

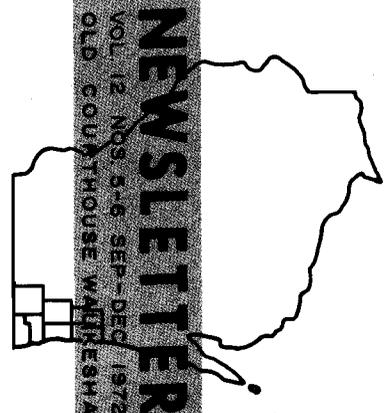
SECOND DISTRICT PLAN COMPLETED

The second comprehensive plan for an urban sub-region within the Southeastern Wisconsin Region has been completed. This plan is a comprehensive community development plan for the Racine Urban Planning District, consisting of all of Racine County east of IH-94 (see Map 1). The area contains seven general-purpose local units of government and 12 special-purpose units of government. The first such plan for an urban subregion was completed in 1967 for the Kenosha Planning District, which area consists of all of Kenosha County east of IH-94.

The overall Commission regional planning program envisions the establishment of subregional planning districts within the Region for the purpose of carrying the regional plans into the greater depth and detail necessary to provide a sound framework for local planning and for plan implementation. These planning districts consist of two types. The boundaries of the first type are delineated on the basis of topography or topographically related environmental and developmental problems. Examples of such districts include the Root, Fox, Milwaukee, and Menomonee River watersheds. The boundaries of the second type of subregional planning district encompass areas of existing or potential intensive urban development which have common developmental problems, such as the Racine Urban Planning District.

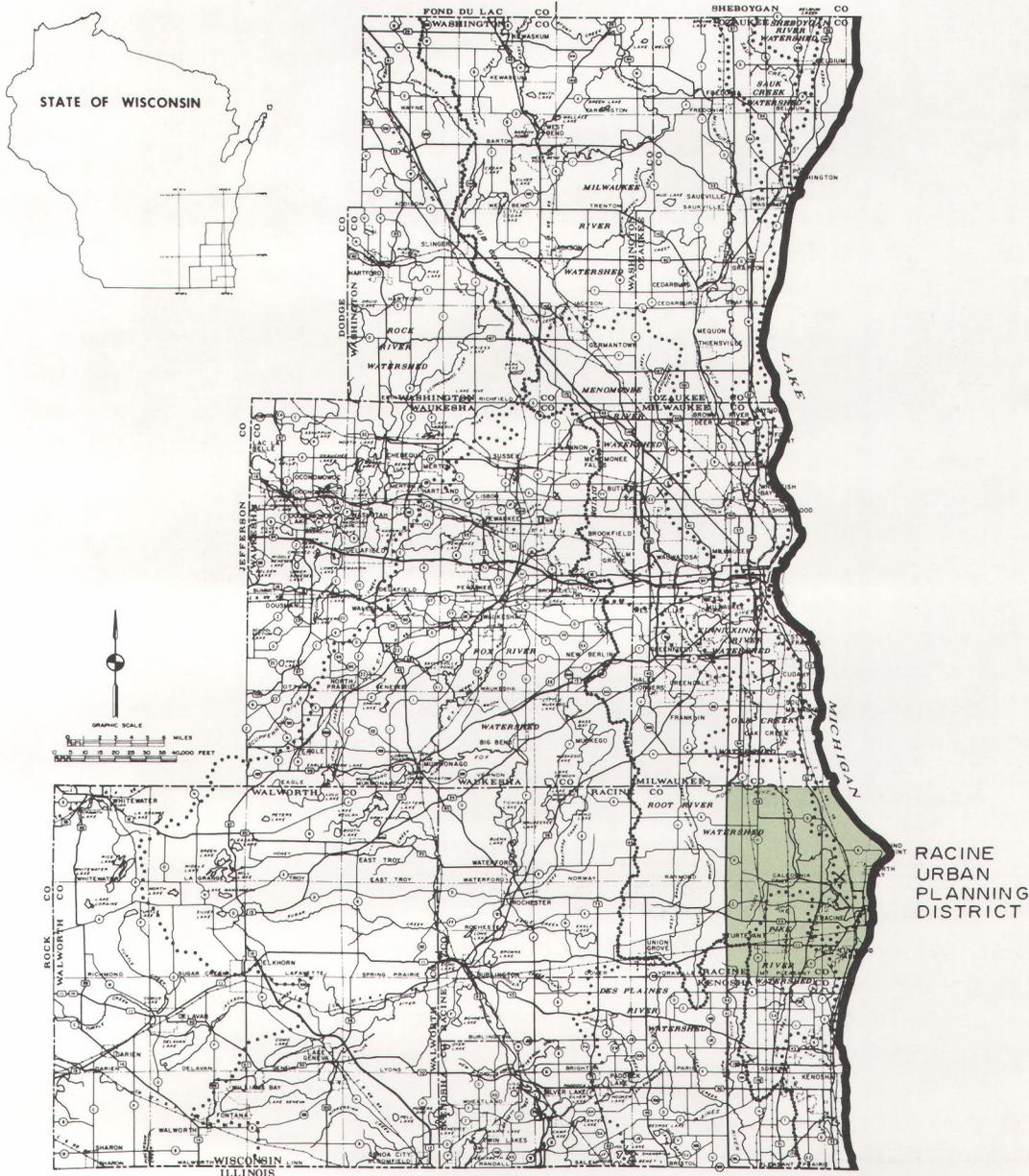
The establishment of the Racine Urban Planning District and the conduct of the comprehensive planning program for the District was brought

**SOUTHEASTERN
WISCONSIN
REGIONAL
PLANNING
COMMISSION**



Map I

LOCATION OF THE RACINE URBAN PLANNING DISTRICT
IN THE SOUTHEASTERN WISCONSIN REGION



SECOND DISTRICT PLAN—continued

about by a Moratorium and Long-Range Planning Agreement executed in 1968 by and between Racine County, the City of Racine, the Village of Sturtevant, and the Town of Mount Pleasant. This Agreement was made in response to serious intergovernmental problems that arose in the mid-1960's over the provision of essential municipal services, such as sanitary sewer and water supply services, on a uniform, District-wide basis. The creation of such problems, which resulted largely from the complex intergovernmental nature of the District, caused a great deal of concern on the part of public officials and citizen leaders with respect to the future governmental structure of the entire area. The intergovernmental problems and conflicts were partially expressed in movements of several of the local units of government toward annexation, incorporation, and the execution of intergovernmental utility service agreements. Most of the problems were related to relatively rapid population growth and consequent areawide urban development, and particularly industrial relocation within the District. The elected officials and citizen leaders within the District became deeply concerned that these intergovernmental problems would, if not properly resolved, adversely affect the future physical, economic, and social well-being and development of the entire District.

Accordingly, the Moratorium Agreement was executed in order to substantially preserve the existing governmental structure within the

COMBINED ISSUE

Please note that this issue combines SEWRPC Newsletters Nos. 5 and 6, Vol. 12. The next Newsletter will be Vol. 13, No. 1, to be issued in February 1973.

SECOND DISTRICT PLAN—continued

District for at least a four-year period so that basic long-range planning studies could be undertaken on a cooperative, intergovernmental basis. The agreement includes provisions for an annexation-incorporation moratorium applicable to a portion of the District; the interim provision of municipal services between municipalities; and, most significantly, the conduct of a two-phase comprehensive planning program for the District. The first phase, which is now complete except for public hearings and final plan adoption, was designed to provide recommendations for the sound physical development of the District. In effect, the first phase would provide the units of government in the District with a series of interrelated functional—i. e. , transportation, land use, sewerage, water supply—plan elements. The second phase of the program is to be designed to provide recommendations relative to the future governmental framework of the District as required to implement the agreed-upon comprehensive functional plan prepared in the first phase. Thus, to be included in the second phase would be such considerations as whether existing governmental units should be expanded or consolidated and whether sewerage, water supply, police and fire protection, park and recreation, health, or other municipal services should be provided by Racine County, by metropolitan service districts, by cooperative municipal action, by individual municipalities, or by other means.

While not parties to the Agreement, the Villages of Elmwood Park, North Bay, and Wind Point and the Town of Caledonia were brought into the comprehensive planning program since their direct involvement and participation was considered to be essential to the success of the entire planning effort. The Racine County Board of Supervisors was given the responsibility under the Agreement to conduct the two-phase comprehensive planning program. The Board requested that the Southeastern Wisconsin Regional Planning Commission undertake the first phase of the study. The agreement also provided that a Citizens Advisory Committee be established to provide policy guidance for the conduct of the study (see Question Box for Committee composition). After consulting

SECOND DISTRICT PLAN—continued

with the Committee, the Commission retained the firm of Harland Bartholomew and Associates, Northbrook, Illinois, to conduct the first phase of the District comprehensive planning program. The Bartholomew firm was responsible for the preparation of all the plan elements except the arterial street and highway system plan, the sanitary sewerage system plan, and the library facilities plan, which elements were adapted to the District by the Commission staff from concurrent planning programs underway at the regional level.

INVENTORIES, ANALYSES, AND FORECASTS

Many major planning inventories were conducted as part of the District study. These included inventories of governmental structure, including existing intergovernmental service agreements; demographic and economic base; natural resources, including the delineation of environmental corridors; land use development, including a description of land use development problems; housing, including a special exterior survey of housing conditions; transportation facilities, including the arterial street and highway system, off-street parking facilities, public transit facilities, port and railroad facilities, and truck terminal facilities; public utilities, including water supply, sanitary sewer service, storm drainage facilities, and solid waste disposal facilities and methods; community facilities, including schools, libraries, police and fire stations, and parks and open spaces; and local plans, ordinances, and programs. In addition, data was collected concerning expenditures and revenues by local governments in the District.

The data collected in all of the foregoing inventories were analyzed in order to clearly identify—and where possible quantify—the environmental and developmental problems that exist within the District. These problems were then to be addressed in the preparation and, ultimately, implementation of the comprehensive long-range development plan for the District. The most significant problems identified can be summarized as:

SECOND DISTRICT PLAN—continued

- The need to provide for environmental preservation and enhancement.

The woodlands, wetlands, and wildlife habitat areas remaining within the District were found to be limited, with the best remaining such resources occurring in linear environmental corridors generally located along the surface watercourses of the District. Such corridors need protection and preservation from incompatible urban and rural development. This would also serve to protect the natural floodlands of the watercourses from urban development, thereby avoiding a future increase in flood damages and the need to construct expensive flood control works. It would also simplify the task of providing good urban storm water drainage. In addition, serious water quality problems were found to exist on both the Root and Pike Rivers. Such problems are largely caused by inadequate municipal sewage treatment and by inoperative private soil absorption sewage disposal systems.

