--	150	22.1	30	4.3
School	160	26.2	--	--	160	23.5	30	4.3
Social-Recreational	130	21.3	--	--	130	19.1	70	10.0
Shopping.	100	16.4	70	100.0	170	25.0	--	--
Total	610	100.0	70	100.0	680	100.0	700	100.0

Source: SEWRPC.

Socioeconomic Characteristics: As indicated in the data presented below, the distribution of bus passenger travel by socioeconomic characteristics of the tripmakers differs substantially from the socioeconomic distribution of total person travel to the Kenosha trip attractor.

Licensed Driver Status: As shown in Figure 3, about 89 percent of the bus passenger trips to the Kenosha trip attractor on an average weekday in 1972 were made by females and about 11 percent were made by males. Of the bus passenger trips destined for the area, about 97 percent were made by persons who did not hold a driver's license. None of the female bus passengers destined for the trip attractor area held a driver's license and only 3 percent of the male bus passengers were licensed drivers. The above distributions differ significantly from the distribution of total tripmaking to the area by licensed driver status. There were substantially greater proportions of females and of persons without driver's licenses among the bus passengers than among the total tripmakers to the area on an average weekday.

Table 11

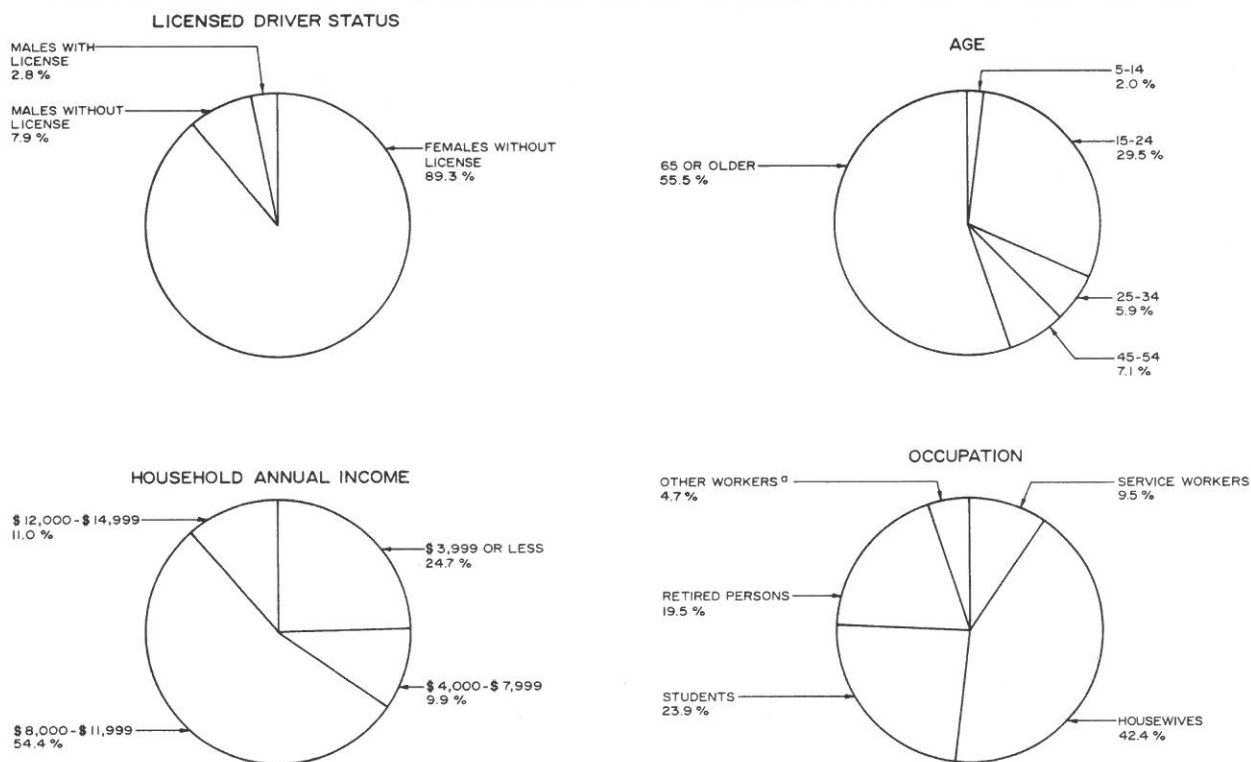
DISTRIBUTION OF BUS PASSENGER TRIPS DESTINED FOR THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE: 1972

Land Use	Bus Passenger Trips	
	Number	Percent
Residential	130	19.1
Commercial	300	44.1
Industrial	--	--
Governmental-Institutional . .	250	36.8
Other	--	--
Total	680	100.0

Source: SEWRPC.

Figure 3

DISTRIBUTION OF BUS PASSENGER TRIPS TO THE KENOSHA TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



100 % BUS PASSENGER TRIPS = 680 TRIPS
^a INCLUDES UNEMPLOYED WORKERS

Source: SEWRPC.

Age: As shown in Figure 3, about 56 percent of the bus passengers to the Kenosha trip attractor were persons 65 years of age or older. This proportion contrasts sharply with the distribution by age of total person trips to the area; persons 65 years of age or older accounted for only 6 percent of the total person trips. Persons 15 through 24 years of age also accounted for a larger proportion of bus passenger travel than total person travel—about 30 percent. Of the remaining age categories, persons 45 through 54 years of age accounted for about 7 percent of the trips; persons 25 through 34 years of age for about 6 percent; and persons 5 through 14 years of age for about 2 percent.

Income: As shown in Figure 3, in 1972 about 89 percent of the bus passenger trips to the Kenosha trip attractor were made by persons from households that earned \$11,999 or less a year. About 54 percent of the bus passenger trips were made by persons from households earning from \$8,000 through \$11,999 a year; about 25 percent by persons from households earning \$3,999 or less a year; about 11 percent by persons from households earning from \$12,000 through \$14,999 a year; and about 10 percent by persons from households earning from \$4,000 through \$7,999 a year. Greater proportions of bus passenger trips than of total person trips were made by persons from households in the income categories of \$8,000 through \$11,999 a year and \$3,999 or less a year, and smaller proportions of bus passenger trips were made by persons from households in the other income categories.

Occupation: About 86 percent of the bus passenger trips to the Kenosha trip attractor were made by persons who were not formally employed, in comparison to 38 percent for total tripmakers. As shown in Figure 3, about 42 percent of the bus passenger trips were made by housewives; about 24 percent, by students; and about 20 percent, by retired persons. The remaining 14 percent of bus passenger trips to the Kenosha trip attractor were made by service workers, about 9 percent, and other workers, about 5 percent.

THE RACINE TRIP ATTRACTOR

The Racine trip attractor includes and extends outward from the City of Racine central business district (CBD). As shown on Map 4, the library, the courthouse, and part of the harbor are within the Racine CBD, which constitutes the northern portion of the attractor. Located in the trip attractor immediately west of the CBD in 1972 were the City Hall and the police station, and to the south were the Racine Gateway Technical Institute, Franklin High School, Johnson Wax office buildings, and Saint Mary's Hospital, as well as numerous residences and small businesses. In the southwestern portion of the Racine trip attractor were numerous residences, various businesses, and the large area occupied by the Washington Park High School. The principal streets providing access to and within this attractor included Taylor Street, Washington Street, 12th Street, 6th Street, Wisconsin Street, and Main Street.

Total Internal Person Trips

As shown in Table 12, about 96,080 internal person trips entered, exited, and occurred within the Racine trip attractor on an average weekday in 1972. Of these person trips, about 41,300 entered and 41,000 exited the trip attractor and about 13,400 were made within the boundaries of the trip attractor. Therefore, 54,700 of these trips had destinations within the trip attractor on an average weekday. About 75 percent of these 54,700 trips were made by persons entering the trip attractor and about 25 percent were made by persons traveling from place to place within the trip attractor.

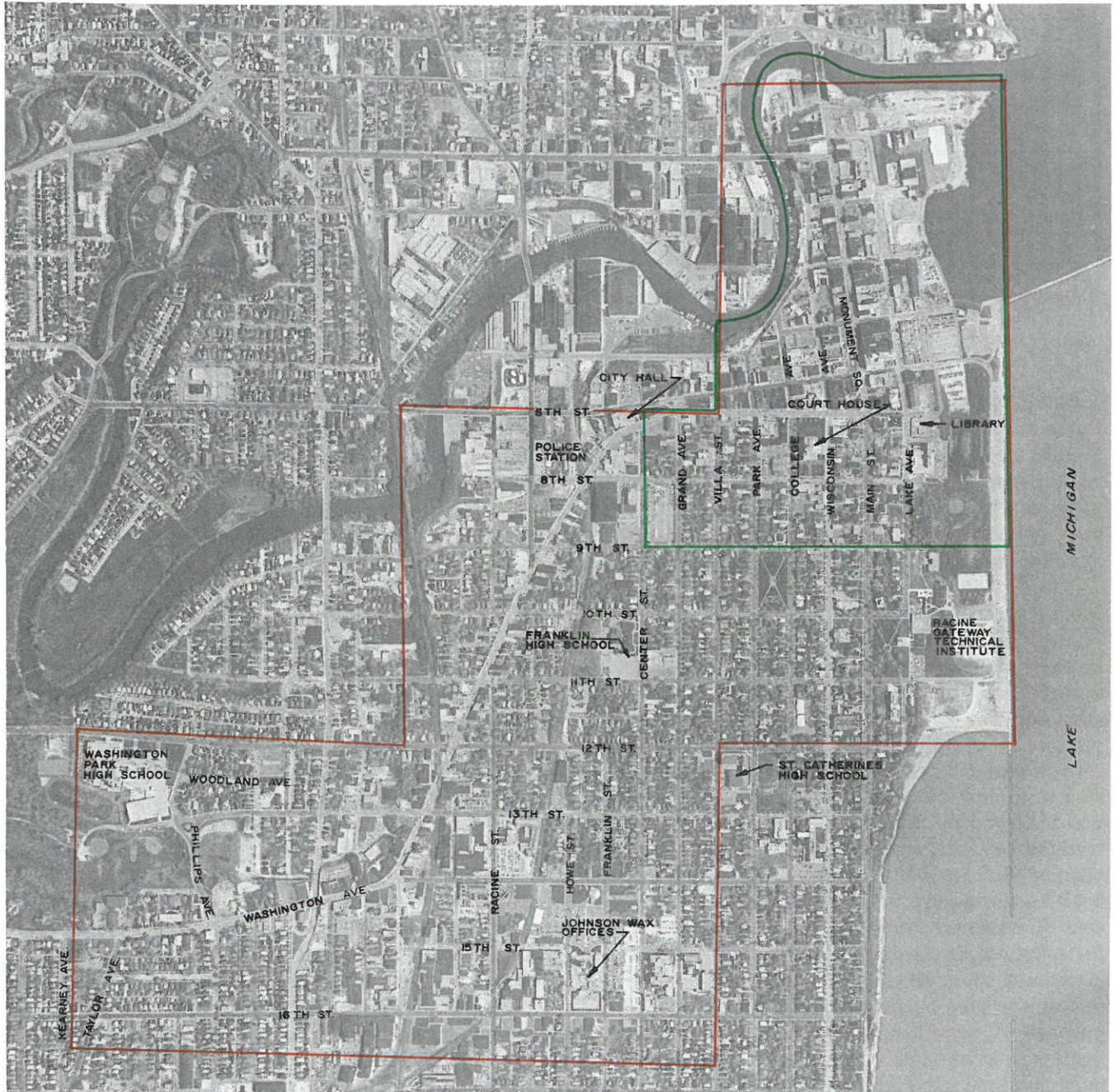
Table 12 indicates that the distribution of trips entering, leaving, and made within the trip attractor by mode of travel was similar to that of total trips made to, from, and within the Racine trip attractor. About 68 percent of the person trips were made as auto drivers; about 28 percent were made as auto passengers; about 2 percent were made as bus passengers; and another 2 percent were made by other modes. As shown in Table 12, trips made wholly within the trip attractor accounted for a lesser percentage of auto driver travel, about 63 percent, and a higher percentage of auto passenger travel, about 36 percent, than did trips entering or leaving the trip attractor.

Origins of Internal Person Trips

In 1972 travel to the Racine trip attractor originated in areas close to or within the attractor itself, as reflected by the patterns of internal person trip origins by traffic analysis zone shown on Map 5. About 98 percent of the internal person trips to this trip attractor originated within Racine and Kenosha Counties,

Map 4

LOCATION OF THE RACINE TRIP ATTRACTOR



LEGEND

- ATTRACTOR BOUNDARY
- CENTRAL BUSINESS DISTRICT BOUNDARY

Source: SEWRPC.

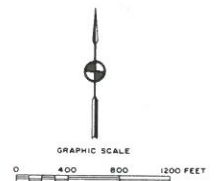


Table 12

**DISTRIBUTION OF INTERNAL PERSON TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN
THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL: 1972**

Direction of Travel	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other ^a			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Entering . .	28,310	68.6	11,080	26.8	860	2.1	1,050	2.5	41,300	100.0
Leaving. . .	28,260	68.4	11,100	26.9	880	2.1	1,080	2.6	41,320	100.0
Within . . .	8,510	63.2	4,830	35.9	80	0.6	40	0.3	13,460	100.0
Total	65,080	67.7	27,010	28.1	1,820	1.9	2,170	2.3	96,080	100.0

^a Includes passenger travel by school bus, taxi, truck, motorcycle, and charter bus.

Source: SEWRPC.

about 92 percent of the trips began in Racine County, and about 6 percent originated in Kenosha County. Furthermore, about 97 percent of the internal person trips to the area originated east of IH 94; about 50,000 trips, or 91 percent, began east of IH 94 in Racine County; and about 3,300 trips, or about 6 percent, began east of IH 94 in Kenosha County. Also indicated on Map 5 are the large concentrations of persons trips originating immediately to the north and to the southwest of the trip attractor. Since trip-making between two areas is reciprocal, the distributional pattern of trip origins shown on Map 5 also serves as a representation of the distributional pattern of internal person trips leaving the trip attractor.

Time Pattern of Travel

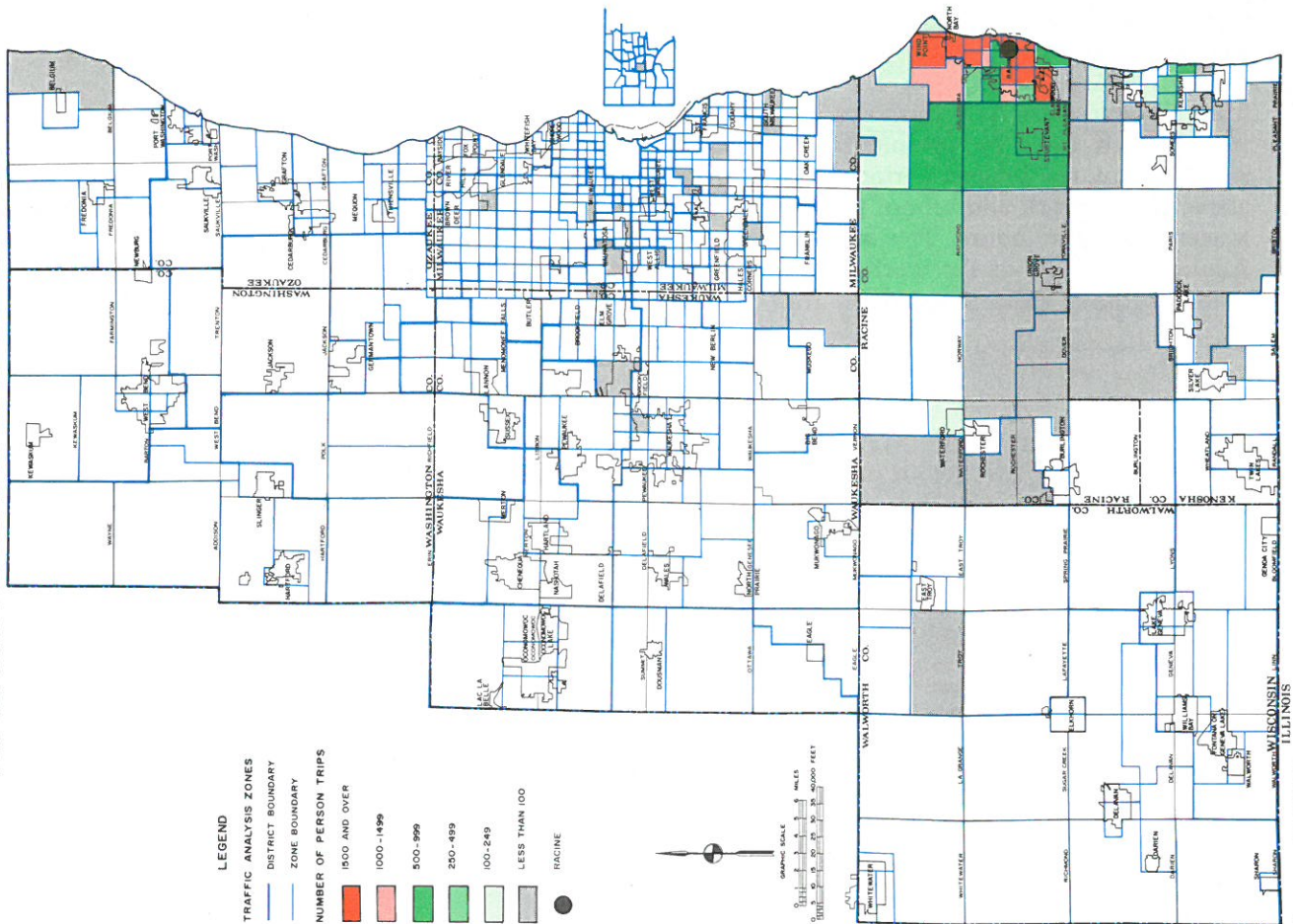
Figure 4 shows the hourly flow of total person trips entering and leaving the Racine trip attractor on an average weekday by trip purpose and the accumulation of persons within the boundary of the attractor during each hour of the day. The pattern formed by the accumulation of persons in the Racine trip attractor was the same basic pattern, although slightly depressed, that was formed by the accumulation of persons in the Kenosha attractor and the Milwaukee CBD.⁷ As indicated in the figure, about 10,960 persons—about 61 percent of the peak accumulation—were reported by the 1972 home interview survey to be area residents⁸ and in the area at the start of the trip day. The relative inactivity of the early morning hours was followed by a sharp increase at 7:00 a.m. through 8:00 a.m. in persons entering the area as commuters traveled to work and school. By 10:00 a.m., the peak accumulation of the day, about 18,030 persons, was reached, followed by a slight decline in the accumulation of persons during the noon hour. The afternoon peak accumulation of 17,610 persons occurred at 1:00 p.m., generally a result of a midday flow into the area of workers, shoppers, and persons involved in personal business or social-recreational activities. Travel for personal business purposes was notable from 9:00 a.m. to 10:00 a.m., but declined during the early afternoon, then showed a substantial increase beginning at 4:00 p.m. A significant increase in tripmaking out of the area began at 3:00 p.m. and continued until 6:00 p.m. As illustrated in Figure 4, the primary purpose of trips leaving the Racine trip attractor was to return home. During the evening hours, as trip-makers entered the trip attractor for personal business and social-recreational purposes, the accumulation of persons increased slightly, with a minor peak of about 12,730 occurring between 6:00 p.m. and 7:00 p.m., followed by a general decline in the accumulation into the night.

⁷ For the pattern formed by the accumulation of persons in the Milwaukee CBD, see "Characteristics of Travel in the Milwaukee Central Business District, 1963 and 1972," by Sheldon W. Sullivan and Jean M. Lusk, SEWRPC Technical Record, Vol. 3, No. 6.

⁸ In comparison, the 1970 population of the Racine trip attractor was 9,540 persons, according to the U. S. Bureau of the Census.

Map 5

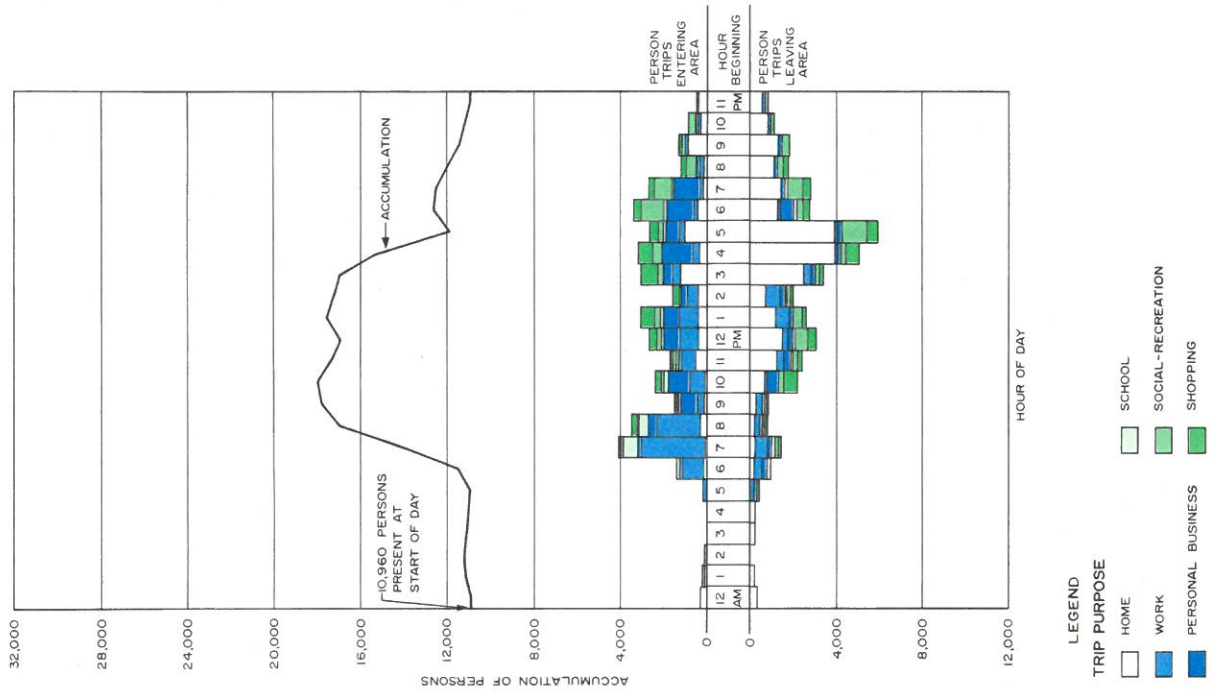
ORIGINS OF INTERNAL PERSON TRIPS TO THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Figure 4

ACCUMULATION OF PERSONS AND NUMBER OF PERSON TRIPS ENTERING AND LEAVING THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY AND TRIP PURPOSE: 1972



Source: SEWRPC.

Mode of Travel by Trip Purpose

Of the 54,760 internal person trips destined for the Racine trip attractor on an average weekday, auto driver travel accounted for about 36,820 trips, or 67 percent; auto passenger travel accounted for about 15,910 trips, or 29 percent; bus passenger travel accounted for about 940 trips, or 2 percent; and travel by other modes accounted for about 1,090 trips, or 2 percent. As shown in Table 13, auto driver travel to the Racine trip attractor consisted primarily of trips to work, personal business trips, and trips to return home. The primary purposes of auto passenger travel to this attractor were to return home, to participate in social-recreational activities, and to conduct personal business. Bus passenger trips were made principally to conduct personal business and to return home. In total, trips to work and to home and personal business trips accounted for about 73 percent of travel to this attractor. Trips to work accounted for about 13,840 trips, or 25 percent of travel; trips to home for about 13,560 trips, or 25 percent; and personal business trips for about 12,770 trips, or 23 percent. Finally, shopping trips accounted for about 6,220 trips, or 11 percent of travel; social-recreational trips for about 6,020 trips, or 11 percent; and trips to school for about 2,350 trips, or 4 percent.

Land Use

Of the 55,760 total person trips destined for the Racine trip attractor, about 24,540 trips, or 45 percent, were made to commercial establishments; about 15,250 trips, or 28 percent, ended at residences; about 9,690, or 18 percent, were made to governmental-institutional facilities; about 3,900, or 7 percent, were made to industrial sites; and about 1,380, or more than 2 percent, were made to a variety of other land uses. Trips to commercial land uses were made primarily for the purposes of attending work, conducting personal business, and shopping. Trips to residential land uses were made primarily for the purpose of returning home. Trips to industrial land uses were made primarily to attend work. And finally, trips to governmental-institutional land uses were made to conduct personal business, attend work, attend school, and participate in social-recreational activities. Within the Racine trip attractor about 56 percent of the trips to work, about 56 percent of the trips to conduct personal business, about 58 percent of the social-recreational trips, and about 98 percent of the shopping trips were destined for commercial land uses (see Table 14).

Time Expended for Trip Purposes

As shown in Table 15, persons traveling to the Racine trip attractor for the purpose of attending work or school spent the longest period of time in the area prior to making another trip. Of the trips to this trip attractor for work and school purposes, about 61 percent and 50 percent, respectively, resulted in visits of longer than four hours. The school-purpose visits tended to be of shorter duration than the work visits. About 38 percent of the work-purpose visits lasted eight hours or longer, whereas about 38 percent of the school-purpose visits lasted from four to eight hours. In contrast, a minimum of 94 percent of the visits

Table 13

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND TRIP PURPOSE: 1972

Trip Purpose	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	7,900	21.4	4,890	30.7	240	25.5	530	48.6	13,560	24.8
Work	11,670	31.7	1,870	11.8	150	16.0	150	13.8	13,840	25.3
Personal Business . . .	9,330	25.4	3,100	19.5	260	27.7	80	7.3	12,770	23.3
School	1,250	3.4	650	4.1	140	14.9	310	28.5	2,350	4.3
Social-Recreational . .	2,430	6.6	3,570	22.4	--	--	20	1.8	6,020	11.0
Shopping	4,240	11.5	1,830	11.5	150	15.9	--	--	6,220	11.3
Total	36,820	100.0	15,910	100.0	940	100.0	1,090	100.0	54,760	100.0

Source: SEWRPC.

made for personal business, social-recreational, or shopping purposes lasted less than four hours, with social-recreational visits lasting the longest: about 60 percent of the social-recreational visits lasted from one to four hours and 34 percent lasted less than one hour. The visits for personal business purposes tended to be briefer, with about 31 percent lasting from one to four hours and about 66 percent lasting less than one hour. The briefest visits to the Racine trip attractor were made by shoppers. About 20 percent of the shoppers made visits of from one to four hours, whereas about 80 percent of the shoppers initiated another trip within less than an hour after reaching their shopping trip destination. In total, the most frequently occurring visit to the Racine trip attractor lasted less than one hour. Such trips represented 44 percent of total person travel to this trip attractor. In total, about 74 percent of the trips made to the Racine trip attractor resulted in visits of less than four hours and 26 percent in visits of four hours or longer.

Socioeconomic Characteristics

As indicated in the data presented below, tripmakers to the Racine trip attractor—as would be expected in a central business district area—are representative of the broad spectrum of socioeconomic characteristics found in the Southeastern Wisconsin Region.

Licensed Driver Status: As shown in Figure 5, about 51 percent of the trips to this attractor were made by males and about 49 percent were made by females. About 81 percent of the total trips to the area were made by licensed drivers—about 42 percent by males and about 39 percent by females. Although males

Table 14

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE AND TRIP PURPOSE: 1972

Trip Purpose	Land Use										Total	
	Residential		Commercial		Industrial		Governmental-Institutional		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	13,540	99.9	--	--	--	--	20	0.1	--	--	13,560	100.0
Work	300	2.2	7,730	55.8	3,320	24.0	2,330	16.8	160	1.2	13,840	100.0
Personal Business . . .	1,140	8.9	7,160	56.1	470	3.7	3,930	30.8	70	0.5	12,770	100.0
School	--	--	70	3.0	--	--	2,280	97.0	--	--	2,350	100.0
Social-Recreational . .	270	4.5	3,500	58.1	--	--	1,100	18.3	1,150	19.1	6,020	100.0
Shopping.	--	--	6,080	97.7	110	1.8	30	0.5	--	--	6,220	100.0
Total	15,250	27.9	24,540	44.8	3,900	7.1	9,690	17.7	1,380	2.5	54,760	100.0

Source: SEWRPC.

Table 15

DISTRIBUTION OF TIME EXPENDED FOR EACH TRIP PURPOSE ON AN AVERAGE WEEKDAY IN THE RACINE TRIP ATTRACTOR: 1972

Duration of Visit (hours)	Percent of Time per Trip Purpose ^a					
	Work	Personal Business	School	Social-Recreational	Shopping	Total
Less than 1.0	20.3	66.5	--	34.2	79.8	43.8
1.0 - 1.9	5.8	17.6	20.9	32.4	13.6	15.3
2.0 - 3.9	13.2	13.0	28.8	27.6	6.6	15.2
4.0 - 7.9	23.1	1.6	38.0	4.7	--	11.4
8.0 and More	37.6	1.3	12.3	1.1	--	14.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

^a Trips to home are not included.

Source: SEWRPC.

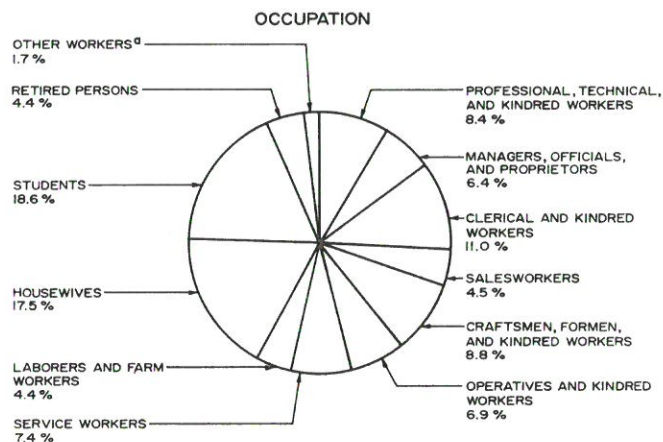
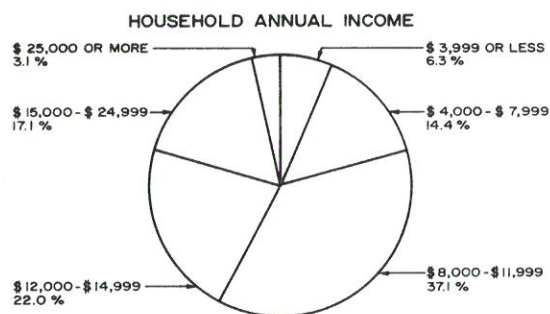
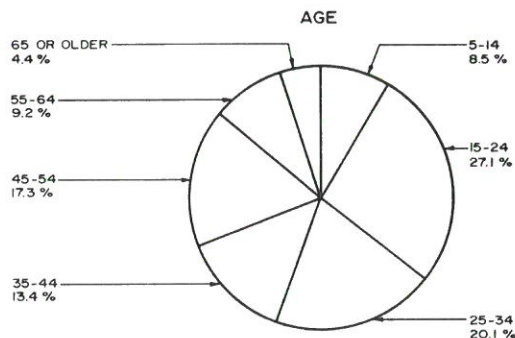
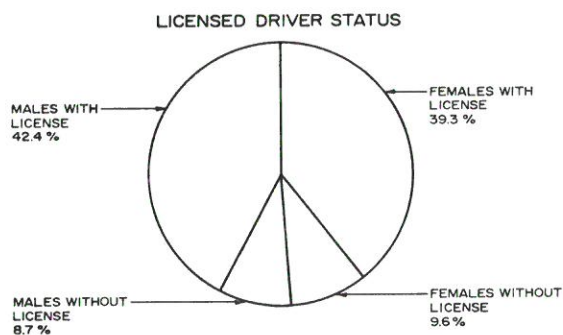
made slightly more trips to the area, females made slightly more of the trips that were made by persons who do not hold a driver's license. About 9 percent of the total trips to the area were made by males who were not licensed to drive; about 10 percent, by females who were not licensed to drive.

Age: Figure 5 indicates that the largest volume of trips to this attractor, about 27 percent, was accounted for by persons from 15 through 24 years of age. About 20 percent of the trips were made by persons 25 through 34 years of age; about 13 percent were made by persons 35 years through 44 years of age; about 17 percent were made by persons 45 through 54 years of age; about 9 percent each were made by persons 55 through 64 years of age and 5 through 14 years of age; and about 4 percent were made by persons 65 years of age or older. In total, about 60 percent of the trips made to the Racine trip attractor were made by persons between 25 and 65 years of age. Tripmaking by persons less than 5 years of age was not recorded in the 1972 home interview survey.

Income: As shown in Figure 5, in 1972 the greatest proportion of total trips to the Racine trip attractor, about 37 percent, was made by persons from households with incomes of from \$8,000 through \$11,999 a year. Of the remaining income categories, persons from households with annual incomes of from \$12,000 through \$14,999 made 22 percent of the trips to the trip attractor; persons from households earning from \$15,000 through \$24,999 made 17 percent of the trips; and persons from households earning from \$4,000 through \$7,999 made 14 percent of the trips. Persons in the highest income category made about half as many trips as persons in the lowest income category: persons from households earning more than \$25,000 a year made about 3 percent of the trips, and persons from households earning \$3,999 or less a year made 6 percent of the trips.

Figure 5

DISTRIBUTION OF INTERNAL PERSON TRIPS TO THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



100% INTERNAL PERSON TRIPS = 54,760

^aINCLUDES UNEMPLOYED WORKERS

Source: SEWRPC.

Occupation: Shown in Figure 5 is the diversity to be found in the occupations of tripmakers to the Racine trip attractor. The predominant occupational group was students, who made only 19 percent of the total trips to the area. Almost 18 percent of the trips were made by housewives and about 4 percent were made by retired persons. In total, then, about 41 percent of the person trips to this trip attractor were made by persons who were not formally employed. The remaining 59 percent of the trips were made by a variety of workers who were categorized in nine occupational groups, the largest of which consisted of clerical and kindred workers.

Automobile Availability

The percentage distribution of total person trips in the Racine trip attractor by the number of autos available is markedly similar to that for the Kenosha trip attractor. As shown in Table 16, about 95 percent of the person trips made to the Racine trip attractor on an average weekday were made by persons from households with one or more automobiles available for personal use. About 48 percent of the total trips were made by persons from households with one auto available; about 39 percent by persons with two autos available; and about 8 percent by persons with three or more autos available. As would be expected, tripmaking from households with no auto available, representing about 5 percent of the total person travel, accounted for only 2 percent of the auto driver travel to the area, but for 10 percent of the auto passenger travel and 46 percent of the bus passenger travel. In contrast, about 90 percent of the auto driver trips and about 83 percent of the auto passenger trips were made by persons from one- and two-auto households.

Table 17 presents the distribution of person trips destined for the Racine trip attractor by the number of automobiles available by trip purpose. Like the pattern found for the Kenosha trip attractor, there is a notable correlation between the number of autos available per household and the percentage of trips made to the attractor for the purpose of returning home. Trips returning home accounted for about 37 percent of the tripmaking by persons from households with no autos available; about 31 percent of the tripmaking by persons from one-auto households; about 18 percent of the tripmaking by persons from two-auto households; and about 11 percent of the tripmaking by persons from three-or-more-auto households.

The largest volume of person trips to the trip attractor, about 8,210 trips, was made by persons from one-auto households for the purpose of returning home. Next in frequency were trips to work by persons from one-auto and two-auto households, about 6,380 trips and 6,340 trips, respectively, and personal business trips by persons from one-auto households, about 6,330 trips. No more than 4,110 trips were recorded in any other category of trip purpose by automobile availability.

Table 16

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE RACINE
TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND
THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD: 1972**

Autos Available per Household	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
0	650	1.8	1,620	10.2	430	45.8	260	23.9	2,960	5.4
1	17,400	47.2	8,280	52.0	190	20.2	660	60.5	26,530	48.4
2	15,670	42.6	4,990	31.4	320	34.0	100	9.2	21,080	38.5
3 or More	3,100	8.4	1,020	6.4	--	--	70	6.4	4,190	7.7
Total	36,820	100.0	15,910	100.0	940	100.0	1,090	100.0	54,760	100.0

Source: SEWRPC.

Table 17

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE
RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE NUMBER
OF AUTOMOBILES AVAILABLE PER HOUSEHOLD AND TRIP PURPOSE: 1972**

Trip Purpose	Autos Available per Household								Total	
	0		1		2		3 or More			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home.	1,080	36.5	8,210	30.9	3,830	18.2	440	10.5	13,560	24.8
Work	180	6.1	6,380	24.0	6,340	30.1	940	22.4	13,840	25.3
Personal Business . . .	940	31.8	6,330	23.9	4,110	19.5	1,390	33.2	12,770	23.3
School	--	--	840	3.2	1,170	5.5	340	8.1	2,350	4.3
Social-Recreational . .	430	14.5	2,340	8.8	3,020	14.3	230	5.5	6,020	11.0
Shopping.	330	11.1	2,430	9.2	2,610	12.4	850	20.3	6,220	11.3
Total	2,960	100.0	26,530	100.0	21,080	100.0	4,190	100.0	54,760	100.0

Source: SEWRPC.

Bus Passenger Profile

In 1972 the Racine trip attractor was provided transit service by Flash City Transit.⁹ The home interview survey recorded about 860 bus passenger trips entering the Racine trip attractor, about 880 bus passenger trips leaving the attractor, and about 80 bus passenger trips originating within and destined for the trip attractor. In total, therefore, about 1,820 bus passenger trips with at least one trip end within the attractor were made on an average weekday in 1972. These 1,820 bus passenger trips represent about 65 percent of the 2,800 bus passenger trips reported in the home interview survey¹⁰ to be made daily within the service area of the Racine transit system and about 2 percent of the 96,080 person trips made to, from, and within the Racine trip attractor on an average weekday.

Time Pattern of Travel: As shown in Table 18, most bus passenger trips entered and exited the Racine trip attractor between the hours of 10:00 a.m. and 2:59 p.m. Bus passenger trips entering the area from 6:00 a.m. through 9:59 a.m. represented about 27 percent of the total bus passenger trips into the Racine trip attractor; from 10:00 a.m. through 2:59 p.m., about 44 percent; from 3:00 p.m. through 5:59 p.m., about 23 percent; and, from 6:00 p.m. through 5:59 a.m., about 6 percent. Bus passenger trips leaving the area from 6:00 a.m. through 9:59 a.m. accounted for about 16 percent of the total bus passenger trips out of the attractor; from 10:00 a.m. through 2:59 p.m., about 56 percent; from 3:00 p.m. through 5:59 p.m., about 25 percent; and from 6:00 p.m. through 5:59 a.m., about 3 percent. These home interview survey figures indicate that the peak periods of morning and afternoon bus passenger travel in the Racine trip attractor do not coincide with the peak periods for total person travel in the attractor.

Trip Purpose: As with the trip purpose distribution found for bus passenger travel in the Kenosha trip attractor, no predominant purpose was found for bus passenger trips entering and occurring within the Racine trip attractor, i.e., those trips destined for the trip attractor. As shown in Table 19, the largest volumes of bus passenger trips were made for the purposes of conducting personal business—about 260 trips, or 28 percent of the total—and returning home—about 240 trips, or 26 percent of the total. Trips

⁹ The City of Racine began subsidizing Flash City Transit operations on November 15, 1972, after the company petitioned the Wisconsin Public Service Commission for permission to abandon service. The City of Racine now owns and operates the transit system.

¹⁰ In 1972 the SEWRPC also conducted special one-day surveys of mass transit passengers. The survey findings indicated that on the day of the Racine area survey, about 2,200 passengers were carried on the Racine transit system.

Table 18

**DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING AND LEAVING THE
RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY: 1972**

Time of Day	Bus Passenger Trips			
	Entering		Leaving	
	Number	Percent	Number	Percent
6:00 a.m. through 9:59 a.m.	230	26.7	140	15.9
10:00 a.m. through 2:59 p.m.	380	44.2	490	55.7
3:00 p.m. through 5:59 p.m.	200	23.3	220	25.0
6:00 p.m. through 5:59 a.m.	50	5.8	30	3.4
Total	860	100.0	880	100.0

Source: SEWRPC.

Table 19

**DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN
THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TRIP PURPOSE: 1972**

Trip Purpose	Bus Passenger Trips							
	Entering		Within		Total Trips Destined for Trip Attractor		Leaving	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Home	220	25.6	20	25.0	240	25.5	420	47.7
Work	150	17.4	--	--	150	16.0	50	5.7
Personal Business	230	26.8	30	37.5	260	27.7	80	9.1
School	130	15.1	--	--	130	13.8	180	20.5
Social-Recreational	--	--	--	--	--	--	60	6.8
Shopping	130	15.1	30	37.5	160	17.0	90	10.2
Total	860	100.0	80	100.0	940	100.0	880	100.0

Source: SEWRPC.

for shopping purposes accounted for about 160 bus passenger trips, or 17 percent of the total; trips to attend work accounted for about 150 bus passenger trips, or 16 percent of the total; and trips to attend school accounted for about 130 bus passenger trips, or 14 percent of the total. The home interview survey reported no bus passenger trips entering the area for social-recreational purposes. There were only two primary purposes for bus passenger travel out of the attractor—returning home, which accounted for about 420 trips, or 48 percent of the total, and attending school, which accounted for about 180 trips, or 21 percent of the total. In comparison to total person trips destined for the attractor, more bus passenger trips were destined for the attractor for school and shopping purposes and, to a lesser extent, for personal business purposes; approximately the same number of trips were made for the purpose of returning home; and fewer trips were made for work and social-recreational purposes.

Land Use: As shown in Table 20, the retail establishments and governmental-institutional facilities in the Racine attractor drew the greatest portions of bus passenger travel. Of the 940 bus passenger trips with destinations in the attractor, about 39 percent were made to commercial establishments, about 35 percent were made to governmental-institutional facilities, and about 26 percent were made to residential locations. No bus passenger trips to industrial land uses or to other land uses were recorded. It was found through detailed data summaries that bus passenger trips to residential locations were for the purpose of returning home. Trips to commercial establishments were predominantly for shopping purposes and, to a lesser extent, for personal business and work purposes. Bus passenger trips to governmental-institutional land uses were for the purposes of conducting personal business, attending school, and attending work.

Socioeconomic Characteristics: As indicated in the data presented below, the distribution of bus passenger travel by socioeconomic characteristics of the tripmakers differs widely from the socioeconomic distribution of total person travel to the Racine trip attractor.

Licensed Driver Status: As shown in Figure 6, about 68 percent of the bus passenger trips to the Racine trip attractor on an average weekday in 1972 were made by females and about 32 percent were made by males. Of the bus passenger trips destined for the area, about 75 percent were made by persons who do not hold a driver's license. About 50 percent of the trips were by unlicensed females and about 25 percent by unlicensed males. Of the bus passenger trips made by licensed drivers, about 18 percent were made by females and about 7 percent were made by males. The above distributions differ significantly from the distribution of total tripmaking to the area by licensed driver status. There were substantially greater proportions of females and of persons without driver's licenses among the bus passengers than among the total tripmakers to the area on an average weekday.

Age: Although persons 65 years of age and older made only 4 percent of the total person travel to the Racine trip attractor, they made about 28 percent of the bus passenger travel destined for this area. Of the other age categories, persons from 15 through 24 years of age accounted for about 20 percent of the bus passenger trips; persons from 5 through 14 years of age for about 19 percent; persons 45 through 54 years of age, about 15 percent; persons 25 through 34 years of age, about 11 percent; persons 55 through 64 years of age, about 5 percent; and persons 35 through 44 years of age, about 3 percent (see Figure 6).

Income: In 1972 about 86 percent of the bus passenger trips to the Racine trip attractor were made by persons from households that earned \$11,999 or less a year. About 41 percent of the bus passenger trips were made by persons from households earning from \$8,000 through \$11,999 a year; about 26 percent, by persons from households earning \$4,000 through \$7,999 a year; about 19 percent, by persons from households earning \$3,999 or less a year; about 11 percent, by persons from households earning from \$12,000 through \$14,999 a year; and about 3 percent, by persons from households earning from \$15,000 through \$24,999 a year. A greater proportion of bus passenger trips than of total person trips was made by persons from households earning under \$8,000 a year; about the same proportion was made by persons from households earning from \$8,000 through \$11,999 a year; and a smaller proportion was made by persons from households earning \$12,000 or more a year (see Figure 6).

Occupation: About 76 percent of the bus passenger trips to the Racine trip attractor were made by persons who were not formally employed, in comparison to 41 percent for total tripmakers. As shown in Figure 6, about 36 percent of the bus passenger trips were made by students; about 26 percent, by retired persons; and about 14 percent, by housewives. The remaining 24 percent of the bus passenger trips to the Racine trip attractor were made by persons employed in a variety of occupations.

THE NEAR SOUTH SIDE TRIP ATTRACTOR

The Near South Side trip attractor is located immediately south of the City of Milwaukee central business district (CBD). As shown on Map 6, in 1972 the eastern portion of this attractor was occupied by an Allen Bradley plant and a variety of other smaller industrial, commercial, wholesale, and retail establishments. The attractor was crossed by IH 94, which has an interchange located between 9th and 6th Streets. To the west of IH 94 in 1972 were a large residential area, several elementary and secondary schools, and commer-

Table 20

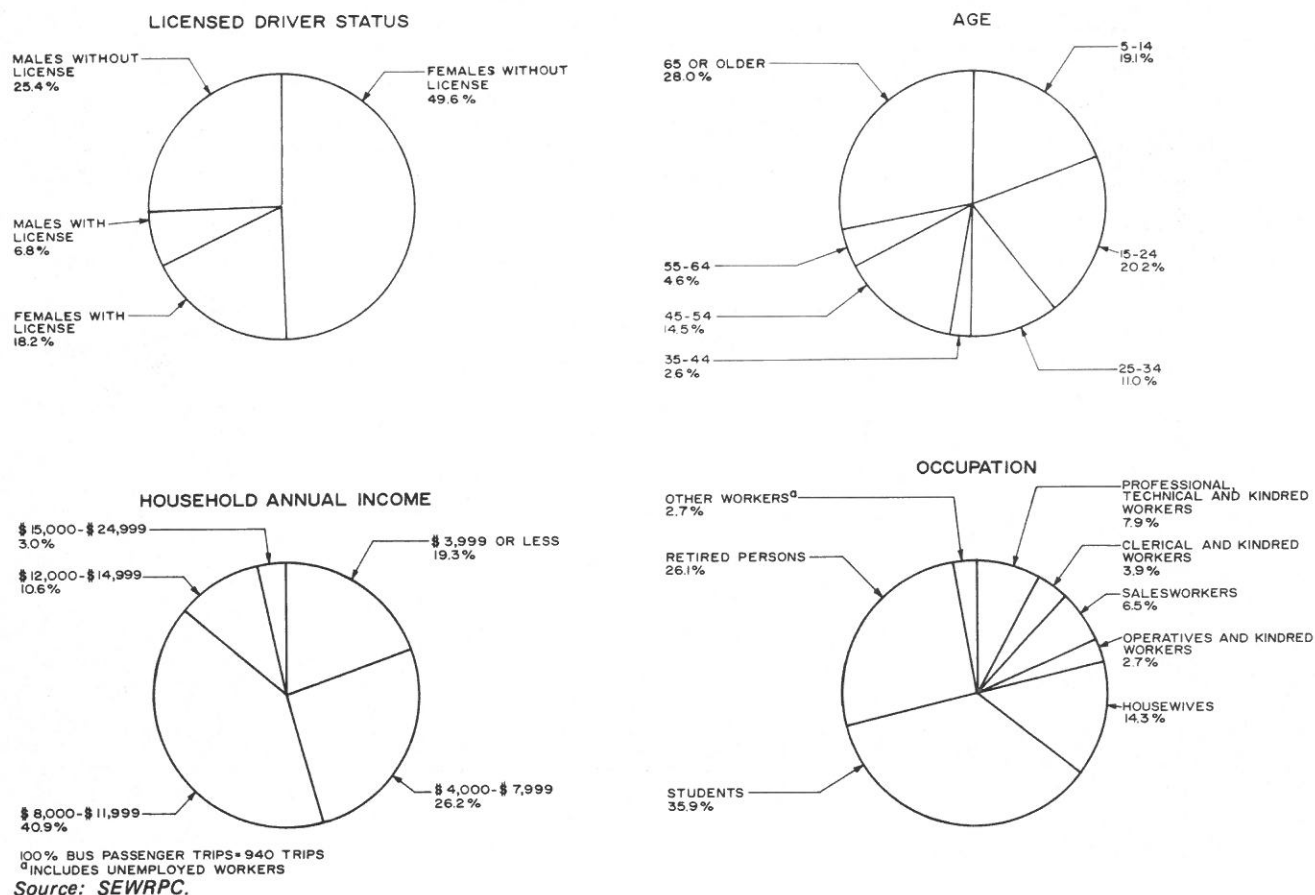
DISTRIBUTION OF BUS PASSENGER TRIPS DESTINED FOR THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE: 1972

Land Use	Bus Passenger Trips	
	Number	Percent
Residential	240	25.5
Commercial	370	39.4
Industrial	--	--
Governmental-Institutional . .	330	35.1
Other	--	--
Total	940	100.0

Source: SEWRPC.

Figure 6

DISTRIBUTION OF BUS PASSENGER TRIPS TO THE RACINE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



cial development along National Avenue. The southern portion of the attractor, in the vicinity of Mitchell Street, consisted of extensive commercial development, including Gimbel's and Sears Roebuck and Company department stores and numerous smaller shops and offices. The principal streets or highways providing access to and within the attractor included IH 94, National Avenue, Mitchell Street, Forest Home Avenue, Lapham Boulevard, Greenfield Avenue, 1st Street, 2nd Street, 5th Street, 6th Street, 11th Street, and 16th Street.

Total Internal Person Trips

As shown in Table 21, about 92,800 total internal person trips entered, exited, and occurred within the Near South Side trip attractor on an average weekday in 1972. Of these person trips, about 41,200 entered and 41,300 exited the trip attractor and about 10,200 were made within the trip attractor. Therefore, 51,400 of these trips had destinations within the trip attractor on an average weekday. About 80 percent of these trips were made by persons entering the trip attractor and about 20 percent were made by persons traveling from place to place within the trip attractor.

Table 21 indicates that the distribution of trips entering, leaving, and made within the trip attractor by mode of travel was similar to that of total trips made to, from, and within the Near South Side trip attractor. About 63 percent of the person trips were made as auto drivers; about 24 percent were made as auto passengers; about 11 percent were made as bus passengers; and about 1 percent were made by other modes of travel. As shown in Table 21, trips made wholly within the attractor accounted for about 60 percent of auto driver travel, a percentage similar to those for auto driver travel entering and leaving the attractor, and for a slightly higher percentage of auto passenger travel, 26 percent, and bus passenger travel, 12 percent. No travel by other modes was recorded for trips made within the attractor.

LOCATION OF THE NEAR SOUTH SIDE TRIP ATTRACTOR



LEGEND

— ATTRACTOR BOUNDARY

Source: SEWRPC.

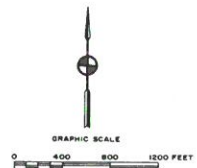


Table 21

DISTRIBUTION OF INTERNAL PERSON TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN THE NEAR SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL: 1972

Direction of Travel	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other ^a			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Entering . .	26,280	63.7	9,670	23.5	4,650	11.3	620	1.5	41,220	100.0
Leaving . . .	26,040	63.0	10,280	24.9	4,400	10.6	620	1.5	41,340	100.0
Within . . .	6,180	60.3	2,690	26.3	1,370	13.4	--	--	10,240	100.0
Total	58,500	63.0	22,640	24.4	10,420	11.2	1,240	1.4	92,800	100.0

^a Includes passenger travel by school bus, taxi, truck, motorcycle, and charter bus.

Source: SEWRPC.

Origins of Internal Person Trips

In 1972, travel to the Near South Side trip attractor largely originated within or in the vicinity of the attractor, particularly to the southwest of the attractor, as shown on Map 7. Of the total person trips destined for the Near South Side trip attractor on an average weekday, about 49,700, or 97 percent, originated within Milwaukee County, and the remaining 1,700, or 3 percent, originated in the other six counties in the Region. As indicated on Map 7, most of the tripmaking to this area from within Milwaukee County originated in the southern three-quarters of the County. Only about 860 trips a day, or about 2 percent of the total trips to the Near South Side trip attractor area on an average weekday, originated in the northern quarter of Milwaukee County. Since tripmaking between two areas is reciprocal, the distributional pattern of trip origins shown on Map 7 also serves as a representation of the distributional pattern of internal person trips leaving the area.

Time Pattern of Travel

Figure 7 shows the hourly flow of total person trips entering and leaving the Near South Side trip attractor on an average weekday by trip purpose and the accumulation of persons within the boundary of the attractor during each hour of the day. The pattern formed by the accumulation of persons in the Near South Side trip attractor was basically the same as that formed by the accumulation of persons in the Kenosha and Racine trip attractors. As indicated in the figure, about 20,300 persons—about 75 percent of the peak accumulation—were reported by the 1972 home interview survey to be area residents¹¹ and in the area at the start of the trip day. The relative inactivity of the early morning hours was followed by a sharp increase at 6:00 a.m. through 8:00 a.m. in persons entering the area, as commuters traveled to work and school. By 10:00 a.m. the peak accumulation of the day, about 27,110 persons, was reached, followed by a very slight decline in the accumulation of persons during the noon hour. The afternoon peak accumulation of 26,690 persons occurred at 1:00 p.m., generally a result of a midday flow into the area of workers, shoppers, and persons involved in personal business or social-recreational activities. Travel for personal business purposes, which had remained moderate throughout the morning and midday periods, showed a notable increase at 3:00 p.m. A significant increase in tripmaking out of the area began at 3:00 p.m. and continued until 6:00 p.m. As illustrated in Figure 7, the primary purpose of trips leaving the Near South Side trip attractor was to return home. During the evening hours, as tripmakers entered the trip attractor for personal business, shopping, and social-recreational purposes, the accumulation of persons increased slightly, with a minor peak of about 22,470 occurring at 7:00 p.m., followed by a general decline in the accumulation into the night.

Mode of Travel by Trip Purpose

Of the 51,460 internal person trips destined for the Near South Side trip attractor on an average weekday, auto driver travel accounted for about 32,460 trips, or 63 percent; auto passenger travel accounted for about 12,350 trips, or about 24 percent; and bus passenger travel accounted for about 6,020 trips, or 12 percent,¹² as shown in Tables 21 and 22. Travel by other modes accounted for about 620 trips, or about 1 percent. Table 22 shows how the characteristics of total person travel in the Near South Side trip attractor compare with those of the other trip attractors in Milwaukee.

As shown in Table 23, auto driver travel to the Near South Side trip attractor consisted primarily of trips to work. There was no outstanding purpose for auto passenger travel in this attractor, with trips to home, shopping trips, trips to attend work, and trips to conduct personal business accounting for a similar number of trips. Bus passenger trips were made primarily to return home, followed in frequency by shopping trips and travel to work. In total, trips to work accounted for most of the travel to this attractor—about 17,130

¹¹ In comparison, the 1970 population of the Near South Side trip attractor was 20,299 persons, according to the U. S. Bureau of the Census.

¹² Although the percentage of total travel by bus passengers is much higher in this trip attractor than in the Racine and Kenosha trip attractors, a notably lower amount of bus passenger travel was destined for this attractor than for the Milwaukee CBD, for which about 29,010 bus passenger trips were destined in 1972—about 22 percent of the total trips to this area.

