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RACINE AREA TRANSIT DEVELOPMENT PROGRAM 1975-1979

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COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 3

THE RACINE AREA TRANSIT
DEVELOPMENT PROGRAM: 1975-1979

City of Racine

Southeastern Wisconsin Regional Planning Commission

The preparation of this report was financed in part by the City of Racine and in part through a joint planning grant from the Wisconsin Department of Transportation; the U.S. Department of Transportation, Federal Highway Administration and Urban Mass Transportation Administration; and the U.S. Department of Housing and Urban Development

June 1974

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RACINE MASS TRANSIT

TECHNICAL COORDINATING AND ADVISORY COMMITTEE

To: Honorable Mayor and Members of Common Council, City of Racine
Southeastern Wisconsin Regional Planning Commission

Gentlemen:

To provide a sound basis for the important policy decisions facing the City of Racine regarding continued public transit service, the Racine Common Council, by Resolution No. 1942 dated on August 7, 1973, directed that a Transit Development Program be prepared; and asked Mayor Stephen F. Olsen to appoint a Racine Transit Technical Coordinating and Advisory Committee to provide citizen and transit related agency participation and guidance to a technical staff in preparation of the program.

The five year Racine Area Transit Development Program, prepared under direction of this Advisory Committee and documented in this report, is based upon an inventory and evaluation of the present transit system and service levels in the Racine area, a careful analysis of the needs and opportunities for transit service in the Racine area and of the factors influencing such needs and opportunities including legislation at the federal, state, and local levels. Based upon the understanding of existing and probable future conditions and needs as provided by these inventories and analyses, a set of transit system improvement objectives and standards was developed to provide a basis for analyzing existing conditions and for developing alternative means of providing a desirable level of continued public transit service. With the specialized assistance of a transit operations consultant, several alternative plans for providing transit service to the Racine area were designed, staged and costed. Following evaluation of these alternative plans, the Advisory Committee selected a combination of appropriate features from the alternatives to constitute the recommended Transit Development Program which is being hereby respectfully transmitted for your consideration.

The recommended five year transit improvement program calls for public ownership of the transit system in 1975, operation under a management contract, improvements in service including a rearrangement of the routes, the purchase of new buses, and the construction of storage and maintenance facilities during 1975. Upon delivery of the new buses, expected before 1976, further improvement and expansion in the transit service is recommended with the institution of new routes and schedules, extended hours of service and a reduced fare. Federal and state funds are available to provide partial support of the attendant capital and operating expenses.

The ninth and final chapter of this report, set forth on colored paper stock, summarizes the significant findings and recommendations of the eight previous

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Page Two

chapters. A review of this chapter, prior to reading the entire report, should provide an improved understanding and appreciation of the findings and recommendations of the transit development program.

Favorable action on the recommended transit program is respectfully urged by the Racine Mass Transit Technical Coordinating and Advisory Committee.

Respectfully submitted,

A handwritten signature in cursive script, reading "William J. Murin". The signature is written in dark ink and is positioned above the printed name and title.

Dr. William J. Murin, Chairman
Racine Mass Transit Technical
Coordinating and Advisory Committee

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RACINE AREA TRANSIT DEVELOPMENT PROGRAM
1975-1979

CHAPTER I

INTRODUCTION

Urban mass transportation has been an important consideration in the development of comprehensive land use and transportation plan recommendations within southeastern Wisconsin. The importance of urban mass transportation was recognized in the establishment of the regional objectives, principles, and standards used to guide design and to permit evaluation of alternative land use and transportation plans. Recommendations for long range transit facility and service improvements were contained in the balanced regional transportation plan adopted by the Southeastern Wisconsin Regional Planning Commission December 1, 1966. The adopted regional land use and transportation plans, as well as the salient findings and recommendations of the comprehensive land use-transportation study, upon which the plans are based, were set forth in SEWRPC Planning Report No. 7, The Land Use-Transportation Study, Volume One, "Inventory Findings", 1963; Volume Two, "Forecasts and Alternative Plans-1990"; and Volume Three, "Recommended Regional Land Use and Transportation Plans-1990."

On March 28, 1967, after careful consideration and upon recommendation of the Racine County Highway Committee, the Racine County Board of Supervisors adopted the recommended land use and transportation plans as guides to be used in making decisions concerning the physical development of the county.

In 1968, subsequent to the adoption of the regional land use and transportation plan a comprehensive community developing planning study for the Racine Urban Planning District, consisting of all that part of Racine County lying east of IH-94, was initiated. This study was completed in 1972 with the publication of Volume II, "The Recommended Comprehensive Plan" of SEWRPC

Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District. Volume I, "Inventory Findings and Forecasts" was published in 1970. The comprehensive development plan for the Racine Urban Planning District also contains specific recommendations for long-range transit facility and service improvements.

Although the completed urban mass transit planning studies provide a sound, long-range framework for transit development within the Racine area and within the Region of which Racine is an integral part, the day-to-day policy and operating decisions required concerning the continuation and levels of transit service to be provided within the Racine urbanized area and for obtaining state and federal assistance for urban transit improvements also require a short-range transit planning effort which can serve to refine and detail the long-range transit planning efforts. Such a short-range planning effort directed to the continuation and improvement of urban mass transportation is termed by the U. S. Department of Transportation, Urban Mass Transportation Administration, as a transit development program.

DEFINITION OF A TRANSIT DEVELOPMENT PROGRAM

More specifically, a transit development program may be defined as a short-range (at least five years) program to achieve, through a coordinated program of capital and operating improvements, a maximum practical level of public mass transit service within an urban transit service area and to promote implementation of the transit improvement recommendations of adopted areawide transportation plans.

A transit development program must be based upon an understanding and evaluation of the existing transit system in terms of service, physical facilities, maintenance, marketing, and management practices; a description and evaluation of the transit service area in terms of personal travel habits, patterns and

needs and of the location and characteristics of major traffic generators; an evaluation of interrelated alternative courses of action encompassing transit operating policies, transit operations improvements, capital improvements, low and non-capital improvements, and policy decisions for the provision of transportation service. A transit development program must include a five year staging plan for transit improvements and identify the financial commitment and other actions required by all agencies involved in program implementation. Finally, a transit development program must describe the unified or coordinated operation of all transit facilities in the urban area, including those to be provided under the transit development program, to assure development of the maximum practical level of transit service.

NEED FOR A TRANSIT DEVELOPMENT PROGRAM

Preparation of a transit development program for the Racine urban area appears particularly timely because of several transit related policy issues confronting public decision makers in the Racine urban area. Presently, the privately owned and operated transit system is being subsidized on a year to year basis by the City of Racine in an effort to maintain current levels of transit service. The transit development program recommendations will provide the basis for making decisions regarding the ownership, management, service levels, and operating policies of continued transit service. Following evaluation of the needs for transit service within the Racine urbanized area, alternative operating programs consisting of appropriate routes and schedules and alternative means of providing transit service such as fixed route--fixed schedule, or dial-a-bus, will be prepared to develop viable transit service within the transit service area.

It is also necessary to identify the capital improvements required to maintain and improve transit service within the urbanized area. The existing bus fleet is nearing the end of its useful life, therefore, decisions as to the number and type of buses required for fleet replacement and fleet expansion will

be required. A fleet purchase schedule matched to need, service expansion, and financial resources will have to be developed. Related capital expenses such as radio communication, dispatching equipment, maintenance facilities, signs, shelters, and other specialized equipment to meet the needs of the customers will also be considered in preparing the transit development program.

The transit development program is needed to describe coordination of local transit service, school bus service, and inter-city service within the urbanized area to assure wise use of limited public resources and to maximize transit service. The role of transit service between Racine and the University of Wisconsin-Parkside Campus to provide expanded educational opportunities for more Racine area residents, to reduce the cost of commuting to the campus and to reduce the cost of providing on-campus transportation facilities and services can be evaluated under the transit development program.

Finally, a transit development program is required to provide federal and state funding agencies an overall transit improvement program upon which they can base their consideration of specific applications for transit capital improvement grants and operating assistance, and to provide assurance that their planning requirements are met.

OBJECTIVES OF THE RACINE URBANIZED AREA TRANSIT DEVELOPMENT PROGRAM

The primary purpose of the transit development program is to postulate, evaluate, and recommend the series of specific actions that can be taken during the next five years to provide the Racine urban area with the maximum practical level of mass transit service. The objectives of the transit development program are:

1. Promote implementation of the adopted regional transportation and land use plan and the comprehensive plan for the Racine Urban Planning District.

2. Provide a sound basis for the continuation and improvement of transit service within the transit service area.
3. Provide a sound basis for the making of management and transit operating policy decisions necessary to carry out transit service improvements.
4. Provide a basis for the establishment of a sound fiscal policy and for the systematic scheduling of transit service and system improvements to assure effective use of public resources in the provisions of urban mass transit.
5. Provide a sound basis for the efficient management of the urban transit system, for continued monitoring of program results, and for continued program updating to maintain program elements through the five years beyond current activities.
6. Provide documentation that relates transit service improvements to long-range transportation and comprehensive plan recommendations for the Racine urbanized area to assure coordinated physical development, provision of balanced transportation, and to provide support for capital and operating assistance grant applications to state and federal agencies.

TRANSIT DEVELOPMENT PROGRAM STUDY ORGANIZATION

To assist and to provide guidance to the technical staff in the preparation of a transit development program and to involve concerned and effected public officials and agency leaders in the development of transit system proposals, the mayor of the City of Racine, the major governmental jurisdiction within the Racine transit service area, appointed a technical coordinating and advisory committee late in 1973. The committee represents a broad spectrum of the leadership in the Racine Urban Planning District and includes representation of several agencies and units of government affected by or involved with the

provision of urban mass transportation. The committee structure acts to broaden the input to the study, provides critical review of staff efforts and provides for the participation of the vital groups represented whose operations may be greatly affected by the future transit system. Specifically, this committee was charged with assisting and advising the study staff of technical methods, procedures, and interpretations; assisting in the assembly and evaluation of the planning and engineering data; assisting in the establishment, definition and review of criteria, appraising alternative plans and resolving any conflicts which might arise in plan preparation and selection. The committee was intended to be actively involved with the local technical officials in the planning process, an objective which it has fully met. The membership of the Racine Urban Area Transit Development Program Technical Coordinating and Advisory Committee and the groups represented is set forth in Appendix A of this report.

The study and report preparation has been a joint staff effort between the City of Racine and the Southeastern Wisconsin Regional Planning Commission. An interagency team was assembled from the staffs of the two agencies to gather the data, analyze the results, develop alternative plans, and prepare reports for Technical Coordinating and Advisory Committee review and response. Additional staff assistance was obtained from many of the agencies represented on the Technical Coordinating and Advisory Committee, particularly from the Flash City Transit Company.

FORMAT OF PRESENTATION

The principle elements of this report documenting the recommended Racine Urban Area Transit Development Program include:

1. An evaluation of existing transit services and service area characteristics.
2. A five-year staging plan of recommended transit management and operation improvements, including cost estimates, anticipated

financing and implementation responsibilities that has been based upon evaluation of feasible alternatives.

3. Recommendations for coordination of all transit systems in the urban area.
4. A means to provide monitoring, updating, and extending of the transit development program.

Chapter II deals with the planning process and the relationship of transit development programs with other planning elements. Significant transit-related characteristics of the Racine urban area, including those areas not now served by transit, are described in Chapter III. Political subdivisions are enumerated as well as the existing conditions of the demographic and economic bases of the area. The pattern of land use of the urbanized area in terms of historical development and existing conditions are described. The purpose of this description becomes evident in later chapters when both the existing and proposed transit services are discussed in terms of service to the urbanized area.

The operating characteristics of existing transit service in Racine are presented in Chapter IV. The description includes discussion of service provided, ridership and revenues, system costs, facilities, equipment, and management. Characteristics of the transit rider and data about their distribution patterns and trip purposes are included to complete the description of existing transit travel. Chapter V summarizes pertinent federal, state, and local legislation including an inventory of enabling legislation for public ownership and operation, and describes the regulatory policies and restraints under which mass transit now operates. Analysis of existing transit service against transit standards and with respect to passenger needs, area coverage, levels of service, management operations, financial resources, and legislative restraints is documented in Chapter VI.

The study of existing conditions, existing transit service, and of all prior and current transit proposals becomes the basis for Chapter VII, "Transit Improvement Alternatives." This chapter presents several alternatives for management and operation of the transit system. A five-year staging plan, with revenues and costs shown, is presented for each alternative. Chapter VIII, "The Recommended Transit Development Program," presents a detailed description of the alternative recommended for implementation in the Racine urbanized area. The chapter develops:

1. Policy guidelines on such matters as management, fare structure and pricing, maintenance, and marketing.
2. Transit operation improvements including routing, scheduling, hours of service, and coordinating of systems.
3. Capital improvements such as replacing and expanding the bus fleet, upgrading storage and maintenance facilities, and providing bus stop signs and shelters.
4. A series of low and non-capital alternatives that enhance transit use and provide congestion relief.

Chapter VIII also presents a five-year staging plan for implementing the transit development program, details responsibilities for program implementation, and recommends a process for updating and extending the transit development program. The final chapter is a summary of the study findings and recommendations.

CHAPTER II

THE PLANNING PROCESS

INTRODUCTION

As described in the previous chapter, the transit development program is a staged series of recommended actions to be undertaken over a short range time period to provide the maximum practical level of urban mass transit service within the urbanized area. The actions to be taken should represent refinements to and serve to guide implementation of transit related portions of adopted long-range, areawide transportation plans. Thus, a transit development program is related to and consistent with staging elements of adopted long-range, areawide transportation plans. Within the Southeastern Wisconsin Region, and more specifically within the Racine Urban Planning District, transportation planning is based upon comprehensive land use planning as one element of the series of interrelated elements that together comprise the area's comprehensive plan.

The U. S. Department of Transportation, Urban Mass Transportation Administration, requires that those urban mass transit improvement projects to be partially funded through grants from the Urban Mass Transportation Administration, must be contained within a locally developed and approved short-range development program which is in turn related to an approved long-range, areawide transportation plan. This plan comprises one of the elements of a comprehensive, areawide development plan. The transit development program documented within this report is indeed an integral part of the continuing comprehensive, areawide planning process underway within the Southeastern Wisconsin Region.

Preparation of a transit development program itself requires a rational and systematic process to provide an understanding of the characteristics of the transit service area and the needs and desires of the people living therein, to develop and review alternative means of providing transit service to those desiring it, and to achieve an effective balance of increased service, ridership

and revenue with efficient transit operations and minimized system costs. A six step planning process has been found effective in the conduct of similar studies. The six steps required to accomplish preparation of the transit development program for the Racine area are:

1. Inventory
2. Preparation of objectives and standards
3. Analysis
4. Program design
5. Evaluation
6. Program adoption

Plan implementation, the next step beyond the planning process must be considered throughout the process if the plans are to be realized. A brief description of each of these six steps as they relate to preparation of the transit development program for the Racine urbanized area follows.

INVENTORY

Reliable basic data is essential to the formulation of workable development plans. The inventory for this program is comprised of three segments; an inventory of the characteristics of the urbanized area considered to comprise the urban mass transit service area; a public transportation service and system inventory; and a transit legislation and regulation inventory. The urbanized area inventory is first discussed in terms of generalized land use, population density, and major traffic generators for the entire urban area, and secondly, a focus of discussion of those concentrations of people and activities most related to mass transit needs and opportunities. The public transportation service inventory offers an overview of existing public transportation services within the area and a detailed account of the existing urban mass transit system, including a history of service, services offered, management and maintenance policies,

and a financial statement. The transit legislation and regulation inventory examines existing federal and state legislation, Wisconsin Public Service Commission regulations, and local regulations and ordinances pertaining to transit operations. Much of the inventory items are available from prior planning studies, particularly from the comprehensive plan for the Racine Urban Planning District, the continuing transportation study wherein transit service levels and systems are continuously monitored, and under the Commission's 1972 Inventory of Travel which included special urban mass transit studies in addition to the basic home interview surveys wherein socioeconomic characteristics and travel behavioral patterns from persons living in a sampling of households within the Region was obtained.

PREPARATION OF OBJECTIVES AND STANDARDS

In its most basic sense, planning is a rational process for establishing and meeting objectives. Formulation of objectives is, therefore, an essential task to be undertaken before plans can be prepared. Basic transportation system development objectives and specific transit system development objectives are set forth in the adopted regional transportation plan and a major transit plan element produced under the Milwaukee Area Transit Plan. These transit development objectives would be reviewed and refined to focus program efforts and to measure the effectiveness of program achievements.

ANALYSIS

The analysis of the existing transit service and its relation to the land activities and characteristics of the people within the transit service area, is undertaken in light of the objectives and standards developed for the transit development program to identify deficiencies to be overcome and opportunities to be sought through the transit development program. Evaluation of future conditions anticipated to exist within the short-range planning period as identified in long-range comprehensive planning studies and other

detailed shorter range analyses will be used to complete the understanding of the potential for transit service improvements.

PROGRAM DESIGN

Improvements to transit service and the transit system, aimed at removing existing deficiencies and implementation of longer range transit plans, are detailed and staged over a five year period in the program design phase. Feasible alternatives will be postulated for each of the several transit improvement areas including policy recommendations regarding management, fare structure, maintenance and marketing; transit operation improvements; capital improvements; and low and non capital intensive solutions to improve transit service and achieve congestion reduction.

EVALUATION

If any of the plans developed in the design stage of the planning process are to be realized in terms of program development, measures must be applied to quantitatively and qualitatively test these plans in advance of their recommendation, adoption, and implementation. The alternatives considered in the several areas of transit system and service improvement can be evaluated against program objectives and standards, number of people served, revenue obtained, cost of providing service and the judgments of the advisory committee and their representative agencies. While it is generally recognized that urban mass transit service is not able to support itself from fare box revenues, cost effective measures can be used to balance the financial requirements against the service provided under the proposed development program. The result of the evaluation of alternative phase is the recommended transit development program which is forwarded to the constituent units of government for their consideration and implementation.

ADOPTION

In a practical sense, the transit development program is not complete until the steps required for its implementation, that is, the steps necessary to convert the plan recommendations to action policies and programs, are specified. Plan implementation must begin with plan adoption by the respective implementing agencies, which will include in this instance the local agencies within the transit service district, the Racine County Board of Supervisors, the administration of the University of Wisconsin-Parkside, the Wisconsin Department of Transportation, and the U.S. Department of Transportation, Urban Mass Transportation Administration. All implementation recommendations, including those relating to transit system ownership, fare reduction, development of the day-to-day transit management agency, applications for capital grants and operating assistance, expansion of transit services, and provision of continued transit development programming follow and flow from such plan adoption.

1972 REGIONAL INVENTORY OF TRAVEL

One of the most important work elements undertaken by the Southeastern Wisconsin Regional Planning Commission in 1972 was the second major inventory of travel within the Region. The first inventory of travel was conducted in 1963 to provide the data for the land use and transportation planning process. Considerable changes in the Region's transportation system and land use patterns since 1963 dictated the need for the second travel inventory. The 1972 survey provided data on traffic volume and vehicle classification counts; travel origins and destinations; trip lengths, frequencies, and purposes; travel modes used; and socioeconomic data of the trip makers. Surveys conducted included a home interview survey, truck and taxi survey, external survey to obtain travel data about persons entering and leaving the Region, screenline survey to provide traffic count data to check the accuracy and completeness of the origin-destination data, weekend travel survey, interregional bus, rail, and ferry survey, mass transit user survey, mass transit nonuser survey,

and a major traffic generator survey. The latter four surveys as well as the home interview survey will be used extensively for the inventory and analysis functions of the Transit Development Program.

The mass transit user survey was conducted in the Racine urbanized area on May 2, 1972. Each boarding revenue passenger on each route of the Flash City Transit Company was provided a mailback survey form. Passengers who boarded with a transfer were not included in the survey. The interregional bus and rail survey, was conducted on October 12, 1972, on most outbound suburban and inter-city routes from Milwaukee. Data obtained from the inter-city routes operated by Wisconsin Coach Lines, Inc. through the Racine area have significance for the Racine Transit Development Program. The information obtained in the two surveys related to the location of home addresses, points of boarding, points of origin and destination, points of transfer, trip purpose, land use at origin and destination, and certain personal and socioeconomic characteristics of the riders.

In the mass transit nonuser survey, home interviews were conducted in one small residential area of Racine in which transit service is maintained but in which transit use is not meeting expectations. In the major traffic generator survey, the management or administrators of two major industrial firms located in the Racine urbanized area, the J. I. Case Company and S. C. Johnson & Son, Inc., were asked to make available to SEWRPC a list of the resident addresses of all employees. For each major employment center, resident addresses were mapped to identify transit improvement potential.

Some data from the above surveys has been analyzed and is included in Chapter III and Chapter IV of the Transit Development Program. Other data, such as from the home interview survey, are still in the analysis process, and will be reported as part of the annual maintenance function of the Transit Development Program.

Chapter III

THE RACINE URBANIZED AREA

INTRODUCTION

In order to evaluate the existing transit system, it is necessary to inventory in detail the socioeconomic and land use characteristics of the area served, as well as the transit system itself. Chapter IV will describe the transit system, while this chapter will describe the urbanized area as it relates to transit operations. Special land uses or concentrations of land uses that may require transit service will be identified, including: residential areas, shopping areas, schools, industrial areas, recreational areas, public buildings, and hospitals. Segments of the population that are most dependent on urban mass transportation service will also be identified. These include the elderly, the poor, the handicapped, the minorities, school age children, and those without automobiles.

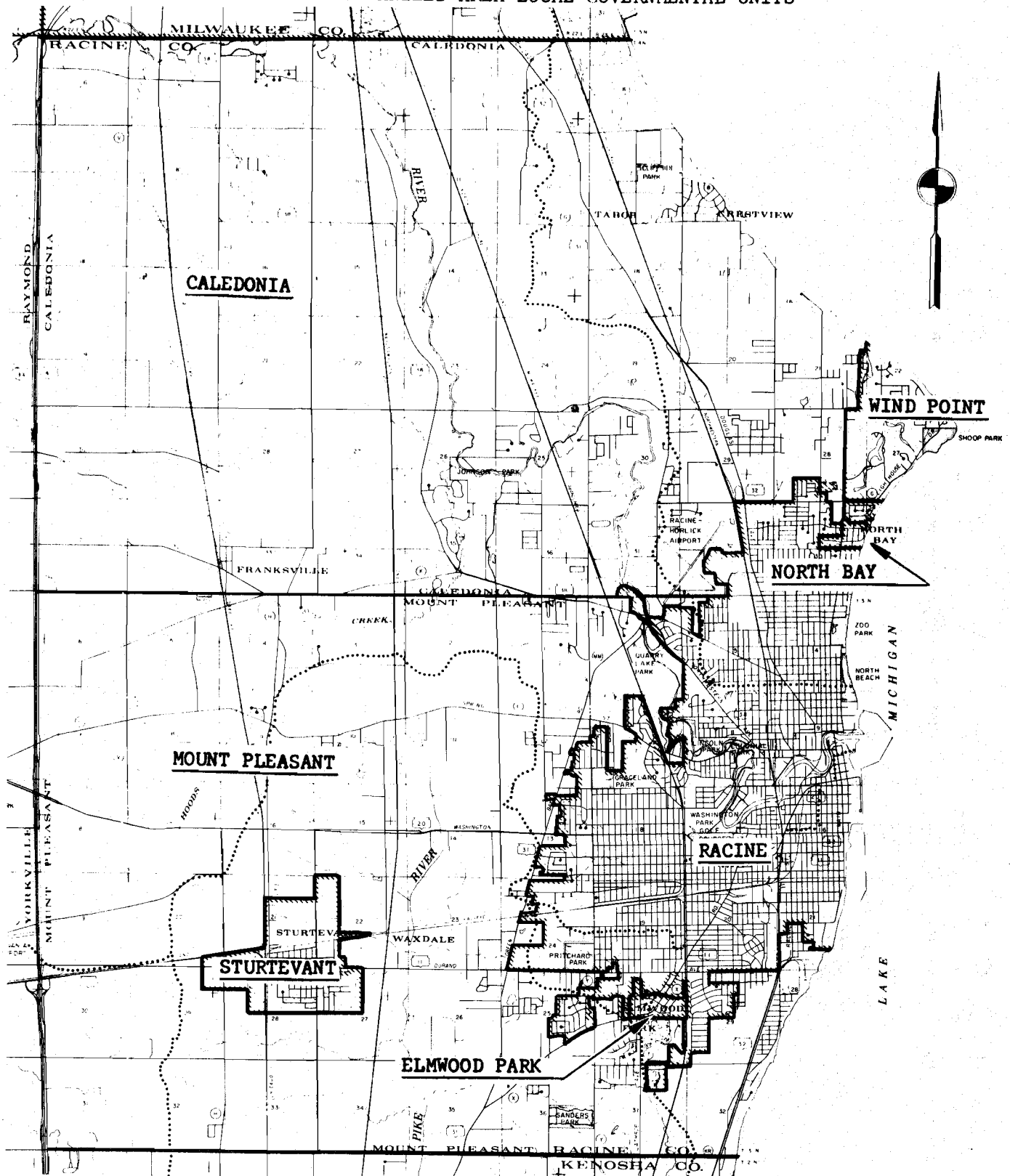
THE STUDY AREA

The Racine urbanized area, for the purposes of this study, has been defined as that area bounded by IH-94 on the west, the Milwaukee-Racine County line on the north, Lake Michigan on the east, and the Racine-Kenosha County line on the south (See Map 3-1). The entire study area is located within the boundaries of Racine County. Within the area, there are seven local governmental units with a combined total resident population, as determined by the 1970 U.S. Census, of 133,624 (See Table 3-1). These seven local governmental units are: the City of Racine, the Towns of Caledonia and Mount Pleasant, and the Villages of Elmwood Park, North Bay, Sturtevant, and Wind Point. In addition, the Racine County government unit has jurisdiction within the study area.

TOPOGRAPHY AND LAND USE

The land in the Racine urbanized area has been shaped by glaciation, creating a broad, gently rolling topography. This topography creates few problems for a transit operation. The single topographic feature of significance to transit operations is the Root River, which winds through the study area and which is crossed by only a

RACINE URBANIZED AREA LOCAL GOVERNMENTAL UNITS



Local governmental units in the Racine urbanized area include the City of Racine, the Towns of Caledonia and Mount Pleasant, and the Villages of Elmwood Park, North Bay, Sturtevant, and Wind Point.

Source: SEWRPC

Table 3-1

1960 AND 1970 POPULATIONS OF THE UNITS OF GOVERNMENT
IN THE RACINE URBANIZED AREA

	<u>City of Racine</u>	<u>Town of Caledonia</u>	<u>Town of Mount Pleasant</u>	<u>Village of Elmwood Park</u>	<u>Village of North Bay</u>	<u>Village of Sturtevant</u>	<u>Village of Wind Point</u>
1960 Population	89,144	9,696	12,358	--- ¹	264	1,488	463
1970 Population	95,162	16,748	16,368	456	263	3,376	1,251
Percent Change	+6.8	+72.7	+32.4	---	-0.4	+126.9	+170.2

¹ Village of Elmwood Park incorporated from part of the Town of Mount Pleasant in 1960 after the decennial census.

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

limited number of existing bridges. The area has a semi-humid climate, relatively extreme seasonal temperature fluctuations, and moderate rainfall and sunshine, which may, at times, create discomfort for the transit user who is waiting for a transit vehicle.

The land use characteristics of the Racine urbanized area are similar to those found in other communities located on the western shore of Lake Michigan. Early settlement and growth of the area took place near the mouth of the Root River. The major commercial area was located just south of the river mouth with industrial development taking place along the banks of the Root River and along railroad rights-of-way traversing the area. Since 1940, the Racine urbanized area has seen rapid urbanization and accompanying "urban sprawl". Much of the industry that originally clustered along the railroad lines has moved to outlying areas. The downtown shopping district has encountered competition from newer outlying shopping centers. Still, as of 1969, less than one-third of the study area was used for urban purposes.

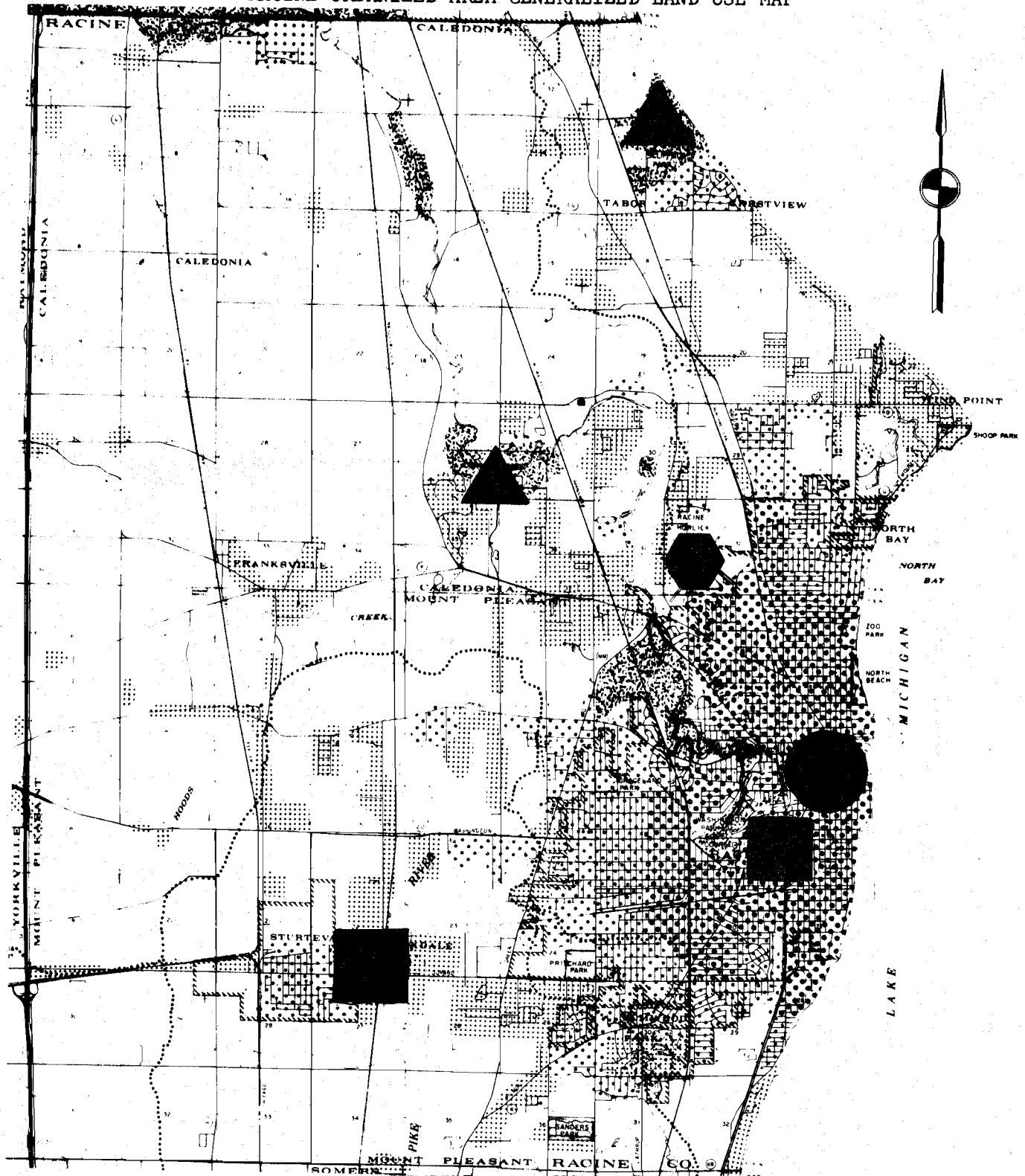
Recreational land use includes both public and private parkland and golf courses. Much of the park area occupies scenic locations along the Root River and Lake Michigan in the Town of Caledonia and the Village of Wind Point.

Map 3-2 and Table 3-2 summarize the results of a land use survey undertaken by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) and published in the SEWRPC Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District, Volume One, Inventory Findings and Forecasts.

POPULATION CHARACTERISTICS

Rates of population growth in the Racine urbanized area have fluctuated from decade to decade, with significant periods of growth reflecting times of economic prosperity. Population densities vary greatly within the study area. In sections of the City of Racine, the number of persons per square mile is more than 14,000. In contrast, the less developed sections of the study area may have population densities of less than 500 persons per square mile. Map 3-3 shows the population densities for

RACINE URBANIZED AREA GENERALIZED LAND USE MAP



LEGEND

- LOW DENSITY RESIDENTIAL
(4.0 PERSONS PER RES. ACRE)
- MEDIUM DENSITY RESIDENTIAL
(14.3 PERSONS PER RES. ACRE)
- HIGH DENSITY RESIDENTIAL
(39.5 PERSONS PER RES. ACRE)

MAJOR RETAIL & SERVICE

SOURCE: SEWRPC

- MAJOR INDUSTRIAL
- PUBLIC USE AIRPORT
- MAJOR PUBLIC OUTDOOR RECREATIONAL SITE
- PRIMARY ENVIRONMENTAL CORRIDOR
- AGRICULTURAL

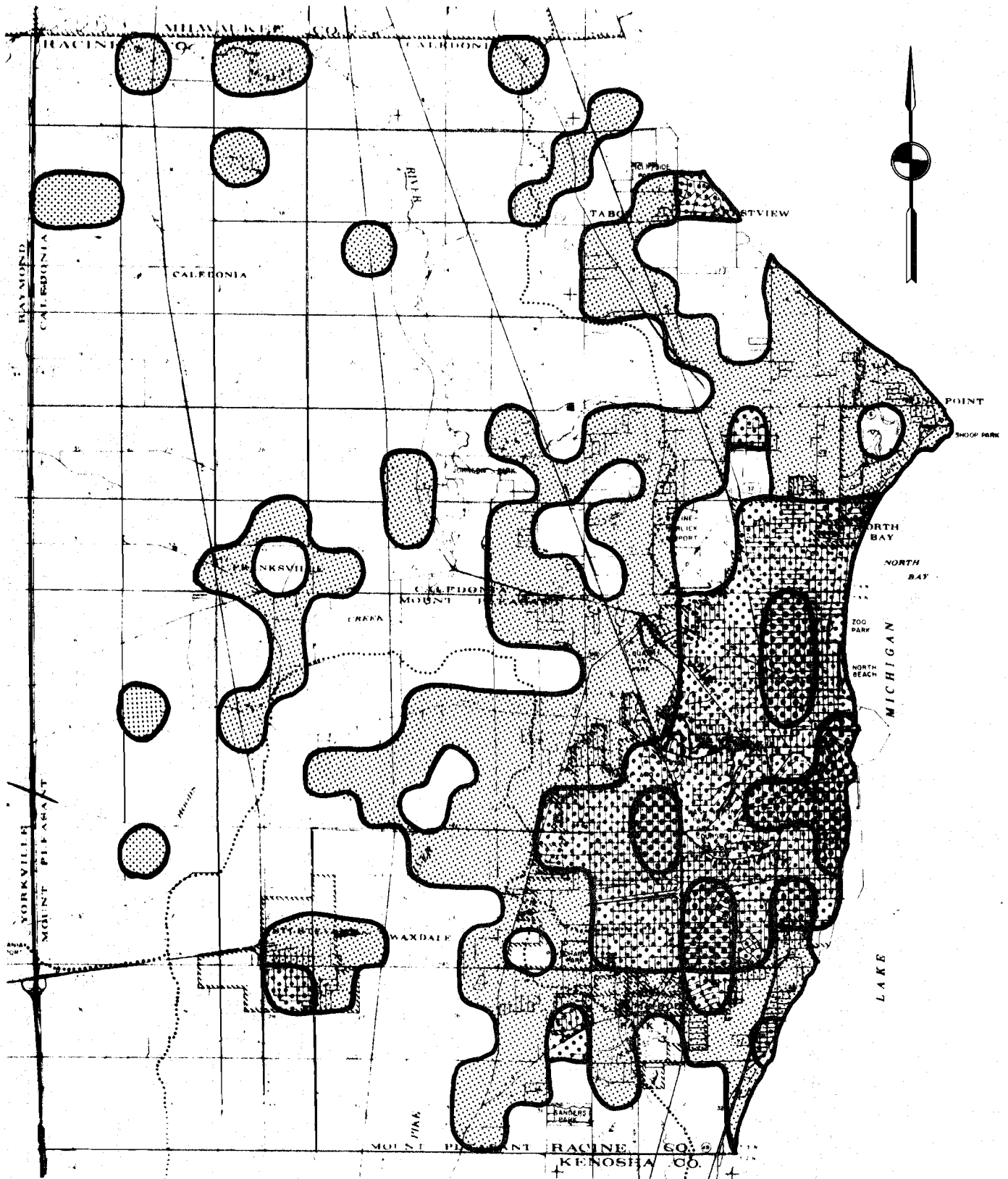
Table 3-2

LAND USE IN THE RACINE URBANIZED AREA

<u>Land Uses In The Racine Urbanized Area</u>	<u>Acres Used</u>	<u>Percent Of Total</u>
<u>Developed</u>		
Single Family Residential	8,556.16	13.3
Two Family Residential	470.63	0.7
Multi-Family Residential	168.78	0.3
Commercial	672.75	1.0
Light Industrial	882.93	1.4
Heavy Industrial	1,142.79	1.8
Railroad	652.02	1.0
Public and Semi-Public	1,357.27	2.1
Park and Recreation	1,951.28	3.0
Streets and Alleys	4,673.54	7.2
Subtotal of Developed Land	20,528.15	31.8
<u>Undeveloped</u>		
Agriculture and Related Uses	31,624.57	48.9
Open Lands and Water	12,472.08	19.3
Subtotal of Undeveloped Land	44,096.65	68.2
TOTAL of All Land	64,624.80	100.0

SOURCE: A Comprehensive Plan for the Racine Urban
Planning District

RACINE URBANIZED AREA POPULATION DENSITY



LEGEND: Persons per square mile

24,999-10,000

3,499-350

9,999- 3,500

349 or less

Source: SEWRPC

the study area. The highest densities are found in the West Racine neighborhood (the area west of Washington Park) and in the central City north of the Root River. The areas with the higher densities, greater than 4,000 persons per square mile, were found to be generally contained within the City of Racine proper. Outside of the City, population densities rarely reach 4,000 persons per square mile. In much of the area urbanized since 1950, population densities were found to rarely exceed 2,000 persons per square mile.