- The need to provide for a more rational urban land development pattern.

The inventories revealed that an extensive amount of urban development has been scattered along nearly every mile of county and town road between IH 94 and the highly developed urban area of the District. Such scattered urban development inhibits the future sound development of viable neighborhoods, often interferes with adjacent agricultural operation, reduces the ability of the roads to carry traffic, and increases the cost of providing essential utility services. Many such linear developments along rural roads have taken place on long, narrow lots which inhibit further division of land to accommodate future urban development.

SECOND DISTRICT PLAN—continued

- The need to combat deteriorating housing conditions.

In a special survey conducted under the program, it was found that about 10 percent of the nearly 40,000 housing units in the District were substandard in terms of deteriorating exterior conditions. These units, most of which could be rehabilitated, were largely found in neighborhoods adjacent to the Racine central business district. Many blocks in these neighborhoods were found to have over half of the housing units in a substandard condition.

- The need to provide for both a better and a more balanced transportation system in the District in order to keep abreast of increasing travel demand.

In a special survey conducted under the District planning program, it was determined that mass transit ridership had declined to about one-fourth of its 1963 level in terms of average daily ridership. Today only about 2,500 persons per day ride the Racine transit system, constituting less than 1 percent of total daily travel in the District. Nine out of every ten transit riders are captive in that they do not have an automobile available for use at the time the transit trip is made. Coupled with this decline in mass transit utilization are increasing automobile registrations and vehicle miles of travel in the District with a corresponding increase in the number of miles of the arterial street system that are operating at or over design capacity—that is, at congestion levels.

- The need to economically and efficiently provide centralized sanitary sewer and water supply services to the entire urban area of the District and to improve levels of sewage treatment.

Inventories conducted under the study revealed that water demand and consequent sewage flow are increasing at rates faster than population growth. Most of the municipal water and sewer ser-

SECOND DISTRICT PLAN—continued

vice in the District is provided through complex intergovernmental agreements which often require the approval of several units of government in order to extend water and sewer service to newly developing areas. These intergovernmental agreement mechanisms often lead to inordinate delays in servicing needed new development, thereby hampering commercial, industrial, and residential growth in the District. In addition, improved levels of sewage treatment in the District and a resolution of the combined sewer overflow problem are needed to meet water quality requirements. The need to provide sanitary sewer service to the entire urban area within the District is clearly indicated because of the inability of the soils covering the District to properly and safely absorb sewage effluent from private on-site septic tank sewage disposal systems.

- The need to economically and efficiently provide certain other community facilities and services to meet increasing demands.

Inventories conducted under the study revealed that shifting population size and distribution patterns in the District have resulted in the need to continually adjust school service areas to avoid both overcrowding and underutilization of schools. This works against the goal of stable neighborhood populations centered on a neighborhood elementary school. There is also a need to replace eight obsolescent elementary schools and one obsolescent junior high school. In addition, there is a need to provide more community and neighborhood parks and additional branch library facilities.

- The need to combat the rapidly rising cost of local government.

Local government expenditures in the District during the decade of the 1960's nearly doubled. The cost of educating the school children in the District now approximates 52 percent of the local

SECOND DISTRICT PLAN—continued

government cost. Despite increasing state and federal aid programs, the property tax in the District bore a slightly higher relative burden in 1969 than it did in 1960. Such rapidly rising costs point out the need to plan for future growth in the District on a comprehensive, cooperative basis and through such planning to examine all potential ways of reducing the overall local government cost while providing essential facilities and services.

Based upon the inventories and analyses conducted in the District study and upon forecasts of growth and development in the Southeastern Wisconsin Region, forecasts of future growth and development in the District were prepared to provide a framework for the development of each of the comprehensive plan elements. For example, population in the District, which stood at about 133,000 in 1970, was forecast to increase to nearly 225,000 persons by 1990. Similarly, employment, which stood at about 51,200 persons in 1970, was forecast to reach about 78,700 persons by 1990. Similar forecasts were made for other such development parameters as urban land area, automobiles available, vehicle miles of travel on the arterial street system, transit ridership, water use and sewage flow, and public school enrollment. All of the forecasts, as well as the inventories and analyses upon which such forecasts were based, are fully documented in SEWRPC Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District, Volume One, Inventory Findings and Forecasts, published in December 1970.

DISTRICT PLAN ELEMENTS

Four interrelated plan elements comprise the basic comprehensive plan for the District: a land use and housing plan element; a transportation plan element, including arterial street and highway system and transit system subelements; a community facilities plan element, including a school plan subelement, a park and open space plan subelement, and a public buildings plan subelement; and a public utilities plan element, including a water supply and distribution plan subelement, a sanitary

SECOND DISTRICT PLAN—continued

sewerage system plan subelement, a storm drainage plan subelement, and a solid waste disposal plan subelement. Each of the plan elements comprising the comprehensive plan for the Racine Urban Planning District are described in detail in SEWRPC Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District, Volume 2, The Recommended Comprehensive Plan, published in October 1972.

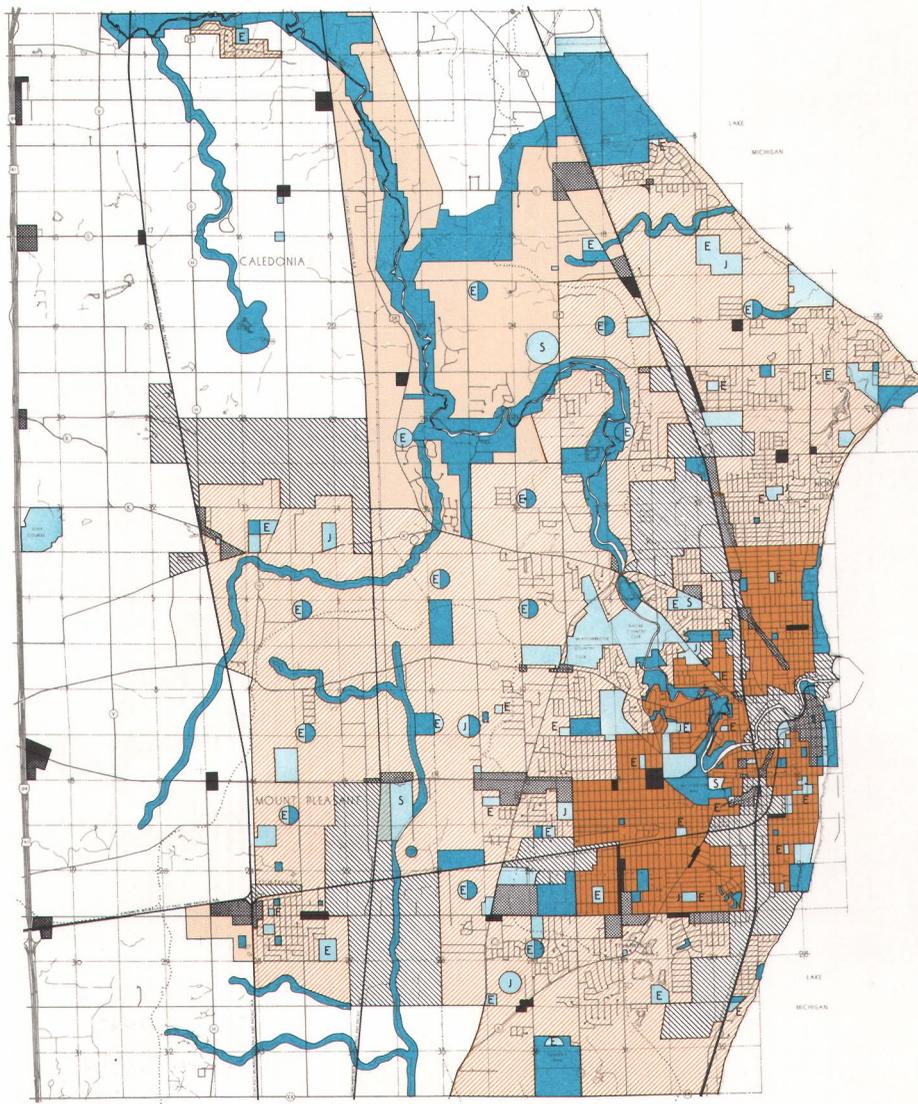
Land Use and Housing Plan

The land use plan for the Racine Urban Planning District is graphically summarized on Map 2. The plan seeks to concentrate new urban development in those areas of the District that can be readily served by public sanitary sewer and water supply services and which are covered by soils generally suitable for urban development with centralized sewer and water service. Most of the new urban growth is recommended to occur at a medium density, where the average single-family lot would approximate a quarter to a third of an acre in area. Lower density residential development is recommended for an area extending along the Root River parkway through the Town of Caledonia. All residential development is recommended to take place in a series of neighborhoods each with its own elementary school and neighborhood park. Adequate provision is made in the plan for future industrial and commercial land use development in the District, including the development of a new major regional shopping center at the intersection of STH 31 and STH 11 and the further development of major industrial areas as shown on Map 2.

In order to illustrate the kind of more precise neighborhood unit development planning recommended to be carried on by the local units of government in implementation of the District land use plan, one such neighborhood plan was developed under the District planning study. This plan, for the Root River neighborhood in the Town of Caledonia, is shown on Map 3A. In addition, a more generalized neighborhood development plan was prepared at the request of the Committee. This plan, for the Peterson neighborhood in the Town of Mount Pleasant, is shown on Map 3B.