Map 7

ORIGINS OF INTERNAL PERSON TRIPS TO THE NEAR SOUTH
SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY: 1972

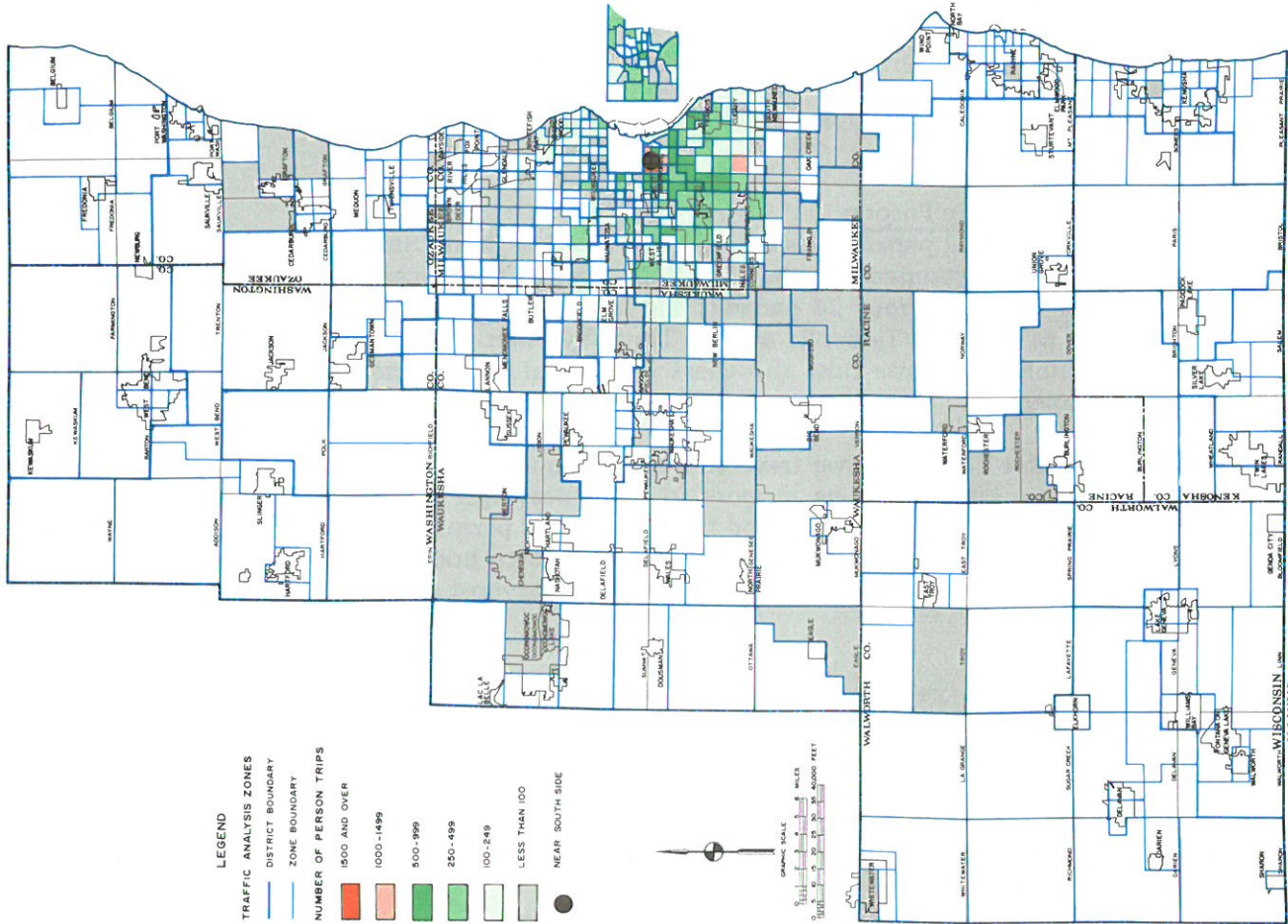


Table 22

**COMPARISON OF SELECTED CHARACTERISTICS OF TOTAL PERSON TRAVEL TO, FROM,
AND WITHIN THE FOUR MILWAUKEE TRIP ATTRACTORS ON AN AVERAGE WEEKDAY: 1972**

Milwaukee Attractor	Bus Passenger Travel as a Percentage of Average Weekday Travel on the Milwaukee Transit System	Percent of Total Person Travel			Average Auto Occupancy of Person Trips
		Bus Passengers	Auto Drivers	Auto Passengers	
Capitol Court	2.5	4.3	63.4	31.4	1.50
Near South Side	5.8	11.2	63.0	24.4	1.39
Marquette-Wisconsin Avenue . .	9.1	15.3	59.8	23.3	1.39
UWM-Lower East Side	7.3	10.7	62.0	26.5	1.43

Source: SEWRPC.

Table 23

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE NEAR SOUTH SIDE TRIP
ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND TRIP PURPOSE: 1972**

Trip Purpose	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home.	5,760	17.7	3,270	26.5	1,860	30.9	330	53.2	11,220	21.8
Work	13,520	41.7	2,390	19.3	1,210	20.1	10	1.6	17,130	33.3
Personal Business . . .	6,380	19.7	2,290	18.5	690	11.5	10	1.6	9,370	18.2
School	40	0.1	480	3.9	710	11.8	240	38.7	1,470	2.8
Social-Recreational . .	1,620	5.0	1,520	12.3	170	2.8	30	4.9	3,340	6.5
Shopping.	5,140	15.8	2,410	19.5	1,380	22.9	--	--	8,930	17.4
Total	32,460	100.0	12,360	100.0	6,020	100.0	620	100.0	51,460	100.0

Source: SEWRPC.

trips, or 33 percent of the total person trips. Next in importance were trips made for the purpose of returning home—11,220 trips, or 22 percent of the total; personal business trips—9,370 trips, or about 18 percent of the total; and shopping trips—8,930 trips, or 17 percent, of the total. Trip purposes that generated less travel included social-recreational trips—about 3,340 trips, or 7 percent; and school-purpose trips—about 1,470 trips, or 3 percent.

Land Use

Of the 51,460 person trips destined for the Near South Side trip attractor on an average weekday, about 21,250 trips, or 41 percent, were made to commercial establishments; about 14,100 trips, or 27 percent, ended at residences; about 10,830 trips, or 21 percent, were made to industrial sites; about 4,830 trips, or 9 percent, were made to governmental-institutional facilities; and about 450, or 1 percent, were made to a variety of other land uses. Trips to commercial land uses were made primarily for the purposes of shopping, attending work, and conducting personal business. Trips to residential land uses were made primarily for the purpose of returning home. Trips to industrial land uses were made primarily for the purpose of attending work. Trips to governmental-institutional land uses covered a wide range of trip purposes, with trips to attend work, to conduct personal business, and to attend school all accounting for similar trip volumes. Within the Near South Side trip attractor about 55 percent of the trips to work were destined for industrial land uses, whereas about 52 percent of the trips to conduct personal business, about 57 percent of the social-recreational trips, and about 99 percent of the shopping trips were destined for commercial land uses (see Table 24).

Time Expended Between Trips

As shown in Table 25, persons traveling to the Near South Side trip attractor for the purpose of attending work or school spent the longest period of time in the area prior to making another trip. Of the trips to this trip attractor for work or school purposes, about 69 percent and 85 percent, respectively, resulted in visits of longer than four hours. The school-purpose visits tended to be of shorter duration than the work visits. About 56 percent of the work-purpose visits lasted eight or more hours; about 69 percent of the school-purpose visits lasted from four hours to eight hours. In contrast, a minimum of 94 percent of the visits made for personal business, social-recreational, and shopping purposes lasted less than four hours, with social-recreational visits lasting the longest: about 63 percent of the social-recreational visits lasted from one to four hours and 30 percent lasted less than one hour. The visits for personal business purposes were briefer, with about 26 percent lasting from one to four hours and about 69 percent lasting less than one hour. As with the Racine and Kenosha attractors, the briefest visits to the Near South Side trip attractor were made by shoppers. About 24 percent of the shoppers made visits of from one to four hours and about 75 percent of the shoppers initiated another trip within less than an hour after reaching their shopping trip destination.

In total, the most frequently occurring visit to the Near South Side trip attractor lasted less than one hour. Such trips represented 41 percent of total person travel to this trip attractor. In total about 64 percent of the trips made to the Near South Side trip attractor resulted in visits of less than four hours and 36 percent in visits of four hours or longer.

Table 24

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE NEAR SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE AND TRIP PURPOSE: 1972

Trip Purpose	Land Use										Total	
	Residential		Commercial		Industrial		Governmental-Institutional		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	11,220	100.0	--	--	--	--	--	--	--	--	11,220	100.0
Work	270	1.6	5,710	33.3	9,390	54.8	1,630	9.5	130	0.8	17,130	100.0
Personal Business . . .	1,400	14.9	4,840	51.7	1,320	14.1	1,560	16.6	250	2.7	9,370	100.0
School	--	--	--	--	--	--	1,470	--	--	--	1,470	100.0
Social-Recreational . .	1,210	36.2	1,890	56.6	120	3.6	50	1.5	70	2.1	3,340	100.0
Shopping	--	--	8,810	98.7	--	--	120	1.3	--	--	8,930	100.0
Total	14,100	27.4	21,250	41.3	10,830	21.0	4,830	9.4	450	0.9	51,460	100.0

Source: SEWRPC.

Table 25

DISTRIBUTION OF TIME EXPENDED FOR EACH TRIP PURPOSE ON AN AVERAGE WEEKDAY IN THE NEAR SOUTH SIDE TRIP ATTRACTOR: 1972

Duration of Visit (hours)	Percent of Time per Trip Purpose ^a					
	Work	Personal Business	School	Social-Recreational	Shopping	Total
Less than 1.0	17.7	68.7	--	30.3	74.6	41.1
1.0 - 1.9	6.7	17.9	2.8	30.8	20.1	13.9
2.0 - 3.9	6.9	8.4	12.4	32.5	4.2	8.9
4.0 - 7.9	12.3	5.0	69.4	5.0	1.1	9.7
8.0 and More	56.4	--	15.4	1.4	--	26.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

^aTrips to home are not included.

Source: SEWRPC.

Socioeconomic Characteristics

The data presented below indicate that the Near South Side trip attractor is visited by persons from a wide variety of socioeconomic backgrounds.

Licensed Driver Status: As shown in Figure 8, about 58 percent of the trips to this attractor were made by males and about 42 percent were made by females. About 75 percent of the total person trips to the area were made by licensed drivers—about 51 percent by males and about 24 percent by females. Although males made most of the trips to the area, females made most of the trips that were made by persons without a driver's license. About 7 percent of the total person trips to the area were made by males who were not licensed to drive, and about 18 percent of the person trips to the area—about 9,400 trips a day—were made by females who were not licensed to drive. Detailed data summaries indicate that on an average day females who do not hold driver's licenses made approximately 3,590 bus passenger trips into the area. Consequently, females without licenses were responsible for about 60 percent of the total bus passenger travel destined for this area on an average weekday.

Age: Figure 8 indicates that about 70 percent of the trips made to the Near South Side trip attractor were made by persons between 25 and 65 years of age. About 21 percent of the trips were made by persons 25 through 34 years of age; about 20 percent were made by persons 45 through 54 years of age; about 17 percent, each, were made by persons 15 through 24 years of age and 35 through 44 years of age; about 12 percent were made by persons 55 through 64 years of age; about 7 percent were made by persons 5 through 14 years of age; and about 6 percent were made by persons 65 years of age or older. Tripmaking by persons less than 5 years of age was not recorded in the 1972 home interview survey.

Income: As shown in Figure 8, in 1972 the greatest proportion of total person trips, about 32 percent, was generated by persons from households earning from \$8,000 through \$11,999 a year. Of the remaining income categories, persons from households with annual incomes of from \$15,000 through \$24,999 and from \$12,000 through \$14,999 made 21 percent and 20 percent of the person trips, respectively. Persons from households earning from \$4,000 through \$7,999 made about 18 percent of the person trips to the attractor. Persons from households in the lowest income category—\$3,999 or less a year—made 6 percent of the trips, while persons in the highest income category—\$25,000 or more a year—made only 3 percent of the trips to the area.

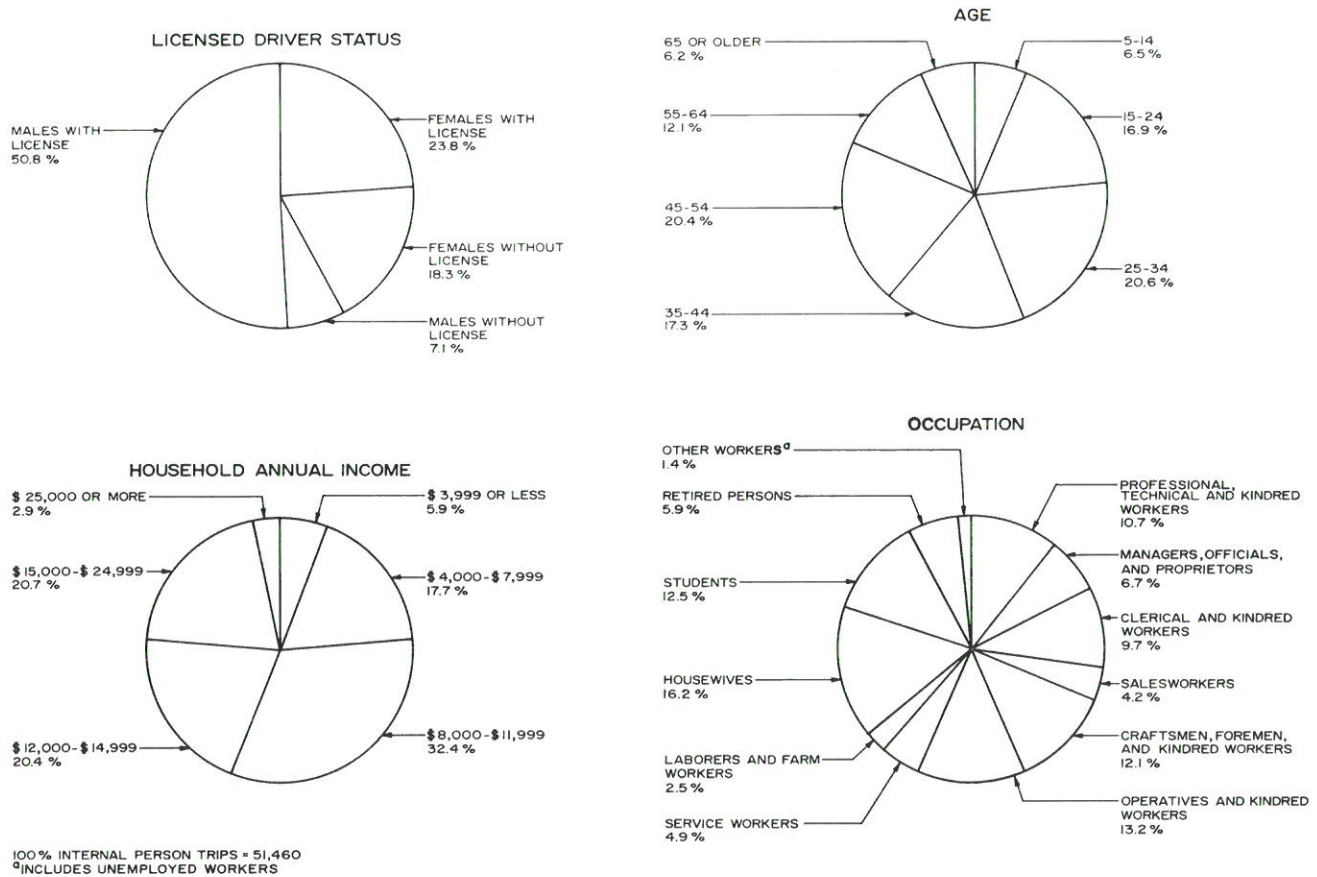
Occupation: Figure 8 illustrates the diversity to be found in the occupations of tripmakers to the Near South Side trip attractor. The most predominant occupational group was housewives, who made 16 percent of the total trips to the area. About 13 percent of the total person trips were made by students and about 6 percent were made by retired persons. In total, then, about 35 percent of the person trips to the attractor were made by persons who were not formally employed. The remaining 65 percent of the trips were made by a variety of workers who were categorized in nine occupational groups, the largest of which consisted of operatives and kindred workers.

Automobile Availability

As shown in Table 26, tripmakers to the Near South Side trip attractor may have had fewer automobiles available for their use than tripmakers to the Racine and Kenosha attractors and, to be discussed in the next section, to the Capitol Court attractor. Not only were a greater proportion of trips made by persons from households with no auto, about 10 percent, but a substantially greater proportion of trips was made by persons from one-auto households and a correspondingly lower proportion was made by persons from two-auto and three-or-more-auto households. As shown in Table 26, about 55 percent of the total trips to the Near South Side trip attractor were made by persons from households with one auto available; 29 percent by persons with two autos available; and 6 percent by persons with three or more autos available. Tripmaking from households with no auto available, representing about 10 percent of the total person travel, accounted for only 1 percent of the auto driver travel to the area, in comparison to about 13 percent of the auto passenger travel and 48 percent of the bus passenger travel. In total, about 90 percent of the auto driver trips and about 84 percent of the auto passenger trips were made by persons from one- and two-auto households, while about 94 percent of the bus passenger trips were made by persons from households with one auto or no autos available.

Figure 8

DISTRIBUTION OF INTERNAL PERSON TRIPS TO THE NEAR SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



Source: SEWRPC.

Table 26

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE NEAR SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD: 1972

Autos Available per Household	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
0	280	0.9	1,560	12.6	2,870	47.7	270	43.6	4,980	9.7
1	18,370	56.6	7,170	58.0	2,800	46.5	180	29.0	28,520	55.4
2	10,980	33.8	3,250	26.3	250	4.1	170	27.4	14,650	28.5
3 or More	2,830	8.7	380	3.1	100	1.7	--	--	3,310	6.4
Total	32,460	100.0	12,360	100.0	6,020	100.0	620	100.0	51,460	100.0

Source: SEWRPC.

Table 27 presents the distribution of person trips destined for the Near South Side trip attractor by the number of automobiles available by trip purpose. Unlike in the Racine and Kenosha trip attractors, there is no observed trend in the Near South Side trip attractor between travel to home and auto availability. Trips to home accounted for about 41 percent of the trips made by persons from households with no autos in this attractor; 25 percent of the trips made by persons from one-auto households; and 11 percent of the trips made by persons from two-auto households. About 11 percent of the trips made by persons from three-or-more-auto households were made for the purpose of returning home. Interestingly there is a strong correlation in the Near South Side trip attractor between the percentage of trips made for work purposes and the number of automobiles available and between the percentage of trips made for shopping purposes and the number of automobiles available.

The largest volumes of person trips to the trip attractor were made by persons from one-auto households for the purposes of attending work, about 8,020 trips, and returning home, about 7,240 trips. Next in frequency were trips to work by persons from two-auto households, about 6,650 trips; personal business trips by persons from one-auto households, about 5,700 trips; and shopping trips by persons from one-auto households, about 5,090 trips. No more than 2,770 trips were recorded in any other category of trip purpose by automobile availability.

Bus Passenger Profile

In 1972 the Near South Side trip attractor was served by the Milwaukee and Suburban Transport Corporation.¹³ The home interview survey reported about 179,100 bus passenger trips per average weekday within the service area of this system.¹⁴ The home interview survey recorded about 4,650 bus passenger trips entering the trip attractor, about 4,400 bus passenger trips leaving the attractor, and about 1,370 bus passenger trips originating within and destined for the trip attractor. In total, therefore, about 10,420 bus passenger trips with at least one trip end within the attractor were made on an average weekday in 1972. These 10,420 bus passenger trips represent about 6 percent of the total 179,100 bus passenger trips reported in the home interview survey to be made daily within the service area of the Milwaukee system and about 11 percent of the total 92,800 person trips made to, from, and within the Near South Side trip attractor.

Of the bus passenger trips with destinations in the Near South Side trip attractor, about 77 percent were trips entering the attractor and about 23 percent were trips made entirely within the trip attractor. This distribution is notable for two reasons. First, as shown in Table 2, of all the trip attractors, the Near South Side trip attractor had the highest percentage of bus passenger trips made wholly within the attractor. Secondly, the Near South Side trip attractor is the only attractor in which there was a higher percentage of bus passenger trips made within the attractor than total person trips, most likely reflecting the impact of tripmaking by area residents.

Time Pattern of Travel: As shown in Table 28, the time pattern of bus passenger travel entering and leaving the Near South Side trip attractor reflects the time pattern of total person travel in this attractor. The greatest volumes of bus passenger trips entering and leaving the area occurred simultaneously from 3:00 p.m. through 5:59 p.m. During this time period, about 1,920 bus passenger trips, or 41 percent, entered the area and about 1,650 bus passenger trips, or 38 percent, exited the area. Of the remaining trips entering the area, about 1,230, or 27 percent, were made from 6:00 a.m. through 9:59 a.m.; about 950, or 20 percent, were made from 10:00 a.m. through 2:59 p.m.; and about 550, or 12 percent, were made

¹³ On July 1, 1975, Milwaukee County purchased the Milwaukee and Suburban Transport Corporation. This corporation has since been renamed the Milwaukee County Transit System.

¹⁴ In 1972 the SEWRPC also conducted special one-day surveys of mass transit passengers. The survey findings indicated that on the day of the Milwaukee area survey, approximately 198,900 passengers were carried on the Milwaukee system. The transport corporation reported an average of 181,650 revenue passengers per weekday in 1972.

Table 27

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE NEAR
SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE NUMBER
OF AUTOMOBILES AVAILABLE PER HOUSEHOLD AND TRIP PURPOSE: 1972**

Trip Purpose	Autos Available per Household								Total	
	0		1		2		3 or More			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	2,040	41.0	7,240	25.4	1,570	10.7	370	11.2	11,220	21.8
Work	720	14.5	8,020	28.1	6,650	45.4	1,740	52.6	17,130	33.3
Personal Business . . .	390	7.8	5,700	20.0	2,770	18.9	510	15.4	9,370	18.2
School	330	6.6	640	2.2	380	2.6	120	3.6	1,470	2.8
Social-Recreational . .	350	7.0	1,830	6.4	970	6.6	190	5.7	3,340	6.5
Shopping	1,150	23.1	5,090	17.9	2,310	15.8	380	11.5	8,930	17.4
Total	4,980	100.0	28,520	100.0	14,650	100.0	3,310	100.0	51,460	100.0

Source: SEWRPC.

Table 28

**DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING AND LEAVING THE NEAR
SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY: 1972**

Time of Day	Bus Passenger Trips			
	Entering		Leaving	
	Number	Percent	Number	Percent
6:00 a.m. through 9:59 a.m.	1,230	26.5	770	17.5
10:00 a.m. through 2:59 p.m.	950	20.4	1,010	22.9
3:00 p.m. through 5:59 p.m.	1,920	41.3	1,650	37.5
6:00 p.m. through 5:59 a.m.	550	11.8	970	22.1
Total	4,650	100.0	4,400	100.0

Source: SEWRPC.

from 6:00 p.m. through 5:59 a.m. Of the remaining trips leaving the area, about 770, or 18 percent, were made from 6:00 a.m. through 9:59 a.m.; about 1,010, or 23 percent, were made from 10:00 a.m. through 2:59 p.m.; and about 970, or 22 percent, were made from 6:00 p.m. through 5:59 a.m.

Trip Purpose: Of the total bus passenger trips entering and occurring within the Near South Side trip attractor, i.e., those trips destined for the attractor, about 1,860, or 31 percent, were made for the purpose of returning home—a slightly higher percentage than the 22 percent of total person travel found to be destined for home within the trip attractor. Shopping trips accounted for about 1,380 trips, or 23 percent of the total bus passenger trips destined for the attractor, and trips to work accounted for about 1,210 trips, or 20 percent. Bus passenger trips out of the attractor were made primarily to return home—about 2,410 trips, or 55 percent. Trips to attend work accounted for about 840 trips, or 19 percent of the bus passenger trips out of the attractor, and shopping trips accounted for about 560 trips, or 13 percent. In comparison to total person trips destined for the attractor, proportionately more bus passenger trips were made to the attractor to return home and for school and shopping purposes and proportionately fewer were made for work, personal business, and social-recreational purposes (see Table 29).

Land Use: As shown in Table 30, of the 6,020 bus passenger trips with destinations in the Near South Side trip attractor, about 2,390, or 40 percent, were made to commercial establishments; about 1,930, or 32 percent, were made to residential locations; about 870, or 15 percent, were made to governmental-

Table 29

**DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN
THE NEAR SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TRIP PURPOSE: 1972**

Trip Purpose	Bus Passenger Trips							
	Entering		Within		Total Trips Destined for Trip Attractor		Leaving	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Home	1,280	27.6	580	42.3	1,860	30.9	2,410	54.8
Work	1,010	21.7	200	14.6	1,210	20.1	840	19.1
Personal Business	480	10.3	210	15.3	690	11.5	260	5.9
School	550	11.8	160	11.7	710	11.8	280	6.4
Social-Recreational . . .	140	3.0	30	2.2	170	2.8	50	1.1
Shopping	1,190	25.6	190	13.9	1,380	22.9	560	12.7
Total	4,650	100.0	1,370	100.0	6,020	100.0	4,400	100.0

Source: SEWRPC.

institutional facilities; about 660, or 11 percent, were made to industrial sites; and about 170, or 3 percent, were made to other land uses. It was found through detailed data summaries that bus passenger trips to commercial land uses were made predominately for shopping purposes and, to a lesser extent, for work and personal business purposes. Trips to residential locations were made to return home. And finally, trips to governmental-institutional facilities were made primarily to attend school or to conduct personal business. All bus passenger trips to industrial sites were made for work purposes and trips to other land uses were made primarily for social-recreational or personal business purposes.

Socioeconomic Characteristics: As indicated in the data presented below, the distribution of bus passenger travel by socioeconomic characteristics of the tripmakers differs widely from the socioeconomic distribution of total person travel to the Near South Side trip attractor.

Licensed Driver Status: As shown in Figure 9, about 70 percent of the bus passenger trips to the Near South Side attractor were made by females and about 30 percent were made by males. Of the bus passenger trips destined for the area, about 81 percent were made by persons who did not hold a driver's license. About 60 percent of the trips were made by unlicensed females and about 21 percent were made by unlicensed males. Of the 19 percent of the bus passenger trips that were made by licensed drivers, about 10 percent were made by males and females, each. The above distributions differ substantially from the distributions of total tripmaking to the area by licensed driver status. There were substantially greater proportions of persons without driver's licenses among the bus passengers than among the total tripmakers to the area on an average weekday.

Age: As shown in Figure 9, tripmaking by bus to the Near South Side trip attractor was almost evenly divided among all age groups. Persons 15 through 24 years of age, 65 years of age or older, and 55 through 64 years of age each made about 17 percent of the bus passenger trips to the attractor, or 51 percent of the

Table 30

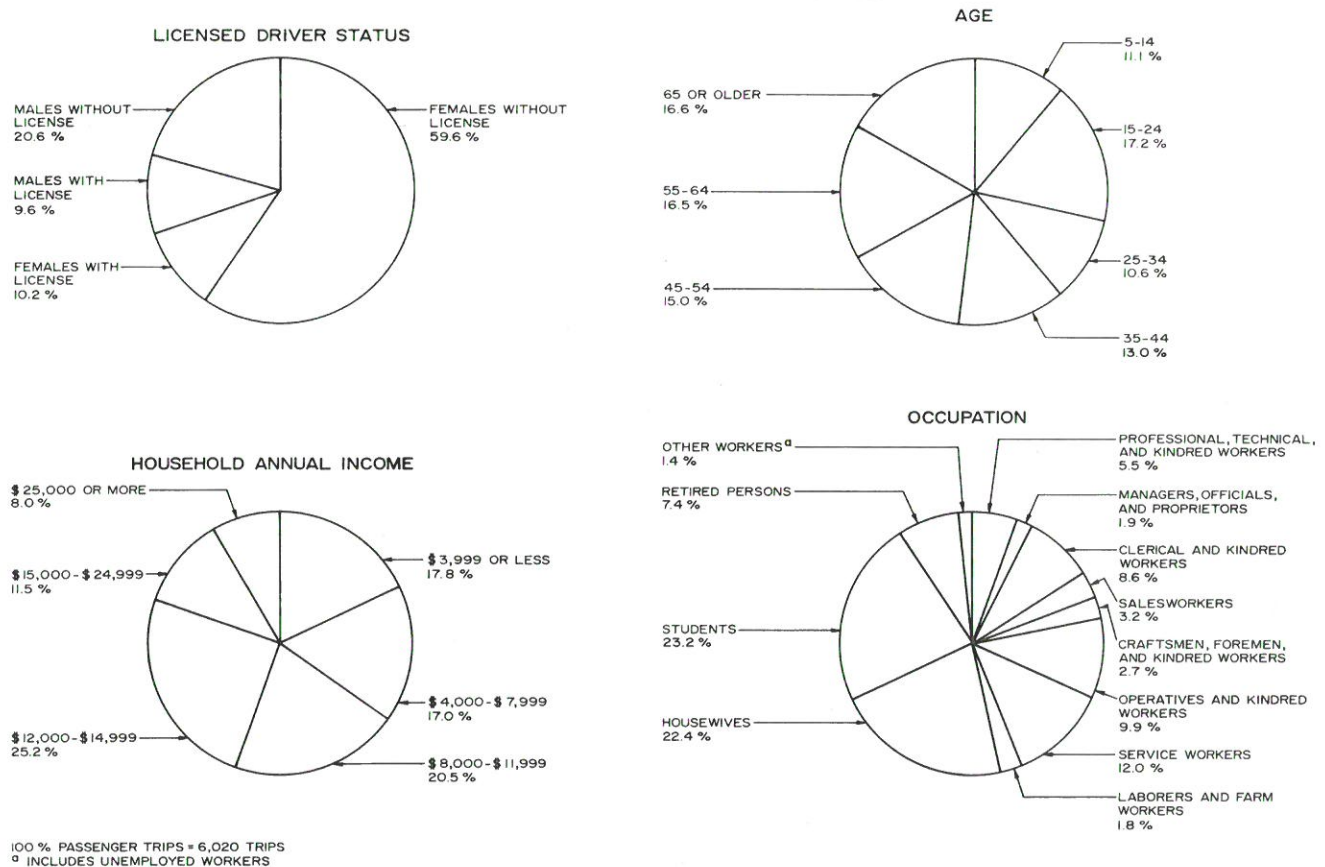
**DISTRIBUTION OF BUS PASSENGER TRIPS
DESTINED FOR THE NEAR SOUTH SIDE
TRIP ATTRACTOR ON AN AVERAGE
WEEKDAY BY LAND USE: 1972**

Land Use	Bus Passenger Trips	
	Number	Percent
Residential	1,930	32.0
Commercial	2,390	39.7
Industrial	660	11.0
Governmental-Institutional . .	870	14.5
Other	170	2.8
Total	6,020	100.0

Source: SEWRPC.

Figure 9

DISTRIBUTION OF BUS PASSENGER TRIPS TO THE NEAR SOUTH SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



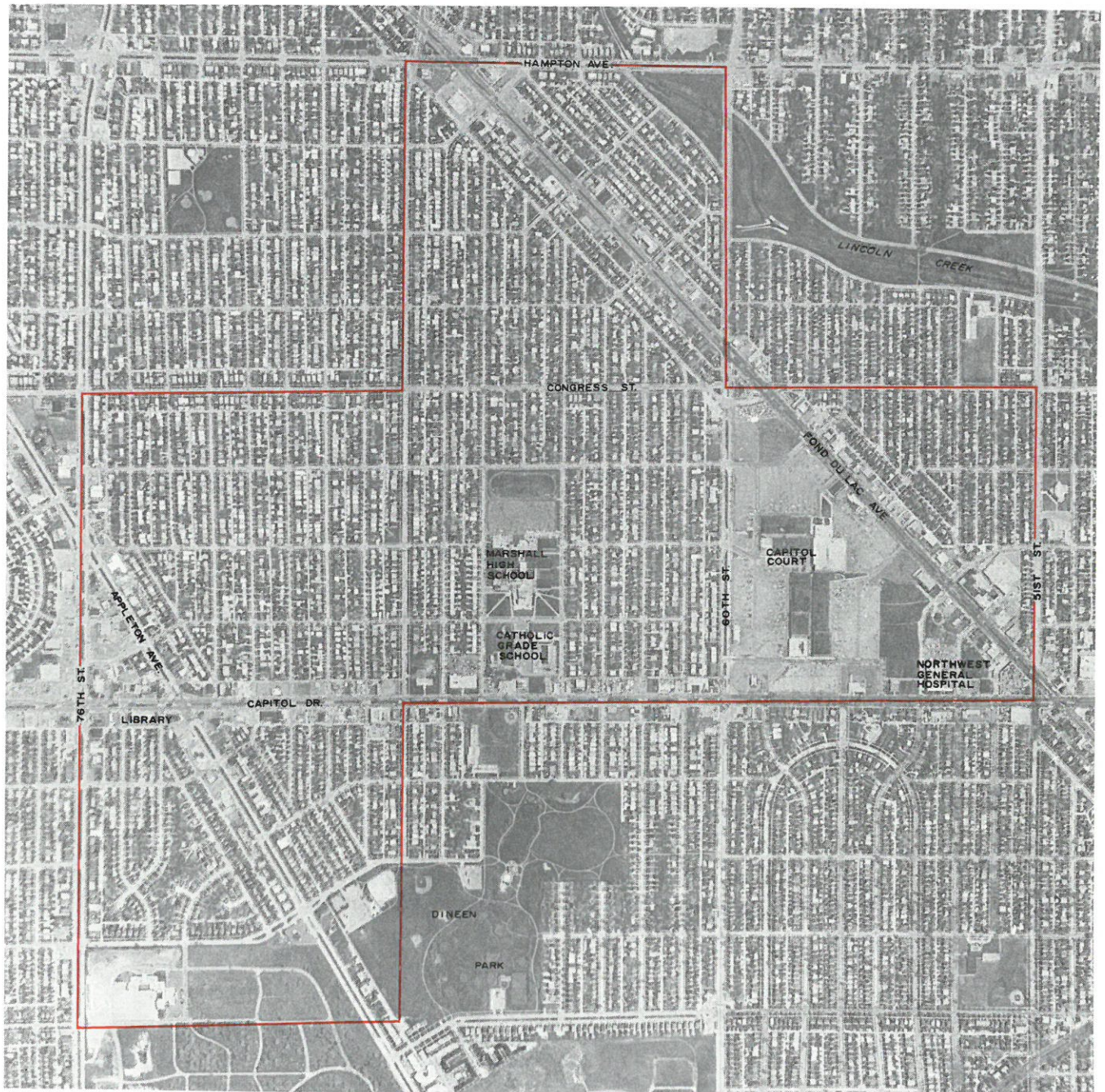
Source: SEWRPC.

bus passenger travel. The remaining four age categories accounted for from 11 to 15 percent of the bus passenger trips. In comparison to total person travel, more bus passenger trips were made by persons 5 through 14 years of age and 55 years of age or older and fewer bus passenger trips were made by persons from 25 through 54 years of age.

Income: Bus passenger trips to the Near South Side trip attractor in 1972 were more evenly distributed among the six income categories than were total person trips to the trip attractor. The largest percentage of bus passenger trips, 25 percent, was made by persons from households earning between \$12,000 and \$14,999 a year. Persons from households earning from \$8,000 through \$11,999 a year, who made 32 percent of the total person trips to the attractor, accounted for only 21 percent of the bus passenger trips. Of the remaining income categories, about 18 percent of the bus passenger trips were made by persons from households earning \$3,999 or less a year; 17 percent, by persons from households earning from \$4,000 through \$7,999 a year; 12 percent, by persons from households earning from \$15,000 through \$24,999 a year; and 8 percent, by persons from households earning \$25,000 or more a year (see Figure 9).

Occupation: More than half of the bus passenger trips to the Near South Side trip attractor were made by persons who were not formally employed. In comparison, 35 percent of the total tripmakers to this attractor were not formally employed. About 23 percent of the bus passenger trips were made by students; about 22 percent, by housewives; and about 7 percent, by retired persons. The largest proportions of bus passenger trips by employed persons were made by service workers, who accounted for 12 percent of the trips; operatives and kindred workers, who accounted for 10 percent of the trips; and clerical and kindred workers, who accounted for 9 percent of the trips. The remaining 17 percent of the trips were made by persons employed in a variety of other occupations (see Figure 9).

LOCATION OF THE CAPITOL COURT TRIP ATTRACTOR



LEGEND

— ATTRACTOR BOUNDARY

Source: SEWRPC.



THE CAPITOL COURT TRIP ATTRACTOR

The area identified as the Capitol Court attractor includes the Capitol Court Shopping Center, other commercial development, and residential areas. As shown on Map 8, in 1972 the eastern portion of the attractor was occupied by a few residences, Northwest General Hospital, the Capitol Court Shopping Center, and

other commercial development predominantly along Fond du Lac Avenue. The land to the west of the shopping center was occupied by residences, Marshall Junior and Senior High Schools, the Capitol Library, and commercial development along both Capitol Drive and Appleton Avenue. The principal streets providing access to and within the attractor included Fond du Lac Avenue, Appleton Avenue, Capitol Drive, 76th Street, 60th Street, 51st Street, and Hampton Avenue.

Total Internal Person Trips

As shown in Table 31, about 102,140 total internal person trips entered, exited, and occurred within the Capitol Court trip attractor on an average weekday in 1972. Of these person trips, about 46,900 entered and 46,600 exited the trip attractor, and almost 8,700 were made within the trip attractor. Therefore, 55,600 of these trips had destinations within the trip attractor on an average weekday. About 84 percent were made by persons entering the trip attractor, and about 16 percent were made by persons traveling from place to place within the trip attractor.

Table 31 also indicates that the distribution of trips entering and leaving the trip attractor by mode of travel was similar to that of total trips made to, from, and within the Capitol Court trip attractor. Almost 64 percent of the person trips were made as auto drivers; about 31 percent were made as auto passengers; about 4 percent were made as bus passengers; and about 1 percent were made by other modes of travel. In comparison, trips made wholly within the trip attractor exhibited higher percentages of auto driver and auto passenger travel, 66 percent and 33 percent, respectively, and a smaller percentage of bus passenger travel, only 1 percent.

Origins of Internal Person Trips

In 1972, travel to the Capitol Court trip attractor largely originated in the vicinity of the attractor, with substantial numbers of trips originating in parts of Milwaukee County, including the central business district (CBD), as well as in the eastern portion of Waukesha County, as shown on Map 9. About 52,100 trips, almost 94 percent of the trips to this trip attractor, originated within Milwaukee County. Of the remaining 6 percent, slightly more than 4 percent, or about 2,400 trips, originated within Waukesha County. As indicated on Map 9, most of the tripmaking from Waukesha County originated in the eastern half of the County, which contributed about 2,200 trips on an average weekday. Since tripmaking between areas is reciprocal, the distributional pattern of trip origins shown on Map 9 also serves as a representation of the distributional pattern of internal person trips leaving the area.

Time Pattern of Travel

Figure 10 shows the hourly flow of total person trips entering and leaving the Capitol Court trip attractor on an average weekday by trip purpose and the accumulation of persons within the boundary of the

Table 31

DISTRIBUTION OF INTERNAL PERSON TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN THE CAPITOL COURT TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL: 1972

Direction of Travel	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other ^a			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Entering . .	29,510	62.9	14,610	31.1	2,340	5.0	450	1.0	46,910	100.0
Leaving . . .	29,550	63.5	14,580	31.3	1,980	4.2	450	1.0	46,560	100.0
Within . . .	5,690	65.6	2,870	33.1	110	1.3	--	--	8,670	100.0
Total	64,750	63.4	32,060	31.4	4,430	4.3	900	0.9	102,140	100.0

^a Includes passenger travel by school bus, taxi, truck, motorcycle, and charter bus.

Source: SEWRPC.

Map 9

ORIGINS OF INTERNAL PERSON TRIPS TO THE CAPITOL COURT
TRIP ATTRACTOR ON AN AVERAGE WEEKDAY: 1972

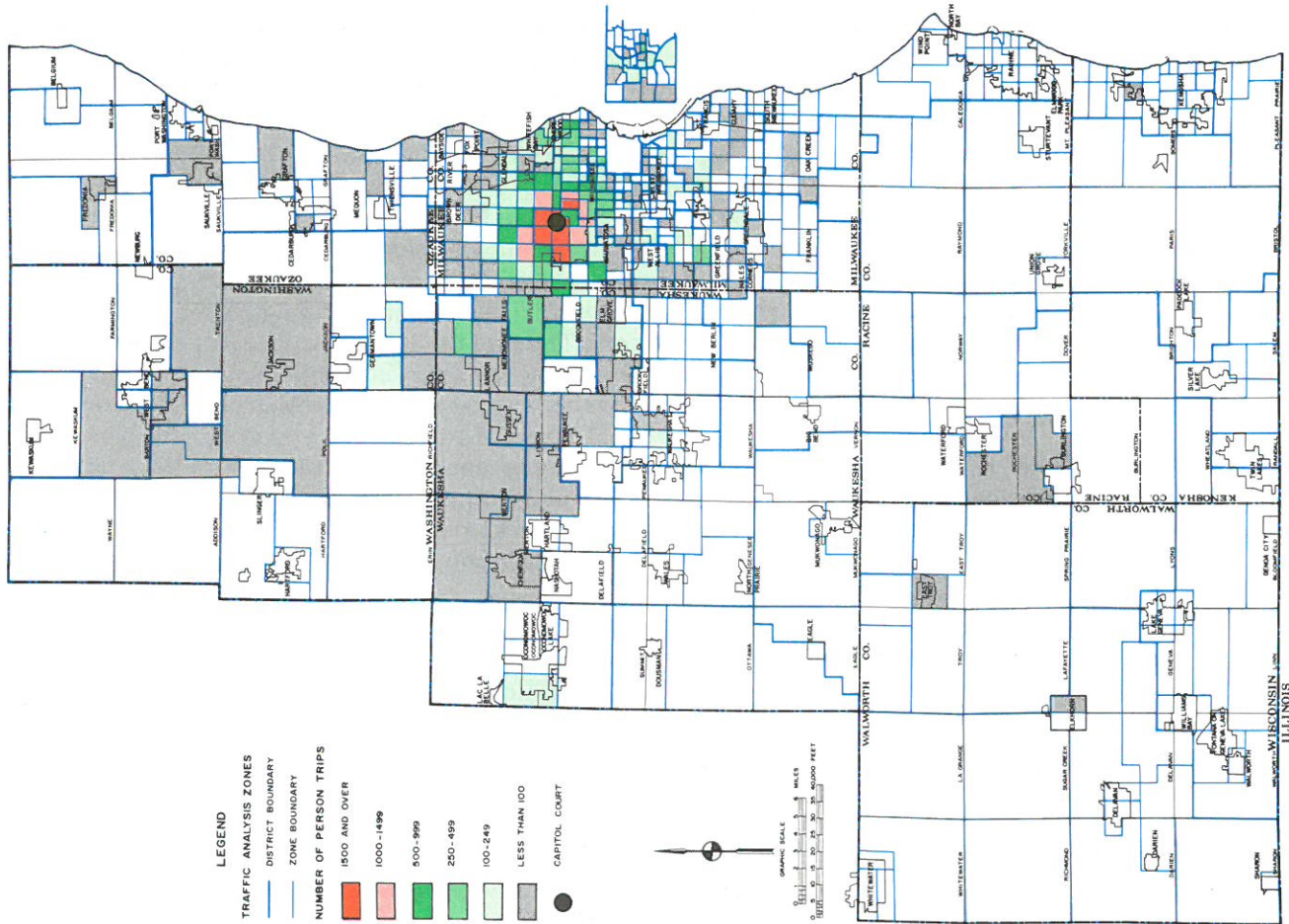
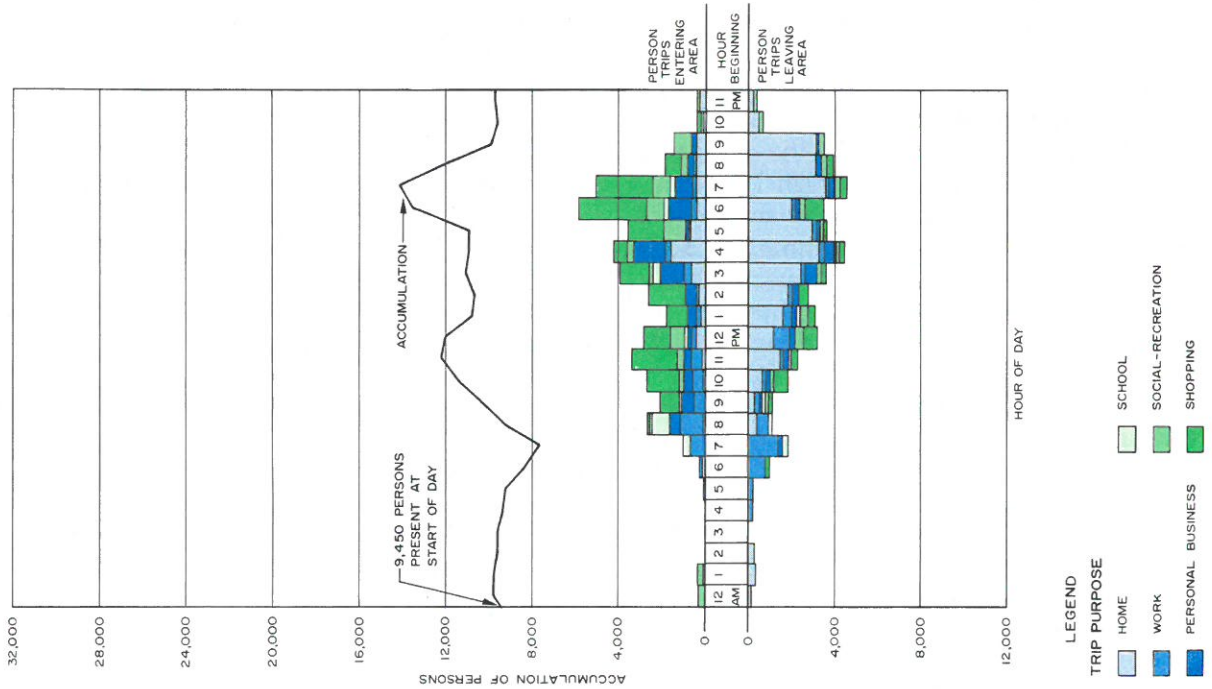


Figure 10

ACCUMULATION OF PERSONS AND
NUMBER OF PERSON TRIPS ENTERING
AND LEAVING THE CAPITOL COURT TRIP
ATTRACTOR ON AN AVERAGE WEEKDAY
BY TIME OF DAY AND TRIP PURPOSE: 1972



attractor during each hour of the day. Shopping trips greatly influenced the general pattern formed by the accumulation of persons in the Capitol Court trip attractor, a pattern that is significantly different from the typical central business district arrays found in the Racine, Kenosha, and Near South Side trip attractors.

As indicated in the figure, about 9,450 persons—approximately 67 percent of the peak accumulation—were reported by the 1972 home interview survey to be area residents¹⁵ and in the area at the start of the trip day. The relative inactivity of the early morning hours was followed by an increase in activity beginning at 6:00 a.m. and continuing through 7:00 a.m. as residents left the area to journey to work. Consequently, the accumulation of persons in the area reached the lowest point of the day at 7:00 a.m. This decline was reversed during the hour beginning at 8:00 a.m. by an increase in travel into the area predominantly for work, school, and personal business purposes. During the hour beginning at 9:00 a.m., significant numbers of trips entered the area for shopping purposes, with greater numbers entering for shopping purposes in each subsequent hour of the morning. The peak morning accumulation of about 12,390 persons in the area was reached at 11:00 a.m., followed by a slight decline in the accumulation during noontime and at 1:00 p.m. Following this decline, a balance between persons entering and leaving the area was sustained through 5:00 p.m. As illustrated in Figure 10, the primary purpose of trips leaving the Capitol Court trip attractor was to return home. During the hour beginning at 6:00 p.m. and continuing through 7:00 p.m., there was a significant increase in tripmaking for shopping purposes in addition to travel into the area for social-recreational and personal business purposes. Thus, the peak accumulation of the day occurred during the hour beginning at 7:00 p.m., with about 14,100 persons found to be in the area. Following this peak, there was a rapid decline in the accumulation as the commercial enterprises closed for the evening and customers returned home.

Mode of Travel by Trip Purpose

Of the 55,600 internal person trips destined for the Capitol Court trip attractor on an average weekday, auto driver travel accounted for about 35,200 trips, or 63 percent; auto passenger travel accounted for about 17,480 trips, or 31 percent; bus passenger travel accounted for about 2,450 trips, or almost 5 percent; and travel by other modes accounted for about 450 trips, or 1 percent. Although adequate transit service¹⁶ was provided to and from this trip attractor, significantly fewer bus passenger trips, both as a percent of transit system travel and as a percent of total person travel to the area, were made to this attractor than were made to the other three Milwaukee area trip attractors. As shown in Table 22, the percentage of total travel made to, from, and within the Capitol Court trip attractor by automobile drivers was similar to that found for the other three Milwaukee area trip attractors. However, substantial differences were found among the Milwaukee area attractors in the percentages of auto passenger and bus passenger trips. Of total trips made to, from, and within the Capitol Court trip attractor, about 31 percent were made as auto passengers. In contrast, auto passenger travel accounted for approximately one-quarter of the total travel affecting the other three Milwaukee area trip attractors. The average auto occupancy of total trips to, from, and within the Capitol Court trip attractor was 1.50 persons per auto, in comparison with 1.39 persons per auto for automobile trips to both the Near South Side trip attractor and the Marquette-Wisconsin Avenue trip attractor, and 1.43 persons per auto for the UWM-Lower East Side trip attractor. Bus passenger travel to the Capitol Court trip attractor accounted for only 4 percent of total travel to, from, and within the attractor. In comparison, bus passenger travel to, from, and within the Near South Side trip attractor and the UWM-Lower East Side trip attractor accounted for about 11 percent of total travel, while bus passenger travel to the Marquette-Wisconsin Avenue trip attractor accounted for about 15 percent of total travel.

As shown in Table 32, auto driver, auto passenger, and bus passenger travel to the Capitol Court trip attractor consisted primarily of shopping trips. Shopping trips to this trip attractor accounted for about 22,530 trips, or 40 percent of the total person trip destinations. Next in frequency were personal business

¹⁵ In comparison, the 1970 population of the Capitol Court trip attractor was 10,010 persons, according to the U. S. Bureau of the Census.

¹⁶ The Capitol Court attractor is served by Route 23—Fond du Lac Avenue, with 10-minute daytime headways and 14-minute nighttime headways, and by Route 62—Capitol Drive and Route 60—North 60th Street, both with 15- to 20-minute day and nighttime headways.

Table 32

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE CAPITOL COURT TRIP
ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND TRIP PURPOSE: 1972**

Trip Purpose	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	6,560	18.6	2,040	11.7	490	20.0	60	13.3	9,150	16.5
Work	4,190	11.9	710	4.0	310	12.6	70	15.6	5,280	9.5
Personal Business . . .	6,200	17.6	2,790	16.0	190	7.8	--	0.0	9,180	16.5
School	300	0.9	980	5.6	240	9.8	280	62.2	1,800	3.2
Social-Recreational . .	3,960	11.3	3,550	20.3	90	3.7	40	8.9	7,640	13.8
Shopping	13,990	39.7	7,410	42.4	1,130	46.1	--	--	22,530	40.5
Total	35,200	100.0	17,480	100.0	2,450	100.0	450	100.0	55,580	100.0

Source: SEWRPC.

trips, which accounted for about 9,180 trips, or 17 percent of the total, and trips to return home, which accounted for about 9,150 trips, or 17 percent of the total. Trip purposes which generated less travel included travel to social-recreational activities, which accounted for about 7,640 trips, or 14 percent; travel to work, which accounted for about 5,280 trips, or 10 percent; and travel to school, which accounted for about 1,800 trips or 3 percent.

Land Use

Of the 55,600 total person trips destined for the Capitol Court trip attractor on an average weekday, about 39,240 trips, or 71 percent, were made to commercial establishments; about 11,270 trips, or 20 percent, ended at residences; about 4,630, trips, or 8 percent, were made to governmental or institutional facilities; and only 440, or almost 1 percent, were made to other land uses, including industrial sites. Trips to commercial land uses for shopping purposes accounted for 40 percent of the total person travel to this trip attractor. The remaining trips to commercial land uses were made primarily to engage in social-recreational activities, conduct personal business, and attend work. Trips to residential land uses were made primarily for the purpose of returning home. Trips to governmental-institutional land uses were made principally for the purposes of conducting personal business and attending school. Within the Capitol Court trip attractor, about 87 percent of the trips to attend work, about 67 percent of the trips to conduct personal business, about 80 percent of the social-recreational trips, and about 99 percent of the shopping purpose trips were destined for commercial establishments (see Table 33).

Time Expended Between Trips

As shown in Table 34, persons traveling to the Capitol Court trip attractor for the purpose of attending school spent the longest period of time in the area prior to making another trip. Of trips to this trip attractor for school or work purposes, about 70 percent and 53 percent, respectively, resulted in visits of longer than four hours. Generally, work visits are expected to be of the longer duration. However, the Capitol Court trip attractor was found to receive a substantial number of trips for work-connected business. About 1,790 trips, or 34 percent of the total work trips to this trip attractor, were made to conduct work-connected business. Such trips tend to be briefer than trips made to an individual's primary place of work. About 36 percent of the total work visits lasted eight hours or longer; about 17 percent lasted from four to eight hours; about 27 percent lasted from one to four hours; and about 20 percent lasted less than one hour. In comparison, about 10 percent of the school-purpose visits lasted eight or more hours; about 60 percent lasted from four to eight hours; and about 30 percent lasted from one to four hours.

In contrast to the long school and work visits, a minimum of 92 percent of the visits made for personal business, social-recreational, or shopping purposes lasted less than four hours, with shopping visits lasting the longest: about 44 percent of the shopping visits lasting from one to four hours, and 55 percent lasted

Table 33

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE CAPITOL COURT TRIP
ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE AND TRIP PURPOSE: 1972**

Trip Purpose	Land Use										Total	
	Residential		Commercial		Industrial		Governmental-Institutional		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	9,150	100.0	--	--	--	--	--	--	--	--	9,150	100.0
Work	350	6.6	4,600	87.1	60	1.2	270	5.1	--	--	5,280	100.0
Personal Business . . .	480	5.2	6,110	66.6	150	1.6	2,440	26.6	--	--	9,180	100.0
School	--	--	--	--	--	--	1,800	100.0	--	--	1,800	100.0
Social-Recreational . .	1,290	16.9	6,130	80.2	--	--	80	1.1	140	1.8	7,640	100.0
Shopping	--	--	22,400	99.4	--	--	40	0.2	90	0.4	22,530	100.0
Total	11,270	20.3	39,240	70.6	210	0.4	4,630	8.3	230	0.4	55,580	100.0

Source: SEWRPC.

Table 34

**DISTRIBUTION OF TIME EXPENDED FOR EACH TRIP PURPOSE ON AN
AVERAGE WEEKDAY IN THE CAPITOL COURT TRIP ATTRACTOR: 1972**

Duration of Visit (hours)	Percent of Time per Trip Purpose ^a					
	Work	Personal Business	School	Social-Recreational	Shopping	Total
Less than 1.0	20.0	67.9	--	59.4	54.6	51.9
1.0 - 1.9	12.2	24.4	1.1	23.2	31.7	25.7
2.0 - 3.9	15.0	7.1	28.6	10.1	12.5	12.0
4.0 - 7.9	17.3	0.6	60.4	7.3	1.2	5.9
8.0 and More	35.5	--	9.9	--	--	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

^a Trips to home are not included.

Source: SEWRPC.

less than one hour. It is notable that the shopping visits to the Capitol Court trip attractor are much longer than are the shopping visits to any of the other attractors discussed in this article. Visits for social-recreational purposes to the Capitol Court trip attractor tended to be shorter in duration than the shopping visits. About 33 percent of the social-recreational visits lasted from one to four hours and 59 percent lasted less than one hour. The briefest visits to the Capitol Court trip attractor were made by persons conducting personal business, with about 31 percent of these visits lasting from one to four hours and 68 percent lasting less than one hour. Of all the trip purposes combined, the most frequently occurring visit to the Capitol Court trip attractor lasted less than one hour. Such trips represented 52 percent of total person travel to this trip attractor. In total, about 90 percent of the trips made to the Capitol Court trip attractor resulted in visits of less than four hours and 10 percent in visits of four hours or longer.