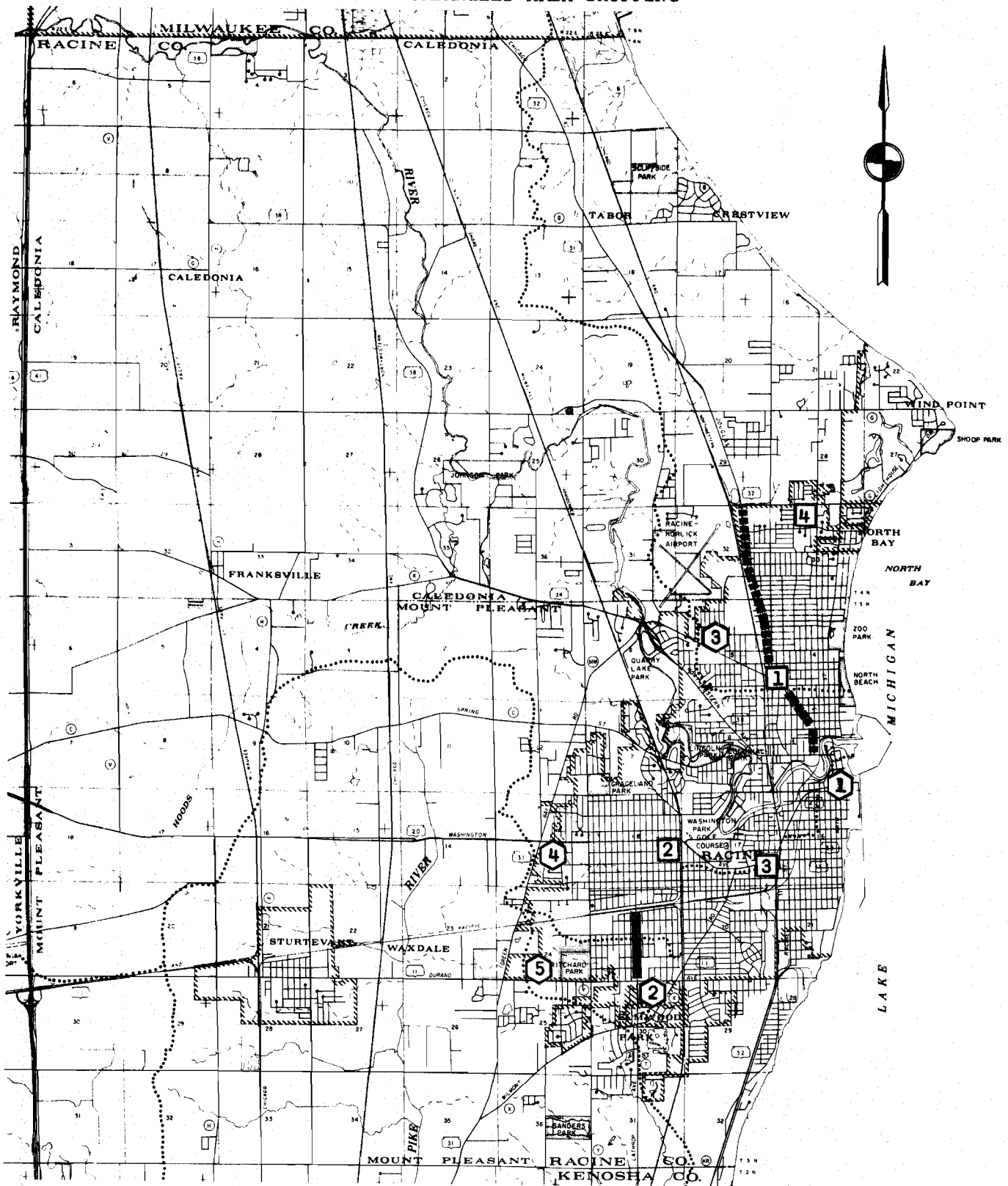
MAJOR TRAFFIC GENERATORS

For purposes of transit planning in the Racine urbanized area, major traffic generators were defined as specific land uses or concentrations of such land uses which attract a large number of person trip destinations. The following categories of land uses were identified as major traffic generators: 1) shopping areas; 2) junior and senior high schools, colleges and universities; 3) hospitals and medical centers; 4) institutions and public buildings; 5) industrial areas; and 6) recreational areas.





Within the category of shopping areas, three classifications were developed. The first classification, major shopping areas, is characterized by a service area which includes most or all of the Racine urbanized area. Such shopping areas, which are shown on Map 3-4 and identified below, are characterized by the presence of a large department store and numerous smaller service and specialty shops. Included in this category are (numbers indicate location on Map 3-4):

1. The Central Business District - located on Main Street between State Street and Seventh Street; and Sixth Street, between Lake Street and Grand Avenue and surrounding area.
2. Elmwood Plaza Shopping Area - located on Durand Avenue between Kentucky Street and Taylor Avenue.
3. Rapids Drive Shopping Area - located on Rapids Avenue between Mt. Pleasant Street and Loraine Avenue.
4. Sears/Turnstyle/Washington Square Shopping Area - located on Washington

RACINE URBANIZED AREA SHOPPING



LEGEND: (Refer to text for explanation of numbers)

-  Major Shopping Area
-  Secondary Shopping Area
-  Strip Commercial Area: Lathrop Avenue
-  Strip Commercial Area: Douglas Avenue

SOURCE: SEWRPC and Racine City Plan Department

4. (cont.) Avenue between Green Bay Road and Ohio Street.
5. Proposed regional shopping center - located north and east of the intersection of Durand Avenue and Green Bay Road.

Secondary shopping areas, also shown on Map 3-4, are characterized by a large concentration of stores and services, usually lacking a major department store, but having a large service area. Included in this category are (numbers indicate location on Map 3-4):

1. Flat Iron Square Area - located at the intersection of Douglas Avenue and High Street
2. West Racine Shopping Area - located on Washington Avenue, west of the intersection of Washington Avenue and West Boulevard.
3. Uptown Shopping Area - located along Washington Avenue between Racine and Phillips Streets.
4. Shorecrest Shopping Center - located at the intersection of Three Mile Road and Erie Street.

The final category of shopping areas shown on Map 3-4 is Major Strip Commercial Areas. These areas are characterized by mixed retail and service uses strung along a major traffic artery. Included in this category are:

1. Lathrop Avenue between the Chicago, Milwaukee, St. Paul & Pacific Railroad tracks and Durand Avenue.
2. Douglas Avenue between State Street and Three Mile Road.

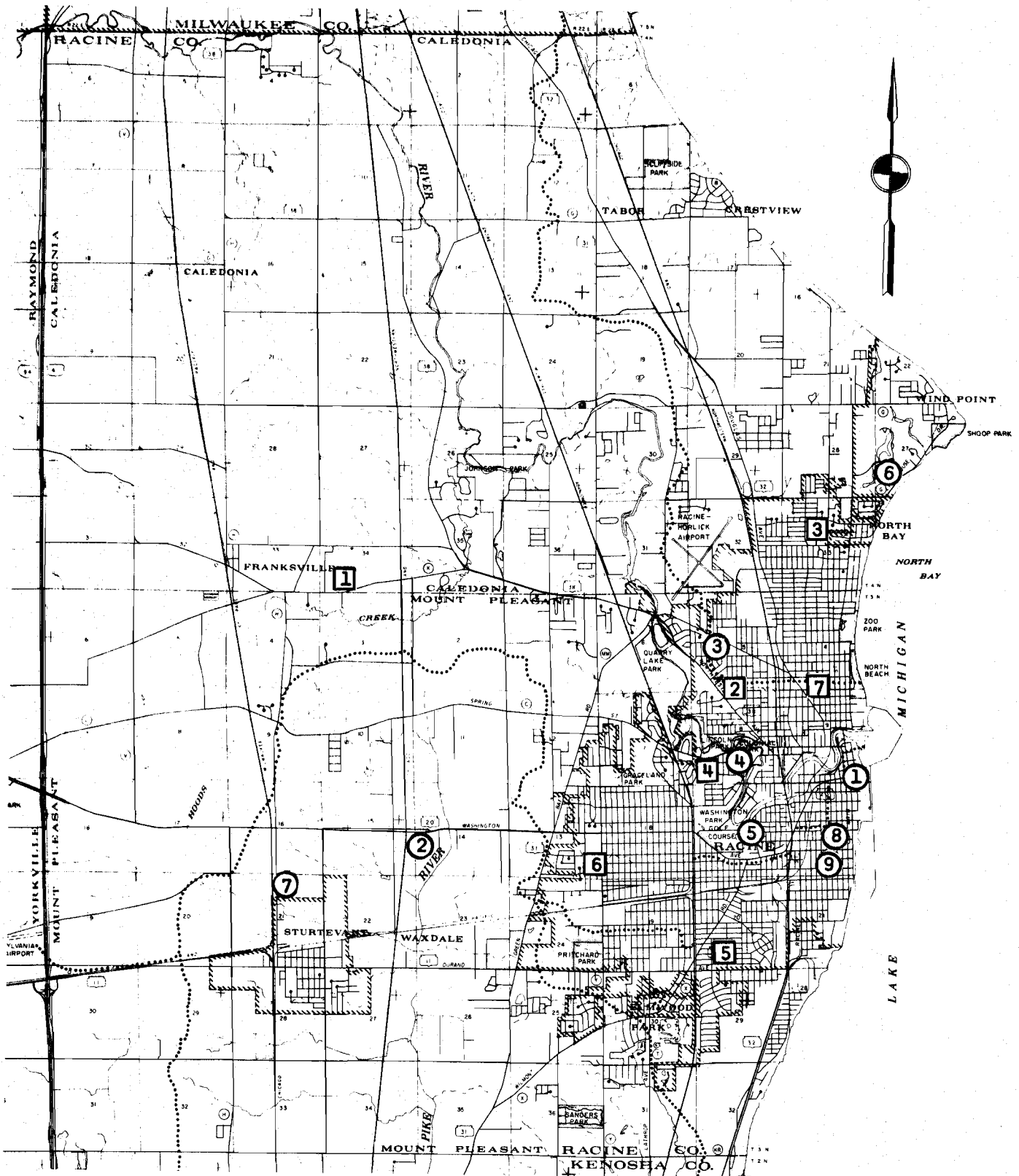
All junior and senior high schools, colleges, and technical schools have been identified as being existing or potential major generators of mass transit riders.

The following is a list of schools and their locations (numbers indicate location on Map 3-5):

I. Junior High Schools

1. W. Allen Gifford	8332 Northwestern Avenue	Caledonia
2. Gilmore	2201 High Street	Racine
3. Jerstad-Agerholm	3601 La Salle Street	Racine
4. Mc Kinley	2326 Mohr Avenue	Racine
5. Mitchell	2701 Drexel Avenue	Racine
6. Starbuck	1516 Ohio Street	Racine
7. Washington	914 St. Patrick Street	Racine

RACINE URBANIZED AREA JUNIOR AND SENIOR HIGH SCHOOL LOCATIONS



LEGEND: (Refer to text for explanations of numbers within symbols)

- Junior High School
- Senior High School

SOURCE: SEWRPC and Racine City Plan Department

II. Senior High Schools

1. Alternative (Walden III)	620 Lake Avenue	Racine
2. J. I. Case	7345 Washington Avenue	Mt. Pleasant
3. William Horlick	2119 Rapids Drive	Racine
4. *Lutheran	251 Leudtke Avenue	Racine
5. Washington Park	1901 Twelfth Street	Racine
6. *Prairie School	4050 Lighthouse Drive	Wind Point
7. *St. Bonaventure	County Trunk "H"	Sturtevant
8. *St. Catherine's	1200 Park Avenue	Racine
9. *Academy of St. Rose	1032 Grand Avenue	Racine

III. Colleges and Technical Schools (numbers indicate location on Map 3-6)

1. *College of Racine	5915 Erie Street	Caledonia
2. Gateway Technical Institute	1001 S. Main Street	Racine
3. University of Wisconsin-Parkside	Wood Road	Kenosha

*Parochial or private school

Elementary schools were not considered as major traffic generators because most of their students live in the surrounding neighborhood and walk to school.

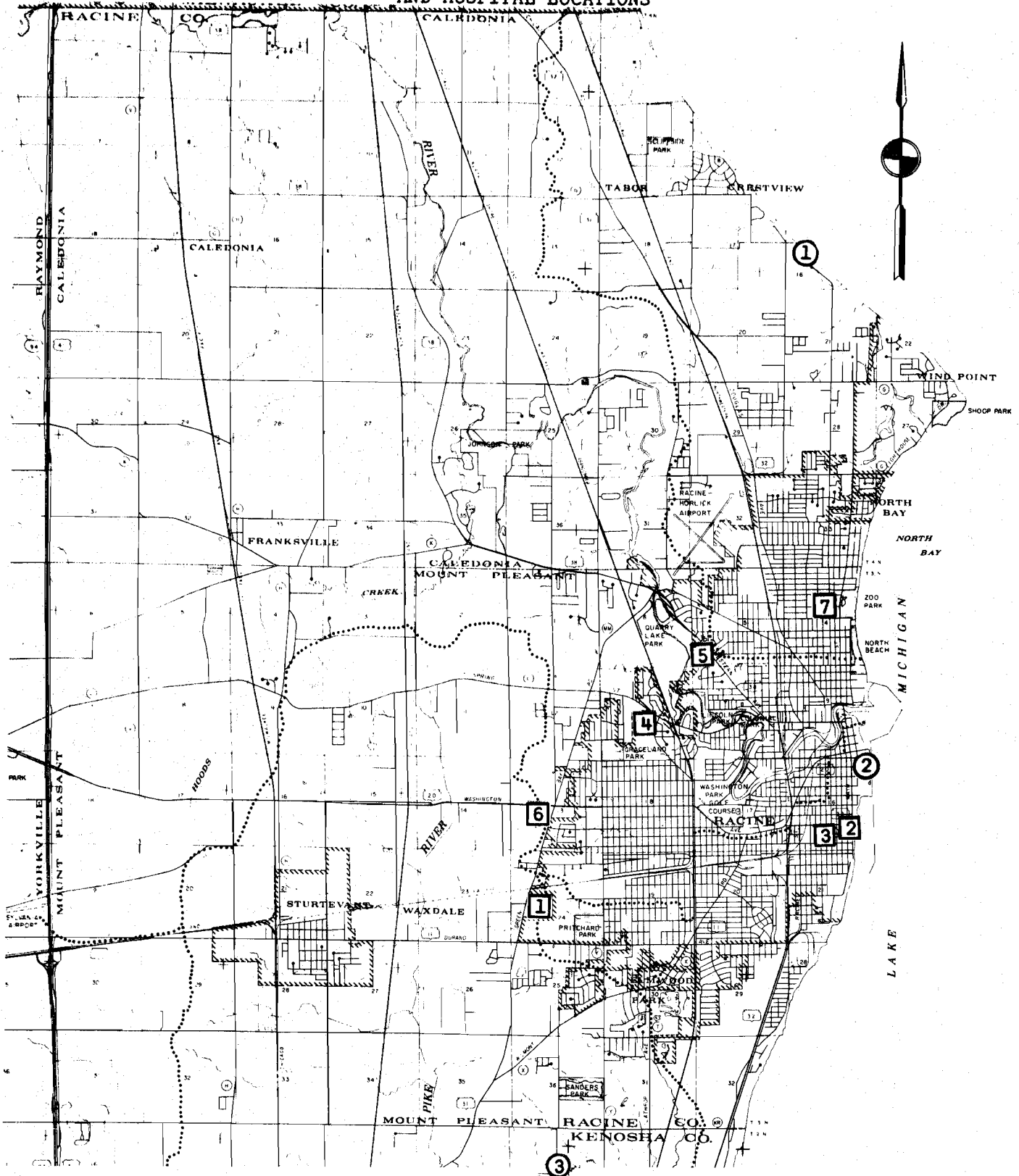
The third land use identified as an actual or potential major generator of mass transit riders was hospitals and medical centers. Included in this category with their identification number on Map 3-6, were:

1. Racine County High Ridge Hospital - located at 2433 South Green Bay Road.
2. St. Luke's Hospital - located at 1320 Wisconsin Avenue.
3. St. Mary's Hospital - located at 717 15th Street.
4. Proposed New St. Mary's Hospital Site - located on Osborne Avenue.
5. Kurten Medical Group - located at 2405 Northwestern Avenue and
Curative Workshop of Racine - located at 2335 Northwestern Avenue.
6. Racine Medical Clinic - located at 5625 Washington Avenue.
7. Schroeder Clinic (Walton Clinic) - located at 500 Walton Avenue.

Institutions and public buildings identified as major traffic generators include city, town, and village halls; libraries, and the county courthouse. Included in this category with their identification number on Map 3-7 were:

1. Racine City Hall - located at 730 Washington Avenue.
2. Caledonia Town Hall - located at 6922 Nicholson Road.
3. Mount Pleasant Town Hall - located at 6126 Durand Avenue.

RACINE URBANIZED AREA UNIVERSITY, COLLEGE, TECHNICAL SCHOOL, AND HOSPITAL LOCATIONS

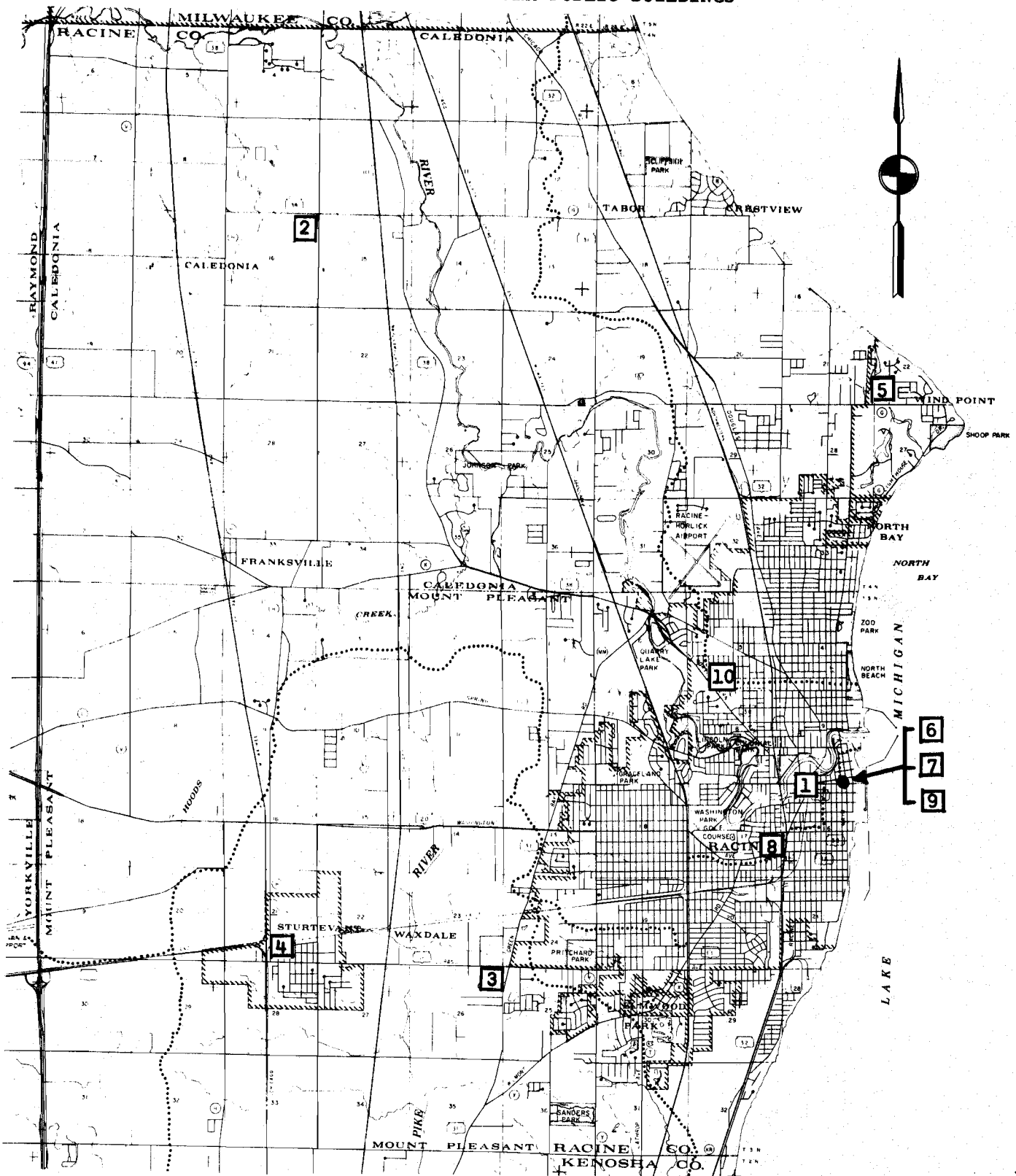


LEGEND: (Refer to text for explanation of numbers within symbols)

- University, College, or Technical School
- Hospital or Medical Center

Source: SEWRPC and Racine City Plan Department

RACINE URBANIZED AREA PUBLIC BUILDINGS



LEGEND: (Refer to text for explanation of numbers within the symbols)

□ Major Public Building

SOURCE: SEWRPC and Racine City Plan Department

4. Sturtevant Village Hall - located at 2846 Wisconsin Street.
5. Wind Point Village Hall - located at 5120 Hunt Club Road.
6. Racine County Courthouse - located at 730 Wisconsin Avenue.
7. Racine City Library - located at 75 7th Street.
8. Racine Uptown Library - located at 1407 S. Memorial Drive.
9. Racine Memorial Hall - located at 72 7th Street.
10. Racine Unified School District No. 1 Office - located at 2230 Northwestern Avenue.

Potential and actual industrial major traffic generators were identified as those manufacturing concerns, or concentrations of firms, employing 50 or more people. Map 3-8 and Table 3-3 show only the major contiguous areas of industrial employers. A complete listing of those employers with 50 or more employees is shown in Appendix B. The two largest industrial employers in the Racine area are the J. I. Case Company and S. C. Johnson & Son, Inc. These two major employers were contacted for their employee address lists in the SEWRPC major generator survey. Both companies have several plants in the Racine urbanized area, but only one plant from each company was selected for the survey. The J. I. Case Company plant located at 25th and Mead Streets employed approximately 3,000 persons at the time of the survey and was served by mass transit. The S. C. Johnson & Son, Inc., Waxdale Plant, located near the Village of Sturtevant at 2512 Willow Road, employed approximately 1,200 persons at the time of the survey and was not served by any form of public transportation.

The addresses of the employees for each plant were plotted on separate maps for each company on a quarter section basis. It was found that high concentrations of employees for both plants live in nearly every quarter section located within the City of Racine. The J. I. Case Plant also had over 300 employees whose home addresses were located in Kenosha County.

The final land use identified as an actual or potential major traffic generator was recreational areas. Included in this category are such uses as parks and community centers, which the Racine City Plan Department delineated as having multiple

This map illustrates the Racine, Wisconsin area, highlighting six major industrial centers. The map includes the city of Racine, surrounding areas like Mount Pleasant and Sturtevant, and the Racine River. The following table summarizes the six industrial centers identified on the map:

Center Number	Location	Key Features
1	Racine, WI	Central industrial area, near downtown
2	Racine, WI	Industrial area near the shore of Lake Michigan
3	Racine, WI	Industrial area near the shore of Lake Michigan
4	Racine, WI	Industrial area near the shore of Lake Michigan
5	Racine, WI	Industrial area near the shore of Lake Michigan
6	Sturtevant, WI	Industrial area near the shore of Lake Michigan



Major Industrial Employment Center

SOURCE: SEWRPC and Racine City Plan Department

Table 3-3
RACINE MAJOR MANUFACTURING EMPLOYMENT CENTERS

<u>Group</u>	<u>Employment Center</u>	<u>Approximate 1973 Employment</u>
#1	Haban Mfg. Co. Horlicks Inc. Nielsen Ironworks Inc. Racine Hydraulics (Div. of Rexnord Inc.) Racine Steel Castings Co. Rainfair Inc. E. C. Styberg Engineering Co., Inc. Warren Packaging Inc.	1,700
#2	Badger Uniform J. I. Case Co. Fredrick Mfg. Co., Inc. Interlake Inc. Mamco Corp. Walker Mfg. Co. Western Publishing Co. Wisconsin Natural Gas Co.	4,500
#3	A & E Mfg. Co. Alloy Casting Co. The Dumore Co. Gold Medal Folding Furniture Co. S. C. Johnson & Son Inc. Massey-Ferguson Inc. Modine Mfg. Co. Racine Industrial Plant Twin Disc Inc. Walker Forge Inc. Webster Electric Co., Inc. Wisco Division ESB Inc. Wisconsin Pattern Co.	6,100
#4	J. I. Case Co.	2,000
#5	Color Arts Inc. Dremel Mfg. Co. In-Sink-Erator (Div. of Emerson Electric Co.) Moxness Products Inc. Printing Development Inc. The Triple E Corp. Twin Disc Inc. Walker Mfg. Co.	2,500
#6	J. I. Case Co. Gorton Machine Corp. S. C. Johnson & Son Inc. McGraw-Edison Co. Racine Hydraulics (Div. of Rexnord Inc.)	4,000

Source: Racine Area Chamber of Commerce

recreational opportunities. Map 3-9 and Table 3-4 show only those recreational generators which have the potential for attracting large numbers of people; therefore, not all parks and recreational sites in the Racine urbanized area are shown.

IDENTIFICATION OF SPECIAL POPULATION GROUPS

Five special population groups were singled out for special consideration in the study because these groups have historically been most in need of transit service. Members of these groups generally are less able to have access to automobiles and must rely on public transportation for mobility. These groups include the elderly, minorities, low-income, handicapped, and school-age children. For the most part, information on these groups in the Racine urbanized area was obtained from the 1970 U.S. Census.

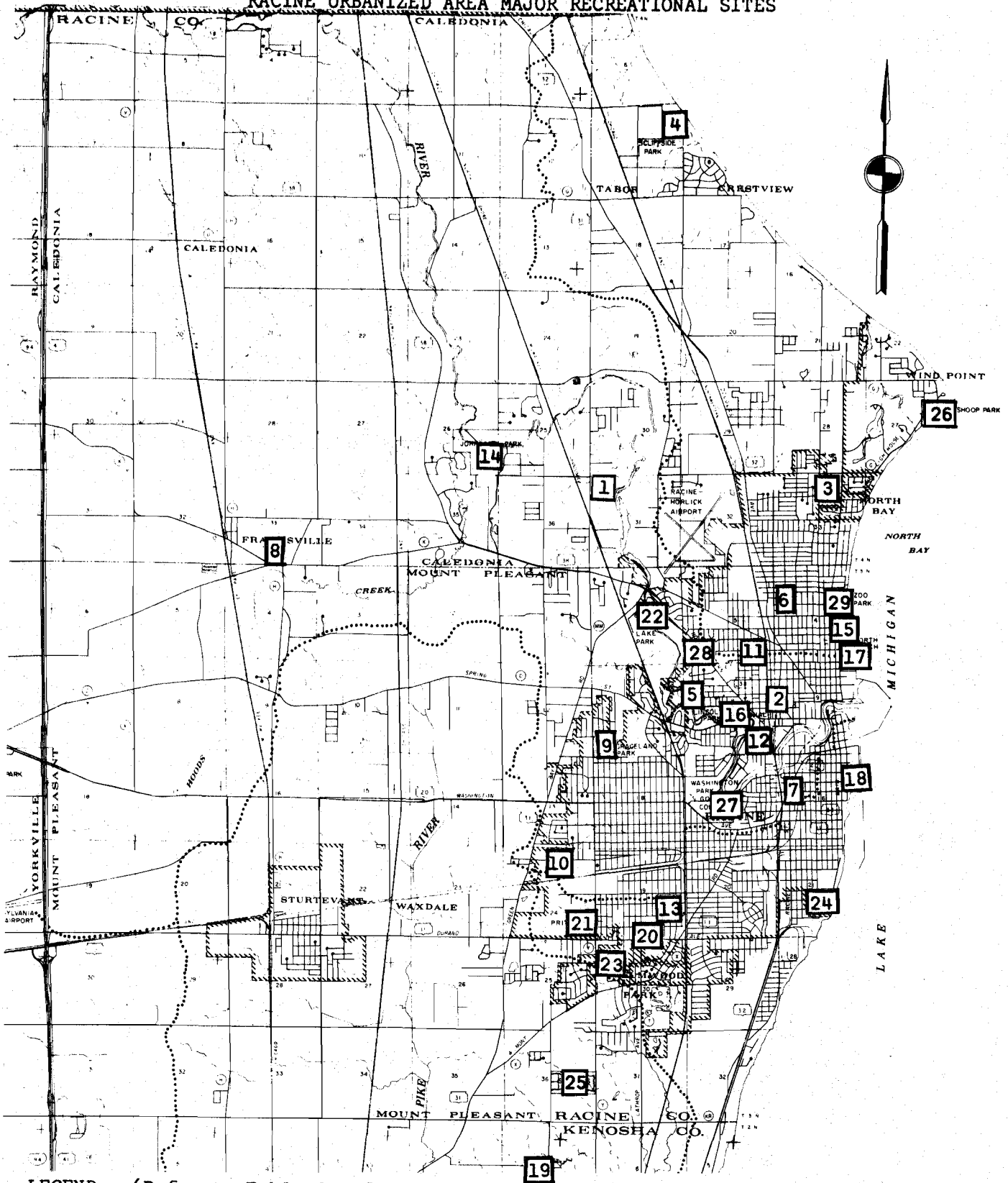
The Elderly

In the Racine urbanized area, there are approximately 12,500 individuals who are 65 years of age or older. They represent about nine percent of the total population within the urbanized area and approximately 11,000 of the 12,500 individuals residing within the political boundaries of the City of Racine. Within the city, the elderly are fairly well dispersed with the highest concentrations appearing in census tracts 2, 9, 10, and 13. Table 3-5 and corresponding Map 3-10 indicates the breakdown of elderly within the urbanized area by census tract.