Map 2

LAND USE PLAN FOR THE RACINE URBAN PLANNING DISTRICT



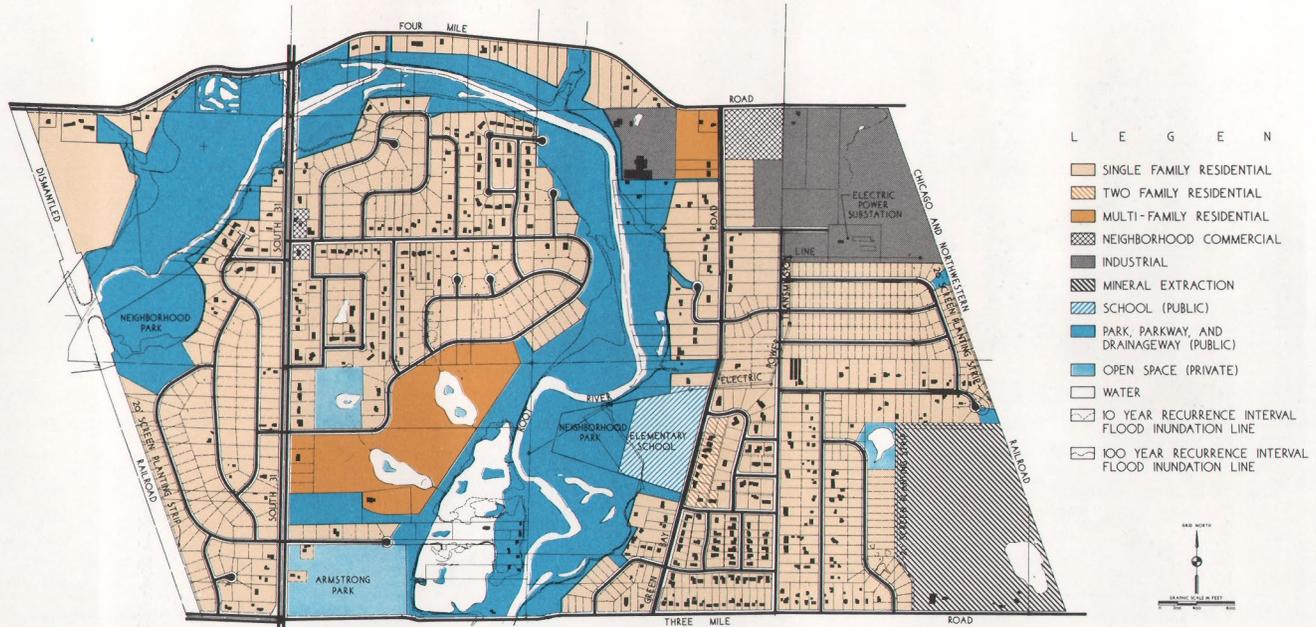
LEGEND

- | | | | |
|--|--|---|--|
| <ul style="list-style-type: none"> --- COUNTY LINE --- TOWN AND RANGE LINE --- SECTION LINE --- QUARTER SECTION LINE --- STATE PLANE COORDINATE GRID --- INCORPORATED CITY OR VILLAGE --- INTERSTATE HIGHWAY --- U.S. NUMBERED HIGHWAY | <ul style="list-style-type: none"> --- STATE TRUNK HIGHWAY --- COUNTY TRUNK HIGHWAY --- LOCAL OR MINOR STREET --- RAILROAD --- RIVER AND LAKE SHORELINE --- WATERWAY TRAIL STRIP OR WATERCOURSE --- MAJOR, PUBLIC AND SEMI-PUBLIC LAND --- POWER LINES | <ul style="list-style-type: none"> --- MAJOR WATERSHED --- BROOK/RAVE --- PARCEL/TAXIAL AND VACANT --- LOW DENSITY RESIDENTIAL --- LESS THAN 1 PERSON PER NET RESIDENTIAL ACRE --- MEDIUM DENSITY RESIDENTIAL --- 1.5 - 22.8 PERSONS PER NET RESIDENTIAL ACRE --- HIGH DENSITY RESIDENTIAL --- 23+ PER PERSON PER NET RESIDENTIAL ACRE | <ul style="list-style-type: none"> --- NEIGHBORHOOD COMMERCIAL --- GENERAL COMMERCIAL --- LIGHT AND HEAVY INDUSTRIAL --- PUBLIC AND SEMI-PUBLIC --- ELEMENTARY SCHOOL --- JUNIOR HIGH SCHOOL --- SENIOR HIGH SCHOOL --- PARKS RECREATION AND ENVIRONMENTAL CORRIDORS |
|--|--|---|--|



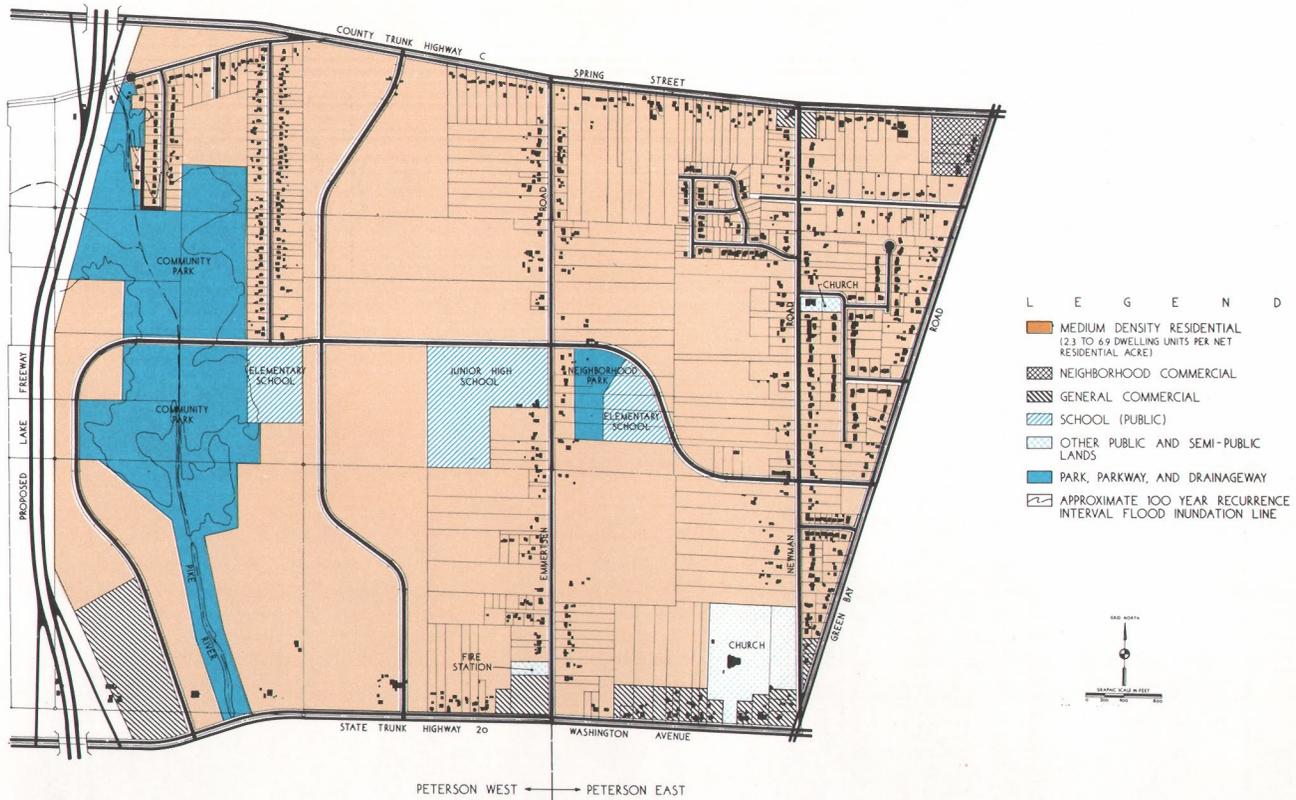
Map 3-A

PRECISE NEIGHBORHOOD UNIT DEVELOPMENT PLAN
FOR THE ROOT RIVER NEIGHBORHOOD



Map 3-B

GENERALIZED NEIGHBORHOOD UNIT DEVELOPMENT PLAN
FOR THE PETERSON NEIGHBORHOOD



SECOND DISTRICT PLAN—continued

Based upon an inventory of exterior housing conditions, suggested housing improvement programs for each neighborhood were identified in a general manner (see Map 4). The plan recommends that programs similar to the Southside Revitalization Study carried on in the neighborhood surrounding S. C. Johnson and Sons, Inc., in the City of Racine and the Town of Mount Pleasant, be completed in other areas in order to provide definitive redevelopment and renewal recommendations within the older neighborhoods in the District.

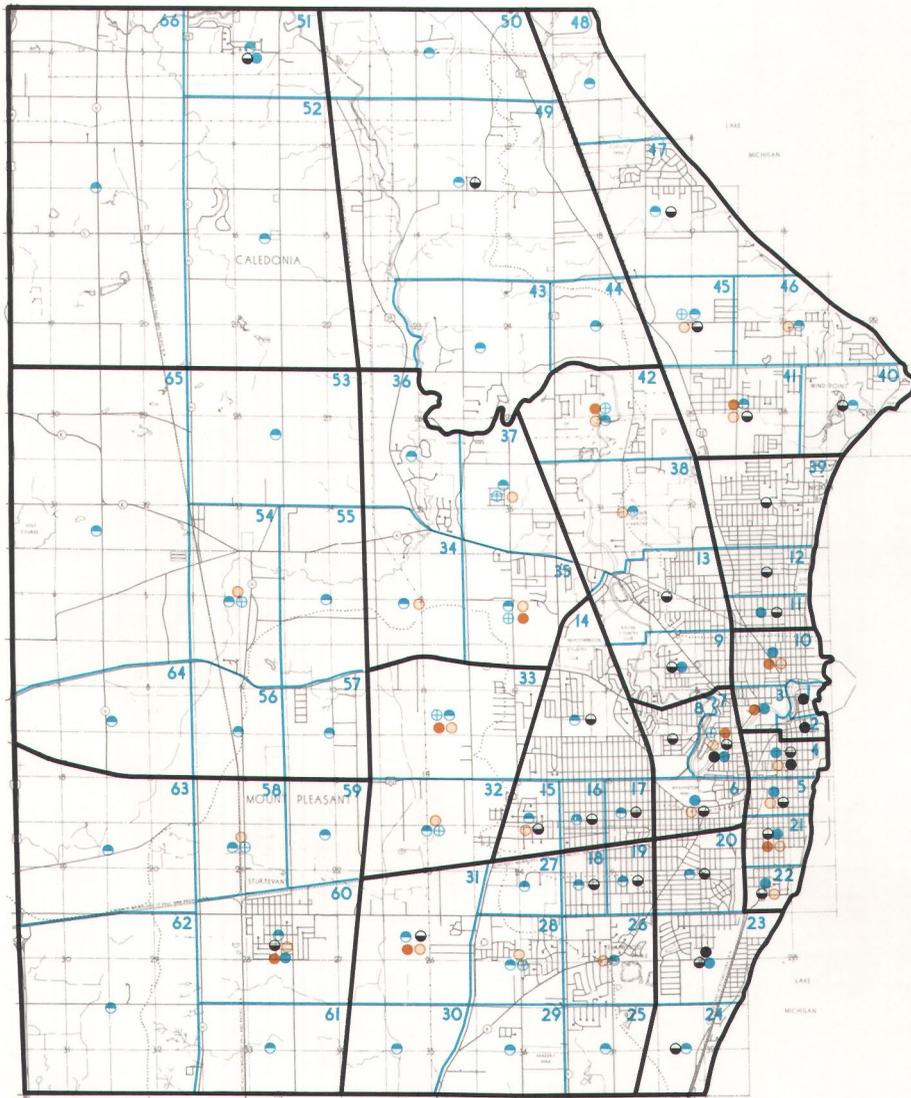
Transportation Plan

The transportation plan for the District consists primarily of an arterial street and highway system plan and a transit system plan. The transit system plan consists of recommended modifications to the existing transit system, including initially reducing the number of bus routes from ten to seven through the combination of certain existing routes and the ultimate provision of additional bus service to the proposed regional shopping center at the intersection of STH 11 and STH 31 through the establishment of a loop bus route. The proposed modifications to the existing transit system are shown on Map 5.