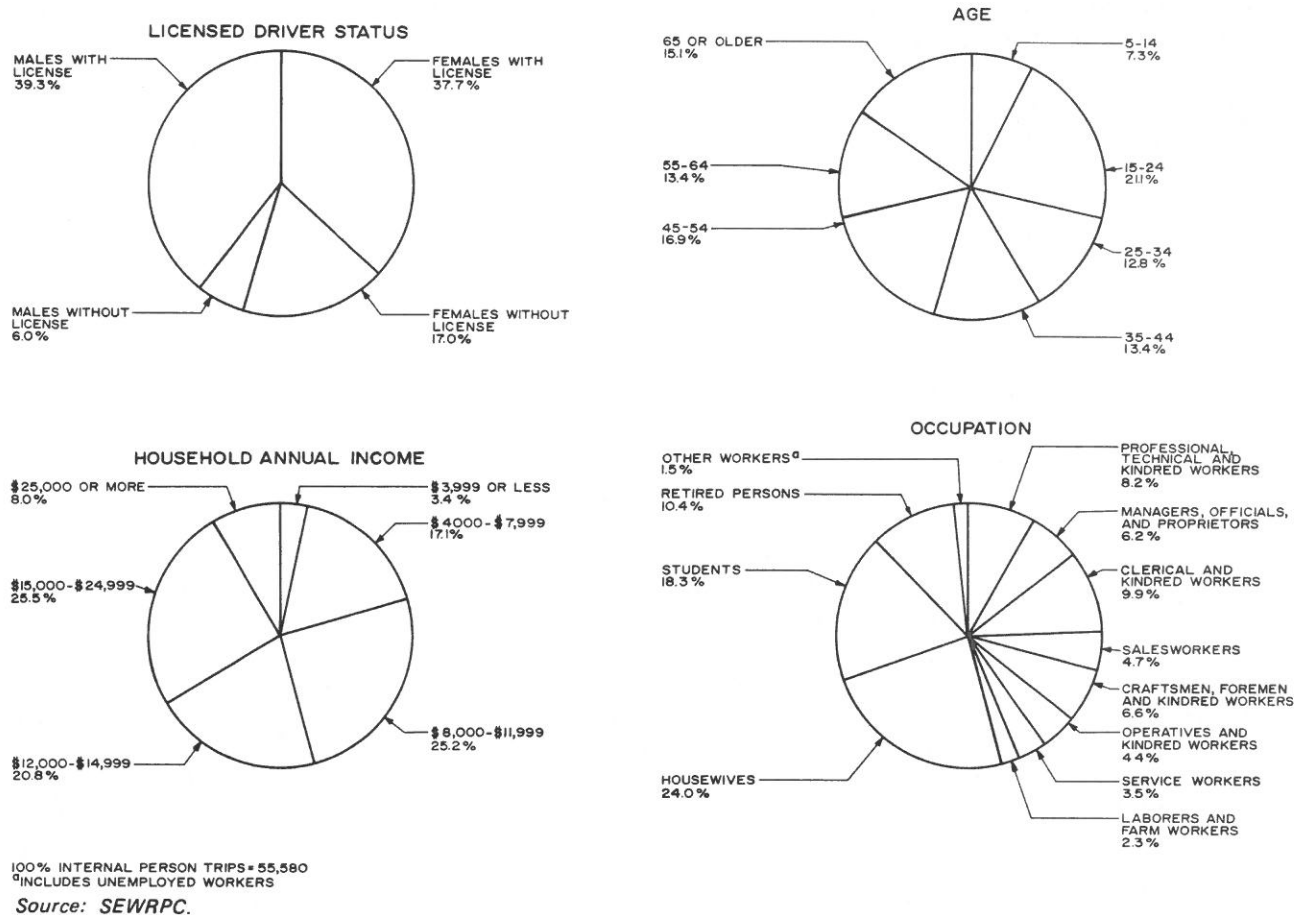
Socioeconomic Characteristics

The data presented below provide an indication of some of the unique attributes of travel to a trip attractor area containing a major shopping center such as Capitol Court.

Licensed Driver Status: As shown in Figure 11, about 45 percent of the trips to this attractor were made by males and about 55 percent were made by females. Although females made most of the trips to the area, slightly more of the trips made by licensed drivers were made by males. About 77 percent of the total trips to the area were made by licensed drivers: about 39 percent were made by males and almost 38 percent were made by females. About 6 percent of the total trips to the area were made by males who are not

Figure 11

DISTRIBUTION OF INTERNAL PERSON TRIPS TO THE CAPITOL COURT TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



licensed to drive, and about 17 percent of the total trips—about 9,400 trips a day—were made by females who do not have a driver's license. Females made approximately 2,050 bus passenger trips to the attractor each weekday—84 percent of the total. Of these trips, females who do not hold driver's licenses accounted for about 1,600 bus passenger trips a day, or 66 percent of the total bus passenger trips destined for the area.

Age: Figure 11 indicates that about 57 percent of the person trips made to the Capitol Court trip attractor were made by persons between 25 and 65 years of age. About 7 percent were made by persons from 5 through 14 years of age; about 21 percent were made by persons from 15 through 24 years of age; about 13 percent, each, were made by persons from 25 through 34 years of age, 35 through 44 years of age, and 55 through 64 years of age; and about 17 percent were made by persons from 45 through 54 years of age. An unusually large proportion of trips was made by persons 65 years of age and older, about 15 percent.

Income: As shown in Figure 11, in 1972 persons from households with annual incomes of from \$15,000 through \$24,999 and from \$8,000 through \$11,999 accounted for the greatest proportion of total trips to the Capitol Court trip attractor, about 25 percent each. Of the remaining income categories, persons from households earning annual incomes of from \$12,000 through \$14,999 made about 21 percent of the trips to the area and persons from households earning from \$4,000 through \$7,999 made 17 percent of the trips. Persons from the highest income bracket made over twice as many trips as did those in the lowest income bracket: about 8 percent of the trips were made by persons from households earning \$25,000 or more a year and about 3 percent were made by persons from households earning \$3,999 or less a year.

Occupation: As demonstrated in Figure 11, only 48 percent of the person trips to the Capitol Court trip attractor were made by workers; the majority of trips, 52 percent, were made by housewives, students, and retired persons. The most predominant occupational group was housewives, who made about 24 percent of the total trips to the area. About 18 percent of the trips were made by students and 10 percent were made by retired persons. The remaining trips were made by a variety of workers who were categorized in nine occupational groups, the largest of which consisted of clerical and kindred workers.

Automobile Availability

As shown in Table 35, about 94 percent of the person trips made to the Capitol Court trip attractor on an average weekday were made by persons from households with one or more automobiles available for personal use. About 50 percent of the total trips were by persons from one-auto households; about 34 percent were made by persons from two-auto households; and about 10 percent were made by persons from households with three or more autos. Tripmaking from households with no auto—almost 6 percent of the total person travel into the area—was found to account for less than one-half of 1 percent of the auto driver trips, in comparison to about 11 percent of the auto passenger trips and 47 percent of the bus passenger trips. In total, about 89 percent of the auto driver trips, about 81 percent of the auto passenger trips, and about 48 percent of the bus passenger trips were made by persons from one- and two-auto households.

Table 36 presents the distribution of person trips destined for the Capitol Court trip attractor by the number of automobiles available by trip purpose. The percentage distribution of trip purpose by automobile availability is similar to the percentage distribution of total trips with the exception that proportionately more trips for shopping purposes were made by households with no auto. Whereas shopping trips represented about 41 percent of total travel to the Capitol Court attractor, such trips accounted for about 64 percent of the tripmaking in the area by households with no auto.

The largest volumes of person trips to the area, about 12,320 trips by persons from one-auto households and 6,010 trips by persons from two-auto households, were made for shopping purposes. Next in frequency were trips to home by persons of one-auto households, which accounted for 4,920 trips, and trips made to conduct personal business by persons of one-auto households, which accounted for 4,760 trips. No more than 3,700 trips were recorded in any other category of trip purpose by automobile availability.

Bus Passenger Profile

In 1972 the Capitol Court trip attractor was served by the Milwaukee and Suburban Transport Corporation.¹⁷ The home interview survey reported about 179,100 bus passenger trips per average weekday within the service area of this system.¹⁸ The home interview survey reported about 2,340 bus passenger trips entering the Capitol Court trip attractor, about 1,980 bus passenger trips leaving the attractor, and about 110 bus passenger trips originating within and destined for the trip attractor. In total, therefore, about 4,430 bus passenger trips with at least one trip end within the attractor were made on an average weekday in 1972. These 4,430 trips represent almost 3 percent of the total 179,100 bus passenger trips reported by the home interview survey to have been made within the service area of the Milwaukee system and about 4 percent of the total 102,140 person trips made to, from, and within the Capitol Court trip attractor. As noted previously, this attractor received significantly fewer bus passenger trips as a percent of the transit system travel and as a percent of the total person travel to the area than did the other three Milwaukee area attractors.

Time Pattern of Travel: As shown in Table 37, the unique character of bus passenger travel to the Capitol Court trip attractor is demonstrated by the distribution of bus passenger travel by time of day. The greatest number of bus passenger trips into the Capitol Court trip attractor were made from 3:00 p.m. through

¹⁷ On July 1, 1975, Milwaukee County purchased the Milwaukee and Suburban Transport Corporation. This corporation has since been renamed the Milwaukee County Transit System.

¹⁸ In 1972 the SEWRPC also conducted special one-day surveys of mass transit passengers. The survey findings indicated that on the day of the Milwaukee area survey, approximately 198,900 passengers were carried on the Milwaukee system. The transport corporation reported an average of 181,650 revenue passengers per weekday in 1972.

Table 35

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE CAPITOL
COURT TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL
AND THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD: 1972**

Autos Available per Household	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
0	60	0.2	1,890	10.8	1,160	47.4	--	--	3,110	5.6
1	18,120	51.5	8,880	50.8	510	20.8	230	51.1	27,740	49.9
2	13,140	37.3	5,220	29.9	670	27.3	220	48.9	19,250	34.6
3 or More	3,880	11.0	1,490	8.5	110	4.5	--	--	5,480	9.9
Total	35,200	100.0	17,480	100.0	2,450	100.0	450	100.0	55,580	100.0

Source: SEWRPC.

Table 36

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE CAPITOL
COURT TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE NUMBER OF
AUTOMOBILES AVAILABLE PER HOUSEHOLD AND TRIP PURPOSE: 1972**

Trip Purpose	Autos Available per Household								Total	
	0		1		2		3 or More			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home.	260	8.4	4,920	17.7	3,660	19.0	310	5.7	9,150	16.5
Work	130	4.2	2,040	7.4	2,230	11.6	880	16.1	5,280	9.5
Personal Business . . .	240	7.7	4,760	17.2	3,170	16.5	1,010	18.4	9,180	16.5
School	110	3.5	620	2.2	860	4.5	210	3.8	1,800	3.2
Social-Recreational . .	370	11.9	3,080	11.1	3,320	17.2	870	15.9	7,640	13.8
Shopping.	2,000	64.3	12,320	44.4	6,010	31.2	2,200	40.1	22,530	40.5
Total	3,110	100.0	27,740	100.0	19,250	100.0	5,480	100.0	55,580	100.0

Source: SEWRPC.

Table 37

**DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING AND LEAVING THE CAPITOL
COURT TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY: 1972**

Time of Day	Bus Passenger Trips			
	Entering		Leaving	
	Number	Percent	Number	Percent
6:00 a.m. through 9:59 a.m.	540	23.1	390	19.7
10:00 a.m. through 2:59 p.m.	730	31.2	790	39.9
3:00 p.m. through 5:59 p.m.	820	35.0	590	29.8
6:00 p.m. through 5:59 a.m.	250	10.7	210	10.6
Total	2,340	100.0	1,980	100.0

Source: SEWRPC.

Table 38

**DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN
THE CAPITOL COURT TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TRIP PURPOSE: 1972**

Trip Purpose	Bus Passenger Trips							
	Entering		Within		Total Trips Destined for Trip Attractor		Leaving	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Home	490	20.9	--	--	490	20.0	1,240	62.6
Work	280	12.0	30	27.3	310	12.6	380	19.2
Personal Business	190	8.1	--	--	190	7.8	80	4.0
School	240	10.3	--	--	240	9.8	70	3.6
Social-Recreational	90	3.8	--	--	90	3.7	80	4.0
Shopping	1,050	44.9	80	72.7	1,130	46.1	130	6.6
Total	2,340	100.0	110	100.0	2,450	100.0	1,980	100.0

Source: SEWRPC.

5:59 p.m.—about 820, or 35 percent of the total. The greatest number of bus passenger trips leaving the attractor were made from 10:00 a.m. through 2:59 p.m.—about 790, or 40 percent of the total. About 66 percent of the total bus passenger trips entering the area and almost 70 percent of the total bus passenger trips leaving the area were made between 10:00 a.m. and 5:59 p.m.

These findings indicate that the pattern of bus passenger travel to and from the Capitol Court trip attractor is very different from the time pattern of total person travel discussed earlier. A unique feature of person travel to this trip attractor was the peak accumulation of persons in the area during the early evening hours. About 34 percent of total person travel destined for the area occurred between 6:00 p.m. and 5:59 a.m., with about 31 percent occurring between 6:00 p.m. and 9:59 p.m. Not only were the majority of these evening person trips made for shopping purposes, but the greatest volume of shopping trips in an hourly period occurred between 6:00 p.m. and 7:00 p.m. The time pattern of bus passenger travel differs substantially from the time pattern of total person travel despite the continuation of adequate levels of transit service to the attractor throughout the evening.¹⁹ Only 11 percent of the bus passenger trips entering or leaving the area are made from 6:00 p.m. through 5:59 a.m. Furthermore, of the bus passenger trips entering the area during the evening hours, only one-third were made for the purpose of shopping. Indeed, although 1,050 trips, or 45 percent of the bus passenger trips entering the area, were made for shopping purposes, almost two-thirds of these trips occurred during the midday period of 10:00 a.m. through 2:59 p.m.

Trip Purpose: As shown in Table 38, of total bus passenger trips entering and occurring within the Capitol Court trip attractor, i.e., those trips destined for the attractor, about 1,130 trips, or 46 percent, were made for shopping purposes. Trips to home accounted for about 490 trips, or 20 percent of the total bus passenger trips destined for the attractor, trips to work accounted for about 310 trips, or 13 percent, and trips to school accounted for about 240 trips, or 10 percent. Bus passenger trips out of the area were made primarily to return home—about 1,240 trips, or 63 percent—and to attend work—about 380 trips, or 19 percent. In comparison to total person trips to the area, proportionately more bus passenger trips were made for shopping, home, work, and school purposes, and proportionately fewer were made for personal business and social-recreational purposes.

¹⁹ Of the three transit routes serving the attractor, only one, Route 23—Fond du Lac Avenue, increases headways at night. On this route, the daytime headway of 10 minutes is increased at night to 14 minutes.

Land Use: As shown in Table 39, of the 2,450 bus passenger trips with destinations in the attractor, about 1,590, or 65 percent, were made to commercial establishments; about 570, or 23 percent, were made to residential locations; and about 290, or 12 percent, were made to governmental or institutional facilities. No bus passenger trips to industrial or other land uses were reported. Bus passenger trips to commercial land uses were made predominantly for shopping purposes, followed by work and personal business purposes. Trips to residential locations were made to return home or to make a social visit. Trips to governmental-institutional facilities were made primarily to attend school, with some trips being made for work or social-recreational purposes.

Socioeconomic Characteristics: As indicated in the data presented below, the distribution of bus passenger travel by socioeconomic characteristics of the tripmakers differs substantially from the socioeconomic distribution of total person travel to the Capitol Court trip attractor.

Licensed Driver Status: As shown in Figure 12, about 84 percent of the bus passenger trips to the Capitol Court trip attractor were made by females and only 16 percent were made by males. Of total bus passenger trips destined for the area, about 78 percent were made by persons who do not hold a driver's license. About 66 percent were made by unlicensed females and about 12 percent were made by unlicensed males. Only 22 percent of the bus passenger trips were made by licensed drivers, with about 18 percent of total bus passenger trips being made by licensed females and about 4 percent being made by licensed males. This distribution differs substantially from the distribution of total tripmaking to the area by licensed driver status. There were substantially greater proportions of females and of persons without driver's licenses among the bus passengers than among the total tripmakers to the area on an average weekday.

Age: Although persons 65 years of age or older accounted for a significant proportion of the tripmaking to the area—about 15 percent of total person trips—they accounted for an even more significant portion of total bus passengers—about 33 percent. About 25 percent of the bus passenger trips were made by persons 15 through 24 years of age and about 17 percent were made by persons from 55 through 64 years of age. In total, about 75 percent of the bus passenger trips made to the Capitol Court trip attractor were made by persons 55 years of age or older and persons 24 years of age or younger (see Figure 12).

Income: Bus passenger trips to the Capitol Court trip attractor in 1972 were fairly evenly distributed among five income categories. About 24 percent of the bus passenger trips were made by persons from households earning from \$15,000 through \$24,999 a year; 23 percent were made by persons from households earning from \$4,000 through \$7,999 a year; 21 percent were made by persons from households earning from \$12,000 through \$14,999 a year; 18 percent were made by persons from households earning \$3,999 or less a year; and 14 percent were made by persons from households earning from \$8,000 through \$11,999 a year. Although about 8 percent of total person travel to this attractor was made by persons from households earning \$25,000 or more a year, no bus passenger trips to the Capitol Court trip attractor were reported for persons in this upper income bracket (see Figure 12).

Occupation: More than 60 percent of the bus passenger trips to the Capitol Court trip attractor were made by persons who were not formally employed, in comparison to 53 percent for total tripmakers. As shown in Figure 12, about 28 percent of the bus passenger trips were made by retired persons; about 24 percent were made by students; and about 9 percent were made by housewives. Clerical and kindred workers accounted for the largest proportion of total bus passenger trips made by employed persons, about 21 percent. The remaining 18 percent of the bus passenger trips were made by persons employed in a variety of

Table 39

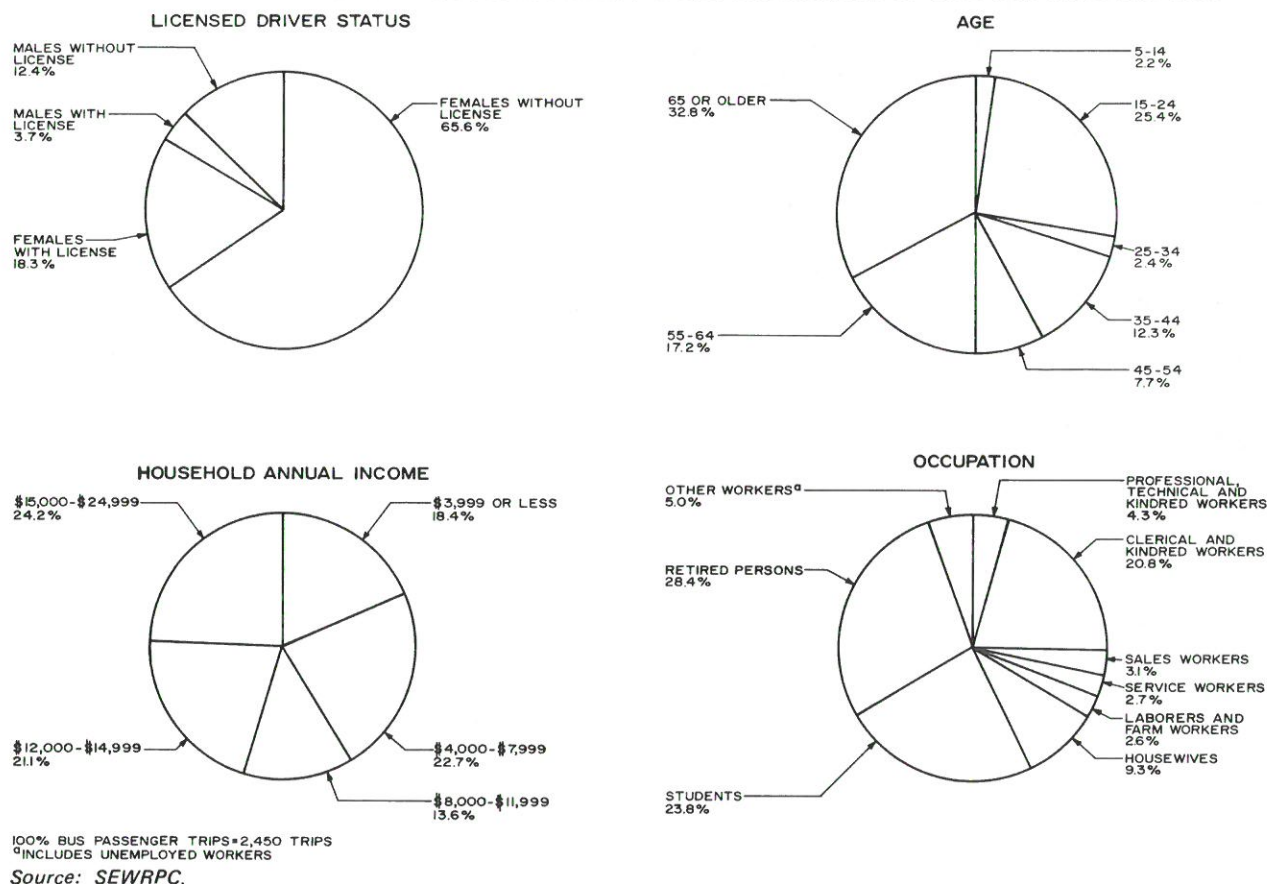
**DISTRIBUTION OF BUS PASSENGER TRIPS
DESTINED FOR THE CAPITOL COURT
TRIP ATTRACTOR ON AN AVERAGE
WEEKDAY BY LAND USE: 1972**

Land Use	Bus Passenger Trips	
	Number	Percent
Residential	570	23.3
Commercial	1,590	64.9
Industrial	--	--
Governmental-Institutional . .	290	11.8
Other	--	--
Total	2,450	100.0

Source: SEWRPC.

Figure 12

DISTRIBUTION OF BUS PASSENGER TRIPS TO THE CAPITOL COURT TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



other occupations (see Figure 12). The above findings differ notably from the distribution of total person travel by occupation. Although a similar proportion of the total person trips to the attractor was made by persons who were not formally employed, there were larger proportions of retired persons and students and substantially smaller proportions of housewives among the bus passengers.

THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR

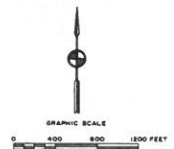
The area identified as the Marquette-Wisconsin Avenue trip attractor is located adjacent to the western edge of the Milwaukee central business district. As shown on Map 10, in 1972 the eastern portion of this trip attractor was primarily occupied by Marquette University. Other learning institutions scattered throughout the trip attractor included Wells Junior High School, West Division High School, Marquette High School, and Concordia College. Many medical facilities were also located in this trip attractor, including Milwaukee Children's Hospital, Milwaukee County Medical and Health Services Facility, Deaconess Hospital, the Milwaukee Blood Center, Lutheran Hospital of Milwaukee, Family Hospital, and Foundation Hospital of Milwaukee. In addition to these many institutional facilities, there were numerous office buildings and retail services found throughout the area. A Wisconsin Telephone Company building, the Bockl Building, and the Holiday Inn Central, in addition to numerous smaller businesses, were located within the central part of the trip attractor. The western portion of the Marquette University-Wisconsin Avenue trip attractor was more residential than was the eastern two-thirds of the trip attractor. The southern portion of the trip attractor between IH 94 and the Menomonee River consisted predominantly of wholesale, warehouse, or

LOCATION OF THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR

**LEGEND**

— ATTRACTOR BOUNDARY

Source: SEWRPC.



industrial development. The principal streets or highways providing access to or within the Marquette University-Wisconsin Avenue attractor included IH 94, Wisconsin Avenue, State Street, Highland Boulevard, 35th Street, 27th Street, 16th Street, 17th Street, St. Paul Avenue, Clybourn Street, and Wells Street.

Total Internal Person Trips

As shown in Table 40, about 106,650 total internal person trips entered, exited, and occurred within the Marquette-Wisconsin Avenue trip attractor on an average weekday in 1972. Of these person trips, about 48,800 entered and 47,300 exited the trip attractor and about 11,500 were made within the boundaries of the trip attractor. Therefore, 59,300 internal person trips with destinations in the trip attractor occurred on an average weekday in 1972. About 81 percent were made by persons entering the trip attractor and about 19 percent were made by persons traveling from place to place within the trip attractor.

Table 40 also indicates that the distribution of trips entering and leaving the Marquette-Wisconsin Avenue trip attractor by mode of travel was similar to that of total trips made to, from, and within the trip attractor. About 60 percent of the person trips were made as auto drivers; about 23 percent were made as auto passengers; a notable 15 percent were made as bus passengers; and almost 2 percent were made by other modes. In comparison, trips made wholly within the trip attractor exhibited higher percentages of auto driver travel, 66 percent, and lower percentages of bus passenger travel, 9 percent, while the percentage of auto passenger travel and of travel by other modes remained the same.

Table 40

**DISTRIBUTION OF INTERNAL PERSON TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN THE
MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL: 1972**

Direction of Travel	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other ^a			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Entering . .	28,110	58.8	11,210	23.4	7,790	16.3	730	1.5	47,840	100.0
Leaving . . .	28,100	59.4	11,010	23.3	7,470	15.8	740	1.5	47,320	100.0
Within . . .	7,530	65.6	2,680	23.3	1,060	9.2	220	1.9	11,490	100.0
Total	63,740	59.8	24,900	23.3	16,320	15.3	1,690	1.6	106,650	100.0

^a Includes passenger travel by school bus, taxi, truck, motorcycle, and charter bus.

Source: SEWRPC.

Origins of Internal Person Trips

In 1972 travel to the Marquette-Wisconsin Avenue trip attractor originated largely within and in the vicinity of the trip attractor, as shown on Map 11. Nevertheless, trip origins were widely dispersed throughout many zones in Milwaukee and Waukesha Counties, based on the results of the home interview survey.²⁰ Of the total person trips to the Marquette-Wisconsin Avenue trip attractor on an average weekday, about 54,850, or 92 percent, originated within Milwaukee County, and the remaining 4,490, or 8 percent, originated within the other six counties of the Region. About 3,490 person trips to this trip attractor, almost 6 percent of the total, were found to originate in Waukesha County. Since tripmaking between two areas is reciprocal, the distributional pattern of trip origins shown on Map 16 may be regarded as representative of the pattern of internal person trips leaving the area.

Time Pattern of Travel

Figure 13 shows the hourly flow of total person trips entering and leaving the Marquette-Wisconsin Avenue trip attractor on an average weekday by trip purpose and the accumulation of persons within the boundary of the attractor during each hour of the day. The pattern formed by the accumulation of persons in the Marquette-Wisconsin Avenue trip attractor was the same as that formed by the accumulation of persons in central business district areas. As indicated in the figure, about 25,880 persons—about 81 percent of the peak accumulation—were reported by the 1972 home interview survey to be area residents²¹ and in the area at the start of the trip day. The relative inactivity of the early morning hours was followed by a sharp increase at 6:00 a.m. through 8:00 a.m. in persons entering the area, as commuters journeyed to work and

²⁰ The home interview survey consisted of a sample of households at an overall 3 percent sample rate and a sample of group quarters at a 33 percent sample rate. The students living in dormitories at Marquette University and Concordia College, therefore, would have been sampled at a 33 percent rate. Previous analysis of the effect of sample rate on the locational distribution of travel patterns indicates that as the sample rate declines, the distributional patterns become more localized, and as the sample rate increases, the distributional patterns become more diffused. The travel patterns presented for the Marquette-Wisconsin Avenue attractor (and the UWM-Lower East Side attractor) may reflect, to some extent, a heightened impact of the 33 percent sample rate data and, thereby, may not be directly comparable to the travel patterns presented for the other attractors. See "The Effect of Sample Rate on Socioeconomic and Travel Data Obtained Through Standard Home Interview: An Analysis of the Mass Transit Nonuser Survey," SEWRPC *Technical Record*, Vol. 4, No. 1, March 1978.

²¹ In comparison, the 1970 population of the Marquette-Wisconsin Avenue trip attractor was 27,505 persons, according to the U. S. Bureau of the Census.

Map 11

ORIGINS OF INTERNAL PERSON TRIPS TO
THE MARQUETTE-WISCONSIN AVENUE TRIP
ATTRACTOR ON AN AVERAGE WEEKDAY: 1972

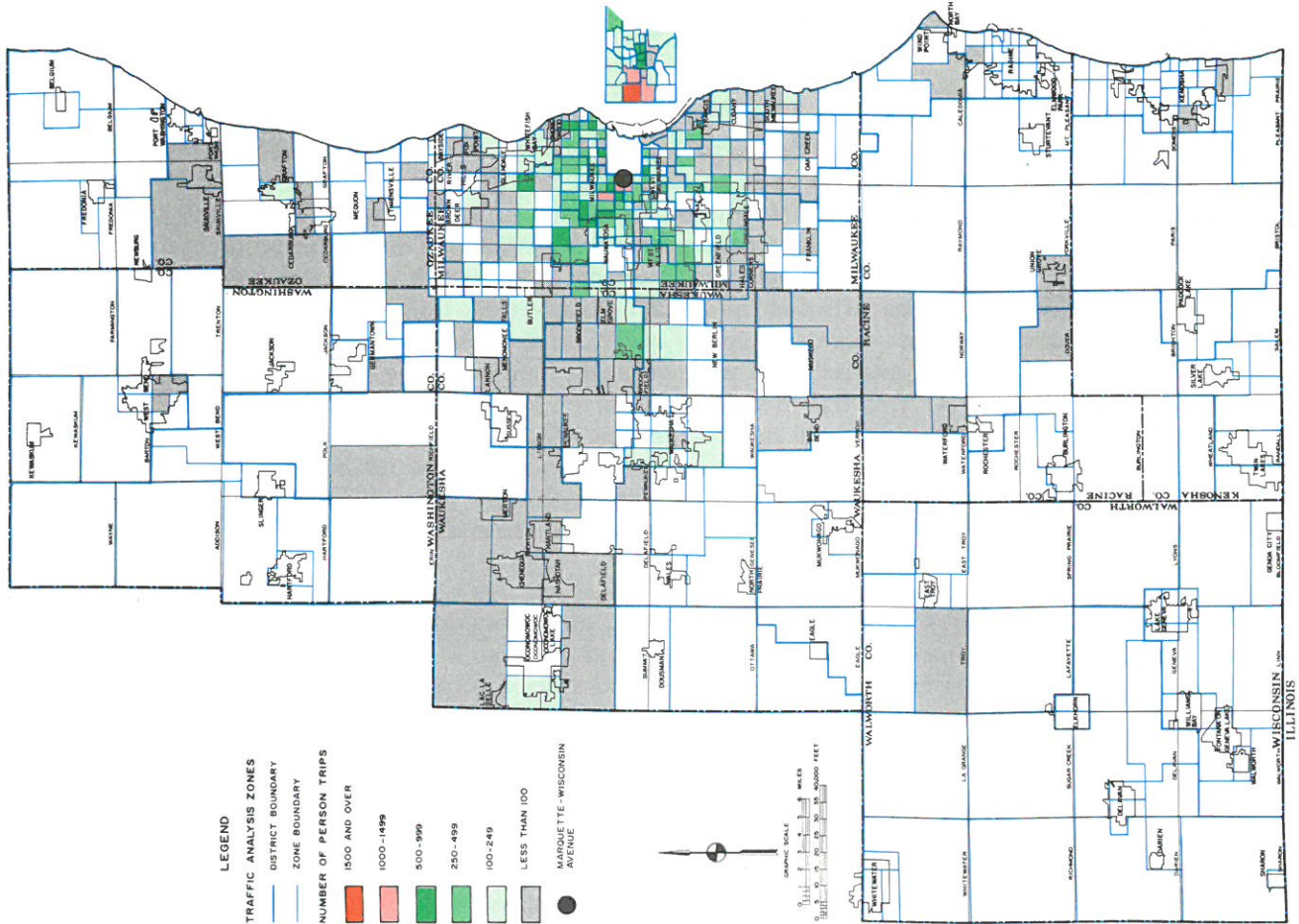
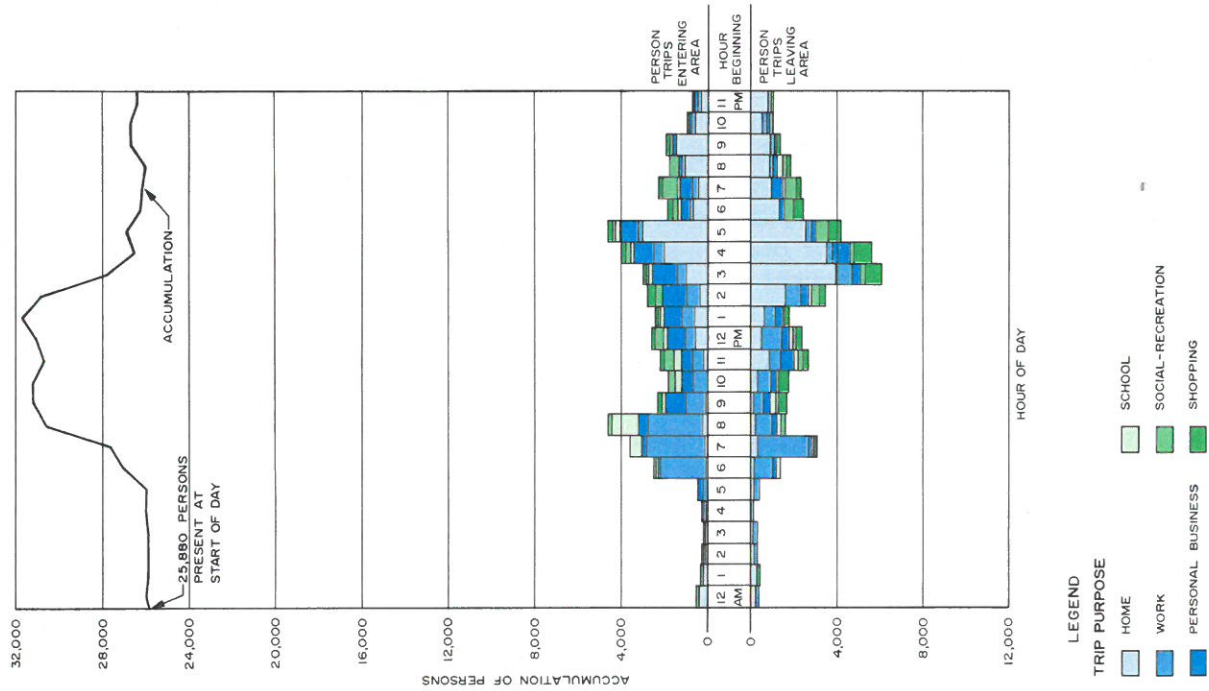


Figure 13

ACCUMULATION OF PERSONS AND NUMBER
OF PERSON TRIPS ENTERING AND LEAVING
THE MARQUETTE-WISCONSIN AVENUE TRIP
ATTRACTOR ON AN AVERAGE WEEKDAY BY
TIME OF DAY AND TRIP PURPOSE: 1972



Source: SEWRPC.

school. By 10:00 a.m., the peak accumulation of the morning, about 31,280 persons, was reached, followed by a slight decline in the accumulation of persons during the noon hour. The peak accumulation of the day of 31,700 persons occurred at 1:00 p.m., generally as a result of continued travel into the area by workers, shoppers, and persons making personal business or social-recreational trips. Travel for personal business purposes, which was notable during the hour beginning at 9:00 a.m., declined slightly during the midday hours, and showed substantial increases after 2:00 p.m. A significant increase in tripmaking out of the area began at 3:00 p.m. and continued until 6:00 p.m. As illustrated in Figure 13, the primary purpose of trips leaving the Marquette-Wisconsin Avenue trip attractor was to return home. During the afternoon hours, travel entering the area for the purpose of returning home resulted in a small increase in the accumulation of persons, with a very minor peak of about 26,880 persons occurring at 5:00 p.m. and a generally sustained accumulation into the night.

Mode of Travel by Trip Purpose

Of the 59,330 internal person trips destined for the Marquette-Wisconsin Avenue trip attractor on an average weekday, auto driver travel accounted for about 35,640 trips, or 60 percent; auto passenger travel accounted for about 13,890 trips, or 23 percent; bus passenger travel accounted for about 8,850 trips, or 15 percent; and travel by other modes accounted for about 950 trips, or 2 percent. As shown in Table 41, auto driver travel to the Marquette-Wisconsin Avenue trip attractor consisted primarily of trips to work, trips to return home, and trips to conduct personal business. Trips to return home and to conduct personal business were the primary purposes of auto passenger travel to this trip attractor. Bus passenger trips were made principally to return home and to attend work. In total, trips to return home, to attend work, and to conduct personal business accounted for over 79 percent of travel to this trip attractor, with about 18,640 trips, or 31 percent, being made to return home; about 15,190 trips, or 26 percent, being made to attend work; and 13,170 trips, or 22 percent, being made to conduct personal business. Trip purposes which generated less travel included trips made for social-recreational purposes—about 6,630 trips, or 11 percent; trips made to attend school²²—about 3,770 trips, or 6 percent; and trips made for shopping purposes—about 1,930 trips, or an unusually meager 3 percent.

Land Use

Of the 59,330 total internal person trips destined for the Marquette-Wisconsin Avenue trip attractor on an average weekday, about 21,810 trips, or 37 percent, were made to residences; about 17,660 trips, or 30 percent, were to governmental or institutional facilities; about 17,470 trips, or 29 percent, were to commercial establishments; and about 400 trips, or almost 1 percent, were to a variety of other land uses. Trips to residential land uses were made primarily to return home. Trips to governmental-institutional land uses were made primarily to conduct personal business, attend work, and attend school. The 800 trips to home at institutional land uses reflected the impact of dormitory-housed college students living in the area. Trips to commercial land uses were principally made for the purposes of attending work and conducting personal business. Trips to industrial sites were generally made for the purpose of attending work. Within the Marquette-Wisconsin Avenue trip attractor, about 47 percent of the total work trips, about 40 percent of the trips made to conduct personal business, about 46 percent of the trips made for social-recreational purposes, and all shopping trips were destined for commercial land uses. About 37 percent of the work trips, about 48 percent of the personal business trips, and 99 percent of the school-purpose trips were destined for governmental-institutional establishments (see Table 42).

Time Expended Between Trips

As shown in Table 43, persons traveling to the Marquette-Wisconsin Avenue trip attractor for the purpose of attending work or school spent the longest period of time in the area prior to making another trip. Of the trips made to this trip attractor for work and school purposes, about 69 percent and 66 percent, respectively, resulted in visits of longer than four hours. The school-purpose visits tended to be briefer than the work-purpose visits. About 53 percent of the work-purpose visits lasted eight hours or longer. In contrast, the largest percentage of school-purpose visits, about 48 percent, lasted from 4 to 7.9 hours. A minimum of 90 percent of the visits made for personal business, social-recreational, or shopping purposes lasted less than four hours. Of these categories of brief visits, the longest in duration were those made for

²² It is important to note that walking trips, which may constitute a major "mode of travel" for students, are not considered "person trips" and, as such, were not inventoried in the home interview travel survey.

Table 41

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE MARQUETTE-WISCONSIN AVENUE
TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND TRIP PURPOSE: 1972**

Trip Purpose	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	10,010	28.1	5,320	38.3	3,010	34.0	300	31.6	18,640	31.4
Work	10,810	30.3	1,830	13.2	2,510	28.4	40	4.2	15,190	25.6
Personal Business . . .	8,040	22.6	3,390	24.4	1,290	14.6	450	47.4	13,170	22.2
School	1,370	3.8	1,290	9.3	1,010	11.4	100	10.5	3,770	6.4
Social-Recreational . .	4,330	12.2	1,510	10.9	730	8.2	60	6.3	6,630	11.2
Shopping	1,080	3.0	550	3.9	300	3.4	--	--	1,930	3.2
Total	35,640	100.0	13,890	100.0	8,850	100.0	950	100.0	59,330	100.0

Source: SEWRPC.

Table 42

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE MARQUETTE-WISCONSIN
AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE AND TRIP PURPOSE: 1972**

Trip Purpose	Land Use										Total	
	Residential		Commercial		Industrial		Governmental-Institutional		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	17,840	95.7	--	--	--	--	800	4.3	--	--	18,640	100.0
Work	420	2.8	7,200	47.4	1,840	12.1	5,660	37.2	70	0.5	15,190	100.0
Personal Business . . .	1,310	9.9	5,250	39.9	150	1.1	6,360	48.3	100	0.8	13,170	100.0
School	--	--	50	1.3	--	--	3,720	98.7	--	--	3,770	100.0
Social-Recreational . .	2,240	33.8	3,040	45.8	--	--	1,120	16.9	230	3.5	6,630	100.0
Shopping	--	--	1,930	100.0	--	--	--	--	--	--	1,930	100.0
Total	21,810	36.8	17,470	29.4	1,990	3.3	17,660	29.8	400	0.7	59,330	100.0

Source: SEWRPC.

Table 43

**DISTRIBUTION OF TIME EXPENDED FOR EACH TRIP PURPOSE ON AN AVERAGE
WEEKDAY IN THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR: 1972**

Duration of Visit (hours)	Percent of Time per Trip Purpose ^a					
	Work	Personal Business	School	Social-Recreational	Shopping	Total
Less than 1.0	13.0	50.0	6.6	37.2	71.6	30.4
1.0 - 1.9	6.2	31.2	9.0	24.2	28.4	18.2
2.0 - 3.9	11.6	14.2	18.4	28.9	--	15.3
4.0 - 7.9	15.8	2.9	48.2	8.5	--	13.0
8.0 and More	53.4	1.7	17.8	1.2	--	23.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

^a Trips to home are not included.

Source: SEWRPC.

social-recreational purposes, with about 53 percent of the visits lasting from one to four hours and 37 percent lasting less than one hour. The visits made for personal business purposes were briefer, with about 45 percent lasting from one to four hours and about 50 percent lasting less than one hour. The briefest visits to the Marquette-Wisconsin Avenue trip attractor were made by shoppers. About 28 percent of the shoppers made visits of from one to four hours, while about 72 percent of the shoppers started another trip within less than an hour after reaching their shopping trip destination. In total, the most frequently occurring visit to the Marquette-Wisconsin Avenue trip attractor—representing 30 percent of travel to this area—lasted less than one hour. About 64 percent of the trips made to the Marquette-Wisconsin Avenue trip attractor resulted in visits of less than four hours and 36 percent in visits of four hours or longer.

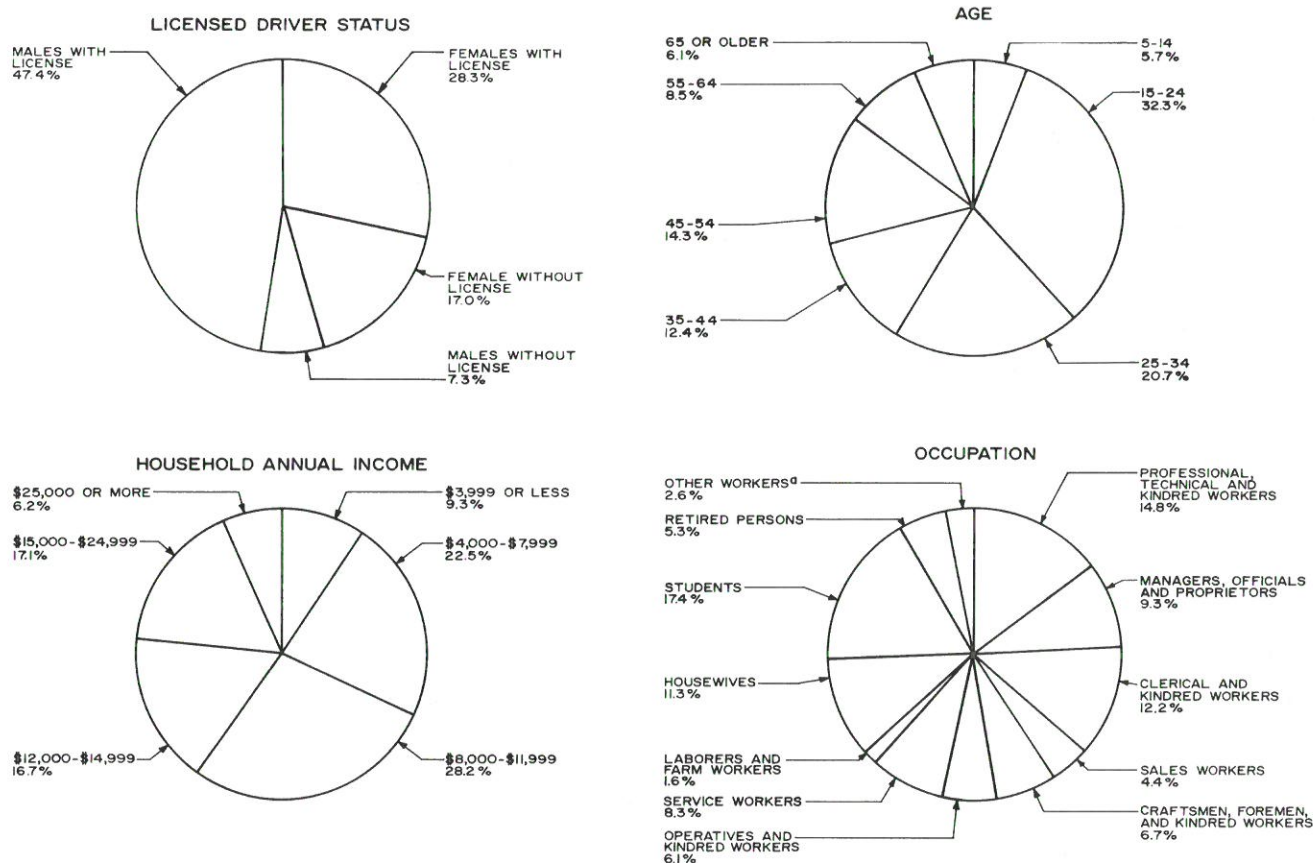
Socioeconomic Characteristics

There is a tendency to categorize persons and activities in any university or college area into a limited set of preconceived characteristics. Standing in opposition to this tendency are the diverse socioeconomic characteristics presented below, which indicate that trips are made to this area by persons from all socioeconomic backgrounds commonly found in the Southeastern Wisconsin Region.

Licensed Driver Status: As shown in Figure 14, about 55 percent of the trips to the Marquette-Wisconsin Avenue trip attractor were made by males and about 45 percent were made by females. About 76 percent of the total person trips to the area were made by licensed drivers—about 48 percent by males and about 28 percent by females. Although males made most of the trips to the area, females made most of the trips that were made by persons who do not hold a driver's license. About 7 percent of the person trips to the area were made by males who were not licensed drivers; about 17 percent of the person trips to the area—

Figure 14

DISTRIBUTION OF INTERNAL PERSON TRIPS TO THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



100% INTERNAL PERSON TRIPS = 59,330
^aINCLUDES UNEMPLOYED WORKERS

Source: SEWRPC.

about 9,800 trips a day—were made by females who did not have a driver's license. On an average weekday, unlicensed females made approximately 4,780 bus passenger trips into the area. Consequently, females who did not hold a driver's license made about 54 percent of the total bus passenger trips recorded to be destined for this area on an average weekday.

Age: As shown in Figure 14, the largest volume of person trips to this trip attractor, about 32 percent, was made by persons from 15 through 24 years of age. About 21 percent of the trips were made by persons 25 through 34 years of age; about 14 percent by persons from 45 through 54 years of age; about 12 percent by persons from 35 through 44 years of age; about 9 percent by persons 55 through 64 years of age; and about 6 percent, each, by persons 65 years of age or older and by persons 5 through 14 years of age. In total, about 56 percent of the trips made to the Marquette-Wisconsin Avenue trip attractor were made by persons between 25 and 65 years of age. Tripmaking by persons less than five years of age was not recorded in the 1972 home interview survey.

Income: As shown in Figure 14, in 1972 persons from households with annual incomes of from \$8,000 through \$11,999 and from \$4,000 through \$7,999 accounted for the greatest proportion of person trips to the Marquette-Wisconsin Avenue trip attractor, about 28 percent and 23 percent, respectively. Of the remaining income categories, persons from households earning annual incomes of from \$12,000 through \$14,999 and from \$15,000 through \$24,999 made 17 percent of the trips, each. Persons from the highest income bracket made about two-thirds the number of trips made by those in the lowest income brackets: about 6 percent of the trips were made by persons from households earning \$25,000 or more a year and about 9 percent were made by persons from households earning \$3,999 or less a year. In total, about 60 percent of the person trips made to the Marquette-Wisconsin Avenue trip attractor on an average weekday were produced by persons from households with incomes of less than \$12,000 per year.

Occupation: The diversity to be found among tripmakers to the Marquette-Wisconsin Avenue trip attractor is exemplified by the occupational data presented in Figure 14. The most predominant occupational group to be found is students, who made only 17 percent of the total person trips to the area. About 11 percent of the person trips were made by housewives and about 5 percent were made by retired persons. In total, about 33 percent of the person trips to the trip attractor were made by persons who were not formally employed. The remaining two-thirds of the trips were made by a variety of workers who were categorized in nine occupational groups, the largest of which consisted of professional, technical, and kindred workers.

Automobile Availability

As shown in Table 44, tripmakers to the Marquette-Wisconsin Avenue trip attractor may have had significantly fewer automobiles available for their personal use than did tripmakers to some of the other attractors described in this article. Almost 15 percent of the person trips made to this trip attractor were made by persons from households with no auto. Of the 85 percent of total trips made by persons from households with one or more automobiles available, about 50 percent were made by persons from one-auto households; about 28 percent by persons from two-auto households; and about 7 percent by persons from three-or-more-auto households. Tripmaking by persons from households with no auto was found to account for less than 2 percent of the auto driver trips, about 21 percent of the auto passenger trips, and a substantial 53 percent of the bus passenger trips. About 90 percent of the auto driver trips, about 72 percent of the auto passenger trips, and only 46 percent of the bus passenger trips were made by persons from one- and two-auto households.

Table 45 presents the distribution of person trips destined for the Marquette-Wisconsin Avenue trip attractor by the number of automobiles available by trip purpose. The percentage distribution of trip purpose by automobile availability is similar to the percentage distribution of total trips with the exception of the distribution of home and work-purpose trips. Although trips to home represented 31 percent of total person travel to the attractor, such trips accounted for 47 percent of the trips made by persons from households with no auto, 34 percent of the trips made by persons from one-auto households, 21 percent of the trips made by persons from two-auto households, and 24 percent of the trips made by persons from three-or-more-auto households. Trips to work, which accounted for 26 percent of total person travel to the attractor, accounted for about 15 percent of the trips made by persons from households with no auto,

about 24 percent of the trips made by persons from one-auto households, about 35 percent of the trips made by persons from two-auto households, and about 22 percent of the trips made by persons from three-or-more-auto households.

The largest volumes of person trips to the area were made by persons from one-auto households for the purposes of returning home—about 10,050 trips; attending work—about 7,030 trips; and conducting personal business—about 6,470 trips. Persons from two-auto households made about 5,940 trips to the trip attractor in order to attend work. No more than 4,050 trips were recorded in any other category of trip purpose by automobile availability.

Table 44

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD: 1972

Autos Available per Household	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
0	530	1.5	2,890	20.8	4,650	52.5	540	56.8	8,610	14.5
1	19,370	54.3	6,500	46.8	3,300	37.3	210	22.1	29,380	49.5
2	12,530	35.2	3,530	25.4	780	8.8	80	8.4	16,920	28.5
3 or More	3,210	9.0	970	7.0	120	1.4	120	12.7	4,420	7.5
Total	35,640	100.0	13,890	100.0	8,850	100.0	950	100.0	59,330	100.0

Source: SEWRPC.

Table 45

DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD AND TRIP PURPOSE: 1972

Trip Purpose	Autos Available per Household								Total	
	0		1		2		3 or More			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home	4,050	47.0	10,050	34.2	3,460	20.5	1,080	24.4	18,640	31.4
Work	1,270	14.8	7,030	23.9	5,940	35.1	950	21.5	15,190	25.6
Personal Business . . .	1,720	20.0	6,470	22.0	3,620	21.4	1,360	30.8	13,170	22.2
School	440	5.1	1,720	5.9	1,120	6.6	490	11.1	3,770	6.4
Social-Recreational . .	700	8.1	2,890	9.8	2,610	15.4	430	9.7	6,630	11.2
Shopping	430	5.0	1,220	4.2	170	1.0	110	2.5	1,930	3.2
Total	8,610	100.0	29,380	100.0	16,920	100.0	4,420	100.0	59,330	100.0

Source: SEWRPC.

Bus Passenger Profile

In 1972 the Marquette-Wisconsin Avenue trip attractor was served by the Milwaukee and Suburban Transport Corporation.²³ The home interview survey reported about 7,790 bus passenger trips entering the trip attractor, about 7,470 bus passenger trips leaving the trip attractor, and about 1,060 bus passenger trips with both ends within the trip attractor boundary on an average weekday. In total, therefore, about 16,320 bus passenger trips had at least one end within the trip attractor on an average weekday. These 16,320 trips represented about 9 percent of the 179,100 bus passenger²⁴ trips found by the home interview survey to be made daily within the service area of the Milwaukee system and about 15 percent of the 106,650 person trips made to, from, and within the Marquette-Wisconsin Avenue trip attractor on an average weekday.

Time Pattern of Travel: As shown in Table 46, the time patterns of bus passenger travel entering and leaving the Marquette-Wisconsin Avenue trip attractor reflect the time patterns of total person travel presented earlier. The evening hours from 6:00 p.m. through midnight and the early morning hours from midnight through 5:59 a.m. constituted the periods of least activity. The peak period of bus passenger travel entering the area was 6:00 a.m. through 9:59 a.m., followed by a second peak from 3:00 p.m. through 5:59 p.m. The peak period of bus passenger trips leaving the area was 3:00 p.m. through 5:59 p.m. Of the total bus passenger trips entering the area on an average weekday, about 33 percent were made from 6:00 a.m. through 9:59 a.m., about 24 percent were made from 10:00 a.m. through 2:59 p.m., about 31 percent were made from 3:00 p.m. through 5:59 p.m., and about 12 percent were made from 6:00 p.m. through 5:59 a.m. Of the total bus passenger trips leaving the area on an average weekday, about 26 percent were made from 6:00 a.m. through 9:59 a.m., about 27 percent were made from 10:00 a.m. through 2:59 p.m., about 34 percent were made from 3:00 p.m. through 5:59 p.m., and about 13 percent were made from 6:00 p.m. through 5:59 a.m.

Trip Purpose: As shown in Table 47, of the total bus passenger trips entering and occurring within the Marquette-Wisconsin Avenue trip attractor, i.e., those trips destined for the attractor, about 3,010, or 34 percent, were made to return home. This percentage is almost equal to that for total person trips destined for home within the trip attractor—32 percent. Trips to work accounted for about 2,510 trips, or 28 percent of the total bus passenger trips destined for the attractor; trips to conduct personal business accounted for about 1,290 trips, or 15 percent; and trips to attend school accounted for about 1,010 trips, or 11 percent. Bus passenger trips out of the area were made primarily to return home—about 3,660 trips, or 49 percent; to attend work—about 1,750 trips, or 23 percent; and to go shopping—about 900 trips, or 12 percent. In comparison to total person trips destined for the area, proportionately more bus passenger trips were made for home, work, and school purposes; about the same proportion was made for shopping purposes; and proportionately fewer were made for personal business and social-recreational purposes.

Land Use: As shown in Table 48, of the 8,850 bus passenger trips with destinations in the trip attractor, about 3,380, or 38 percent, were made to governmental-institutional facilities; about 3,130, or 35 percent, were made to residential locations; about 2,130, or 24 percent, were made to commercial establishments; and about 210, or 2 percent, were made to industrial sites. No trips to other land uses were reported. Bus passenger trips to governmental-institutional land uses were made predominantly to attend work or school. Bus passenger trips to residential locations were made to return home. Trips to commercial establishments were made primarily for work or personal business purposes and secondarily for social-recreational and shopping purposes. All bus passenger trips to industrial sites were made for work purposes.

²³ On July 1, 1975, Milwaukee County purchased the Milwaukee and Suburban Transport Corporation. This corporation has since been renamed the Milwaukee County Transit System.

²⁴ In 1972 the SEWRPC also conducted special one-day surveys of mass transit passengers. The survey findings indicated that on the day of the Milwaukee area survey, approximately 198,900 passengers were carried on the Milwaukee system. Data from the transport corporation reported an average of 181,650 revenue passengers per weekday in 1972.

Socioeconomic Characteristics: As indicated in the data presented below, the distribution of bus passenger travel by socioeconomic characteristics of the tripmakers differs substantially from the socioeconomic distribution of total person travel to the Marquette-Wisconsin Avenue trip attractor.