In addition to utilizing the 1970 census, another criteria used in located high concentrations of elderly individuals was to identify and locate homes for the elderly. Included in this group are:

	Location
1. Lincoln Lutheran Home	2015 Prospect Avenue
2. Lincoln Village Convalescent Center	1701 South Green Bay Road
3. Shoop Memorial Building	5837 16th Street
4. St. Catherine's Nursing Home	5635 Erie Street
5. St. Monica's Senior Citizens Home	3920 North Green Bay Road
6. Westview Nursing Home	1600 Ohio Street
7. Danish Old People's Home Society	1014 Milwaukee Avenue
8. Racine County Institutions	Green Bay Road
9. Palmeto Home	1547 College Avenue
10. Lincoln Manor Apartments	5801 16th Street
11. Durand Plaza	3011 Durand Avenue
12. (Facility under construction)	2000 Washington Avenue

RACINE URBANIZED AREA MAJOR RECREATIONAL SITES



LEGEND: (Refer to Table 3-4 for explanation of the numbers within the symbols)

□ Major Recreational Site

SOURCE: SEWRPC and Racine City Plan Department

Table 3-4

MAJOR RECREATIONAL GENERATORS IN THE RACINE URBANIZED AREA

1. Armstrong Park
2. Breakthru Park and Community Center
3. Carlson Park
4. Cliffside County Park
5. Colonial Park
6. Douglas Park and Communitiy Center
7. Franklin Park
8. Franksville Park
9. Graceland Park (Proposed Community Center)
10. Hantschel Park
11. Horlick Athletic Field
12. Horlick Park
13. Humble Park and Community Center
14. Johnson Park
15. Lakeview Park and Community Center
16. Lincoln Park
17. North Beach Park
18. Pershing Park
19. Petrifying Springs County Park (Kenosha)
20. Pierce Woods
21. Pritchard County Park
22. Quarry Park
23. Reservoir Park
24. Roosevelt Park and Community Center
25. Sanders County Park
26. Shoop Park
27. Washington Park
28. Wustum Park
29. Zoological Gardens

Source: Racine City Plan Department

Table 3-5

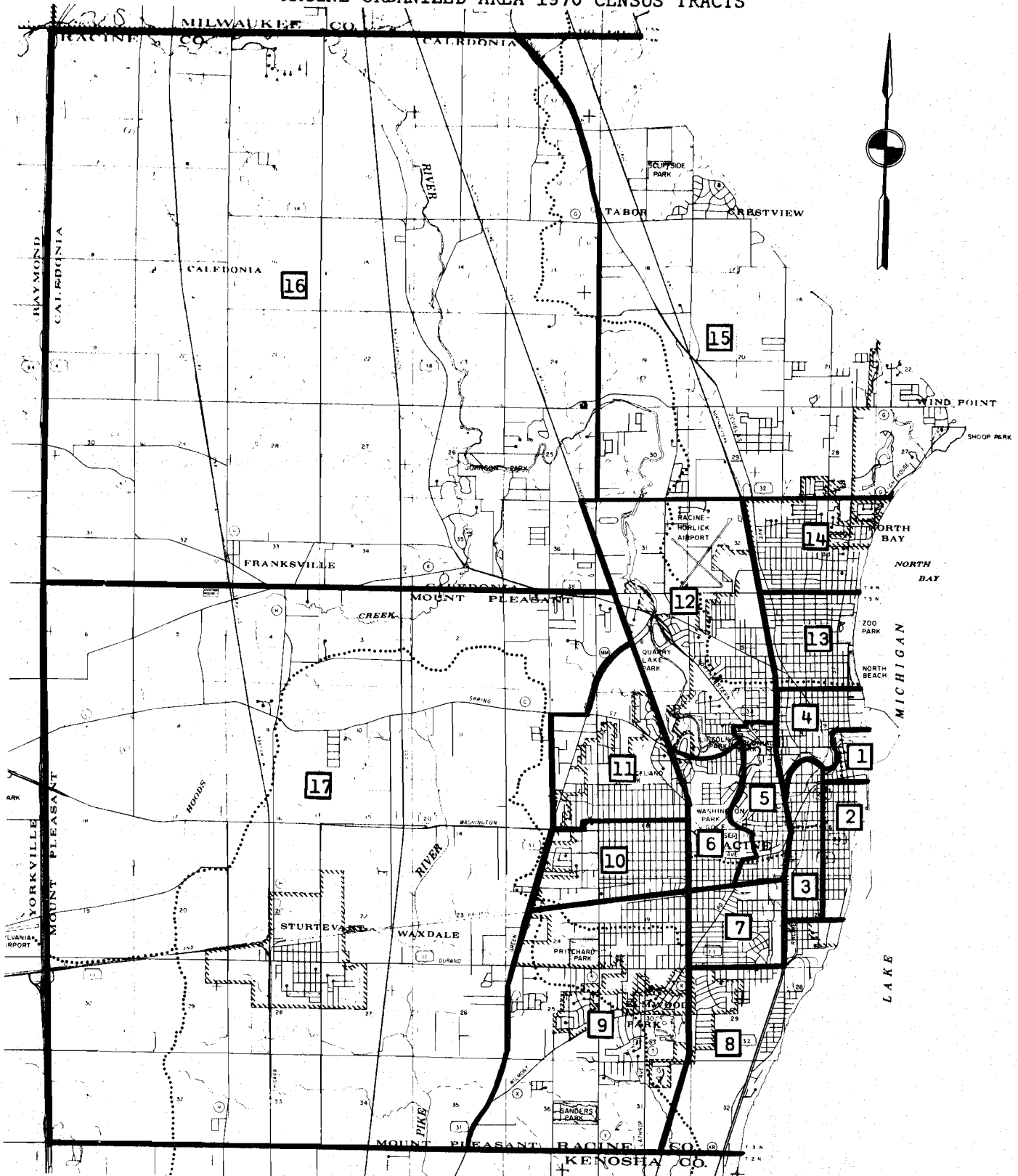
SELECTED CHARACTERISTICS FOR THE RACINE URBANIZED AREA BY 1970 CENSUS TRACTS

Tract Number	Tract Population	School Children ¹		Elderly ²		Low Income ³		Minority ⁴		Number of Occupied Dwelling Units (O.D.U.)	O.D.U. With No Auto Ownership		Tract Number
		Number	% of Population	Number	% of Population	Number	% of Population	Number	% of Population		Number	% of O.D.U.	
1	309	28	9.1	92	29.8	51	14.1	30	9.7	213	157	73.7	1
2	7,085	1,316	18.6	1,086	15.3	1,225	17.7	865	12.2	2,586	807	31.2	2
3	4,964	1,137	22.9	413	8.3	1,049	21.2	3,135	63.2	1,427	472	33.1	3
4	6,222	1,328	21.3	624	10.0	1,300	21.2	2,085	33.5	1,875	727	38.8	4
5	7,443	1,617	21.7	685	9.2	1,605	21.5	3,178	42.7	2,213	696	31.5	5
6	6,363	1,172	18.4	748	11.8	378	5.9	78	1.2	2,063	262	12.7	6
7	7,278	1,290	17.7	885	12.2	386	5.3	107	1.5	2,436	326	13.4	7
8	5,597	1,261	22.5	238	4.3	262	4.7	451	8.1	1,447	99	6.8	8
9	11,167	2,294	20.5	1,108	9.9	373	3.5	221	2.0	3,063	98	3.2	9
10	10,009	1,878	18.8	1,180	11.8	539	5.5	174	1.7	3,027	335	11.1	10
11	9,245	1,885	20.4	847	9.2	222	2.5	46	0.5	2,842	166	5.8	11
12	10,154	1,966	19.4	902	8.9	505	5.0	180	1.8	3,130	348	11.1	12
13	9,908	1,755	17.7	1,569	15.8	631	6.4	234	2.4	3,402	557	16.4	13
14	9,164	2,007	21.9	625	6.8	328	3.6	95	1.0	2,746	97	3.5	14
15	10,520	2,369	22.5	568	5.4	496	4.9	77	0.7	2,711	73	2.7	15
16	7,587	1,750	23.1	389	5.1	400	5.3	59	0.8	1,891	35	1.9	16
17	10,609	2,290	21.6	561	5.3	401	3.8	43	0.4	2,757	94	3.4	17
TOTAL	133,624	27,343	20.5	12,520	9.4	10,151	7.6	11,058	8.3	39,829	5,349	13.4	TOTAL

¹ Ages 10-19, inclusive² Ages 65 and over³ Family income below \$3,743⁴ Non-white

SOURCE: 1970 U.S. Census

RACINE URBANIZED AREA 1970 CENSUS TRACTS



The numbered areas shown represent the 1970 census tracts which comprise the Racine Urbanized Area. Refer to Table 3-5 for selected tract characteristics.

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

Minority Concentrations

The location of minority groups within the Racine urbanized area somewhat parallels the location of elderly. There are approximately 11,000 individuals within the urbanized area which are categorized as members of a minority group and this figure represents approximately eight percent of the total population. Of those individuals classified as members of minority groups, approximately 180 individuals reside outside of the City of Racine. The largest concentrations of minority group members are located within census tracts 2, 3, 4, and 5, which make up the central core of the City of Racine (see Map 3-10 and Table 3-5).

Low Income Concentrations

The 1970 U.S. Census found that 7.8 percent or about 10,000 persons that reside within the Racine urbanized area had incomes below the Federal poverty level (see Map 3-10 and Table 3-5). The poverty threshold for a non-farm family of four was determined to be \$3,743 in 1969. Census tracts 2, 3, 4, and 5 in the City of Racine contain the highest concentrations of low income people, with approximately 8,500 of the total 10,000 low-income persons.

Handicapped

The Wisconsin Department of Health and Social Services, Division of Vocational Rehabilitation, reports that it has 543 clients who are disabled and who are in need of transportation in the Racine urbanized area. Wisconsin Statutes Section 55.01(13) prohibits the release of names or addresses of these clients; therefore, the location of concentrations of these individuals could not be ascertained.

Residential care centers and halfway houses in the City of Racine were located and include:

	<u>Location</u>
1. Bridge Manor	512 - 8th Street
2. Residential Care, Inc.	1719 Washington Avenue
3. Shoreline Manor	1403 - 6th Street
4. Gateway House	2016 Washington Avenue
5. Christensen Residential Care	3716 Douglas Avenue
6. Racine Transitional Care	801 Park Avenue
7. Serentiy House, Inc.	810 Main Street

Automobile Availability

The 1970 U.S. Census showed that in the Racine urbanized area approximately 13 percent of the occupied dwelling units within the area had no automobile ownership. Census tracts 1-5 showed the highest percentage of occupied dwelling units without automobile ownership (see Map 3-10 and Table 3-5). The other tracts within the urbanized area showed that less than 20 percent of the occupied dwelling units were without automobile ownership.

School Age Children

School age children in the 10-19 age group, inclusive, comprise about 20 percent of the Racine urbanized area population (see Map 3-10 and Table 3-5). As expected, no significant concentrations of school age children could be found in any census tract. With the exception of Tract One, the percentage of school age children to total population was approximately 20 percent in each tract.

SUMMARY

The study area for the Transit Development Program for the Racine Urbanized Area has been defined as that portion of Racine County located east of IH-94. The area had a total resident population in 1970 of 133,624. There are seven local governmental units in the area, with the largest being the City of Racine, which had a 1970 total resident population of 95,162. The growth of the urbanized area has been in the form of "urban sprawl," with industries and shopping centers locating in recent years on the periphery of the urban development. Population densities in the newer residential areas rarely exceeds 2,000 persons per square mile, while within the older areas of the City of Racine, population densities exceed 14,000 persons per square mile. Major traffic generators, such as shopping areas, schools, industrial plants, hospitals, public buildings, and recreational areas are generally scattered throughout the urbanized area. Several of the largest industrial employers

have built new plants in outlying areas in recent years. Certain special population groups, such as the elderly, minorities, persons with low income, and those without automobiles, tend to be located in the older, more densely populated areas of the City of Racine. School age children tend to be distributed evenly throughout the urbanized area. Currently, only about one-third of the study area is used for urban purposes. By 1990, it is projected that approximately half of the area will be utilized for urban purposes.

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CHAPTER IV

EXISTING MASS TRANSPORTATION SYSTEM

INTRODUCTION

An understanding of existing public mass transportation service within the study area is basic to any Transit Development Program. This chapter will describe all mass transit service found to be operating in the Racine urbanized area, with particular emphasis on the operations of the local urban mass transit operation. A brief sketch of the history of urban mass transit in the Racine area will be presented, as well as a detailed description of transit user characteristics in the Racine area.

HISTORY¹

The need for mass transit service was first recognized in Racine in 1883 when Racine businessmen chartered the Belle City Street Railway Company and began service in October of that year using horse drawn streetcars on one route. In 1889, the operation was sold to industrialist J. I. Case and in 1892, the new management completely rebuilt the system, electrified the line, and purchased new equipment. By 1896 the company was in bankruptcy and in 1897 the line was purchased by the Milwaukee Electric Railway & Light Company (TMER & L), who reorganized the company as the Belle City Electric Company. In 1899, the local company was merged into TMER & L. The company also operated an interurban line through the City of Racine between Milwaukee and Kenosha.

Service in Racine was provided exclusively by streetcars until 1928 when TMER & L began its first feeder bus route. An extensive street repaving program was started by the City of Racine during the Depression, and the company decided to convert to buses rather than replace track where the repaving program affected their routes.

Seeking to dispose of unprofitable operations, TMER & T, as the company was known after 1938, tried to sell the local system to the City of Racine in 1939. The

¹Source: Joseph M. Canfield, Editor, TM: The Milwaukee Electric Railway and Light Company, Bulletin 112 of Central Electric Railfans Association, Inc., pp. 118-119; and Racine City Plan Commission.

city was unable to make the purchase and the property was sold to Henry P. Bruner, who named the operation Racine Motor Coach Lines. The new company continued to operate the few remaining streetcar lines, renting cars and track from TMER & T, until October 1, 1940, when the last city streetcar operated in Racine.

During World War II, Racine was faced with a transit crisis because of increased ridership demand. Additional second-hand coaches were purchased, and makeshift, semi-trailer-type, two-man buses were pressed into service, but were inadequate to handle the wartime crowds.

After the war, ridership on the transit system dropped sharply, following a trend throughout the country. After two additional changes in management, Racine Motor Coach Lines was sold to Lakeshore Transit, Inc., which began operation on October 19, 1962. This company also operated the urban mass transit system in the City of Kenosha and an intercity bus line between the Cities of Racine and Kenosha. This company also experienced ridership declines, and in 1968, Lakeshore Transit went out of business and was replaced by the present operator, Flash City Transit Company. Table 4-1 shows the trends in ridership and total vehicle miles and hours for urban mass transit service in Racine since 1955.

Flash City Transit Company is operated by the owners of Racine Flash Cab Company, Inc., which operates both taxicab and yellow school bus service in the Racine area. The company has experienced a 36 percent decline in revenue passengers on its transit routes from 1969 to 1972. Since November of 1972, the City of Racine has subsidized the mass transit operations after the company petitioned the Wisconsin Public Service Commission to abandon service.

EXISTING MASS TRANSPORTATION SERVICE

Urban mass transit service in the Racine urbanized area is provided by Flash City Transit Company, and consists of ten fixed routes with a total of 80.8 round trip route miles (See Table 4-2). The system traverses approximately 46 non-duplicate

Table 4-1

RACINE URBAN MASS TRANSIT REVENUE PASSENGERS,
VEHICLE MILES, AND HOURS
1955-1973

<u>Company</u>	<u>Year</u>	<u>Revenue Passengers</u>	<u>Vehicle Miles</u>	<u>Vehicle Hours</u>
Racine Motor Coach Lines	1955	5,042,766	1,293,599	123,884
Racine Motor Coach Lines	1956	4,859,396	1,213,297	119,529
Racine Motor Coach Lines	1957	4,216,861	1,197,411	113,729
Racine Motor Coach Lines	1958	3,742,134	1,172,041	109,878
Racine Motor Coach Lines	1959	3,834,700	1,176,298	110,461
Racine Motor Coach Lines	1960	3,744,495	1,166,414	109,549
Racine Motor Coach Lines	1961	3,370,481	1,113,398	105,100
Racine Motor Coach Lines ^a	1962	3,356,809	1,150,452	106,191
Lakeshore Transit Co., Inc.	1963	2,901,986	1,099,783	95,931
Lakeshore Transit Co., Inc.	1964	2,568,126	1,023,758	85,988
Lakeshore Transit Co., Inc.	1965	2,535,138	971,953	82,863
Lakeshore Transit Co., Inc.	1966	2,470,766	943,553	79,632
Lakeshore Transit Co., Inc.	1967	2,169,883	914,553	N.A.
Flash City Transit Co. ^b	1968	1,281,820	650,550	54,102
Flash City Transit Co.	1969	824,985	559,650	45,210
Flash City Transit Co.	1970	686,513	530,250	42,375
Flash City Transit Co.	1971	657,973	536,522	43,815
Flash City Transit Co.	1972	525,681	461,644	35,580
Flash City Transit Co.	1973	530,477	416,835	37,260

Notes: ^aLakeshore Transit Co., Inc. took over operations 10/19/62.
^bFlash City Transit Co. took over operations 6/10/68
 NA - Not Available

Source: Wisconsin Public Service Commission

Table 4-2

FLASH CITY TRANSIT COMPANY ROUTE MILES

<u>Route</u>	<u>Route Name</u>	<u>Round Trip Route Miles</u>
1	Shorecrest	7.4
2	Carlton Drive	6.8
3	Rapids Drive	6.5
4	Northwestern Avenue	7.1
5	Spring and Ohio	7.9
6	Sears-Turnstyle	9.4
7	Elmwood Plaza	8.0
8	Sheridan Woods	9.1
9	16th and Ohio	11.1
10	Clausen Works	7.5
Total		80.8

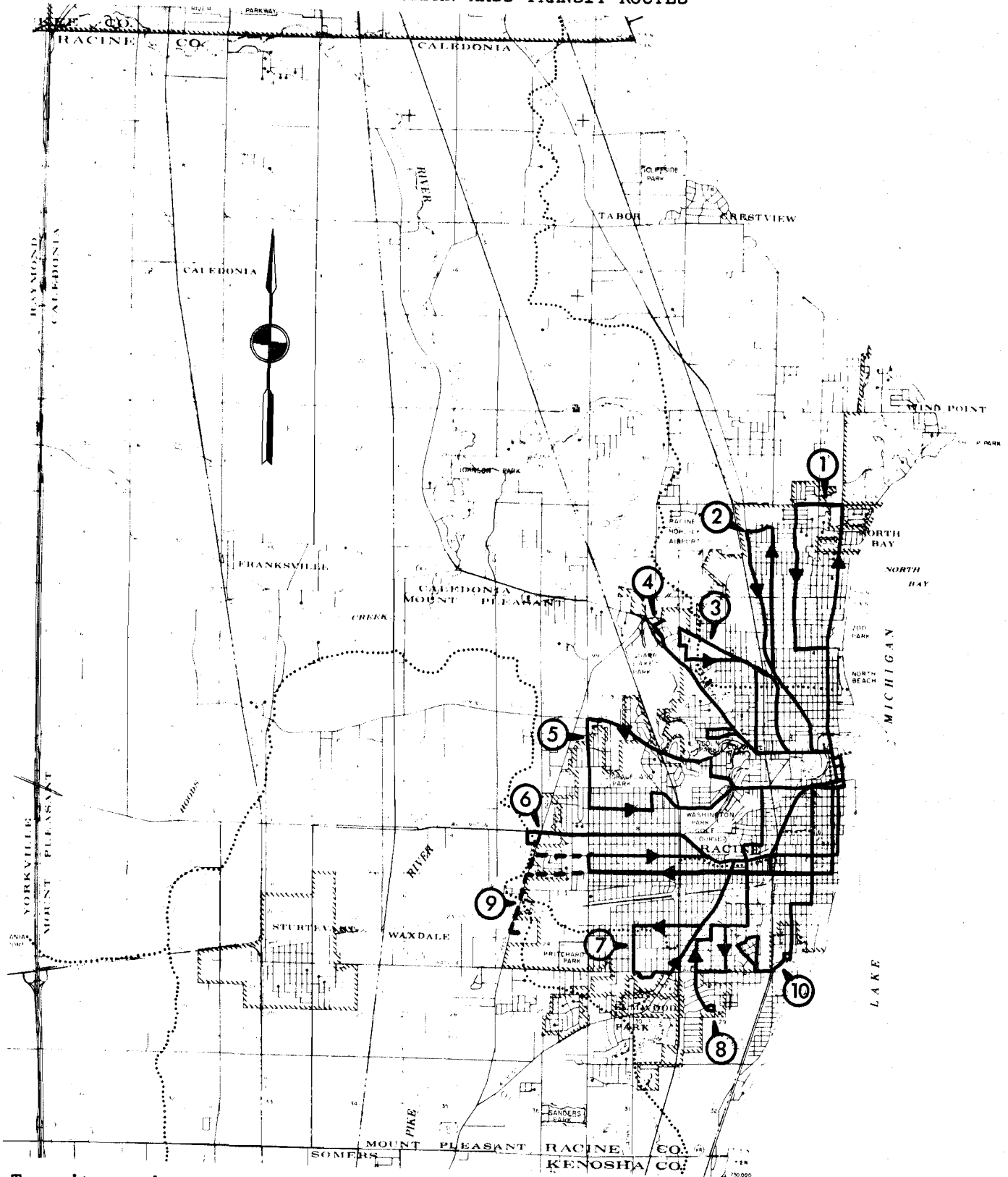
Source: Flash City Transit Company

miles of streets and highways, of which approximately five miles are traversed by two or more transit lines. Map 4-1 shows the transit service provided by the Company.

Currently, the company is being subsidized by the City of Racine to cover the total operating deficit of the transit company and also receives a sum of \$1,000 per month from the city for the rental of garage facilities. The City of Racine has also entered into a Mass Transit Aid Program Contract with the State of Wisconsin Department of Transportation to help pay for the deficits expected to occur during 1974.

Other public mass transportation services in the Racine urbanized area include intercity bus service, intercity rail service, suburban bus service, school bus service, and special service for the elderly. Intercity service includes bus service to and from the City of Chicago by Greyhound Lines-West with three weekday trips in each direction; bus service provided along Interstate Highway 94 by Tri-State Coach Lines, Inc. to O'Hare International Airport in the City of Chicago with a ramp stop at State Trunk Highway 20 in Racine County; and railroad passenger service to the City of Chicago and intermediate points, and the City of Milwaukee by the National Railroad Passenger Corporation (Amtrak) with four trains departing daily in each direction from the Village of

RACINE URBAN MASS TRANSIT ROUTES



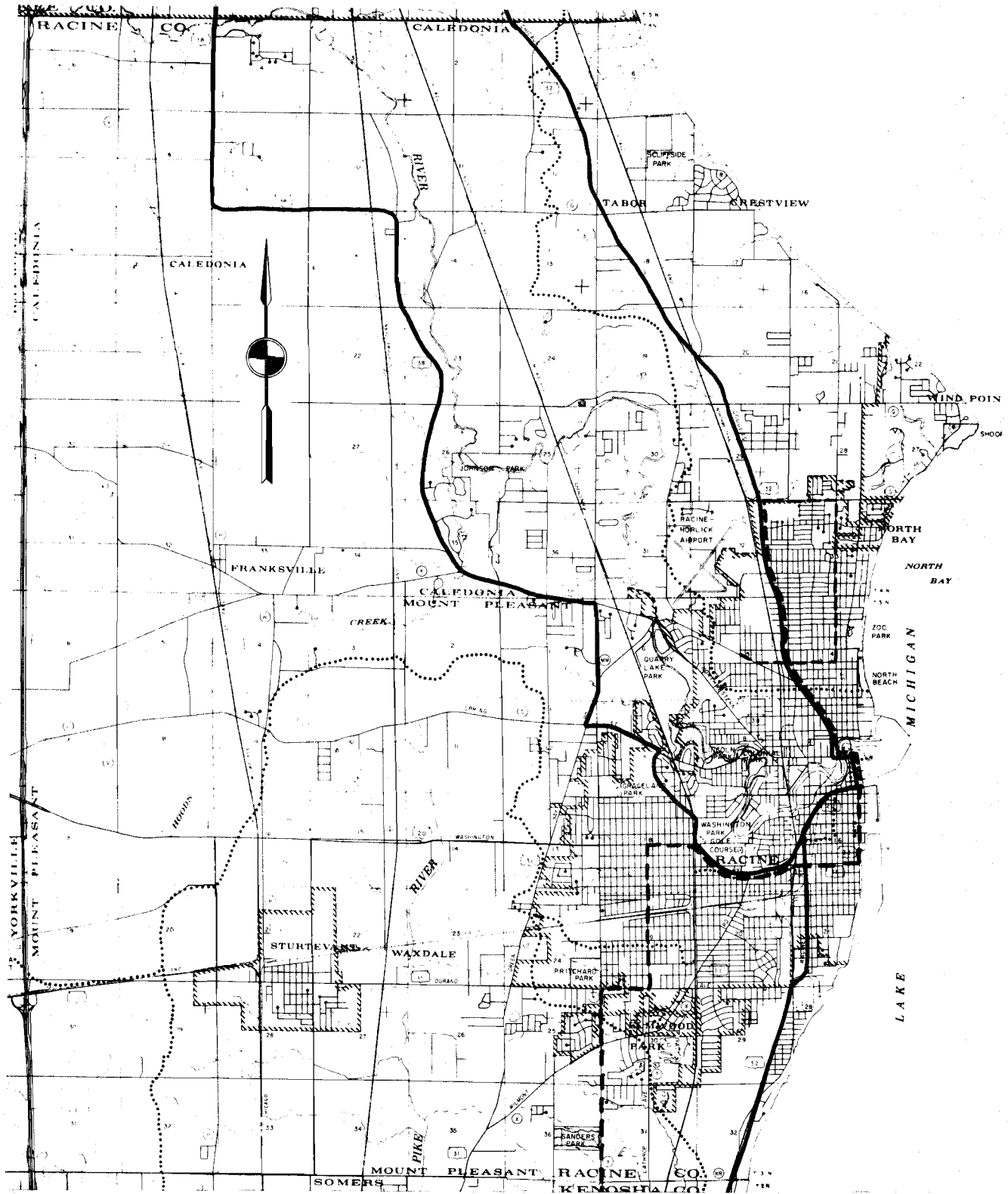
Transit service provided by Flash City Transit Company traverses 46 non-duplicate miles of streets and highways and totals 80.8 round-trip route miles. The dashed line on Route 9 indicates the limited service provided to the Racine County Home.

Sturtevant, located approximately seven and one-half miles west of the Racine central business district. Suburban bus service is provided between the Cities of Milwaukee, Racine, and Kenosha by Wisconsin Coach Lines, Inc. over two routes with ten northbound and nine southbound weekday trips through the City of Racine (See Map 4-2). No passenger may be carried on these routes whose origin and destination are entirely within the City of Racine. The maximum one-way fare for a trip on these lines within Racine County is 65 cents. The University of Wisconsin-Parkside Vet's Club operates a bus line between its main campus in northern Kenosha County and the City of Racine with seven round trips operated each school day. Passenger rates are \$45.00 for a semester pass or 75 cents for a one-way ride.

The Racine Area Wide Model Project on Aging in conjunction with the City of Racine recently began operating a dial-a-bus service within the City of Racine for senior citizens. For the purposes of this program, senior citizens have been defined as those people who are 55 years of age or older. Service to the elderly is provided by two 18 passenger buses which are dispatched by radio from a central dispatching office located in the City Hall of Racine. The hours of operation are 9:00-12:00 noon and 1:00-4:30 p.m. on Monday, Wednesday, and Friday only. Additional days of service will be provided if there is sufficient demand. The dial-a-bus service is available at no cost to the user for trips to and from medical, shopping, and recreational facilities. The service is available only to elderly residents of the City of Racine and may not be utilized for getting to and from places of employment. The City of Racine is providing its share of the project in in-kind services which include: garage facilities, maintenance, provision of office space for dispatcher, and the supplying of fuels and lubricants. All drivers and dispatchers are currently volunteers, giving their time without receiving any monetary compensation.

The Racine Unified School District No. 1 provides transportation to and from public, private, and parochial schools for all pupils who reside in the school district two miles or more from the nearest public, private, or parochial school they are

RACINE SUBURBAN MASS TRANSIT ROUTES



LEGEND:

- Wisconsin Coach Lines, Inc. Milwaukee-Kenosha route
- - - University of Wisconsin-Parkside Vet's Club Route

No passenger may be carried on these lines whose entire ride is within the City of Racine.

entitled to attend. In addition, the school board provides transportation for students living less than two miles from the nearest public school they are entitled to attend when local governments choose to contract for such services. Yellow school bus service for the 1973-1974 school year is provided to the District by Flash City Cab Company. The school bus contract for the 1974-1977 period has been awarded to ARA, Inc.

Taxicab service, a form of personalized mass transit, is provided by two companies currently licensed by the City of Racine Common Council to operate in the city. Racine Flash Cab Company, Inc. operates ten cabs and Sherri Cab Company, Inc. currently operates five cabs in the urbanized area. Cabs are not allowed by city ordinance to permit other persons to occupy or ride in the taxicab unless the person or persons first employing the taxicab consent to the acceptance of additional passengers. Cab companies are required by the city to provide continuous service twenty-four hours a day and seven days a week. The current cab fares are: 50¢ for the first 1/4 mile or fraction thereof, and ten cents for each additional 1/4 mile or fraction thereof. The waiting time rate is ten cents per two minute period or fraction thereof.

FLASH CITY TRANSIT COMPANY

Since Flash City Transit Company provides all of the local urban mass transit service in the Racine urbanized area, the remainder of this chapter will describe the company and its operations in detail. As stated earlier, the company operates ten fixed routes with a total of 80.8 round trip route miles. Buses on all ten routes operate on a 40-minute headway between the hours of 5:30 a.m. and 6:25 p.m. Monday through Friday and 8:05 a.m. and 5:45 p.m. on Saturdays. Racine has not had transit service on Sundays or holidays since January 1968. One bus is required on each of the ten routes in order to meet the 40-minute headway requirement. Buses from each of the ten routes arrive and depart from the Racine Central Business District (CBD) transfer point at the same time, thus passengers transferring from one route to another have a minimal wait time. The company offers a special service on an extension of Route 9

two days per week. Two afternoon trips leaving the CBD transfer point are extended on Tuesdays and Fridays to the Racine County Home (see Map 4-1).

There are no marked bus stops on the transit system except at the CBD transfer stop and in shopping centers. At other points, drivers stop to load and unload passengers when signaled, including mid-block stops. No waiting shelters are provided at any point along any transit route.

The adult cash fare is 40 cents with an additional 10 cents charge for a transfer and children between the ages of five and twelve, inclusive, ride for 20 cents plus 5 cents for a transfer. Children under age five ride free when accompanied by a fare paying passenger. No other passengers are carried for free. Transfers are good for a continuation of a trip and are honored only at the Racine CBD transfer point. A school pass is issued by Racine's school district to a small percentage of Racine's student population for transportation on Flash City Transit Company buses. The pass is punched by the bus driver each time the student boards the bus until all the rides on the pass are used up. The student then turns in the pass and the company receives compensation for the rides from the school district. Approximately 100 rides per weekday are made with these school passes. The recent history of transit fares in Racine is summarized in Table 4-3.

Equipment used in providing mass transit service to Racine consists of 13 "mini" buses each capable of holding 19 seated passengers. All buses in the fleet are equipped with two-way radios and are air-conditioned. The buses, which have gas engines, are stored indoors during the cold weather months. The average life of the small buses used in Racine is usually about six years. As can be seen from Table 4-4, the fleet has neared the end of its useful life and will be in need of replacement in the near future. Buses are readily identifiable for each route by a sign on the front of the bus with the name of the route.

The company maintenance policy includes daily washing and interior cleaning each bus. Oil, water, battery, and brake fluid checks are also made daily. Defects which

Table 4-3
HISTORY OF URBAN TRANSIT FARES IN RACINE

<u>Effective Date</u>	<u>Cash</u>	<u>Token</u>	<u>Children Cash</u>	<u>Student (Cash)</u>
1/40	\$0.07	6 @ \$0.35	\$0.03	*
4/49	\$0.10	4 @ \$0.30	\$0.05	*
2/51	\$0.12	6 @ \$0.50	\$0.05	\$0.05
1/53	\$0.12	9 @ \$1.00	\$0.05	\$0.07
10/53	\$0.13	4 @ \$0.55	\$0.05	\$0.07
2/55	\$0.15	*	\$0.07	\$0.10
2/58	\$0.18	6 @ \$1.00	\$0.10	\$0.10
5/61	\$0.20	5 @ \$0.90	\$0.12	\$0.12
9/62	\$0.25	5 @ \$1.00	\$0.12	\$0.12
8/63	\$0.25	5 @ \$1.00	\$0.12	\$0.15
6/68	\$0.30	*	\$0.20	\$0.20
10/69	\$0.40	*	\$0.20	\$0.20

Transit Operators: Racine Motor Coach Lines (12/29/39-10/18/62)
Lakeshore Transit Inc. (10/19/62-5/24/68)
Flash City Transit Co. (6/10/68-present)

*None

SOURCE: Wisconsin Department of Transportation/Division of Planning

Table 4-4
FLASH CITY TRANSIT COMPANY - REVENUE EQUIPMENT
January 1974

<u>Fleet Number</u>	<u>Year</u>	<u>Model</u>	<u>Engine Type</u>	<u>Seats</u>
500	1967	Flxible Flxette	Gas	19
501	1967	Flxible Flxette	Gas	19
502	1967	Flxible Flxette	Gas	19
503	1967	Flxible Flxette	Gas	19
504	1967	Flxible Flxette	Gas	19
505	1967	Flxible Flxette	Gas	19
506	1967	Flxible Flxette	Gas	19
507	1967	Flxible Flxette	Gas	19
508	1967	Flxible Flxette	Gas	19
509	1967	Flxible Flxette	Gas	19
511	1968	Flxible Flxette	Gas	19
514	1968	Flxible Flxette	Gas	19
515	1968	Flxible Flxette	Gas	19

SOURCE: Flash City Transit Company

are reported by drivers are repaired on a daily basis and major repairs are made as needed. The buses are greased and oil changed every three thousand miles or each month, whichever comes first. The company keeps detailed maintenance records on each individual bus.

Flash City Transit Company publishes a schedule available to the public showing times that buses leave each end of the ten routes. A system route map is published with the schedule, but no time points are shown for intermediate stops along any route. Telephone information is available 24 hours a day, primarily because the taxicab operation of Flash City Cab Company, Inc., requires a dispatcher on duty at all times. The printed schedule-map is available at the company office, on the buses, or through the mail. The company has published small advertisements in the Racine newspapers since the energy crisis has become a factor in transit ridership.

The management structure of Flash City Transit Company is keyed around five positions: President, Vice-President, Secretary-Treasurer, Operations Manager, and Public Relations Director. The personnel filling the latter two positions are assigned the responsibility of making sure all buses depart from the garage on time and are in good condition each morning. They are also responsible for keeping buses on schedule throughout the day, especially that all buses meet at the Central Business District transfer point at the same time. These people are "on the Street" during the operational day of the bus system.

The company currently employs 13 full-time and eight part-time drivers to operate the transit buses. Drivers choose routes and shifts on a straight seniority basis, and are represented in labor negotiations by the Teamsters, Chauffers and Helpers Union, Local No. 43. Work rules for the drivers range from the requirement that they appear in uniform every work day to various rules covering personal conduct or disregarding passengers or schedules. Violations of the work rules involve penalties ranging from a written reprimand for the first offense to one to three days off-time, for further offenses.

The company shares office, storage, and maintenance facilities with Flash City Cab Company, Inc., at 1824 Kentucky Street in Racine, where the terminal comprises

one city block with an area totaling 64,125 square feet. About 12,400 square feet of this space is comprised of buildings. Improvements at the terminal are comprised of offices, dispatch stations, waiting rooms, rest rooms, a vehicle maintenance and service facility, a vehicle washing facility, a vehicle closed storage facility, fuel storage and dispensing stations, outside engine heating stations, and one 160' high radio tower.

The safety record of Flash City Transit Company for 1972 and 1973 is shown in Table 4-5. There were no deaths reported during these years as a result of any accident involving a transit vehicle. The 1972 and 1973 figures each show four accidents involve injuries to passengers.

Flash City Transit Company very seldom uses its 13 bus transit fleet for charter purposes. Most charter work in the Racine area is done by the Racine Flash Cab Company, Inc., which shares offices, management, and terminal space with Flash City Transit Company. Racine Flash Cab maintains a fleet of 128 yellow school buses of which 116 are used on daily school bus runs. The charter rate for local service is \$10.00 per hour, but the company reports that most of its charter business is for school field trips to locations outside the Racine urbanized area.

The financial history of Flash City Transit Company has been one of continual losses. The company has failed to make a profit in each full year of operation in spite of certain in-kind services rendered for the company by Flash City Cab Company, Inc. In November of 1972, the City of Racine began to subsidize the operation after the company petitioned the Wisconsin Public Service Commission for abandonment of service. The company continued to lose money in 1973 in spite of a subsidy at a rate of \$1,000 per week plus losses incurred for Saturday operations. In 1974, the subsidy will pay all operating losses for the first time. In effect, the Flash City Transit Company will be operating the transit service as a public service, without a profit or loss. Income statements for the company for 1969 to 1972 are shown in Appendices C through F.