It was initially assumed that the arterial street and highway system plan already prepared as part of the regional transportation plan and adopted by Racine County would be utilized as a basis for the arterial street and highway system plan subelement of the District plan. The adopted regional transportation system plan contained a major recommendation for the development of a Racine Loop Freeway following in part the abandoned Chicago, Northshore and Milwaukee Railroad right-of-way within the City of Racine and the Towns of Mount Pleasant and Caledonia. Because the City of Racine, which had purchased a portion of the right-of-way upon abandonment of the railroad, determined during the progress of the District study to dispose of the right-of-way and permit other land use development to take place on remnant parcels, it was considered essential to consider alternatives to the Loop Freeway in the District planning program. In addition, since the District planning

Map 4

HOUSING PLAN FOR THE RACINE URBAN PLANNING DISTRICT

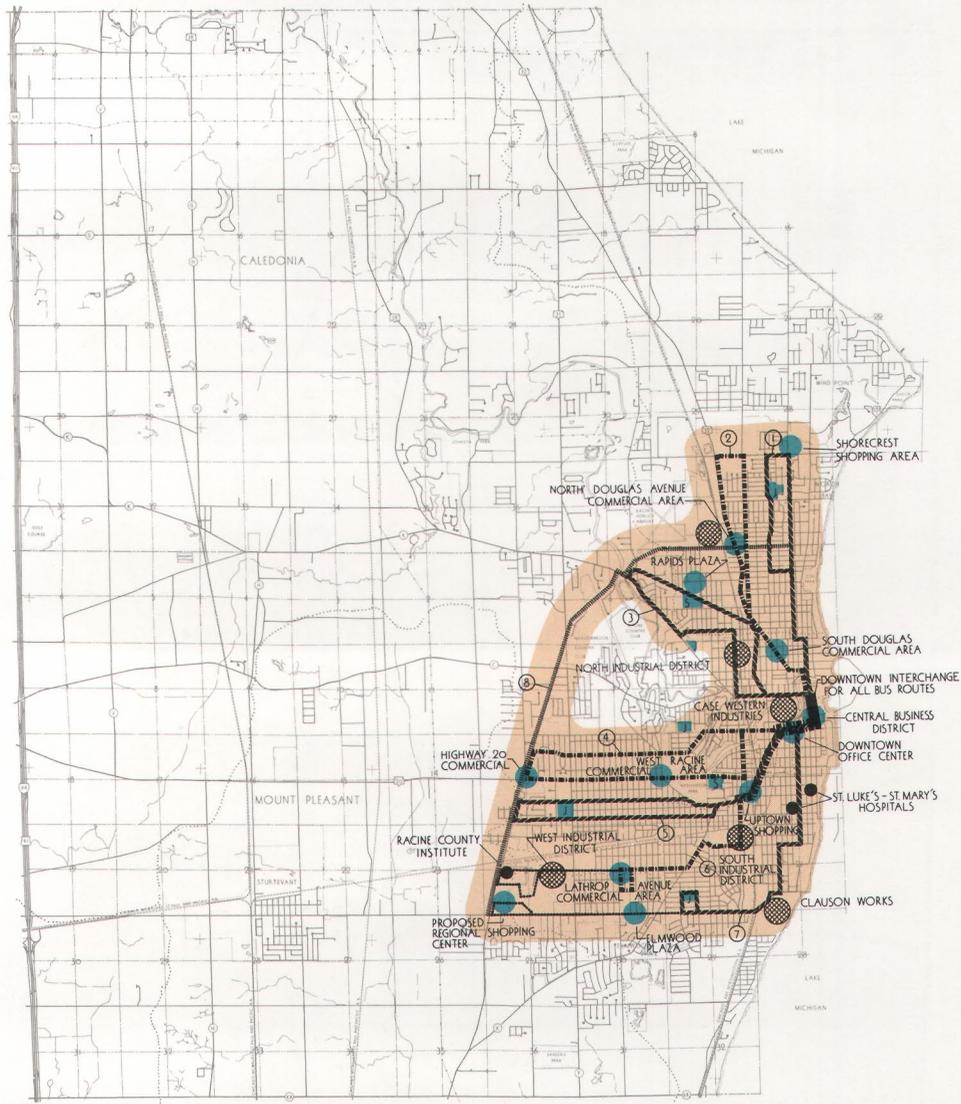


- LEGEND**
- COUNTY LINE
 - TOWN AND RANGE LINE
 - SECTION LINE
 - QUARTER SECTION LINE
 - STATE PLANE COORDINATE GAUS
 - INCORPORATED CITY OR VILLAGE
 - INTERSTATE HIGHWAY
 - U.S. NUMBERED HIGHWAY
 - STATE TRUNK HIGHWAY
 - COUNTY TRUNK HIGHWAY
 - LOCAL OR MINOR STREET
 - RAILROAD
 - RIVER AND LAKE SHORELINE
 - INTERMITTENT STRIP OR WATER COURSE
 - MAJOR, PUBLIC AND SEMI-PUBLIC LAND
 - POWER LINES
 - MAJOR WATERWAY
 - REDEVELOPMENT AND CLEARANCE NEIGHBORHOOD INCLUDES REDEVELOPMENT PROGRAM, CLEARANCE PROGRAM, CODE ENFORCEMENT AND RECONSTRUCTION OR PUBLIC LANDS EXPANSION
 - PRESERVATION NEIGHBORHOOD INCLUDES PRESERVATION CODE ENFORCEMENT PROGRAM AND CLEARANCE AND PUBLIC LANDS EXPANSION
 - PRESERVATION NEIGHBORHOODS INCLUDES CODE ENFORCEMENT PROGRAM
 - DEVELOPMENT RESERVE INCLUDES COORDINATED APPLICATION OF ZONING, PRESERVATION, BUILDING AND HOUSING CODES
 - RELOCATION HOUSING AREAS
 - ELDERLY HOUSING AREAS
 - LOW AND MODERATE INCOME AREAS
 - NEIGHBORHOOD BOUNDARY
 - COMMUNITY BOUNDARY



Map 5

TRANSIT SYSTEM PLAN FOR THE RACINE URBAN PLANNING DISTRICT



LEGEND

- | | | | | |
|--|---|---|---|---|
| <ul style="list-style-type: none"> --- COUNTY LINE --- TOWN AND RANGE LINE --- SECTION LINE --- QUARTER SECTION LINE --- STATE PLANE COORDINATE GRID --- INCORPORATED CITY OR VILLAGE --- INTERSTATE HIGHWAY --- U.S. NUMBERED HIGHWAY | <ul style="list-style-type: none"> --- STATE TRUNK HIGHWAY --- COUNTY TRUNK HIGHWAY --- LOCAL OR AVENUE STREET --- RAILROAD --- RIVER AND LAKE DISCHARGE --- PERMANENT STREAM OR WATERCOURSE --- MAJOR, PUBLIC AND SEMI-PUBLIC LAND --- POWER LINES | <ul style="list-style-type: none"> --- MAJOR WATERSHED --- BREAKWATER | <p>DESTINATIONS</p> <ul style="list-style-type: none"> ● INDUSTRIAL CENTERS ● COMMERCIAL CENTERS ● INSTITUTIONS ● HIGH SCHOOLS ■ SERVICE AREA (1/4 MILE WALKING DISTANCE) | <p>PROPOSED DESTINATIONS</p> <ul style="list-style-type: none"> --- Hatched box: PROPOSED SERVICE AREA FOR BUS ROUTES ○ N.S. 4201 NUMBER --- Dashed line: FUTURE EXTENSIONS --- Thick dashed line: PROPOSED LOOP ROUTE |
|--|---|---|---|---|



SECOND DISTRICT PLAN—continued

program contained participation by all seven local units of government in the District as well as Racine County, it provided a logical forum for a final decision on a key highway facility which has areawide ramifications.