Licensed Driver Status: As shown in Figure 15, about 69 percent of the bus passenger trips to the Marquette-Wisconsin Avenue trip attractor were made by females and about 31 percent were made by males. Of total bus passenger trips destined for the area, about 76 percent were made by persons who did not hold a driver's license: about 54 percent of the trips were made by unlicensed females and about 22 percent were made by unlicensed males. Of the remaining 24 percent—those trips made by licensed drivers—about 15 percent were made by females and about 9 percent were made by males. This distribution differs substantially from the distribution of total tripmaking to the area by licensed driver status. There were substantially greater proportions of females and of persons without driver's licenses among the bus passengers than among the total tripmakers to the area on an average weekday.

Age: Persons from 15 through 24 years of age, who accounted for almost one-third of total person travel to this area, made about 36 percent of the bus passenger trips destined for the Marquette-Wisconsin Avenue trip attractor. As shown in Figure 15, persons from 25 through 54 years of age accounted for 39 percent of

Table 46

DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING AND LEAVING THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY: 1972

Time of Day	Bus Passenger Trips			
	Entering		Leaving	
	Number	Percent	Number	Percent
6:00 a.m. through 9:59 a.m.	2,540	32.6	1,930	25.8
10:00 a.m. through 2:59 p.m.	1,870	24.0	2,000	26.8
3:00 p.m. through 5:59 p.m.	2,450	31.5	2,570	34.4
6:00 p.m. through 5:59 a.m.	930	11.9	970	13.0
Total	7,790	100.0	7,470	100.0

Source: SEWRPC.

Table 47

DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TRIP PURPOSE: 1972

Trip Purpose	Bus Passenger Trips							
	Entering		Within		Total Trips Destined for Trip Attractor		Leaving	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Home.	2,630	33.8	380	35.9	3,010	34.0	3,660	49.0
Work	2,250	28.9	260	24.5	2,510	28.4	1,750	23.4
Personal Business	1,210	15.5	80	7.5	1,290	14.6	620	8.3
School	870	11.2	140	13.2	1,010	11.4	360	4.8
Social-Recreational . . .	580	7.4	150	14.2	730	8.2	180	2.4
Shopping.	250	3.2	50	4.7	300	3.4	900	12.1
Total	7,790	100.0	1,060	100.0	8,850	100.0	7,470	100.0

Source: SEWRPC.

the bus passenger trips made to the area on an average weekday; persons 45 through 54 years of age made about 15 percent of the trips; and persons from 35 through 44 years of age and from 25 through 34 years of age each made about 12 percent of the trips. Persons in the remaining three age groups each accounted for less than 10 percent of the total bus passenger trips. The only substantial difference in the proportions of bus passenger travel by age group and total travel by age group occurs for persons 25 through 34 years of age, who accounted for only 12 percent of the bus passenger trips but about 21 percent of the total person trips to the area. It is notable that a similar correlation can be drawn for bus passenger travel and total person travel by age group in the UWM-Lower East Side trip attractor.

Table 48

**DISTRIBUTION OF BUS PASSENGER
TRIPS DESTINED FOR THE MARQUETTE-
WISCONSIN AVENUE TRIP ATTRACTOR ON
AN AVERAGE WEEKDAY BY LAND USE: 1972**

Land Use	Bus Passenger Trips	
	Number	Percent
Residential	3,130	35.3
Commercial	2,130	24.1
Industrial	210	2.4
Governmental-Institutional . .	3,380	38.2
Other	--	--
Total	8,850	100.0

Source: SEWRPC.

Income: As shown in Figure 15, in 1972 persons from households earning less than \$12,000 a year made almost 87 percent of the bus passenger trips to the Marquette-Wisconsin Avenue trip attractor on an average weekday. The largest percentage of bus passenger trips, 41 percent, was made by persons from households earning from \$4,000 through \$7,999 per year. Persons from households earning from \$8,000 through \$11,999 a year and \$3,999 or less a year also accounted for a significant amount of bus passenger travel to the trip attractor, 23 percent each. Of the remaining income categories, about 9 percent of the bus passenger trips were made by persons from households earning from \$12,000 through \$14,999 a year; about 4 percent were made by persons from households earning from \$15,000 through \$24,999 a year; and about 1 percent were made by persons from households earning \$25,000 or more a year. It can be seen in comparing the distribution by household income of total person trips with that of total bus passenger trips that persons from households earning less than \$8,000 a year accounted for a much greater proportion of bus passenger travel than they did total person travel and that persons from households earning \$8,000 or more a year accounted for smaller proportions of bus passenger travel than they did total person travel.

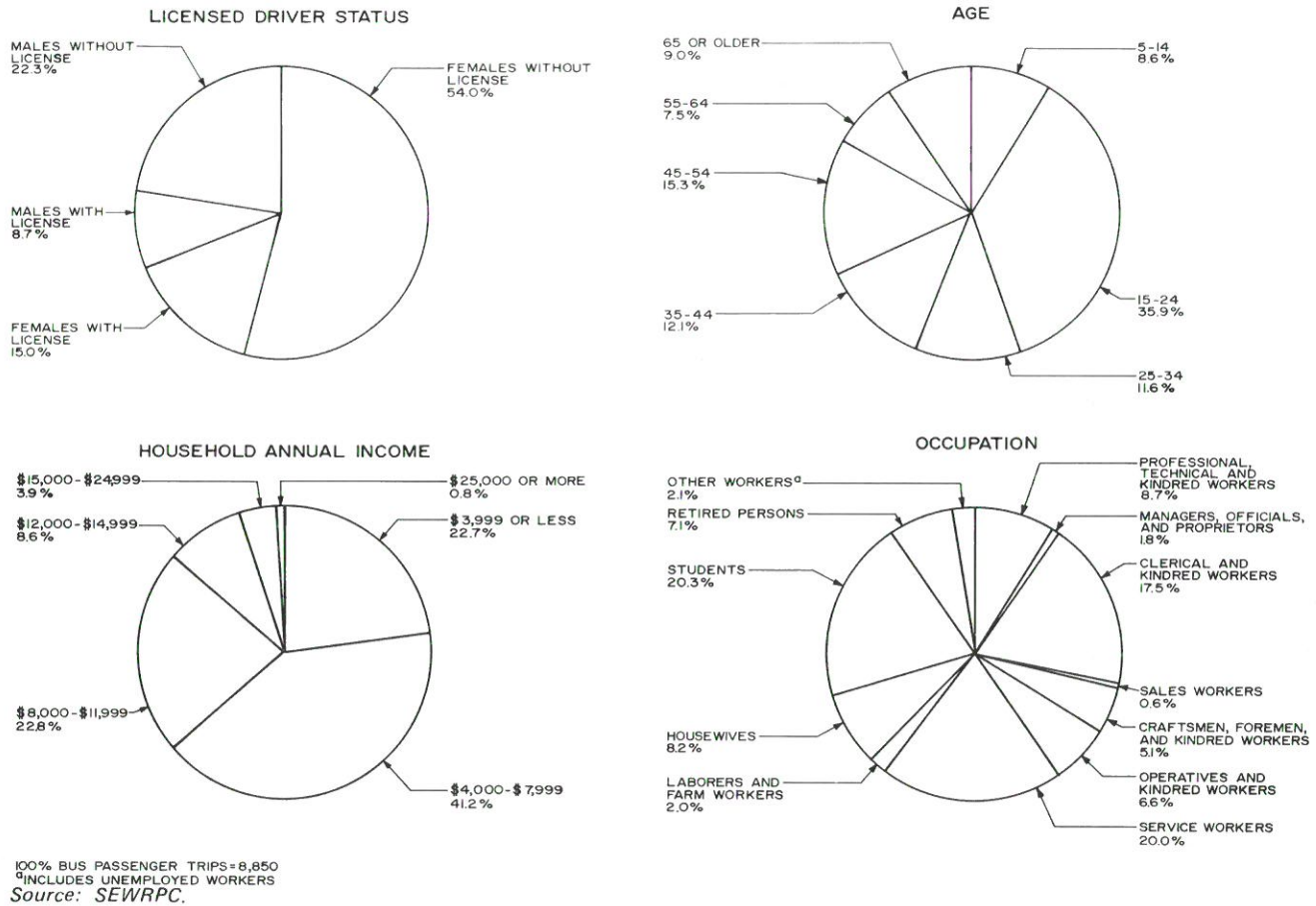
Occupation: The distribution of bus passenger travel to the Marquette-Wisconsin Avenue trip attractor by occupation of the tripmakers is substantially different from that found in the Near South Side trip attractor and the Capitol Court trip attractor. In these latter two trip attractors, more than half of the bus passengers were not formally employed. In the Marquette-Wisconsin Avenue trip attractor only about 35 percent of the bus passengers were not formally employed: about 20 percent of the bus passenger trips were made by students; about 8 percent were made by housewives; and about 7 percent were made by retired persons. It is notable that in the Marquette-Wisconsin Avenue trip attractor the proportion of employed/unemployed tripmakers was similar for total person travel and bus passenger travel. The largest proportions of bus passenger trips by employed persons were made by service workers, who accounted for 20 percent of the trips; clerical and kindred workers, who accounted for 18 percent of the trips; and professional, technical, and kindred workers, who accounted for 9 percent of the trips. The remaining 19 percent of the trips were made by persons employed in a variety of occupations (see Figure 15).

THE UWM-LOWER EAST SIDE TRIP ATTRACTOR

The area identified as the UWM-Lower East Side trip attractor is located immediately north of the Milwaukee central business district. As shown on Map 12, in 1972 the northern portion of this attractor was occupied primarily by the University of Wisconsin-Milwaukee campus (UWM) and Columbia Hospital. To the south of the UWM campus was a large residential area which occupied the center of this trip attractor. In the southern portion of the UWM-Lower East Side trip attractor were located many residences as well as numerous small businesses, several nursing homes, some large automobile dealerships, and St. Mary's

Figure 15

DISTRIBUTION OF BUS PASSENGER TRIPS TO THE MARQUETTE-WISCONSIN AVENUE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



Hospital. Adding to the diversity found in the southern portion of this attractor were the lakefront and the Milwaukee Yacht Club on the southeastern border and the Milwaukee River on the southwestern border. The principal streets which provide access to and within the attractor included Prospect Avenue, Farwell Avenue, Humboldt Avenue, Ogden Street, Brady Street, North Avenue, Locust Street, Oakland Avenue, Maryland Avenue, and Downer Avenue.

Total Internal Person Trips

As shown in Table 49, about 122,940 total internal person trips entered, exited, and occurred within the UWM-Lower East Side trip attractor on an average weekday in 1972. Of these person trips, 52,850 entered and 54,290 exited the trip attractor and 15,850 were made within the boundary of the trip attractor. Therefore, 68,650 internal person trips with destinations in the trip attractor occurred on an average weekday in 1972. About 77 percent were made by persons entering the attractor and about 23 percent were made by persons traveling from place to place within the trip attractor.

Table 49 also indicates that the distribution of trips entering the UWM-Lower East Side trip attractor by mode of travel was similar to the distribution by mode of the trips leaving the attractor, with about 63 percent of trips entering and 61 percent of the trips leaving the area being made by auto drivers; 25 percent and 27 percent, respectively, of the trips entering and leaving the area being made by auto passengers; 11 percent of the trips entering and leaving being made by bus passengers; and 1 percent of the trips entering and leaving being made by other modes. In comparison, trips made wholly within the trip attractor exhibited lower percentages of auto driver travel, 60 percent, and of bus passenger travel, 7 percent, and higher percentages of auto passenger travel, 31 percent, and of travel by other modes, 2 percent.

Map 12

LOCATION OF THE UWM-LOWER
EAST SIDE TRIP ATTRACTOR



LEGEND

— ATTRACTOR BOUNDARY

Source: SEWRPC.

Origins of Internal Person Trips

In 1972 travel to the UWM-Lower East Side trip attractor largely originated within and in the vicinity of the area, as shown on Map 13. Outside

the immediate vicinity of the trip attractor, trip origins were reported by the home interview survey to be widely disbursed throughout Milwaukee, Waukesha, and Ozaukee Counties.²⁵ Of the total person trips to the UWM-Lower East Side trip attractor on an average weekday, about 65,290 trips, or 95 percent, originated within Milwaukee County. Almost all of the remaining 3,360 trips, or 5 percent, originated in Ozaukee and Waukesha Counties. Since tripmaking between two areas is reciprocal, the distributional pattern of trip origins shown on Map 13 may be regarded as representative of the pattern of internal person trips leaving the trip attractor.

Time Pattern of Travel

Figure 16 shows the hourly flow of total person trips entering and leaving the UWM-Lower East Side trip attractor on an average weekday by trip purpose and the accumulation of persons within the boundary of the attractor during each hour of the day. As indicated in the figure, about 23,940 persons—about 99 percent of the peak accumulation—were reported by the 1972 home interview survey to be area residents²⁶ and in the area at the

²⁵ The home interview survey consisted of a sample of households at an overall 3 percent sample rate and a sample of group quarters at a 33 percent sample rate. The students living in dormitories at UWM and the residents of nursing homes in the area, therefore, would have been sampled at a 33 percent rate. Previous analysis of the effect of sample rate on the locational distribution of travel patterns indicates that as the sample rate declines, the distributional patterns become more localized, and as the sample rate increases, the distributional patterns become more diffused. The travel patterns presented for the UWM-Lower East Side attractor (and the Marquette-Wisconsin Avenue attractor) may reflect, to some extent, a heightened impact of the 33 percent sample rate data and, thereby, may not be directly comparable to the travel patterns presented for the other attractors. See "The Effect of Sample Rate on Socioeconomic and Travel Data Obtained Through Standard Home Interview: An Analysis of the Mass Transit Nonuser Survey," SEWRPC *Technical Record*, Vol. 4, No. 11.

²⁶ In comparison, the 1970 population of the UWM-Lower East Side trip attractor was 24,146 persons, according to the U. S. Bureau of the Census.

Table 49

**DISTRIBUTION OF INTERNAL PERSON TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN THE
UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL: 1972**

Direction of Travel	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other ^a			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Entering . .	33,300	63.1	13,330	25.2	5,770	10.9	400	0.8	52,800	100.0
Leaving. . .	33,350	61.4	14,430	26.6	6,230	11.5	280	0.5	54,290	100.0
Within . . .	9,540	60.2	4,910	31.0	1,140	7.2	260	1.6	15,850	100.0
Total	76,190	62.0	32,670	26.5	13,140	10.7	940	0.8	122,940	100.0

^a Includes passenger travel by school bus, taxi, truck, motorcycle, and charter bus.

Source: SEWRPC.

start of the trip day. This percentage represents the highest proportion of residents in the person accumulation found in any of the six areas. The relative inactivity of the early morning hours was followed by a sharp increase in activity at 7:00 a.m. and 8:00 a.m. in persons entering and leaving the area, as commuters journeyed to work and students traveled to attend school. By 11:00 a.m., the peak accumulation of the day, about 24,290 persons, was reached, followed by a slight decline in the accumulation of persons during the noon hour. This decline continued through 4:00 p.m., when the lowest accumulation of persons during the day was reached. As demonstrated in Figure 16, the primary purpose of persons leaving the UWM-Lower East Side trip attractor was to return home. Travel into the area for social-recreational purposes remained fairly constant during the later morning and early afternoon hours, then showed a substantial increase in the evening from 6:00 p.m. through 8:00 p.m. The peak accumulation of persons in the evening occurred between 6:00 p.m. and 7:00 p.m., with about 24,000 persons reported to be in the area. During the evening hours, as trips entered the trip attractor for personal business, social-recreational, and shopping purposes, the accumulation of persons was generally sustained as persons also returned home for the night.

Mode of Travel by Trip Purpose

Of the 68,650 internal person trips destined for the UWM-Lower East Side trip attractor on an average weekday, auto driver travel accounted for about 42,840 trips, or 62 percent; auto passenger travel accounted for about 18,240 trips, or 27 percent; bus passenger travel accounted for about 6,910 trips, or 10 percent; and travel by other modes accounted for about 660 trips, or 1 percent. As shown in Table 50, auto driver travel to the UWM-Lower East Side trip attractor consisted primarily of trips to home. Trips to return home and trips for social-recreational purposes were the primary purposes of auto passenger travel to this trip attractor. Bus passenger trips were made principally to return home and to attend school. In total, trips to return home accounted for about 24,930 trips, or about 36 percent, of total person travel. The remaining person trips were evenly divided among the remaining trip purposes. About 11,360 person trips, or 17 percent, were made for social-recreational purposes; about 9,900 person trips, or 14 percent, were made for personal business purposes; about 8,390 person trips, or 12 percent, were made to attend work; about 8,270 person trips, or 12 percent, were made to attend school; and about 5,800 person trips, or 9 percent, were made for shopping purposes.

Land Use

Of the 68,650 internal person trips destined for the UWM-Lower East Side trip attractor, about 29,370, or 43 percent, were made to residences; about 22,490, or 33 percent, were made to governmental or institutional facilities; about 14,430, or 21 percent, were made to commercial establishments; about 730, or 1 percent, were made to industrial land uses; and about 1,630, or 2 percent, were made to a variety of other land uses. Trips to residential land uses were made primarily to return home; trips to commercial land uses were made primarily for shopping and social-recreational purposes; and trips to industrial land uses were

Map 13

ORIGINS OF INTERNAL PERSON TRIPS TO THE UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY: 1972

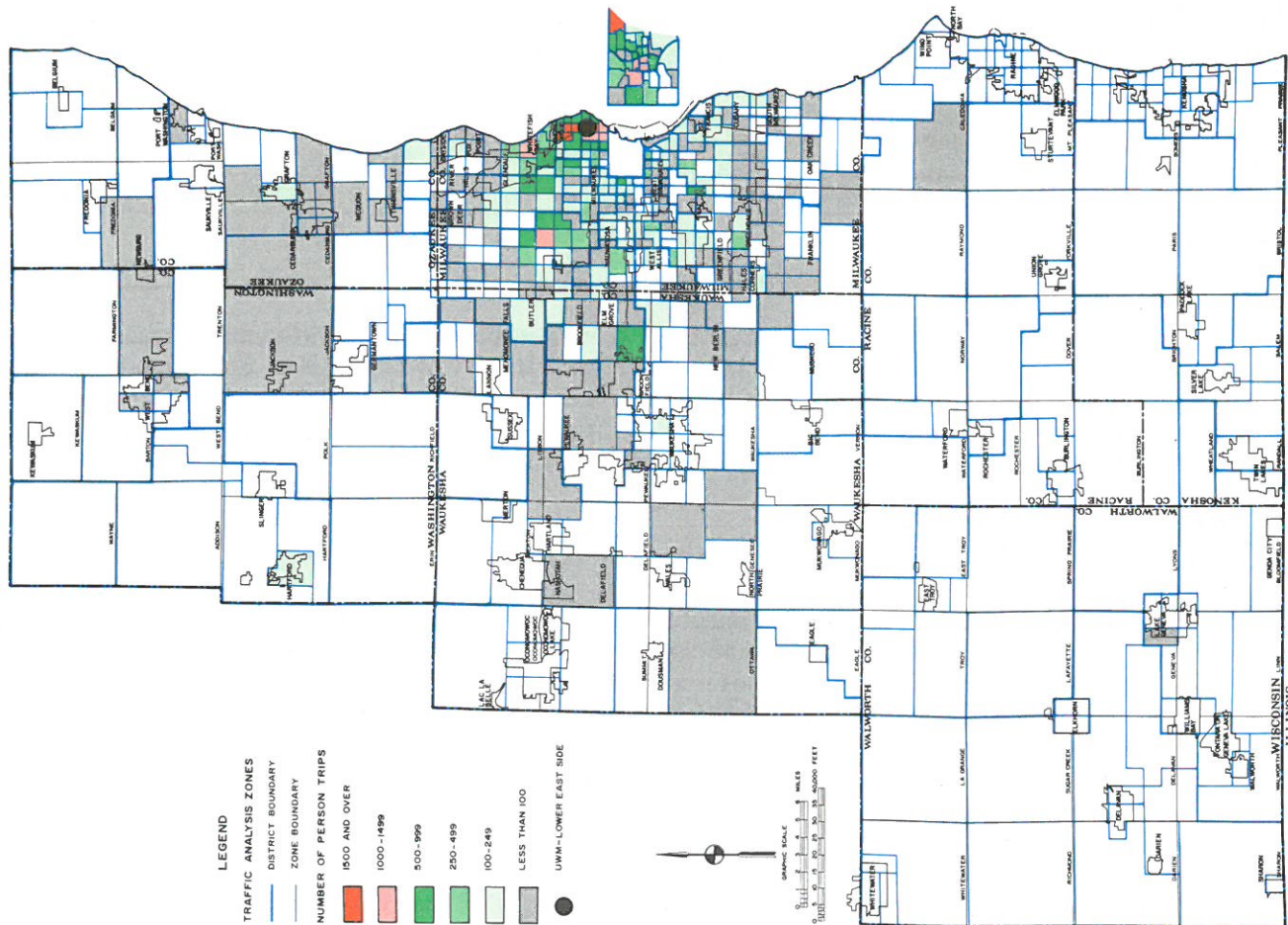
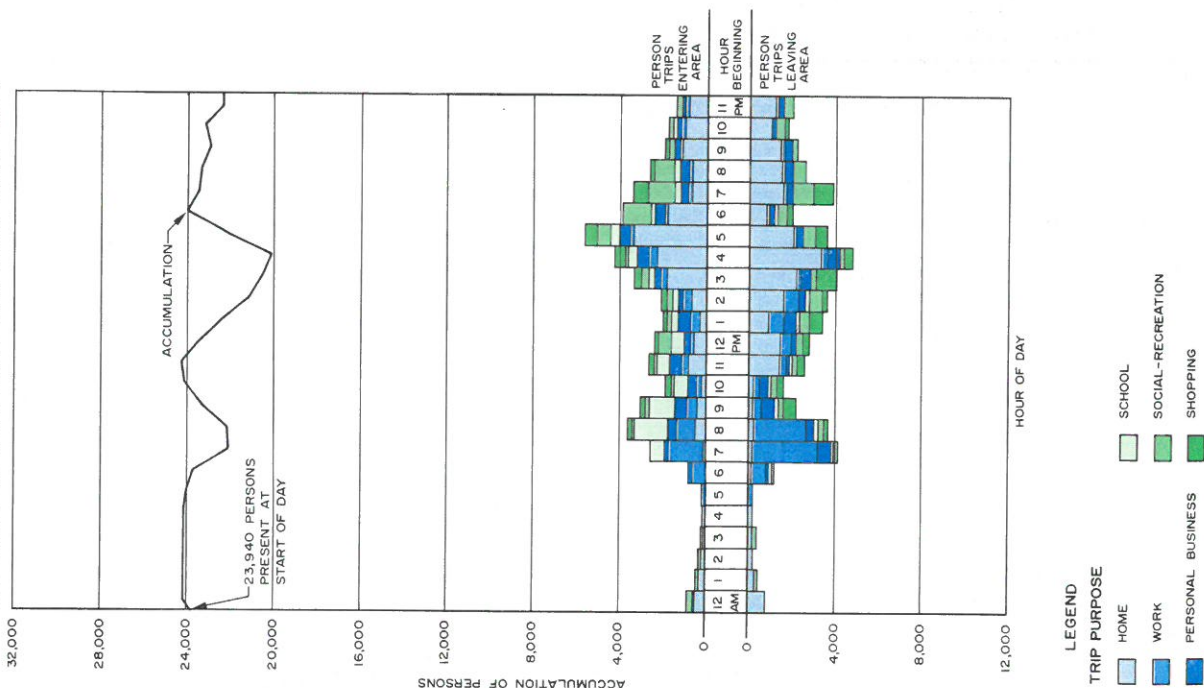


Figure 16

ACCUMULATION OF PERSONS AND NUMBER OF PERSON TRIPS ENTERING AND LEAVING THE UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY AND TRIP PURPOSE: 1972



Source: SEWRPC.

Table 50

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE UWM-LOWER EAST SIDE
TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL AND TRIP PURPOSE: 1972**

Trip Purpose	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home.	14,800	34.6	6,550	35.9	3,390	49.1	190	28.8	24,930	36.3
Work	6,300	14.7	820	4.5	1,090	15.8	180	27.3	8,390	12.2
Personal Business . . .	6,840	16.0	2,630	14.4	390	5.6	40	6.1	9,900	14.4
School	5,750	13.4	1,000	5.5	1,450	21.0	70	10.6	8,270	12.0
Social-Recreational . .	5,450	12.7	5,420	29.7	400	5.8	90	13.6	11,360	16.6
Shopping.	3,700	8.6	1,820	10.0	190	2.7	90	13.6	5,800	8.5
Total	42,840	100.0	18,240	100.0	6,910	100.0	660	100.0	68,650	100.0

Source: SEWRPC.

Table 51

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE UWM-LOWER EAST SIDE
TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE AND TRIP PURPOSE: 1972**

Trip Purpose	Land Use										Total	
	Residential		Commercial		Industrial		Governmental-Institutional		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home.	23,780	95.4	--	--	--	--	1,150	4.6	--	--	24,930	100.0
Work	500	5.9	1,850	22.1	620	7.4	5,380	64.1	40	0.5	8,390	100.0
Personal Business . . .	1,900	19.2	2,710	27.4	30	0.3	5,010	50.6	250	2.5	9,900	100.0
School	--	--	110	1.3	--	--	8,160	98.7	--	--	8,270	100.0
Social-Recreational . .	3,190	28.1	4,170	36.7	--	--	2,660	23.4	1,340	11.8	11,360	100.0
Shopping.	--	--	5,590	96.4	80	1.4	130	2.2	--	--	5,800	100.0
Total	29,370	42.8	14,430	21.0	730	1.1	22,490	32.7	1,630	2.4	68,650	100.0

Source: SEWRPC.

made primarily to attend work. Trips to governmental-institutional land uses were made primarily to attend school, attend work, or conduct personal business. Within the UWM-Lower East Side trip attractor, about 64 percent of the work trips, about 51 percent of the personal business trips, and about 99 percent of the school trips were destined for governmental-institutional sites. Commerical establishments attracted 37 percent of the social-recreational trips and 96 percent of the shopping trips (see Table 51).

Time Expended Between Trips

As shown in Table 52, persons traveling to the UWM-Lower East Side trip attractor for the purpose of attending work spent the longest period of time in the area prior to making another trip. Of the trips made to this trip attractor for work and school purposes, about 67 percent and 46 percent, respectively, resulted in visits of longer than four hours. The school-purpose visits tended to be briefer than the work-purpose visits. About 50 percent of the work-purpose visits lasted eight hours or longer. The largest percentage of school-purpose visits, about 40 percent, lasted from 4 to 7.9 hours. A minimum of 85 percent of the visits made for personal business, social-recreational, or shopping purposes lasted less than four hours. Of these brief visits, the longest in duration were those made for social-recreational purposes, with about 46 percent of the visits lasting from one to four hours and 39 percent lasting less than one hour. Of the trip attractors discussed in this article, this area received the largest percentage of trips for social-recreational purposes lasting longer than four hours, about 15 percent. The visits for personal business purposes were briefer, with about 39 percent lasting from one to four hours and about 55 percent lasting less than one hour. The

Table 52

**DISTRIBUTION OF TIME EXPENDED FOR EACH TRIP PURPOSE ON AN
AVERAGE WEEKDAY IN THE UWM-LOWER EAST SIDE TRIP ATTRACTOR: 1972**

Duration of Visit (hours)	Percent of Time per Trip Purpose ^a					
	Work	Personal Business	School	Social- Recreational	Shopping	Total
Less than 1.0	12.7	54.9	8.0	38.8	81.8	36.3
1.0 - 1.9	8.5	23.8	10.7	19.8	7.9	14.8
2.0 - 3.9	11.4	15.5	35.1	26.8	7.1	20.5
4.0 - 7.9	17.6	5.3	40.2	14.6	--	16.6
8.0 and More	49.8	0.5	6.0	--	3.2	11.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

^a Trips to home are not included.

Source: SEWRPC.

briefest visits to the UWM-Lower East Side trip attractor were made by shoppers. About 15 percent of the shoppers made visits of from one to four hours, while about 82 percent of the shoppers were in the area for less than one hour prior to initiating another trip. In total, the most frequently occurring visit to the UWM-Lower East Side trip attractor—representing about 36 percent of total person trips made to the area—lasted less than one hour. About 72 percent of the person trips made to the UWM-Lower East Side trip attractor resulted in visits of less than four hours, and 28 percent in visits of four hours or longer.

Socioeconomic Characteristics

There is a tendency to categorize persons and activities in any university or college area into a limited set of preconceived characteristics. Although students have an obvious influence on the tripmaking to the area, the diverse socioeconomic characteristics presented below indicate that trips are made to this area by persons from all socioeconomic backgrounds commonly found in the Southeastern Wisconsin Region.

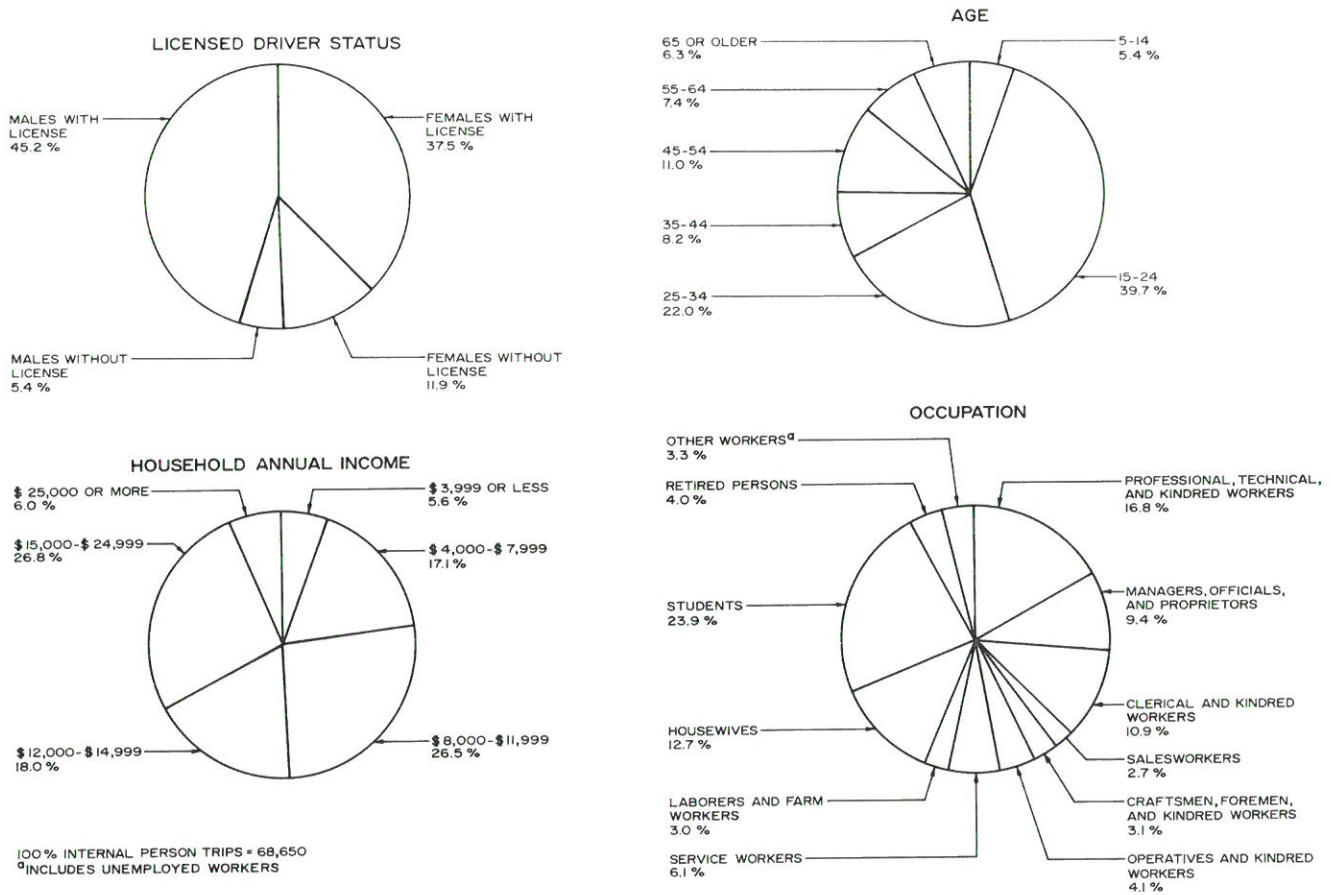
Licensed Driver Status: As shown in Figure 17, about 51 percent of the trips to the UWM-Lower East Side trip attractor were made by males and about 49 percent were made by females. About 83 percent of the total person trips to the area were made by licensed drivers—about 45 percent by males and about 38 percent by females. Females made most of the trips which were made by persons who do not hold a driver's license, about 8,080 trips, or 12 percent of the total person trips. In contrast, unlicensed males made 5 percent of the total person trips to the area. On an average weekday, unlicensed females made about 3,180 bus passenger trips into the area, 46 percent of the total bus passenger travel recorded to be destined for this area on an average weekday.

Age: Figure 17 indicates the influence of the student population on travel to the area. The largest volume of travel to the trip attractor, about 40 percent of the total, was made by persons from 15 through 24 years of age. About 5 percent of the trips were made by persons from 5 through 14 years of age; about 22 percent by persons from 25 through 34 years of age; about 8 percent by persons from 35 through 44 years of age; about 11 percent by persons from 45 through 54 years of age; about 7 percent by persons from 55 through 64 years of age; and about 6 percent by persons 65 years of age or older. In total, only 49 percent of the trips made to the UWM-Lower East Side trip attractor were made by persons between 25 and 65 years of age. Tripmaking by persons less than five years of age was not recorded in the 1972 home interview survey.

Income: As shown in Figure 17, in 1972 persons from households with annual incomes of from \$8,000 through \$11,999 and from \$15,000 through \$24,999 accounted for the greatest proportion of total trips to the UWM-Lower East Side trip attractor—about 27 percent each. Of the remaining income categories, persons from households with annual incomes of from \$12,000 through \$14,999 made 18 percent of the

Figure 17

DISTRIBUTION OF INTERNAL PERSON TRIPS TO THE UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



Source: SEWRPC.

trips and persons from households earning from \$4,000 through \$7,999 made 17 percent of the trips. Those households with annual incomes in excess of \$25,000 and those with annual incomes of less than \$4,000 each accounted for approximately 6 percent of total person travel to this trip attractor.

Occupation: As shown in Figure 17, the most predominant occupational group to be found among trip-makers to the UWM-Lower East Side trip attractor was students, who made 24 percent of the person trips to the area.²⁷ About 13 percent of the person trips were made by housewives and about 4 percent were made by retired persons. In total, therefore, about 41 percent of the person trips to this trip attractor were made by persons who were not formally employed. The remaining 59 percent of the trips were made by a variety of workers who were categorized in nine occupational groups, the largest of which consisted of professional, technical, and kindred workers.

Automobile Availability

Like tripmakers to the Marquette-Wisconsin Avenue trip attractor, tripmakers to the UWM-Lower East Side trip attractor may have had significantly fewer autos available than did tripmakers to the other attractors examined in this article. As shown in Table 53, about 12 percent of the person trips to this trip attractor

²⁷ It should be noted that walking trips, which may constitute a major "mode of travel" for students, are not considered to be "person trips" and, consequently, as such, were not inventoried in the home interview travel survey.

Table 53

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE UWM-LOWER
EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY MODE OF TRAVEL
AND THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD: 1972**

Autos Available per Household	Mode of Travel								Total	
	Auto Driver		Auto Passenger		Bus Passenger		Other			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
0	820	1.9	3,950	21.7	3,380	48.9	230	34.9	8,380	12.2
1	23,150	54.0	8,470	46.4	2,830	41.0	230	34.9	34,680	50.5
2	14,310	33.4	4,840	26.5	580	8.4	200	30.2	19,930	29.0
3 or More	4,560	10.7	980	5.4	120	1.7	--	--	5,660	8.3
Total	42,840	100.0	18,240	100.0	6,910	100.0	660	100.0	68,650	100.0

Source: SEWRPC.

Table 54

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR THE UWM-LOWER
EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE NUMBER OF
AUTOMOBILES AVAILABLE PER HOUSEHOLD AND TRIP PURPOSE: 1972**

Trip Purpose	Autos Available per Household								Total	
	0		1		2		3 or More			
	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent	Number of Trips	Percent
Home.	5,020	59.9	14,850	42.8	4,030	20.2	1,030	18.2	24,930	36.3
Work	640	7.6	3,920	11.3	3,130	15.7	700	12.4	8,390	12.2
Personal Business . . .	630	7.5	5,220	15.1	2,730	13.7	1,320	23.3	9,900	14.4
School	260	3.1	2,830	8.2	3,990	20.0	1,190	21.0	8,270	12.0
Social-Recreational . .	1,400	16.7	4,930	14.2	3,820	19.2	1,210	21.4	11,360	16.6
Shopping.	430	5.2	2,930	8.4	2,230	11.2	210	3.7	5,800	8.5
Total	8,380	100.0	34,680	100.0	19,930	100.0	5,660	100.0	68,650	100.0

Source: SEWRPC.

were made by persons from households with no auto. Of the 88 percent of trips made by persons from households with one or more automobiles available, about 51 percent were made by persons from one-auto households; about 29 percent by persons from two-auto households; and about 8 percent by persons from three-or-more-auto households. Tripmaking by persons from households with no auto was found to account for less than 2 percent of the auto driver trips, about 22 percent of the auto passenger trips, and about 49 percent of the bus passenger trips. About 87 percent of the auto driver trips, about 73 percent of the auto passenger trips, and about 49 percent of the bus passenger trips were made by persons from one- and two-auto households.

Table 54 presents the distribution of person trips destined for the UWM-Lower East Side trip attractor by the number of automobiles available by trip purpose. A strong correlation may be observed between the numbers of automobiles available per household and the percentage of trips made to the area for the purpose of returning home. About 60 percent of the tripmaking made by persons from households with no auto, about 43 percent of the tripmaking by persons from one-auto households, about 20 percent of the tripmaking by persons from two-auto households, and about 18 percent of the tripmaking by persons from three-or-more-auto households was made for the purpose of returning home.

The largest volume of person trips to this trip attractor was made by persons from one-auto households for the purpose of returning home—about 14,850 trips. Next in frequency were trips by persons from one-auto households for the purpose of conducting personal business, about 5,220 trips, and to participate in social-recreational activities, about 4,930 trips, followed by trips by persons from households with no auto made for the purpose of returning home, about 5,020 trips. No more than 4,030 trips were reported in any other category of trip purpose by automobile availability.

Bus Passenger Profile

In 1972 the UWM-Lower East Side trip attractor was served by the Milwaukee and Suburban Transport Corporation.²⁸ The home interview survey reported about 5,770 bus passenger trips entering the trip attractor, about 6,230 bus passenger trips leaving the trip attractor, and about 1,140 bus passenger trips with both ends within the trip attractor boundary on an average weekday. In total, therefore, there were about 13,140 bus passenger trips with at least one trip end within the trip attractor on an average weekday. These 13,140 trips represented about 7 percent of the 179,100 bus passenger²⁹ trips found by the home interview survey to be made daily within the service area of the Milwaukee system and about 11 percent of the 122,940 person trips made to, from, and within the UWM-Lower East Side trip attractor on an average weekday.

Time Pattern of Travel: As shown in Table 55, the general direction of bus passenger travel in the UWM-Lower East Side trip attractor is out of the trip attractor in the morning and into the trip attractor in the late afternoon. The peak period of bus passenger travel entering the area was 3:00 p.m. through 5:59 p.m. and the peak period of bus passenger travel leaving the area was 6:00 a.m. through 9:59 a.m. Almost all bus passenger trips made during the 3:00 p.m. through 5:59 p.m. period were for the purpose of returning home. Bus passenger trips leaving the area from 6:00 a.m. through 9:59 a.m. were made primarily for the purpose of going to work, while bus passenger trips entering the area during this morning period were almost evenly divided between the purposes of attending school and going to work. Bus passenger trips entering the area from 6:00 a.m. through 9:59 a.m. represented about 21 percent of the total bus passenger trips into the trip attractor; from 10:00 a.m. through 2:59 p.m., about 25 percent; from 3:00 p.m. through 5:59 p.m., about 36 percent; and from 6:00 p.m. through 5:59 a.m., about 18 percent. Bus passenger trips leaving the area from 6:00 a.m. through 9:59 a.m. represented about 38 percent of the total bus passenger trips out of the attractor; from 10:00 a.m. through 2:59 p.m., about 25 percent; from 3:00 p.m. through 5:59 p.m., about 18 percent; and from 6:00 p.m. through 5:59 a.m., about 19 percent.

Trip Purpose: As shown in Table 56, of total bus passenger trips entering and occurring within the UWM-Lower East Side trip attractor, i.e., those trips destined for the trip attractor, about 3,390, or 49 percent, were made to return home. This percentage is substantially higher than the 36 percent of total person trips found to be destined for home within the trip attractor. Trips to school accounted for about 1,450 trips, or 21 percent of the total bus passenger trips destined for the attractor, and trips to work accounted for about 1,090 trips, or 16 percent. Bus passenger trips out of the area were made primarily to return home—about 2,460 trips, or 39 percent; and to go to work—about 2,110 trips, or 34 percent. In comparison to total person trips destined for the area, proportionately more bus passenger trips were made for home, work, and school purposes, and proportionately fewer were made for personal business, social-recreational, and shopping purposes.

Land Use: As shown in Table 57, of the 6,910 bus passenger trips with destinations in the trip attractor, about 3,400, or 49 percent, were made to residential locations and about 2,710, or 39 percent, were made to governmental-institutional facilities. Only 640 trips, or about 9 percent, were destined for commercial

²⁸ On July 1, 1975, Milwaukee County purchased the Milwaukee and Suburban Transport Corporation. This corporation has since been renamed the Milwaukee County Transit System.

²⁹ In 1972 the SEWRPC also conducted special one-day surveys of mass transit passengers. The survey findings indicated that on the day of the Milwaukee area survey, about 198,900 passengers were carried on the Milwaukee system. Data from the transport corporation reported an average of 181,650 revenue passengers per weekday in 1972.

Table 55

DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING AND LEAVING THE UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TIME OF DAY: 1972

Time of Day	Bus Passenger Trips			
	Entering		Leaving	
	Number	Percent	Number	Percent
6:00 a.m. through 9:59 a.m.	1,230	21.3	2,390	38.3
10:00 a.m. through 2:59 p.m.	1,440	24.9	1,580	25.4
3:00 p.m. through 5:59 p.m.	2,070	35.9	1,090	17.5
6:00 p.m. through 5:59 a.m.	1,030	17.9	1,170	18.8
Total	5,770	100.0	6,230	100.0

Source: SEWRPC.

Table 56

DISTRIBUTION OF BUS PASSENGER TRIPS ENTERING, LEAVING, AND OCCURRING WITHIN THE UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY TRIP PURPOSE: 1972

Trip Purpose	Bus Passenger Trips							
	Entering		Within		Total Trips Destined for Trip Attractor		Leaving	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Home.	2,730	47.3	660	57.9	3,390	49.1	2,460	39.4
Work.	920	16.0	170	14.9	1,090	15.8	2,110	33.9
Personal Business.	350	6.1	40	3.5	390	5.6	450	7.2
School.	1,260	21.8	190	16.7	1,450	21.0	160	2.6
Social-Recreational.	340	5.9	60	5.2	400	5.8	360	5.8
Shopping.	170	2.9	20	1.8	190	2.7	690	11.1
Total	5,770	100.0	1,140	100.0	6,910	100.0	6,230	100.0

Source: SEWRPC.

land uses and about 160, or 2 percent, were destined for industrial sites. No trips to other land uses were reported. Bus passenger trips to residential land uses were made primarily for the purpose of returning home. Trips to governmental-institutional land uses were made predominantly to attend school and, to a much lesser extent, to attend work. Bus passenger trips to commercial establishments were made primarily for shopping, social-recreational, and personal business purposes. All bus passenger trips to industrial sites were made for work purposes.

Socioeconomic Characteristics: As indicated in the data presented below, the distribution of bus passenger travel by socioeconomic characteristics of the tripmakers differs substantially from the socioeconomic distribution of total person travel to the UWM-Lower East Side trip attractor.

Table 57

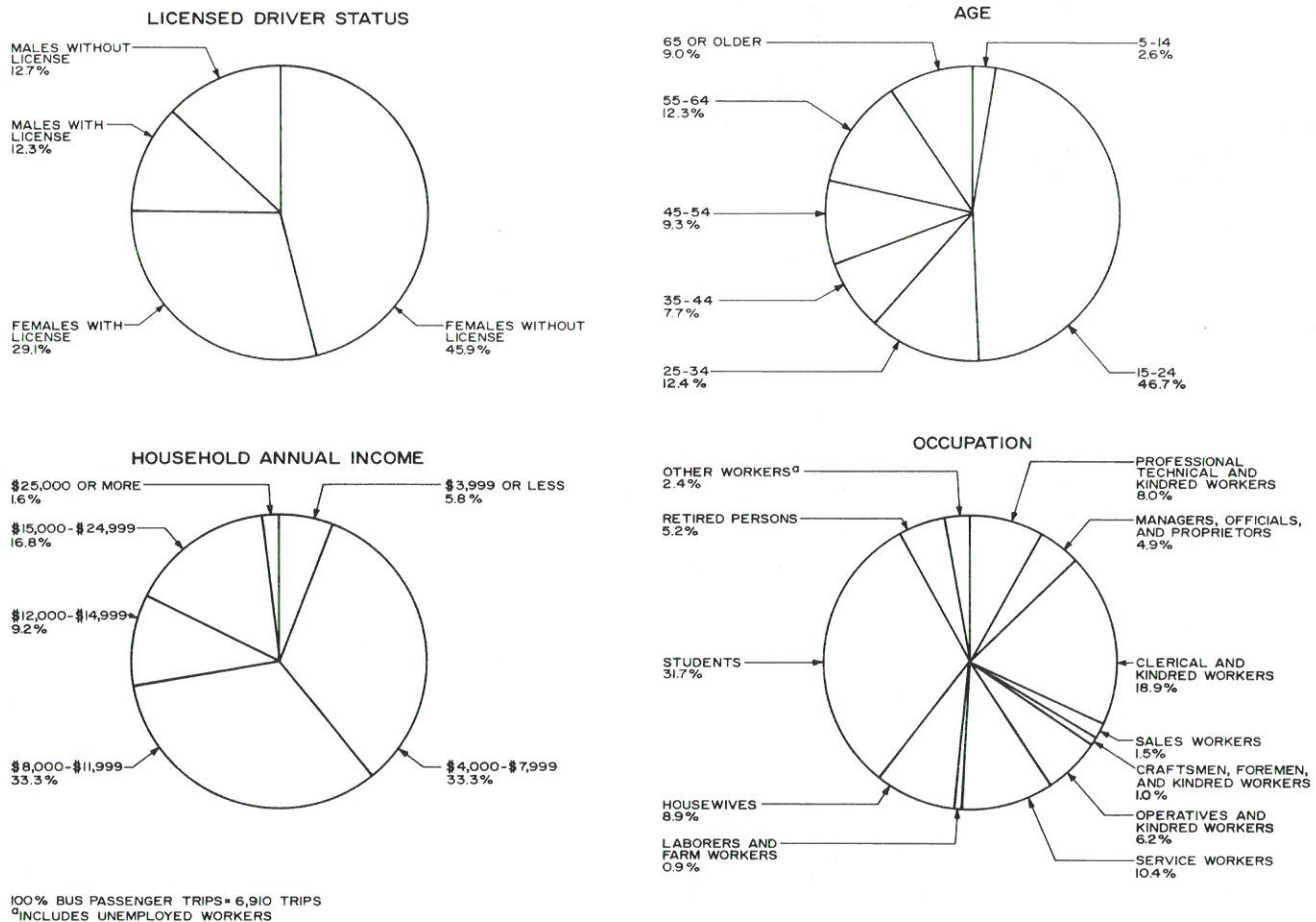
DISTRIBUTION OF BUS PASSENGER TRIPS DESTINED FOR THE UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY LAND USE: 1972

Land Use	Bus Passenger Trips	
	Number	Percent
Residential.	3,400	49.2
Commercial.	640	9.3
Industrial.	160	2.3
Governmental-Institutional.	2,710	39.2
Other.	--	--
Total	6,910	100.0

Source: SEWRPC.

Figure 18

DISTRIBUTION OF BUS PASSENGER TRIPS TO THE UWM-LOWER EAST SIDE TRIP ATTRACTOR ON AN AVERAGE WEEKDAY BY THE SOCIOECONOMIC CHARACTERISTICS OF THE TRIPMAKERS: 1972



Source: SEWRPC.

Licensed Driver Status: As shown in Figure 18, about 75 percent of the bus passenger trips to the UWM-Lower East Side trip attractor were made by females and about 25 percent were made by males. Of total bus passenger trips destined for the area, about 59 percent were made by persons who did not hold a driver's license: about 46 percent of the trips were made by unlicensed females and about 13 percent were made by unlicensed males. Of the remaining 41 percent—those trips made by licensed drivers—about 29 percent were made by females and about 12 percent were made by males. This distribution differs substantially from the distribution of total tripmaking to the area by licensed driver status. There were substantially greater proportions of females and of persons without driver's licenses among the bus passengers than among the total tripmakers to the area on an average weekday.

Age: Persons from 15 through 24 years of age, who accounted for about 40 percent of the total person travel to this area, made about 46 percent of the bus passenger trips destined for the UWM-Lower East Side attractor. As shown in Figure 18, persons from 55 through 64 years of age accounted for about 13 percent of the bus passenger trips made on an average weekday, and persons from 25 through 34 years of age made about 12 percent of the bus passenger trips. Persons in each of the remaining four age groups each accounted for less than 10 percent of the total bus passenger trips. The only substantial difference in the proportions of bus passenger travel by age group and total travel by age group occurs for persons 25 through 34 years of age, who accounted for only 12 percent of the bus passenger trips but about

22 percent of the total person trips to the area. It is notable that an almost identical correlation can be drawn for bus passenger travel and total person travel by age group in the Marquette-Wisconsin Avenue trip attractor.

Income: As shown in Figure 18, in 1972 persons from households earning from \$4,000 through \$11,999 a year accounted for two-thirds of the bus passenger trips to the UWM-Lower East Side trip attractor on an average weekday, and persons from households earning from \$4,000 through \$7,999 a year and from \$8,000 through \$11,999 a year each accounted for 33 percent of the bus passenger trips to the area. Of the remaining income categories, about 17 percent of the bus passenger trips were made by persons from households earning from \$15,000 through \$24,999 a year; about 9 percent were made by persons from households earning from \$12,000 through \$14,999 a year; about 6 percent were made by persons from households earning \$3,999 or less a year; and about 2 percent were made by persons from households earning \$25,000 or more a year. It can be seen by comparing the distribution by household income of total person trips with that of total bus passenger trips that persons from households earning from \$4,000 through \$11,999 a year accounted for a much greater proportion of bus passenger travel than they did total person travel, that persons from households earning \$3,999 or less a year accounted for about the same proportion of bus passenger travel as they did total person travel, and that persons from households earning \$12,000 or more a year accounted for smaller proportions of bus passenger travel than they did total person travel.

Occupation: Student tripmaking accounted for a higher proportion of bus passenger travel to the UWM-Lower East Side trip attractor than to any other trip attractor in the Milwaukee system. As shown in Figure 18, about 32 percent of the bus passenger trips were made by students. In addition, about 9 percent of the bus passenger trips to this attractor were made by housewives and about 5 percent were made by retired persons. It is notable that in the UWM-Lower East Side trip attractor, the proportion of employed/unemployed tripmakers was similar for total person travel and bus passenger travel. The largest proportions of bus passenger trips by employed persons were made by clerical and kindred workers, who accounted for 19 percent of the trips; service workers, who accounted for 10 percent of the trips; and professional, technical, and kindred workers, who accounted for 8 percent of the trips. The remaining 17 percent of the trips were made by persons employed in a variety of other occupations.

SUMMARY AND CONCLUSION

The six trip attractors discussed in this article—Kenosha, Racine, Near South Side, Capitol Court, Marquette-Wisconsin Avenue, and UWM-Lower East Side—contribute significantly to tripmaking within the entire Southeastern Wisconsin Region. No other areas of equivalent size other than the Milwaukee central business district (CBD) receive such concentrations of person trips. In total, trips to, from, and within these six trip attractors accounted for about 14 percent of the 4,504,900 trips made in the Region on an average weekday in 1972. On an average weekday, bus passenger trips to, from, and within these six trip attractor areas accounted for about 48 percent of the bus passenger trips within the service area of the Kenosha transit system, about 65 percent of the bus passenger trips within the service area of the Racine transit system, and about 25 percent of the bus passenger trips within the service area of the Milwaukee transit system. For each of the six areas, the bus passenger profiles were presented in order to underscore the important relationships between these trip attractors and the local transit services, as well as to provide both bus passenger trip data and pertinent comparisons to total trip attractor person travel which may be useful to area transit authorities. Community and commercial enterprises in the Region may find the travel patterns in these six major trip attractors useful in their pursuits of providing service for their clients, meeting the needs of specific groups of tripmakers, or making available any of a wide variety of public and private services. Below is a brief summary of the salient findings for each of the six areas.

Kenosha Trip Attractor

A total of 73,790 internal person trips with destinations in the Kenosha trip attractor were made on an average weekday in 1972. Of these internal person trips, auto driver travel accounted for about 52,730, or 71 percent; auto passenger travel accounted for about 19,600, or 27 percent; bus passenger travel accounted for about 680, or about 1 percent; and travel by other modes accounted for about 780, or about

1 percent. About 24,180 trips, or 33 percent of the total person trip destinations, were made to conduct personal business, the trip purpose which accounted for the most travel to this trip attractor. Second in frequency were the 19,940 trips made to work, which accounted for about 27 percent of the total person trips. Less frequently occurring trip purposes included about 11,900 trips made to home, accounting for 16 percent of the total; about 7,760 shopping trips, accounting for 11 percent; about 7,750 trips made for social-recreational purposes, accounting for 11 percent; and about 2,260 trips made to school, accounting for 3 percent. Of the total person trips destined for the Kenosha trip attractor, about 32,500, or 44 percent, were made to commercial establishments; about 16,000, or 22 percent, ended at residences; about 12,350, or 17 percent, were made to governmental or institutional facilities; about 11,650, or 16 percent, were made to industrial sites; and about 1,280, or 2 percent, were made to a variety of other land uses. The most frequently occurring visit to the Kenosha trip attractor lasted less than one hour. About 72 percent of the trips to this trip attractor area resulted in visits of less than four hours and 28 percent in visits of four hours or longer. On an average weekday about 1,380 bus passenger trips had at least one trip end within the trip attractor boundary. These 1,380 bus passenger trips represented about 48 percent of the total 2,900 bus passenger trips reported in the 1972 home interview survey to be made daily within the service area of the Kenosha transit system and about 1 percent of the 129,380 person trips made to, from, and within the Kenosha trip attractor on an average weekday. The distribution of bus passenger trips by the socioeconomic characteristics of the tripmakers was found to differ substantially from the similar array of total person travel destined for the Kenosha trip attractor.

Racine Trip Attractor

A total of 54,760 internal person trips with destinations in the Racine trip attractor were made on an average weekday in 1972. Of these internal person trips, auto driver travel accounted for about 36,820, or 67 percent; auto passenger travel accounted for about 15,910, or 29 percent; bus passenger travel accounted for about 940, or 2 percent; and travel by other modes accounted for about 1,090, or 2 percent. Trips destined for work or home and trips made to conduct personal business together accounted for about 73 percent of the travel to this attractor, with about 13,840 trips, or 25 percent, being destined for work; about 13,560 trips, or 25 percent, being destined for home; and about 12,770 trips, or 23 percent, being made to conduct personal business. Less frequently occurring purposes included about 6,220 shopping trips accounting for 11 percent of the total; about 6,020 trips made for social recreational purposes, also accounting for 11 percent; and about 2,350 trips to school, accounting for 4 percent. Of total person trips to the Racine trip attractor, about 24,520 trips, or 45 percent, were destined for commercial establishments. In contrast, about 15,250 trips, or 28 percent, ended at residences; about 9,690, or 18 percent, were made to governmental or institutional facilities; about 3,900, or 7 percent, were made to industrial sites; and about 1,380, or over 2 percent, were made to a variety of other land uses. The most frequently occurring visit to the Racine trip attractor, representing 44 percent of the total person travel to this attractor, lasted less than one hour. In total, about 74 percent of the trips to the Racine trip attractor resulted in visits of less than four hours and 26 percent in visits of four hours or longer. On an average weekday about 1,820 bus passenger trips had at least one trip end within the trip attractor boundary. These 1,820 bus passenger trips represented about 65 percent of the total 2,800 bus passenger trips found by the 1972 home interview survey to be made daily within the service area of the Racine system and about 2 percent of the total 96,080 person trips made to, from, and within the Racine trip attractor on an average weekday. The distribution of bus passenger trips by the socioeconomic characteristics of the tripmakers was found to differ substantially from the similar array of total person travel destined for the Racine trip attractor.