Table 4-5
FLASH CITY TRANSIT COMPANY SAFETY RECORD
1972-1973

<u>Date</u>	<u>Alleged Injury</u>	<u>Description</u>
1972 01/07/72	X	No collision - passenger alleges injury
03/09/72		Bus rear ended by another vehicle
03/14/72		Vehicle left turn in front of bus
04/06/72	X	No collision - passenger alleges injury
09/14/72		Illegal U-turn in front of bus
10/16/72	X	No collision - passenger alleges injury
10/23/72	X	No collision - passenger alleges injury
10/30/72		Bus sideswiped another vehicle
11/09/72		Bus sideswiped another vehicle
12/14/72		Bus rear ended by another vehicle
1973 01/04/73	X	No collision - passenger alleges injury
01/08/73		Bus sideswiped another vehicle
02/01/73		Bus sideswiped another vehicle
03/01/73		Bus rear ended another vehicle
03/02/73		Bus sideswiped another vehicle
03/02/73	X	Bus sideswiped by another vehicle
04/10/73		Bus sideswiped by another vehicle
04/25/73		Bus sideswiped by another vehicle
05/14/73		Illegal turn in front of bus
06/22/73		Bus backed up hitting another vehicle
07/06/73	X	No collision - passengers allege injury
08/24/73		Bus sideswiped another vehicle
09/13/73		Bus rear ended another vehicle
09/18/73		Bus sideswiped another vehicle
09/23/73		Bus hit overhanging tree
10/10/73		Bus sideswiped by another vehicle
10/11/73		Bus hit building marquee
10/22/73	X	No collision - passenger alleges injury

Source: Flash City Transit Company

TRANSIT USER CHARACTERISTICS

Ridership

In 1973, Flash City Transit Company carried 530,477 revenue passengers, which compares with a 1972 total of 525,681 revenue passengers, or an increase of approximately one percent. The slight increase in patronage in 1973 was due primarily to the reestablishment of Saturday service in June of 1973. Table 4-6 shows ridership by route for the period January 4-10, 1974. This ridership is calculated on a basis of revenue at an average fare of 34 cents. An actual count of ridership was taken on May 1, 1973, and is shown in Table 4-7. This count was taken by the Wisconsin Department of Transportation, Division of Planning, as part of a Transfer survey of

Table 4-6
FLASH CITY TRANSIT COMPANY RIDERSHIP BY ROUTE, JANUARY 4-10, 1974

Route	Friday 1/4/74	Saturday 1/5/74	Monday 1/7/74	Tuesday 1/8/74	Wednesday 1/9/74	Thursday 1/10/74
1	337	209	257	262	252	287
2	295	145	202	190	209	200
3	290	168	289	243	254	250
4	292	87	174	172	153	156
5	182	110	184	139	144	119
6	243	174	211	248	250	177
7	434	328	317	342	248	266
8	263	114	229	227	157	212
9	352	161	324	237	279	257
10	365	160	310	269	176	186
Total	2,947	1,657	2,495	2,331	2,122	2,110

Source: Flash City Transit Company. Counts based on revenue and an average fare of 34¢

Table 4-7
FLASH CITY TRANSIT COMPANY RIDERSHIP BY ROUTE
May 1, 1973

Route	Cash	Adult Transfer	Total	Cash	Child Transfer	Total	Student Pass	Grand Total
1	163	52	215	49	26	75	14	304
2	105	56	161	71	14	85	7	263
3	95	26	121	82	24	106	5	232
4	97	43	140	37	10	47	8	195
5	94	33	127	70	5	75	7	209
6	127	46	173	43	11	54	1	228
7	189	49	238	76	16	92	2	332
8	68	21	89	89	58	147	1	237
9	173	51	224	133	16	149	17	390
10	151	50	201	83	54	137	26	364
Total	1,262	427	1,689	733	234	967	98	2,754

Source: Wisconsin Department of Transportation, Division of Planning

the Racine system. It would appear that Routes 7 and 9 were the most popular at the time of the various counts and routes 4 and 5 appear to have the lowest ridership levels.

Transfer Summary

The May 1, 1973, transfer survey found that of a total of 1,995 adult and child cash passengers (excluding student passes), 661 passengers, or 33.1%, transferred to another route. This compared favorably with the SEWRPC mass transit user survey conducted on May 2, 1972. That survey found that of 2,239 revenue passengers, 717 passengers or 32.0% transferred to another route. The SEWRPC survey was based on factored mail-back questionnaire data, while the May 1, 1973, Wisconsin Department of Transportation survey is based on an actual count of transfers. Both surveys showed that transfers appear to be quite uniform among the ten routes. No transfers were recorded in the SEWRPC survey from Route 2 to 3 or 4; Route 3 to 2, 4, 5, or 8; Route 4 to 2; Route 6 to 8; Route 7 to 8; Route 8 to 3, 6, or 7; Route 9 to 6; or Route 10 to 9. Table 4-8 shows a matrix of route to route transfer movements from the SEWRPC survey. Table 4-9 shows total transfers by route by hour from the Wisconsin Department of Transportation survey.

Table 4-8

ROUTE TO ROUTE TRANSFERS
FROM SEWRPC MASS TRANSIT USER SURVEY
May 2, 1972

From Route	To Route										Total
	1	2	3	4	5	6	7	8	9	10	
1	-	4.0	9.6	4.9	1.0	19.5	16.5	3.5	9.2	20.6	88.8
2	3.7	-	-	-	3.5	20.8	9.8	4.8	4.5	18.8	65.9
3	12.8	-	-	-	-	23.5	6.2	-	18.3	12.3	73.1
4	5.0	-	1.8	-	1.0	8.6	6.3	4.6	20.5	6.9	54.7
5	5.8	2.0	1.6	2.5	-	1.0	7.3	1.2	5.0	14.5	40.9
6	17.5	8.5	5.5	7.8	3.8	-	4.3	-	6.5	4.0	57.9
7	15.6	10.8	3.8	7.5	2.1	2.5	1.7	-	3.2	4.0	51.2
8	11.9	9.8	-	2.0	1.3	-	-	-	16.0	18.5	59.5
9	20.1	12.1	7.3	15.1	9.5	-	5.2	3.7	1.6	4.8	79.4
10	68.2	10.8	6.2	17.7	6.5	16.8	7.5	10.6	-	1.7	146.0
Total	160.6	58.0	35.8	57.5	28.7	92.7	64.8	28.4	84.8	106.1	717.4

Source: SEWRPC. Data is in fractions because of factoring of a mail-back questionnaire.

Table 4-9

TOTAL TRANSFERS BY ROUTE BY HOUR MAY 1, 1973
WISCONSIN DEPARTMENT OF TRANSPORTATION SURVEY

Time	To Route										Total
	1	2	3	4	5	6	7	8	9	10	
5:45 a.m.	2	2	0	1	3	1	0	0	2	6	17
6:25	2	2	7	10	4	1	11	2	6	4	49
7:05	4	4	1	5	1	1	6	18	6	6	52
7:45	14	3	6	2	3	4	0	14	5	4	55
8:25	5	3	2	0	2	6	5	4	4	10	41
9:05	4	1	1	2	2	2	2	1	1	6	22
9:45	2	0	2	0	0	0	3	1	0	9	17
10:25	0	3	1	1	0	1	0	2	2	3	13
11:05	2	0	3	3	0	2	5	18	2	3	38
11:45 a.m.	0	3	6	2	1	4	2	0	3	2	23
12:25 p.m.	2	1	6	4	3	6	10	0	5	16	53
1:05	3	3	0	2	0	3	1	1	6	2	21
1:45	6	6	0	0	0	2	1	1	4	3	23
2:25	0	3	3	2	0	2	5	0	3	6	24
3:05	9	12	3	2	3	8	6	2	14	7	66
3:45	8	10	4	4	4	6	6	8	0	2	52
4:25	3	6	2	4	5	5	1	1	2	5	34
5:05	7	5	2	6	2	3	1	0	2	7	35
5:45	2	3	1	3	5	0	0	6	0	3	23
6:25 p.m.	3	0	0	0	0	0	0	0	0	0	3
Total	78	70	50	53	38	57	65	79	67	104	661
% of Total	11.8	10.6	7.6	8.0	5.7	8.6	9.8	12.0	10.1	15.7	100%
A.M. Total	37	22	35	30	19	28	44	60	36	69	380
P.M. Total	41	48	15	23	19	29	21	19	31	35	281

Source: Wisconsin Department of Transportation, Division of Planning

Note: A.M. = 5:45 a.m. to 12:25 p.m., P.M. = 1:05 p.m. to 6:25 p.m.

Socioeconomic Summary

A socioeconomic profile of the Racine transit rider who responded to the SEWRPC mass transit user survey on May 2, 1972, is summarized below. Unfactored data was used to compile this summary. Of 2,239 questionnaires handed out on the survey day, 955 questionnaires, or 42.7 percent were returned in usable form. Each individual rider was counted only once for the socioeconomic summaries, regardless of the number of trips made by that rider on the survey day.

Sex: (See Table 4-10) On the Racine mass transit system, female riders account for approximately 78 percent of the total daily ridership. Of this group, just under 73 percent indicated that they did not possess a drivers' license. The male ridership also indicated a high percentage of individuals without drivers' licenses, approximately 63 percent.

Race: (See Table 4-11) Of those riders responding to the survey, 86 percent indicated they were members of the Caucasian (white) race. Members of the Negro (black) race made up only about eight percent of the ridership, and members of the American Indian, Spanish-American and other races make up only about four percent of the total ridership.

Income: (See Table 4-12) Of those riders responding to the survey, about 62 percent had a family income of less than \$12,000 per year. Approximately 19 percent of the ridership had family incomes at a poverty level, less than \$4,000 per year. Only about nine percent of the ridership had a family income above \$15,000 per year. It is significant to note that over 18 percent of the riders that responded to the survey chose to give no response to the income question.

Age: (See Table 4-13) Of those riders responding to the survey, the largest age group was the 16-24 bracket, with 30 percent of the riders. The 1-15 age bracket accounted for about 10 percent of the riders, and senior citizens age 65 and over totaled less than 12 percent of the ridership. The age bracket 25-44 accounted for only about 16 percent of the riders.

Table 4-10
ROUTE RIDERSHIP BY SEX

<u>City Transit Route</u>	<u>Male</u>	<u>Female</u>	<u>No Response</u>
1	21.30%	78.70%	0.00%
2	25.37%	73.13%	1.49%
3	12.50%	87.50%	0.00%
4	15.38%	84.62%	0.00%
5	10.81%	87.84%	1.35%
6	14.00%	86.00%	0.00%
7	25.86%	74.14%	0.00%
8	18.97%	81.03%	0.00%
9	28.57%	71.43%	0.00%
10	30.12%	69.88%	0.00%
System	21.74%	77.99%	0.26%

Note: Columns may not equal totals because of rounding error.

Source: SEWRPC

Table 4-11
ROUTE RIDERSHIP BY RACE

<u>Route</u>	<u>Black</u>	<u>White</u>	<u>American Indian</u>	<u>Spanish American</u>	<u>Other</u>	<u>No Response</u>
1	0.00%	98.15%	0.93%	0.00%	0.93%	0.00%
2	1.49%	97.01%	0.00%	0.00%	0.00%	1.49%
3	12.50%	81.25%	0.00%	2.08%	2.08%	2.08%
4	9.62%	78.85%	3.85%	1.92%	3.85%	1.92%
5	6.76%	86.49%	0.00%	2.70%	0.00%	4.05%
6	6.00%	94.00%	0.00%	0.00%	0.00%	0.00%
7	8.62%	86.21%	4.31%	0.00%	0.00%	0.86%
8	10.34%	81.03%	0.00%	1.72%	5.17%	1.72%
9	5.36%	89.29%	0.00%	3.57%	1.79%	0.00%
10	25.30%	66.27%	0.00%	3.61%	1.20%	3.61%
System	8.20%	86.46%	1.04%	1.56%	1.30%	1.43%

Note: Columns may not equal total because of rounding error.

Source: SEWRPC

Table 4-12

ROUTE RIDERSHIP BY INCOME GROUP

<u>Route</u>	<u><\$4,000</u>	<u>\$4,000- 7,999</u>	<u>\$ 8,000- 11,999</u>	<u>\$12,000- 14,999</u>	<u>\$15,000- 19,999</u>	<u>\$20,000- 24,999</u>	<u>> \$25,000</u>	<u>No Response</u>
1	20.37%	14.81%	22.22%	11.11%	9.26%	4.63%	2.78%	14.81%
2	17.91%	37.31%	17.91%	13.43%	1.49%	0.00%	0.00%	11.94%
3	18.75%	14.58%	22.92%	12.50%	6.25%	2.08%	6.25%	16.67%
4	17.31%	25.00%	25.00%	7.69%	1.92%	3.85%	0.00%	19.23%
5	22.97%	18.92%	16.22%	14.86%	4.05%	2.70%	0.00%	20.27%
6	10.00%	32.00%	24.00%	6.00%	4.00%	4.00%	2.00%	18.00%
7	19.83%	24.14%	13.79%	8.62%	11.21%	1.72%	0.86%	19.83%
8	13.79%	24.14%	18.97%	12.07%	5.17%	0.00%	1.72%	24.14%
9	16.96%	21.43%	28.57%	8.93%	4.46%	2.68%	1.79%	15.18%
10	<u>26.51%</u>	<u>21.69%</u>	<u>18.07%</u>	<u>7.23%</u>	<u>2.41%</u>	<u>1.20%</u>	<u>0.00%</u>	<u>22.89%</u>
System	19.01%	22.79%	20.57%	10.16%	5.60%	2.34%	1.43%	18.10%

Note: Columns may not equal total because of rounding error.

Source: SEWRPC

Table 4-13

ROUTE RIDERSHIP BY AGE GROUP

<u>Route</u>	<u>1-15</u>	<u>16-24</u>	<u>25-34</u>	<u>35-44</u>	<u>45-54</u>	<u>55-64</u>	<u>65+</u>	<u>No Response</u>
1	12.04%	25.00%	8.33%	7.41%	13.89%	11.11%	19.44%	2.78%
2	1.49%	34.33%	4.48%	4.48%	31.34%	13.43%	10.45%	0.00%
3	2.08%	58.33%	8.33%	10.42%	4.17%	10.42%	6.25%	0.00%
4	5.77%	23.08%	9.62%	13.46%	23.08%	13.46%	9.62%	1.92%
5	12.16%	29.73%	5.41%	4.05%	18.92%	18.92%	9.46%	1.35%
6	6.00%	26.00%	2.00%	8.00%	20.00%	26.00%	12.00%	0.00%
7	12.07%	19.83%	11.21%	11.21%	11.21%	19.83%	14.66%	0.00%
8	12.07%	41.38%	8.62%	10.34%	10.34%	8.62%	8.62%	0.00%
9	16.96%	30.36%	8.93%	5.36%	16.07%	11.61%	8.93%	1.79%
10	<u>9.64%</u>	<u>28.92%</u>	<u>14.46%</u>	<u>4.82%</u>	<u>18.07%</u>	<u>12.05%</u>	<u>9.64%</u>	<u>2.41%</u>
System	10.16%	29.95%	8.59%	7.68%	16.41%	14.45%	11.59%	1.17%

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Note: Columns may not add to totals because of rounding error.

Source: SEWRPC

License Status: (See Table 4-14) Of those riders responding to the survey, over 70 percent indicated that they did not possess a drivers' license. This would indicate a large percentage of "captive" riders (those without other means of transportation) are utilizing the transit system.

Table 4-14

SYSTEM RIDERSHIP BY DRIVERS' LICENSE STATUS

Passengers with drivers' license:	27.34%
Passengers without drivers' license:	70.83%
No response:	1.82%

Note: Totals may not add to 100% because of rounding error.

Source: SEWRPC

Trip Purpose

Urban mass transit service in the Racine area primarily serves persons traveling between home and work (See Table 4-15). Approximately 36 percent of the ridership interviewed in the SEWRPC mass transit user survey indicated they were making a home-based work trip. Home-based "other" trips, which were a combination of recreational and personal business trips, accounted for the next highest percentage of trip purpose, with 17 percent.

Table 4-15

TRANSIT TRIPS BY TRIP PURPOSE
RACINE - MAY 2, 1972

<u>Trip Purpose</u>	<u>Percentage of Total Trips</u>
Home-Based Work	36 Percent
Home-Based School	15 Percent
Home-Based Shop	11 Percent
Home-Based Other	17 Percent
Non Home-Based	8 Percent
Unknown	13 Percent

Source: SEWRPC

Further analysis of the SEWRPC mass transit user survey and non-user survey during 1974 is expected to produce desire line plots of transit trips and reasons why persons are not using the transit system. These are expected to be a further aid in the establishment and maintenance of the Transit Development Program.

SUMMARY

Urban mass transit service has been available in the Racine area since 1883. Currently, mass transit service is provided by Flash City Transit Company, which operates ten fixed routes in the City of Racine with a total of 80.8 round trip route miles. The ridership trend over the years has been one of decline. The transit system carried over two million revenue passengers as late as 1967, while in 1973 total revenue passengers totaled only slightly more than one-half million. Buses on all routes operate on a 40-minute headway between the hours of 5:30 a.m. to 6:25 p.m. Monday through Friday and 8:05 a.m. to 5:45 p.m. on Saturdays. Buses from each of the ten routes arrive and depart from the Racine Central Business District (CBD) transfer point at the same time, thus passengers transferring from one route to another have a minimal wait time. The adult cash fare is 40 cents with an additional 10 cents charge for a transfer and children between the ages of five and twelve, inclusive, ride for 20 cents plus 5 cents for a transfer. Transfers are honored only at the Racine CBD transfer point. Buses used for providing transit service are 19-passenger "mini" buses, all of which have neared the end of their useful life and are in need of replacement. The company has lost money in each of its full years of operation and is currently subsidized by the City of Racine.

Various surveys have shown that about 2,400 revenue passengers ride the bus daily and about one-third of them make a transfer at the CBD stop. Female riders account for about 78 percent of the total ridership, and 62 percent of the ridership had an income under \$12,000 per year. The largest age group of riders was the 16-24 bracket, with over 30 percent of the riders. Over 70 percent of the ridership indicated that they did not possess a drivers' license.

Chapter V

EXISTING TRANSIT LEGISLATION AND REGULATIONS

INTRODUCTION

The current legal, institutional, and financial resources available to, and affecting mass transit organizations and operations will to a large measure dictate the direction of many improvement recommendations developed under this Transit Development Program. This chapter summarizes the pertinent legislation and regulations existing at the federal, state, and local levels as they apply to mass transit organization and operation. Federal legislation and administration is directed primarily to the funding of capital improvement projects and the criteria governing the granting of federal aid. State legislation describes the organizational structure of public mass transit systems; tax relief measures; and most recently, direct operational assistance. The Wisconsin Public Service Commission regulates operations of mass transit services. Local ordinances describe particular regulations and define the local role in the provision of mass transit service.

FEDERAL AUTHORITY¹

Federal government assistance has been available to urban mass transportation since 1961 when an emergency loan program was inaugurated by a provision of the Housing and Urban Development Act. Several years of experience demonstrated the inadequacy of the early federal programs and in 1964 the Urban Mass Transportation Act established a program of federal matching grants for preserving, improving, and expanding urban mass transit systems. The Urban Mass Transportation Act of 1964 was enacted by Congress to: 1) assist in the development of improved mass transportation facilities, equipment, techniques, and methods, with the cooperation of mass

¹Source: Urban Mass Transportation Act of 1964, Urban Mass Transportation Assistance Act of 1970, and Federal Aid Highway Act of 1973.

transportation companies both public and private; 2) Encourage the planning and establishment of areawide urban mass transportation systems needed for economical and desirable urban development, with the cooperation of mass transportation companies both public and private; 3) Provide assistance to state and local governments and their instrumentalities in financing such systems, to be operated by public or private mass transportation companies as determined by local needs.

The original Act has been amended several times, by the Urban Mass Transportation Assistance Act of 1970, and parts of the Federal Aid Highway Act of 1973. The 1973 amendments contain potentially significant provisions for improved mass transit, but it also contains some restrictive measures, especially pertaining to charter and school operations. Highlights of the Acts as related to the Racine urbanized area are as follows:

1. The Department of Transportation may make grants or loans to assist State and local public bodies and agencies thereof in financing the acquisition, construction, reconstruction, and improvement of facilities and equipment for use, by operation or lease or otherwise, in mass transportation service in urban areas.
2. No grant will be made for operating expenses.
3. The Department of Transportation may make loans to States or local public bodies and agencies thereof to finance the acquisition of real property and interests in real property for use as rights-of-way, station sites, and related purposes for urban mass transportation systems.
4. Capital grants will not exceed 80 percent of the project cost. The remainder of the net project cost shall be provided, in cash, from sources other than federal funds. No grants will be made unless the Secretary of the DOT determines that the facilities and equipment for which the assistance is sought are needed for carrying out a program for a unified

or officially coordinated urban transportation system as part of the comprehensively planned development of the urban area.

5. Research, development, and demonstration projects which will assist in the reduction of urban transportation needs, the improvement of mass transportation service, or the contribution of such service toward meeting total urban transportation needs at minimum cost, may be funded up to 100 percent of the project cost.
6. No financial assistance will be extended to any project unless an adequate relocation program is being carried on for any families displaced by the project. Financial assistance obtained through this Act may be used to help defer these costs, not to exceed certain amounts.
7. Grants for technical studies not to exceed 80 percent of the project cost may be made.
8. Existing rights, privileges, and benefits of any transit system's employees cannot be worsened as a result of a capital grant project.
9. All project applications shall include a detailed statement on the environmental impact of the proposed project. Buses acquired with federal financial assistance under the Act must meet the emission standards under Section 202 of the Clean Air Act and Section 6 of the Noise Control Act, and whenever possible, the equipment must meet special criteria for low-emission vehicles and for low-noise-emission products.
10. Mass transportation facilities receiving financial assistance under the Act must be planned and designed so that they meet the special needs of the elderly and handicapped. (For purposes of this Act, the term "handicapped person" means any individual who, by reason of illness, injury, age, congenital malfunction, or other permanent or temporary incapacity or disability, is unable without special facilities or special planning or design to utilize mass transportation facilities and services as effectively as persons who are not so affected).

11. The Act permits Interstate, Urban System, and Urban Extension highway funds to be utilized for construction of exclusive or preferential bus lanes, traffic control devices, bus passenger loading areas and facilities, shelters, and fringe and transportation corridor parking facilities to serve public mass transportation passengers. In fiscal 1975, a portion of Urban System funds may also be used to purchase buses; and, in fiscal 1976, the funds may also be used for construction, reconstruction, and improvement of rail transit facilities and purchase of rolling stock. The Federal share of transit projects financed from these funds will be 70 percent of the project cost.
12. Where sufficient land exists within any federal aid rights-of-way to accommodate needed rail or non-highway public mass transit programs without impairing automotive safety or future highway improvements, a state can make such lands available without charge to a publicly owned mass transit authority for such purpose.
13. No federal assistance shall be provided for the purchase of buses unless an applicant first agrees not to engage in charter bus operations in competition with private bus operators outside of the area where the applicant provides regularly scheduled service.
14. No federal assistance shall be provided for the purchase of buses to any applicant unless such applicant agrees not to engage in school bus operations for the exclusive transportation of students and school personnel in competition with private school bus operators. This rule does not apply to the transportation of school children along with other passengers by regularly scheduled bus service at either full or reduced fares.
15. Demonstration projects for public mass transportation on highways in rural areas can be eligible for federal funds. Projects eligible for funds

include highway traffic control devices; the construction of passenger loading areas and facilities, including shelters; fringe and transportation corridor parking facilities to serve bus and other public mass transportation passengers, and the purchase of passenger equipment other than railroad rolling stock.

STATE AUTHORITY²

Since 1955, the State of Wisconsin has provided tax relief to the State's publicly and privately owned urban mass transit systems. The most significant of these provisions is Wisconsin Statute 71.18, which provides urban mass transit systems with a special method for calculating income for state tax purposes. To encourage urban bus systems to invest their profits in new capital facilities and rolling stock, the formula provides that any net income after payment of federal income taxes is taxed by the State on the following basis: 1) An amount equivalent to eight percent of the depreciated cost of carrier operating property is exempt from the tax, and 2) the remaining portion of the net income is taxed at a rate of 50 percent.

Other 1955 Wisconsin Statutes giving urban mass transit systems tax relief are:

1. Section 76.54 which prohibits cities, villages, and towns from imposing a license tax on vehicles owned by urban transit companies.
2. Section 78.01(2)(d) which excludes vehicles engaged in urban mass transportation from the seven cents per gallon fuel tax.
3. Section 78.40(2)(c) which excludes urban mass transportation vehicles from the seven cents per gallon special fuel tax.
4. Section 85.01(4)(dm) which established an annual registration fee of \$1.00 for each vehicle engaged in the urban transportation of passengers.

²Source: Wisconsin Department of Transportation, Division of Planning; Wisconsin State Statutes; and Wisconsin Administrative Code: Rules of Public Service Commission, Chapter PSC 40 and PSC 41.

The approval of the 1973-1975 state budget opens the way for direct state aid to urban mass transit systems. Section 85.05 of the Wisconsin Statutes permits the Wisconsin Department of Transportation to make grants of up to two-thirds of the operating deficit (not to include return on investment) to any local unit of government within an area served by urban mass transit as of August 5, 1973. Only local units of government that will provide financial operating assistance to or operate an urban mass transit system are eligible applicants for state operating assistance. Contracts between the Wisconsin Department of Transportation and recipients may be at most one-year in duration. Any changes in revenues and expenditures during the contract period are subject to review by the Department of Transportation (DOT).

The second part of the Act provides for aid to mass transit demonstration and planning projects designed to increase the availability and quality of mass transit. The provisions of this Act are contained in Wisconsin Statute 85.06. The projects must be designed to plan or demonstrate: 1) the effect of improved mass transit service in reducing urban vehicular travel; 2) meeting total urban transportation needs at minimum cost; and 3) reducing urban highway and parking facility requirements. Suitable municipalities and counties may request grants from the DOT. Applications for such grants shall specify the program of planning or improvements for which the grant is to be used. Such programs may include: 1) improvement in accessibility of public transportation; 2) improvement in the quality of mass transit service to passengers; 3) improvement in the economic performance of mass transit systems; and 4) reduction of adverse impacts of vehicular transportation on the urban environment. The budget authorizes the DOT to pay up to 100 percent of the demonstration and planning project costs.

The Wisconsin Statutes provide many organizational alternatives to cities and counties for the operation of an urban mass transit system. State legislation defining city governmental powers for operation of a transit system include the following:

1. City Operation of Transit System--Wisconsin Statute 66.065(5)

This statute permits a city to own, operate or engage in a municipal bus transportation system in either of two circumstances: (1) if the city has no existing local transportation system or (2) if the city does have an existing transportation system and the city had (a) obtained the consent of the existing system, (b) been empowered to do so by the legislature, or (c) secured a certificate of public convenience and necessity from the Wisconsin Public Service Commission. The second (2) provision would apply today if the City of Racine were to take over the Flash City Transit Company or establish a competing system.

2. City Transit Department--Wisconsin Statute 66.065(5)

As an alternative to separate operation under municipal ownership, the city could absorb the bus operation into an existing department or departments which would be expanded to accommodate the added responsibility. For example, the Traffic or Public Works Departments could be expanded to include the transit operation.

3. City Transit Commission--Wisconsin Statute 66.943

This statute provides for a City Transit Commission composed of not fewer than three members appointed by the mayor or the city manager and approved by the city council. No transit commissioner may hold any other public office. The Commission is permitted to "establish, maintain and operate a bus system, the major portion of which is located within or the major portion of the service is supplied to such a city." The initial acquisition of the system is subject to the limitations discussed under Item 1. The City Transit Commission is permitted to extend its system into adjacent territory outside the city not more than 30 miles from the city limits. The City Transit Commission, in lieu of providing transportation services, may contract with a private organization for such services.

4. City Transit Parking Commission--Wisconsin Statutes 66.943, 66.068, and 66.079

These statutes provides for both City Transit Commissions and City Parking Commissions. The Transit Parking Commission is organized as a single body under both pieces of enabling legislation (such as in the City of Kenosha). The City Transit Parking Commission has all the powers of a City Transit Commission with parking responsibilities added.

5. Joint Municipal Transit Commission--Wisconsin Statute 66.30

An alternative available to both cities and counties is provided by legislation concerning intergovernmental cooperation. Under this statute any municipality may contract with another municipality or municipalities for the receipt or furnishing of services or the joint exercise of any power or duty authorized by statute. A "municipality" is defined to be for the purposes of this law any city, village, town, county, or regional planning commission. Wisconsin law permits any county, city or village to contract with any other county, city, or village to establish a joint municipal transit commission.

State legislation defining county government powers pertaining to operation of a transit system includes the following:

1. Subsidies to Private Companies--Wisconsin Statute 59.968(1) to (3)

This Statute permits a county to financially assist private bus companies operating principally within the county by (1) direct subsidies, (2) purchase of buses and lease back to the private company, and (3) applications for federal aid.

2. County Ownership and Operator--Wisconsin Statutes 59.968(4) to (8), 59.969, 63.03(1)(x), 67.04(1)(aa)

These statutes permit a county to acquire a transportation system by purchase, condemnation or otherwise and provide funds for the operation and maintenance of such system. "Transportation system" means all land,

shops, structures, equipment, property, franchises and rights of whatever nature for transportation of passengers. County acquisition of a transit system must be approved by a two-thirds vote of the County Board. The county would have the right to operate into contiguous or cornering counties. However, where such operation into other counties would be competitive with the urban or suburban operations of another existing common carrier of passengers, the county must coordinate the proposed operations with such other carriers to eliminate adverse financial impact for such carrier. This coordination may include, but is not limited to, route overlapping, transfers, transfer points, schedule coordination, joint use of facilities, lease of route service, and acquisition of route and corollary equipment. The law permits a county to use any street without obtaining a license or permit from a municipality for the operation of a transit system within its boundaries. The law also requires the county to assume all the employer's obligations under any contract between the employees and management of the system, and to negotiate an agreement protecting the interests of employees affected by the acquisition, construction, control, or operation of the transit system. This labor protection provision is similar to Section 13(c) of the UMTA Act of 1964, as amended.

3. County Transit Commission--Wisconsin Statute 59.967

The County Transit Commission Act, a law parallel to the City Transit Commission Act, permits counties to operate a bus transportation system. The County Transit Commission is to be composed of not less than seven members to be appointed by the County Board. The Commission has power to extend service into adjacent territory within 30 miles of the county corporate limits.

4. County Expressway and Transportation Commission--Wisconsin Statute 59.965

This statute created the Milwaukee County Expressway and Transportation

Commission and as now written does not apply to counties under 500,000 population; therefore, it does not apply to Racine County.

State legislation also defines the powers of special mass transit districts and authorities as follows:

1. Transit Right-of-Way Authority--Wisconsin Statute 66.941

This statute established the Transit Right-of-Way Authority in 1963 to acquire the right-of-way of the Chicago, North Shore, and Milwaukee Railroad but gave no power to the authority to operate a mass transit system. The governing board of this organization is composed of the mayors of Milwaukee, Racine, and Kenosha; the county executive of Milwaukee County; the Chairman of the county boards of Racine and Kenosha Counties; the Secretary of the Department of Local Affairs and Development; the Chairman of the Highway Commission, and a citizen member appointed by the Governor. The governing board has not been active since 1964.

2. Metropolitan Transit Authority--Wisconsin Statute 66.94

An authority established under this statute has legal power to acquire, operate, and maintain a public transportation system. For purposes of the Act, public transportation system is defined to include subways, railways, and buses. However, the largest city within its boundaries must have a population of 125,000 or more. Therefore, this Act would not apply to the Racine area.

The regulation of public and private utilities, railroads, and common motor carriers is the responsibility of the Wisconsin Public Service Commission (PSC). The Transportation Division of the PSC administers rules and conducts investigations relating to the economic regulation of motor carriers.

The Wisconsin Administrative Code (PSC 8.05) provides that a common motor carrier certificate for providing urban mass transit service may be sought by filing either an application for original authority or an application for assignment of an

existing authority with the PSC. An application for original authority would be set for a public hearing where the applicant must present evidence to show that the service proposed is required by public convenience and necessary and that the applicant is fit, willing, and able to perform the service. An application to assign an existing certificate would be set for public hearing where facts are presented to show that the assignee is fit, willing, and able to provide the service and that the assignment is in the public interest.

All urban mass transit systems are required to file annual and monthly reports with the PSC that include such information as: revenues, expenses, vehicle miles of travel and vehicle hours of operation. The PSC has the authority to inspect the books and records of all common motor carriers.

Any changes in the fare structure charged by an urban mass transit system must be approved informally by the PSC or set for a public hearing. The handling of each case is determined by circumstances and the evidence presented at the time of the request. Any action by the PSC on an informal basis is subject to reconstruction or hearing upon proper complaint or protest. Any change in the base schedule of urban mass transit operations requires the transit operator to file with the PSC and with the clerk of the affected municipalities at least five days in advance a schedule showing such change, except that if a waiver of objection is made by local authorities and filed with the schedule change, the schedule change may be filed any time prior to its effective date. No schedule change can become effective if the PSC disapproves or orders a hearing on the proposed changes. The PSC does have the power of special approval, as the public interest may require, to authorize changes on less notice than the guidelines set above. No bus route can be established, extended, or abandoned without the approval or order of the PSC.

LOCAL REGULATION AND ORDINANCES³

³Racine Municipal Ordinances, Chapter 27.27-27.29, and Racine City Plan Commission.

The Existing transit legislation at the local level is contained in three chapters of the Racine Municipal Ordinances; Chapter 27.27--Bus Operations, Chapter 27.28 Bus Stops, and Chapter 27.29--Bus Loading Zone. The fundamental details of these chapters are as follows:

A. Chapter 27.27

Section 010--Speed Limit

Buses operating within the City of Racine will observe the posted speed limits.

Section 030--Equipment and Maintenance of Buses

1. Buses, prior to their use and operation, must be inspected by the Racine Police Department to insure that safety standards are maintained. Upon inspection, satisfactory vehicles will be issued a certificate to that effect.
2. After the buses are in use, periodic inspections by the Racine Police Department shall occur to maintain safe operating conditions.
3. All buses shall be maintained in a clean and sanitary condition as deemed appropriate by the Racine Police Department.

B. Chapter 27.28

Section 010--Bus Stops

For purposes of loading and unloading passengers, all buses will pull as close to the right-hand curb as possible and in doing so, stop at a point which, whenever possible, will enable the bus to clear the intersection.

C. Chapter 27.29

Section 010--Bus Loading Zone

This designates the west side of Main Street between Fourth Street and Fifth Street as a bus loading zone and prohibits any parking or standing by another vehicle.

SUMMARY

This chapter summarized pertinent legislation and regulations existing at the federal, state, and local levels as they apply to mass transit organization and operation. The Federal government provides assistance to the transit systems in the form of paying 80 percent of capital costs, 80 percent of costs for technical studies, and up to 100 percent of demonstration project costs. Numerous regulations for obtaining funds must be met before the project is approved. The State of Wisconsin has provided tax relief and direct operating aid to transit systems. The Wisconsin Statutes provide many organizational alternatives to cities and counties for operation of an urban mass transit system. The City of Racine may operate a transit system by expanding an existing city department to include transit operations; or by creating a City Transit Commission, or a City Transit-Parking Commission. The Wisconsin Public Service Commission (PSC) regulates all mass transit systems in the State. No bus route can be established, extended, or abandoned without approval or order of the PSC. Local regulations and ordinances pertain to bus stops, speed limits, and maintenance of buses.

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Chapter VI

EVALUATION OF CURRENT URBAN TRANSIT SERVICES

INTRODUCTION

This chapter presents an evaluation of the existing transit service conditions in the Racine area together with a discussion of legislative and energy considerations affecting or that might affect continued transit service. The transit service is evaluated in terms of route configuration and schedule design; area, traffic generators, employment; population--including special population groups--served; user characteristics; fare policy; and management policy. In order to evaluate the existing service, a set of definitions relating to mass transit service was developed and a set of transit service objectives, principles, and standards was developed to measure the effectiveness of the transit system.

DEFINITIONS

The term "mass transit," for purposes of this Transit Development Program, has been defined as the transportation of persons by bus, train, ferry, or other vehicular conveyance having a passenger carrying capacity of ten or more persons including the operator. This definition is in conformance with the definitions used by the State of Wisconsin for computation of special taxes for urban transit companies (Wisconsin Statute 71.18). Further, mass transit may be classified into two use sectors: public use and private use. Ridership eligibility on public use sector mass transit is based upon payment of required fare by the rider, if such a fare is required, and ridership eligibility on private use sector mass transit is based upon the ability of the rider to identify himself as a member of a qualified group whose ridership is paid for under a group plan. Some examples of private use sector mass transit include charter service, subscription service, or yellow school bus service.

Public use sector and private use sector mass transit may each be further divided into three classifications: 1) Inter-city mass transit, 2) Suburban mass transit, and 3) Urban mass transit. Inter-city mass transit service is that service over relatively

long distances between urban areas where schedules are primarily designed for, and ridership generally consists of, noncommuter trips. Suburban mass transit service is that service being provided between an urban area and surrounding suburban development or noncontiguous urban areas where schedules are defined for, and ridership consists of primarily commuter trips. Urban mass transit service is that service being provided within an urban area. The service provided by Flash City Transit Company is classified in the latter category.