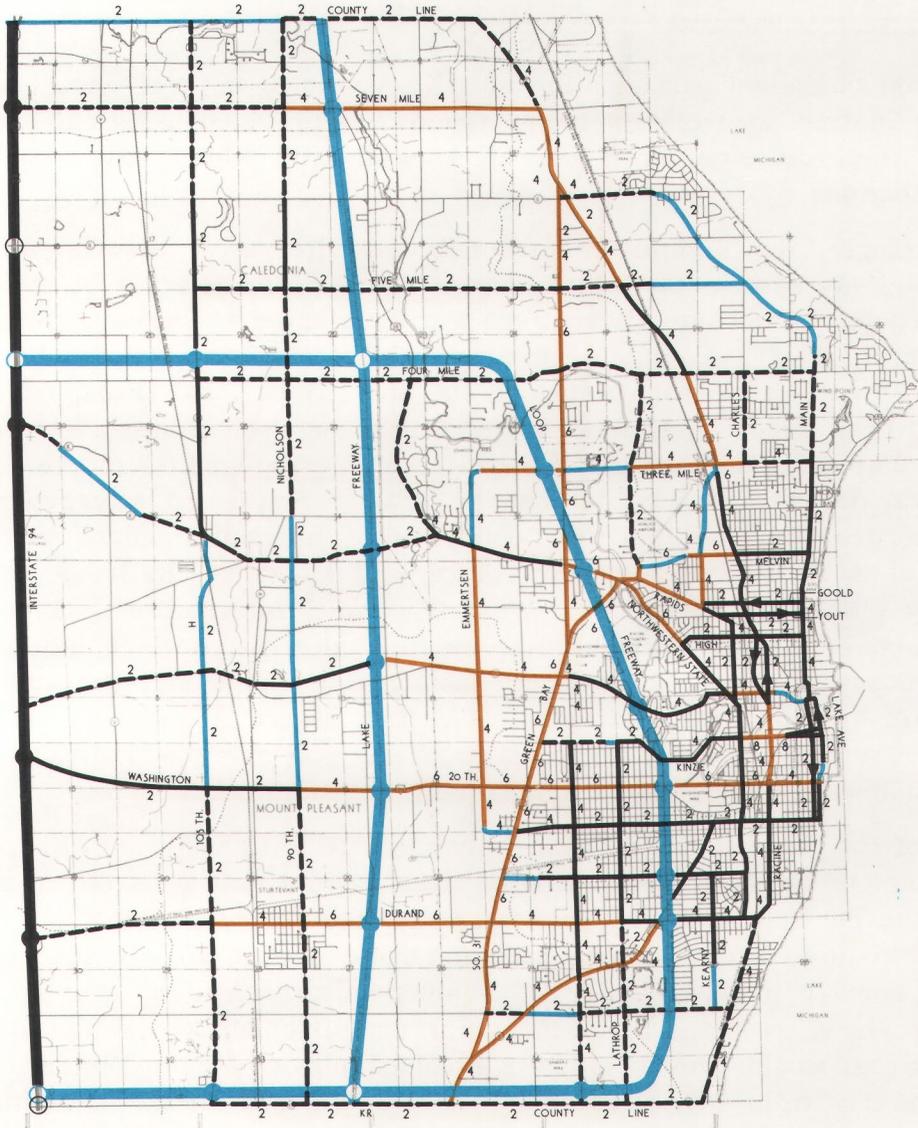
Accordingly, the Committee directed that alternative arterial street and highway system plans be prepared and presented for their consideration. Four basic alternatives were presented as shown on Maps 6 through 9. The first contains an arterial street system with the Racine Loop Freeway as recommended in the adopted regional transportation plan ("Loop Freeway Alternative"). The second substitutes a standard surface arterial on a portion of the right-of-way designated for the Loop Freeway under the first alternative ("West Boulevard Alternative"). The third contains neither the Loop Freeway nor any standard surface arterial on the old Chicago, Northshore, and Milwaukee Railroad right-of-way ("No Loop Freeway—No West Boulevard Alternative"). Finally, the fourth contains modifications to the third alternative which minimize the necessary relocation of homes, businesses, and industrial structures ("Minimum Relocation Alternative"). A fifth alternative, which assumes neither reconstruction of existing facilities nor any new facility construction, was also given consideration ("Do Nothing Alternative").

Each of the alternatives was carefully analyzed with respect to its performance in handling the anticipated 1990 travel demand, its effect upon land use development, and its cost. The first three alternatives presented would provide approximately the same overall level of transportation service in the District. The fourth alternative, in reducing the relocation of residences, commercial establishments, and industrial structures, would provide a lower level of service to the District and particularly to the City of Racine. The fifth alternative—a "do nothing" alternative—would result in severe traffic congestion on nearly all segments of the arterial street system.

Total construction and right-of-way costs for the alternatives presented, excluding the "do nothing" alternative, ranged from about \$97 million

Map 6

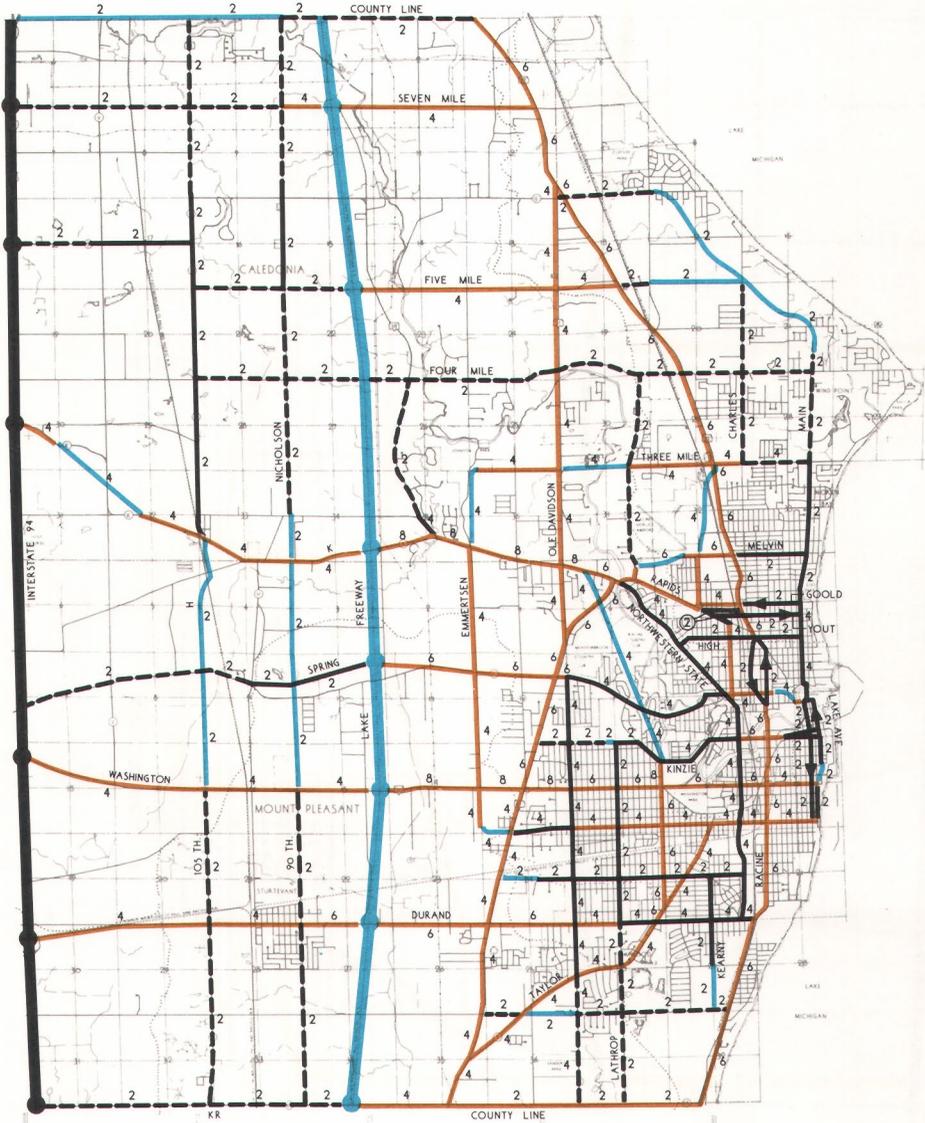
ARTERIAL STREET AND HIGHWAY SYSTEM PLAN NO. 1 FOR THE RACINE URBAN PLANNING DISTRICT--LOOP FREEWAY ALTERNATIVE



- | | | |
|--|--|---|
| <p>LEGEND</p> <ul style="list-style-type: none"> --- COUNTY LINE --- TOWN AND RANGE LINE --- SECTION LINE --- QUARTER SECTION LINE --- STATE PLANNED COORDINATE GRID --- INCORPORATED CITIES OR VILLAGES --- INTERSTATE HIGHWAY --- U.S. NUMBERED HIGHWAY | <ul style="list-style-type: none"> ○ STATE TRUNK HIGHWAY ○ COUNTY TRUNK HIGHWAY ○ LOCAL OR MAIN STREET ○ RAILROAD ○ RIVER AND LAKE SHORELINE ○ INTERMEDIATE STREAM OR WATERCOURSE ○ MAJOR PUBLIC AND SEMI-PUBLIC CANAL ○ POWER LINE ○ MAJOR WATERSHED ○ BREAKWATER | <ul style="list-style-type: none"> --- RESURFACE (STANDARD ARTERIAL) --- RESURFACE (FREEWAY) --- RECONSTRUCTION FOR SAME CAPACITY (STANDARD ARTERIAL) --- RECONSTRUCTION FOR ADDITIONAL CAPACITY (STANDARD ARTERIAL) --- NEW CONSTRUCTION (STANDARD ARTERIAL) --- NEW CONSTRUCTION (FREEWAY) ○ EXISTING FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE) ○ EXISTING FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE) ○ PROPOSED FREEWAY (FREEWAY INTERCHANGE AND LOCAL ACCESS) ○ ONE-WAY STREETS ○ NUMBER OF THROUGH TRAFFIC LANES |
|--|--|---|

Map 7

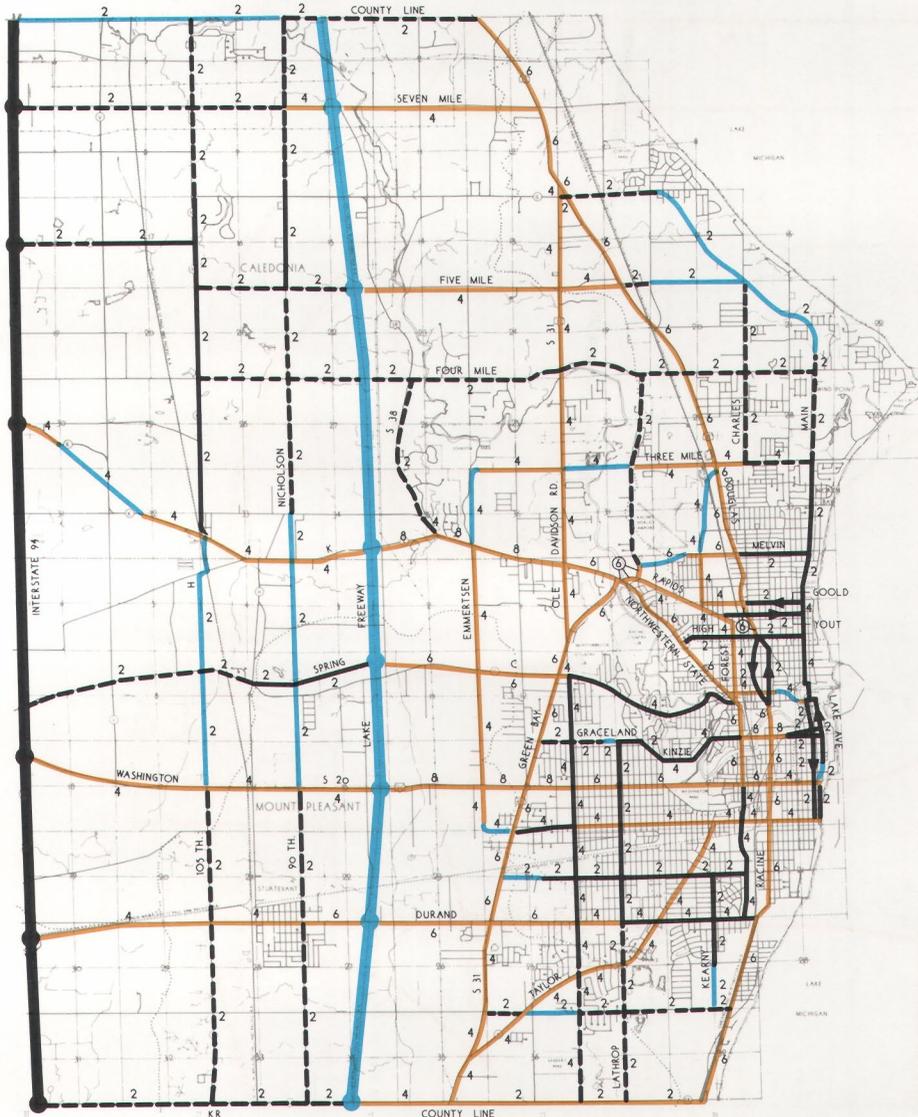
ARTERIAL STREET AND HIGHWAY SYSTEM PLAN NO. 2 FOR THE RACINE URBAN PLANNING DISTRICT--WEST BOULEVARD ALTERNATIVE