Near South Side Trip Attractor

A total of 51,460 internal person trips with destinations in the Near South Side trip attractor were made on an average weekday in 1972. Of these internal person trips, auto driver travel accounted for about 32,460, or 63 percent; auto passenger trips accounted for about 12,360, or about 24 percent; bus passenger travel accounted for about 6,020, or 12 percent; and travel by other modes accounted for about 620, or about 1 percent. About 17,130 trips, or 33 percent of the total person trip destinations, were made to attend work, the trip purpose which accounted for the most travel to this attractor. Next in importance were trips made to return home, which accounted for 11,220 trips, or about 22 percent of the total; trips made to conduct personal business, which accounted for 9,370 trips, or about 18 percent of the total; and trips made for shopping purposes, which accounted for 8,930 trips, or about 17 percent of the total. Trip pur-

poses which generated less travel included trips to social-recreational activities, which accounted for about 3,340 trips, or 7 percent, and trips to attend school, which accounted for about 1,470 trips, or 3 percent. Of total person trips to the Near South Side trip attractor, about 21,250, or 41 percent, were destined for commercial establishments; about 14,100, or 27 percent, ended at residences; about 10,830, or 21 percent, were made to industrial sites; about 4,830, or 9 percent, were made to governmental or institutional facilities; and about 450, or 1 percent, were made to a variety of other land uses. The most frequently occurring visit to the Near South Side trip attractor, representing 41 percent of travel to this area, lasted less than one hour. About 64 percent of the trips made to the Near South Side trip attractor resulted in visits of less than four hours and 36 percent in visits of four hours or longer. On an average weekday, about 10,420 bus passenger trips had at least one trip end within the attractor boundary. These 10,420 trips represented about 6 percent of the total 179,100 bus passenger trips found by the 1972 home interview survey to be made daily within the service area of the Milwaukee system and about 11 percent of the total 92,800 person trips made to, from, and within the Near South Side trip attractor on an average weekday. The distribution of bus passenger trips by the socioeconomic characteristics of the tripmakers was found to differ substantially from the similar array of total person travel destined for the Near South Side trip attractor.

Capitol Court Trip Attractor

A total of 55,580 internal person trips with destinations in the Capitol Court trip attractor were made on an average weekday in 1972. Of these internal person trips, auto driver travel accounted for about 35,200, or 63 percent; auto passenger travel accounted for about 17,480, or 31 percent; bus passenger travel accounted for about 2,450, or almost 5 percent; and travel by other modes accounted for about 450, or 1 percent. Shopping trips accounted for the most travel to this attractor—about 22,530 trips, or 40 percent of the total. Next in importance were trips made to conduct personal business, accounting for 9,180 trips, or 17 percent of the total and trips made to return home, accounting for 9,150 trips, also 17 percent of total. Trip purposes which generated less travel included trips to social-recreational activities, which accounted for about 7,640 trips, or 14 percent; trips to work, which accounted for about 5,280 trips, or 10 percent; and trips to school, which accounted for about 1,800 trips, or 3 percent. Shopping trips greatly influenced the general pattern of tripmaking in the Capitol Court trip attractor. The peak accumulation of the day occurred during the hour beginning at 7:00 p.m., when about 14,100 persons were found to be in the area. Following this peak, there was a rapid decline in the accumulation as the commercial enterprises closed for the evening and customers returned home. The pattern formed by the accumulation of persons in the Capitol Court trip attractor is significantly different from the typical patterns observed in the other five trip attractor areas. Of the total person trips to the Capitol Court trip attractor, about 39,240, or 71 percent, were destined for commercial establishments; about 11,270 trips, or 20 percent, ended at residences; about 4,630 trips, or 8 percent, were made to governmental-institutional facilities; and only 440 trips, or almost 1 percent, were to other land uses, including industrial sites. The most frequently occurring visits to the Capitol Court trip attractor, representing 52 percent of total person travel to this attractor, lasted less than one hour. In total, about 90 percent of the trips to the Capitol Court trip attractor resulted in visits of less than four hours and 10 percent in visits of four hours or longer. On an average weekday about 4,430 bus passenger trips had at least one trip end within the trip attractor boundary. These 4,430 trips represented about 3 percent of the total 179,100 bus passenger trips reported by the 1972 home interview survey to have been made within the service area of the Milwaukee transit system and about 4 percent of the total 102,140 person trips made to, from, and within the Capitol Court trip attractor on an average weekday. This trip attractor received significantly fewer bus passenger trips as a percent of total transit system travel and as a percent of the total person travel to the area than did the other three Milwaukee area trip attractors. The distribution of bus passenger trips by the socioeconomic characteristics of the tripmakers was found to differ substantially from the similar array of total person travel destined for the Capitol Court trip attractor.

Marquette-Wisconsin Avenue Trip Attractor

A total of 59,330 internal person trips with destinations in the Marquette-Wisconsin Avenue trip attractor were made on an average weekday in 1972. Of these internal person trips, auto driver trips accounted for about 35,640, or 60 percent; auto passenger travel accounted for about 13,890, or 23 percent; bus passenger travel accounted for about 8,850, or 15 percent; and travel by other modes accounted for about

950, or 2 percent. In total, trips made to return home, to attend work, and to conduct personal business accounted for over 79 percent of travel to this trip attractor, with about 18,640 trips, or 31 percent, being made to return home; about 15,190 trips, or 26 percent, being made to attend work; and about 13,170 trips, or 22 percent, being made to conduct personal business. Trip purposes which generated less travel included trips to social-recreational activities, which accounted for about 6,630 trips, or 11 percent; trips to attend school, which accounted for about 3,770 trips, or 6 percent; and trips for shopping purposes, which accounted for about 1,930 trips, or an unusually meager 3 percent. Of the total internal person trips to this trip attractor, about 21,810 trips, or 37 percent, were destined for residences; about 17,660 trips, or 30 percent, were made to governmental or institutional facilities; about 17,470 trips, or 29 percent, were made to commercial establishments; about 1,990 trips, or 3 percent, were made to industrial sites; and about 400 trips, or almost 1 percent, were made to a variety of other land uses. The most frequently occurring visit to the Marquette-Wisconsin Avenue trip attractor, representing 30 percent of travel to this area, lasted less than one hour. About 64 percent of the trips to this trip attractor resulted in visits of less than four hours and 36 percent in visits of four hours or longer. On an average weekday about 16,320 bus passenger trips had at least one trip end within the trip attractor boundary. These 16,320 trips represented about 9 percent of the total 179,100 bus passenger trips found by the 1972 home interview survey to be made daily within the service area of the Milwaukee transit system and about 15 percent of the 106,650 person trips made to, from, and within the Marquette-Wisconsin Avenue trip attractor on an average weekday. The distribution of bus passenger trips by the socioeconomic characteristics of the tripmakers was found to differ substantially from the similar array of total person travel destined for the Marquette-Wisconsin Avenue trip attractor.

UWM-Lower East Side Trip Attractor

A total of 68,650 internal person trips with destinations in the UWM-Lower East Side trip attractor were made on an average weekday in 1972. Of these internal person trips, auto driver trips accounted for about 42,840, or 62 percent; auto passenger travel accounted for about 18,240, or 27 percent; bus passenger travel accounted for about 6,910, or 10 percent; and travel by other modes accounted for about 660, or 1 percent. In total, trips to return home accounted for about 24,930 trips, or about 36 percent of total person travel to this trip attractor. Of the remaining person trips destined for this attractor, about 11,360, or 17 percent, were made for social-recreational purposes; about 9,900, or 14 percent, were made for personal business purposes; about 8,390, or 12 percent, were made to attend work; about 8,270, or 12 percent, were made to attend school; and about 5,800, or 9 percent, were made for shopping purposes. About 29,370 trips, or 43 percent of the internal person trips to this trip attractor, were destined for residences; about 22,490, or 33 percent, were made to governmental or institutional facilities; about 14,430, or 21 percent, were made to commercial establishments; about 730, or 1 percent, were made to industrial land uses; and about 1,630, or 2 percent, were made to a variety of other land uses. The most frequently occurring visit to this trip attractor, representing about 36 percent of total person trips made to the area, lasted less than one hour. About 72 percent of the person trips made to the UWM-Lower East Side trip attractor resulted in visits of less than four hours and 28 percent in visits of four hours or longer. On an average weekday about 13,140 bus passenger trips had at least one trip end within the trip attractor boundary. These 13,140 trips represented about 7 percent of the total 179,100 bus passenger trips found by the home interview survey to be made daily within the service area of the Milwaukee transit system and about 11 percent of the total 122,940 person trips made to, from, and within the UWM-Lower East Side trip attractor on an average weekday. The distribution of bus passenger trips by the socioeconomic characteristics of the tripmakers was found to differ substantially from the similar array of total person travel destined for the UWM-Lower East Side trip attractor.

SHOPPING CENTERS: CHARACTERISTICS OF TRAVEL—1963-1972

by Jean M. Lusk, Planner and John L. Zastrow, Senior Specialist

INTRODUCTION

Within the Southeastern Wisconsin Region between 1963 and 1972, there was significant growth of regional shopping centers located at points of easy access to urban, rural, and suburban customers. These centers provide plentiful free parking, weatherproofed, aesthetically pleasing malls, a variety of retail stores within easy walking distance, and social-recreational opportunities in the form of movies and restaurants. A number of tripmakers who in previous years would have regarded the Milwaukee central business district (CBD) as the primary source of such activities¹ may have been diverted to the shopping centers since 1963. Indeed, on an average weekday in 1972, approximately 113,000 internal person trips were made to seven major shopping centers located within southeastern Wisconsin. Consequently, these centers are important not only in that they affect travel habits and patterns, but in that they are significant generators of travel within the Region.

The purpose of the following article is to provide a summary of the characteristics of tripmaking to these seven regional shopping centers. Included in this analysis are the following travel characteristics as they pertain to each shopping center: trip volumes, trip origins, average trip length in miles and minutes, mode of travel, trip purpose, automobile occupancy, duration of stay, time patterns of travel, automobile availability of the tripmakers, and socioeconomic characteristics of the tripmakers.

The data upon which this article is based were obtained through a comprehensive home interview travel survey conducted by the SEWRPC in 1972.² The travel data used in preparation of the following summaries have been expanded, adjusted, and linked to represent the total travel occurring on an average weekday in 1972. Only internal person trips are represented—i.e., trips which had both trip origin and trip destination within the seven-county Region.

BACKGROUND

The seven regional shopping centers under discussion are: Elmwood Plaza, Southridge, Southgate-Point Loomis, Brookfield Square, Capitol Court, Mayfair, and Bayshore. All but two of these centers are located in Milwaukee County. Elmwood Plaza is located in Racine County and Brookfield Square is situated on the eastern edge of Waukesha County. The location of each of the seven shopping centers is shown on Map 1.

Elmwood Plaza

As shown in Table 1, Elmwood Plaza, which is located to the southwest of the Racine central business district, attracted approximately 8,900 internal person trips on an average weekday in 1972. The U. S. Bureau of the Census established in the 1972 Census of Retail Trade that Elmwood Plaza contained

¹ Data obtained through comprehensive home interview studies conducted by SEWRPC in 1963 and 1972 indicate that during this period there was relatively slow growth in tripmaking to the Milwaukee CBD for the purpose of conducting personal business—an increase of 15 percent in such tripmaking in the CBD as opposed to an increase of 41 percent in the Region—and substantial declines in tripmaking to the CBD for shopping purposes—a 25 percent decline in the CBD as opposed to a 28 percent increase in the Region—and for social-recreational purposes—a 16 percent decline in the CBD as opposed to a 20 percent increase in the Region.

² For information concerning sampling, conduct, and levels of accuracy of the home interview survey, see Chapter IX of SEWRPC Planning Report No. 25, A Regional Land Use Plan and a Regional Transportation Plan for Southeastern Wisconsin, Volume One, Inventory Findings.

LOCATION OF SEVEN
REGIONAL SHOPPING CENTERS
IN SOUTHEASTERN WISCONSIN: 1972

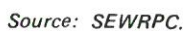


Table 1

**SELECTED CHARACTERISTICS OF SEVEN MAJOR SHOPPING CENTERS
LOCATED IN THE SOUTHEASTERN WISCONSIN REGION: 1972**

Selected Characteristic of Shopping Centers: 1972	Elmwood Plaza	Southridge	Southgate-Point Loomis	Brookfield Square	Capitol Court	Mayfair	Bayshore	Total Seven Centers
Internal Person Trips to Centers on Average Weekday	8,870	20,640	17,060	19,910	21,450	12,420	12,530	112,880
Convenience Goods Stores ^a	13	20	28	10	25	18	10	124
Shopping Goods Stores ^b	24	79	52	40	53	56	37	341
Other Stores ^c	10	5	19	4	20	10	21	89
Total Retail Establishments	47	104	99	54	98	84	68	554
Net Sales (dollars)	34,317,000	85,456,000	85,476,000	71,448,000	82,000,000	54,933,000	47,798,000	461,428,000
Payroll (dollars)	4,174,000	11,455,000	10,163,000	9,165,000	10,991,000	8,540,000	6,594,000	61,082,000
Paid Employees from January 1, 1972 through March 12, 1972	946	2,830	1,994	2,197	2,440	2,110	1,498	14,015

^a Convenience goods stores are food stores, eating and drinking places, and drug stores.

^b Shopping goods stores include general merchandise, department, apparel, furniture, and appliance stores.

^c Other stores include building material, hardware, garden supply, liquor, sporting goods, book, stationery, jewelry, craft, photographic, novelty, luggage, sewing, and other specialty stores and automotive dealers and service stations.

Source: U. S. Bureau of the Census, 1972 Census of Retail Trade, and SEWRPC.

47 retail establishments at the end of 1972. Thirteen of these stores were convenience goods stores;³ 24 were shopping goods stores;⁴ and 10 were other stores.⁵ The census data indicate that during 1972 total net sales in Elmwood Plaza amounted to \$34,317,000. The payroll for the entire year amounted to \$4,174,000. The census data show that 946 employees were on the payroll at Elmwood Plaza during the pay period from January 1, 1972 through March 12, 1972.

As shown on the aerial photograph presented on Map 2, the primary streets providing access to Elmwood Plaza are Durand Avenue on the north and Lathrop Avenue on the west. Providing transportation to Elmwood Plaza is Route 7 (Elmwood Plaza) of the Flash City Transit Company, which provides service at 40-minute headways during peak, off-peak, and evening hours.

Southridge

Southridge Shopping Center, which is located in the southern portion of Milwaukee County, attracted approximately 20,600 internal person trips on an average weekday in 1972. The U. S. Bureau of the Census established in the 1972 Census of Retail Trade that Southridge contained 104 retail establishments at the end of the year. Twenty of these establishments were convenience goods stores; 79 were shopping goods stores; and 5 were other stores. It is reported in the Census data that during 1972 total net sales at Southridge reached \$85,456,000. The payroll for the entire year amounted to \$11,455,000. During the pay period from January 1, 1972 through March 12, 1972, there were 2,830 employees on the payroll at Southridge.

As shown on the aerial photograph presented on Map 3, the primary streets providing access to Southridge are Edgerton Avenue on the north, 76th Street on the west, Grange Avenue on the south, and 68th Street on the east. The Milwaukee and Suburban Transport Corporation provides transportation to Southridge on Route 76 (N. 60th Street - S. 70th Street) at 12-minute headways during peak periods and 18-minute headways during the off-peak and evening periods.

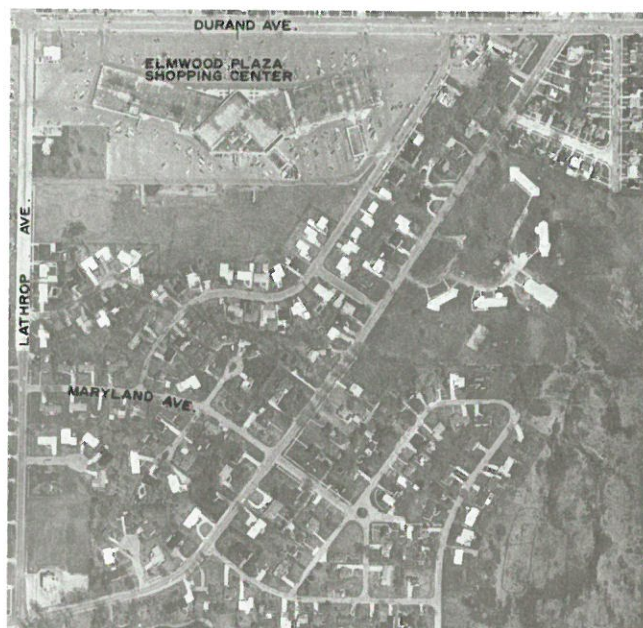
³ Convenience goods stores are food stores, eating and drinking places, and drug stores.

⁴ Shopping goods stores include general merchandise, department, apparel, furniture, and appliance stores.

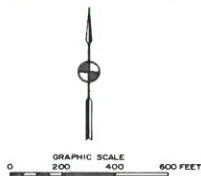
⁵ Other stores include building material, hardware, garden supply, liquor, sporting goods, book, stationery, jewelry, craft, photographic, novelty, luggage, sewing, and other specialty stores and automotive dealers and service stations.

Map 2

AERIAL PHOTOGRAPH OF ELMWOOD PLAZA SHOPPING CENTER

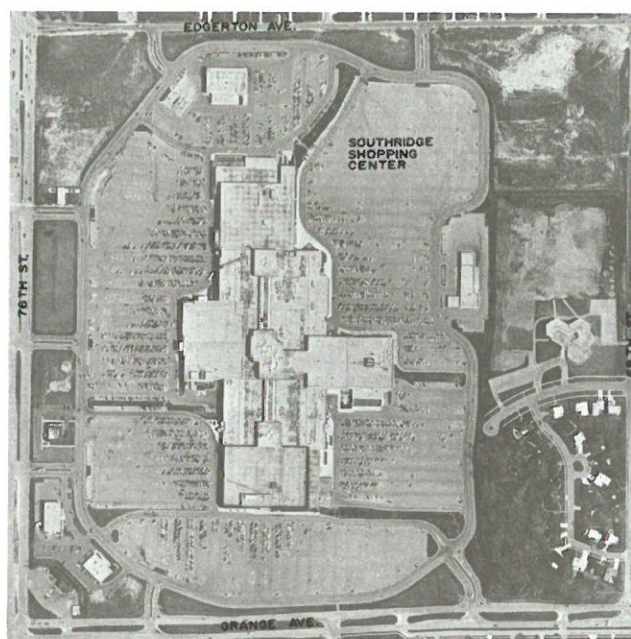


Source: SEWRPC.

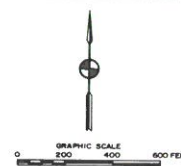


Map 3

AERIAL PHOTOGRAPH OF SOUTHRIDGE SHOPPING CENTER



Source: SEWRPC.



Southgate-Point Loomis

The Southgate-Point Loomis complex, which is also located in the southern portion of Milwaukee County, attracted about 17,100 internal person trips on an average weekday in 1972. The U. S. Bureau of the Census reported in the 1972 Census of Retail Trade that Southgate-Point Loomis contained 99 retail establishments at the end of 1972. Twenty-eight of these establishments were convenience goods stores; 52 were shopping goods stores; and 19 were other stores. Total net sales at Southgate-Point Loomis amounted to \$85,476,000 during 1972. The payroll for the entire year amounted to \$10,163,000. During the pay period from January 1, 1972 through March 12, 1972, there were 1,994 employees on the payroll at Southgate-Point Loomis.

As shown on Map 4, the primary streets providing access to Southgate-Point Loomis are Oklahoma Avenue on the north, 35th Street on the west, Loomis Road on the south, and 27th Street on the east. The Milwaukee and Suburban Transport Corporation provides transportation to this center on Route 27 (27th Street), which operates on 10-minute headways during peak periods, 23-minute headways during off-peak periods and 26-minute headways during evening periods, and on Route 50 (Morgan Avenue), which provides service at 20-minute frequencies during peak periods and 75-minute frequencies during off-peak periods.

Brookfield Square

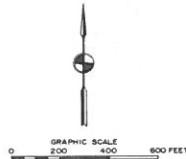
Brookfield Square, which is located in the eastern portion of Waukesha County, attracted about 19,900 internal person trips on an average weekday in 1972. The U. S. Bureau of the Census reported in the 1972 Census of Retail Trade that Brookfield Square contained 54 retail establishments at the end of the year. Of

Map 4

AERIAL PHOTOGRAPH OF SOUTHGATE- POINT LOOMIS SHOPPING CENTERS

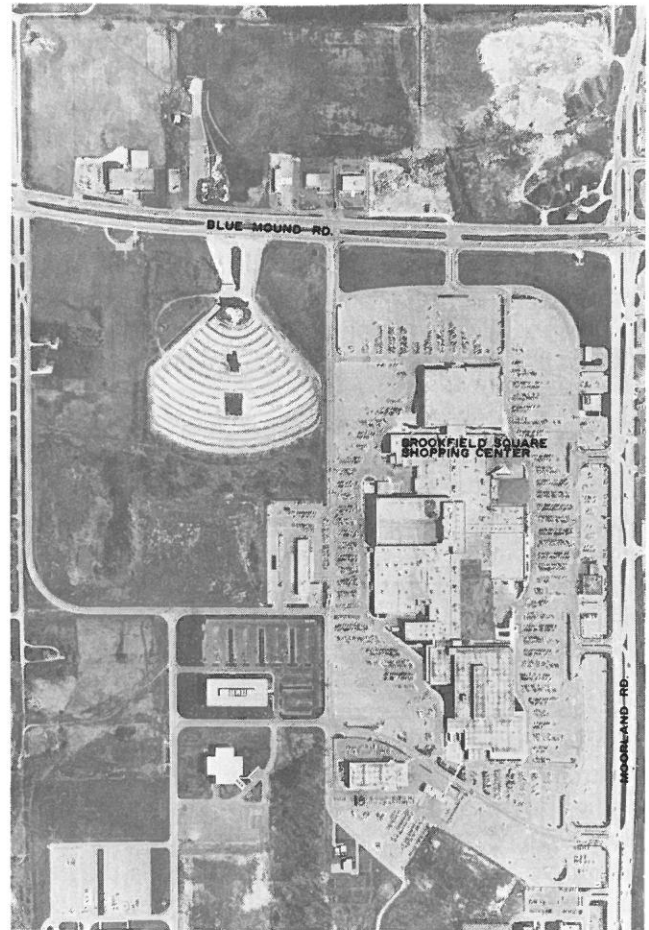


Source: SEWRPC.

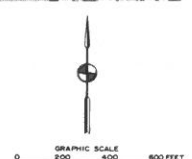


Map 5

AERIAL PHOTOGRAPH OF BROOKFIELD SQUARE SHOPPING CENTER



Source: SEWRPC.



these, 10 were convenience goods stores; 40 were shopping goods stores; and 4 were other stores. During 1972 total net sales at Brookfield Square reached \$71,448,000. The payroll for the year amounted to \$9,165,000. During the pay period from January 1, 1972 through March 12, 1972, there were 2,197 employees on the payroll at Brookfield Square.

As shown on Map 5, the primary streets providing access to Brookfield Square are Blue Mound Road to the north and Moorland Road to the east. An IH 94 interchange is directly south of the shopping center, thus providing easy vehicular access to this shopping center from all areas of the Region. The only public transportation serving Brookfield Square is provided by Wisconsin Coach Lines on the Waukesha-Milwaukee route, which arrives at 60-minute intervals during both the peak and off-peak periods and at 80-minute intervals during the evening periods.

Capitol Court

The Capitol Court Shopping Center, which is located slightly to the north of the central portion of Milwaukee County, attracted approximately 21,500 internal person trips on an average weekday in 1972. The U. S. Bureau of the Census reported in the 1972 Census of Retail Trade that Capitol Court contained 98 retail establishments at the end of the year. There were 25 convenience goods stores; 53 shopping goods stores; and 20 other stores. The total net sales at Capitol Court during 1972 amounted to \$82,000,000. The payroll for 1972 amounted to \$10,991,000. There were 2,440 employees on the payroll during the period from January 1, 1972 through March 12, 1972.

As shown on Map 6, the primary streets providing access to Capitol Court are Fond du Lac Avenue to the northeast, Capitol Drive on the south, and 60th Street to the west. The Milwaukee and Suburban Transport Corporation provides transportation to Capitol Court with three routes. Route 76 (N. 60th - S. 70th) services the area at 12-minute headways during peak periods and at 18-minute headways during off-peak and evening periods. Route 23 (Fond du Lac) provides service at 6-minute intervals during peak periods, at 10-minute intervals during off-peak periods, and at 12-minute intervals during evening hours. Route 62 (Capitol Drive) provides service at 25-minute frequencies during peak and off-peak periods and at 22-minute frequencies during the evening.

Mayfair

Mayfair Shopping Center, which is located in the western portion of Milwaukee County, attracted approximately 12,400 internal person trips on an average weekday in 1972. The U. S. Bureau of the Census established in the 1972 Census of Retail Trade that Mayfair contained 84 retail stores at the end of the year. Eighteen of these establishments were convenience goods stores; 56 were shopping goods stores; 10 were other stores. It is reported in the Census data that during 1972 total net sales at Mayfair reached \$54,933,000. The payroll for the entire year amounted to \$8,540,000. During the pay period from January 1, 1972 through March 12, 1972, there were 2,110 employees on the payroll at Mayfair.

As shown on the aerial photograph presented on Map 7, the primary streets providing access to Mayfair are Mayfair Road (STH 100) to the west and North Avenue, which borders the southern side of the center. An interchange on the Zoo Freeway (USH 45) at North Avenue about one-quarter mile to the west of Mayfair allows for easy vehicular access to this shopping center from all parts of the Region. The Milwaukee and Suburban Transport Corporation provides service to Mayfair on four routes. Route 21 (North Avenue) arrives at Mayfair at 23-minute intervals during peak periods, 27-minute intervals during off-peak periods, and 24-minute intervals during evening periods. Route-31 (Wisconsin-Washington-Wauwatosa) supplies transportation to the center at 15-minute frequencies during peak periods, 20-minute frequencies during off-peak periods, and 17-minute frequencies during the evening. Route 60 (Burleigh Street) provides service at 25-minute headways during the peak periods and 30-minute headways during the off-peak and evening hours. The Mayfair Freeway Flyer (Route-41) provides transportation to the center during peak periods at 9-minute frequencies.

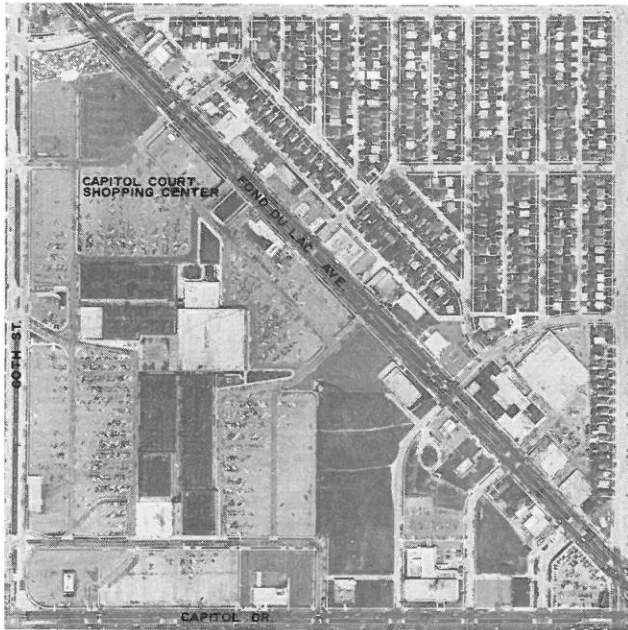
Bayshore

The Bayshore Shopping Center, which is located in the northeastern portion of Milwaukee County, attracted approximately 12,500 internal person trips on an average weekday in 1972. The U. S. Bureau of the Census reported in the 1972 Census of Retail Trade that Bayshore contained 68 retail establishments at the end of the year. Ten of these were convenience goods stores; 37 were shopping goods stores; and 21 were other stores. Total net sales at Bayshore amounted to \$47,798,000 during 1972. The payroll for the entire year amounted to \$6,594,000. During the pay period from January 1, 1972 through March 12, 1972, there were 1,498 employees on the payroll at Bayshore.

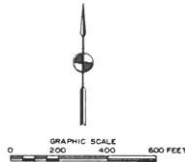
As shown on Map 8, the streets providing access to Bayshore are Montclair Avenue on the north, Lydell Avenue on the east, Silver Spring Drive on the south, and Port Washington Road and IH 43 to the west. Transportation to Bayshore is provided by three routes of the Milwaukee and Suburban Transport Corporation. Route 15 (Oakland-Delaware) provides service at 20-minute intervals during peak periods, 28-minute intervals during off-peak periods, and 23-minute intervals during evening hours. Route 68 (Port Washington Road - Santa Monica Boulevard) provides service at 23-minute frequencies during peak periods, 33-minute frequencies during off-peak periods, and 60-minute frequencies during the evening. The Bayshore Freeway Flyer (Route 42) provides transportation to the center during peak periods at 14-minute intervals.

Map 6

AERIAL PHOTOGRAPH OF CAPITOL COURT SHOPPING CENTER

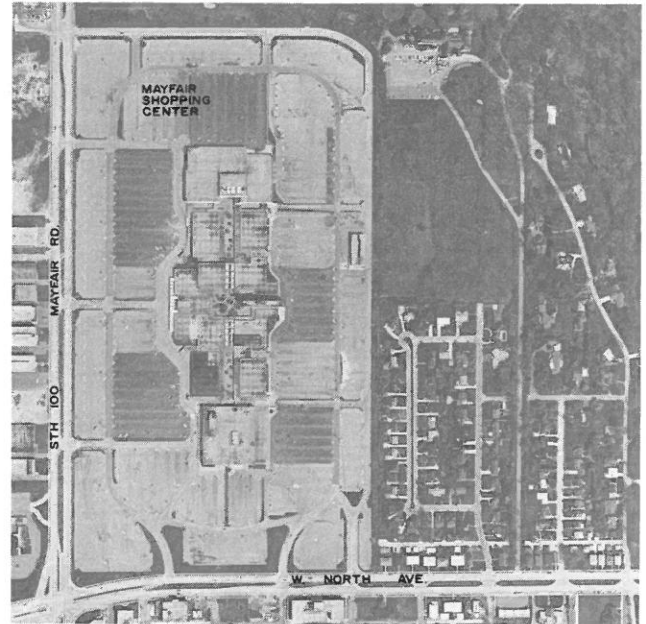


Source: SEWRPC.

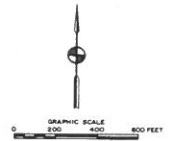


Map 7

AERIAL PHOTOGRAPH OF MAYFAIR SHOPPING CENTER



Source: SEWRPC.



CHARACTERISTICS OF TRIPMAKING TO THE SHOPPING CENTERS

The home interview travel survey conducted in the Region in 1972 furnishes a comprehensive representation of travel habits and patterns affecting the Region. Presented below are those inventory findings as they pertain to the seven major regional shopping centers.

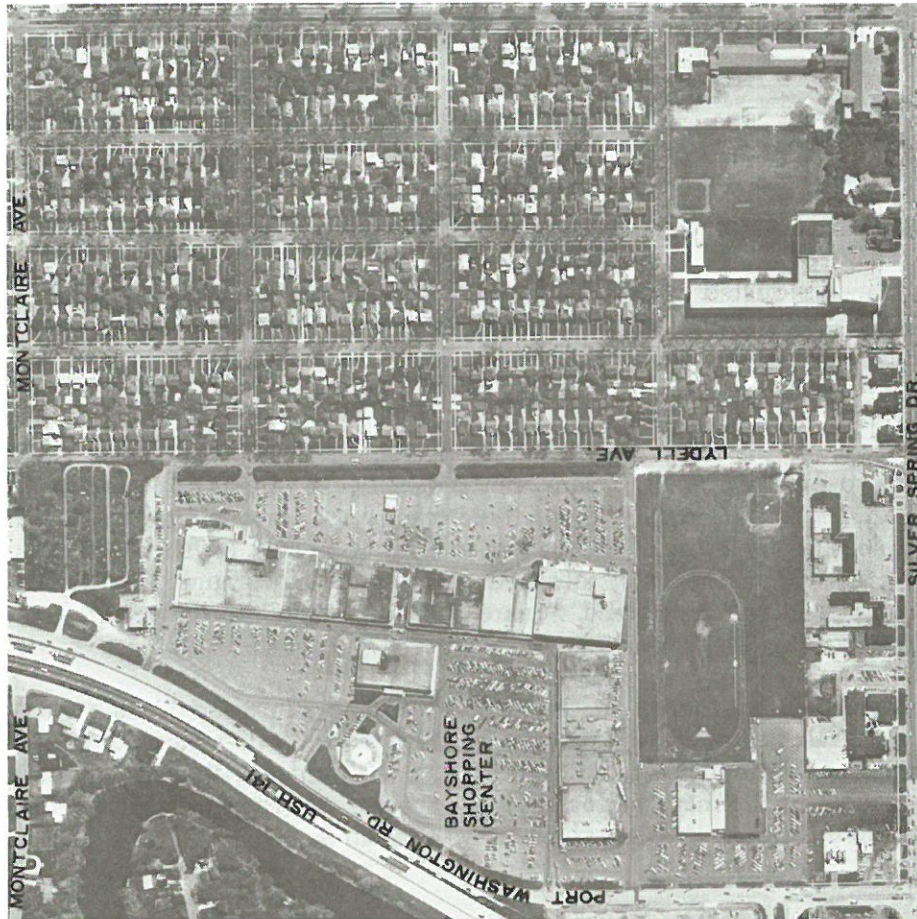
Location of Person Travel to the Shopping Centers

In composite, on an average weekday the seven regional shopping centers attract tripmaking from all the counties in the Region. Displayed on the following maps are the densities of origins of person trips to each shopping center by traffic analysis zones. Comparisons of these maps reveal certain similarities and differences between travel to the seven shopping centers. Tripmaking to Elmwood Plaza, Bayshore, and Southgate-Point Loomis shopping centers produces the most localized patterns of trip origins. Capitol Court and Mayfair have wider ranges of attraction. Brookfield Square and Southridge attract person travel from almost every county in the Region on an average weekday.

Elmwood Plaza: The pattern formed by the origins of person travel to Elmwood Plaza on an average weekday in 1972 was more localized than were the patterns of travel to the other shopping centers. Most travel to Elmwood Plaza originated within the eastern half of Racine County, with some additional trip-making coming from eastern Kenosha County. In total, on an average weekday only 35 traffic analysis zones were the origins of 10 or more trips to this center, as shown on Map 9.

Map 8

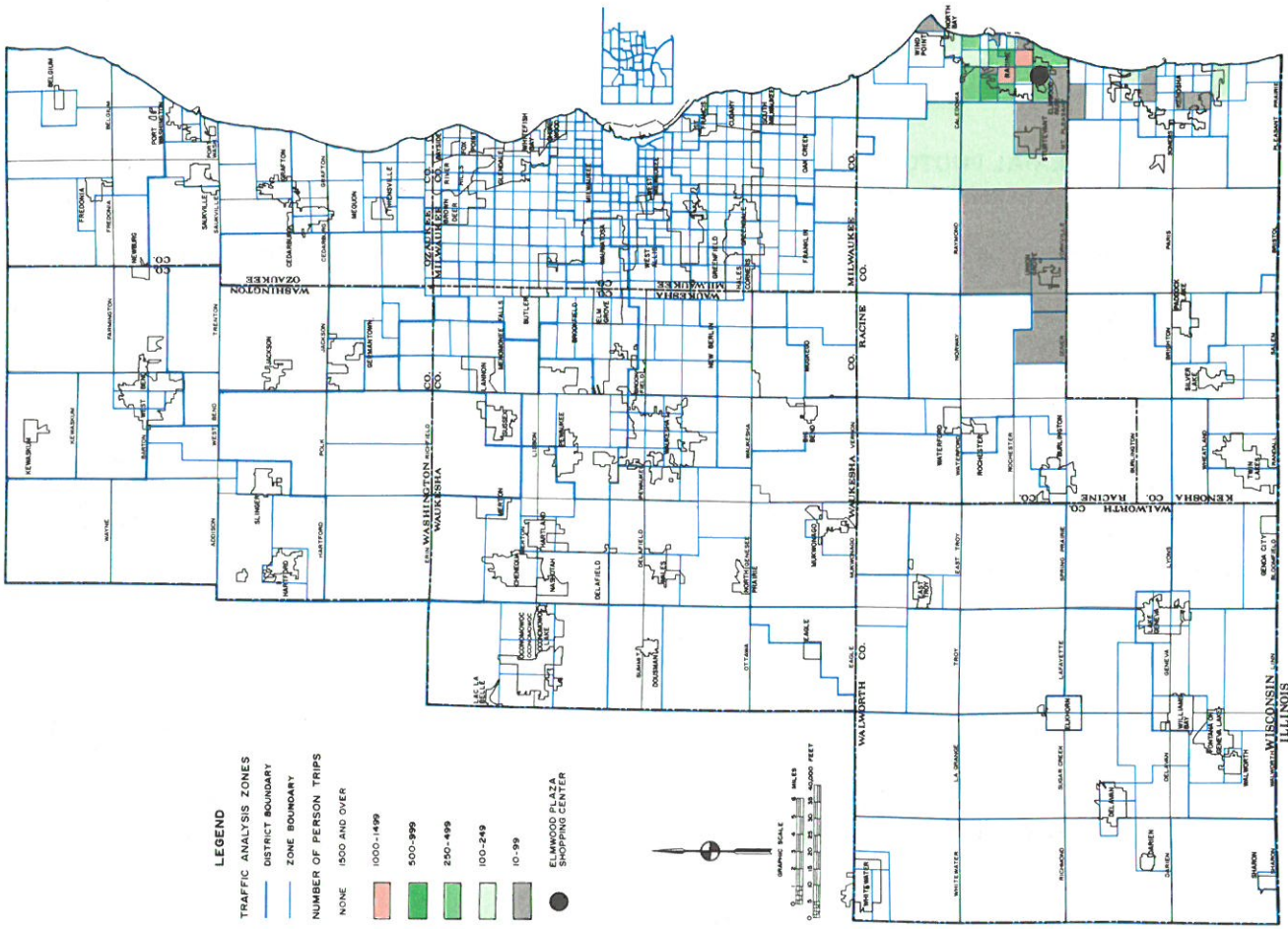
AERIAL PHOTOGRAPH OF BAYSHORE SHOPPING CENTER



Source: SEWRPC.

Map 9

THE ORIGINS OF PERSON TRAVEL TO ELMWOOD PLAZA ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Southridge: Reflected in the pattern of trip origins of person travel to Southridge, as shown on Map 10, is the wide area of attraction of this shopping center. Although most tripmaking to Southridge on an average weekday originated within Milwaukee County, there were traffic analysis zones in every other county in the Region, with the exception of Washington County, which produced 10 or more trips per average weekday to Southridge. In total, on an average weekday 153 traffic analysis zones were the origins of 10 or more trips to this center.

Southgate-Point Loomis: Like travel to Elmwood Plaza, travel to the Southgate-Point Loomis shopping center on an average weekday was relatively localized. As shown on Map 11, trips to the Southgate-Point Loomis shopping center originated predominantly in Milwaukee County and, to a much lesser extent, in Racine County and the southeastern portion of Waukesha County. In total, 114 traffic analysis zones—111 of which are within Milwaukee County—were the origins of 10 or more trips to this center on an average weekday.

Brookfield Square: Like Southridge, on an average weekday in 1972 Brookfield Square attracted person trips from a wide area of the Region, as shown on Map 12. Although most tripmaking to Brookfield Square originated within Waukesha County and Milwaukee County, there were traffic analysis zones in every other county in the Region, with the exception of Racine County, which produced 10 or more trips per average weekday to Brookfield Square. In total, on an average weekday 159 traffic analysis zones were the origins of 10 or more trips to this center.

Capitol Court: The pattern formed by the origins of person travel to Capitol Court on the average weekday, as shown on Map 13, indicates that most tripmaking to this center originated in the central and northern portions of the Region. On an average weekday, Capitol Court attracted tripmaking predominantly from Milwaukee County and, to a lesser degree, from Waukesha, Ozaukee and Washington counties. In total, 133 traffic analysis zones were the origins of 10 or more trips to this center on an average weekday.

Mayfair: Mayfair Shopping Center attracted tripmaking from a slightly wider range than did Capitol Court, as shown by the pattern of person trip origins on an average weekday in 1972 displayed on Map 14. Most tripmaking to Mayfair originated in Milwaukee and Waukesha Counties and, to a lesser extent, in Racine, Ozaukee, and Washington Counties. In total, 117 traffic analysis zones were the origins of 10 or more trips to this center on an average weekday.

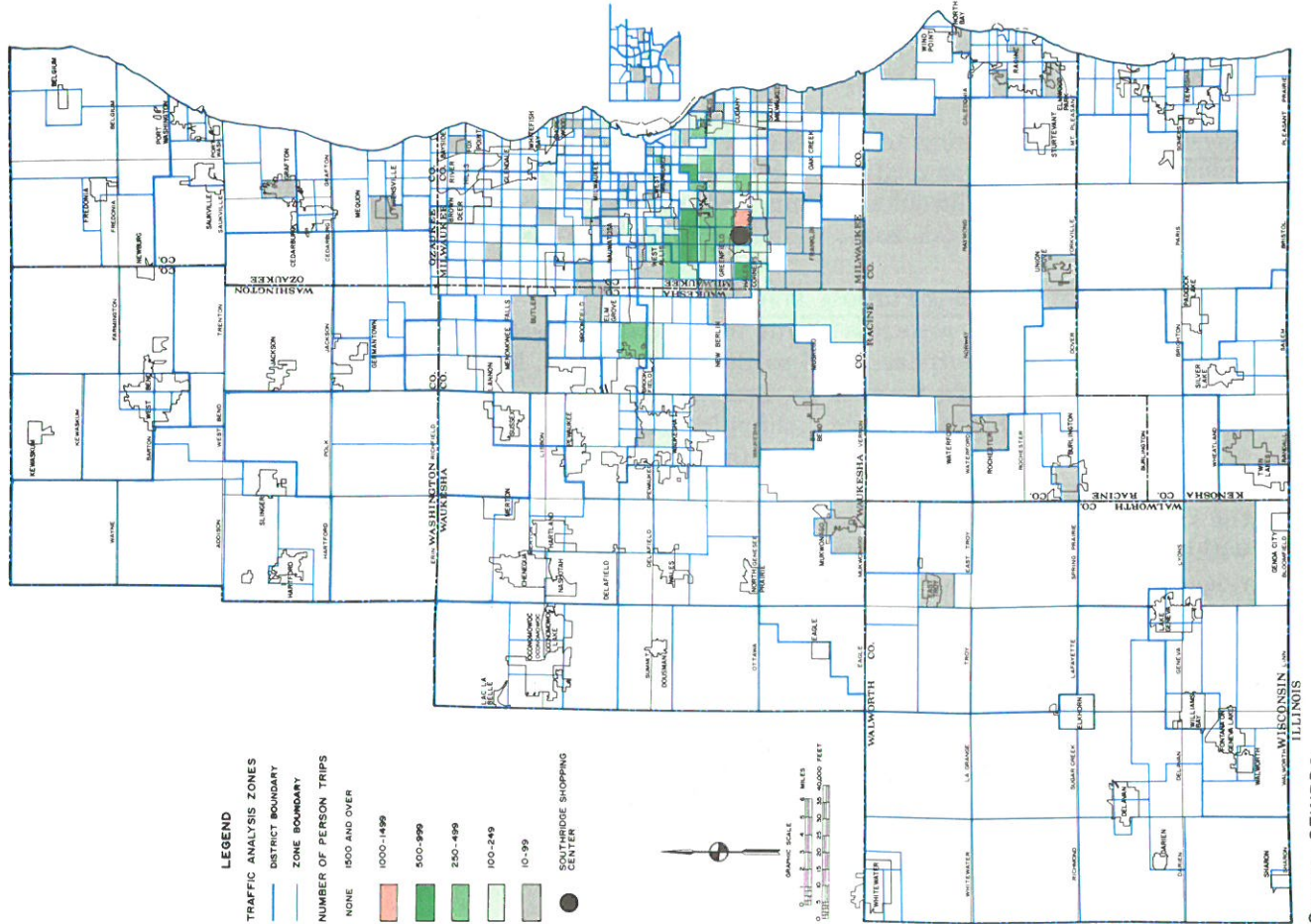
Bayshore: Like tripmaking to Elmwood Plaza and Southgate-Point Loomis, on an average weekday tripmaking to Bayshore was relatively localized. As shown on Map 15, Bayshore attracted person trip origins predominantly from Milwaukee County and, to a much lesser extent, from Ozaukee and Waukesha Counties. In total, 83 traffic analysis zones were the origins of 10 or more trips to this center on an average weekday.

The Location of Shopping Purpose Travel

The patterns of travel associated with total person travel to the shopping centers were mirrored in the patterns of shopping purpose travel to the seven centers. Elmwood Plaza attracted shopping purpose travel from closer origins while Southridge, Brookfield Square, and Mayfair attracted the most distant shopping purpose travel. As shown in Table 2, shopping purpose tripmaking to Elmwood Plaza was the most localized of travel to all the shopping centers, with 50 percent of the shopping trips to this center originating within a 3-mile radius, 75 percent within a 4-mile radius, and 90 percent within a 6-mile radius. Fifty percent of the shopping trips to the Southgate-Point Loomis, Capitol Court, and Bayshore shopping centers originated within a 3-mile radius, 75 percent within a 5-mile radius, and 90 percent within an 8-mile radius. Southridge, Brookfield Square, and Mayfair shopping centers attracted shopping trips from the widest areas of the Region. Fifty percent of the shopping trips to Southridge originated within 5 miles of the center, 75 percent within 10 miles, and 90 percent within 17 miles. Fifty percent of the shopping trips to Brookfield Square originated from within an 8-mile radius, 75 percent from within an 11-mile radius, and 90 percent from within a 15-mile radius. Fifty percent of the shopping trips to Mayfair originated from within a 5-mile radius, 75 percent from within an 8-mile radius, and 90 percent from within a 14-mile radius. As displayed on Map 16, the locations of shopping purpose person trip origins within these radii were substantially overlapping, even at the 50 percent level, for all the shopping centers, with the exception of Elmwood Plaza.

Map 10

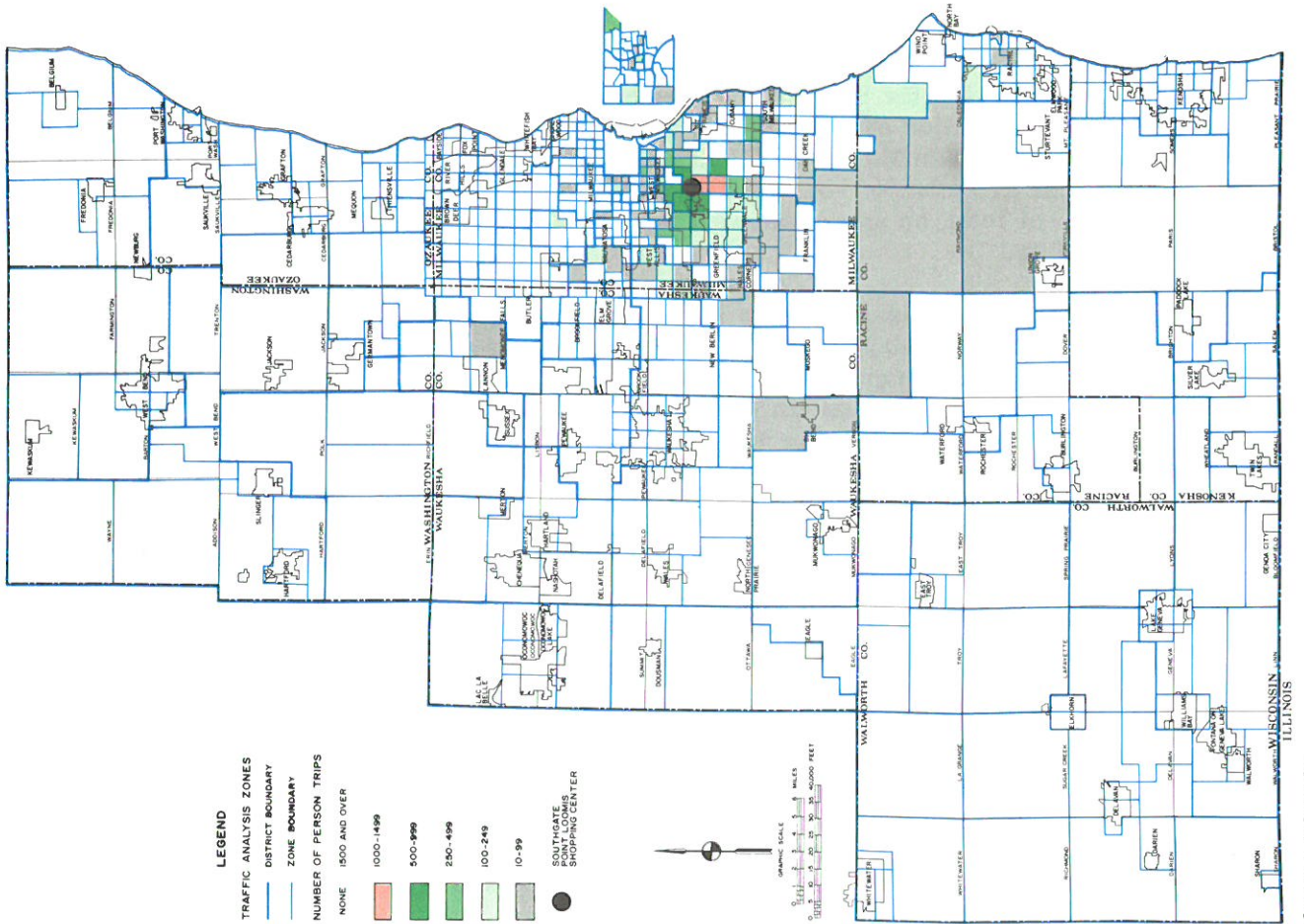
THE ORIGINS OF PERSON TRAVEL TO
SOUTHRIDGE ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Map 11

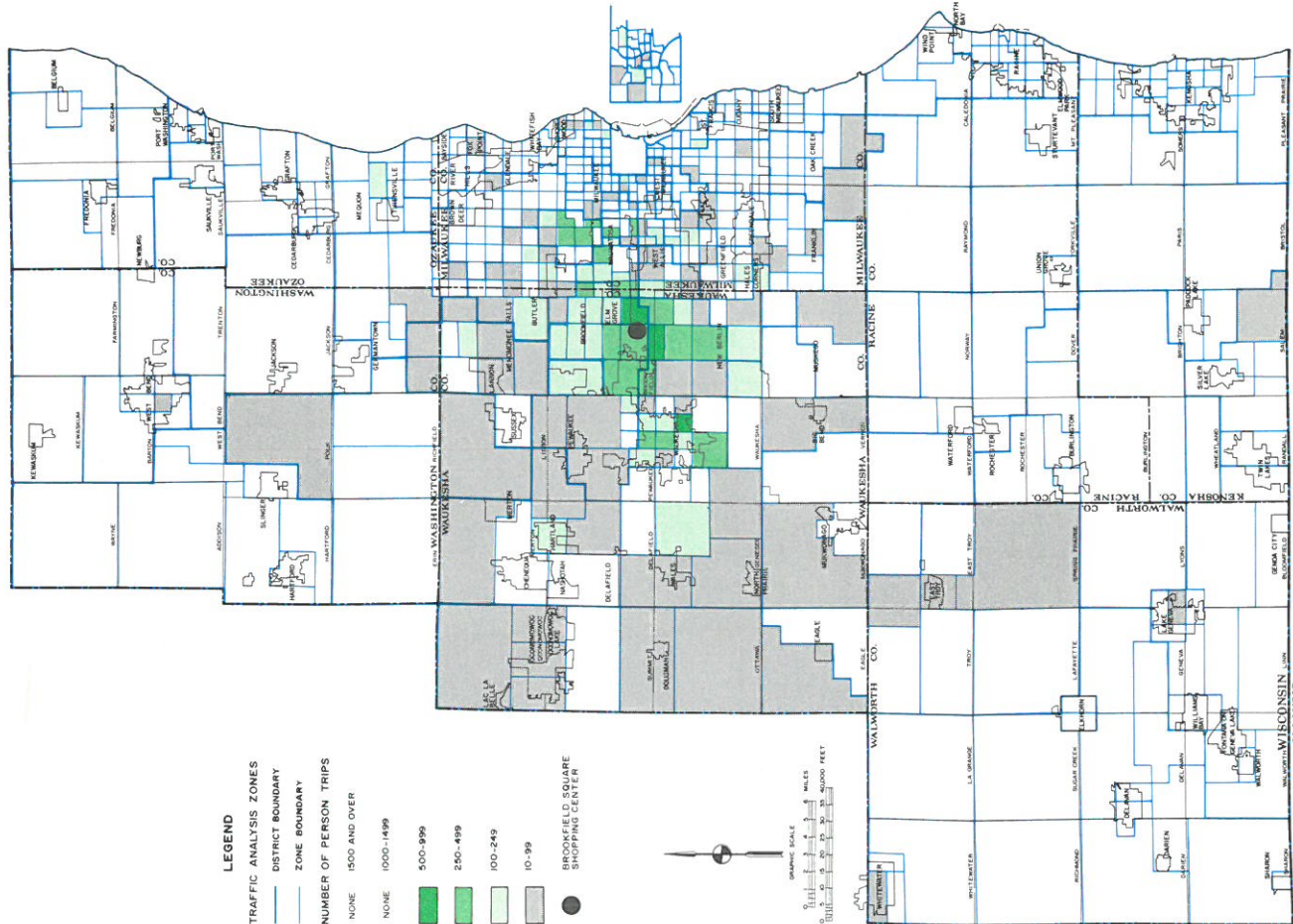
THE ORIGINS OF PERSON TRAVEL TO SOUTHGATE-
POINT LOOMIS ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Map 12