Other terms used frequently in this and subsequent chapters are defined below:

1. Local Service - Urban mass transit operating principally on arterial and collector streets with stops for passenger pick-up and discharge located no further than 1,200 feet apart.
2. Express Service - Urban or suburban mass transit service operating on a schedule of limited stops over a major portion of its route utilizing free-ways or major arterial streets.
3. Rapid Transit Service - Urban or suburban mass transit service operating within its own exclusive right-of-way at relatively high speeds for a major portion of its route.
4. Circulation-Distribution Service - Local urban mass transit service carrying passengers within an activity center.
5. Demand-Responsive Service - Urban mass transit service provided within a community operating without fixed routes or defined schedules in direct response to rider request.
6. Special Service - Urban, suburban, or inter-city mass transit service provided for special events or purposes over scheduled routes.

OBJECTIVES, PRINCIPLES, AND STANDARDS

Terms such as "objective," "principle," and "standard" are subject to a wide range of interpretation and application and are closely linked to other items often used in planning work which are subject to equally diverse interpretation and

application. To provide a common frame of reference, the following definitions have been adapted for use in the Racine transit planning effort:

1. Objective: a goal or end toward the attainment of which plans and policies are directed.
2. Principle: a fundamental, primary, or generally accepted tenet used to support objectives and to prepare standards and plans.
3. Standard: a criterion used as a basis of comparison to determine the adequacy of plan proposals to attain objectives.

Presented below is a complete list of the objectives and supportive principles and standards originally prepared by the Southeastern Wisconsin Regional Planning Commission under its regional transit planning efforts as adapted and modified for the Transit Development Program for the Racine urbanized area.

Objective No. 1

Transit facilities should be located and coordinated so as to effectively serve the existing land use pattern and promote the implementation of adopted land use plans.

Principle

Transit facilities serve as a supplement to the arterial street and highway system in the provision of access to, and the interconnection of, various land use activities and in support of essential economic and social activities. Different land uses vary widely in their need for accessibility and the various elements of a transportation system vary widely in the type and level of accessibility provided. The various points and levels of accessibility provided by transportation systems should be properly related to the types and levels of accessibility required by various land uses, through both the design of the transportation system and the location of land uses, and the different transportation modes should be coordinated so that points of high accessibility provided by different modes will coincide.

Standards

1. Inter-city mass transit facilities should be provided as warranted to connect¹ noncontiguous urban centers² with each other.
2. Suburban mass transit facilities should be provided as warranted to connect³ noncontiguous urban development with the urban center of the urbanized area.
3. Urban mass transit facilities should be provided as warranted, within communities or groups of communities constituting major parts of a metropolitan area, to serve⁴ the following land uses:
 - a. Loading points of inter-city and suburban mass transit facilities.
 - b. Major, secondary, and strip development shopping areas.⁵
 - c. Major industrial centers.⁶
 - d. Major recreational sites.
 - e. Universities, colleges, public vocational schools, and secondary schools.
 - f. Institutions such as public buildings, libraries, children's homes, general and emergency hospitals, rehabilitation and mental health centers, medical centers and sanitariums.

¹Inter-city mass transit facilities shall be considered to "connect" noncontiguous urban centers when the transit vehicle provides immediate access to the urban center and/or to another transit subsystem serving the urbanized area of which the center is a part.

²The term "urban center" is defined as the largest identifiable concentrated complex of commercial activities within a single contiguous urban area.

³Suburban mass transit facilities shall be considered to "connect" noncontiguous urban development within the urban center of an urbanized area when the transit vehicle provided immediate access to the urban center and to an urban mass transit system serving the urbanized area.

⁴Urban mass transit facilities shall be considered to "serve" given land uses when the transit vehicle provides access to within an over-the-road distance of one-quarter mile of the land use to be served.

⁵For definitions, see Chapter III, pages 22-24.

⁶A major industrial cluster shall be defined as an existing or officially designated concentration of manufacturing, wholesaling, and related-use establishments providing employment for over 50 persons.

3. g. Special use areas such as zoological and botanical gardens, civic centers, fairgrounds, and stadiums.
- h. Public housing complexes containing more than 100 dwelling units.
- i. Senior citizen centers.
4. Circulation-distribution local urban mass transit service should be provided as warranted within the urban center or other extensive land use complexes served by inter-city, suburban, or urban mass transit facilities to distribute passengers from the other transit facilities throughout the land use complex to be served.

Objective No. 2

Transit facilities should promote total transportation flexibility allowing transit service to be readily adapted to changes in the requirements of, or the balance between private and mass transportation, and to changes in transit technology.

Principle

In order to obtain maximum efficiency of, and benefits from, a transit system it is necessary that the facilities be designed and developed to potentially serve the travel demand forecast for the future.

Standards

1. Suburban and urban mass transit facilities should be located and designed to readily permit the extension of service to developing residential and employment areas.
2. Inter-city and suburban mass transit facilities should be adaptable to serving a variety of transportation functions in addition to the movement of people.

Objective No. 3

Transit facilities should provide a means of access to areas of employment and essential services for all segments of the population, but especially for low-to-middle income families and others who do not or cannot operate an automobile.

Principle

The transportation system serves to provide access to areas of employment and essential services, such as health, education, and recreation. Public mass transportation is needed to assure that this access is available to all segments of the population.

Standards

1. Urban mass transportation systems should provide levels of service commensurate with potential demand. Service should be such that during peak periods at least 50 percent of the urban population and all low income population resides within:
 - a. 30 minutes overall transit travel time of at least 50 percent of the employment opportunities.
 - b. 30 minutes overall transit travel time of a major retail shopping and service center.
 - c. 30 minutes overall transit time of a hospital and/or medical or public health center.
 - d. 30 minutes overall transit time of a major public outdoor recreational area.
 - e. 40 minutes overall transit time of vocational and higher educational centers.
2. Urban mass transit routes should be provided at intervals of no more than one-half mile in residential areas having a population density of seven dwelling units per net acre or greater.

Objective No. 4

Transit facilities should be located and designed to provide user convenience and comfort, thereby promoting transit utilization.

Principle

In order to realize the potential benefits of a transit system, the system must

attract ridership. To do this, the feature of reduced transit travel time must be supplemented by features of transit user convenience and comfort.

Standards

1. The loading factor for inter-city mass transit service should not exceed 100 percent. The loading factor for suburban and urban mass transit service should not exceed 110 percent where headways are greater than 10 minutes, 125 percent where headways are 5-10 minutes, and 150 percent where headways are less than five minutes.
2. Operating headways of urban mass transit facilities should not exceed:
 - a. 30 minutes during weekday peak hours.
 - b. 60 minutes during weekday daylight, non-peak hours.
 - c. 60 minutes during weekday, evening hours.
 - d. 60 minutes during weekend hours.
3. Overall transit travel time on circulation-distribution urban mass transit facilities should not exceed 10 minutes.
4. Passengers shelters shall be provided at major loading points where boarding passenger volumes exceed 50 persons per day. As a minimum, all passenger shelters shall be of an attractive design that provides good shelter from the weather and that will permit the transfer of the shelter to another location with only the base being lost in the relocation. In addition, considerations regarding heating and lighting the shelters should be made.
5. Paved platforms shall be provided at all transit loading and unloading points and all such points shall be marked by attractive bus stop signs.
6. Each urban mass transit vehicle should be retired and replaced at the end of its maximum service life; and in this respect, maximum service life for buses with a seating capacity of over 25 passengers and powered by a diesel engine shall generally be considered to average:
 - a. 12 years for buses averaging more than 50,000 miles per year.

6. b. 15 years for buses averaging less than 50,000 miles per year.

Maximum service life for buses with a seating capacity of less than 25 passengers and powered by a gasoline engine, and averaging more than 20,000 miles per year shall generally be considered to average six years.

7. All suburban and urban mass transit vehicles should be air-conditioned.
8. All transit vehicles should be equipped with two-way radio communication equipment.

Objective No. 5

Transit facilities should be located and designed in relation to the urban environment so as to minimize any harmful effects they may have on the surrounding physical environment and to assist in the improvement of the design of the total urban environment.

Principle

The environment, as perceived by all of the senses, affects the physical and mental health and the well being of people; and as a feature of the urban environment, transit facilities have an impact on the quality of the total urban environment.

Standards

1. All transit vehicles should be washed and cleaned daily and be painted in a manner aesthetically pleasing to the eye.
2. All transit facilities should be located and designed so as to create a minimum of noise disturbance.
3. Air pollution produced by the transit system should be minimized.
4. All transit facilities should be located so as to avoid destruction of visually pleasing buildings, structures, and natural features, and to avoid interferences with vistas to such features.

Objective No. 6

The transit system should be economical and efficient, meeting all other objectives at the lowest possible cost.

Principle

The total resources of the urbanized area are limited and any undue investment in transit facilities and services must occur at the expense of other public and private investment. Therefore, total costs should be minimized for the desired level of service.

Standard

The sum of the transit facilities operating and capital investment costs should be minimized over the plan design period. This includes consideration of the following factors:

- a. Cost of vehicles.
- b. Cost of yards and shops.
- c. Operating costs.

ROUTES AND SCHEDULES

Route Analysis

Flash City Transit Company currently operates ten fixed radial routes from the Racine Central Business District to various areas primarily within the City of Racine (See Map 4-1).

The effectiveness of coverage by transit routes is generally measured by walking distance standards. One of the standards set forth earlier in this Chapter specifies that the local urban mass transit service area should include an over-the-road distance of one-quarter mile on each side of the bus route. As can be seen in Map 4-1, the present service provided by Flash City Transit Company provides excellent coverage within the City of Racine. The only deficiencies noted are that no service is provided west of Lathrop Avenue in the southern part of the city, and no service is provided south of Durand Avenue except along Drexel Avenue. The only

urban density population concentration outside the City of Racine that is not served is the Village of Sturtevant. It was also noted in the Southeastern Wisconsin Regional Planning Commission mass transit user survey that there was some transit ridership whose origin or destination was located in the low density population area of the Village of Wind Point. Several routes are spaced close enough together that an overlapping of the service area for each route exists.

As stated in Chapter III, the population of the study area was 133,624 in 1970. The population of the service area of the Flash City Transit Company as reported in the National Transportation Study by the Regional Planning Commission is 101,417 persons.⁷ This would indicate that the present transit service encompasses approximately 76 percent of the population of the study area. Also as reported in the National Transportation Study, employment in the study area totaled 49,325 persons. The employment served by mass transit totaled 34,089 persons, or approximately 69 percent of the total employment opportunities. This relatively low percentage of employment served may be attributed to the large number of industries located along Durand Avenue between Green Bay Road and the Village of Sturtevant which are not served by mass transit.

Standard 3 under the first objective lists the land uses and major generators that should be served by urban mass transit. Each will be evaluated below:

* Inter-City and Suburban Mass Transit Loading Points: Loading points of inter-city and suburban mass transit facilities should be served by urban mass transit. Inter-city and suburban bus mass transit loading points are located in the central business district of the City of Racine and are presently served by mass transit. However, the loading point for inter-city railroad mass transit is the Amtrak depot located in the Village of Sturtevant, which is presently not served by urban mass transportation. Service to the inter-city

⁷"1974 National Transportation Study," Racine Urbanized Area - 1972 Inventory

rail depot represents a planning problem, since proposals have been advanced to re-route the Amtrak service over the Chicago & Northwestern Railroad passenger line, which line is better located to serve the central business district of the City of Racine and to interface with local transit service.

* Shopping Areas: All of the existing shopping areas shown on Map 3-4 are presently served by one or more transit routes.

* Industrial Centers: Two of the major industrial employment centers are not currently served by mass transit. They are delineated as areas five and six on Map 3-6 and are the areas located immediately west of Indiana Street along the right-of-way of the Chicago, Milwaukee, St. Paul and Pacific Railroad, and the industries located along Durand Avenue west of Green Bay Road. Some major industrial firms employing more than 50 people are scattered throughout the rural area of the study area and are not, therefore, served by mass transit.

* Recreational Sites: Major recreational sites not presently served by mass transit include Cliffside County Park, Hantschel Park, Johnson Park, Pritchard County Park, Reservoir Park, Sanders County Park, Shoop Park, and Petrifying Springs Park in Kenosha County (See Map 3-9).

* Schools: Since the majority of the school children are transported on "yellow" school buses, the need for service to secondary schools has been somewhat limited. All secondary schools within the urban developed area, however, are served except the Prairie School, located in the Village of Wind Point.

Among the colleges and universities of the Racine area, the College of Racine currently is without service. The University of Wisconsin-Parkside has limited service from the City of Racine provided by the UW- Parkside Vet's Club, but no coordination exists between that service and service provided by Flash City Transit Company.

* Institutions and Public Buildings: The City and County buildings within the

City of Racine are located within the central business district of the City of Racine and are served by urban mass transit. The two major private hospitals are also served, although service to the Racine County High Ridge Hospital is very limited being provided only two days per week.

- * Special Use Areas: The Racine Zoological Park is served by the Flash City Transit Company.
- * Senior Citizen Centers: Homes for the elderly identified in Chapter III and not served by urban mass transit include the Lincoln Village Convalescent Center, St. Catherine's Nursing Home, and St. Monica's Senior Citizens Home. Those homes for the elderly with only limited service include the Shoop Memorial Building, the Racine County Institutions, and the Lincoln Manor Apartments.
- * Special Population Groups: Special population groups, including minority concentrations, low income concentrations, elderly concentrations, and those without automobiles tend to be located in the older, more densely populated areas of the City of Racine. These areas are also the areas best served by transit; and no concentration of these special population groups are located farther than a quarter mile from any bus route.
- * Route Design: Basically, for medium and small cities, transit routing is of two types: through routing and cycle-routing. Through routing is simply the routing of buses from one side of the city to the other--generally, although not necessarily, through the central business district. Such routing is often called "cross town" routing. Cycle-routing is the routing of buses into the central business district and then back out again over the same line, usually at a fixed time interval. The latter type of route design is presently used in Racine.

Because all routes are oriented to the central business district, and because a significant proportion of person trips are non-central business district oriented, the operation of the present system entails a large

percentage of transfers. With nearly a third of the ridership transferring at the central business district stop, a certain amount of confusion exists during the transfer time period. The buses do not line up in consecutive route number order, but rather in the order they are supposed to arrive at the CBD stop. Even though signs indicate where each bus stops, some patrons are given a limited amount of time to find the correct bus. More importantly, the large percentage of transfers also result in longer travel time for most users of the system.

The present large looping routes serve a large portion of the urban area with a minimum number of buses and drivers. The loops, however, should not have layovers at the outbound end, as this results in a delay of time for passengers. If a loop is necessary, it should be small and have a short running time over the loop portion of the route. In Racine, some of the loops are too large. Route 9, on its inbound run, never actually returns over the same streets it follows on its outbound run. Routes 1, 3, 5, and 7 also have large loops which results in longer travel time for some passengers. The use of the large loops results in service area overlap because the routes are in very close proximity to each other (See Map 6-1). This duplication of effort results in a low productivity of only 1.3 revenue passengers per vehicle mile for 1973. For the most part, the routes follow major arterial and collector streets where intersections are protected with stop signs. However, some routes do traverse local streets in some portions of the city, and this is undesirable because of the lower speeds involved, and the decreased safety of passing through uncontrolled intersections.

* Schedule Design: The amount of service which is scheduled for a given route must be balanced with the volume of patronage on that route and with system-wide requirements generated by other routes. There are two basic types of

This is a detailed map of Racine, Wisconsin, showing the city's layout, major roads, and surrounding areas. The map is oriented with North at the top. Key features include the Racine River, the Racine Harbor, and the Racine Peninsula. The city is divided into several wards, numbered 1 through 10. The map also shows the surrounding counties: Racine, Milwaukee, and Kenosha. The map is a black and white line drawing with various symbols for roads, water, and buildings.

SOURCE: SEWRPC

scheduling for cities the size of Racine: cycle operation and non-cycle operation. Under a cycle-schedule, all buses leave the central business district, or other terminus, at the same time, with one bus assigned to each route. This requires that each route be approximately the same length in terms of round trip time. The Racine system currently uses this type of scheduling. The advantage of the system is the no-wait transfer at the central terminal point. The chief disadvantage is inflexibility. Lengthening or shortening one route means putting all the other routes out of phase, and the temptation to maintain the status quo with respect to transit service in Racine has been almost irresistible under these circumstances. Currently, during peak periods, some of the routes are "out of phase". The time differential between the first and last bus arriving in the CBD has been observed to be as great as eight minutes. Routes 7 and 9 have particular problems maintaining their schedules during the peak periods due to heavy use and traffic conditions.

Noncycle scheduling is the scheduling of each route individually. This type is much more complex than cycle-scheduling, because it demands coordination between routes for purposes of transferring. Noncycle scheduling, with its attendant flexibility, offers more opportunity for scheduling to be used as a marketing tool.

The long forty minute headway period used throughout the day has a definite negative effect upon patronage. Customers prefer a time-clock orientation at major points along a route, and this currently is not practiced. Once a bus leaves either end of the line in Racine, it has a maximum of 20 minutes to reach the other end of the line. The faster the driver arrives at the other end of the line, the longer the layover he can take. The service makes no special provisions for passing by factories or other places of employment at shift change times, and this results in considerable inconvenience to people who want to use the bus to go to or return from work. The service period

also affects people who work later in the day. With no service after 6:30 p.m. it is impossible for any second shift worker to ride home by mass transit. In addition, evening shopping, recreational, or school trips are not possible. The use of the extremely small 19-passenger bus combined with the long headways has resulted in severe cases of overloading on some routes, especially during the peak periods. As many as 50 passengers have been observed on a single 19-seat bus. This results in extreme discomfort to the rider, and the operator cannot operate the bus in a safe manner when it is severely overcrowded.

MANAGEMENT

In urban transportation, as in other fairly complex endeavors, management--rather than hardware, location or operating rights--is the key to success. Despite its importance, transit management has received suprisingly little attention.

Flash City Transit Company does an admirable job of keeping its buses on the streets, and generally operating on time. The fact that the Operations Manager is "on the street" during the time period that buses are in operation leads to schedule adherence, driver courtesy, and driver safety. The problem is that the hours of operation are too long and the transit system too large to be the responsibility of one person. The Public Relations Director helps in this regard, but must be concerned about her own duties as well.

The fact that the company shares office, storage, and maintenance facilities with Flash City Cab Company, Inc. results in many in-kind services to Flash City Transit Company at no direct cost to the transit company. Until recently, no rent was charged for storage of transit buses within the Flash Cab garage. Such in-kind services will have to be recognized, and monies required to pay for such services should be budgeted.

A policy deficiency may be the lack of an adequate driver training program. Of the 18 accidents listed for 1973 in Table 4-5, as many as ten appear to be the result of operator error. Additional safety requirements and training for drivers lead to good public relations if the transit system can remain accident free.

Due to lack of finances, the transit company has not followed a practice of fleet replacement. Its present fleet has reached the end of its useful life and should be retired. The company does practice preventive maintenance, but the program is incomplete. Investigation indicates that the air-conditioning system on the buses usually does not work, and until a recent repainting, the buses looked particularly worn and unpleasing.

Due to financial constraints, the Flash City Transit Company does not have a transit marketing program. Transit currently suffers from a "negative" image in Racine, primarily because of the threatened abandonment and resulting subsidy of the operation. The company has made an attempt to improve the schedules it distributes to the public by including a route map; however, the schedules still only list start times at the beginning point of each line.

Financially, the company has shown a loss in each full year of its operation (See Appendices C-F). The constant decline in the number of revenue passengers was the primary reason for the loss through 1972, and in 1973 sharp increases in labor costs more than offset gains in revenue made from the small increase in ridership. The company has been receiving a subsidy from the City of Racine since late in 1972, and only this has prevented the complete collapse of the transit operations. Flash City Cab Company, Inc. has lost its bus contract for the Unified School District for the Fall of 1974, and this will leave only the taxicab operation left as a viable source of income for the company. It is obvious that an increasing amount of subsidy will be necessary to keep the transit system operating.

FARE STRUCTURE

The fare structure is the means by which mass transit customers are charged by the transit operator for services rendered. The fare structure should provide different prices according to the amount of service used and/or the cost to the operator

of providing the customers with different kinds and amounts of service.⁸ The fare structure should also serve to maximize revenues or passengers (as the case may be) through an overall pricing policy.

There are three basic types of fare structures currently employed in the United States urban mass transit systems: flat fare, graduated fare based on zones, and graduated fare based on mileage. A flat fare system, the type used in Racine, is simply a single fare established for all trips regardless of length. A graduated fare based on zones involves dividing the city into a small number of zones and charging the rider a base fare plus incremental charges for traveling into subsequent zones. A graduated fare based on mileage is a refinement of the zone system in which the rider's fare is based on the distance traveled plus a base fare. Other special fare structure considerations include transfer charges, premium fares, and reduced fares for certain groups of riders.

In addition to charging a flat base fare, the Flash City Transit Company has a transfer charge, and a reduced fare for children. The transfer charge in Racine amounts to a full 25 percent of the basic adult cash fare. Since the transit system is presently designed so that transferring is required to travel from one area of the city to any other area, the transfer charge seems especially inequitable since the riders paying these extra fares are also those who suffer the greatest inconvenience in completing their trips. In effect, they pay twice--in time and money. Special fares for children result in some inequity to the adult rider, who, in effect, is subsidizing these transit rides. However, the benefits in this case may outweigh the costs involved. Reduced fares for children may encourage whole families to ride mass transit at a more reasonable cost.

There appears to be a trend to also provide reduced fares for senior citizens. In most cases, the fare reduction applies only during off-peak hours, and some proof of age is needed (such as a special identification card or medicare card). The fare

⁸"Short-Range Transit Planning," U.S. Department of Transportation, July 1973.

reduction typically amounts to 25 to 30 percent of the regular fare, and in some cities, senior citizens ride free. Currently, no reduction of this kind exists for senior citizen transit riders in Racine. Several studies have clearly shown a social need for senior citizens to have inexpensive public transportation available, and that need is well accepted by most citizens and transit operators.⁹ The recent introduction of dial-a-ride service for persons 55 years of age or older by the Racine Area Wide Model Project on Aging in conjunction with the City of Racine is an attempt to fulfill this social need. However, the service is limited to three days per week, certain times of the day, and is limited to certain trip purposes. The lack of coordination between the dial-a-ride service and regular service provided by Flash City Transit Company may also lead to a fragmentation of transit service in the Racine area.

The use of the flat fare system in Racine appears to be the most appropriate for the present type of service. It simplifies the payment and collection of fares which result in a speeding of service and reduced costs. However, it discourages short transit trips in favor of longer trips. It decreases the mobility of those without autos, especially for shopping, convenience and other neighborhood trips, but tends to benefit longer commuter trips to the CBD and elsewhere. The mass transit user survey conducted by the Southeastern Wisconsin Regional Planning Commission indicated that only 11 percent of all transit riders in the Racine area were made for the purpose of "home-based shopping," while home-based school and work commuter trips accounted for over 50 percent of the transit rides. The present transit system is underutilized for non-commuter type trips, and this may be a partial result of the fare structure policy.

FARE COLLECTION

The transit industry has been essentially a "cash and carry" business which has had to give high priority to very simple methods of fare collection. With the

⁹ "Short-Range Transit Planning," U.S. Department of Transportation, July 1973.

exception of the very limited number of school children who use passes, all passengers on Flash City Transit buses pay cash fares. During the late 1960's there was widespread adoption of the requirement that customers entering a bus have the correct change to pay the exact fare. The rationale behind the exact fare concept is to reduce the risk of robberies of drivers on the theory that, if the driver has no change and all fares are deposited in a locked box secured to the bus, there is less temptation to attempt a theft. Fortunately, this has not been a major problem in Racine up to this time and drivers will make change for customers. It has been demonstrated in other cities that exact fare requirements tend to discourage ridership. Many mass transit systems across the country use ticket books or tokens sold in quantity at a discount as an incentive for increased transit ridership. Some transit systems offer weekly or monthly passes at considerable savings per ride over paying cash fares. None of these incentives and conveniences are available on the Racine system.

FARE PRICING

Typical adult fares in the United States have risen by 25 to 50 percent in the past ten years so that most base fares now range from 25 to 50 cents. In Racine, the current adult fare is 40 cents, which is near the top of the range of transit fares. However, the average fare of 34 cents compares very closely to the national average fare of 34.02 cents.¹⁰ Transfer charges have been found to range from free to a top of ten cents. Flash Transit Company's ten cent charge for a transfer ranks it with the nation's highest in charges for transfers.

USER CHARACTERISTICS

Chapter IV described the transit user in the Racine area as identified in the Southeastern Wisconsin Regional Planning Commission mass transit user survey. It was found that over 70 percent of the riders surveyed did not possess a driver's license. While this does not relate directly to automobile availability, it does indicate that a large percentage of the transit riders in Racine could not have made

¹⁰"1972-1973 Transit Fact Book," American Transit Association, page 11.

their trips as automobile drivers. The socio-economic profile of the typical transit rider in Racine is a young, white female who has a family income under \$12,000 per year. This would indicate that any marketing approach to transit in the Racine area should be directed to the above described group to maintain them as riders, and a diligent effort should be directed towards all other socio-economic groups, as this market has not been fully tapped for transit ridership potential.

ENERGY CONSIDERATIONS

Facts concerning the nation's energy supply and its use are far from conclusive. There is a consensus, though, that the nation should be concerned about an energy shortage of undetermined severity and duration. Motor fuel costs in the Racine area have risen sharply over the first three months of 1974. Against this background, demand for petroleum products continues to rise. Conservation of petroleum can be encouraged by the doubling up of commuters in carpools, the greater use of mass transit facilities, more bicycling and walking, and even the encouragement of leisure time activities close to home. There are a number of imponderables in the energy picture. Technological breakthroughs could make feasible new sources of energy from coal or nuclear power. While this is all conjectural, it does suggest a turbulent period ahead for the use of energy resources. A contraction of demand brought about by higher fuel prices could mean a contraction of travel unless available fuel were utilized in the most energy efficient modes of transportation. At a minimum, mass transit must be given high priority in any allocation of fuel resources.

LEGISLATIVE ANALYSIS

The Wisconsin Statutes provide many organizational alternatives for the operation of an urban mass transit system. These Statutes were described in detail in Chapter V. Analysis of State legislation defining city governmental powers for the operation of a transit system indicate that the following alternatives are available to the Racine area:

1. City Operation of Transit System

Section 66.065(5) of the Wisconsin Statutes permits a city to own, operate, or engage in a municipal bus transportation system. Should a transfer of ownership occur, this Statute allows for the orderly transfer of a common carrier certificate from the previous operator of the mass transit system to the city.

2. City Transit Department

Section 66.065(5) of the Wisconsin Statutes permits a city to absorb a bus operation into an existing department which could be expanded to accomodate the added responsibility. This would result in some economy to the overall operation, but the overall transit operation could also suffer from neglect due to lack of management attention. The operation of transit involves unique aspects totally unknown in other areas. Schedule making is a prime example. Transit would assume a low profile in any combined operation which is not desirable in communities which pride themselves on civic achievements.

3. City or County Transit Commission

Section 66.943 of the Wisconsin Statutes provides for a City Transit Commission composed of not fewer than three members appointed by the mayor or city manager. Section 59.967 of the Wisconsin Statutes provides for a County Transit Commission to be composed of not less than seven members to be appointed by the County Board. Both of these Acts allow transit systems to extend its system into adjacent territory outside its boundaries for up to 30 miles. This should be sufficient to service all urban development in the Racine area. The major drawback of a City Transit Commission is that any area outside the City of Racine would have no voice in the operation of the transit system since the members are appointed by the mayor.

4. City Transit-Parking Commission

Sections 66.068, 66.079, and 66.943 of the Wisconsin Statutes provides for a combined City Transit-Parking Commission which has all the powers of a City Transit Commission with parking responsibilities added. Unified regulation and administration of parking and mass transit could lead to some economies, as well as control over parking availability and pricing, which has a bearing on mass transit ridership.

5. County Ownership and Operator

Sections 59.968(4) to (8), 59.969, 63.03(1)(x), and 67.04(1)(aa) of the Wisconsin Statutes permits a county to acquire a transportation system by purchase, condemnation or otherwise provide funds for the operation and maintenance of such a system. This is the most comprehensive enabling legislation available regarding operation of a mass transit system. One unique feature allows a county to use any street without obtaining a license or permit from a municipality for the operation of a transit system within its boundaries.

At the local level, legislation consists of several municipal ordinances involving bus stops, speed limits, and the inspection of buses. Additional ordinances may be necessary in the future regarding public conduct on buses, and parking regulations in bus stops.

The City of Racine has several sources of outside funding available. For capital expenditures, the Urban Mass Transportation Administration can provide up to 80 percent of cost. The Wisconsin Department of Transportation may provide up to 2/3's of any operating deficit of a transit operation and 100 percent of the cost of a transit demonstration project. All of these sources of funds have many requirements attached to receive them, but none of these should be a barrier to the City of Racine to be eligible for the funds.

SUMMARY

In order to evaluate the existing transit system, a set of definitions, objectives, principles, and standards was developed. The evaluation showed that the transit system serves the land area of the urban area fairly well but certain problems exist in regard to route design and transferring. Routes with large loops cause travel time delays for the passengers and service duplication. The cycle scheduling method employed has rendered the system nearly inflexible. The lack of time points along the routes for improved schedule adherence has served to further damage an already negative image of transit in Racine. The transfer fee currently charged merely penalizes the transit patrons who have the least desirable ride in terms of lost time and inconvenience. The headways and hours of service do not serve the needs of the work trips in Racine. Flash City Transit Company has failed to make a profit in any of its full years of operation. A number of alternatives are available to the Racine area in the form of enabling legislation should it desire to take over the existing transit operation. These and other alternatives are further detailed in the following chapter.

CHAPTER VII

TRANSIT IMPROVEMENT ALTERNATIVES

INTRODUCTION

Descriptions of the Racine urbanized area, the transit system serving that area, and the transit rider have been presented in previous chapters of this report. Those chapters have described the existing land use pattern of the urban area including the existing locations of major trip generators, the existing population densities, and the location of groups having special transportation needs. This chapter will present alternative management and operational improvements as well as marketing and maintenance programs required to provide a viable public transportation system within the Racine urban area. Six management alternatives will be described ranging from private ownership to public management. In addition, four operational alternatives will be described including maintaining the existing system, headway reductions and complete realignment of the route structure. Attendant to each operational alternative, ridership projections, capital costs, operating costs, and revenue estimates will be presented.

Management Alternatives

The provision of adequate and effective urban mass transportation at the most reasonable cost depends greatly on the ownership and management structure of the transit system. Chapter V has shown that there are ownership and management alternatives in the State of Wisconsin to fit almost any local situation. The advantages and disadvantages of the six basic alternative forms of management available to the City of Racine are summarized in Table 7-1.¹

The management alternatives are:

1. Private ownership and operation without public assistance. This private

¹"Basic Ownership and Management Alternatives," Wisconsin Department of Transportation/Division of Planning, 1973.

Table 7-1

BASIC MANAGEMENT ALTERNATIVES

1. Private ownership and operation without public assistance:

Advantages

- A. No public investment
- B. Maintains private enterprise
- C. No public body involvement in personnel problems such as labor contract negotiations

Disadvantages

- A. Does not insure continued operation
- B. Does not realize general tax savings (such as property taxes)
- C. Management not totally responsive to local government
- D. Service designed for commercial and not community needs
- E. Not eligible for any Federal funds for capital purchases or State operating aid.

2. Private ownership and operation with public subsidy

Advantages

- A. Does not involve capital investment by public body
- B. Preserves private enterprise
- C. No public body involvement in personnel problems such as labor contract negotiations
- D. Temporarily postpones fare increases, service reductions, and/or discontinuance of service
- E. Allows for some public control over management policies
- F. Eligible for State operating aid

Disadvantages

- A. Does not realize general tax savings (such as property taxes)
- B. Does not create an incentive for improving service
- C. Does not obviate the need for fare increases and service reductions
- D. Does not stimulate innovation or experimentation
- E. If subsidy does not include return on investment, does not allow for replacement of equipment
- F. Not eligible for any Federal funds for capital purchases

3. Lease buses and other facilities and operate with public employees:

Advantages

- A. Does not involve capital outlay by public body
- B. Provides direct managerial

Disadvantages

- A. Cost of lease includes all taxes, higher interest rates, and profit of leasing company

Table 7-1
(cont.)

<u>Advantages</u>	<u>Disadvantages</u>
3. B. control over levels and cost of service C. Eligible for State operating aid	B. Possible personnel problems including labor contracts, pensions and other employee benefits C. Not eligible for any Federal funds for capital purchases
4. Lease buses and other facilities and operate by management contract:	
<u>Advantages</u>	<u>Disadvantages</u>
A. Does not involve capital outlay by public body B. Provides direct managerial control over levels and cost of service C. Avoids personnel problems involving labor contracts, pensions, and other employee benefits D. Eligible for State operating aid	A. Cost of management control and lease include all taxes, higher interest rates, and profits B. Does not realize all tax savings of public operation C. Not eligible for Federal funds for capital purchases
5. Purchase system and operate with public employees:	
<u>Advantages</u>	<u>Disadvantages</u>
A. Secures full tax exemption B. Makes available public credit C. Provides direct control over levels and cost of service D. Eligible for Federal funds for capital purchases and State operating aid	A. Involves capital outlay by public body B. Generally requires new tax sources to meet capital and operational costs C. Possible personnel problems involving labor contracts, pensions, and other employee benefits
6. Purchase system and operate by management contract:	
<u>Advantages</u>	<u>Disadvantages</u>
A. Secures full tax exemption B. Makes available public credit and lower interest rates	A. Involves capital outlay by public body B. Generally requires new tax sources to meet capital and operating costs

Table 7-1
(cont.)AdvantagesDisadvantages

6. C. Provides direct ownership control over levels and cost of service
- D. Avoids personnel problems involving labor contracts, pensions, and other employee benefits
- E. Eligible for Federal funds for capital purchases and State operating aid

enterprise alternative generally has had great difficulty in surviving as evidenced by the declining number of such operations nationwide.

2. Private ownership and operation with public subsidy. This is the management alternative presently in existence in Racine today. There are many methods by which a local public body can subsidize a private transit operator. Most commonly used methods in Wisconsin are: Fixed weekly/monthly/yearly amount based on projected losses; amount equal to difference between actual revenues and expenses (expenses are usually determined by using a fixed unit cost, e.g. per mile or per hour); a fixed per hour or per mile expense figure with the city collecting all urban passenger revenues; and an amount equal to the cost of certain expense items, e.g. fuel and oil, insurance and/or utilities.
3. Lease buses and other facilities and operate with public employees.
4. Lease buses and other facilities and operate by management contract.
5. Purchase system and operate with public employees.
6. Purchase system and operate by management contract.

MARKETING PROGRAM

A fundamental component of nearly every successful enterprise is a solid marketing program. The primary goal of a public transit marketing program is to maximize the services provided in terms of meeting consumer needs. Such a program begins with three basic tasks:

1. determine who needs service,
2. determine what type of service is needed,
3. determine how to best provide that service.

These elements enable the transit management team to fully develop its product and, if properly priced and promoted, successfully "sell" the product to the consumers. While such a program may be quite complex and costly, it need not be so for a smaller transit organization. Such a marketing program must be employed as an

adjunct to each of the alternatives presented in this chapter. The thrust of such a program is simply to make the transit system consumer oriented. Responsibility for this will ultimately rest with the general manager.

People ride the bus because they desire to go from some origin to some destination. This subjects the transit industry to a threefold obligation:

1. these origins and destinations must be discovered and the links served,
2. the service must be reasonably priced in the eyes of the potential riders,
3. the potential riders must be aware that the service exists.