- | | | | |
|--|---|--|--|
| <ul style="list-style-type: none"> --- COUNTY LINE --- TOWN AND RANGE LINE --- SECTION LINE --- QUARTER SECTION LINE --- STATE PLANE COORDINATE GRID --- INCORPORATED CITY OR VILLAGE --- WATERSTATE HIGHWAY --- U.S. NUMBERED HIGHWAY | <ul style="list-style-type: none"> --- STATE TRUNK HIGHWAY --- COUNTY TRUNK HIGHWAY --- LOCAL OR MINOR STREET --- RAILROAD --- FURROW AND LEE MARKING --- INTERMITTENT STREAM OR WATERCOURSE --- MAJOR PUBLIC AND SEMI-PUBLIC UTILITY --- POWER LINE --- MAJOR WATERSHED --- BREAKWATER | <ul style="list-style-type: none"> --- RESURFACE (STANDARD ARTERIAL) --- RESURFACE (FREEWAY) --- RECONSTRUCTION FOR SAME CAPACITY (STANDARD ARTERIAL) --- RECONSTRUCTION FOR ADDITIONAL CAPACITY (STANDARD ARTERIAL) --- NEW CONSTRUCTION (STANDARD ARTERIAL) --- NEW CONSTRUCTION (FREEWAY) | <ul style="list-style-type: none"> ● EXISTING FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE) ● PROPOSED FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE) ● ONE-WAY STREETS 2 NUMBER OF THROUGH TRAFFIC LANES |
|--|---|--|--|



ARTERIAL STREET AND HIGHWAY SYSTEM
 PLAN NO. 3 FOR THE RACINE URBAN PLANNING DISTRICT--
 NO LOOP FREEWAY-NO WEST BOULEVARD ALTERNATIVE

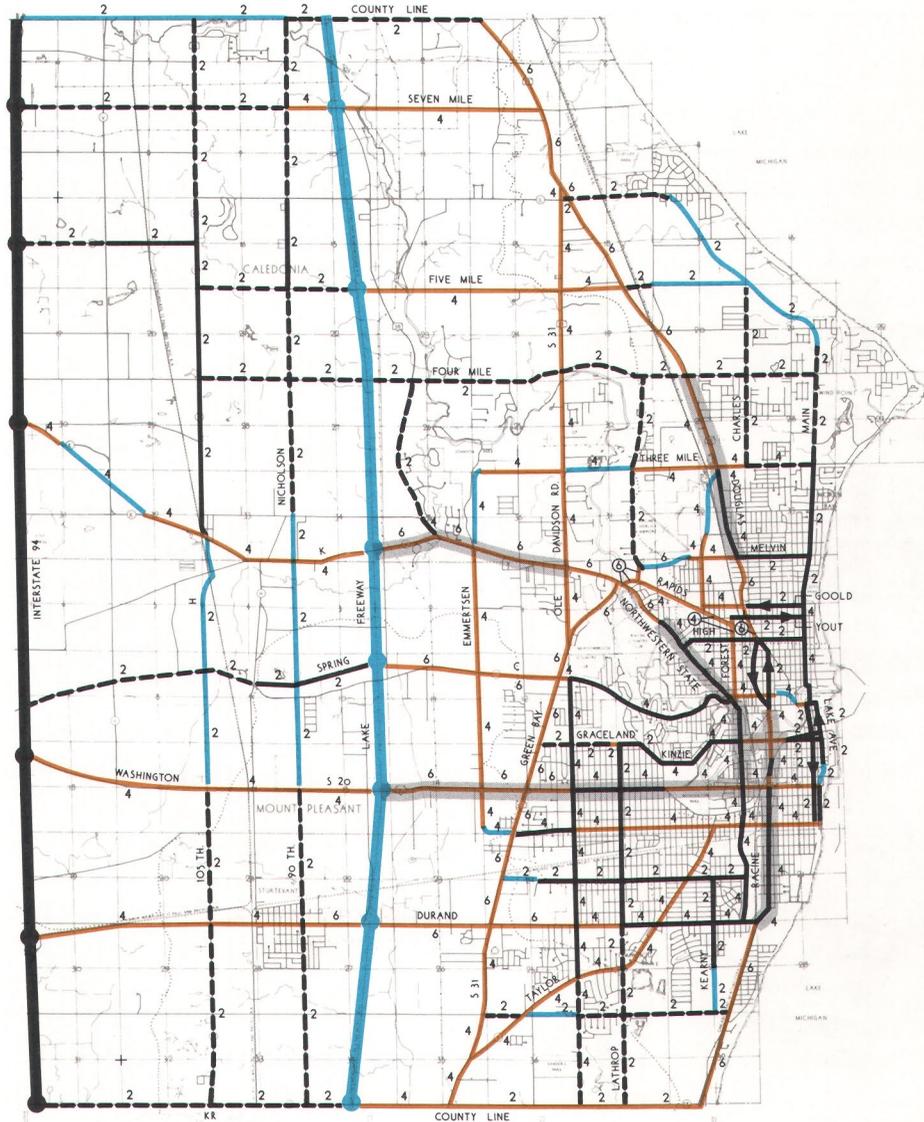


LEGEND

--- COUNTY LINE	--- STATE PLANE HIGHWAY	--- RESURFACE (STANDARD ARTERIAL)	● PROPOSED FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE)
--- TOWN AND RANGE LINE	--- COUNTY TRUNK HIGHWAY	--- RESURFACE (FREEWAY)	● ONE-WAY STREETS
--- SECTION LINE	--- LOCAL OR MAJOR STREET	--- RECONSTRUCTION FOR SAME CAPACITY (STANDARD ARTERIAL)	2 NUMBER OF THROUGH TRAFFIC LANES
--- QUARTER SECTION LINE	--- RAILROAD	--- RECONSTRUCTION FOR ADDITIONAL CAPACITY (STANDARD ARTERIAL)	
--- STATE PLANE COORDINATE GRID	--- RIVER AND LAKE SHORELINE	--- NEW CONSTRUCTION (STANDARD ARTERIAL)	
--- INCORPORATED CITY OR VILLAGE	--- INTERMITTENT STREAM OR WATERCOURSE	--- NEW CONSTRUCTION (FREEWAY)	
--- UNINCORPORATED CITY OR VILLAGE	--- MAJOR PUBLIC AND SEMI-PUBLIC LINE	--- EXISTING FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE)	
--- INTERSTATE HIGHWAY	--- POWER LINES		
--- U.S. NUMBERED HIGHWAY	--- MAJOR WATERWAY		
	--- BRANCH LINE		

Map 9

ARTERIAL STREET AND HIGHWAY SYSTEM PLAN NO. 4 FOR THE RACINE URBAN PLANNING DISTRICT-- MINIMUM RELOCATION ALTERNATIVE



LEGEND

- | | | | |
|--|--|--|--|
| <ul style="list-style-type: none"> --- COUNTY LINE --- TOWN AND RANGE LINE --- SECTION LINE --- QUARTER SECTION LINE --- STATE PLANE COORDINATE GRID --- INCORPORATED CITY OR VILLAGE --- INTERSTATE HIGHWAY --- U.S. NUMBERED HIGHWAY | <ul style="list-style-type: none"> --- STATE TRUNK HIGHWAY --- COUNTY TRUNK HIGHWAY --- LOCAL OR MAJOR STREET --- RAILROAD --- RIVER AND LAKE CHANNEL --- INTERMITTENT STREAM OR WATERCOURSE --- MAJOR, PUBLIC AND SEMI-PUBLIC UTIL. --- POWER LINE --- WATER WATERSHED --- BROOKWATER | <ul style="list-style-type: none"> --- RESURFACE (STANDARD ARTERIAL) --- RESURFACE (FREEWAY) --- RECONSTRUCTION FOR SAME CAPACITY (STANDARD ARTERIAL) --- RECONSTRUCTION FOR ADDITIONAL CAPACITY (STANDARD ARTERIAL) --- NEW CONSTRUCTION (STANDARD ARTERIAL) --- NEW CONSTRUCTION (FREEWAY) --- PLANNED REDUCED LEVEL OF SERVICE | <ul style="list-style-type: none"> ● EXISTING FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE) ● PROPOSED FREEWAY (STANDARD SURFACE ARTERIAL INTERCHANGE) ● ONE-WAY STREETS 2 NUMBER OF THROUGH TRAFFIC LANES |
|--|--|--|--|

SECOND DISTRICT PLAN—continued

for the minimum relocation alternative to about \$121 million for the West Boulevard alternative. When total annual costs are compared, which include not only construction and right-of-way but also maintenance, operating, and accident costs attributed to the systems, the Loop Freeway alternative is the best alternative, having an annual cost of about \$140 million, as compared to \$142 million for the West Boulevard and No Loop Freeway-No West Boulevard alternatives and \$143 million for the minimum relocation alternative.

In addition to cost, the five alternative street and highway system plans considered were compared in several other ways. In terms of system performance with respect to accommodating the anticipated 1990 travel demand, the first three alternatives were approximately the same, with the Loop Freeway alternative having only one mile of congested street (0.5 percent of the arterial street system) as opposed to six miles of congested streets in the West Boulevard alternative (3 percent of the arterial street system) and three miles of congested streets under the No Loop Freeway-No West Boulevard alternative (2 percent of the arterial street system). By comparison, the minimum relocation alternative would have about 15 miles of congested streets (8 percent of the arterial street system) and the "do nothing" alternative would have about 125 miles of congested streets (80 percent of the arterial street system).