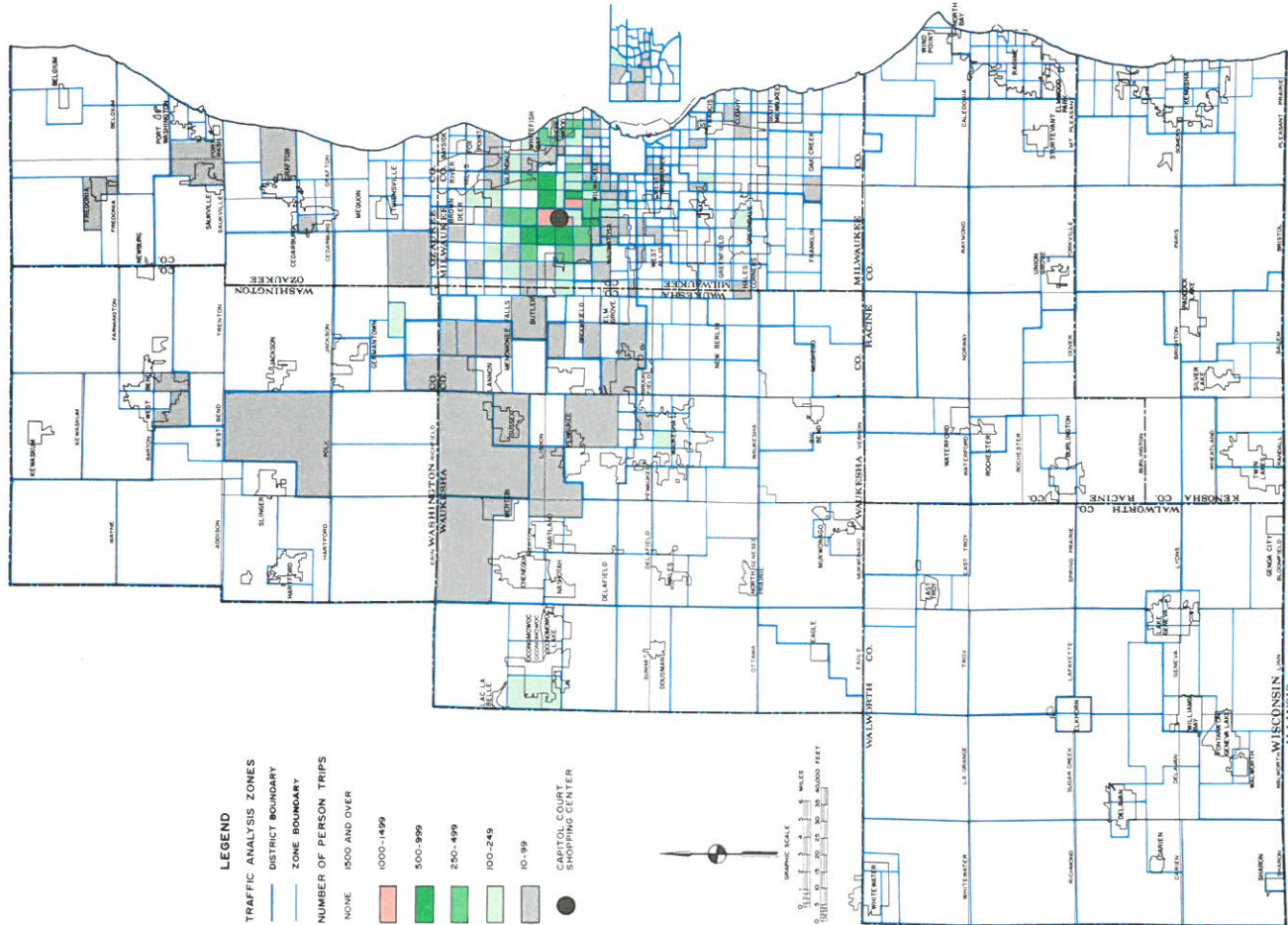
THE ORIGINS OF PERSON TRAVEL TO BROOKFIELD SQUARE ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Map 13

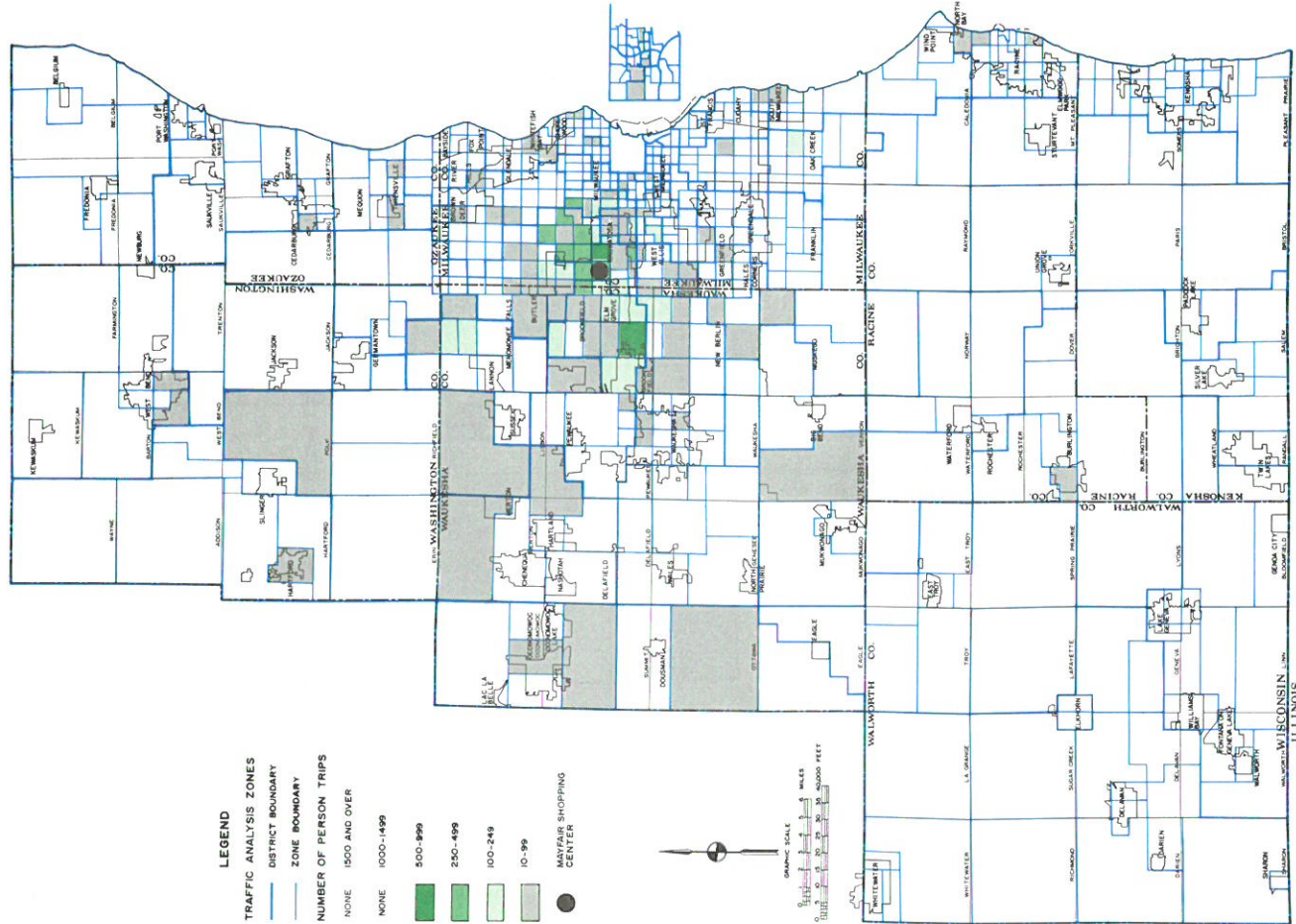
THE ORIGINS OF PERSON TRAVEL TO CAPITOL COURT ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Map 14

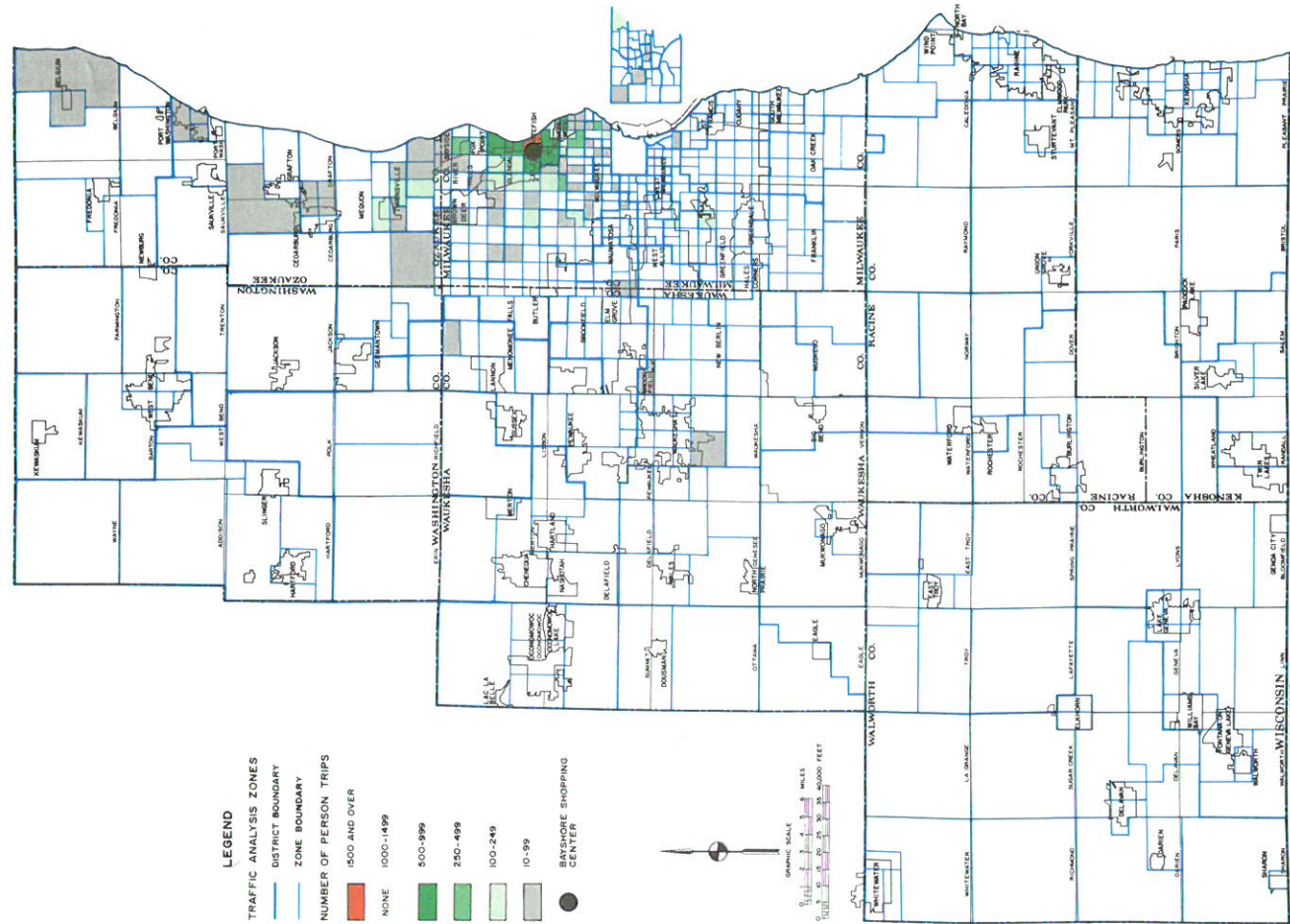
THE ORIGINS OF PERSON TRAVEL TO MAYFAIR ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Map 15

THE ORIGINS OF PERSON TRAVEL TO BAYSHORE ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Table 2

THE AVERAGE DISTANCE IN MILES TRAVELED OF 50 PERCENT, 75 PERCENT, AND 90 PERCENT OF SHOPPING PURPOSE PERSON TRIPS TO THE SEVEN REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY: 1972

Shopping Center	Average Miles Traveled to the Centers for the Purpose of Shopping		
	50 Percent of the Trips	75 Percent of the Trips	90 Percent of the Trips
Elmwood Plaza	2.7	3.9	6.3
Southridge	5.0	9.5	17.4
Southgate-Point Loomis	2.8	4.8	8.1
Brookfield Square	7.6	11.1	15.2
Capitol Court	3.2	5.2	7.9
Mayfair	4.7	7.7	14.0
Bayshore	2.7	5.3	7.9

Source: SEWRPC.

Average Time and Distance of Shopping Purpose Travel

Computation of the average trip distance in miles and minutes of shopping purpose person travel to the seven regional shopping centers on an average weekday further emphasizes the relative closeness of the origins of trips destined for Elmwood Plaza, Bayshore, Southgate-Point Loomis, and Capitol Court shopping centers in comparison to the wider area of trip origins destined for Southridge, Brookfield Square, and Mayfair. The mean distance traveled to shopping centers for the purpose of shopping ranged from 3.4 miles to 8.8 miles and the median ranged from 2.7 miles to 7.6 miles, as shown in Figure 1. The mean travel time required to reach the shopping centers on an average weekday ranged from 10.5 minutes to 16.8 minutes and the median ranged from 8.8 minutes to 15.3 minutes, as shown in Figure 2.

Mode of Travel

As shown in Table 3, about 97 percent of the total internal person trips to the seven regional shopping centers on an average weekday were made as either an automobile driver or a passenger. Less than 3 percent of the trips to the shopping centers were made as bus passengers. In comparison, on an average weekday in 1972 bus passengers generated about 4 percent of the total internal person trips made within the Region and about 22 percent of the internal person trips destined for the Milwaukee CBD. It is notable that even at the shopping centers located in areas of adequate transit service, such as Capitol Court and Mayfair, the proportion of tripmaking by bus passengers was relatively low—barely exceeding the regional average for total person travel.

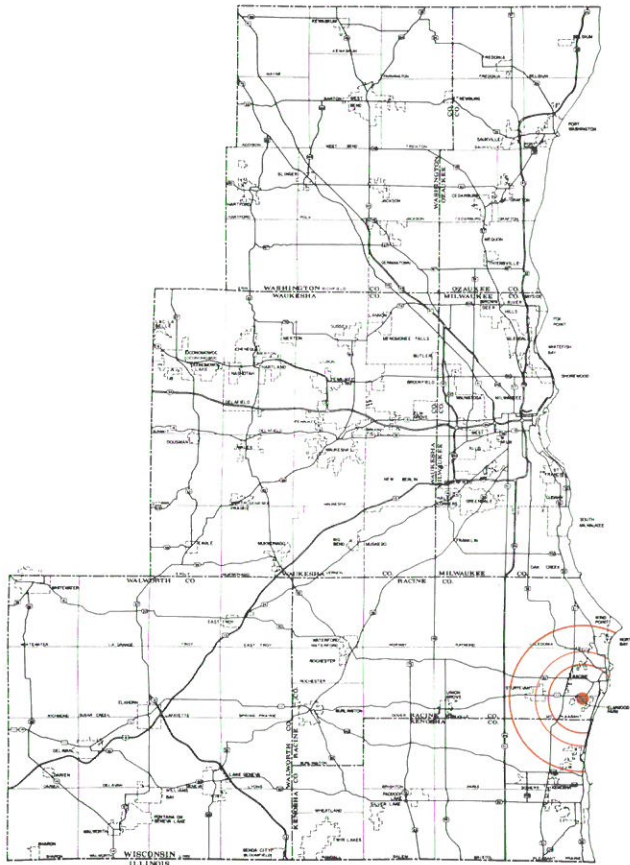
Auto driver travel constituted about 60 percent of the trips made to Elmwood Plaza, Southridge, Brookfield Square, and Capitol Court; about 65 percent of the trips to Southgate-Point Loomis and Mayfair; and about 70 percent of the trips made to Bayshore. Auto passenger travel made up about 30 percent of the trips made to Southgate-Point Loomis, Mayfair, and Bayshore; about 35 percent of the trips to Brookfield Square and Capitol Court; and almost 40 percent of the trips to Elmwood Plaza and Southridge. Bus passenger travel constituted less than 1 percent of the trips made to Elmwood Plaza, Brookfield Square, and Bayshore; about 2 percent of the trips to Southridge; about 4 percent of the trips to Southgate-Point Loomis; and almost 5 percent of the trips to Capitol Court and Mayfair.

Average Auto Occupancy

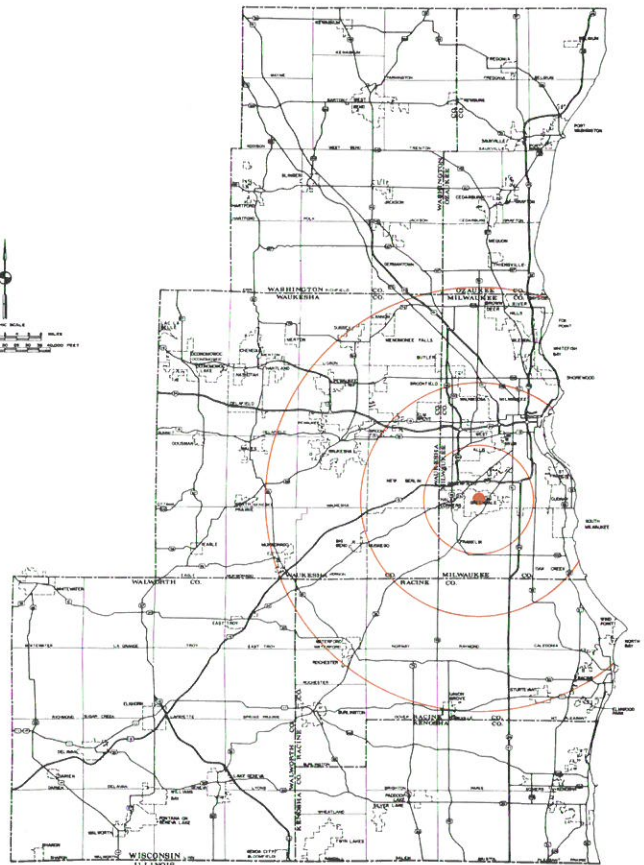
Reflecting the predominant use of the automobile in tripmaking to the seven regional shopping centers are the automobile occupancy data shown in Table 4. The average auto occupancy for total travel to the seven shopping centers was 1.55 persons—ranging from a low auto occupancy of 1.40 persons for auto-

THE RADII OF THE ORIGINS OF 50 PERCENT, 75 PERCENT, AND 90 PERCENT OF SHOPPING PURPOSE PERSON TRAVEL TO SEVEN REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY: 1972

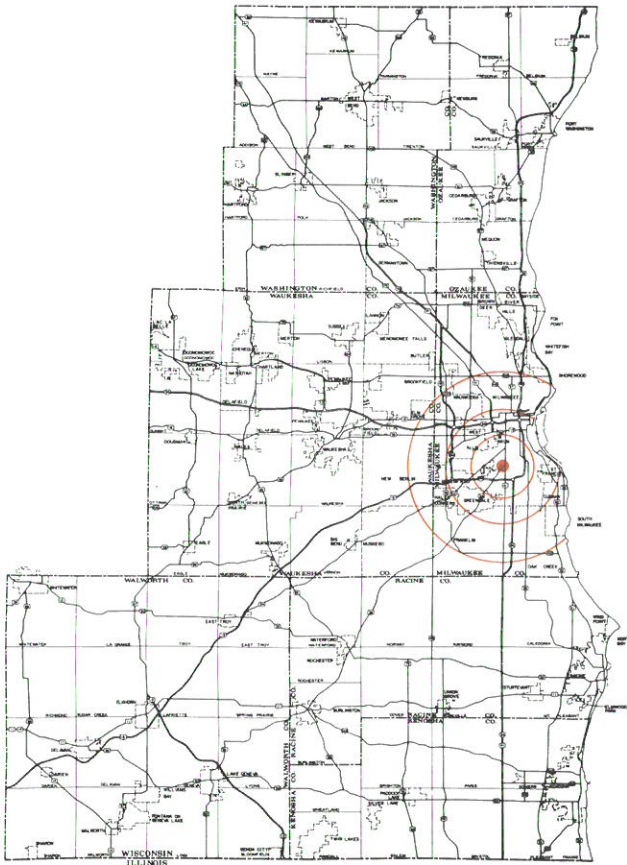
ELMWOOD PLAZA



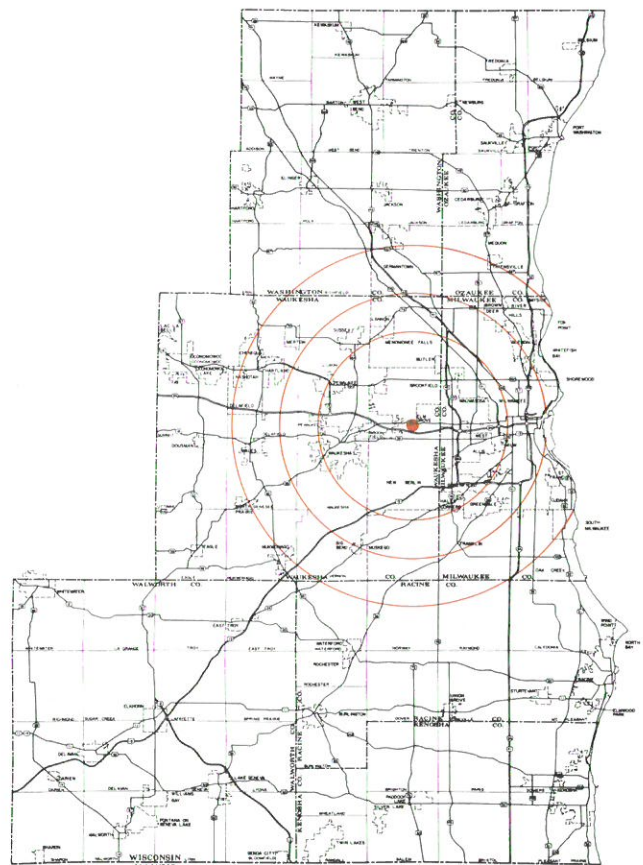
SOUTHRIDGE



SOUTHGATE-POINT LOOMIS

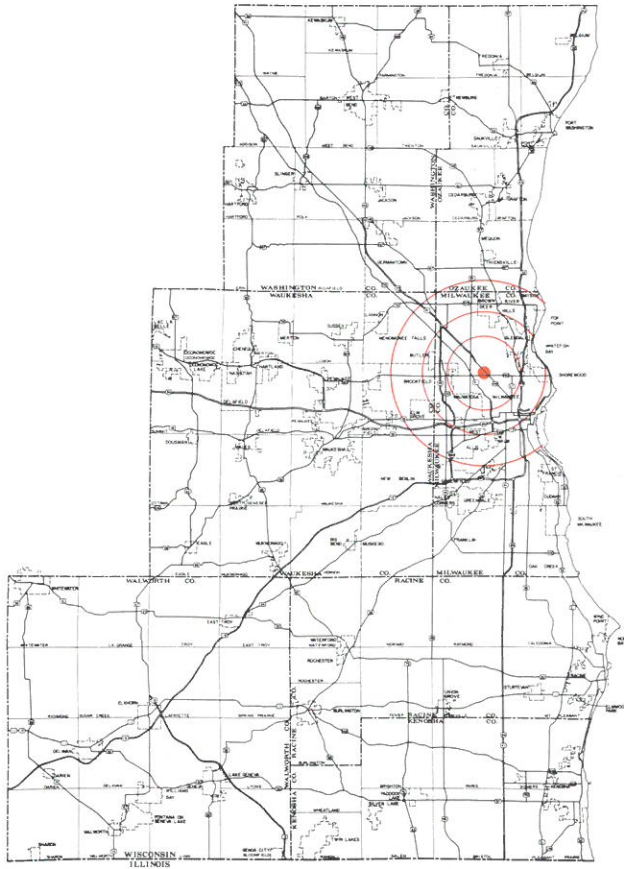


BROOKFIELD SQUARE

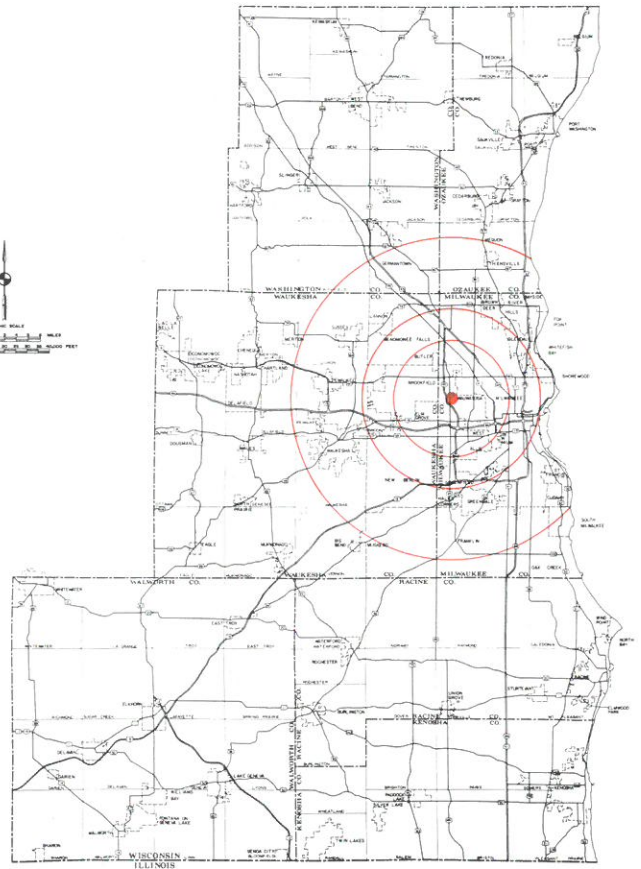


Map 16 (continued)

CAPITOL COURT



MAYFAIR



BAYSHORE

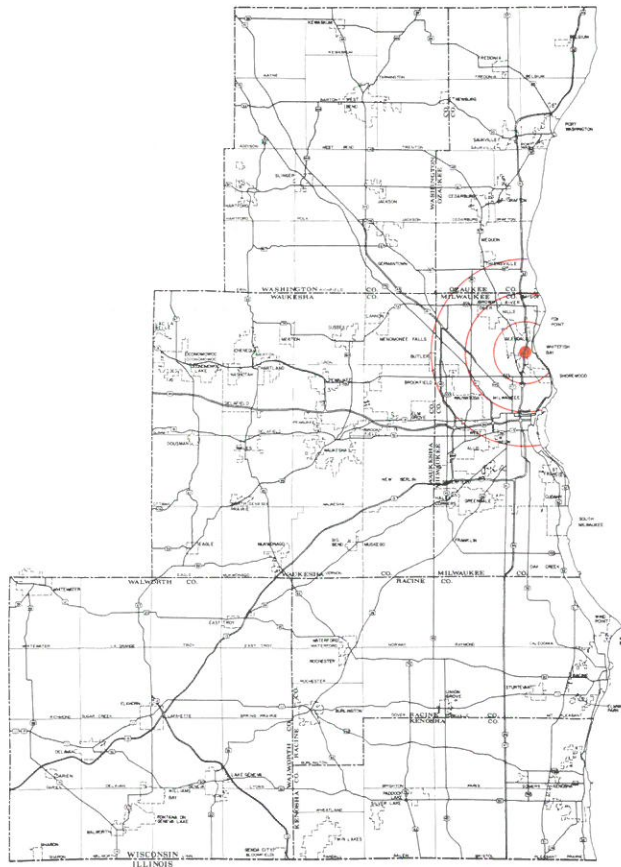
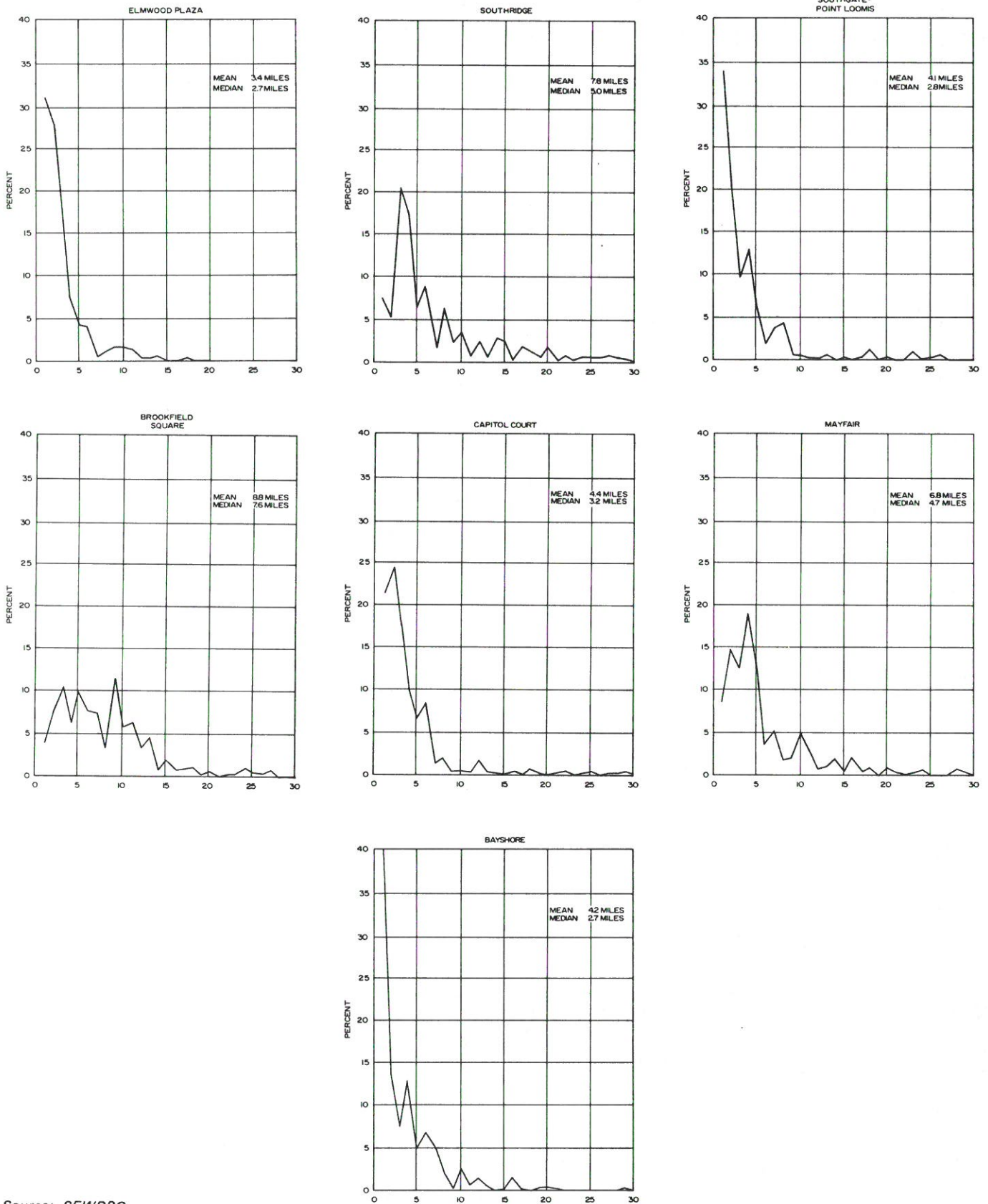


Figure 1

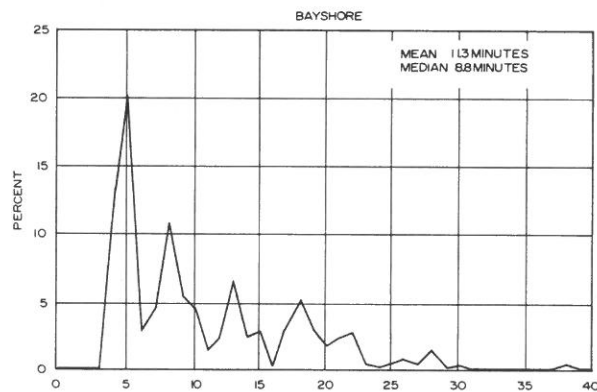
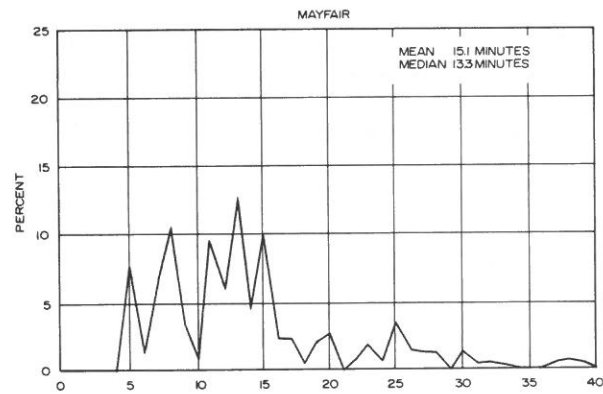
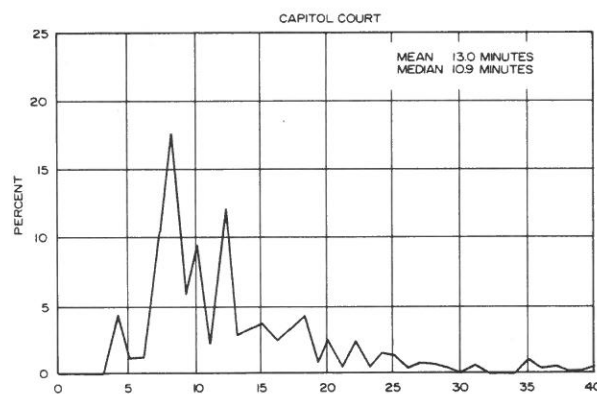
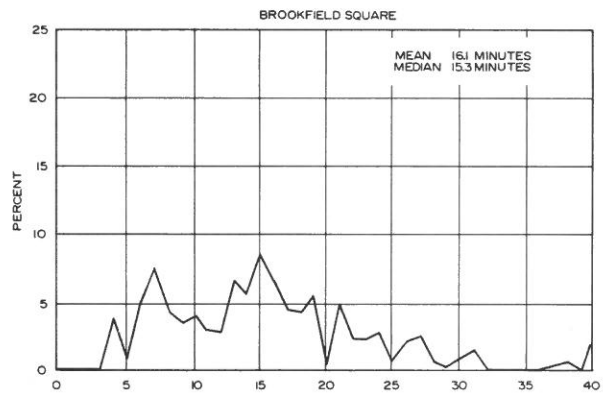
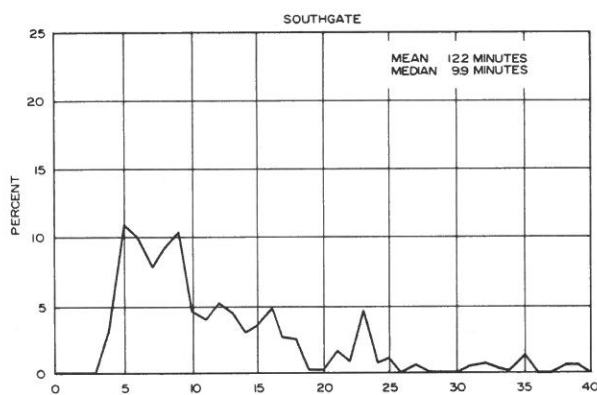
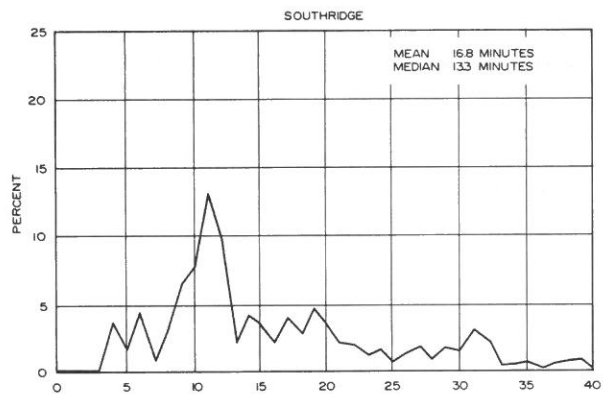
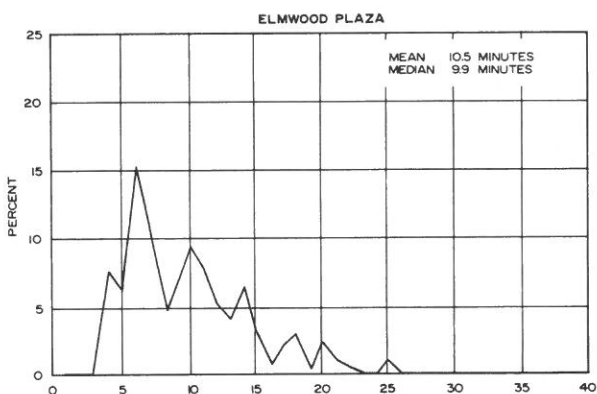
**AVERAGE TRIP LENGTHS IN MILES OF SHOPPING PURPOSE PERSON TRIPS
DESTINED FOR SEVEN SHOPPING CENTERS ON THE AVERAGE WEEKDAY: 1972**



Source: SEWRPC.

Figure 2

AVERAGE TRIP LENGTH IN MINUTES OF SHOPPING PURPOSE PERSON TRIPS DESTINED FOR SEVEN REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Table 3

**MODE OF TRAVEL OF INTERNAL PERSON TRIPS DESTINED FOR SEVEN
REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY: 1972**

Shopping Center	Mode of Travel									
	Auto Driver		Auto Passenger		Bus Passenger		Other ^a		Total	
	Trips	Percent	Trips	Percent	Trips	Percent	Trips	Percent	Trips	Percent
Elmwood Plaza	5,310	59.9	3,490	39.3	70	0.8	--	0.0	8,870	100.0
Southridge	12,470	60.4	7,810	37.8	340	1.7	20	0.1	20,640	100.0
Southgate-Point Loomis . .	10,970	64.3	5,470	32.1	620	3.6	--	0.0	17,060	100.0
Brookfield Square	12,460	62.6	7,290	36.6	70	0.4	90	0.4	19,910	100.0
Capitol Court	12,830	59.8	7,530	35.1	1,050	4.9	40	0.2	21,450	100.0
Mayfair	8,110	65.3	3,750	30.2	560	4.5	--	0.0	12,420	100.0
Bayshore	8,860	70.7	3,570	28.5	100	0.8	--	0.0	12,530	100.0
Total	71,010	62.9	38,910	34.5	2,810	2.5	150	0.1	112,880	100.0

^a Includes passenger travel by school bus, taxi, truck, motorcycle, and charter bus.

Source: SEWRPC.

mobile travel to Bayshore and a high occupancy of 1.66 persons for automobile travel to Elmwood Plaza. In comparison, the average auto occupancy rate for total internal person travel in the Region in 1972 was 1.43 persons, and the average auto occupancy rate for internal person travel to the Milwaukee CBD was 1.37 persons.

The auto occupancy rates for shopping purpose trips were substantially higher than for other purpose trips at all the shopping centers with the exception of Bayshore and Southgate-Point Loomis. The average overall auto occupancy of shopping purpose trips to the seven shopping centers was 1.60 persons—ranging from a low occupancy of 1.38 persons at Bayshore to a high occupancy of 1.88 persons at Elmwood Plaza.

Trip Purpose

As would be expected, the primary purpose of tripmaking to the regional shopping centers on an average weekday was shopping. As shown in Table 5, almost 73 percent of the total tripmaking to the centers was for shopping purposes, ranging from a low of 63 percent of the trips made to Mayfair to a high of 83 percent of the trips made to Elmwood Plaza. In total, on an average weekday in 1972 about 81,900 shopping purpose trips were made to the seven regional shopping centers, or about 15 percent of the total 544,900 shopping trips made within the Southeastern Wisconsin Region on an average weekday. About 7,300 shopping trips were made to Elmwood Plaza on an average weekday; about 7,900 were made to Mayfair; about 8,300 were made to Bayshore; about 11,800 were made to Southgate-Point Loomis; about 15,200 were made to Brookfield Square; about 15,700 were made to Capitol Court;

Table 4

**AVERAGE AUTOMOBILE OCCUPANCY OF
INTERNAL PERSON TRIPS DESTINED FOR
SEVEN REGIONAL SHOPPING CENTERS
ON THE AVERAGE WEEKDAY: 1972**

Shopping Center	Average Auto Occupancy		
	Shopping	Other Purposes	Total
Elmwood Plaza	1.88	1.07	1.66
Southridge	1.71	1.40	1.63
Southgate-Point Loomis . .	1.50	1.50	1.50
Brookfield Square	1.62	1.48	1.59
Capitol Court	1.60	1.55	1.59
Mayfair	1.56	1.33	1.46
Bayshore	1.38	1.46	1.40
Average	1.60	1.43	1.55

Source: SEWRPC.

Table 5

**PURPOSES OF INTERNAL PERSON TRIPS DESTINED FOR SEVEN
REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY: 1972**

Shopping Center	Trip Purpose									
	Work		Personal Business		Social-Recreation		Shopping		Total	
	Trips	Percent	Trips	Percent	Trips	Percent	Trips	Percent	Trips	Percent
Elmwood Plaza	630	7.1	770	8.7	150	1.7	7,320	82.5	8,870	100.0
Southridge	2,480	12.0	1,270	6.1	1,170	5.7	15,720	76.2	20,640	100.0
Southgate-Point Loomis . .	2,090	12.3	1,560	9.1	1,630	9.6	11,780	69.0	17,060	100.0
Brookfield Square	2,140	10.8	1,100	5.5	1,460	7.3	15,210	76.4	19,910	100.0
Capitol Court	1,300	6.1	2,460	11.5	2,020	9.4	15,670	73.0	21,450	100.0
Mayfair	1,590	12.8	2,110	17.0	860	6.9	7,860	63.3	12,420	100.0
Bayshore	1,680	13.4	1,780	14.2	740	5.9	8,330	66.5	12,530	100.0
Total	11,910	10.6	11,050	9.8	8,030	7.1	81,890	72.5	112,880	100.0

Source: SEWRPC.

and about 15,800 were made to Southridge. In comparison, during the same period the Milwaukee CBD attracted about 12,400 shopping trips on an average weekday; the Kenosha CBD attracted about 5,500 shopping trips; and, the Racine CBD attracted about 3,800 shopping trips.

Of the remaining tripmaking to the shopping centers, work purposes constituted about 11 percent of the trips; personal business purposes constituted about 10 percent of the trips; and social-recreational purposes constituted about 7 percent of the trips.

Time Expended at the Shopping Centers

As shown in Table 6, persons traveling to the seven regional shopping centers for the purpose of shopping spent the shortest period of time at the shopping centers. Of the visits to the seven centers for the purpose of shopping, 73 percent lasted less than two hours and 98 percent lasted less than four hours. In contrast, of visits to the centers for other purposes, 49 percent lasted less than two hours, two-thirds lasted less than four hours, and one-third lasted four or more hours. Bayshore attracted the shortest shopping purpose visits with 97 percent of such visits lasting less than two hours and 74 percent lasting less than one hour. Shopping visits to Elmwood Plaza were also relatively brief, with 92 percent of the total shopping visits lasting less than two hours and 59 percent lasting less than one hour. Shopping visits of the longest duration were found to occur at Southridge and Mayfair. At Southridge about 71 percent of the shopping visits lasted less than two hours and 26 percent lasted less than one hour. At Mayfair, 75 percent of the shopping visits lasted less than two hours and 28 percent lasted less than one hour. Visits for shopping purposes at all the centers tended to be briefer than were shopping purpose visits to the Milwaukee CBD on an average weekday. In 1972, about 60 percent of the shopping visits to the Milwaukee CBD lasted less than two hours.

The distance traveled to the shopping centers for shopping purposes appears to have influenced the amount of time spent at the centers. The three centers which attracted the longer shopping visits were the centers which received trips from the most distant origins: Southridge, Mayfair, Brookfield Square. As the average times and distances of tripmaking to each center declined, the proportion of shopping visits which lasted less than two hours increased. As may be observed in Table 7, with the exception of Brookfield Square, there is a notable correlation between the length of visit and the median distance in miles and minutes traveled to the shopping centers.

Table 6

**PERCENTAGE DISTRIBUTION OF TIME EXPENDED AT SEVEN REGIONAL SHOPPING
CENTERS ON THE AVERAGE WEEKDAY BY THE PURPOSE OF THE TRIPS: 1972**

Shopping Center	Trip Purpose	Percentage of Trips by Duration of Visit					
		Less Than 1.0 Hour	1.0-1.9 Hours	2.0-3.9 Hours	4.0-7.9 Hours	8.0 and More Hours	Total
Elmwood Plaza	Shopping . . .	58.8	32.7	8.5	0.0	0.0	100.0
	Other	39.0	21.6	14.9	14.5	10.0	100.0
	Total	55.3	30.8	9.6	2.5	1.8	100.0
Southridge	Shopping . . .	25.8	44.7	25.3	3.9	0.3	100.0
	Other	15.8	24.0	11.0	31.4	17.8	100.0
	Total	23.6	40.1	22.1	10.0	4.2	100.0
Southgate-Point Loomis	Shopping	63.1	25.0	10.9	0.7	0.3	100.0
	Other	43.5	9.5	17.4	19.7	9.9	100.0
	Total	57.3	20.4	12.8	6.3	3.2	100.0
Brookfield Square	Shopping . . .	35.7	43.4	18.3	2.2	0.4	100.0
	Other	18.9	8.6	25.5	25.6	21.4	100.0
	Total	31.8	35.3	20.0	7.6	5.3	100.0
Capitol Court	Shopping . . .	37.9	43.6	17.2	1.3	0.0	100.0
	Other	43.0	22.9	11.4	8.6	14.1	100.0
	Total	39.2	38.4	15.8	3.1	3.5	100.0
Mayfair	Shopping . . .	28.2	47.1	21.2	3.3	0.2	100.0
	Other	29.0	17.1	22.9	10.7	20.3	100.0
	Total	28.4	36.7	21.8	5.9	7.2	100.0
Bayshore	Shopping . . .	74.3	22.9	2.8	0.0	0.0	100.0
	Other	32.2	24.6	18.8	17.0	7.4	100.0
	Total	60.0	23.5	8.2	5.8	2.5	100.0
Total	Shopping . . .	43.4	38.4	16.2	1.8	0.2	100.0
	Other	31.2	17.9	17.4	18.6	14.9	100.0
	Total	40.2	33.0	16.5	6.2	4.1	100.0

Source: SEWRPC.

Table 7

**DURATION OF VISIT AND AVERAGE TRIP LENGTH IN MILES AND MINUTES OF
SHOPPING PURPOSE TRIPS MADE TO SEVEN REGIONAL SHOPPING CENTERS: 1972**

Shopping Center	Percent of Shopping Purpose Trips by Duration of Visit at Center		Average Trip Length of Shopping Purpose Trips in Minutes		Average Trip Length of Shopping Purpose Trips in Miles	
	Less Than 2 Hours	2 or More Hours	Median	Mean	Median	Mean
Southridge	70.5	29.5	13.3	16.8	5.0	7.8
Mayfair	75.3	24.7	13.3	15.1	4.7	6.8
Brookfield Square	79.1	20.9	15.3	16.1	7.6	8.8
Capitol Court	81.5	18.5	10.9	13.0	3.2	4.4
Southgate-Point Loomis . . .	88.1	11.9	9.9	12.2	2.8	4.1
Elmwood Plaza	91.5	8.5	9.9	10.5	2.7	3.4
Bayshore	97.2	2.8	8.8	11.3	2.7	4.2

Source: SEWRPC.

Hourly Patterns of Person Travel to the Shopping Centers

The hourly patterns of person travel to and from the seven shopping centers were markedly similar for all the centers with the exception of Bayshore, which reached peak person trip and person accumulation volumes during the morning hours. Both the person accumulations and the volumes of person trips to the remaining six centers reached peak volumes during the evening. The primary purposes of travel to all of the centers were shown to be shopping during the bulk of the day and work-related purposes during the morning hours prior to 9:00 a.m. The primary purpose of persons leaving the shopping centers was to return home.

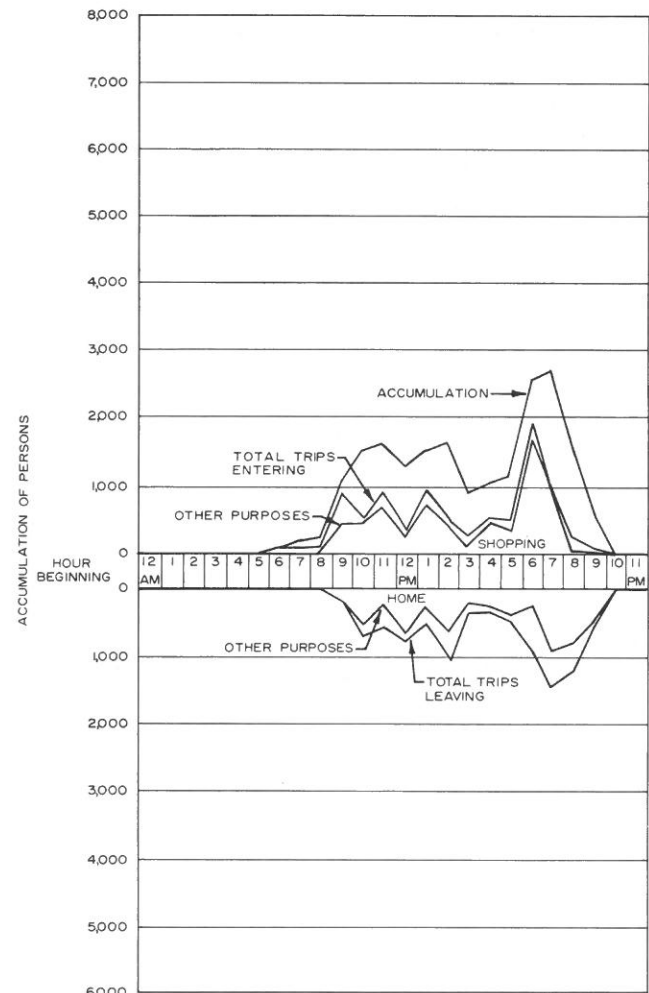
Elmwood Plaza: As shown in Figure 3, the greatest hourly volume of person trips entering Elmwood Plaza, about 1,800 trips, occurred during the hour beginning at 6:00 p.m., followed by the greatest hourly volume of person trips leaving Elmwood Plaza, about 1,400 trips, during the hour beginning at 7:00 p.m. The largest accumulation of persons at the shopping center occurred during the hour beginning at 7:00 p.m. with about 2,700 persons determined to be present at Elmwood Plaza. During the day there were two lesser peaks in the hourly accumulation of persons present at Elmwood Plaza of about 1,700 persons during the hour beginning at 11:00 a.m. and 1,600 persons during the hour beginning at 2:00 p.m.

Southridge: Although Capitol Court attracted the largest total volumes of person trips to the seven regional shopping centers during an average weekday, the highest hourly peaks of person trips and person accumulations among the seven shopping centers occurred at Southridge. As shown in Figure 4, the greatest hourly volume of person trips entering Southridge, about 3,700 person trips, occurred during the hour beginning at 7:00 p.m., followed by the greatest hourly volume of person trips leaving any of the shopping centers, about 5,000 person trips, during the hour beginning at 9:00 p.m. The largest accumulation of persons at Southridge occurred during the hour beginning at 7:00 p.m., with about 7,900 persons determined to be present at the center—predominantly for shopping purposes. During the day there was a lesser peak in the hourly accumulation of persons present at Southridge of about 3,200 persons during the hour beginning at 1:00 p.m.

Southgate-Point Loomis: As shown in Figure 5 the greatest hourly volume of person trips entering the Southgate-Point Loomis complex, about 2,100 person trips, occurred during the hour beginning at 7:00 p.m., followed by the largest hourly volume of person trips leaving Southgate-Point Loomis, about 2,100 person trips, during the hour beginning at 9:00 p.m. The largest accumulation of persons at Southgate-Point Loomis occurred during the hour beginning at 7:00 p.m., with about 4,900 persons

Figure 3

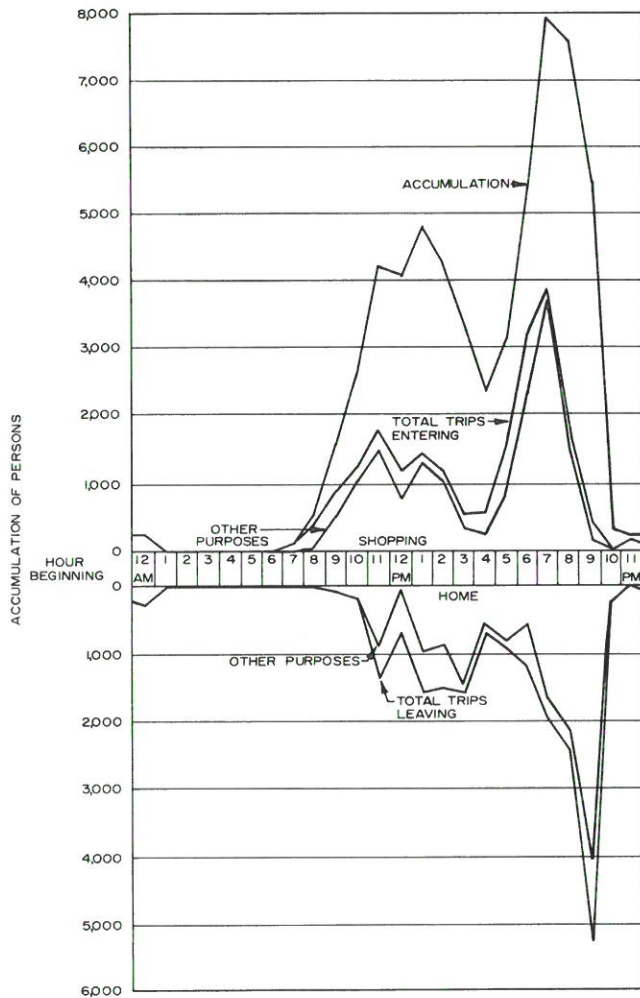
THE ACCUMULATION OF PERSONS AND THE NUMBER OF PERSON TRIPS ENTERING AND LEAVING ELMWOOD PLAZA BY TIME OF DAY AND TRIP PURPOSE ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Figure 4

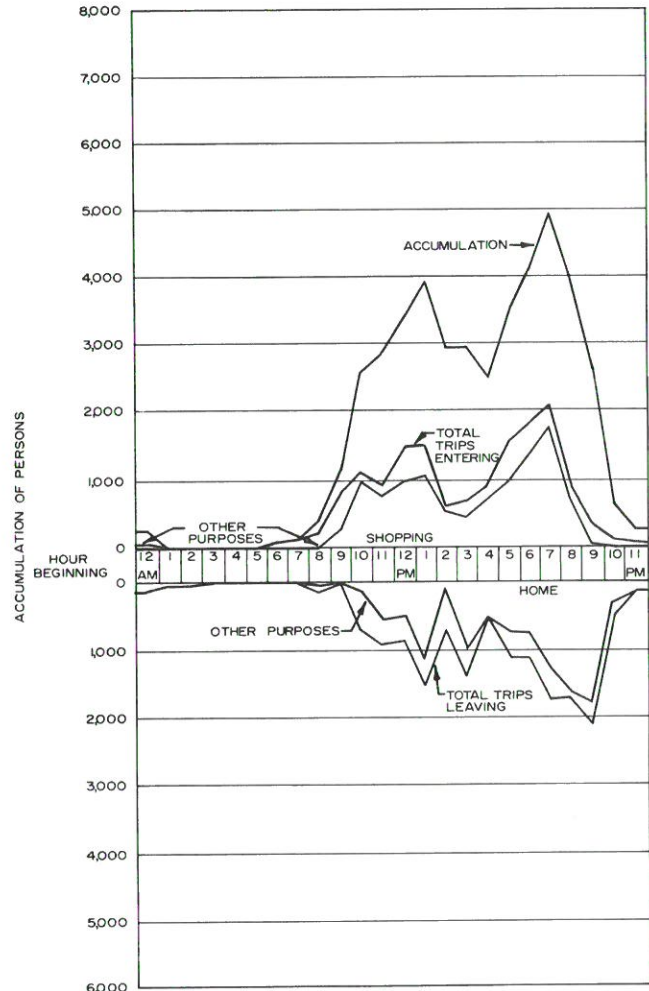
THE ACCUMULATION OF PERSONS AND THE
NUMBER OF PERSON TRIPS ENTERING AND
LEAVING SOUTHRIDGE BY TIME OF DAY AND
TRIP PURPOSE ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Figure 5

THE ACCUMULATION OF PERSONS AND THE
NUMBER OF PERSON TRIPS ENTERING AND
LEAVING THE SOUTHGATE-POINT LOOMIS
SHOPPING CENTERS BY TIME OF DAY AND TRIP
PURPOSE ON THE AVERAGE WEEKDAY: 1972



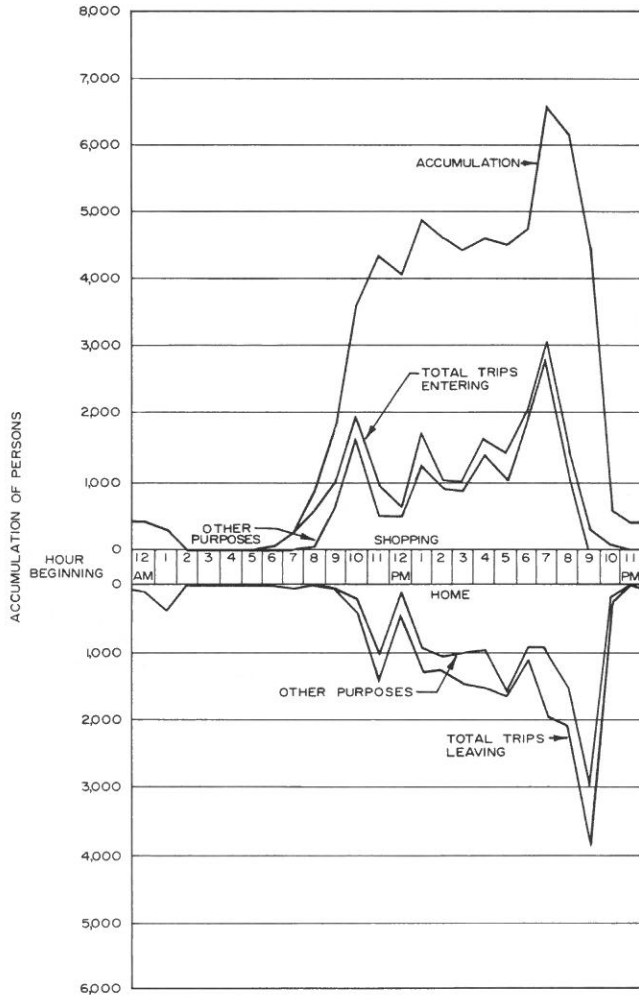
Source: SEWRPC.

determined to be present at this complex. During the day there was a lesser peak in the hourly accumulation of persons present at Southgate-Point Loomis of about 3,900 persons during the hour beginning at 1:00 p.m.