Meeting these three obligations will serve as the goals for a good marketing program. It should be noted that the first goal is basically an expression of consumer needs which are likely to change over time. A good marketing program will detect any changes in demand and allow the transit firm to perhaps alter some facet of its operation to serve any new consumer needs.

In Racine, where transit currently suffers from a "negative" image, it is recommended that as an immediate first step in a marketing program, a new color-coded route map be published showing all transit routes on the system, and pocket timetables be produced for each line on the system, showing times buses leave various points on each line. This information will give the rider a better image of the transit system, and will help the rider adjust to any changes made in the system.

MAINTENANCE PROGRAM

Regardless of the operational alternative used in the Racine area, it is important that a preventive maintenance program be instituted for the transit system. The goal of maintenance is to preserve a systematic pattern of transit operation as free from interruptions as possible by taking orderly and prescribed action. This effort is critical in the transit business since schedules for men and equipment must normally be programmed to operate the system in accordance with a strict timetable which will meet the needs of the public. A logical objective of a maintenance program, then, is to establish uninterrupted service on the transit system. Preventive

maintenance reduces the numbers of breakdowns by scheduling certain types of routine maintenance such as daily fueling inspection, mileage inspections, and battery and tire inspection. It will be important for the transit management team to develop the preventive maintenance program before the new maintenance facility is built, as the layout and design of the maintenance facility is of prime importance to the success of a preventive maintenance program.

OPERATIONS IMPROVEMENT ALTERNATIVES

In this section, four distinct alternative courses of action for the Racine urbanized area in terms of transit operating improvements are presented. Each alternative plan investigated is specifically related to a different level of service, which will reflect different levels of capital and operating costs, assumed ridership, and passenger revenues.

The four alternatives may be described as follows:

Alternative 1 - is a continuation of the existing system with no changes in routes or frequency of service, except to adjust to lower ridership levels. This action is, in effect, a "do-nothing" alternative.

Alternative 2 - involves the maintaining of the service at the present level, with minimal upgrading of equipment, and only minor expansion of routes and services. An objective of this alternative would be the preservation of the present ridership with minimal changes in transit service.

Alternative 3 - involves the same minimal expansion of routes and services as in Alternative 2, but provides for maximum improvement in terms of upgrading equipment and headways.

Alternative 4 - requires a commitment to a new system of expanding routes and services that includes the extension of routes into suburban areas, a route system of lineal design, and an increase in the

frequency of service. Unlike the other alternatives, this system is extremely flexible in terms of adjusting service to meet demands.

Each of the four alternatives are described below in terms of operations improvements, and then in terms of capital improvements and operation costs. It is assumed that under each of the alternatives, the existing system will be in operation "as is" for the remainder of calendar year 1974. Alternatives 3 and 4 are staged improvements utilizing Alternative 2 through 1975 and implementing service improvements in subsequent years. Each alternative requires the replacement of the existing rolling stock before 1976.

Alternative 1 - Continuation of Present Trends

This alternative allows for continuation of mass transit service in Racine exactly as it operates at the present time, with no changes in routes, schedules, or hours of operation. The historic trend in ridership volume under the present system shows a 59 percent decline in revenue passengers between 1968 and 1973 (see Table 4-1). It is estimated that this rate of decline may be expected to decrease to about five percent per year over the five year period from 1975 to 1979. The restoration of Saturday service and the motor fuel shortage may be expected to have a positive effect on ridership only through 1975, after which ridership is projected to continue the downward trend which has existed in the Racine area since 1959. Ridership is estimated to decline 3 percent by 1976 and 17 percent over the five year study period. Table 7-2 shows projected passenger volumes, vehicle miles, and vehicle hours for the five year planning period 1975-1979.

Table 7-2

Alternative 1 - Projections of Operating Data:
1974-1979

<u>Year</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Passengers	551,000	562,020	533,919	507,223	481,862	457,769
Vehicle Miles	440,000	440,000	440,000	440,000	440,000	440,000
Vehicle Hours	39,000	39,000	39,000	39,000	39,000	39,000
Passengers/ Vehicle Mile	1.25	1.28	1.21	1.15	1.10	1.04

Source: SEWRPC, and Wisconsin Department of Transportation

Bus requirements for this alternative will be the same as for the existing system. Ten buses are required to maintain the service and an additional three buses are needed as spares. Since ridership is projected to continue to decline under this alternative, buses similar in size to the present fleet in terms of passenger capacity should be considered for use.

Consequences of Alternative 1

At the end of five years this alternative produces a transit system that has continually reduced its usefulness to the residents of the Racine urbanized area. Using the Objectives, Principles, and Standards outlined in Chapter VI, it was determined that the route and schedule design of the system was inconvenient to the majority of the riders, especially for accommodating work trips. The chief disadvantage of the system was its inflexibility. Lengthening or shortening one route puts all other routes out of phase for the CBD transfer connection, and the temptation to retain the status quo in spite of declining ridership is overwhelming. This alternative cannot be considered a practical long term solution to the transit problems of the Racine area. It portrays a continuation of existing trends in transit ridership and on this basis alone can not be considered as a viable alternative, and is thereby not recommended as a possible course of action.

Alternative 2 - Minimum Improvement of Service

In consideration of the role that mass transit plays in the Racine community, the least that transit ought to attempt to do is to improve present service so as to hold the level of ridership at approximately its existing level. Alternative 2 proposes a modification of the existing route system with no changes in the existing headways of 40 minutes, or the number of buses required for operation.

Under this alternative, a modification of the present cycle-routing system is proposed with the number of routes being reduced from ten to six. As shown on Map 7-1, four of the new routes proposed would provide crosstown service with no transfer between Racine's north side and the areas to the south and west of the CBD. The present Route 1 would be combined with the present Route 6, the present Route 2 would be combined with the present Route 7, and the present Routes 3 and 4 would be combined with a modified Route 9. In addition, the present Route 10 would be extended to the north side of Racine via a new route on Douglas Avenue and LaSalle Street. The present Route 5 will remain unchanged, and the present Route 8 will continue to operate on the south side of Racine only.

Some of the large, inconvenient loops on the present route system would be eliminated under this alternative. The large loops on Routes 1 and 2 would be eliminated by the extension of the present Route 10 to the north side. The loops on present Route 8 would be eliminated, and the one-way routing on present Route 9 would be replaced with two-way routing on 16th Street. The elimination of these loops provides a more convenient and direct route for the rider, and eliminates service overlapping that exists on the present system. The large loops would still remain, however, on Route 5 and in the area presently served by Routes 3 and 4. Ridership on these routes is presently rather low, and to provide lineal route service to these areas would result in a very low passenger per mile ratio and lineal service would be impossible without increasing the size of the bus fleet.

All buses on the system would continue to meet in the Racine central business

The map displays the city of Racine, Wisconsin, with its surrounding areas including Caledonia, Mount Pleasant, and Wauwatosa. Major roads such as Highway 1, Highway 2, and Highway 3 are shown. The Kalamog River flows through the city, and Lake Michigan is to the east. Numbered circles (1-6) indicate key stops or transfer points along the proposed transit routes. A north arrow is located in the top right corner.

SOURCE: SEWRPC

district at the same time (every 40 minutes) to facilitate easy transferring. However, it would be expected that the amount of transferring would be reduced because of the four through routes provided.

Several new areas not presently served by transit would be served under the Alternative 2 system. The largest residential area not served by the present system is the area beyond the one-quarter mile zone west of Lathrop Avenue between 21st Street and Durand Avenue. This area would be served by extending the present Route 7 three blocks west to Kentucky Street. The major industrial employment center (number 5 on Map 3-8) which is presently not served by any transit line would be served by the Kentucky Street extension.

Another extension that would be possible under this alternative would be new service into the subdivision located directly south of the J. I. Case Plant east of State Highway 32 along the shore of Lake Michigan. This area is presently served only by Wisconsin Coach Lines, Inc. suburban service between the City of Milwaukee and the City of Kenosha. While the present service operates on State Highway 32, the new extension would operate on the Lakeshore Drive in the subdivision.

The other extension would be the operation of all buses to the Racine County High Ridge Hospital and County Home on the present Route 9, rather than the four buses per week that are currently operating to there. This extension would provide Racine residents with direct access to their County Hospital throughout the service hours of the transit system.

The implementation of the new route system in 1975 would result in an increase in vehicle miles without a significant increase in vehicle hours (See Table 7-3). A sizable increase in ridership could be expected to occur in 1976, when the average fare is recommended to be dropped from 35 cents to 25 cents, and new buses are recommended to be placed into service.

Table 7-3

Alternative 2 - Projections of Operating Data:
1974-1979

<u>Year</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Passengers	551,000	578,550	665,333	678,639	692,212	706,056
Vehicle Miles	440,000	526,712	526,712	526,712	526,712	526,712
Vehicle Hours	39,000	40,734	40,734	40,734	40,734	40,734
Passengers/Mile	1.25	1.10	1.26	1.29	1.31	1.34

Source: SEWRPC and Wisconsin Department of Transportation

Consequences of Alternative 2

While this alternative is a viable one, it is not a very desirable or attractive one. The chief criticism of this alternative is the same as that of Alternative 1: the system is not flexible. Patterns of land use development and demands for transportation service may be expected to change over the next five years in the Racine area. This alternative would not be able to respond readily to these changes because of its inflexibility. The route and schedule design, while a major improvement over Alternative 1, is still inconvenient to a large percentage of the ridership. The continued forty minute headways would not accommodate work trips very successfully, and no provision is made in this alternative for carrying students going to or from school. Some of the large loops, which are a discouragement to ridership, would still have to remain on the system under this alternative. In addition, some of the routes have very short running times, resulting in excessive layover time at both ends of the route, which results in an inefficient system. This alternative, while viable, could be expected to generate about a 20 percent increase in ridership by 1976 and over the five year study period. While the ridership increase is desirable, the alternative does not realize the maximum ridership potentials of other alternatives, and it locks the community into an inflexible system not capable of expansion.

Alternative 3 - Maximum Improvement of Service Within Existing System

This alternative uses the same route system as Alternative 2, but provides for double the level of service with headways on all routes operating at 20 minutes. In addition, the hours of operation would be expanded in 1978, with evening service extended to 9:30 p.m. (at 40 minute headways after 6:30 p.m.). Under this alternative, ridership is estimated to increase about 36 percent by 1976 and about 65 percent by 1979 (See Table 7-4). By 1976, new buses would be placed in service, the headways would be reduced from 40 minutes to 20 minutes, and the average fare would be reduced from 35 cents to 25 cents. This alternative would require the use of 23 buses, twenty of which would be in revenue service at any one time. The use of 20 minute headways would provide improved service especially for work and school trips on the transit system. Buses on the system would continue to meet in the Racine central business district at the same time (every 20 minutes) to facilitate easy transferring. However, the through routes would be expected to reduce the amount of transfers.

Consequences of Alternative 3

While this alternative would provide a high level of service, the use of the cycle-schedule system still renders the system highly inflexible to changes in demand for service. For example, when the new regional shopping center is completed at the intersection of Durand Avenue and Green Bay Road (See Map 3-4), whichever route is extended to serve the shopping center will be put out-of-phase with the rest of the system. What is needed for the Racine area is a transit system that is flexible enough to meet the changing needs of the people in the community. Moreover, this alternative, as were the previous two alternatives, is inefficient in that much time is wasted in layovers in order to keep the cycle-schedule system in operation.

Table 7-4

Alternative 3 - Projections of Operating Data: 1974-1979

<u>Year</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Passengers	551,000	578,550	752,115	789,721	868,693	912,128
Vehicle Miles	440,000	526,712	1,053,424	1,053,424	1,227,844	1,227,844
Vehicle Hours	39,000	40,734	81,468	81,468	98,298	98,298
Passengers/Mile	1.25	1.10	0.71	0.75	0.71	0.74

Source: SEWRPC and Wisconsin Department of Transportation.

Alternative 4 - Maximum Improvement of Service

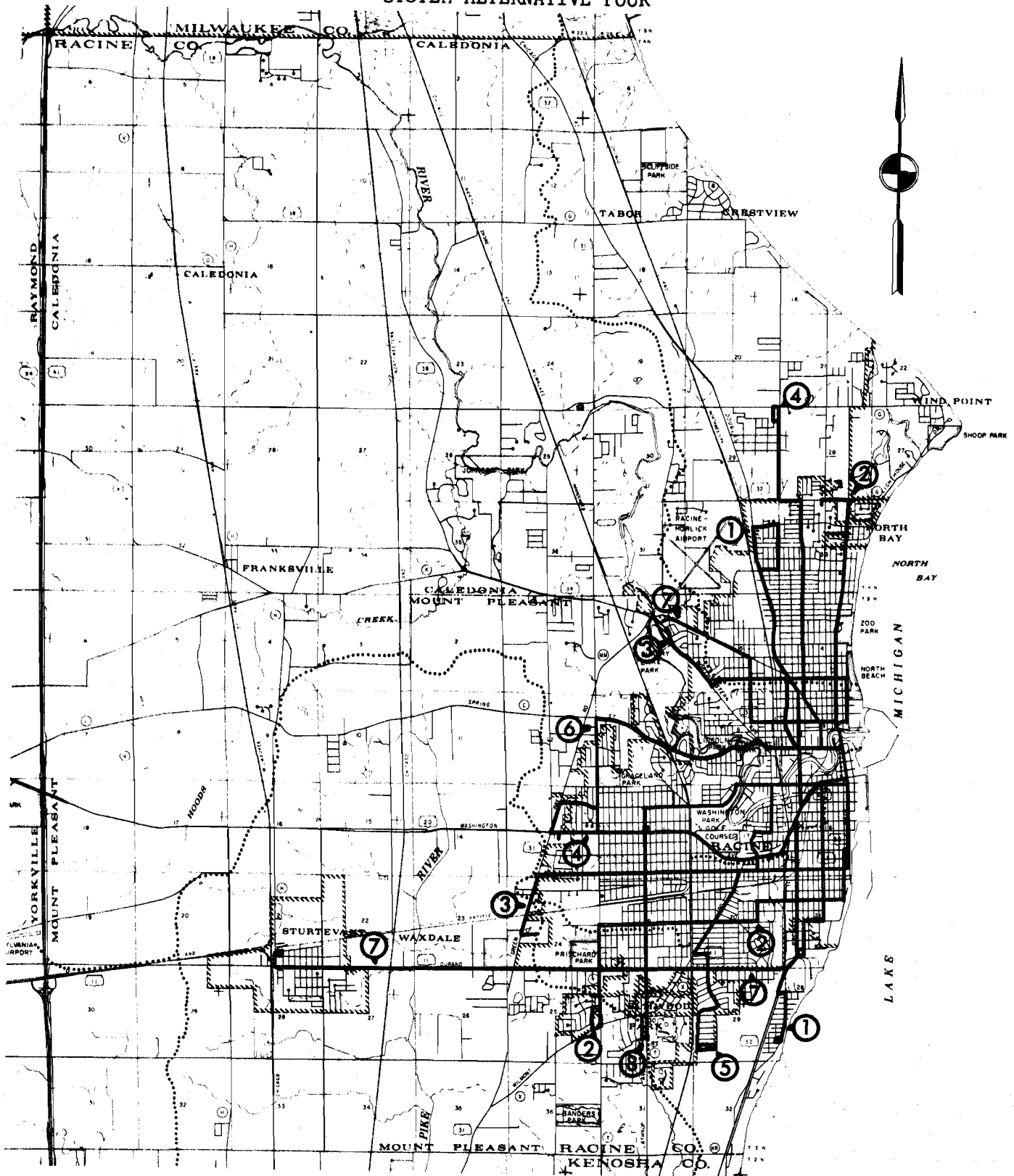
Under this alternative the transit system would provide greatly improved service, by operating over a completely new route system that would not only improve the level of service to the area presently served, but which would extend service into new areas where ridership might be developed. This alternative provides very good service to all residential areas of the City of Racine. Service is provided to areas south of Durand Avenue along Lakeshore Drive, Spruce Street, Lathrop Avenue, and Ohio Avenue. New service is provided along the entire length of Durand Avenue between STH 32 and the Amtrak depot in the Village of Sturtevant, and a new extension is provided along Charles Street between the Three Mile and Four Mile Roads.

The routes are designed in a lineal fashion to provide two-way service over most streets (See Map 7-2). Large loops would be eliminated in the system. Two small turn-around loops would be used on new Route 1 on the north end, and on new Route 5 on the west end. A new crosstown service that is not routed through the central business district is provided by Route 1. The route would connect the north area of Racine with employment centers--such as the J. I. Case Co.--on the south side of Racine, and provide transfer connections to all the other routes in the transit system.

The system would provide crosstown service on High Street between North Beach Park and Northwestern Avenue. This particular service is high on the priority list of improvements advocated by the Northside Redevelopment Project.² The route providing this service would also serve the Quarry Lake Park area, the central business district, major industries along 16th Street, and all three major hospitals. It is proposed that scheduling on this alternative be of the non-cycle type. This requires the scheduling of each route individually, which demands coordination between routes to facilitate transferring. Under this alternative, any rider entering the central business district from the north side of Racine would be able to transfer to any

²Racine Northside Redevelopment Project, "Preliminary Plan" p. 20.

SYSTEM ALTERNATIVE FOUR



The routing system shown provides eight routes which traverse approximately 117 round-trip route miles.

SOURCE: SEWRPC

route going to the west or south areas with no waiting. The same no-wait transfer would apply in the reverse directions. Headways on all lines would be a maximum of 30 minutes. A rider transferring from one north side line to another north side line--an unusual travel desire--would have a maximum wait of 15 minutes in the CBD. In addition, it is proposed that transfers would be permitted at any bus stop where two or more bus routes intersect. Under this alternative, the hours of system operation would be from 5:30 a.m. to 6:30 p.m. Monday through Friday, and from 7:00 a.m. to 6:00 p.m. on Saturdays. It is proposed that the service hours of Monday through Friday operation be expanded to at least 9:30 p.m. by 1978. This alternative would require 21 buses in revenue service at any one time, plus four buses as spares.

Using the 1/4 mile band criteria established in the Objectives, Principles, and Standards in Chapter VI, all major traffic generators within the Racine urbanized area would be served. A high level of service over several routes would also be provided to the areas where population groups with special transportation needs live in the Racine area. The transit system would adequately serve all of the secondary schools in the City of Racine, and it is recommended that the public transit system serve all students within the service area. This would eliminate the current needless duplication of service between yellow school buses and transit buses.

Ridership, vehicle miles and vehicle hour projections for the alternative system are presented in Table 7-5. Because of a lack of equipment, the Alternative 2 route system would have to be put into effect in 1975. In 1976, when new buses and equipment became available, the new routes and schedules would take effect. With new buses, new routes, expansion of service, a reduction in the average fare from 35 cents to 25 cents, a reduction of headways from 40 minutes to a maximum of 30 minutes, and an extensive marketing program, it is projected that ridership would increase by about 36 percent by 1976 and about 110 percent over the five year study period. It is recommended that the transit system begin carrying school children to secondary schools in the Fall of 1977, resulting in an additional 20 percent increase in ridership for that year.

Table 7-5

ALTERNATIVE 4 - PROJECTIONS OF OPERATING DATA:
1974-1979

<u>Year</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Passengers	551,000	578,550	752,115	902,538	1,110,122	1,165,623
Vehicle Miles	440,000	526,712	967,995	967,995	1,204,380	1,204,380
Vehicle Hours	39,000	40,734	86,379	86,379	101,679	101,679
Passengers/Mile	1.25	1.15	0.78	0.93	0.92	0.97

Source: SEWRPC and Wisconsin Department of Transportation

Consequences of Alternative 4

The term "maximum" as used in the description of this alternative may be misleading, in that the provision of bus transit service does not have a practical maximum per se. Alternative 4 represents a reasonable advanced stage to which the transit system could be developed. In projecting a transit improvement program of the magnitude discussed under this alternative, there is always the possibility of either increasing or decreasing the rate of growth after the first two or three years have passed, when more is learned about how the public is accepting the changes. If ridership seems to be growing at a rate in excess of what is anticipated here, then there is no reason why improvements in serving cannot be accelerated. If, however, the opposite is true, and the system does not receive the acceptance that is anticipated, then cutbacks in service can be made. Therein lies the greatest advantage of Alternative 4. The system is extremely flexible, and allows for extensions or deletions of service without upsetting the entire transit system. For example, if the Village of Sturtevant decides it does not want mass transit service, Route 7 of this alternative could be cut back to Ohio Street with no difficulty. Alternative 4 provides a high level of transit service to the Racine community which can easily change to meet changes in travel demand. A flexible system such as Alternative 4 can also compliment such services as the dial-a-ride bus for the elderly by providing convenient transfers between facilities at specific locations.

CAPITAL COSTS OF THE VARIOUS ALTERNATIVES

Certain capital costs will have to be incurred by the transit system no matter which operational alternative is chosen for service to the Racine community. New buses will be needed immediately, as well as a garage and maintenance facility. Since the agreement between Flash City Transit Company and the City of Racine for operation of the transit system expires at the end of 1974, it will be necessary to purchase the present revenue equipment of the transit operator in order to continue service until new buses can be delivered. Because of the desperate need for new equipment, it is recommended that all capital purchases be made as soon as possible in 1975. A contingency fund of ten percent of the total capital costs is included under each alternative to allow for rapidly changing costs of capital equipment.

Alternative 1 - Capital Needs

Under this alternative, new equipment needed would include 12 new, 31 to 33 passenger, radio-equipped, air-conditioned buses, a bus storage garage and maintenance facility, passenger shelters, and bus stop signs. A complete roster of capital needs and costs is presented in Table 7-6.

The purchase of 12 new buses allows for two spares, a minimum amount for a system this size. Registering locked vault fareboxes provide a count of passengers as well as protection against theft. Two-way mobile radios in each bus provide instant communications between driver and dispatcher in case of accident, break-down, traffic congestion, or other emergency. A replacement bus can be dispatched immediately, if needed, with minimal disruption of service. The garage facility assumes 500 sq. ft. of storage space per bus.

Alternative 2 - Capital Needs

This alternative requires the identical equipment as in Alternative 1 except that 45-passenger air-conditioned buses are needed to handle slightly increased passenger volumes. Since some routes have been extended, some additional bus stop signs will also be necessary. Table 7-7 shows a complete roster of capital needs and costs for Alternative 2. For transit systems as small as Alternative 1 and 2 are, major maintenance repairs and towing can be done with a contract with private firms, and bus washing and cleaning can be done by hand by transit personnel.

Table 7-6

CAPITAL NEEDS AND COSTS FOR ALTERNATIVE 1
MAY, 1974

Quantity	Description	Cost
13	Flxible 19 pass. buses from Flash Transit at \$500 each	\$ 6,500
13	Non-registering fareboxes at \$150 each	\$ 1,950
New Equipment:		
12	31 to 33 passenger air-conditioned buses at \$35,000 each	\$420,000
15	Registering lock vault fareboxes at \$1,000 each	\$ 15,000
13	Two-way mobile radios at \$1,000 each	\$ 13,000
1	Radio Base unit	\$ 4,000
1	Supervisor's car	\$ 3,000
1	Garage, office, and maintenance facility	\$118,800
	Garage site paving and lighting	\$ 30,000
	Office furniture	\$ 2,500
645	Bus stop signs at \$20 each installed	\$ 12,900
1	Hydraulic 2-post hoist	\$ 12,000
1	Fuel-dispensing equipment	\$ 2,000
1	Steel fuel storage tank (10,000 gal. capacity installed)	\$ 4,000
	Maintenance Equipment and Parts	\$ 18,000
5	Passenger shelters (12 x 5 x 8 covered and 3 sides plexi-glas)	\$ 12,500
Total Capital Costs		\$676,150
Contingency Fund (10 percent of total capital costs)		67,615
Grand Total		\$743,765
Federal Share (80 percent)		\$595,012
Local Share (20 percent)		148,753
		\$743,765

Source: Various manufacturers of equipment and Wisconsin Department of Transportation, Division of Planning.

Table 7-7

CAPITAL NEEDS AND COSTS FOR ALTERNATIVE 2

MAY, 1974

<u>Quantity</u>	<u>Description</u>	<u>Cost</u>
13	Flxible 19 pass. buses from Flash Transit Co. at \$500 each	\$ 6,500
13	Non-registering fare boxes at \$150 each	\$ 1,950
New Equipment:		
12	45-passenger air-conditioned buses at \$48,000 each	\$576,000
15	Registering lock-vault fareboxes at \$1,000 each	\$ 15,000
13	Two-way mobile radios at \$600 each	\$ 13,000
1	Radio base unit	\$ 4,000
1	Supervisor's car	\$ 3,000
1	Garage, office, and maintenance facility	\$118,800
	Garage site paving and lighting	\$ 30,000
	Office furniture	\$ 2,500
680	Bus stop signs at \$20 each installed	\$ 13,600
1	Hydraulic 2-post hoist	\$ 12,000
1	Fuel-dispensing equipment	\$ 2,000
1	Steel fuel storage tank (10,000 gal. capacity installed)	\$ 4,000
	Maintenance equipment and parts	\$ 18,000
5	Passenger shelters (12 x 5 x 8 covered and 3 sides plexi-glas)	<u>\$ 12,500</u>
Total Capital Costs		\$833,450
Contingency Fund (10 percent of total capital costs)		<u>83,345</u>
Grand Total		\$916,795
Federal Share (80 percent)		\$733,436
Local Share (20 percent)		<u>183,359</u>
		\$916,795

Source: Various manufacturers of equipment and Wisconsin Department of Transportation, Division of Planning.

Alternative 3 - Capital Needs

This alternative requires 23 buses of the 45-passenger, radio-equipped, air-conditioned type and a larger garage facility to store the buses. With a system this size, an automatic drive-through bus washer is also recommended. Again, major maintenance repairs can be done with a contract with private firms. Table 7-8 shows a complete roster of capital needs and costs for Alternative 3.

Alternative 4 - Capital Needs

This alternative is similar to Alternative 3 in capital needs except that 25 buses are required for the system, and because of extensions of various routes, about 935 bus stop signs are needed. An automatic drive-through bus washer is recommended for this system. Table 7-9 shows a complete roster of capital needs and costs for Alternative 4.

No provision was made under any of the alternatives for site acquisition costs for the transit storage garage and maintenance facility. The City of Racine owns land suitable for the location and construction of the proposed facility.

OPERATING COSTS

The cost of operating a transit system is a function of the level and frequency of service provided. The operating costs may be divided into seven categories which include:

Equipment - Maintenance personnel salaries, fringe benefits, and related taxes; materials; supplies; utilities; and tires and tubes.

Fuel and Lubrication - Fuel costs and all lubricating oil cost.

Transportation - Bus operator salaries, fringe benefits, and related taxes.

Advertising - Advertisement and promotional aspects of the transit marketing program.

Insurance - Insuring the buses, workmen's compensation, fire, and buildings and grounds.

Table 7-8

CAPITAL NEEDS AND COSTS FOR ALTERNATIVE 3

MAY, 1974

Quantity	Description	Cost
13	Flxible 19 passenger buses from Flash Transit Co. at \$500 ea.	\$ 6,500
13	Non-registering fareboxes at \$150 each	\$ 1,950
New Equipment:		
23	45-passenger, air-conditioned buses at \$48,000 each	\$1,104,000
25	Registering lock-vault fareboxes at \$1,000 each	\$ 25,000
24	Two-way mobile radios at \$1000 each	\$ 24,000
1	Radio base unit	\$ 4,000
1	Supervisor's Car	\$ 3,000
1	Garage, office, and maintenance	\$ 218,900
	Garage site paving and lighting	\$ 30,000
	Office furniture	\$ 3,000
680	Bus stop signs at \$20 each installed	\$ 13,600
1	Hydraulic 2-post hoist	\$ 12,000
1	Fuel-dispensing equipment	\$ 2,000
1	Steel fuel storage tank (10,000 gal. capacity installed)	\$ 4,000
	Maintenance equipment and parts	\$ 25,000
1	Drive-through automatic bus washer installed	\$ 25,000
1	Water circulation system for washer	\$ 6,000
5	Passenger shelters (12 x 5 x 8 covered and 3 sides plexi-glas)	\$ 12,500
Total Capital Costs		\$1,520,450
Contingency Fund (10 percent of total capital costs)		152,045
Grand Total		\$1,672,495
Federal Share (80 percent)		\$1,337,996
Local Share (20 percent)		334,499
		\$1,672,495

Source: Various manufacturers of equipment and Wisconsin Department of Transportation, Division of Planning.

Table 7-9

CAPITAL NEEDS AND COSTS FOR ALTERNATIVE 4

MAY, 1974

<u>Quantity</u>	<u>Description</u>	<u>Cost</u>
13	Flxible 19 passenger buses from Flash Transit at \$500 ea.	\$ 6,500
13	Non-registering fareboxes at \$150 each	\$ 1,950
New Equipment:		
25	45-passenger, air-conditioned buses at \$48,000 each	\$1,200,000
29	Registering lock-vault fareboxes at \$1,000 each	\$ 29,000
26	Two-way mobile radios at \$1,000 each	\$ 26,000
1	Radio base unit	\$ 4,000
1	Supervisor's car	\$ 3,000
1	Garage, office, and maintenance facility	\$ 229,900
	Garage site, paving and lighting	\$ 30,000
	Office furniture	\$ 3,000
935	Bus stop signs at \$20 each installed	\$ 18,700
1	Hydraulic 2-post hoist	\$ 12,000
1	Fuel dispensing equipment	\$ 2,000
1	Steel fuel storage tank (10,000 gal. capacity installed)	\$ 4,000
	Maintenance equipment and parts	\$ 25,000
1	Drive-through automatic bus washer installed	\$ 25,000
1	Water circulation system for washer	\$ 6,000
20	Passenger shelters (12 x 5 x 8 covered and three sides plexiglas)	\$ 50,000
Total Capital Costs		\$1,676,050
Contingency Fund (10 percent of total capital costs)		167,605
Grand Total		\$1,843,655
Federal Share (80 percent)		\$1,474,924
Local Share (20 percent)		368,731
		\$1,843,655

Source: Various manufacturers of equipment and Wisconsin Department of Transportation, Division of Planning.

Administration - Administrative personnel salaries, fringe benefits, and related taxes; supervisor's automobile operation; and miscellaneous office expenses.

Taxes - Federal fuel tax, vehicle registration and permits.

Most significant of the seven cost categories is the transportation amounting to about 60 percent of the total operating costs. As such it should be noted that continued inflation over the next five years could have a profound effect on the operating costs projected in the tables. All operating costs, including salaries with related fringe benefits and taxes, used herein are comparable to those costs reported by other transit systems of similar size and geographic location. Operating costs in 1974 dollars for each alternative are presented in Tables 7-10, 7-11, 7-12, and 7-13.

A comparison of revenues versus expenses projected over the next five years shows each alternative with a deficit. The amount of deficit is determined by the average fare. For 1975, it was assumed that the average fare would remain constant at its present level of approximately 35 cents. However, in 1976, under each viable alternative the average fare would be reduced to 25 cents. The basic theory underlying arguments for reducing transit fares to low levels is an economic one. It is believed that the lower the price, the higher the demand for the service will be assuming all other factors remain equal. A lower price for transit should thus influence modal choice and attract people from their cars to public transportation. The financial evaluations indicate, however, that the revenue generated by the increase in ridership attributable to the proposed fare reduction do not offset the decrease in revenue resulting from the reduction in the fare. This would provide general benefits to both transit users and non transit users in the form of reduced traffic congestion and air pollution, improved energy conservation, and a decreased need for costly new highway and parking facilities. In addition, lower fares would be of significant importance to transit dependent persons, and particularly such

Table 7-10
 ALTERNATIVE 1 - Operating Costs: 1974-1979

Operating Cost	Year				
	1975	1976	1977	1978	1979
Equipment	\$ 76,990	\$ 76,990	\$ 76,990	\$ 76,990	\$ 76,990
Fuel & Lubrication	30,930	30,930	30,930	30,930	30,930
Transportation	248,980	248,980	248,980	248,980	240,980
Advertising	3,000	3,000	3,000	3,000	3,000
Insurance	26,750	26,750	26,750	26,750	26,750
Administration	38,760	38,760	38,760	38,760	38,760
Taxes	4,770	4,770	4,770	4,770	4,770
Total Cost	\$430,180	\$430,180	\$430,180	\$430,180	\$430,180
Annual Miles	440,000	440,000	440,000	440,000	440,000
Cost/Mile	97.8¢	97.8¢	97.8¢	97.8¢	97.8¢

ASSUMPTIONS:

1. Personnel requirements:

1 General Manager	Administrative Personnel
1 1/2 Secretary-Clerical	
1 Lead Mechanic	Equipment Personnel
1 Mechanic's Helper	
1 Cleaner-Handyman	
22 Operators	Transportation Personnel

28

2. The transit system, in terms of miles operated and personnel required, will remain constant throughout the five year period.

Source: SEWRPC

Table 7-11
 ALTERNATIVE 2 - Operating Costs: 1974-1979
 1974 Dollars

Operating Cost	Year				
	1975	1976	1977	1978	1979
Equipment	\$ 84,270	\$ 84,270	\$ 84,270	\$ 84,270	\$ 84,270
Fuel & Lubrication	37,030	37,030	37,030	37,030	37,030
Transportation	248,980	248,980	248,980	248,980	248,980
Advertising	3,000	3,000	3,000	3,000	3,000
Insurance	26,750	26,750	26,750	26,750	26,750
Administration	38,760	38,760	38,760	38,760	38,760
Taxes	5,560	5,560	5,560	5,560	5,560
Total Cost	\$444,350	\$444,350	\$444,350	\$444,350	\$444,350
Annual Miles	526,712	526,712	526,712	526,712	526,712
Cost/Mile	84.4¢	84.4¢	84.4¢	84.4¢	84.4¢

ASSUMPTIONS:

1. Personnel requirements:

1 General Manager	Administrative Personnel
1 1/2 Secretary-Clerical	
1 Lead Mechanic	Equipment Personnel
1 Mechanic's Helper	
1 Cleaner-Handyman	
22 Operators	Transportation Personnel

28

2. The transit system, in terms of miles operated and personnel required, will remain constant throughout the five year period.

Source: SEWRPC

Table 7-12
 ALTERNATIVE 3 - Operating Costs: 1974-1979
 1974 Dollars

Operating Cost	Year				
	1975	1976	1977	1978	1979
Equipment	\$ 84,270	\$ 172,640	\$ 172,640	\$ 187,290	\$ 187,290
Fuel & Lubrication	37,030	74,060	74,060	86,320	86,320
Transportation	248,980	486,360	486,630	531,880	531,880
Advertising	3,000	5,000	5,000	5,000	5,000
Insurance	26,750	47,250	47,250	47,250	47,250
Administration	38,760	71,250	71,250	71,250	71,250
Taxes	5,560	11,060	11,060	12,610	12,610
Total Cost	\$444,350	\$ 867,890	\$ 867,890	\$ 941,600	\$ 941,600
Annual Miles	526,712	1,053,424	1,053,424	1,227,844	1,227,844
Cost/Mile	84.4¢	82.4¢	82.4¢	76.7¢	76.7¢

ASSUMPTIONS:

1. In 1975, Alternative No. 2 will be implemented.
2. Assuming new buses will arrive by January 1, 1976, Alternative No. 3 will be implemented in 1976.
3. Costs will rise and employee requirements will change when the hours of operation are extended in 1978.
4. Personnel requirements:

1975--See Alternative No. 2
 1976-1977

1 General Manager	
1 Dispatcher/Scheduler	Administrative Personnel
1 Scheduler/Dispatcher	
1 Secretary	
1 Foreman	
1 A Mechanic	
1 B Mechanic	
1 Utility Man	Equipment Personnel
1 Cleaner	
43 Operators	Transportation Personnel

1978-1979

Same as 1976-1977 only the required operators increases by four men to 47 operators.