The impact of not building the Racine Loop Freeway on the remainder of the arterial street and highway system is seen when the number of miles of arterials needed to be reconstructed for additional capacity—generally requiring additional right-of-way—is compared. Under the Loop Freeway alternative, about 44 miles of arterials would need to be reconstructed for additional capacity, with about 116 miles needing only minor resurfacing to serve the anticipated demand. By comparison, the West Boulevard alternative would require reconstruction for additional capacity of 72 arterial miles, with 92 miles needing resurfacing. Simi-

SECOND DISTRICT PLAN—continued

larly, the No Loop Freeway-No West Boulevard alternative would require 74 miles of arterials to be reconstructed for additional capacity, with 89 miles needing resurfacing. Finally, the minimum relocation alternative would require the reconstruction of 68 miles and the resurfacing of about 95 miles. Thus, by building the Racine Loop Freeway to serve the intensively developed area of the District, the need to reconstruct from 24 to 30 miles of standard arterial streets and highways would be avoided. This factor is quite significant when the impact upon the local environment is taken into account. In many cases street widening means the loss of trees and curb lawns and the placement of high volumes of traffic within 20 to 30 feet of residential structures.

In terms of structure displacement to accommodate facility construction, the Loop Freeway alternative is superior to the West Boulevard alternative and the No Loop Freeway-No West Boulevard alternative, displacing an estimated 314 structures as compared to an estimated 415 and 374 structures, respectively. Even given the planned reduced levels of service under the minimum relocation alternative, it would still be necessary to displace over 100 structures to effect absolutely essential arterial street improvements.

Finally, each of the five alternatives also was compared as to the arterial miles of travel in the District on an average weekday that would be accommodated on freeways. In this comparison it was determined that by 1990, when about 3.3 million vehicle miles of travel will be made daily in the District, nearly one-half of such travel could be accommodated on freeways in the District if the Loop Freeway was constructed. If the Loop Freeway is not constructed, only about one-third of the travel can be expected to be accommodated on freeways. Again, this difference can be very significant when the impact of heavily traveled standard surface arterial streets on adjacent land use development, and in particular on adjacent residential land use development, is considered.

SECOND DISTRICT PLAN—continued

After very lengthy and careful deliberation on the five alternative arterial street and highway system plans, the Committee selected the Loop Freeway alternative for inclusion in the recommended comprehensive plan for the District, as that plan would be submitted to public hearing. This decision reaffirmed the recommendations made in the adopted regional transportation plan for arterial street and highway system development in the easterly portion of Racine County. The Committee, in endorsing the concept of the Racine Loop Freeway as a needed arterial street improvement, clarified its position that consideration should be given to alignments other than the abandoned Chicago, Northshore, and Milwaukee Railroad right-of-way for that portion of the proposed Loop Freeway running in a north-south direction and that it may be more appropriate to locate the proposed Racine Loop Freeway farther to the east in order to better provide service to the central area of the City of Racine.

Community Facilities Plan

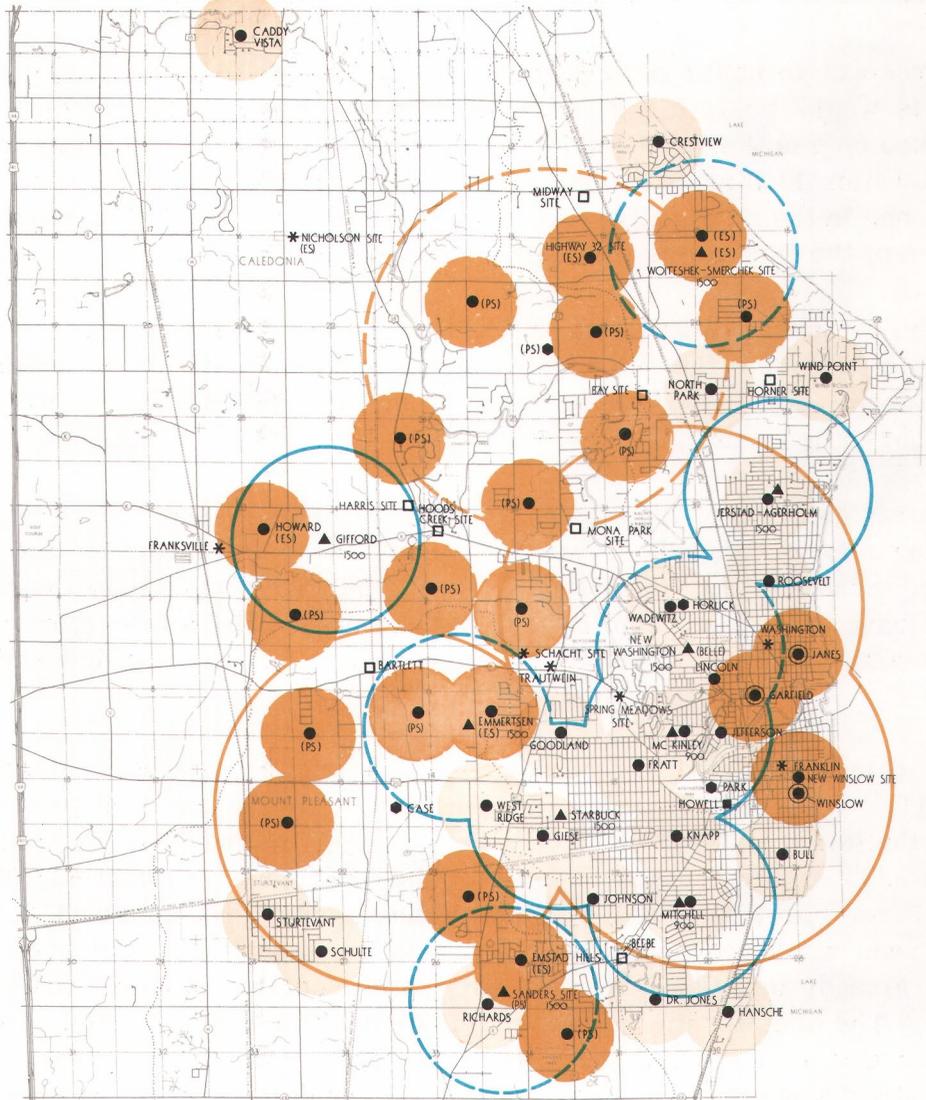
The community facilities plan consists of three major subelements: public schools, parks and open spaces, and public buildings.

The recommended public school plan for the Racine Urban Planning District is shown on Map 10. The plan seeks to promote the utilization of the park-school site concept as the focal point for neighborhood identification.

With respect to elementary schools, three—Garfield, Janes, and Winslow—are recommended to be replaced on expanded sites. Five—Bartlett, Beebee, Franksville, Hood's Creek, and Trautwein—are recommended to be abandoned, with the Franksville and Trautwein sites retained in public ownership and converted to other uses. The plan recommends that 19 additional elementary schools be constructed as the need for these schools develops in the neighborhoods (see Map 10).

Map 10

PUBLIC SCHOOL PLAN FOR THE RACINE URBAN PLANNING DISTRICT



LEGEND

- | | | | |
|--|--|---|---|
| <ul style="list-style-type: none"> --- COUNTY LINE --- TOWN AND RANGE LINE --- SECTION LINE --- QUARTER SECTION LINE --- STATE PLANE COORDINATE GRID --- INCORPORATED CITY OR VILLAGE --- INTERSTATE HIGHWAY --- U.S. NUMBERED HIGHWAY | <ul style="list-style-type: none"> --- STATE TRUNK HIGHWAY --- COUNTY TRUNK HIGHWAY --- LOCAL OR MINOR STREET --- RAILROAD --- RIVER AND LAKE SHORELINE --- INTERLUFT STREAM OR WATERCOURSE --- MAJOR PUBLIC AND SEMI-PUBLIC LINES --- POWER LINES | <ul style="list-style-type: none"> ● MAJOR WATERBODIES --- BELLEVILLE ● ELEMENTARY SCHOOL ▲ JR. HIGH SCHOOL (1900-PROJECTED ENROLLMENT) ● SR. HIGH SCHOOL ○ ONE-HALF MILE SERVICE RADIUS-ELEMENTARY ○ PROPOSED ELEMENTARY SERVICE RADIUS ○ ONE MILE SERVICE RADIUS - JR. HIGH ○ PROPOSED JR. HIGH SERVICE RADIUS | <ul style="list-style-type: none"> ○ TWO MILE SERVICE RADIUS - SR. HIGH ○ PROPOSED 3/4 MILE SERVICE RADIUS ○ PROPOSED 3/4 MILE SERVICE RADIUS ○ SCHOOL PROPERTY TO BE SOLD ○ PENDING SITE ○ EXISTING SITE ○ REPLICE OR RELOCATE ○ SPECIAL EDUCATION |
|--|--|---|---|

SECOND DISTRICT PLAN—continued

With respect to junior high schools, five of the six existing junior high schools would be retained, with Washington Junior High School being replaced on a new site. In addition, the plan proposes to add three additional junior high schools, one located in the north portion of the District, one in the western portion of the District, and one in the southern portion of the District as the need for these schools develops.

Finally, the plan recommends that one additional senior high school be constructed during the planning period to meet the anticipated demand. This school is proposed to be located near the intersection of STH 31 and Four-Mile Road.

The foregoing school plan is based upon the basic assumption that the existing nine-month school year will continue to be used. Should the Unified School Board decide to use a 12-month school year, the plan would have to be revised to reflect the increased utilization of existing and certain proposed facilities possible under such an extended school year.

The recommended park and open space plan for the District is shown on Map 11. This plan incorporates the major land acquisition program along the Root River valley already underway by Racine County pursuant to the adopted comprehensive plan for the Root River watershed. This Root River parkway would eventually have a total area of about 2,000 acres and would connect all of the existing community and regional parks already developed by the City and County of Racine along the River. The plan further proposes a major addition to the existing undeveloped Cliffside Park site of about 200 acres. The plan further proposes the acquisition of environmental corridor lands lying between Cliffside Park and the Root River parkway and the acquisition of a major wildlife conservation area in the Town of Caledonia. In addition, the plan recommends the expansion of Sanders Park near the south County

SECOND DISTRICT PLAN—continued

line and the establishment of two new major community parks in the western portion of the District. Finally, the plan proposes a series of new neighborhood parks throughout the future urban area as the need for these parks develops.