Brookfield Square: As shown in Figure 6, the greatest hourly volume of person trips entering Brookfield Square, about 3,000 person trips, occurred during the hour beginning at 7:00 p.m. The largest hourly volume of person trips leaving this shopping center, about 3,900 person trips, occurred at 9:00 p.m. The second greatest hourly accumulation of persons at any of the seven shopping centers occurred at Brookfield Square, with 6,600 persons determined to be present at this center during the hour beginning at 7:00 p.m. During the day there was a lesser peak in the hourly accumulation of persons present at Brookfield Square of about 4,900 persons during the hour beginning at 1:00 p.m.

Figure 6

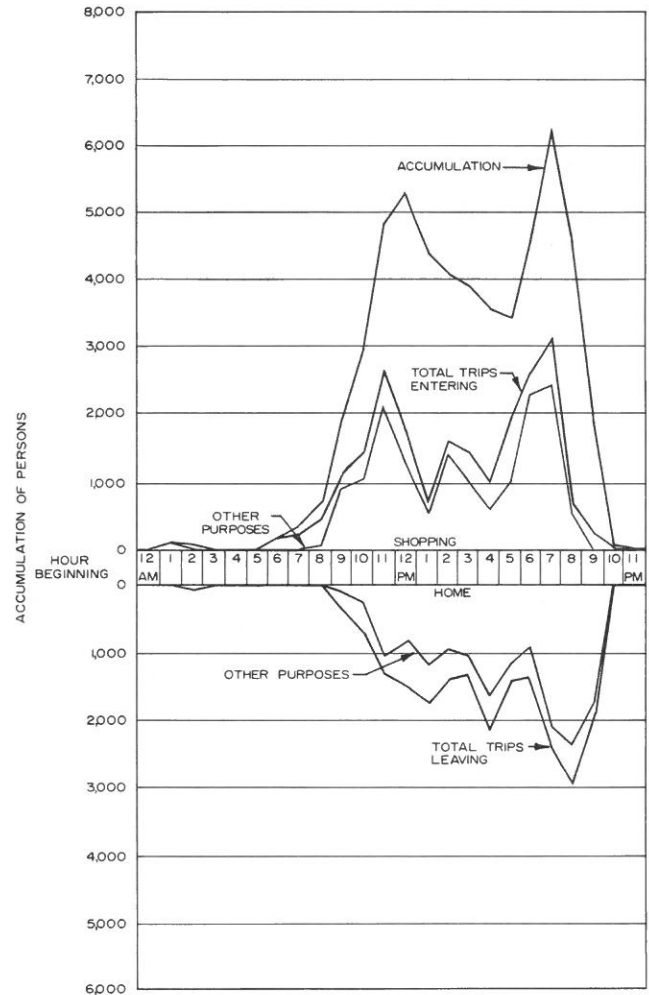
THE ACCUMULATION OF PERSONS AND
THE NUMBER OF PERSON TRIPS ENTERING
AND LEAVING BROOKFIELD SQUARE
BY TIME OF DAY AND TRIP PURPOSE
ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Figure 7

THE ACCUMULATION OF PERSONS AND THE
NUMBER OF PERSON TRIPS ENTERING AND
LEAVING CAPITOL COURT BY TIME OF DAY AND
TRIP PURPOSE ON THE AVERAGE WEEKDAY: 1972



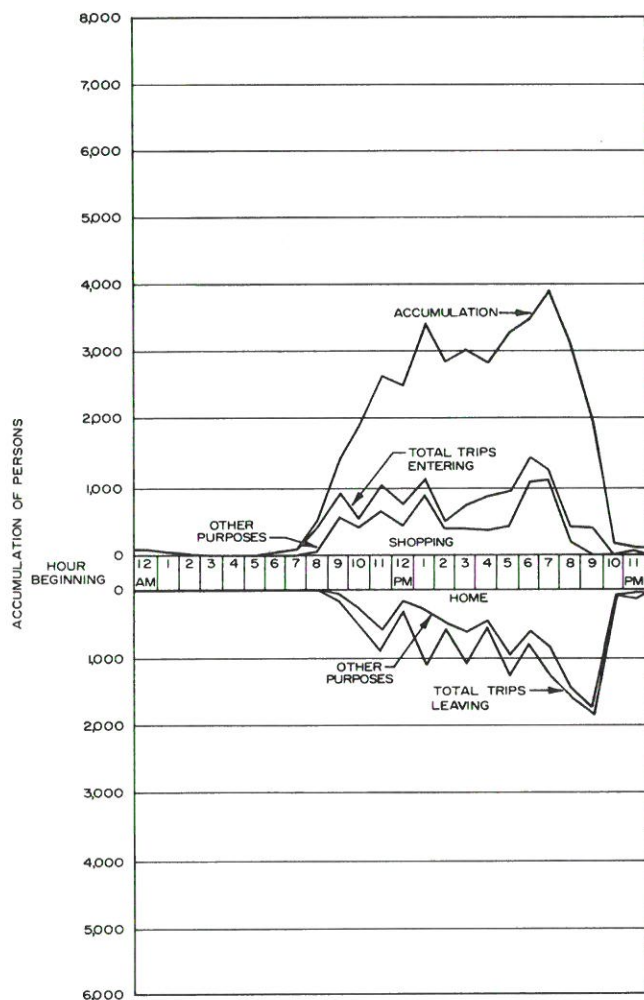
Source: SEWRPC.

Capitol Court: As shown in Figure 7, the largest hourly volume of person trips entering Capitol Court, about 3,100 person trips, occurred during the hour beginning at 7:00 p.m., followed by the largest hourly volume of person trips leaving this center, about 2,900 person trips, during the hour beginning at 8:00 p.m. The peak accumulation of persons at Capitol Court occurred during the hour beginning at 7:00 p.m., with about 6,300 persons determined to be present at this center. The largest midday hourly accumulation of persons at any of the seven shopping centers occurred at Capitol Court, with a secondary peak of about 5,200 persons at noontime.

Mayfair: As shown in Figure 8, the greatest hourly volume of person trips to the Mayfair shopping center, about 1,500 person trips, occurred during the hour beginning at 6:00 p.m. The largest hourly volume of person trips leaving this shopping center, about 1,800 person trips, occurred at 9:00 p.m. The greatest

Figure 8

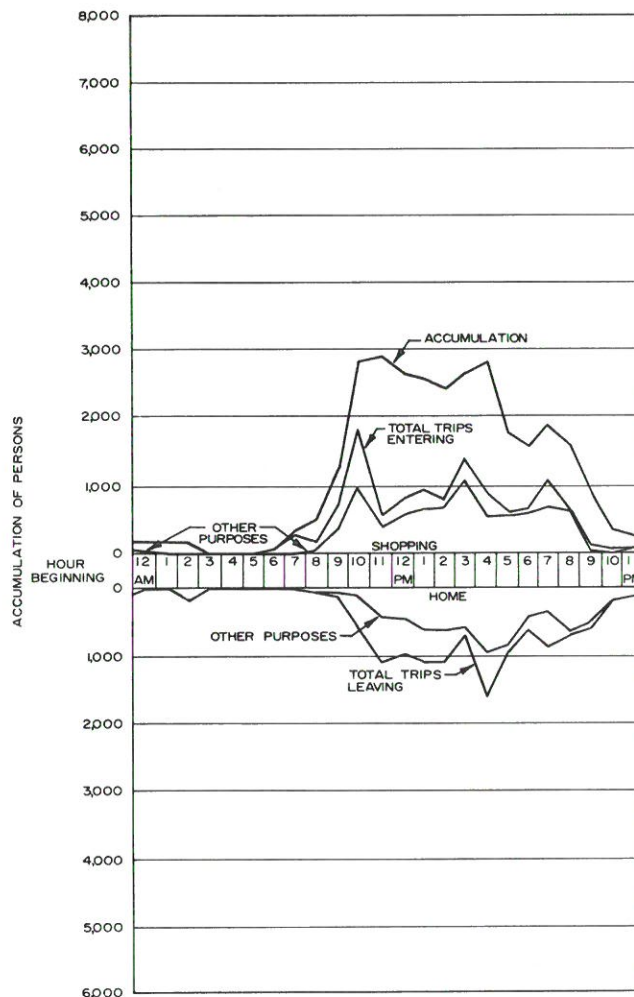
THE ACCUMULATION OF PERSONS AND THE NUMBER OF PERSON TRIPS ENTERING AND LEAVING THE MAYFAIR SHOPPING CENTER BY TIME OF DAY AND TRIP PURPOSE ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

Figure 9

THE ACCUMULATION OF PERSONS AND THE NUMBER OF PERSON TRIPS ENTERING AND LEAVING BAYSHORE SHOPPING CENTER BY TIME OF DAY AND TRIP PURPOSE ON THE AVERAGE WEEKDAY: 1972



Source: SEWRPC.

accumulation of persons at Mayfair occurred during the hour beginning at 7:00 p.m., with about 3,800 persons determined to be present at this center. During the day there was a lesser peak in the hourly accumulation of persons at Mayfair of about 3,400 persons during the hour beginning at 1:00 p.m.

Bayshore: As shown in Figure 9, the patterns formed by the hourly distribution of person trips made to and from Bayshore Shopping Center on an average weekday were notably different from the hourly patterns observed at the other shopping centers. Of the seven shopping centers, Bayshore is the only center at which peak volumes of person trips and person accumulations occurred during the morning hours. The largest hourly volume of person trips entering Bayshore, about 1,800 person trips, occurred during the hour beginning at 10:00 a.m. A secondary peak of about 1,400 person trips occurred during the hour beginning at 3:00 p.m. and a third, lesser peak of about 1,000 person trips occurred during the hour beginning at

7:00 p.m. The largest hourly volume of person trips leaving this center on an average weekday was about 1,600 person trips during the hour beginning at 4:00 p.m. The largest accumulation of persons at Bayshore occurred during the hours beginning at 10:00 a.m. and 11:00 a.m., with about 2,800 persons determined to be present at this center during each hour. An accumulation of nearly equal magnitude, about 2,700 persons, was reached during the hour beginning at 4:00 p.m. In the evening there was a lesser peak in the hourly accumulation of persons present at Bayshore of about 1,800 persons during the hour beginning at 7:00 p.m.

Automobile Availability

In total, about 4 percent of the person trips made to the seven regional shopping centers on an average weekday were made by persons living in households with no auto; about 47 percent by persons living in one-auto households; about 38 percent by persons living in two-auto households; and about 10 percent by persons living in three-or-more-auto households. Elmwood Plaza, Brookfield Square, and Bayshore attracted the smallest percentages of trips by persons who lived in households with no auto—0.5 percent at Elmwood Plaza, 2.7 percent at Brookfield Square and Bayshore. In contrast, Capitol Court attracted the largest proportion of person trips from households with no auto—almost 10 percent. Mayfair attracted the largest proportion of trips by persons from multiple-auto households—almost 62 percent (see Table 8).

Socioeconomic Characteristics

The following section delineates some of the socioeconomic characteristics of the persons who traveled to the seven regional shopping centers on an average weekday in 1972 by the percentage of internal person trips made to each center.

Licensed Driver Status: Females made the majority of person trips to the seven regional shopping centers—from 61 percent of the trips made to Capitol Court to almost 68 percent of the trips made to the Southgate-Point Loomis complex. The majority of person trips to the shopping centers were made by licensed drivers. Persons without drivers licenses generated only 29 percent of the person trips to Elmwood Plaza, 26 percent to Capitol Court, 16 percent to Bayshore, 21 percent to Brookfield Square, 20 percent to both Southridge and Southgate-Point Loomis, and 17 percent to Mayfair. Females accounted for the highest proportion of trips made by persons without driver's licenses to all of the shopping centers with the exception of Elmwood Plaza. At Elmwood Plaza males without driver's licenses made almost 15 percent of the person trips to this center, whereas females without licenses made about 14 percent of the person trips. Males without driver's licenses generated from 3 percent to 7 percent of the total person trips made to the remaining six shopping centers (see Table 9).

Age: Persons in the 15 to 24 year age bracket accounted for the greatest proportion of person trips on a average weekday to Elmwood Plaza, about 18 percent; to Southridge, about 27 percent; to Southgate-Point Loomis, about 20 percent; and to Brookfield Square, almost 23 percent. Persons 65 years of age or older generated the largest proportion of trips to Capitol Court, about 21 percent. About 20 percent of the person trips made to Mayfair were generated by persons in two separate age brackets: persons 15 to 24 years of age and persons 45 to 54 years of age. The largest proportion of trips to Bayshore, about 22 percent, was generated by persons 35 to 44 years of age (see Table 10).

It is notable that the three shopping centers attracting the smallest proportions of person trips by persons 5 to 14 years of age—Bayshore, Southgate-Point Loomis, and Mayfair—are also the three centers associated with the lowest automobile occupancy rates. Conversely, automobile travel to Elmwood Plaza, the shopping center attracting the highest proportion of trips by persons 5 to 14 years of age, had the highest automobile occupancy rate.

Occupation: The greatest proportion of person trips made to the seven shopping centers on an average weekday was generated by housewives and ranged from a low of 28 percent of the person trips made to Mayfair to a high of 39 percent of the person trips made to Bayshore. The second most prominent occupational group was students, who accounted for 12 percent to 23 percent of the person trips to the seven centers. Capitol Court, Elmwood Plaza, and Mayfair attracted significant percentages of trips from retired persons—about 14 percent, about 11 percent, and about 10 percent, respectively. In total, persons who are

Table 8

**DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR SEVEN REGIONAL SHOPPING CENTERS
ON THE AVERAGE WEEKDAY BY THE NUMBER OF AUTOMOBILES AVAILABLE PER HOUSEHOLD: 1972**

Shopping Center	Autos Available per Household								Total	
	0		1		2		3 or More			
	Trips	Percent	Trips	Percent	Trips	Percent	Trips	Percent	Trips	Percent
Elmwood Plaza	40	0.5	5,530	62.3	3,100	34.9	200	2.3	8,870	100.0
Southridge	710	3.4	9,470	45.9	8,080	39.2	2,380	11.5	20,640	100.0
Southgate-Point Loomis . .	610	3.6	9,530	55.8	5,250	30.8	1,670	9.8	17,060	100.0
Brookfield Square.	540	2.7	8,180	41.1	8,820	44.3	2,370	11.9	19,910	100.0
Capitol Court	2,110	9.8	11,060	51.6	6,140	28.6	2,140	10.0	21,450	100.0
Mayfair.	480	3.9	4,270	34.4	6,010	48.4	1,660	13.3	12,420	100.0
Bayshore	340	2.7	5,220	41.7	5,770	46.0	1,200	9.6	12,530	100.0
Total	4,830	4.3	53,260	47.2	43,170	38.2	11,620	10.3	112,880	100.0

Source: SEWRPC.

Table 9

**PERCENTAGE DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED
FOR SEVEN REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY
BY THE SEX AND LICENSED DRIVER STATUS OF THE TRIPMAKERS: 1972**

Licensed Driver Status	Percent of Internal Person Trips to Shopping Centers						
	Elmwood Plaza	Southridge	Southgate-Point Loomis	Brookfield Square	Capitol Court	Mayfair	Bayshore
Unlicensed Males	14.7	4.7	2.6	5.0	5.4	6.5	2.6
Licensed Males	25.7	31.8	29.8	29.5	33.8	30.9	30.0
Subtotal	40.4	36.5	32.4	34.5	39.2	37.4	32.6
Unlicensed Females	14.4	15.2	17.2	15.8	20.7	10.8	13.8
Licensed Females	45.2	48.3	50.4	49.7	40.1	51.8	53.6
Subtotal	59.6	63.5	67.6	65.5	60.8	62.6	67.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SEWRPC.

Table 10

**PERCENTAGE DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR SEVEN REGIONAL
SHOPPING CENTERS ON THE AVERAGE WEEKDAY BY THE AGE OF THE TRIPMAKERS: 1972**

Age (in years)	Percent of Internal Person Trips to Shopping Centers						
	Elmwood Plaza	Southridge	Southgate-Point Loomis	Brookfield Square	Capitol Court	Mayfair	Bayshore
5-14	15.7	11.3	5.7	10.4	7.6	6.5	4.4
15-24	17.7	26.5	20.2	22.5	14.5	19.8	14.6
25-34	16.7	18.7	18.3	21.6	13.6	13.5	16.1
35-44	14.7	14.4	17.2	10.9	14.8	11.6	22.1
45-54	15.1	19.1	19.2	16.4	14.9	19.9	17.5
55-64	8.0	6.1	12.8	11.3	13.8	17.3	13.9
65 and Older	12.1	3.9	6.6	6.9	20.8	11.4	11.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SEWRPC.

Table 11

PERCENTAGE DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR SEVEN REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY BY THE OCCUPATION OF THE TRIPMAKERS: 1972

Occupation	Percent of Internal Person Trips to Shopping Centers						
	Elmwood Plaza	Southridge	Southgate-Point Loomis	Brookfield Square	Capitol Court	Mayfair	Bayshore
Professional, Technical, and Kindred . . .	4.4	7.8	8.6	6.9	8.7	8.7	11.8
Managers, Officials, and Proprietors . . .	5.3	6.8	7.4	7.4	3.7	4.8	9.3
Clerical and Kindred	3.9	9.7	12.1	8.0	7.8	12.9	7.6
Sales	2.2	4.8	5.2	5.5	2.6	7.2	7.1
Craftsmen, Foremen, and Kindred	1.5	3.9	6.7	4.8	3.3	1.4	3.0
Operatives and Kindred	7.1	4.6	5.4	2.1	5.2	2.3	1.3
Service Workers	3.2	6.9	3.7	3.4	4.9	5.9	4.3
Laborers and Farm Workers	3.0	0.7	0.4	1.6	2.1	0.5	0.4
Housewives and Other							
Unpaid Home Workers	38.3	26.4	30.9	33.6	31.2	28.1	38.8
Students	19.2	23.0	12.1	21.6	14.8	16.6	11.8
Retired	11.4	4.3	5.8	4.7	13.6	10.4	2.8
Other	0.5	1.1	1.7	0.4	2.1	1.2	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SEWRPC.

not formally employed accounted for most of the trips made to the shopping centers: about 69 percent of the trips to Elmwood Plaza; about 54 percent of the trips to Southridge; about 49 percent of the trips to Southgate-Point Loomis; about 60 percent of the trips to Brookfield Square and Capitol Court; about 55 percent of the trips to Mayfair; and about 53 percent of the trips to Bayshore. Among employed persons, clerical and kindred workers were the most prominent group at Southridge, about 10 percent; at Southgate-Point Loomis, about 12 percent; at Brookfield Square, about 8 percent; and at Mayfair, about 13 percent. Among employed persons, professional, technical, and kindred workers generated the most trips to Capitol Court, about 9 percent, and Bayshore, about 12 percent, while operatives and kindred workers generated the most trips to Elmwood Plaza, about 7 percent (see Table 11).

Income: Persons from households with a 1972 income of between \$8,000 and \$11,999 generated the largest proportions of trips to most of the regional shopping centers: about 57 percent of the trips to Elmwood Plaza; about 34 percent of the trips to Southgate-Point Loomis; about 30 percent of the trips to Southridge and Capitol Court; and about 29 percent of the trips to Mayfair. The largest proportions of trips to Brookfield Square, about 33 percent, and to Bayshore, about 35 percent, were generated by persons from households with a 1972 income of \$15,000 to \$24,999. Persons from households with a 1972 income of less than \$8,000 accounted for about 20 percent of the trips to Elmwood Plaza, about 11 percent to Southridge, about 20 percent to Southgate-Point Loomis, about 13 percent to Brookfield Square, about 27 percent to Capitol Court, about 14 percent to Mayfair, and about 7 percent to Bayshore (see Table 12).

SUMMARY

Within the Southeastern Wisconsin Region between 1963 and 1972, there was significant growth of regional shopping centers which were easily accessible from all areas of the Region. The seven shopping centers found to have the greatest impact on the Region in terms of both trip attraction and economic impact were Elmwood Plaza, Southridge, Southgate-Point Loomis, Brookfield Square, Capitol Court, Mayfair, and Bayshore. This article has presented in summary the salient findings of a comprehensive home interview travel survey conducted by the SEWRPC in 1972 as such findings relate to the travel habits and patterns generated by tripmaking to the seven regional shopping centers.

Table 12

PERCENTAGE DISTRIBUTION OF INTERNAL PERSON TRIPS DESTINED FOR SEVEN REGIONAL SHOPPING CENTERS ON THE AVERAGE WEEKDAY BY THE HOUSEHOLD ANNUAL INCOME OF THE TRIPMAKERS: 1972

1972 Household Annual Income	Percent of Internal Person Trips to Shopping Centers						
	Elmwood Plaza	Southridge	Southgate-Point Loomis	Brookfield Square	Capitol Court	Mayfair	Bayshore
\$ 3,999 or Less . . .	3.4	2.3	2.9	4.1	3.7	5.1	2.5
\$ 4,000-\$ 7,999 . . .	16.1	9.0	17.3	8.7	22.9	8.9	4.3
\$ 8,000-\$11,999 . . .	57.2	29.7	33.9	17.4	29.7	28.7	20.0
\$12,000-\$14,999 . . .	8.9	27.6	22.5	26.9	20.2	27.1	23.1
\$15,000-\$24,999 . . .	11.8	24.9	20.9	32.5	16.1	20.6	34.5
\$25,000 or More . . .	2.6	6.5	2.5	10.4	7.4	9.6	15.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SEWRPC.

On an average weekday in 1972, the seven shopping centers attracted about 113,000 internal person trips. Elmwood Plaza attracted about 8,800 trips; Southridge, about 20,600 trips; Southgate-Point Loomis, about 17,100 trips; Brookfield Square, about 19,900 trips; Capitol Court, about 21,500 trips; Mayfair about 12,400 trips; and Bayshore, about 12,600 trips.

It was shown in summaries of data obtained by the U. S. Bureau of Census in the 1972 Census of Retail Trade that these seven shopping centers contained a total of 554 retail establishments that netted sales of \$461,428,000. The total payroll of the seven centers was \$61,082,000 during 1972. There were 14,015 paid employees working at the seven shopping centers during the period from January 1, 1972 through March 12, 1972.

Tripmaking to the Elmwood Plaza, Bayshore, and Southgate-Point Loomis shopping centers was found to account for the most localized patterns of trip origins. Capitol Court and Mayfair had wider ranges of attraction. Brookfield Square and Southridge attracted person travel from almost every county in the Region on an average weekday.

The mean distance traveled to the shopping centers for the purpose of shopping ranged from 3.4 miles to 8.8 miles, and the median ranged from 2.7 miles to 7.6 miles. The mean travel time required to reach the shopping centers on an average weekday ranged from 10.5 minutes to 16.8 minutes, and the median ranged from 8.8 minutes to 15.3 minutes.

About 97 percent of the total internal person trips to the shopping centers were made as either automobile drivers or passengers. Less than 3 percent of the person trips to the shopping centers were made as bus passengers. The average auto occupancy for total travel to the seven shopping centers was 1.55 persons; for shopping purpose travel, 1.60 persons.

On an average weekday in 1972, about 81,900 shopping purpose trips were made to the seven regional shopping centers, or about 15 percent of the total 545,000 shopping trips made within the Southeastern Wisconsin Region on an average weekday. Of the visits to the shopping centers for shopping purposes, 73 percent lasted less than two hours and 98 percent lasted less than four hours.

At all of the shopping centers, with the exception of Bayshore, the peak period for trips entering the centers and for the accumulation of persons at the centers occurred in the evening during the hours beginning at 6:00 p.m. or 7:00 p.m., with a secondary, lesser peak occurring during the noon hour or early afternoon. At Bayshore, the peak periods occurred in the morning during the hours beginning at 10:00 a.m. and 11:00 a.m., with secondary peaks occurring during the hours beginning at 3:00 p.m. and 4:00 p.m.

About 4 percent of the person trips to the shopping centers were made by persons living in households with no auto; about 47 percent, by persons from one-auto households; about 38 percent, by persons from two-auto households; and about 10 percent, by persons from three-or-more-auto households.

By shopping center, females made 61 percent to 68 percent of the trips to the centers. The majority of the trips to the shopping centers were made by licensed drivers. In total, females generated the highest proportion of trips to the centers made by persons without driver's licenses.

The greatest proportion of person trips made to the seven shopping centers was generated by housewives. In total, persons who were not formally employed—i.e., housewives, students, and retired persons—made most of the trips to the shopping centers, ranging, by center, from 49 percent to 69 percent of the internal person trips.

A BACKWARD GLANCE—HISTORIC EVOLUTION OF THE LOCAL GOVERNMENTAL STRUCTURE IN SOUTHEASTERN WISCONSIN

by Eileen Hammer

FORMATION OF CITIES AND VILLAGES

When Wisconsin became a state in 1848, southeastern Wisconsin was a vast expanse of forests, prairies, and swamps. Settlements were few and tiny. Only four¹ incorporated municipalities existed in southeastern Wisconsin when statehood became official, although a handful of others were ready for incorporation. As might be expected, Milwaukee was the largest urban center, with a resident population approaching 20,000 persons. Racine and Southport (later Kenosha) on Lake Michigan each had several thousand residents. The fourth incorporated municipality was Geneva (later Lake Geneva). The three Lake Michigan port communities were among the first areas settled in the Region and have remained the centers of the largest urbanized areas in the seven-county Region. They are presently among the five largest cities in the State.

In examining the historic development of incorporated municipalities in this Region, it is necessary to review briefly the distinctions between incorporated and unincorporated areas. While Wisconsin was still a territory, the land was divided into counties and subdivided into towns, a process that was largely completed several years after statehood was achieved. Most civil towns were originally 36 square miles in size, corresponding to a complete U. S. Public Land Survey township, although there were some variations. Civil towns were considered subdivisions of the State and counties for political and administrative purposes, in addition to their function to deliver local services to the rural residents.

In effect, civil towns are an arm of the State with limited power regulated by the Wisconsin Constitution and Wisconsin Statutes. Towns are not incorporated and therefore lack the special prerogatives accorded to incorporated cities and villages. For instance, towns do not have the power to annex land or otherwise change their boundaries. Conversely, towns are the most frequent source of territory for cities and villages that wish to incorporate or expand.

Cities and villages, on the other hand, are municipal corporations that have more latitude than do towns in areas of self government. Cities and villages are formed at the request of residents of built-up areas. The early laws reflected a common belief that when settled communities reached a certain size and density they would first form into villages and with later growth become cities. Hence, population size was initially

¹ A fifth community—Prairieville—was incorporated prior to statehood but its charter was rescinded by the Territorial Legislature before Wisconsin became a state. Several years after statehood occurred, this community was again incorporated, this time under the name of Waukesha.

Editor's Note: This article is the third in a three-part series examining the historic development of the local governmental structure in the Region. The first article, published in SEWRPC Technical Record Vol. 4, No. 2, described the development of the governmental structure in the Region from pre-statehood through the establishment of the seven county boundaries as they exist today. The second article, published in SEWRPC Technical Record Vol. 4, No. 3, examined the development of the boundaries of the civil towns in the Region. This third and final installment in the series examines the historic development of incorporated municipalities.

a major distinction between cities and villages, although the form of government was another important distinction. Until 1959, the State set no municipal incorporation standards addressing land use or other development-related factors.

The requirements and procedures for municipal incorporation changed frequently until 1921, and then remained fairly stable until the 1950's. An overview of the early provisions and modifications is provided here. Subsequent revisions are discussed later in the text to explain certain developments. In addition, the laws and court decisions surrounding annexations are addressed as necessary.

When Wisconsin became a state, the Constitution gave the Legislature power to create cities and villages through the granting of special charters that stipulated boundaries, form of government, powers of elected officials, and a host of other provisions. A similar municipal incorporation procedure was used before statehood by the Territorial Legislature. Boundary changes, creation or vacation of streets or alleys, revisions in official duties, or other modifications had to be approved by an act of the Legislature. Sometimes municipalities were reincorporated under entirely new charters. This became cumbersome and was soon changed.

As early as 1849, villages could be formed through local petition to the Circuit Court, which verified the propriety of petition signatures, the community census, and later the outcome of the referendum on whether or not to incorporate. This procedure became mandatory in 1871 when an amendment to the State Constitution prohibited the Legislature from incorporating villages.

A similar constitutional amendment was adopted in 1892 prohibiting the Legislature from granting special charters to cities. Three years earlier, in 1889, a general city charter law was passed giving cities the option to be incorporated under either general or special charter.

Under the 1889 law, special-charter cities could be reincorporated under a general charter through common council action and subsequent filing with the Secretary of State. A confusing mixture of special and general charter laws prevailed, however, so in 1921 city charter laws were recodified and all special charters repealed. Any remaining special-charter cities were then mandated to reincorporate under general charters simply by certifying their boundaries to the Secretary of State.

Meanwhile, village charter laws had been recodified in 1919. This recodification served to repeal an 1897 measure that mandated city incorporation of all villages exceeding 1,500 in population. The 1919 law provided a simple procedure for villages that opted to become cities. By a two-thirds vote of the village trustees, a referendum could be held. If passed, the village clerk would notify the Secretary of State, who would issue city incorporation papers. While the 1919 law remained in effect, the 1921 city recodification law provided an alternative method of village reincorporation to city status. Under this more cumbersome procedure, electors and taxpayers had to petition their village board for a referendum on city incorporation. This 1921 provision also applied to town residents who wished to petition their town boards for a referendum on becoming a city.

For reasons not clear, state lawmakers historically have made village incorporation more difficult than city incorporation in two ways. As previously noted, a circuit court must give advance approval before a referendum may be held on village incorporation. No court involvement is required for city incorporation. In addition, villages must meet a density requirement that has varied over the years between 300 and 400 persons per square mile. This law was in effect from 1849 to 1959, except for the period between 1881 and 1939. There is no recorded reason for the lapse in the density law; however, its absence in 1902 resulted in the Lammers case, a far-reaching Wisconsin Supreme Court decision that affected incorporations after World War II and which is discussed later.

Cities, on the other hand, have always had a minimum population requirement, but not a density requirement. The 1889 general city charter law called for a population of at least 2,000. This was revised downward over the years to 1,500, 1,200, and eventually 1,000. Primarily because density was not a factor, many larger geographic areas found it easier to incorporate directly into cities.

For more than a century, municipal incorporation took place when residents of a hamlet desired more services than the town government was willing or able to offer. In the early days this frequently meant street and sidewalk construction, street lights, and police and fire protection. Municipal water service became an increasingly important reason for incorporating as water tables dropped and private wells dried up, or as wells became contaminated by surrounding waste disposal systems. Following World War II, the need for water, sewer, and other municipal services resulted in a great deal of annexation activity, especially in the Milwaukee area. By the 1970's, however, town governments in some urban areas began providing traditionally municipal services on their own or through utility districts.

Municipal incorporations and annexations were relatively simple before the turn of the century, and they became increasingly complex after that. A chronological description of this municipal growth phenomenon is provided.

Prior to Statehood

The first European settlers of the Region were trappers and traders. A trader named Jacques Vieau built a cabin in 1795 along the Menomonee River in an area now occupied by Mitchell Park. One of his daughters married an enterprising trader from Green Bay named Solomon Juneau, who built a trading post on the east bank of the Milwaukee River near Lake Michigan in 1818. Juneau is commonly considered the founder of Milwaukee, probably because land speculators found him first and initiated contracts for development with him.

Settlers began arriving in southeastern Wisconsin during the 1830's. Most of them were Yankees, many from upstate New York. The settlements that became Milwaukee attracted thousands, but the outlying areas also lured pioneering individuals who recognized the agricultural potential of the fertile soils. To these early settlers, the availability of water was of primary importance. Many of today's cities and villages began as tiny settlements along Lake Michigan or along rivers or streams that provided waterpower for saw and grist mills. Establishment of a mill usually preceded all other community development. Growth of these settlements often resulted in a desire on the part of residents for a form of governance independent of the counties and towns, and incorporation as a village was generally the first step taken. Table 1 summarizes the various acts of incorporation that occurred prior to Wisconsin becoming a state in May of 1848.

Milwaukee has the distinction of being the first incorporated civil division in southeastern Wisconsin. After Solomon Juneau settled east of the Milwaukee River, Byron Kilbourn founded a settlement—Kilbourn-town—west of the river and Colonel George H. Walker established a south-side settlement called Walker's Point. These three independent settlements became the Village of Milwaukee under a charter granted by the Territorial Legislature in 1838. At the time of the 1840 federal census, 1,712 residents lived in the Village. Continued rapid growth led the Village to incorporate as the City of Milwaukee under a charter granted by the Territorial Legislature in 1846.

The settlement that became the City of Racine was established by Captain Gilbert Knapp in 1834 and was originally called Port Gilbert. Residents later took the French name Racine, meaning "root," believed to refer to the tangle of roots in the river that emptied into Lake Michigan at the site of the settlement. Racine was incorporated as a village in 1841 by an act of the Territorial Legislature.

In 1835, a group of people from Oswego County, New York, formed the Western Emigration Company to buy land for settlement along Lake Michigan. After haggling unsuccessfully with Gilbert Knapp for land in the Racine area, the exploration group claimed property to the south. In 1841, what would later become the City of Kenosha was incorporated as the Village of Southport by an act of the Territorial Legislature. Kenosha County had not been formed yet and the Village was located in Racine County at the time of its incorporation.

Two other incorporations occurred in the period prior to statehood. In Walworth County, what would later become the City of Lake Geneva had its genesis in the incorporation of the Village of Geneva by an act of the Territorial Legislature in 1844. In 1846, the Territorial Legislature acted to incorporate the Village of Prairieville, the predecessor of the City of Waukesha.

Table 1

**ACTS OF INCORPORATION AND CHANGES IN
STATUS OF INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN REGION
PRIOR TO STATEHOOD**

Year	Civil Division	Description
1838	Milwaukee	Incorporated as a village
1841	Racine	Incorporated as a village
	Southport (Kenosha)	Incorporated as a village
1844	Geneva (Lake Geneva)	Incorporated as a village
1846	Milwaukee	Village of Milwaukee incorporated as the City of Milwaukee
	Prairieville (Waukesha)	Incorporated as a village
1847	Prairieville (Waukesha)	Village name changed to Waukesha
1848	Waukesha	Village incorporation voided by an act of the Territorial Legislature

Source: SEWRPC.

At the time of Prairieville's incorporation as a village, it was located in Milwaukee County. Shortly after the incorporation, Waukesha County was created from a portion of Milwaukee County, and in 1847 the Territorial Legislature acted to change the name of Prairieville to Waukesha. Then the Territorial Legislature, in its final session in March of 1848, acted to repeal the 1846 incorporation of Prairieville and all subsequent amendments, including the name change. The reasons for this act are not clear, although it may have been related to the acrimony that was created between Waukesha and Milwaukee legislators by the creation of Waukesha County.² Following statehood, several attempts were made to incorporate anew. These attempts were not successful until 1852, however, when Waukesha was again incorporated as a village.

From Statehood Through 1879

At the beginning of 1848, several months prior to the establishment of the State of Wisconsin, five incorporated civil divisions—the City of Milwaukee and the Villages of Geneva, Racine, Southport, and Waukesha—existed in southeastern Wisconsin. The locations and boundaries of these civil divisions are shown on Map 1. During 1848, immediately following statehood, the new State Legislature granted a city charter to the Village of Racine and also acted to incorporate the Village of Port Washington.

Port Washington was originally settled in 1835 and was called Wisconsin City at that time. Since another location in the Wisconsin Territory had also taken that name, the settlement was soon renamed Washington City. It flourished for a short time and then became a ghost town following the financial crash of 1837. Shortly thereafter, settlers returned, calling the community Sauk Washington, and finally Port Washington, the name used for incorporation. At the time of incorporation the community was in Washington County, the formation of Ozaukee County not occurring until 1853.

Early in 1850, the State Legislature granted a city charter to the Village of Southport. The community name was changed to Kenosha at this time. The 1850 federal census indicated that about 25 percent of the 113,389 residents of southeastern Wisconsin lived in the three Cities of Milwaukee, Racine, and Kenosha, with resident populations of 20,061, 5,107, and 3,455, respectively, in that year. Over the next 30-year period, from 1850 to 1879, the City of Kenosha and the Villages of Geneva and Waukesha annexed additional territory and 11 additional incorporations occurred (see Table 2). These new incorporations were scattered throughout the Region with the exception of Kenosha County, where no incorporation occurred between 1850 and 1879.

In Racine County, the Village of Burlington was incorporated in 1855. The community, near the junction of the White and Fox Rivers, had been originally settled in 1836, but began to grow rapidly after the arrival in 1855 of the Racine and Mississippi Railroad (later a part of the Chicago, Milwaukee, St. Paul & Pacific Railroad system).

²See the first installment of this *Backward Glance* series in SEWRPC *Technical Record*, Vol. 4, No. 2, March 1981.

Map 1

**INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1848**

LEGEND

CITIES MILWAUKEE

VILLAGES GENEVA

Towns Waukesha



Source: SEWRPC.

The Villages of Delavan, Elkhorn, and Whitewater in Walworth County were incorporated in 1856, 1857, and 1858, respectively. John Starr Rockwell, a clerk in the U. S. government land office in Milwaukee, apparently had advance knowledge in 1836 that a county named Walworth soon would be established to the southwest. He also was aware of a federal law saying a county could claim a quarter-section of land for county purposes. Acting on this information, he and some friends bought four one-quarter sections whose common corner was directly in the center of the proposed county and dedicated one of the quarter-sections for county purposes. They expected their community to become the county seat, making their property valuable. However, the area grew slowly and they realized little profit for nearly 40 years.

In Washington County the Villages of West Bend, Schleisingsville, and Hartford were incorporated in 1868, 1869 and 1871, respectively. Schleisingsville was originally named in honor of its founder, Baruch Schleisinger Weil. It kept the name for more than 50 years before residents adopted a shortened version—Slinger—in 1921. In Ozaukee County, the Village of Cedarburg was incorporated in 1874.

In Waukesha County two communities—Oconomowoc and Pewaukee—were incorporated as villages in 1865 and 1876, respectively. Oconomowoc, at the southern end of the Town of Oconomowoc, also included a portion of the Town of Summit in its incorporation. A controversy arose shortly after the 1865 incorporation regarding the Village's special charter and its relationship to the Town of Oconomowoc. The presumed solution was to reincorporate with a new village charter; however, the Town of Summit refused to let the new charter cover that portion of the Village located in the

Town of Summit. Consequently, the residents of this area petitioned the Circuit Court to form the Village of Summitville. However, villagers did not care for the provision requiring them to vote three miles away at the Summit town hall. They also felt that Summitville might be viewed as secondary to Oconomowoc. A means to reunite the two areas was sought, but the 1871 state constitutional amendment passed shortly after Oconomowoc's incorporation prevented the Legislature from reincorporating new villages or amending existing village charters. The final solution, achieved in 1875, was to have the Legislature issue a city charter including the existing Village of Oconomowoc and the portion of the Town of Summit in question, since this was possible under the laws at that time.

The final incorporation of this period occurred in Milwaukee County, where the Village of Bay View was incorporated in 1879. Located several miles south of the City of Milwaukee along the shore of Lake Michigan, this area rapidly became industrialized after the Milwaukee Iron Company built a plant at this location in 1868.

Table 2

**ACTS OF INCORPORATION AND CHANGES IN
STATUS OF INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN REGION
STATEHOOD TO 1879**

Year	Civil Division	Description
1848	Racine	Village of Racine incorporated as the City of Racine
1850	Port Washington Southport (Kenosha)	Incorporated as a village Village of Southport Incorporated as the City of Kenosha
1852	Waukesha	Status as an incorporated village—repealed by the Territorial Legislature in 1848—reestablished.
1855	Burlington	Incorporated as a village
1856	Delavan	Incorporated as a village
1857	Elkhorn	Incorporated as a village
1858	Whitewater	Incorporated as a village
1865	Oconomowoc	Incorporated as a village
1868	West Bend	Incorporated as a village
1869	Schleisingsville (Slinger)	Incorporated as a village
1871	Hartford	Incorporated as a village
1874	Cedarburg	Incorporated as a village
1875	Oconomowoc	Village of Oconomowoc incorporated as the City of Oconomowoc
1876	Pewaukee	Incorporated as a village
1879	Bay View	Incorporated as a village

Source: SEWRPC.

From 1880 Through 1899

At the beginning of 1880, the Region contained 17 incorporated civil divisions, as shown on Map 2. In the 20-year period beginning with 1880, 12 new civil divisions were incorporated. Nine villages incorporated prior to 1880 obtained new charters as cities, and one village was annexed by an adjoining city (see Table 3). A number of railroads were being constructed in the Region at this time, and railroad junctions and stations increasingly became the focal points of urban activity, supplanting mill sites in this regard.

Table 3

ACTS OF INCORPORATION AND CHANGES IN STATUS OF INCORPORATED CIVIL DIVISIONS IN THE SOUTHEASTERN WISCONSIN REGION: 1880 TO 1899

Year	Civil Division	Description
1882	Port Washington	Village of Port Washington incorporated as the City of Port Washington
1883	Hartford	Village of Hartford incorporated as the City of Hartford
1885	Cedarburg	Village of Cedarburg incorporated as the City of Cedarburg
	West Bend	Village of West Bend incorporated as the City of West Bend
	Whitewater	Village of Whitewater incorporated as the City of Whitewater
1886	Geneva (Lake Geneva)	Village of Geneva incorporated as the City of Lake Geneva
1887	Bay View	Village of Bay View annexed to the City of Milwaukee
1892	Hartland	Incorporated as a village
	Menomonee Falls	Incorporated as a village
	Sharon	Incorporated as a village
	South Milwaukee	Incorporated as a village
	Wauwatosa	Incorporated as a village
	Whitefish Bay	Incorporated as a village
1893	Union Grove	Incorporated as a village
1895	Cudahy	Incorporated as a village
	Kewaskum	Incorporated as a village
1896	Grafton	Incorporated as a village
	Waukesha	Village of Waukesha incorporated as the City of Waukesha
1897	Delavan	Village of Delavan incorporated as the City of Delavan
	Elkhorn	Village of Elkhorn incorporated as the City of Elkhorn
	North Milwaukee	Incorporated as a village
	South Milwaukee	Village of South Milwaukee incorporated as the City of South Milwaukee
	Wauwatosa	Village of Wauwatosa incorporated as the City of Wauwatosa
1899	Eagle	Incorporated as a village

Source: SEWRPC.

Map 2

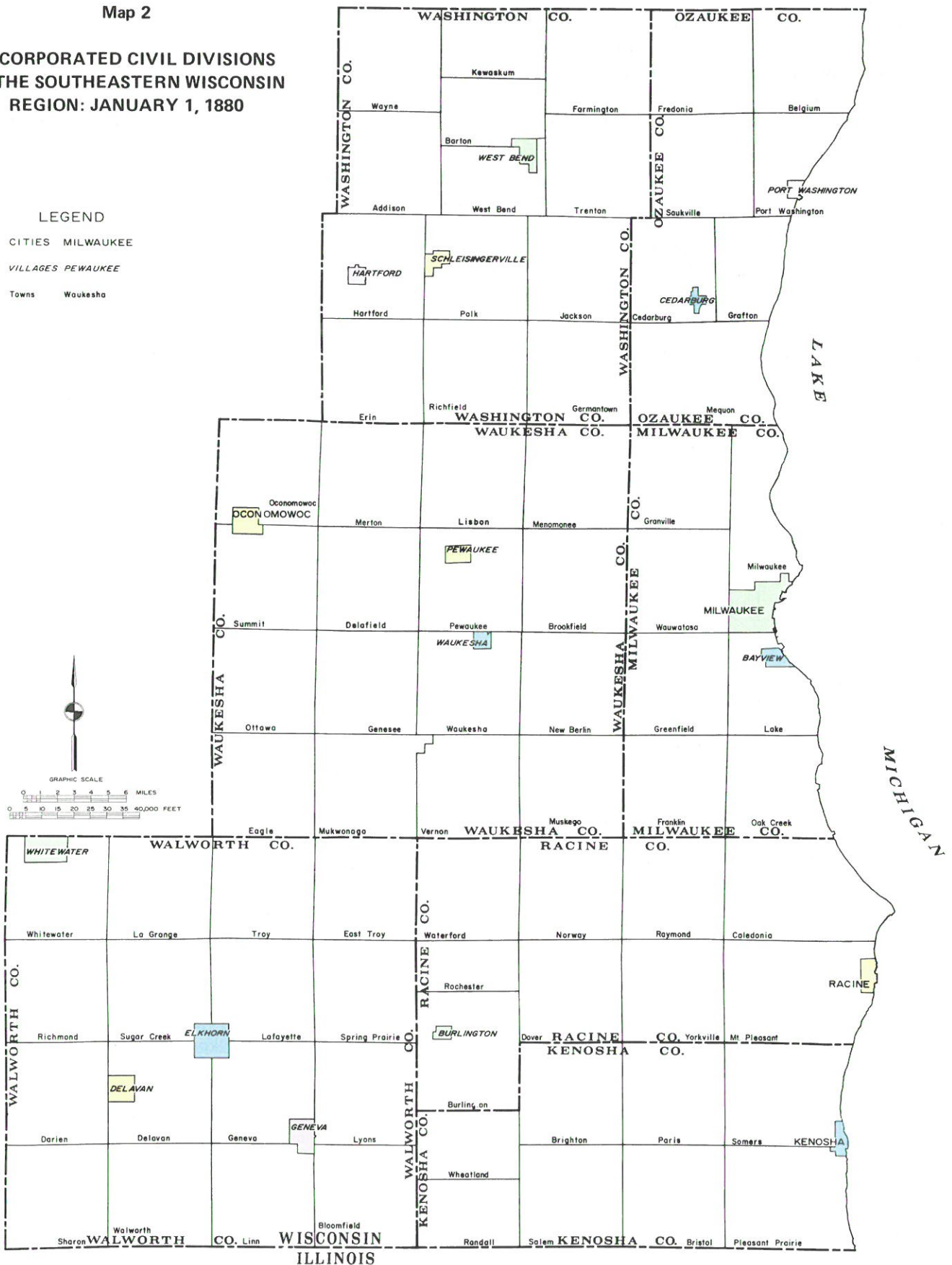
INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1880

LEGEND

CITIES MILWAUKEE

VILLAGES PEWAUKEE

Towns Waukesha



Source: SEWRPC.

Milwaukee County was the scene of rapid urban growth during this period. The City of Milwaukee annexed sizable amounts of territory to the north, west, and south, including territory in the Town of Wauwatosa. All the territory between Milwaukee and Bay View in the Town of Lake was annexed to Milwaukee, and as early as 1880 Bay View residents were asked in a newspaper poll if they wished to join Milwaukee. The answer was a resounding no. However, by 1887, village services apparently were considered inadequate, since the residents petitioned for annexation and were annexed to the City of Milwaukee in that year.

Five incorporations occurred in Milwaukee County between 1880 and 1899. In 1892, Wauwatosa, South Milwaukee, and Whitefish Bay were incorporated as villages. The settlement that ultimately became the Village of South Milwaukee was known for a time as Oak Creek, since it was established on the shore of Lake Michigan at the mouth of the stream named Oak Creek. In 1890 a group of ambitious men organized the South Milwaukee Company, a real estate firm that platted land in the area and sold lots at relatively high prices. In 1891 the Post Office name was changed to South Milwaukee, the community name that prevailed when the area was incorporated. Originally settled in 1842, Whitefish Bay had long been a popular resort area for Milwaukeeans. The Village was incorporated mainly so that a school could be built and pupils would not have to travel long distances to attend classes. In 1895, the Village of Cudahy was incorporated. Cudahy had its beginning in 1892 as a company town established by Patrick Cudahy, a successful meat packer in the City of Milwaukee. When Milwaukee threatened to ban all meat packing plants, Cudahy located a new plant south of Milwaukee near the Lake Michigan shore and on a railroad line. Other firms followed, and Cudahy became an industrial community. In 1897, the Village of North Milwaukee was incorporated and also in that year, the Villages of Wauwatosa and South Milwaukee, incorporated as villages just five years earlier, obtained charters as cities.

Three new incorporations occurred in Waukesha County during this period, with Menomonee Falls and Hartland being incorporated as villages in 1892 and the Village of Eagle being incorporated in 1899. Also during this period, the Village of Waukesha annexed additional territory, more than doubling its areal extent, and in 1896, obtained a city charter.

In Ozaukee County, the Village of Port Washington obtained a city charter in 1882, and the Village of Cedarburg obtained a city charter in 1885. In 1896, Grafton became the County's third incorporated civil division when it incorporated as a village.

In Washington County, the Village of Hartford obtained a city charter in 1883, and the Village of West Bend obtained a city charter in 1885. Ten years later, in 1895, the Village of Kewaskum became the County's fourth incorporated civil division.

There were only two new incorporations in the Region's three southern counties from 1880 to 1899—the Village of Sharon in Walworth County in 1892 and the Village of Union Grove in Racine County in 1893. The Village of Geneva obtained a city charter in 1886 and in the process changed its name to Lake Geneva. The name change was made because mail was frequently mixed with mail for another Village of Geneva 50 miles to the south in Illinois. Also obtaining city charters during this period were the Village of White-water in 1885 and the Villages of Delavan and Elkhorn in 1897.

From 1900 Through 1919

At the beginning of 1900, the Region contained 28 incorporated civil divisions, as shown on Map 3. In the 20-year period beginning with 1900, 17 new civil divisions were incorporated and four villages obtained new charters as cities (see Table 4).

In Milwaukee County, three new villages were incorporated during this period—East Milwaukee in 1900, West Allis in 1902, and West Milwaukee in 1906. In 1917, East Milwaukee obtained a new village charter, changing its name to the Village of Shorewood. West Allis was originally called North Greenfield, the name of the railroad station around which it developed. In 1890 when state officials sought a permanent site for the Wisconsin State Fair, they chose a farm nearby. The State Fair secretary then successfully campaigned for the extension of electric street railway service to the south end of the fairgrounds along W. Greenfield Avenue. This helped the community grow.

Map 3

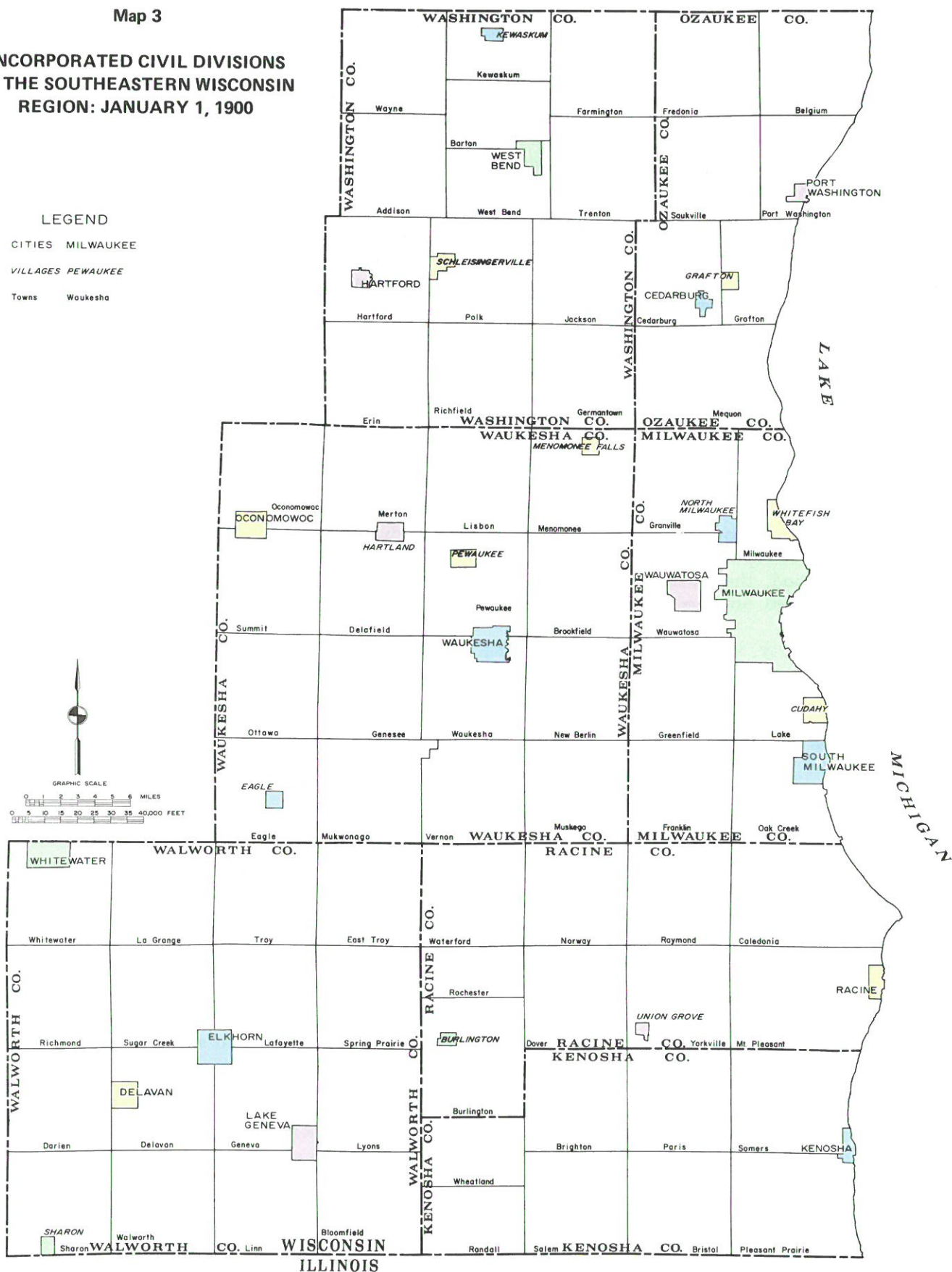
**INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1900**

LEGEND

CITIES MILWAUKEE

VILLAGES PEWAUKEE

Towns Waukesha



Source: SEWRPC.

Table 4

**ACTS OF INCORPORATION AND CHANGES IN STATUS OF INCORPORATED
CIVIL DIVISIONS IN THE SOUTHEASTERN WISCONSIN REGION: 1900 TO 1919**

Year	Civil Division	Description
1900	Burlington	Village of Burlington incorporated as the City of Burlington
	East Milwaukee (Shorewood)	Incorporated as a village
	East Troy	Incorporated as a village
1901	Genoa Junction (Genoa City)	Incorporated as a village
	Walworth	Incorporated as a village
1902	West Allis	Incorporated as a village
1905	Mukwonago	Incorporated as a village
1906	Cudahy	Village of Cudahy incorporated as the City of Cudahy
	Waterford	Incorporated as a village
	West Allis	Village of West Allis incorporated as the City of West Allis
	West Milwaukee	Incorporated as a village
1907	Corliss (Sturtevant)	Incorporated as a village
1910	Thiensville	Incorporated as a village
1912	Jackson	Incorporated as a village
	Rochester	Incorporated as a village
1913	New Butler (Butler)	Incorporated as a village
1915	Saukville	Incorporated as a village
1917	Dousman	Incorporated as a village
	East Milwaukee (Shorewood)	Village name changed to Shorewood
1918	North Milwaukee	Village of North Milwaukee incorporated as the City of North Milwaukee
1919	North Prairie	Incorporated as a village
	Williams Bay	Incorporated as a village

Source: SEWRPC.