Source: SEWRPC.

Table 7-13
 ALTERNATIVE 4 - Operating Costs: 1974-1979
 1974 Dollars

Operating Cost	Year				
	1975	1976	1977	1978	1979
Equipment	\$ 84,270	\$165,470	\$165,470	\$ 185,320	\$ 185,320
Fuel & Lubrication	37,030	68,060	68,060	84,670	84,670
Transportation	248,980	520,580	520,580	622,420	622,420
Advertising	3,000	5,000	5,000	5,000	5,000
Insurance	26,750	50,750	50,750	50,750	50,750
Administration	38,760	71,250	71,250	71,250	71,250
Taxes	5,560	10,330	10,330	12,430	12,430
Total Cost	\$444,350	\$891,440	\$891,440	\$1,031,840	\$1,031,840
Annual Miles	526,712	967,995	967,995	1,204,380	1,204,380
Cost/Mile	84.2¢	92.1¢	92.1¢	85.7¢	85.7¢

ASSUMPTIONS:

1. In 1975, Alternative No. 2 will be implemented.
2. Assuming new buses will arrive by January 1, 1976, Alternative No. 4 will be implemented in 1976.
3. Costs, miles operated, and employee requirements will increase in 1978 when the hours of operation are extended.
4. Personnel requirements:

1975--See Alternative No. 2
 1976-1977

1 General Manager	
1 Dispatcher/Scheduler	Administrative Personnel
1 Scheduler/Dispatcher	
1 Secretary	
1 Foreman	
1 Assistant Foreman	
1 A Mechanic	
1 B Mechanic	
1 Utility Man	Equipment Personnel
1 Cleaner	
46 Operators	Transportation Personnel

1978-1979

Same as 1976-1977 except the operators required increased by nine men to 55 operators.

special population groups as low income, senior citizens, handicapped persons, and minority groups enabling increased mobility for the same economic investment. Lower fares will also encourage travel to the downtown area of Racine, because the transit system would remain central business district oriented under all of the viable alternatives considered. This should stimulate economic activity in the area.

It is also recommended that fare incentives be employed to attract additional ridership. The use of passes or ticket books at a reduced rate is an effective marketing tool for attracting new ridership. In some cities, local merchants provide free one-way fares with purchases in their stores. The use of zone fares or premium charges should be discouraged, as this complicates the fare structure to the point of becoming confusing to the user.

Tables 7-14, 7-15, 7-16, and 7-17 show revenue and expense projections for each alternative over a five year period. Advertising revenue is that generated from selling space on the buses for advertisements, and charter revenue is that generated for group charters to special events. Charter operations, while a large revenue producer on some transit operations, is not expected to produce a substantial amount of income for the Racine system because buses are needed for regular service six days a week.

Also shown in the expense-revenue comparison tables for each alternative is the amount of state operating aid that can be expected to support the system. This projection makes the assumption that the Wisconsin State Legislature will continue to appropriate monies at the same rate or greater to cover two-thirds of the operating deficit.

UW-PARKSIDE SERVICE

A problem that any new transit system will face in the Racine area is providing transportation service to the University of Wisconsin-Parkside Campus located approximately two miles south of the Racine-Kenosha County line. The present service provided by the UW-Parkside Vet's Club uses an obsolete school bus and provides only

Table 7-14

ALTERNATIVE 1 - REVENUE AND EXPENSE COMPARISONS:
1974 to 1979

	Year				
	1975	1976	1977	1978	1979
Ridership Projections	562,020	533,919	507,223	481,862	457,769
Average Fare	35¢	35¢	35¢	35¢	35¢
Passenger Revenue	\$ 196,710	\$ 186,870	\$ 177,530	\$ 168,650	\$ 160,220
Advertising Revenue	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Charter Revenue	\$--	\$--	\$--	\$--	\$--
Total Revenue	\$ 200,710	\$ 190,870	\$ 181,530	\$ 172,650	\$ 164,220
Operating Expense	\$ 430,180	\$ 430,180	\$ 430,180	\$ 430,180	\$ 430,180
Income (Loss)	\$(229,470)	\$(239,310)	\$(248,650)	\$(257,530)	\$(265,960)
State Operating Aid 2/3's	\$ 152,980	\$ 159,540	\$ 165,767	\$ 171,687	\$ 177,308
Local Operating Aid 1/3	\$ 76,490	\$ 79,770	\$ 82,883	\$ 85,843	\$ 88,652

Source: SEWRPC

Table 7-15

ALTERNATIVE 2 - REVENUE AND EXPENSE COMPARISONS:
1974 to 1979

	Year				
	1975	1976	1977	1978	1979
Ridership Projections	578,550	665,333	678,639	692,212	706,056
Average Fare	35¢	25¢	25¢	25¢	25¢
Passenger Revenue	\$ 202,490	\$ 166,330	\$ 169,660	\$ 173,050	\$ 176,510
Advertising Revenue	\$ 4,000	\$ 5,000	\$ 6,000	\$ 6,000	\$ 6,000
Charter Revenue	\$--	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000
Total Revenue	\$ 206,490	\$ 172,330	\$ 176,660	\$ 180,050	\$ 183,510
Operating Expense	\$ 444,350	\$ 444,350	\$ 444,350	\$ 444,350	\$ 444,350
Income (Loss)	\$(237,860)	\$(272,020)	\$(267,690)	\$(264,300)	\$(260,840)
State Operating Aid 2/3's	\$ 158,573	\$ 181,347	\$ 178,460	\$ 176,200	\$ 173,893
Local Operating Aid 1/3	\$ 79,287	\$ 90,673	\$ 89,230	\$ 88,100	\$ 86,947

Soure: SEWRPC

Table 7-16

ALTERNATIVE 3 - REVENUE AND EXPENSE COMPARISONS:
1974 to 1979

	Year				
	1975	1976	1977	1978	1979
Ridership Projections	578,550	752,115	789,721	868,693	912,128
Average Fare	35¢	25¢	25¢	25¢	25¢
Passenger Revenue	\$ 202,490	\$ 188,030	\$ 197,430	\$ 217,170	\$ 228,030
Advertising Revenue	\$ 4,000	\$ 10,000	\$ 10,000	\$ 11,000	\$ 11,000
Charter Revenue	\$--	\$ 1,000	\$ 1,000	\$ 2,000	\$ 2,000
Total Revenue	\$ 206,490	\$ 199,030	\$ 208,430	\$ 230,170	\$ 241,030
Operating Expense	\$ 444,350	\$ 867,890	\$ 867,890	\$ 941,600	\$ 941,600
Income (Loss)	\$(237,860)	\$(668,860)	\$(659,460)	\$(711,430)	\$(700,570)
State Operating Aid 2/3's	\$ 158,573	\$ 445,907	\$ 439,640	\$ 474,287	\$ 467,047
Local Operating Aid 1/3	\$ 79,287	\$ 222,953	\$ 219,820	\$ 237,143	\$ 233,523

Source: SEWRPC

Table 7-17

ALTERNATIVE 4 - REVENUE AND EXPENSE COMPARISONS:
1974 to 1979

	Year				
	1975	1976	1977	1978	1979
Ridership Projections	578,550	752,115	902,538	1,110,122	1,165,628
Average Fare	35¢	25¢	25¢	25¢	25¢
Passenger Revenue	\$ 202,490	\$ 188,030	\$ 225,640	\$ 277,530	\$ 291,410
Advertising Revenue	\$ 4,000	\$ 11,000	\$ 11,000	\$ 12,000	\$ 12,000
Charter Revenue	\$--	\$ 1,000	\$ 1,000	\$ 2,000	\$ 2,000
Total Revenue	\$ 206,490	\$ 200,030	\$ 237,640	\$ 291,530	\$ 305,410
Operating Expense	\$ 444,350	\$ 891,440	\$ 891,440	\$1,031,840	\$1,031,840
Income (Loss)	\$(237,860)	\$(691,410)	\$(653,800)	\$(740,310)	\$(726,430)
State Operating Aid 2/3's	\$ 158,573	\$ 460,940	\$ 435,867	\$ 493,540	\$ 484,287
Local Operating Aid 1/3	\$ 79,287	\$ 230,470	\$ 217,933	\$ 246,770	\$ 242,143

Source: SEWRPC

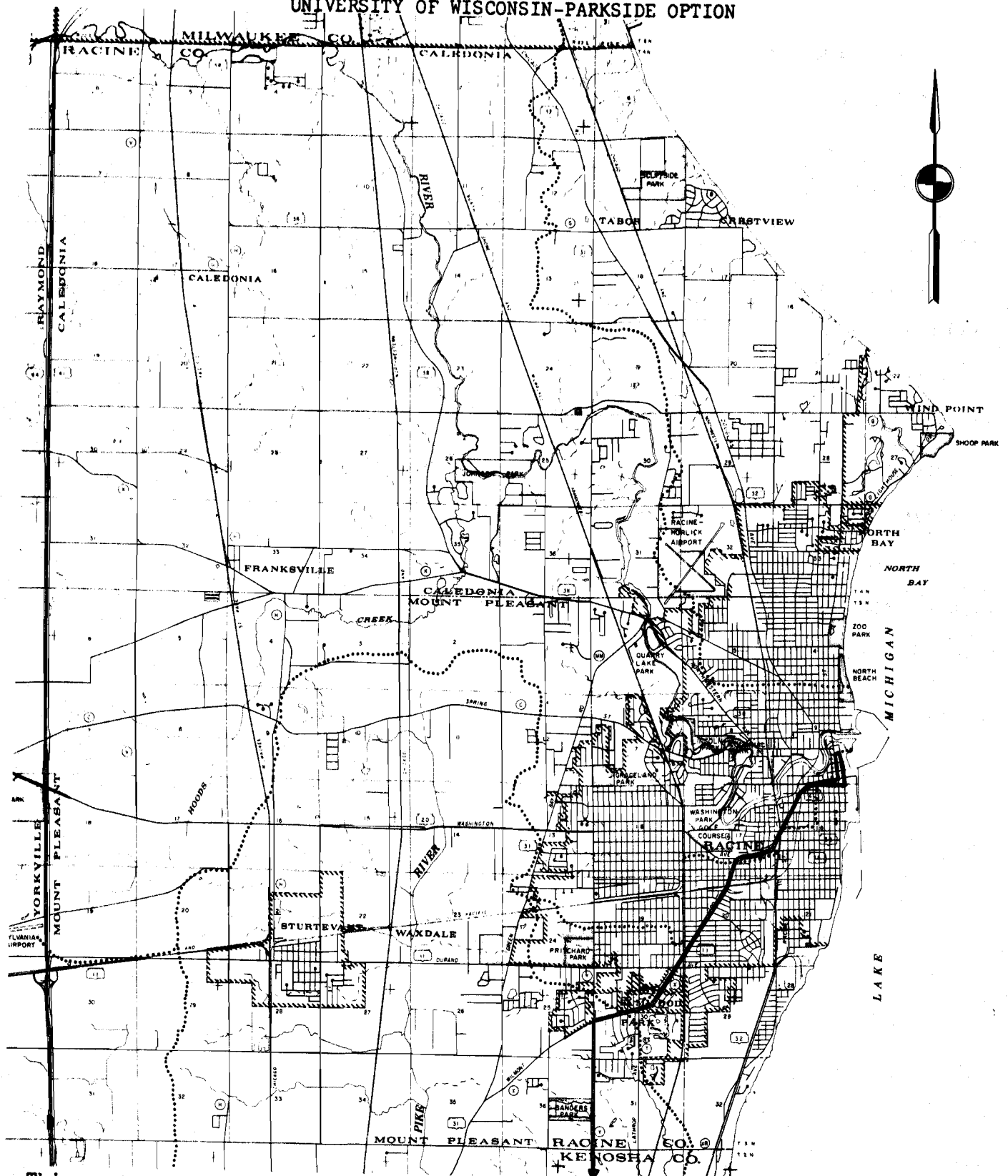
three trips from Racine to the campus in the morning and four trips from the campus to the Racine area in the afternoon. Because the bus used is chartered from a company that does not have Common Carrier status, no fares may be collected on this bus. The collection of fares for individual rides are handled as passengers disembark from the bus on the campus, which is undesirable for efficient fare collection.

As a possible alternative to the present service, bus service to the campus could be provided as an integrated part of the regular transit system in Racine. The route that is recommended could best be integrated into Alternative 4, but would be compatible with any of the other alternatives as well. The special route would operate from the central business district of the City of Racine via 6th Street, Washington Avenue, Taylor Avenue, and Meachem Road to the campus (See Map 7-3). The reverse route would be the same except for operating on 7th Street instead of 6th Street. The bus would run hourly, with arrivals and departures from the campus at times most convenient for students going to and from class. The recommended fare for this service is 50¢ one-way. Going to the campus, riders could board any bus in Racine and transfer to the Parkside bus by paying the difference in fare. Returning from the campus, all riders would pay the full 50¢ fare, and transfers would be free. Under each of the alternatives, the Parkside route would intersect all other bus routes operating in the City of Racine. This is especially convenient under Alternative 4, where the crosstown services provide convenient connections to the UW-Parkside route. The service would operate during the same hours as the city system, with extensions for night service if desired. Any local share of an operating deficit resulting from this service should be borne entirely by the university under a contract agreement with the City of Racine. Costs of the service are presented in Table 7-18 for service from 7:00 a.m. to 6:00 p.m., and in Table 7-19 for service from 7:00 a.m. to 10:00 p.m.

SUMMARY

The City of Racine is faced with a serious problem--the deterioration of its transit system. Four alternatives as to what to do have been presented in this

UNIVERSITY OF WISCONSIN-PARKSIDE OPTION



This route would provide service from the City of Racine to the University of Wisconsin-Parkside and would traverse approximately 17 round trip route miles.

SOURCE: SEWRPC

Table 7-18

UNIVERSITY OF WISCONSIN-PARKSIDE BUS SERVICE ^a
AT 50 CENT ONE-WAY FARE AND TRANSFER PRIVILEGES

<u>Daily One-Way Rides</u>	<u>Daily Revenue</u>	<u>Daily Cost</u>	<u>Difference</u>	<u>Annual Profit</u>	<u>Local Share of Deficit^b</u>
350	\$122.50	\$120.75	+ \$ 1.75	\$ 297.50	\$ None
300	\$105.00	\$120.75	-(\$15.75)	-(\$ 2,677.50)	892.50
250	\$ 87.50	\$120.75	-(\$33.25)	-(\$ 5,652.50)	1,884.00
200	\$ 70.00	\$120.75	-(\$50.75)	-(\$ 8,627.50)	2,876.00
150	\$ 52.50	\$120.75	-(\$68.25)	-(\$11,602.50)	3,867.50

^a Revenue figured at an average fare of 35.0 cents. Costs are assumed to be \$10.50 per hour of operation. Hours of operation are 6:55 a.m. to 5:55 p.m. Annual figures are assumed at 170 days per year operation. Lower ridership during exam periods may lower revenue.

^b Local share is one-third of total deficit.

SOURCE: SEWRPC

Table 7-19

UNIVERSITY OF WISCONSIN-PARKSIDE BUS SERVICE ^a
AT 50 CENT ONE-WAY FARE AND TRANSFER PRIVILEGES
WITH EVENING SERVICE

<u>Daily One-Way Rides</u>	<u>Daily Revenue</u>	<u>Daily Cost</u>	<u>Difference</u>	<u>Annual Profit</u>	<u>Local Share of Deficit</u>
500	\$175.00	\$162.75	+ \$ 12.25	\$ 2,082.50	\$ None
450	\$157.50	\$162.75	-(\$ 5.25)	-(\$ 892.50)	297.50
350	\$122.50	\$162.75	-(\$ 40.25)	-(\$ 6,842.50)	2,281.00
250	\$ 87.50	\$162.75	-(\$ 75.25)	-(\$12,792.50)	4,264.00
150	\$ 52.50	\$162.75	-(\$110.25)	-(\$18,742.50)	6,247.50

^a Revenue figured at an average fare of 35.0 cents. Costs are assumed to be \$10.50 per hour of operation. Hours of operation are 6:55 a.m. to 9:55 p.m. Annual figures are assumed at 170 days per year operation. Lower ridership during exam periods may lower revenue.

^b Local share is one third of total deficit.

SOURCE: SEWRPC

chapter. Alternative 1 is a "do-nothing" alternative that may be expected to result in further deterioration of the system and a further loss of riders. Alternatives 2, 3, and 4 involve various improvements in the levels of service and routing system which may be expected to result in an increase in ridership. Regardless of the alternative selected, new capital equipment will have to be purchased at once. Needed are new buses, a garage to store them, and a maintenance facility and related equipment. The city will also have to choose a management alternative for operation of the system. The costs of operating the system may be expected to exceed the revenues generated by the fare box, and a public subsidy will be necessary to keep the buses running. The local share of the costs for the next five years is presented in Table 7-20. The city must also decide if it wishes to operate transit service to the University of Wisconsin-Parkside Campus, and to various other suburban areas, and what share of the cost these institutions and municipalities should pay. The transit management team selected will have to institute a preventive maintenance program, and a strong marketing program with fare incentives to attract new ridership. Of the three viable alternatives, Alternative 4 provides the highest level of service to the community and is most flexible to change. However, it also carries with it the highest cost in terms of the operating deficit. If the system is allowed to transport school children within the city, some of this deficit may be offset by savings in yellow school bus cost to the community.

Table 7-20
TOTAL LOCAL SHARE EXPENDITURES - 1974 DOLLARS^b

	1975 ^a	1976	1977	1978	1979	Total
Alternative 1	\$229,899	\$ 79,770	\$ 82,883	\$ 85,843	\$ 88,652	\$ 567,047
Alternative 2	\$267,170	\$ 90,673	\$ 89,230	\$ 88,100	\$ 86,947	\$ 622,120
Alternative 3	\$421,274	\$222,953	\$219,820	\$237,143	\$233,523	\$1,334,713
Alternative 4	\$448,018	\$230,470	\$217,933	\$246,770	\$242,143	\$1,385,334

^a1975 local share includes both operating subsidy and capital expenses.

^bUW-Parkside service not included. See Tables 7-18 and 7-19.

CHAPTER VIII

THE RECOMMENDED PLAN

INTRODUCTION

Six alternative management plans and four basic alternative transit operations plans were formulated as documented in Chapter II, and evaluated for possible implementation in the Racine urbanized area. Based upon the evaluation of these alternatives, the Technical Coordinating and Advisory Committee recommended that the City of Racine obtain ownership of the bus system, operate it under a management contract with a private management firm, and move toward providing transit service as outlined under Alternative Operational Plan 4, which plan recommends a new transit route configuration, extension of services to new areas, improved scheduling, and reduced fares. This chapter presents a description of the recommended plan together with a description of a five-year development program to implement the plan.

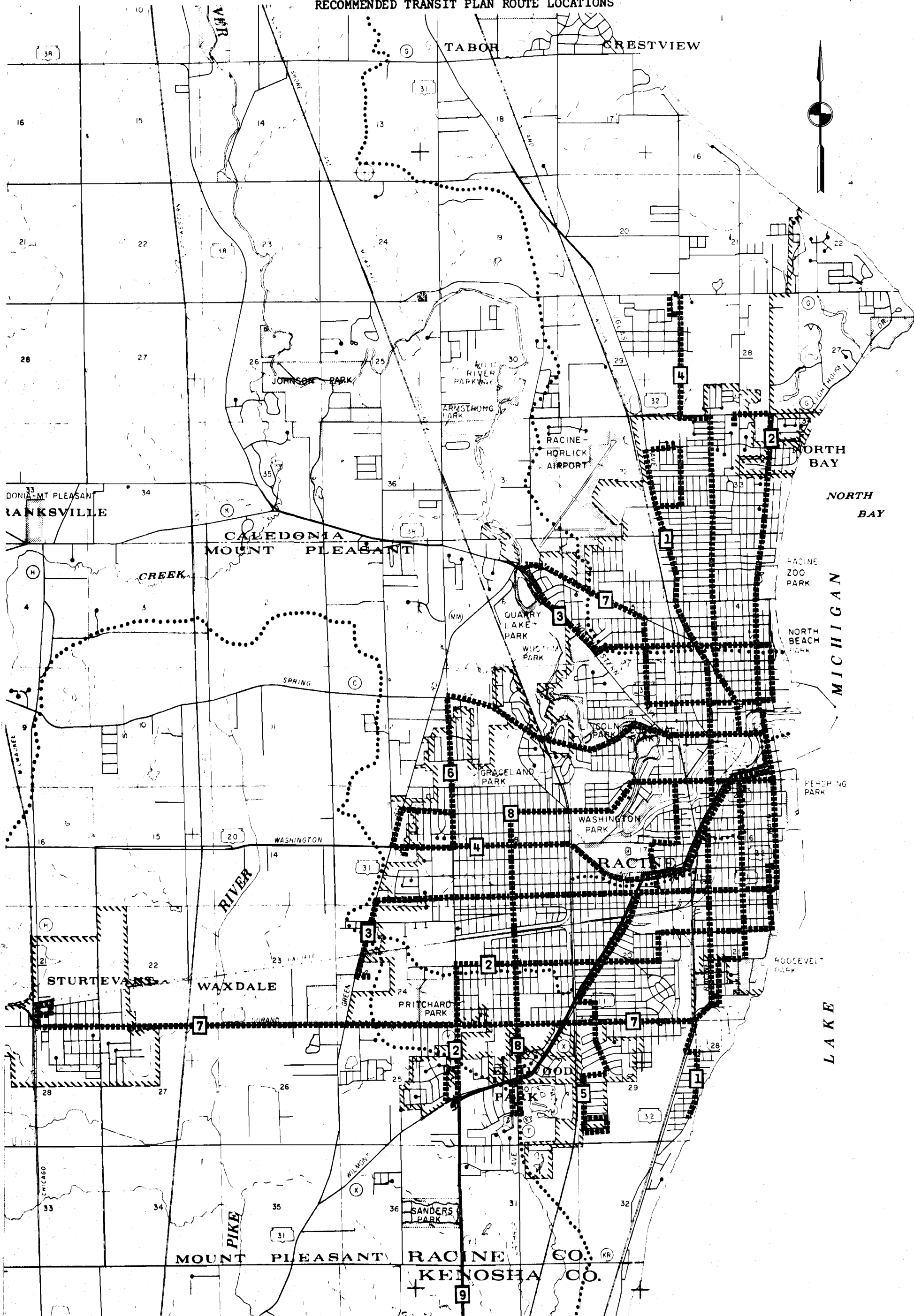
OPERATIONS IMPROVEMENTS

The recommended operational plan for the Racine area offers a completely new route system and level of transit service for the community. In addition to service to the City of Racine, the recommended plan proposes that transit service be extended into the Towns of Caledonia and Mount Pleasant, and into the Village of Sturtevant, all areas not presently served (See Maps 4-1 and 8-1). Crosstown service is proposed to be provided on most lines and the large one-way loops of the present system would be eliminated. Headways would be a maximum of 30 minutes.

Because the new capital equipment and facilities necessary for the full implementation of Alternative 4 will not be available until late 1975, it will be necessary to operate the system with the present small, 19-passenger, buses until the recommended new buses are delivered. For 1975, the initial year of the five-year Transit Development Program, it is recommended that the operating plan described as Alternative 2 (See Map 7-1) be employed with the present 40 minute headways. Thus the year 1975 would serve as a transitional period between the present system and the

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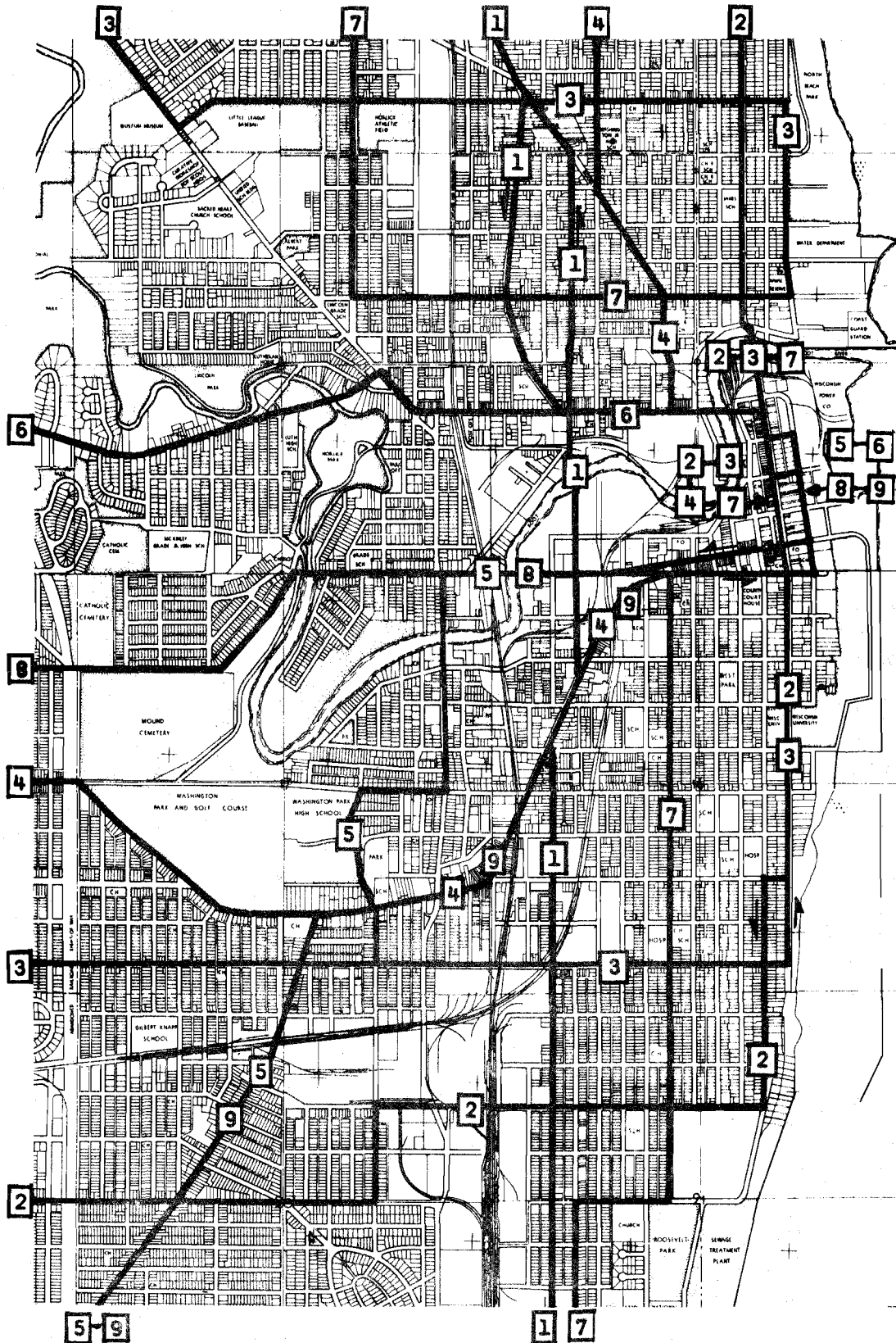
RECOMMENDED TRANSIT PLAN ROUTE LOCATIONS



The regular transit routes, the dashed lines with route numbers one through eight, and the University of Wisconsin-Parkside route, shown as a solid black line and designated route number nine, together total approximately 134 round trip route miles.

SOURCE: SEWRPC

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Map 8-2
RECOMMENDED ROUTE LOCATIONS IN CENTRAL RACINE



The central area in the City of Racine is well served by all eight regular transit routes and the UW-Parkside route.

SOURCE: SEWRPC

recommended system. The Alternative 2 system eliminates some of the large loops of the present routes and provides for some crosstown service, reducing the number of routes from ten to six. All buses would continue to meet at the central business district transfer point at the same time, but with crosstown routing, the amount of transferring will be reduced. It is recommended that today's fare structure, an average fare of 35 cents, be maintained under the Alternative 2 route system, because the small buses probably would not be able to handle the passenger volume if fares were reduced.

As soon as new, larger buses arrive in the Racine area, transit service as recommended under Alternative 4 can be implemented. Delivery of the new buses would permit expanded service to be provided as recommended under Alternative 4, including an increase in round-trip route miles from approximately 85 miles under Alternative 2 to approximately 117 miles. The new route system would be lineal in design, and transfers could be made at any location where two bus routes intersect. The system is designed on a non-cycle schedule--that is, each route would be scheduled separately--and the buses would not necessarily all meet in the central business district at the same time. The system could be scheduled so that any passenger traveling between the north side of Racine and the west or south sides could readily make a coordinated transfer to another line without any waiting time. For passenger transfers from a north side line to another north side line, the transit system can be scheduled so that the maximum wait time would be 15 minutes.

It is also recommended that the fare for all rides be reduced to 25 cents in 1976, and that there be no fee for a transfer. Although the lower fare should provide a strong incentive for new ridership to use the system, an increase in the public subsidy would be required. The lower fare should provide low income families and individuals with improved access to employment, and recreation. Lower fares should also encourage shopping trips on the transit system.

New areas proposed to be served by the transit system are shown on Map 8-1.

The new system includes a north-south crosstown route which does not go through the central business district (Route 1), and crosstown service on the following major arterials: Durand Avenue, 16th Street, Washington Avenue, Lathrop Avenue, High Street, and Main Street. New areas proposed to be served include the area along Charles Street between the Three Mile Road and Four Mile Road in the Town of Caledonia, the area along Lakeshore Drive between Larson Street and Lakewood Avenue in the Town of Mount Pleasant, the areas along Maryland Avenue and Spruce Street in the City of Racine, the area along Lathrop Avenue in the City of Racine and the Village of Elmwood Park, the area along Durand Avenue between Lathrop Avenue and the Amtrak depot in the Village of Sturtevant, and the Town of Mount Pleasant, and the area along Ohio Street and Meachem Road in the City of Racine and the Town of Mount Pleasant. Table 8-1 presents a brief description of each proposed route.

It is also recommended that as soon as new buses arrive, service be extended to the University of Wisconsin-Parkside Campus in Kenosha County. The route would begin at 5th Street and Main Street and operate via Main Street, 6th Street, Washington Avenue, Taylor Avenue, and Meachem Road to the campus (See Map 7-3). Passengers could ride any regular bus route in Racine and transfer to the UW-Parkside route. The recommended fare on the route is 50 cents, with transferring passengers paying 25 cents on the city system and 25 cents on the UW-Parkside line. When returning from the campus, passengers would pay the full 50 cents on the Parkside bus and transfers would be free to the city bus system. The bus would be scheduled so that arrival and departure times on the campus would coincide with class schedules. Buses could be operated on a 60-minute headway under this system. It is recommended that any local deficit of the operational cost of this service be borne by UW-Parkside, through a service contract with the City of Racine. The transit system would provide the capital cost of the bus necessary for this service.

In 1977, the contract between the Unified School District and the school bus operator will expire. It is recommended that the public transit system assume the

Table 8-1
PROPOSED ROUTE SYSTEM
ALTERNATIVE 4

Route	Description	Headway
1	From Douglas Avenue via Carlton Drive, Charles Street, South Street, Douglas Avenue, Milwaukee Avenue, Marquette Street, Washington Avenue, Racine Street, STH "32", Larson Street, Lakeshore Drive to Lakewood Avenue. Returns north via Lakeshore Drive, Larson Street, STH "32", Racine Street, Washington Avenue, Marquette Street, Douglas Avenue to Carlton Drive.	30 Minutes
2	From Shorecrest Shopping Center via Three Mile Road, Main Street, 14th Street, Wisconsin Avenue, DeKoran Avenue, Phillips Avenue, 21st Street, Ohio Street, Meachem Road to Taylor Avenue. Returns via same route except via DeKoran Avenue, Wisconsin Avenue, 16th Street, and Main Street.	30 Minutes
3	From Racine County High Ridge Hospital via service drive, Green Bay Road, 16th Street, Main Street, Hamilton Street, Michigan Boulevard, High Street, Northwestern Avenue to Rapids Drive. Returns via same route except via Main Street, 14th Street, Wisconsin Avenue and 16th Street.	30 Minutes
4	From Four Mile Road via Charles Street, Three Mile Road, LaSalle Street, Douglas Avenue, State Street, Main Street, 6th Street, Washington Avenue, and private driveway to Sears store at Green Bay Road. Returns via same route.	30 Minutes
5	From Concord Drive, via Spruce Street, Maryland Avenue, Drexel Avenue, Mitchell Street, Taylor Avenue, 16th Street, Phillips Avenue, Valley Drive, 12th Street, Memorial Drive, 6th Street, 7th Street, Lake Avenue, 4th Street, Main Street to 5th Street. Returns via Main Street, 6th Street and same route.	30 Minutes
6	From 5th Street via Main, 6th Street, Lake Avenue, 3rd Street, State Street, Northwestern Avenue, Spring Street, Ohio Street, Kinzie Avenue, Green Bay Road, Washington Avenue; service drive to Sears store. Returns via service drive from Sears store, Washington Avenue, Ohio Street, Spring Street, Northwestern Avenue, State Street, and Main Street to 5th Street.	30 Minutes
7	From Amtrak depot via Wisconsin Avenue (Sturtevant), Racine Avenue, STH "11", Durand Avenue, service drive into Elmwood Plaza Shopping Center, Durand Avenue, STH "32", 25th Street, Mead Street, 21st Street, Grand Avenue, 7th Street, Main Street, Hamilton Street, Carlisle Avenue, Rapids Drive, service drive into Rapids Plaza Shopping Center, Rapids Drive to Northwestern Avenue. Returns via same route except via Main Street, 6th Street, and Grand Avenue.	30 Minutes
8	From Pleasant Lane via Lathrop Avenue, Kinzie Avenue, 6th Street, 7th Street, Lake Avenue, 4th Street, Main Street to 5th Street. Returns via Main Street, 6th Street and same route.	30 Minutes
9	From 5th Street via Main Street, 6th Street, Washington Avenue, Taylor Avenue, Meachem Road, CTH "Y" and service drives to the University of Wisconsin-Parkside. Return via same route to Washington Avenue then via 7th Street, Lake Avenue, 4th Street, and Main Street to 5th Street.	60 Minutes

SOURCE: SEWRPC

responsibility of carrying school children on regularly scheduled service within the service area of the bus system. J. I. Case High School and W. Allen Gifford Junior High School are located just beyond the proposed transit area. Students attending these schools and living in the City of Racine could be transported by the public transit system on rush-hour extensions of Route 4 to Case High School, and Routes 3 or 7 to Gifford Junior High School. (See Map 3-5). The transporting of students on the public transit system will be an important source of revenue to the system, and will eliminate the needless duplication of publicly provided services between the city transit system and the yellow school bus system.

Through 1977, the hours of operation of the transit system are recommended to be from 5:30 a.m. to 6:30 p.m. on Monday through Friday, and from 7:00 a.m. to 5:30 p.m. on Saturdays. In 1978, it is recommended that the transit system operate to 9:30 p.m. on Monday through Friday. This will allow shoppers and retail store employees to use transit to go home in the evening. Students and others could use the expanded system for trips to libraries or recreational events. The amount of subsidy may have to be increased in order to provide such evening service but an increasing demand for travel in the evening hours may be expected.

Although no further operational improvements are planned for the transit system in 1979, a vigorous marketing program should help to promote more ridership during the year. Possible future extensions of service beyond 1979 might include service to the Crestview subdivision on the shore of Lake Michigan in the Town of Caledonia and to the Village of Wind Point. Rapid urban growth in these areas may even necessitate service before 1979. It may also be desirable to provide service on Sundays on certain routes after 1979. The Racine Mass Transit Technical Coordinating and Advisory Committee will be responsible for advisement and recommendations to the City of Racine for the maintenance and updating of the Transit Development Program and will have to evaluate any such proposed future extensions and improvements in service.

CAPITAL IMPROVEMENTS

The capital improvements program required to implement the recommended operational transit plan for the Racine area consists of over \$1.6 million dollars in new equipment and facilities, all to be purchased as soon as possible in 1975. New buses are needed to replace the existing fleet and a facility to maintain and store the fleet is also needed. A complete roster of recommended capital expenditures is presented in Table 7-9.

Buses - Since large increases in passenger volume are forecast for the Racine system, if the recommended plan is implemented, buses of the 45-passenger type should be purchased. All vehicles should employ the most advanced measures to reduce exhaust emissions, and noise, and all should be two-way radio-equipped and air-conditioned.

Storage and Maintenance - The present storage area and maintenance facility of Flash City Transit is inadequate and may not be available in any case for use by the publicly owned transit system. A new garage, office, and maintenance facility should be built in a centralized location within the transit service area. A 25 bus fleet will require 12,500 square feet of ~~enclosed~~, heated storage space; the maintenance facility will require 4,000 square feet of floor space, and the office area will require 1,200 square feet of floor space. No monies are allocated for site acquisition, since the City of Racine owns land suitable for the location and construction of the proposed facility.

Bus Stops - It is recommended that all bus stops be attractively and noticeably signed and also marked as no-parking zones. At an average of eight stops per mile, a total of 935 signs would be needed.

Bus Shelters - It is recommended that passenger shelters of an attractive design, enclosed on at least three sides and roofed, be installed at major transfer intersections and other bus stops which generate heavy passenger volume. The shelters should have a pay telephone associated with them and posted route maps

and schedules. Twenty bus stops are recommended to receive shelters during the initial five year program.

OWNERSHIP AND MANAGEMENT OF THE TRANSIT SYSTEM

Under the current agreement between the City of Racine and Flash City Transit Company, the bus operator will assign its franchise for the city bus operation to the City on January 1, 1975, without charge to the City of Racine. It is recommended that the City continue operation of the transit system under a management contract. The City would own the franchise and all capital equipment for the transit system, but the day-to-day operations of the system would be handled by a private enterprise management team. The management fee in such a situation is usually based on a percentage of gross revenue, with a guaranteed minimum, and supplemented by an additional incentive amount based on ridership in order to assure aggressive management. This alternative allows the transit system to obtain full exemptions from property taxes, and provides direct control by the city over levels and costs of service. Since the personnel who operate the transit system will be employees of the management company, and not public employees, certain problems involving labor contracts, pensions, and other employee benefits can be minimized. However, as a requirement for Federal and Wisconsin Department of Transportation funding, the City of Racine will have to negotiate an agreement with the representatives of the employees of the existing transit company that assures the employees no loss of wages, benefits, or other interests after the public takeover of the transit system. Since negotiations of this "13c" agreement have taken a considerable amount of time in other cities with similar problems, it is recommended that representatives from the City and the transit unions involved begin negotiations toward such an agreement as soon as possible.

The use of a management contract will prevent a large increase in the number of employees on the City payroll. However, it will be necessary for the City to designate one employee to act as liaison between the City and the management firm. The employee's primary responsibility will be to monitor the management agreement, and to act as a spokesman between the management firm and the Racine Common Council. In addition, the employee would serve to coordinate those traffic engineering changes affecting

transit operations, review requested service changes, and also negotiate subsidy agreements with the State and other municipalities and institutions which desire transit service.

It is also recommended that the contract between the City of Racine and the transit management team contain an incentive clause to be used as an inducement for management to wage a vigorous and innovative marketing program that will attract new ridership to the system. As explained in Chapter VII, the recommended transit system will not reach its full potential without an aggressive public information and promotion campaign. In addition to an advertising campaign, system route maps and route schedules should be made available to the public and fare incentives, such as ticket books or a monthly pass, should be considered to encourage ridership. The dissemination of transit information to the public is of vital importance in molding the image of the transit system. The transit management team should project an image of vitality, progressiveness, and initiative. Items such as a courtesy campaign by drivers, a new system logo on attractive looking buses, attention to cleanliness of buses, and installation and proper maintenance of attractive shelters would all be important steps in this direction.

COORDINATION WITH OTHER SYSTEMS

The recommended urban transit plan is designed to be fully coordinated with the other transportation modes serving the Racine area. Connections can be readily made from the proposed transit system to inter-city and suburban bus routes, and to Amtrak trains in the Village of Sturtevant. It is recommended that should the current service provided by the Racine Area Wide Model Project on Aging Dial-A-Bus Service be continued when the present grant in aid is terminated the service should be operated in such a fashion as to be fully coordinated with the city transit system. Further, it is recommended that the dial-a-bus service be expanded to include persons with physical disabilities. This would satisfy the travel needs of handicapped individuals in the Racine area unable to use the regular transit system. It is also recommended that the dial-a-bus service be expanded to at least a five day a week operation,

instead of the present three days a week, and be used as a supplemental service for persons unable, because of age or handicap, to use the regular city transit system.

FINANCIAL REQUIREMENTS

A projection of operating and capital costs and total revenues for each year of the recommended plan is set forth in Table 8-2. An estimate of ridership (Table 7-5) has been made that assumes a positive rate of attraction of riders to the system throughout the five years of the program. The projection should be considered a conservative one--in light of the fact that the transit system in Racine carried more than two million riders annually as recently as 1967 (See Table 4-1).

The major sources of funds for operation of the transit system would be: 1) passenger revenue; 2) other direct revenue, including charter and advertising space sales; and 3) subsidy from local and state tax sources. The operating subsidy would be provided in part by the State of Wisconsin, which may, under current legislation, pay up to two-thirds of the operating deficit of local public transit systems, and from the City of Racine and from the other municipalities to be served, which together would have to provide the other one-third of the operating deficit.

The capital costs of the projects were presented in Table 7-9. The capital costs include a contingency fund of ten percent of the total capital cost to allow for rapidly rising prices of capital equipment. Federal capital improvement grants would provide 80 percent of the capital costs. The remaining 20 percent matching local share of the capital cost estimated at \$368,731, all of which is to be expended in the first year (1975) of the program. The local capital cost can be funded through the issuance of municipal bonds. Table 8-3 shows the total local cost of the transit development program in constant 1974 dollars.

PLAN IMPLEMENTATION

The recommended staging of improvements for the recommended transit plan has been well documented in the previous chapters. The recommended plan is not complete, however, until the steps required for its implementation are specified. Full implementation of the recommended plan will be dependent upon coordinated action by 11 agencies of government: the United States Department of Transportation, Urban Mass

Table 8-2
RECOMMENDED TRANSIT PLAN COSTS¹
1974 Dollars

Year	Improvement	Annual Revenue Passengers	Total Revenue ²	Operating Cost ³	State Share	Deficit ⁴		Capital Costs ⁵		
						Local Share	Total	Federal Share	Local Share	Total
1975	Implement Alternative 2 Route System	578,550	\$ 206,490	\$ 444,350	\$ 158,573	\$ 79,287	\$ 237,860	\$1,474,924	\$368,731	\$1,843,655
1976	Alternative 4 Route System Lower Fares to 25¢, New Buses	752,115	\$ 200,030	\$ 891,440	\$ 460,940	\$ 230,470	\$ 691,410	\$ 0	\$ 0	\$ 0
1977	Begin Transporting Students in City	902,538	\$ 237,640	\$ 891,440	\$ 435,867	\$ 217,933	\$ 653,800	\$ 0	\$ 0	\$ 0
1978	Expand Service to 9:30 p.m. Monday through Friday	1,110,122	\$ 291,530	\$1,031,840	\$ 493,540	\$ 246,770	\$ 740,310	\$ 0	\$ 0	\$ 0
1979	Marketing Promotion	1,165,623	\$ 305,410	\$1,031,840	\$ 484,287	\$ 242,143	\$ 726,430	\$ 0	\$ 0	\$ 0
	Total		\$1,241,100	\$4,290,910	\$2,033,207	\$1,016,603	\$3,049,810	\$1,474,924	\$368,731	\$1,843,655
Total Cost = \$4,893,465										

Footnotes:

¹Costs do not include University of Wisconsin-Parkside route, see Tables 7-18 and 7-19.

²Revenue includes farebox, advertising, and charter revenues, see Table 7-17.

³For details of operating costs, see Table 7-13.

⁴State share is two-thirds, local share is one-third.

⁵Federal share is 80 percent, local share is 20 percent.

SOURCE: SEWRPC

Table 8-3
 LOCAL COSTS FOR ALTERNATIVE 4
 RACINE TRANSIT SYSTEM¹ 1974 DOLLARS

<u>Year</u>	<u>Operating</u>	<u>Capital</u>	<u>Total</u>
1975	\$ 79,287	\$368,731	\$ 448,018
1976	\$230,470	0	\$ 230,470
1977	\$217,933	0	\$ 217,933
1978	\$246,770	0	\$ 246,770
1979	\$242,143	0	\$ 242,143
		Total	\$1,385,334

¹ Costs do not include University of Wisconsin-Parkside route, See Tables 7-18 and 7-19.

SOURCE: SEWRPC

Transportation Administration; the Wisconsin Department of Transportation; the Southeastern Wisconsin Regional Planning Commission; the Racine County Board; and the seven local governmental units in the Racine area. Adoption or endorsement of the recommended transit development program by each of these agencies is essential to assure a common understanding between the governmental agencies and to enable their staffs to program the necessary implementation work.

The City of Racine will have the major responsibility for implementation of the transit plan, since it will own the operating franchise. The City will have the responsibility of holding a public hearing and referendum on whether or not the City should operate the transit system. If a favorable response is returned from the public hearing and referendum, the City will have to act quickly to meet the January deadline which the present transit operator has proposed with respect to transferring the franchise for operation to the City. The City will have to be prepared to submit its Capital grant request to UMTA as soon as possible after the system receives public approval. This will also require immediate action on negotiating a "13c" labor agreement with the employees of the transit company. The City should also be prepared to interview and retain a management team to operate the transit system beginning January 1, 1975, and to begin an appraisal of existing transit revenue equipment. Specific design details as to exact location of bus stops, turn-around loops, and the location of a garage and maintenance facility must also be worked out before submission of the Capital grant application. The City of Racine and other municipalities will have to adopt ordinances pertaining to bus operations on their streets, conduct aboard buses, and a ban on parking in bus stop areas. The City of Racine will have the responsibility for regulation of the transit system through its management contract. The recommendation of a city employee to act as liaison between the City and the transit management team is vital to the implementation of the plan.

It is intended that the recommended transit system meet all of the urban mass transit service required in the Racine area. Any service begun by other operators

would serve to fragment the service offered under the recommended plan. Maintenance of the transit development program provides opportunity to evaluate new service needs for inclusion within and expansion of the service area. Although the area served by transit as recommended herein extends beyond the present City of Racine municipal boundaries, it is recommended that the City of Racine assume full responsibility for provision of the service. Further extension of service beyond the City limits can be provided under contract between the City of Racine and the community desiring such service. The proposed University of Wisconsin-Parkside service is an example of this type of service extension. Service to the Village of Sturtevant in other than peak hours would be another example of contract service. The contract should specify the funding arrangements between the City of Racine and the community to cover the capital and operating costs of the desired service.

LOW-COST ALTERNATIVES

The preparation and coordination of long range highway and transit plans is the charge of the Southeastern Wisconsin Regional Planning Commission. Within the context of these plans it is the recommendation of this report that the Department of Traffic and Lighting of the City of Racine undertake the investigation of low-capital intensive solutions to the expeditious movement of public transit vehicles and to encourage transit ridership. It is further recommended that any future analysis of parking supply and cost, especially in the central business district; as well as such non-capital intensive alternatives as staggered work shifts and car-pooling be carefully reviewed to determine their potential impact on the transit system ridership.

SUMMARY

The recommended transit plan for the Racine urbanized area involves a commitment to public ownership of the existing transit system, and to a new lineal route system providing improved service in an expanded service area at a lower average fare. It is recommended that the City of Racine operate the transit system by

management contract, with the day-to-day operation of the system left to a private enterprise management team. The City should designate one employee to act as liaison between the City and the management company. The new transit system, by 1976, would provide service to all areas of the City of Racine, and to urban development in all of the other municipalities in the study area at a 25 cent fare. The proposed transit system is designed to carry students to school within the transit service area, eliminating the need for duplicate yellow school bus service within that area. Since the schedules for the transit system are designed on a non-cycle basis, the transit system is very flexible, and can respond readily in the demand for service. The initial headways on all bus routes (except UW-Parkside) will be a maximum of 30 minutes. Capital improvements to the system will include 25 new buses, a garage, and a maintenance facility, and other passenger amenities. The local cost over the five-year program to the City of Racine and other local municipalities, assuming State operating aid of two-thirds of the operating deficit, and Federal aid for 80 percent of the capital costs, would be about 1.3 million dollars. Adoption or endorsement of the recommended plan by each of the 11 units of government involved is essential to the implementation of the plan.

CHAPTER IX

SUMMARY AND CONCLUSIONS

INTRODUCTION

On August 7, 1973, the Common Council of the City of Racine adopted Resolution Number 1942 which directed that a Mass Transit Development Program (TDP) be prepared for the Racine area. In a subsequent resolution, the Common Council further directed the Mayor to appoint a "Technical Task Force on Mass Transportation" to guide the staff in preparing the TDP. In November of 1973, appointments to the Racine Mass Transit Technical Coordinating and Advisory Committee were approved by the Common Council, and the Committee and its staff, comprised of the Racine City Plan Department and the Southeastern Wisconsin Regional Planning Commission (SEWRPC), began the preparation of the TDP. This chapter briefly summarizes the findings and recommendations of the TDP.

SUMMARY

The study area for the Racine Area Transit Development Program was defined as all that portion of Racine County located east of IH-94. The area has a total 1970 resident population of 133,624. The area is comprised of seven local units of government, with the largest being the City of Racine, which had a total 1970 resident population of 95,162. Recent growth in the urbanized area has been in the form of a highly diffused, low-density pattern, often called "urban sprawl," with industries and shopping centers, as well as residences, locating on the periphery of the existing developed urban area. Population densities in the newer residential areas rarely exceeds 2,000 persons per square mile, while within the older areas of the City of Racine, population densities exceed 14,000 persons per square mile. Major traffic generators, comprised of shopping areas, schools, industrial plants, hospitals, public buildings, and major recreational areas are generally scattered throughout the urbanized area. Certain population groups with special transportation problems, such as the elderly, minorities, persons with low income, and those without

automobiles, tend to be located in the older, more densely populated areas of the City of Racine. School age children tend to be distributed evenly throughout the urbanized area. Currently, only about one-third of the study area is devoted to urban land uses. It is projected that, if present trends continue, by 1990 approximately half of the area will be utilized for urban purposes.

Urban mass transit service has been available in the Racine area since 1883. Currently, mass transit service is provided by Flash City Transit Company, which operates ten fixed routes in the City of Racine with a total of 80.8 round trip route miles. The ridership trend over recent years has been one of decline. The transit system carried over two million revenue passengers annually as recently as 1967, while in 1973 total revenue passengers totaled only slightly more than one-half million. Buses on all routes operate on a 40-minute headway between the hours of 5:30 a.m. to 6:25 p.m. Monday through Friday and 8:05 a.m. to 5:45 p.m. on Saturdays. Buses from each of the ten routes arrive and depart from the Racine Central Business District (CBD) transfer point at the same time, thus passengers transferring from one route to another have a minimal wait time. The adult cash fare is 40 cents with an additional 10 cents charge for a transfer and children between the ages of five and twelve, inclusive, ride for 20 cents plus 5 cents for a transfer. Transfers are honored only at the Racine CBD transfer point. Buses used for providing transit service are 19 passenger "mini" buses, all of which have neared the end of their six years of useful life and are in need of replacement. The company has lost money in each of its five full years of operation and is currently subsidized by the City of Racine. The public subsidy covers the total operating deficit of the company and a garage rental fee of \$1,000 per month.

Various surveys have shown that about 2,400 revenue passengers ride the bus daily and about one-third of them make a transfer at the CBD stop. Female riders account for about 78 percent of the total ridership, and 62 percent of the ridership had an income under \$12,000 per year. The largest age group of riders was the 16-24

bracket, with over 30 percent of the riders. Over 70 percent of the ridership indicated that they did not possess a drivers' license.

Legislation and regulations exist at the federal, state, and local levels relating to or governing mass transit organization and operation. The Federal government can provide assistance to public transit systems in the form of capital grants of up to 80 percent of needed improvements, of technical studies grants of up to 80 percent of costs of needed technical studies, and of special demonstration grants of up to 100 percent of the costs of demonstration operations. Numerous requirements must be met before the project is approved for federal funding. The State of Wisconsin provides tax relief and direct operating aid to transit systems. The Wisconsin Statutes provide many organizational alternatives to cities and counties for public operation of an urban mass transit system. The Wisconsin Public Service Commission (PSC) regulates all mass transit systems in the State and no bus route can be established, extended, or abandoned without approval or order of the PSC. Local regulations and ordinances are in effect pertaining to bus stops, speed limits, and maintenance of buses.

In order to assist in the evaluation of the existing transit system and to guide the development of alternative transit service plans and programs, a set of definitions objectives, principles, and standards relating to adequate transit service was developed. The evaluation showed that while the existing transit system provides service to the Racine urban area, deficiencies in route design do exist and that the requirement that all crosstown passengers transfer is undesirable. Routes with large loops cause travel time delays for the passengers and result in some duplication of service. The cycle scheduling method now employed, wherein all buses meet in the CBD at the same time to facilitate transfers between routes, has rendered the system inflexible because it does not allow for changes in the scheduling of individual routes to meet changes in travel demand. The lack of schedule time points along the routes to encourage schedule adherence has served to further damage an

already negative image of transit in Racine and the headways and hours of operation as well as the configuration of the routes do not serve the needs of the work trips. The transfer fee currently charged penalizes the transit patrons who have the least desirable ride in terms of lost time and inconvenience.

The City of Racine is faced with a serious problem--the deterioration of its present transit system and attendant potential further decline in transit use. A number of alternatives are available to the Racine area in the form of enabling legislation should it desire to assume ownership of the existing transit operation. Four transit operating system alternatives were presented and evaluated in Chapter VII. Alternative 1, a "do-nothing" alternative, may be expected to result in further deterioration of the system and a loss of more riders. Alternatives 2, 3, and 4 involve various improvements in the levels of service and routing and may be expected to result in increased ridership. Each of these three alternatives will require the purchase of new buses and the construction of a modern garage facility for maintenance and storage of buses and related equipment. Six alternative transit management options available to the City were also detailed in Chapter VII.

The studies indicate that the costs of operating the system even at present inadequate levels of service may be expected to exceed the revenues which can be generated from the fare box, and a public subsidy will be necessary to keep the buses running. The local public share of the operating costs required over the next five years is estimated to range from \$414,000 to \$1,017,000. The City must also decide if it wishes to operate transit service to the University of Wisconsin-Parkside, and to various other major traffic generators located in outlying areas, and what share of the cost the institutions and municipalities should pay. The transit management team selected will have to institute a preventive maintenance program, and a strong marketing program with fare incentives to attract new ridership. Of the three viable alternatives, Alternative 4 provides the highest level of service to the community and is more flexible with respect to adaptation to

change. However, it also carries with it the highest cost in terms of the required public subsidy.

As detailed in Chapter VIII, the Transit Development Program offers the following recommendations:

1. The City of Racine assume ownership of the existing transit system on January 1, 1975.
2. The public transit system be operated by experienced professional management by means of a contract with a transit management firm.
3. The City designate an employee to act as a liaison between the City and the management firm.
4. The capital equipment required to support System Alternative 4 be ordered immediately upon assumption of public ownership of the system and System Alternative 4 be implemented as soon as the capital equipment becomes available on or before January 1, 1976.
5. System Alternative 2 should be implemented with the existing equipment until the new equipment arrives.
6. A cash fare of twenty-five cents be established for all riders without charge for transfer, as soon as new capital equipment is put in service.
7. Upon the expiration of the present "yellow school bus" contract in July, 1977, the City and Unified School District avoid the costly duplication of service and public expenditure by providing transportation to school on the city transit system in all areas served by that system.
8. The City and University of Wisconsin-Parkside cooperatively agree to the provision of transit service to the University with compensation to the City for the local share of any resulting deficit.
9. The City and nearby communities (such as the Towns of Caledonia and Mount Pleasant; the Villages of Sturtevant, Elmwood Park, and North Bay) cooperatively agree to the provision of transit service from the City to the

nearby communities with compensation to the City for the local share of any resulting deficit.

10. Efforts should immediately be undertaken to effect such important implementation steps as a capital grant application, a "13c" agreement protecting the employees rights, and the preparation of a referendum regarding public ownership and operation of the system.

The total cost of providing the recommended level of transit service to the Racine area includes an estimated five-year operating deficit of \$3,049,810, of which the local share is estimated at \$1,016,603; and an estimated five-year capital cost of \$1,832,215, of which the local share is estimated at \$368,731. The total local share of the plan implementation cost is estimated at \$1,385,334 over the five-year period. (See Table 8-3).

CONCLUSION

Adoption and implementation of the transit development plan and program recommended in this report would provide the Racine urbanized area with an efficient, flexible transit system offering a high level of service. The reduced fare recommended coupled with the improved levels of service will not only enhance the mobility and lessen the costs for the current transit riders, but should favorably influence modal choice, attracting new transit riders from present auto users. Such an occurrence would prove beneficial for transit users and non-users alike in terms of reduced traffic congestion and air pollution, improved energy conservation, and a decreased need for new highway and parking facilities.

The reduced fare should also prove especially advantageous for the young, with little or no earning power; for the elderly, many of whom must live on a fixed income; and for those growing families with growing travel demands whose economic limitations preclude the purchase of a second, or in some cases, even a first automobile.

Since the recommended transit system will continue to be focused on the central business district, although improved "crosstown" service will also be provided,

increased ridership should mean an increased potential for the downtown merchants to improve their businesses and stimulate economic activity. This should support local redevelopment plans. A final benefit of the recommended system is the improved accessibility to employment opportunities which may be expected as a result of the improved transit service. A major criticism of the existing system is its inability to serve work trips well, due both to routing and scheduling inefficiencies. The recommended transit plan would mitigate these inefficiencies and in turn provide a large segment of the population served with improved access to employment opportunities throughout the Racine urbanized area.

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APPENDICES

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Appendix A

MEMBERS OF THE RACINE MASS TRANSIT TECHNICAL COORDINATING
AND ADVISORY COMMITTEE

Dr. William J. Murin	Chairman	Associate Professor of Political Science, University of Wisconsin-Parkside Kenosha
Kurt W. Bauer		Executive Director, Southeastern Wisconsin Regional Planning Commission
Ed Benter		Demographer/Planner, Unified School District No. 1, Racine
Eual Bodenbach		Town Coordinator, Town of Mount Pleasant
Arnold L. Clement		Planning Director and Zoning Administrator, Racine County
Marcel A. Dandeneau		Town Supervisor, Town of Caledonia
Jubentino Gonzales		Director, Racine Spanish Center
John M. Hartz		Chief, Mass Transit Assistance Section, Division of Planning, Wisconsin Depart- ment of Transportation
Thomas N. Harvey		Regional Representative, Urban Mass Transportation Administration, Chicago
Robert G. Heck		Alderman, City of Racine
Eugene N. Korzilius		Chairman, Traffic and Transportation Commission, Racine
James Kurcharski		Village Trustee, Village of Sturtevant
Richard E. LaFave		Chairman, Racine County Board of Supervisors
Raymond Mathews		Executive Director, Urban League of Racine
Walter Neider		Member, Downtown Businessmen's Association, Racine
Frank Rizzo		President, Racine County AFL-CIO Council
Eric Schroder		Vice-Chairman, Racine Urban Planning District Citizens Advisory Committee
Victor C. Tannehill		Executive Vice-President, Manufacturers and Employers Association, Racine
Jack Taylor		President, Flash City Transit Company, Racine
Ray F. Truesdell		Vocational Rehabilitation Supervisor, Wisconsin Department of Health and Social Services, Division of Vocational Rehabilitation, Racine
Fred Wentorf		Coordinator of Trade and Industry in the Community Services Department, Gateway Technical Institute, Racine Campus
Darrell Wright		Executive Director, Racine Chamber of Commerce
Erwin Zuehlke		Director of Business Office, University of Wisconsin-Parkside, Kenosha

Appendix B

MANUFACTURERS WITH 50 OR MORE EMPLOYEES IN RACINE AREA

<u>Company</u>	<u>Address</u>	<u>Location</u>
A & E Manufacturing Co.	1905 Kearney Avenue	Racine
Acme Die Casting Corp.	1635 Murray Avenue	Racine
Alloy Casting Co.	1301-18th Street	Racine
AMETEK/Lamb Electric	2745 Chicory Road	Mt. Pleasant
Andis Clipper Company	1718 Layard Avenue	Racine
Badger Uniform	1125 Sixth Street	Racine
Beauty Appliance Corp.	1718 Layard Avenue	Racine
J. I. Case Company	700 State Street	Racine
	7000 Durand Avenue	Mt. Pleasant
	25th St. & Mead St.	Racine
Color Arts, Inc.	1840 Oakdale Avenue	Racine
Continental Can Co.	1901 Chicory Road	Mt. Pleasant
Doyle Handymark Corp.	2720 Golf Avenue	Racine
Dremel Manufacturing Co.	4915-21st Street	Racine
The Dumore Co.	1300-17th Street	Racine
Electro Tool Corp.	1718 Layard Avenue	Racine
Frederick Manufacturing Co., Inc.	702 Racine Street	Racine
Gettys Manufacturing Co., Inc.	2700 Golf Avenue	Racine
Gold Medal Folding Furniture Co.	1700 Packard Avenue	Racine
Gorton Machine Corp.	8311 Highway 11	Mt. Pleasant
Greene Manufacturing Co.	1028 Douglas Avenue	Racine
Haban Manufacturing Co.	1101 Mound Avenue	Racine
Harris Metals, Inc.	4210 Douglas Avenue	Caledonia
Horlicks Malt	1450 Summit Avenue	Racine
In-Sink-Erator Mfg. Div. Emerson Electric Co.	4700-21st Street	Racine
Interlake, Inc.	718 Marquette Street	Racine
Jacobson Manufacturing Company	1721 Packard Avenue	Racine
S. C. Johnson & Son, Inc.	1525 Howe Street	Racine
	2512 Willow Road	Mt. Pleasant
Journal Times Co.	212 Fourth Street	Racine
Mamco Corporation	532 Fourth Street	Racine
Massey-Ferguson, Inc.	2200 DeKoven Avenue	Racine
Master Appliance Corp.	1745 Flett Avenue	Racine
Medical Engineering Corp.	3037 Mt. Pleasant St.	Racine
Metal Parts Corp.	930 Tenth Street	Racine
Mining Equipment Manufacturing Corp.	3319 Four Mile Road	Caledonia
Modine Manufacturing Co.	1500 DeKoven Avenue	Racine
Motor Specialty, Inc.	2801 Lathrop Avenue	Racine
Moxness Products, Inc.	1914 Indiana Street	Racine
Multi Products Co. Inc.	2052 Grand Avenue	Racine
Nielsen Iron Works, Inc.	1600 N. Memorial Drive	Racine
Pioneer Products, Inc.	1917 S. Memorial Drive	Racine
Precise Division-Rockwell Manufacturing Co.	3715 Blue River Avenue	Racine
Printing Developments, Inc.	2010 Indiana Street	Racine
Professional Positioners, Inc.	2525 Three Mile Road	Caledonia
Racine Die Casting Company, Inc.	2620-90th Street	Sturtevant
Racine Federated Industries Corp.	1637 Goold Street	Racine
Racine Hydraulics Div.		
Rexnord, Inc.	2000 Albert Street	Racine
Racine Packaging Corp.	1800 South Street	Racine
Racine Steel Castings Co.	1442 N. Memorial Drive	Racine
Rainfair, Inc.	1501 Albert Street	Racine
Service-International Business Forms	2205 Durand Avenue	Mt. Pleasant
Seven-Up Bottling, Inc.	3131 Phillips Avenue	Mt. Pleasant
E. C. Styberg Engineering Co., Inc.	1600 Goold Street	Racine
The Triple E. Corp.	4400-21st Street	Racine
Twin Disc, Inc.	1328 Racine Street	Racine
Unico, Inc.	2635 Golf Avenue	Racine
Von Schrader Co.	1600 Junction Avenue	Racine
Voorlas Manufacturing Co.	1711 South Street	Racine
Vulcan Materials Co.	1501 Three Mile Road	Caledonia
Walker Forge, Inc.	2000-17th Street	Racine
Walker Manufacturing Co.	1201 Michigan Boulevard	Racine
Webster Electric Co., Inc.	1900 Clark Street	Racine
Western Publishing Co., Inc.	1220 Mound Avenue	Racine
Wisco Division-ESB Inc.	1222-18th Street	Racine
Wisconsin Natural Gas Co.	100 Third Street	Racine
Wisconsin Pattern Co.	1301-18th Street	Racine
Wrapping Machinery Co., Inc.	3817 Nicholson Road	Caledonia
Young Radiator Co.	2825 Four Mile Road	Caledonia

Appendix C

RACINE FLASH TRANSIT COMPANY

INCOME STATEMENT
1969OPERATING REVENUES

Passenger Revenues		
Urban	\$259,156	
Charter	<u>20,746</u>	<u>\$279,902</u>
TOTAL OPERATING REVENUES		\$279,902

OPERATING EXPENSES

Transportation		
Supervision	8,815	
Drivers' Wages	101,636	
Fuel & Lubricants	17,158	
Other	<u>1,039</u>	<u>\$128,648</u>
Maintenance		
Repairs, Service, Tires & Tubes	\$ 36,452	
Other	<u>88</u>	<u>\$ 36,540</u>
Administrative		
Management & Office Salaries	16,016	
Traffic & Advertising	1,439	
Legal & Auditing	3,868	
Employees Welfare	1,984	
Other	<u>2,090</u>	<u>\$ 25,397</u>
Other		
Depreciation	\$ 55,036	
Insurance	12,516	
Taxes Other than Income	12,270	
Station	<u>5,287</u>	<u>\$ 85,109</u>
TOTAL OPERATING EXPENSES		<u>\$275,694</u>

NET OPERATING INCOME (LOSS) \$ 4,208

Operating Ratio = $\frac{\text{Total Operating Expenses}}{\text{Total Operating Revenues}} \times 100 = 98.5$

Income Deductions 6,221

NET INCOME (LOSS) (\$ 2,013)

Source: Wisconsin Department of Transportation/Division of Planning

Appendix D

RACINE FLASH TRANSIT COMPANY

INCOME STATEMENT
1970OPERATING REVENUES

Passenger Revenues		
Urban		\$242,048
Other		<u>16,536</u>
TOTAL OPERATING REVENUES		\$258,584

OPERATING EXPENSES

Transportation		
Supervision	\$ 13,055	
Drivers' Wages	113,161	
Fuel & Lubricants	12,723	
Other	<u>1,649</u>	\$140,588
Maintenance		
Repairs, Service, Tires & Tubes	\$ 47,832	
Other	<u>2</u>	\$ 47,834
Administrative		
Management & Office Salaries	\$ 18,904	
Traffic & Advertising	1,206	
Legal & Auditing	2,750	
Employees Welfare	1,778	
Other	<u>3,399</u>	\$ 28,037
Other		
Depreciation	\$ 43,818	
Insurance	15,874	
Taxes Other Than Income	13,838	
Station	<u>4,157</u>	\$ 77,687
TOTAL OPERATING EXPENSES		\$294,146
NET OPERATING INCOME (LOSS)		(\$35,562)
Operating Ratio = $\frac{\text{Total Operating Expenses}}{\text{Total Operating Revenues}} \times 100 = 113.8$		
Income Deductions		<u>663</u>
NET INCOME (LOSS)		<u><u>(\$36,195)</u></u>

Source: Wisconsin Department of Transportation/Division of Planning

Appendix E

RACINE FLASH TRANSIT COMPANY

INCOME STATEMENT
1971OPERATING REVENUES

Passenger Revenues		
Urban	\$217,184	\$217,184
Other		<u>17,952</u>
TOTAL OPERATING REVENUES		\$235,136

OPERATING EXPENSES

Transportation		
Supervision	\$ 8,505	
Drivers' Wages	118,427	
Fuel & Libricants	14,140	
Other	<u>836</u>	\$141,908
Maintenance		
Repairs, Service, Tires & Tubes	\$ 34,083	
Other	<u>140</u>	\$ 34,223
Administrative		
Management & Office Salaries	\$ 14,691	
Traffic & Advertising	929	
Legal & Auditing	2,600	
Employees Welfare	1,674	
Other	<u>4,283</u>	\$ 24,177
Other		
Depreciation	\$ 32,901	
Insurance	18,254	
Taxes Other Than Income	13,399	
Station	3,895	
Other	<u>207</u>	\$ 68,656
TOTAL OPERATING EXPENSES		<u>\$268,964</u>

NET OPERATING INCOME (LOSS) (\$33,828)

Operating Ratio = $\frac{\text{Total Operating Expenses}}{\text{Total Operating Revenues}} \times 100 = 114.4$

Income Deductions 410

NET INCOME (LOSS) (\$34,238)

Source: Wisconsin Department of Transportation/Division of Planning

Appendix F

RACINE FLASH TRANSIT COMPANY

INCOME STATEMENT
1972OPERATING REVENUES

Passenger	\$179,779.61
School District	1,915.30
Contract (Postmen, Policemen, Firemen)	1,886.50
Charter	-0-
Advertising	<u>4,323.25</u>

TOTAL OPERATING REVENUES

\$187,904.66

OPERATING EXPENSES

Labor		
Management, Supervisory, & Administrative Salaries	\$ 19,760	
Operators' Wages	109,193	
Maintenance Personnel Wages	17,919	
Other Hourly Wages	6,003	
Fringe Benefits	6,918	
Social Security Taxes	<u>11,696</u>	\$171,489
Transportation		
Fuel and Lubricants	\$ 12,305	\$ 12,305
Equipment, Maintenance, and Garage		
Repairs, Service, Tires & Tubes on Revenue Equipment	\$ 14,116	
Repairs and Maintenance on Other Equipment, Buildings, and Grounds	494	
Utilities	<u>742</u>	\$ 15,352
Administrative		
Tariffs and Traffic Expenses	\$ 1,168	
Advertising, Marketing, and Promotion	4,047	
Legal and Auditing	5,305	
Other	<u>1,681</u>	\$ 12,201
Insurance and Safety		
Public Liability and Property Damage Insurance	\$ 9,909	
Other	<u>212</u>	\$ 10,121
Operating Taxes		
Vehicle Registration and Permit Fees	\$ 294	
Other Operating Taxes	<u>630</u>	\$ 924
Other		
Depreciation	\$ 1,192	\$ 1,192

TOTAL OPERATING EXPENSES

\$223,584

NET OPERATING INCOME (LOSS)

(\$35,679)

Total Operating Expenses

Operating Ratio = $\frac{\text{Total Operating Expenses}}{\text{Total Operating Revenues}} \times 100 = 119.0$

Source: Wisconsin Department of Transportation/Division of Planning

INTERAGENCY STAFF

RACINE AREA TRANSIT DEVELOPMENT PROGRAM:
1975-1979

Kurt W. Bauer, P. E. Executive Director, Southeastern
Wisconsin Regional Planning
Commission

Keith W. Graham, P. E. Assistant Director, Southeastern
Wisconsin Regional Planning
Commission

Mark P. Green, P. E. Chief Transportation Planner,
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Clair W. Jenn, P. E. Traffic Engineer, Racine Department
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Robert C. Johnson Transportation Planner, Southeastern
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Richard A. Linsmeier Project Coordinator, Racine City
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Thomas N. Wright Director of Planning, Racine City
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Galen C. Larson. Assistant Vice President and Assistant
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