In 1900, when community residents heard that the Edward P. Allis Company was considering expansion, a delegation went to the home of Charles Allis to suggest a site near North Greenfield. The machinery manufacturing firm relocated there, and the area was dubbed West Allis. When village incorporation became a consideration, area natives favored the name North Greenfield, while newcomers favored West Allis. At the village organizational meeting set for March 28, 1902, the West Allis proponents arrived early, began the meeting promptly at 8:00 p.m., and unanimously voted for the West Allis name. A short time later, the North Greenfield advocates arrived, but they were too late. In 1906, the village obtained a charter as the City of West Allis.

During this period, four villages were incorporated in Walworth County—East Troy in 1900, Walworth and Genoa Junction (later Genoa City) in 1901, and Williams Bay in 1919—and four villages were incorporated in Waukesha County—Mukwonago in 1905, New Butler (later Butler) in 1913, Dousman in 1917, and North Prairie in 1919. In Ozaukee County the Villages of Thiensville and Saukville were incorporated in 1910 and 1915, respectively, and the Village of Jackson was incorporated in Washington County in 1912.

In Racine County, the City of Racine annexed additional territory from the Town of Mt. Pleasant, approximately tripling its size during this period. The Village of Burlington obtained a new charter as the City of

Burlington in 1900, and the Villages of Waterford, Corliss (later Sturtevant), and Rochester were incorporated in 1906, 1907, and 1912, respectively. The Village of Corliss was originally called Parkersville after Stillman Parker, who platted the land and sold lots in the 1870's. Later, the hamlet was called Western Union Junction because of the railroad crossing there. In 1901 the Brown Corliss Engine Company of Milwaukee established a plant there and the community became known as Corliss, under which name it was incorporated. The engine company eventually failed, and the building was bought by the B. F. Sturtevant Company of Massachusetts, which accounted for the final name change.

From 1920 to 1939

At the beginning of 1920, the Region contained 45 incorporated civil divisions, as shown on Map 4. In the 20-year period beginning with 1920, 17 new civil divisions—all villages—were incorporated (see Table 5). No new cities appeared either through direct incorporation or through the issuance of city charters to existing villages. One city was consolidated with an adjoining city and ceased to exist, however.

Table 5

ACTS OF INCORPORATION AND CHANGES IN STATUS OF INCORPORATED CIVIL DIVISIONS IN THE SOUTHEASTERN WISCONSIN REGION: 1920-1939

Year	Civil Division	Description
1921	Schleisingerville (Slinger)	Village name changed to Slinger
1922	Belgium	Incorporated as a village
	Fredonia	Incorporated as a village
	Merton	Incorporated as a village
	Wales	Incorporated as a village
1923	Corliss (Sturtevant)	Village name changed to Sturtevant
1924	Fontana-on-Geneva-Lake	Incorporated as a village
	Genoa Junction (Genoa City)	Village name changed to Genoa City
	Sussex	Incorporated as a village
1925	Barton	Incorporated as a village
1926	Fox Point	Incorporated as a village
	Silver Lake	Incorporated as a village
1927	Germantown	Incorporated as a village
1928	Big Bend	Incorporated as a village
	Chenequa	Incorporated as a village
1929	North Milwaukee	Consolidated with the City of Milwaukee
1930	New Butler (Butler)	Village name changed to Butler
	Lannon	Incorporated as a village
	River Hills	Incorporated as a village
1931	Lac La Belle	Incorporated as a village
1937	Twin Lakes	Incorporated as a village
1938	Greendale	Incorporated as a village

Source: SEWRPC.

Map 4

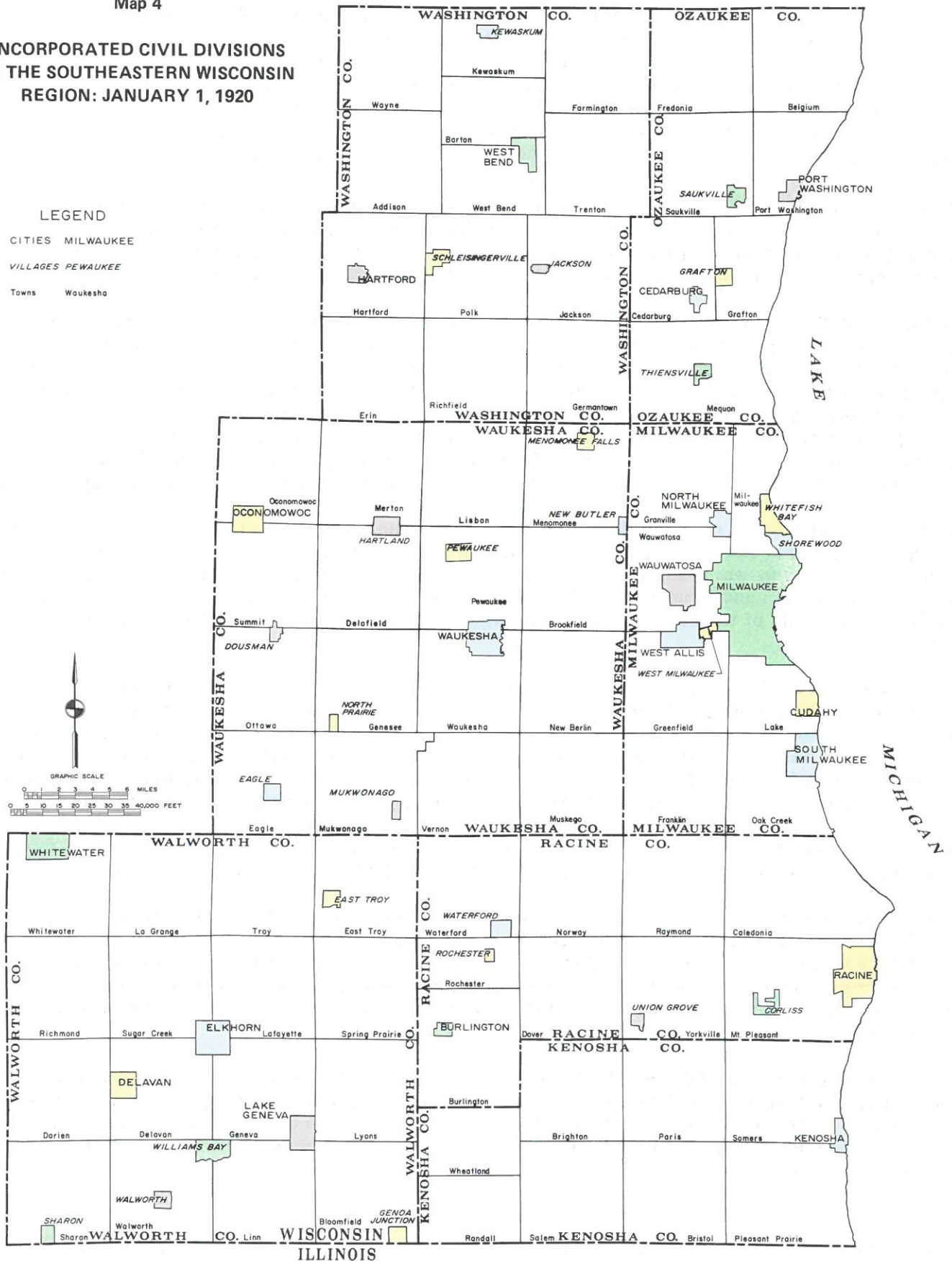
**INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1920**

LEGEND

CITIES MILWAUKEE

VILLAGES PEWAUKEE

Towns Waukesha



Source: SEWRPC.

In Milwaukee County, the City of Milwaukee undertook an aggressive annexation program during the 1920's. Milwaukee's expansion resulted in large part from the establishment in 1920 of the Department of Annexation, a predecessor of the present Department of City Development. Creation of the Annexation Department was apparently a belated reaction to a state law passed in 1889 and amended somewhat since then. It required petitions signed by a certain percentage of voters and property owners in any territory to be annexed. Prior to that time, each annexation was accomplished by a separate act of the Legislature, frequently at the request of the municipalities seeking to expand their boundaries.

Milwaukee's annexation supervisor had the duty of securing annexation petitions from people living in areas just outside the City. This often resulted in the acquisition of odd-shaped parcels, rather than tidy tracts of land with common characteristics. It was during this period that the City of Milwaukee acquired the finger of land south of W. Blue Mound Road and between the Cities of Wauwatosa and West Allis.

During the 1920's, the City of Milwaukee also began expanding to the northwest by annexing land directly to the north of the City of Wauwatosa and by consolidating with the City of North Milwaukee. Early in that decade, the residents of North Milwaukee apparently began to desire consolidation with Milwaukee to receive better municipal services; but the move was opposed by North Milwaukee city officials. Following a six-year campaign to get a consolidation referendum on the ballot, advocates of the merger succeeded in electing a slate of officers pledged to union with the City of Milwaukee. State municipal consolidation laws require that voters of both affected communities approve the merger in a referendum. In September of 1928 the referendum passed in both communities, and consolidation took place on January 1, 1929.

According to the writings of Arthur M. Werba, supervisor of annexation at the time, the City of Milwaukee expanded from 26 square miles in 1922 to nearly 42 square miles in 1929. Extension of the municipal boundaries in this way was costly to the City because it had to extend municipal water, sewerage, streets, sidewalks, fire, police, and other services. Milwaukee could not afford the high price of annexation during the Great Depression of the 1930's, so expansion virtually ceased for more than a decade until after World War II.

The Villages of Fox Point, River Hills, and Greendale were also incorporated in Milwaukee County during this period in 1926, 1930, and 1938, respectively. Unlike most other communities where settlements arose and were followed by incorporation, Greendale was a "planned community" established by the federal government.³ It was one of three sites chosen by the Resettlement Administration as a "Greenbelt Town" surrounded by parkland. The purpose was to demonstrate a new kind of suburban planning, to combine the best of city and country life, to provide work for the unemployed building trades and allied industries, and to provide low-cost but adequate housing for working class families who had been trapped in crowded central cities. The Milwaukee area was chosen because there were enough available jobs within driving distance for the Greendale residents, and because Milwaukee had a housing shortage at the time.

Seven villages were incorporated in Waukesha County during this period—Wales and Merton in 1922, Sussex in 1924, Big Bend and Chenequa in 1928, Lannon in 1930, and Lac La Belle in 1931. The incorporation of Chenequa was challenged in court and ultimately upheld by the Wisconsin Supreme Court, whose decision represented a major reinterpretation of the 1902 Supreme Court ruling in "State ex rel. Holland v. Lammers." In essence, the Chenequa case opened the door to the establishment of large "bedroom" communities after World War II.

The Lammers decision in 1902 held that communities had to have the characteristics of a municipality before they could incorporate. The decision further held that candidates for incorporation must meet the definitions of "city" or "village" as commonly perceived when the State Constitution was written in 1848. The result was that most incorporations involved relatively small, built-up areas with densities greater than those of rural settings.

³See "A Backward Glance: Greendale—Garden City in Wisconsin," *SEWRPC Technical Record*, Vol. 1, No. 6, August-September 1964.

Chenequa, on the other hand, was a sparsely populated community of about 200 year-round residents who lived on wooded lots surrounding Pine Lake, but who generally worked in Milwaukee. They desired police and fire protection, as well as other services that could be obtained through village status. The Supreme Court ruled that Chenequa met the contemporary definition of a "village" and that this was sufficient for incorporation. This ruling, in effect, created a more flexible definition of municipality in matters of incorporation.

The Villages of Belgium and Fredonia were incorporated in Ozaukee County—both in 1922—and the Villages of Barton and Germantown were incorporated in Washington County in 1925 and 1927, respectively. In Kenosha County, a period of more than 80 years with no incorporations ended when the Village of Silver Lake became the County's second incorporated civil division in 1926. The Village of Twin Lakes, also in Kenosha County, was incorporated in 1937, becoming the County's third incorporated civil division. Only one new civil division appeared in Walworth County during this period, the Village of Fontana-on-Geneva-Lake, incorporated in 1924.

The Cities of Racine and Kenosha both annexed territory during this period. Racine had previously annexed territory from the Town of Mt. Pleasant between 1900 and 1920. Between 1920 and 1940 additional territory was annexed from the Towns of Mt. Pleasant and Caledonia. Kenosha had annexed small amounts of territory from the Towns of Pleasant Prairie and Somers prior to 1880, but its boundary had remained generally fixed since that time. Between 1920 and 1940, however, Kenosha annexed territory from the Towns of Mt. Pleasant and Somers and more than quadrupled its jurisdictional area.

From 1940 Through 1959

At the beginning of 1940, the Region contained 61 incorporated civil divisions, as shown on Map 5. There were no additional incorporations during the 1940's; however, a number of civil divisions did annex additional territory, as can be seen by comparing Map 5, which shows the areal extent of the Region's incorporated civil divisions at the beginning of 1940, with Map 6, which shows the areal extent of those same civil divisions at the beginning of 1950. In particular, the City of Milwaukee began during the 1940's to position itself to renew its aggressive campaign to annex surrounding territory.

The most extensive and significant municipal growth in southeastern Wisconsin occurred during the 1950's. Eighteen civil divisions were incorporated during that 10-year period (see Table 6). More importantly, all of Milwaukee County became incorporated, resulting in the disappearance of all seven town governments. Three towns—Menomonee, Mequon, and New Berlin—in adjacent counties also disappeared, and one—Brookfield—was greatly diminished in size.

In Milwaukee County, eight civil divisions were incorporated during the 1950's beginning with the Cities of Glendale in 1950, and St. Francis in 1951. St. Francis had attempted to incorporate as a village in 1932, but the Wisconsin Supreme Court denied incorporation in an apparently narrow interpretation of the Lammers doctrine. The court ruled that the characteristics of a cohesive village were not met because much of the area was in a narrow strip of undeveloped land running east-west, when all the major roads ran north-south and the area was divided by a railroad embankment. The Villages of Hales Corners, Bayside, and Brown Deer were incorporated in 1952, 1953, and 1955, respectively, followed by the Cities of Oak Creek, Franklin, and Greenfield in 1955, 1956, and 1957, respectively.

In Waukesha County, six civil divisions were incorporated during the 1950's. The Village of Elm Grove attempted to incorporate in 1953 but the original incorporation petition was voided in court and the incorporation process was not completed until 1955. In 1954, an area of approximately 17 square miles with a resident population of 7,923 persons located in the Town of Brookfield was incorporated as the City of Brookfield. Nine months later the City attempted to square off its boundaries by annexing three square miles with only 165 residents. The Town of Brookfield challenged this in Circuit Court saying the City was only 50 percent developed and did not need the additional territory. The Circuit Court denied the annexation for other reasons, but ultimately the Wisconsin Supreme Court upheld the annexation by saying that state laws did not regulate the characteristics of land to be annexed.

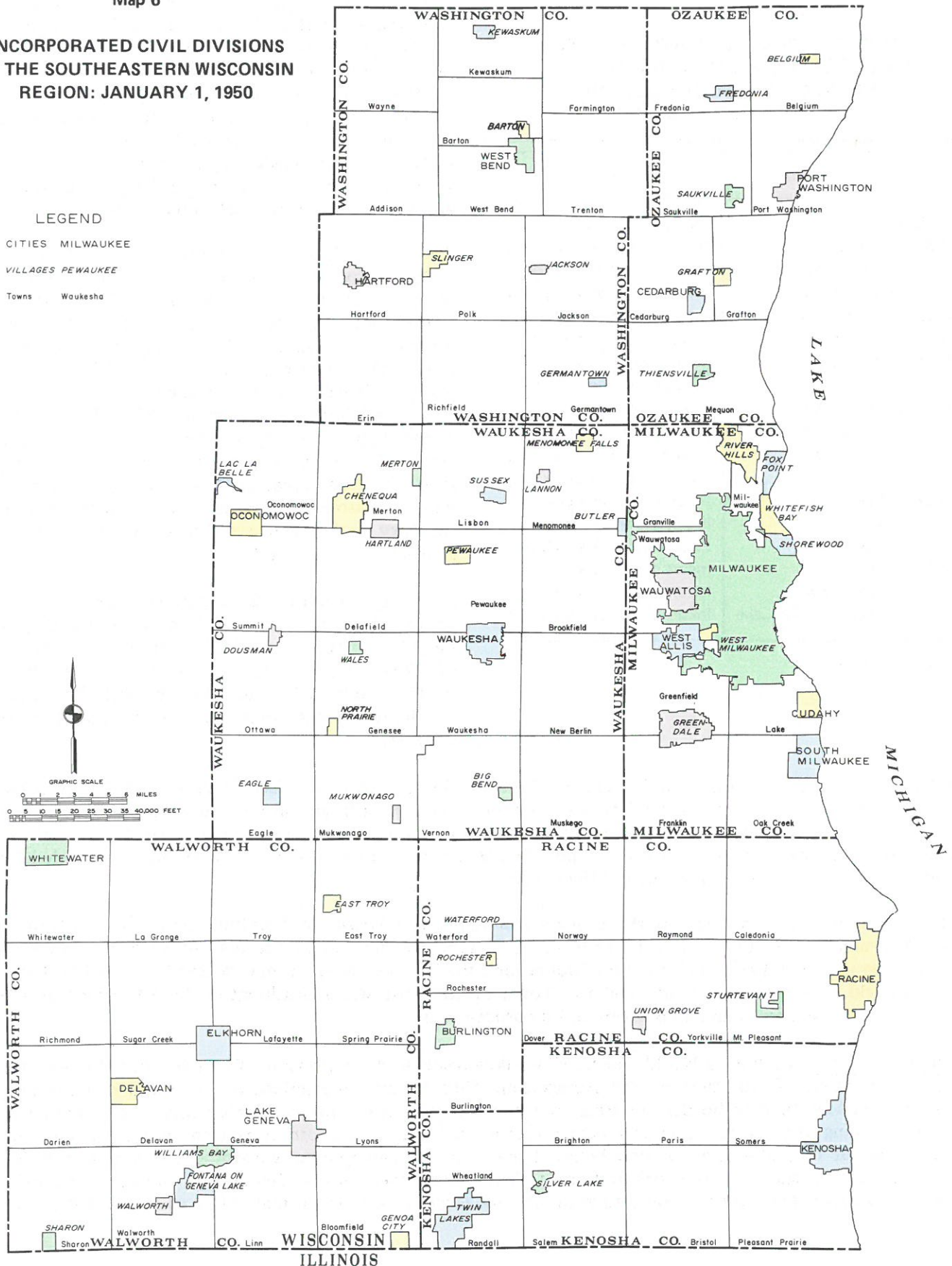
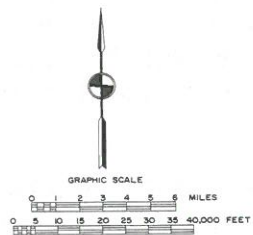
INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1940

Towns Waukesha



INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1950

Towns Waukesha



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Table 6

**ACTS OF INCORPORATION AND CHANGES
IN STATUS OF INCORPORATED CIVIL
DIVISIONS IN THE SOUTHEASTERN
WISCONSIN REGION: 1940-1959**

Year	Civil Division	Description
1950	Glendale	Incorporated as a city
1951	Darien	Incorporated as a village
	North Bay	Incorporated as a village
	St. Francis	Incorporated as a city
1952	Hales Corners	Incorporated as a village
1953	Bayside	Incorporated as a village
1954	Brookfield	Incorporated as a city
	Wind Point	Incorporated as a village
1955	Brown Deer	Incorporated as a village
	Elm Grove	Incorporated as a village
	Oak Creek	Incorporated as a city
1956	Franklin	Incorporated as a city
1957	Greenfield	Incorporated as a city
	Mequon	Incorporated as a city
	Nashotah	Incorporated as a village
1959	Delafield	Incorporated as a city
	New Berlin	Incorporated as a city
	Oconomowoc Lake	Incorporated as a village

Source: SEWRPC.

This ruling was significant because it also stated for the first time that courts may review municipal decisions to annex land by determining whether or not the annexations are arbitrary and capricious. Furthermore, the court ruled that planning for future land development on the fringe areas was an important factor in annexation cases. Officials began to acknowledge that planning and zoning were necessary to guarantee orderly development and prevent the growth of suburban slums.

The incorporation of the City of Brookfield was followed by the incorporations of the Village of Nashotah in 1957, the Cities of Delafield and New Berlin, both in 1959, and the Village of Oconomowoc Lake, also in 1959. Attempts to incorporate Oconomowoc Lake began in 1952. Several legal challenges ensued, and the matter went to the Wisconsin Supreme Court in 1955. The Court's ruling at that time applied the Lammers doctrine in language that said density was not the only measure of village characteristics. A village should also have a reasonably compact center with adjacent territory that is urban and leaves room for future growth, the Court said.

In Ozaukee County, the remaining territory of the Town of Mequon was incorporated as the City of Mequon in 1957. In Racine County, the Villages of North Bay and Wind Point were incorporated in 1951 and 1954, respectively, and the Village of Darien in Walworth County was incorporated in 1951.

By far, most of the "action" and "reaction" during this period took place in and around Milwaukee County. The City of Milwaukee itself annexed territory to the south and also to the northwest, which led to a protracted court battle with the newly formed Village of Brown Deer. As Milwaukee aggressively attempted to annex as much territory as possible, many Milwaukee County communities responded by incorporating to avoid becoming part of Milwaukee.

The rapid municipal expansion of those years eliminated the Towns of Franklin, Granville, Greenfield, Lake, Milwaukee, Oak Creek, and Wauwatosa. Also gone by the end of the decade were the Towns of Menomonee and New Berlin in Waukesha County, and the Town of Mequon in Ozaukee County. The Town of Brookfield in Waukesha County and the Town of Germantown in Washington County were substantially reduced in size through annexations and incorporations.

Annexation Issues: Following World War II, Milwaukee resumed its annexation efforts through the re-established Department of Abstractions and Annexation. City officials recognized the high cost of extending municipal services to new borderline areas, but the rationale for expansion apparently was a long-range goal of bringing the entire urbanized area under a single municipal administration. Frank Zeidler, the Socialist mayor of that era, apparently believed that a single metropolitan government was more sensible for an urban area than a patchwork system of cities and villages. Nonresidents of Milwaukee disagreed—favoring the often lower taxes associated with suburbs, as well as a more intimate sense of local government.

Because nonresidents of Milwaukee often strongly opposed annexation, the City seldom was able to annex large, well-shaped tracts of land. As previously noted, state law required a majority of nonmunicipal electors and property owners to sign a petition before annexation could take place. Finding enough agreeable petition signers to meet state requirements frequently meant drawing convoluted annexation boundary lines. Since state law prohibited annexation of noncontiguous territory (unless it was municipally owned), many otherwise noncontiguous parcels were connected to a city or village by narrow strips of land, sometimes only a few feet wide (see, for example, Map 6). These piecemeal annexations were common. While subsequent annexations corrected some of the extreme cases, grossly irregular boundary lines still remain—for instance, between the Cities of Milwaukee and Greenfield and at the northern edge of the City of Wauwatosa along its boundary with the City of Milwaukee.

In the early 1950's, the Lammers doctrine had a strong influence on the size of newly incorporated municipalities. The Lammers case and subsequent rulings held that communities had to have the density and other characteristics of a city or village before they could be incorporated. This prevented the establishment of large suburbs with great expanses of undeveloped land. Consequently, no less than five Milwaukee County suburbs were founded as geographically small units between 1950 and 1954. They were the Cities of Glendale and St. Francis and the Villages of Bayside, Brown Deer, and Hales Corners.

Because of this narrow interpretation, municipalities sometimes took a two-step approach. First, they would establish themselves as a compact unit, and then they would initiate an annexation program to expand their boundaries, because the state annexation laws had no restrictions on density or other characteristics of proposed new territory.

The forces that influenced matters of municipal growth were indeed weighty. Apparently because the issues were so complex—and perhaps because the conflicting sides were so evenly balanced—the State Legislature for many years did not enact any strong measures to address the problems. The result was a proliferation of bitter and sometimes protracted court cases over municipal boundary lines. These litigations often hampered the delivery of local services and frequently curtailed land development. Probably the longest and most significant case was the Village of Brown Deer versus the City of Milwaukee, where both parties claimed jurisdiction over 16.5 square miles of territory in the Town of Granville. Milwaukee eventually won this suit, but it failed in attempts to block the City of Greenfield incorporation, another highly publicized case.

Two Annexation Cases: Two years after Brown Deer was incorporated in 1954 with an area of 1.8 square miles, the Village received four petitions from Town of Granville residents asking for annexations totaling 16.5 square miles. Shortly after the petitions were filed early in 1956, the City of Milwaukee adopted an ordinance to consolidate with those 16 square miles, plus six additional square miles in the Town of Granville. On April 3, 1956, voters in both the City of Milwaukee and the Town of Granville voted in favor of consolidation. Meanwhile, between March 3 and April 16, 1956, Brown Deer annexed the four parcels comprising the 16.5 square miles.

Thus began a series of Circuit Court cases that went to the Wisconsin Supreme Court four times before a final decision was rendered in April of 1962. Milwaukee was ultimately awarded jurisdiction over the 16 square miles of disputed territory, plus the six square miles that Brown Deer was not seeking. Brown Deer received only the Tripoli Golf Course of approximately one-half square mile.

A key legal issue in this case was whether Brown Deer's claim should have priority because it was started first, or whether Milwaukee's claim should be upheld on the theory that large-scale consolidations should not be blocked by piecemeal annexations by a smaller governmental unit. Ultimately, the Supreme Court skirted these questions by upholding a lower court finding that most of the Brown Deer annexation petitions were void because they did not have enough valid signatures or because the legal descriptions were inaccurate.

While Milwaukee prevailed on a technicality, it appeared throughout most of the litigation period that the courts favored Brown Deer. Following a 1956 Supreme Court decision favoring the Village, Milwaukee

reluctantly agreed to withdraw its municipal services and let Brown Deer have "temporary jurisdiction" over the disputed 16.5 square miles while the matter was in court. For a span of several years, then, Brown Deer appeared on the maps as a much larger village than it now is (see Map 7).

During the early to middle 1950's, the Town of Greenfield had been steadily diminished in size through annexations by the City of Milwaukee and the Villages of Greendale, Hales Corners, and West Milwaukee. As school districts within the Town lost more and more of their tax base, the Town began legal actions to oppose pending annexations. Town officials saw the annexations as a perpetual and expensive proposition that might end in the demise of their Town.

City incorporation of the remaining 15 square miles in the Town of Greenfield was the proposed solution. Petitions were filed on December 7, 1954, asking for a referendum on city status. However, a taxpayer's suit stalled the referendum for more than a year. Although Milwaukee County was not allowed to enter the case, it nevertheless supported the taxpayers' cause. Meanwhile, Milwaukee and Greenfield lawyers repeatedly met in court over Milwaukee annexation attempts.

Early in 1956, the restraining order against holding the referendum was lifted. This added fuel to the legal fires. A taxpayer's group and the City of Milwaukee both attempted to get an injunction to stop town officials from conducting the referendum. All the elected town officials, however, "went out of town" and were not available for service of legal papers. William Bowman, town attorney, resigned and remained available as a spokesman and as a "private citizen" advocating incorporation.

The referendum, held September 21, 1956, passed 3,251 to 972. Town officials remained in hiding to avoid injunctions barring them from certifying the election results to the Secretary of State. Greenfield was successful in its maneuvers, and the City was officially incorporated on February 4, 1957. Milwaukee apparently made one more attempt to acquire Greenfield through consolidation, but the move failed.

The "Oak Creek Law": Fear of encroachment by the City of Milwaukee apparently led the State Legislature in 1955 to relax the requirements that had previously prevented large-scale city and village incorporations. This law allowed municipal incorporation of entire towns if they were contiguous to the City of Milwaukee, had a population of 5,000 or more, and had an equalized property valuation of more than \$20 million.

The law was expressly written to permit city incorporation of the Town of Oak Creek and, therefore, is commonly called the "Oak Creek Law." Several other municipalities subsequently replaced entire towns under this law or the impetus from it. They include the Cities of Franklin, Mequon, Muskego, and New Berlin. In a similar development, the Village of Menomonee Falls in 1958 expanded to encompass the remainder of the Town of Menomonee, following annexation petitions by town residents.

The constitutionality of the "Oak Creek Law" was questioned in an attorney general's opinion, but nothing was done to change or repeal it because of the limited application. The law is no longer applicable because it pertains only to unincorporated areas bordering cities of the first class. Milwaukee is the only Wisconsin city in that category, and all contiguous territory is already incorporated.

From 1960 to the Present

A comparison of Map 6 and Map 7 shows the large amount of additional territory that became incorporated between 1950 and 1960 either through direct incorporation or through annexation to an already incorporated civil division. In the period from 1960 to the present, only four additional incorporations have occurred (see Table 7). In 1960, the Villages of Paddock Lake and Elmwood Park were incorporated in Kenosha County and Racine County, respectively. In 1964, the Town of Muskego in Waukesha County was incorporated as the City of Muskego and in 1973 the Village of Newburg was incorporated from territory in Ozaukee and Washington Counties.

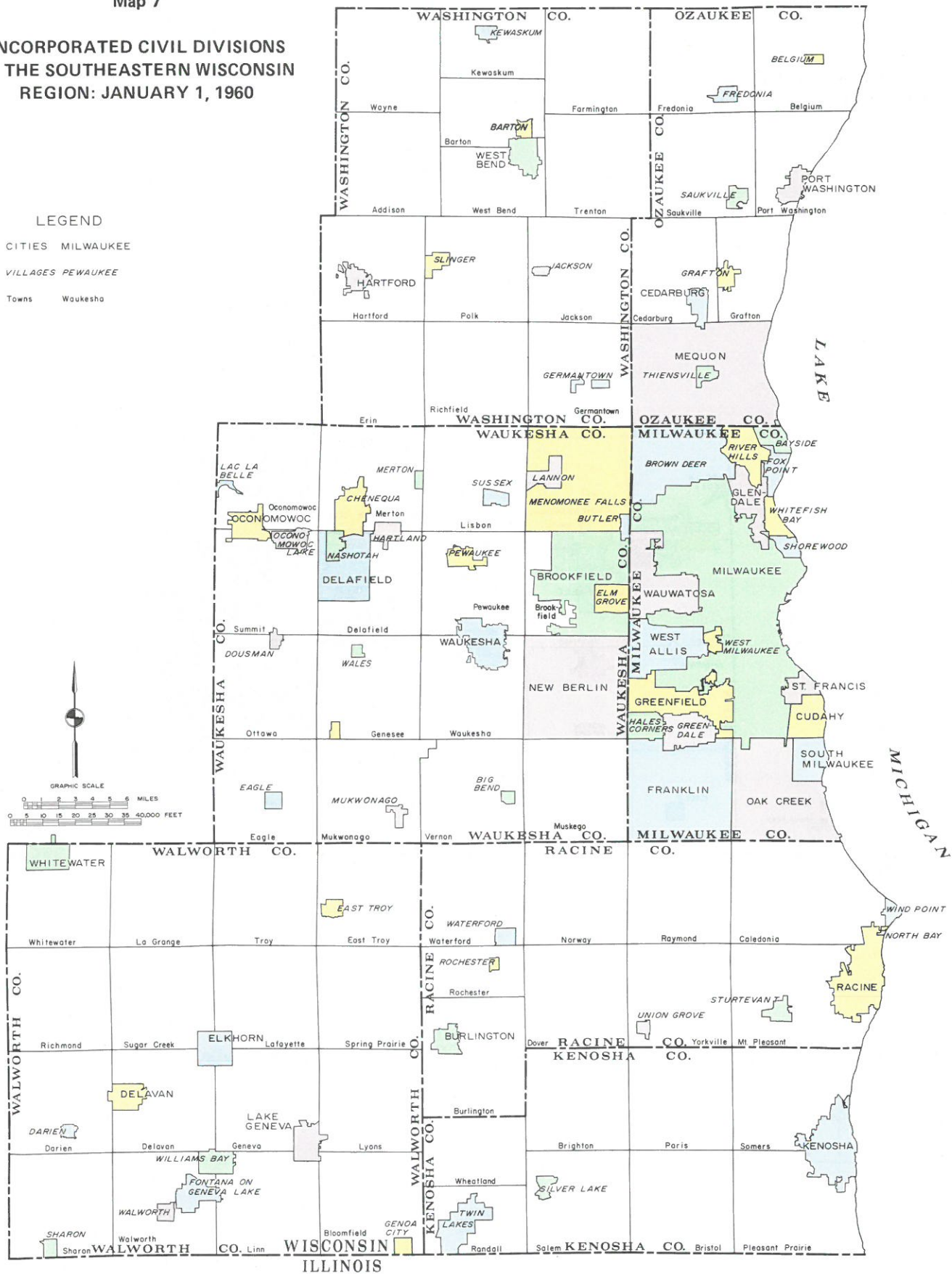
While the number of new incorporations has been reduced from the levels of the preceding decades, additional annexations have continued to occur up to the present time (see Maps 8 and 9). In Washington

Map 7

**INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1960**

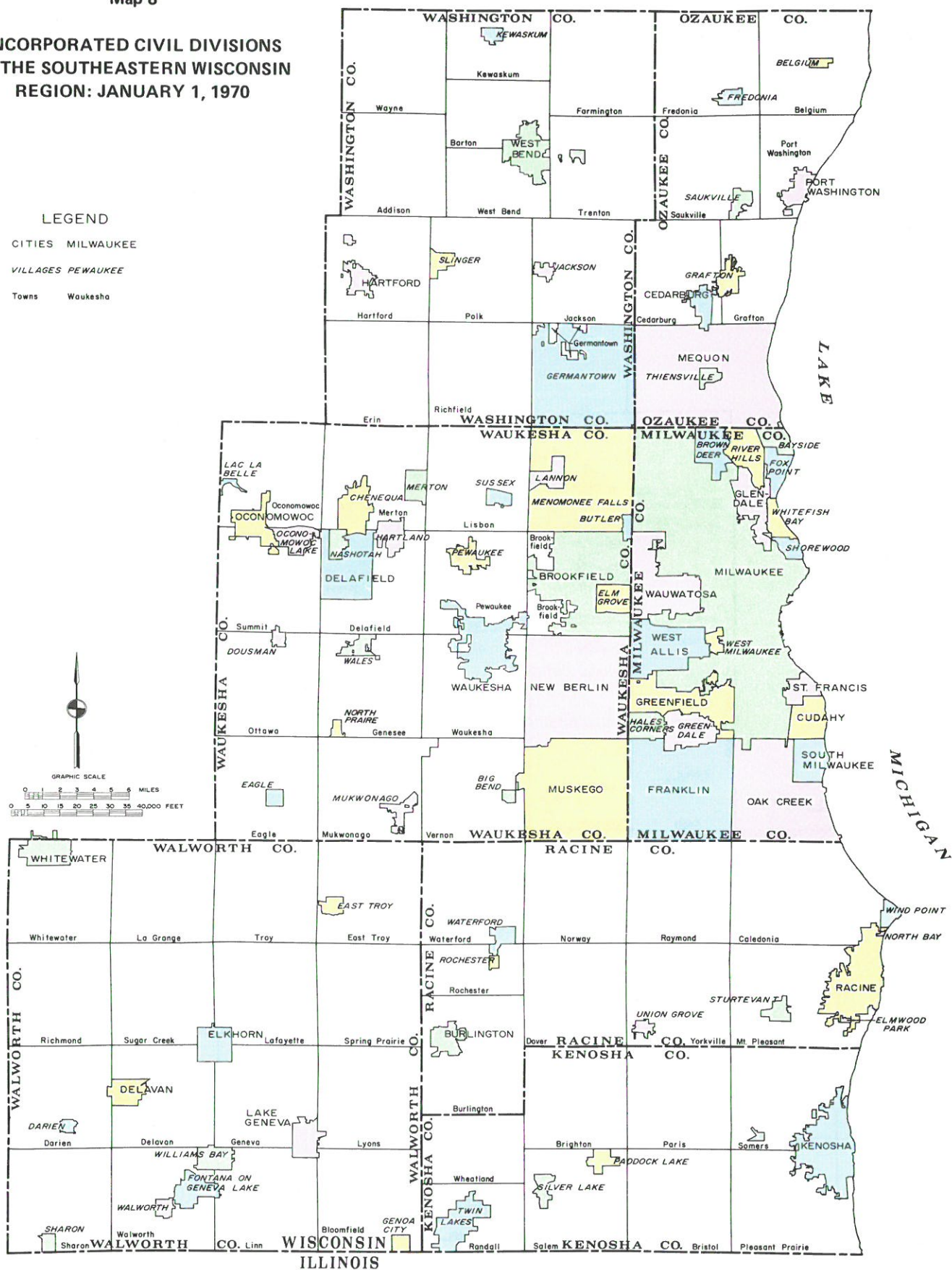
LEGEND

CITIES MILWAUKEE
VILLAGES PEWAUKEE
Towns Waukesha



Source: SEWRPC.

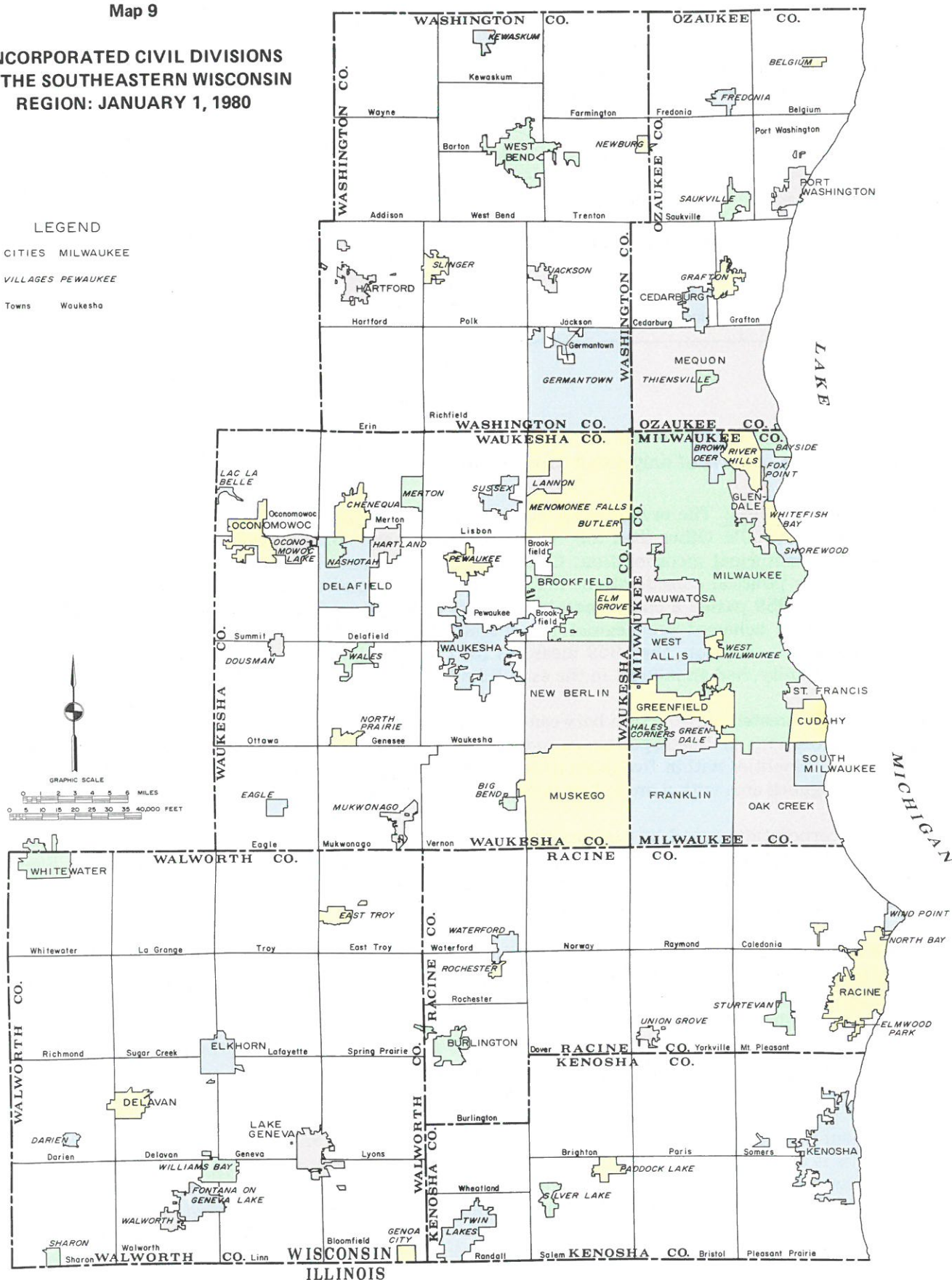
**INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1970**



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**INCORPORATED CIVIL DIVISIONS
IN THE SOUTHEASTERN WISCONSIN
REGION: JANUARY 1, 1980**

Towns Waukesha



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Table 7

**ACTS OF INCORPORATION AND CHANGES IN
STATUS OF INCORPORATED CIVIL DIVISIONS IN THE
SOUTHEASTERN WISCONSIN REGION: 1960-1983**

Year	Civil Division	Description
1960	Paddock Lake	Incorporated as a village
1961	Elmwood Park	Incorporated as a village
	Barton	Consolidated with the City of West Bend
1964	Muskego	Incorporated as a city
1973	Newburg	Incorporated as a village

Source: SEWRPC.

tiny Town of Germantown petitioned for annexation to the Village, while others chose to remain independent. The Town now consists of only about three square miles in four separate "islands."

1959 Incorporation Laws: The ever-growing number of new municipalities in urban areas began to cause concern in the late 1950's. Other than the "Oak Creek Law" and some restrictions on density, there were no standards for municipal incorporation. Consequently, cities and villages were being created more in response to narrow political considerations than for the well-being of the broader community. In response, the Legislature in 1959 passed a comprehensive revision of the municipal incorporation statutes. The new provisions effectively achieved the Legislature's intent, which was to curtail municipal incorporation in metropolitan areas. In addition, the 1959 measures for the first time acknowledged that the State, as well as the local community, had an interest in the establishment of new municipalities.

The 1959 statutes created a distinction between rural and urban incorporations. Stricter standards apply to proposed incorporations in "metropolitan communities," defined as one city having at least 25,000 population or two municipalities within five miles of each other having a combined population of at least 25,000, plus all the contiguous area with a present or potential density of at least 100 persons per square mile.

Petitions of incorporation signed by electors and property owners must be reviewed by the Circuit Court, which determines whether population, density, and other procedural requirements have been met. Significantly, contiguous municipalities are given the opportunity to file a resolution stating their willingness to annex the territory proposed for incorporation.

The Circuit Court findings and the annexation-willingness resolutions are then sent to the state Department of Development, which determines whether other statutory standards are met. These include whether the area has urban characteristics that are specifically spelled out, whether there is less dense territory beyond the core that can still be developed, whether the proposed municipality would have sufficient tax revenue to support municipal services, whether comparable taxes and services could be offered by any contiguous municipality willing to annex, and whether the incorporation would have a negative impact on the remainder of the town or hinder solutions to the problems of the metropolitan community.

The Department of Development can approve the incorporation proposal, suggest changes to bring it into line, or dismiss it outright. If approved, the matter goes back to the Circuit Court, which orders a referendum. Very few municipal incorporations have taken place in metropolitan communities following enactment of the 1959 laws. The City of Muskego near Milwaukee and the Village of Elmwood Park near Racine are the only two metropolitan area incorporations in southeastern Wisconsin. The only rural communities incorporated in this Region since 1959 were Paddock Lake in Kenosha County and Newburg in Washington and Ozaukee Counties.

County, the Village of Barton was consolidated with the City of West Bend, which has annexed additional territory over the past two decades.

The Village of Germantown, on the other hand, expanded to incorporate most of the surrounding Town of Germantown under a 1959 revision in the annexation laws. This new provision allowed municipalities to initiate annexation procedures, rather than wait for petitions from the residents. But the Village met some resistance when it attempted town annexation in 1964. Residents in a 6.5-square-mile area in the northwest corner of the Town filed a petition to incorporate as a separate municipality. After the bulk of the Town was annexed to Germantown, the smaller area was prohibited from incorporating under a strict 1959 incorporation law that is discussed below. Subsequently, some of the residents of the

Quite a number of proposed incorporations in southeastern Wisconsin have failed because the Circuit Court or the Department of Development found that they did not meet statutory requirements, or because voters turned down incorporation when the matter went to referendum. Among the incorporations that failed were Lake Como (twice) in Walworth County; Genesee Depot, Lisbon, Moraine Lakes (twice), and Pewaukee Lake (twice) in Waukesha County; Bristol and Salem in Kenosha County; Pleasant Prairie (twice) in Kenosha County; and Rockfield, the unincorporated area of the Town of Germantown in Washington County. The Pleasant Prairie case is currently before the Wisconsin Supreme Court.

Annexation Growth, Town Islands, and Noncontiguous Territory: While the 1959 incorporation laws effectively halted the proliferation of new cities and villages, a revision to the 1959 annexation laws did not halt the growth of existing municipalities. The state Department of Development is mandated to review all annexations in counties with populations of 50,000 or more. This encompasses the entire southeastern Wisconsin area. Steady annexation growth has occurred in the 20-plus years since the 1959 laws were passed. These annexations have included a mix of new subdivisions, as well as individual lots where property owners sought municipal services. New territory has steadily been added to larger municipalities, as well as to the smaller, more rural cities and villages that have enjoyed renewed popularity as residential locations in the 1970's.

In conjunction with the 1959 laws on annexation and incorporation, the Legislature passed measures in 1957 that gave town governments additional powers to provide municipal services. Although towns were not given the extensive home rule authority accorded cities and villages, towns were permitted to provide police, fire, sewer, water, and other services. Frequently towns provided these services at a lower cost than did neighboring municipalities, giving town residents no incentive to join nearby cities or villages.

The historical development of cities and villages in southeastern Wisconsin sometimes resulted in peculiar municipal boundary lines and formations. For instance, Brookfield, Germantown, Lake Geneva, Mukwonago, and Waukesha all have "town islands" which they completely surround. A 1973 state law prohibits formation of any additional town islands, but it did not mandate municipal annexation of existing islands. Municipalities were given authority to take unilateral action in annexing small town islands, but only if they were smaller than 65 acres and had fewer than 100 residents.

Most often, town residents in these "islands" have their own wells and onsite sewage disposal systems. Fire departments are frequently volunteer, and police departments are small or nonexistent. For example, the Town of Germantown relies on the Washington County Sheriff's Department for police service, and the Town benefits from ongoing police surveillance from the City of Germantown squads who drive through the Town on their regular patrols. The City also responds to town emergency calls until the Sheriff's Department arrives, and does so gratuitously. Consequently, while the Village of Germantown property taxes help support a police budget of nearly \$1 million a year, as well as its portion of the sheriff's budget, the Town of Germantown taxes are significantly lower because it does not support a local police department.

A peaceful co-existence has developed between cities and towns that have "islands," as well as between local governments that share jagged and irregular boundaries. These unusual border lines often confuse and frustrate private citizens. They frequently call the wrong local government unit to complain or ask for information, and they often call the wrong police or fire department in an emergency. The emergency dispatchers, however, are usually intimately familiar with addresses along the boundary lines, and they know whether or not the calls fall under their jurisdiction. Their common practice is to notify the proper authorities if a caller makes a mistake. When police from two jurisdictions respond to an accident on a street that divides two local governments, the police quickly determine who should write up the report.

Quite a number of municipalities have small pieces of noncontiguous territory in their jurisdictions. For the most part, these are municipally owned lands. In the case of Burlington, Kenosha, and West Bend, the noncontiguous property is an airport. Racine has a city-owned park to the northwest. The noncontiguous property might also be a solid waste disposal site, a municipal garage or utility site such as a water tower, or even a municipally owned industrial park. State laws permit municipalities to annex noncontiguous

property only if it is municipally owned. Interestingly, the municipality may sell the property after it is annexed, but the municipality may not add to the noncontiguous territory unless it also owns the additional land.

CHANGES IN THE AREAL EXTENT OF INCORPORATED TERRITORY

One way to summarize the more than 130 years of history of incorporated civil divisions in southeastern Wisconsin is to examine the changes over time in the aggregate amount of surface area contained within the boundaries of the Region's incorporated civil divisions. Table 8 sets forth the aggregate areal extent of the Region's incorporated civil divisions for selected years beginning in 1848, when about 13 square miles—less than 1 percent of the Region's 2,689 square miles of surface area—were contained within the Region's five incorporated civil divisions. By 1980 about 630 square miles, or about one-quarter of the Region's surface area, had become incorporated.

As shown in Figure 1, the expansion of incorporated territory was greatest during the 1950's, when about 320 square miles of territory were incorporated. This amount represents more than one-half of all territory ever incorporated within the Region. Large increases in incorporated territory occurred during this decade not only in Milwaukee County where all remaining rural territory was incorporated, but also in Ozaukee and Waukesha Counties, where large amounts of territory immediately adjacent to Milwaukee County were incorporated.

TWO-COUNTY MUNICIPALITIES

Six cities and villages in the Southeastern Wisconsin Region cross county boundary lines for a variety of reasons. The Village of Bayside annexed about 20 or 30 acres in Ozaukee County because the area is isolated from the remainder of Ozaukee County by a ravine, and the only road access is from Milwaukee County. The Village of Kewaskum in 1963 annexed noncontiguous village-owned property in Fond du Lac County that serves as a modified landfill for dirt, concrete, stone, and similar materials. The City of Burlington in 1974 annexed its airport, which extends into Walworth County.

Table 8

AREAL EXTENT OF INCORPORATED CIVIL DIVISIONS IN THE REGION BY COUNTY: SELECTED YEARS 1848-1980

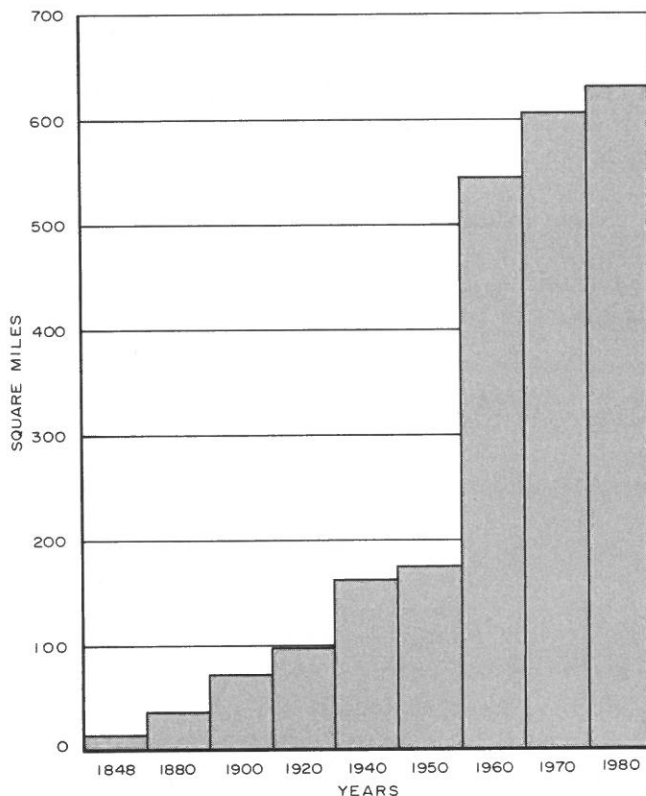
County	Area in Square Miles								
	1848	1880	1900	1920	1940	1950	1960	1970	1980
Kenosha ^a	0.8	1.3	1.3	1.3	14.6	14.6	17.8	23.0	24.7
Milwaukee	8.0	9.5	35.3	41.3	74.2	83.7	242.4	242.4	242.4
Ozaukee ^a	0.0	1.7	2.8	5.1	7.6	8.0	56.9	58.9	61.1
Racine	1.7	2.5	3.1	10.9	13.2	14.2	18.6	22.2	24.2
Walworth	1.0	12.8	13.9	19.3	21.6	22.3	25.1	25.7	29.1
Washington	0.0	4.5	5.4	5.9	7.1	7.4	9.7	47.0	51.0
Waukesha	0.6	5.0	12.1	14.3	22.5	22.7	175.0	188.9	199.1
Region	12.1	37.3	73.9	98.1	160.8	172.9	545.5	608.1	631.6

^aMeasurements are reported for the configuration of county boundaries as they presently exist. This configuration became fixed in 1853. In 1848 Kenosha County was still a part of Racine County and Ozaukee County was still a part of Washington County.

Source: SEWRPC.

Figure 1

**AREAL EXTENT OF INCORPORATED
CIVIL DIVISIONS IN THE REGION
SELECTED YEARS 1848-1980**



Source: SEWRPC.

voting district must be exclusively in Jefferson County. Because of laws saying that voting districts should be similar in population, the Jefferson County segment of the City of Whitewater sets the pace for determining the size of other voting districts in Jefferson County, which are reapportioned every 10 years.

Newburg is so small that there is only one polling site, but there are two sets of paper ballots serving the residents of the two counties. Bayside has a similar arrangement, in which all residents vote at the same polling site, but Milwaukee County residents vote by machine and Ozaukee County residents vote on paper ballots. The two City of Milwaukee residents who live in Washington County also vote on paper ballots.

Sending out property tax bills also involves more work for municipalities with residents in two counties. Instead of having one comprehensive tax rate reflecting municipal, school, and county levies, these communities must compute two tax rates and apply them separately to their residents in the different counties.

While elections and taxes require some additional work, officials in these communities said that they were not overly burdened by having their municipalities cross county lines. Whitewater officials acknowledged one oddity in law enforcement involving the University of Wisconsin security force. The campus officers are not deputized by Walworth County, but they are deputies of the Jefferson County Sheriff's Department. This means that they can make traffic or other arrests on the north side of Whitewater, but not on the larger south side.

The City of Whitewater began in 1959 to annex territory in Jefferson County. The first annexation was a city-owned landfill site. Subsequently, several residential subdivisions, a mobile home park, and University of Wisconsin-Whitewater property in Jefferson County were annexed.

In 1963, the City of Milwaukee annexed 15 acres occupied by two people in the Town of Germantown in Washington County. The two residents petitioned for annexation to Milwaukee because they owned a tavern and wanted a city liquor license, and there were no licenses available from the Town.

Newburg, which straddles Ozaukee and Washington Counties, was incorporated as a village in 1973. The community had formed a sanitary district 10 years earlier, but eventually officials felt they could administrate the district better if there were a village. A motivation was that incorporation allowed Newburg to receive state-shared taxes according to the number of residents living there. Previously, Newburg's "share" of the taxes was divided between the Towns of Trenton and Saukville.

Some administrative complications have arisen in two-county municipalities that have residents living in both jurisdictions. Whitewater experiences the most difficulties because its territory in Jefferson County is fairly large. Since those residents are represented by a different county government, the

CONCLUDING COMMENT

In the 130 years between 1850 and 1980, southeastern Wisconsin experienced a tremendous growth in the number of incorporated municipalities and in their areal extent. Only five cities and villages existed in 1850; now there are 82 incorporated municipalities with a total area of about 630 square miles, and many of these are 20 or 30 square miles in size. Milwaukee County is now completely incorporated, and the tier of former towns in adjacent counties to the west and north is almost entirely incorporated. Waukesha County has the distinction of containing the largest number of incorporated cities and villages—24. Kenosha County, on the other hand, has only four incorporated civil divisions. It is difficult to predict the nature and extent of municipal growth in the next 20 years. Most likely, however, current trends will continue, with subdivision and smaller annexations gradually enlarging the size of most municipalities.

While the precise shape and form of future cities and villages cannot be forecast, one general statement certainly can be made. Just as societal values and human politics were the primary forces for municipal development in the past, so will they be the prevailing determinants of future growth. We can all hope that the leaders of tomorrow will study history and apply its lessons to enlighten their decision-making efforts.

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Author's Note

In researching the history of the Region's incorporated civil divisions, secondary sources occasionally disagreed upon the dates at which certain events, such as incorporations, became effective. Where disagreement between different sources was encountered, additional sources—including the records of city and village clerks where appropriate—were sought out to resolve discrepancies. All data reported herein are based upon detailed cross-checking of primary and secondary source documents and are believed to be the correct dates for the described events.



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