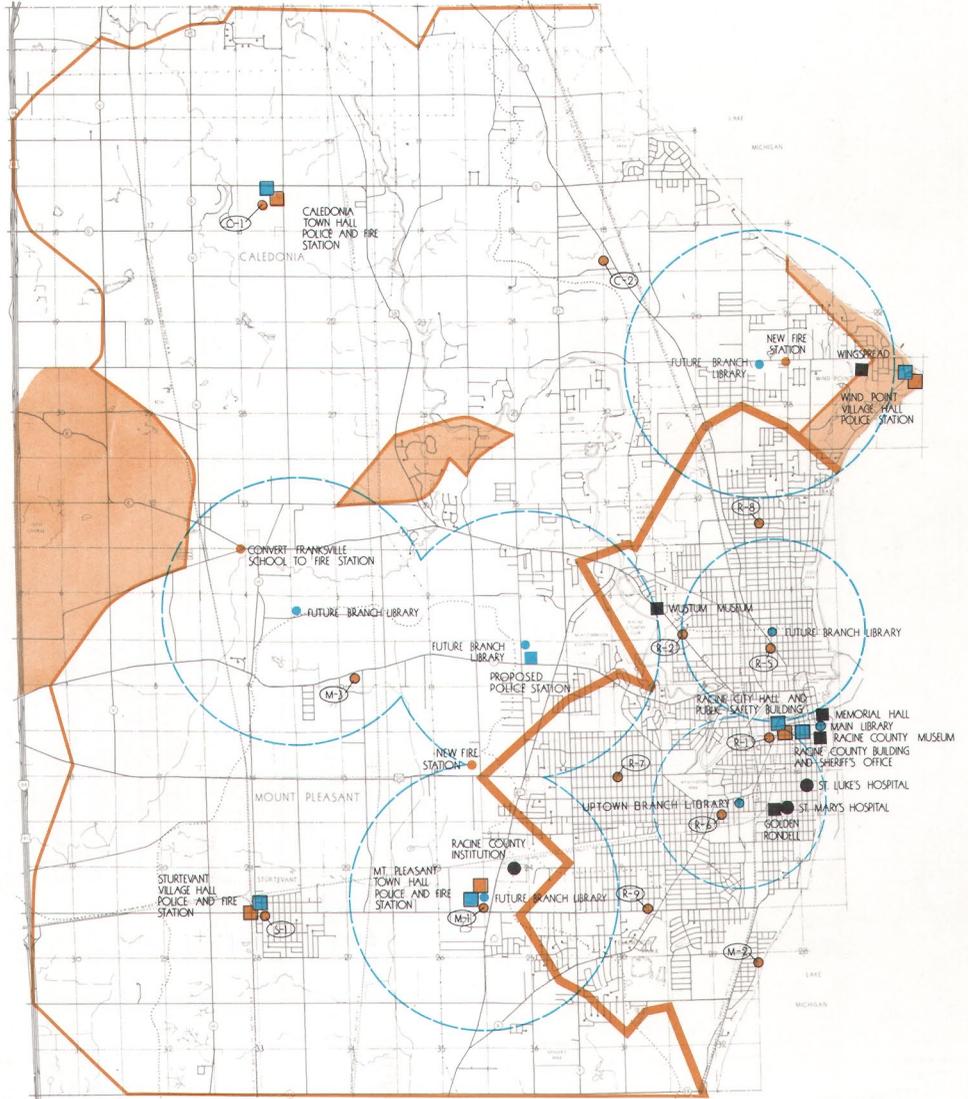
The recommended public buildings plan is shown on Map 12. The plan proposes that five additional branch libraries eventually be provided, two in the near future and three additional ones to meet anticipated needs by 1990. General locations for the branch libraries are also shown on Map 12. Proposed fire and police station locations are indicated, with such recommendations tentative pending completion of the jurisdictional phase of the study.

Public Utilities Plan

The public utilities plan consists of a water supply and distribution plan, a sanitary sewer service plan, a storm water drainage plan, and a solid waste disposal plan.

The recommended water supply and distribution plan for the District is shown on Map 13. With the exception of the small utility districts which rely on ground water and serve the Crestview and Caddy Vista Sanitary Districts, there is today essentially a single public water system in the District. This system is supplied with treated Lake Michigan water by the City of Racine Water Works Commission. The recommended plan proposes that this basic system be extended to serve all contiguous existing and future urban development within the District, including service to the Crestview Sanitary District. Recognizing that the existing intakes from Lake Michigan operated by the City of Racine have a capacity of 110 mgd, which is expected to satisfy peak demand conditions in 1990, the plan recommends that the present water treatment facility, which has an existing capacity of about 40 mgd, be expanded to serve the forecast 1990 demand. This expansion would approximately double the size of the existing plant. The plan further recommends that the equiva-

PUBLIC BUILDINGS PLAN FOR THE RACINE URBAN PLANNING DISTRICT

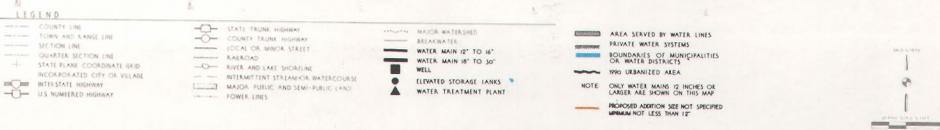
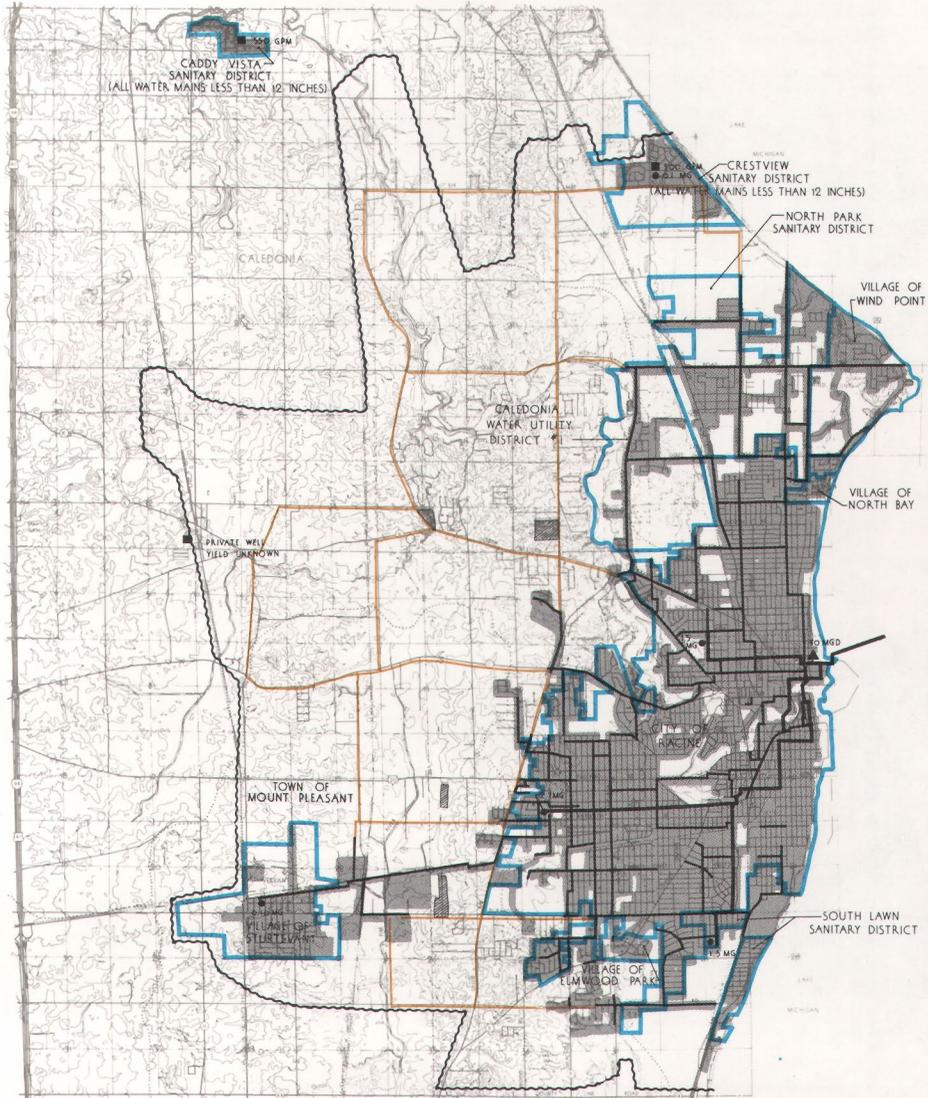


LEGEND

<ul style="list-style-type: none"> --- TOWNSHIP LINE --- PARK AND BOARDER LINE --- SECTION LINE --- QUARTER SECTION LINE --- STATE PLANE COORDINATE GRID --- INCORPORATED CITY OR VILLAGE --- INTERSTATE HIGHWAY --- US NUMBERED HIGHWAY 	<ul style="list-style-type: none"> --- STATE TRUNK HIGHWAY --- COUNTY TRUNK HIGHWAY --- LOCAL OR WAGON STREET --- RAILROAD --- RIVER AND LAKE SHORELINE --- INTERMITTENT STREAM / WATERCOURSE --- MAJOR PUBLIC AND SEMI-PUBLIC UTILITIES --- POWER LINES 	<ul style="list-style-type: none"> --- MAJOR WATERWAY --- BRANCH WATER 	<ul style="list-style-type: none"> ● LIBRARY BUILDING ■ ADMINISTRATIVE BUILDING ■ POLICE STATION ● FIRE STATION ● CULTURAL AND INSTITUTIONAL BUILDING □ EXISTING BUILDING 	<ul style="list-style-type: none"> ○ INCREASED BRANCH LIBRARY SERVICE AREA ○ THREE & ONE-HALF MILE FIRE SERVICE TRAVEL DISTANCE FROM OTHER DISTRICT STATIONS ○ ONE & ONE-HALF MILE FIRE SERVICE TRAVEL DISTANCE FROM CITY STATIONS ○ CITY OF RACINE FIRE STATION NUMBER ○ MT. PLEASANT FIRE STATION NUMBER ○ CALEDONIA FIRE STATION NUMBER ○ STURTEVANT FIRE STATION NUMBER ○ FIRE SERVICE AREA EXPANSION
--	--	--	---	---

Map 13

WATER SUPPLY AND DISTRIBUTION PLAN FOR THE RACINE URBAN PLANNING DISTRICT



SECOND DISTRICT PLAN—continued

lent of one-half day's supply be maintained in elevated storage in order to provide for emergency service during times of any system disruption or pumping malfunctions.

The recommended extensions to the major water distribution system to serve the 1990 urban area in the District are also shown on Map 13. These recommended distribution mains will provide for both extension of the system throughout the urban area and for a "looping" of the lines to assure adequate pressure, flow, and alternative direction of supply. It is recommended in the plan that the construction of additional water treatment facilities be undertaken within the next few years because actual peak consumption is approaching the existing plant capacity at the present time.

The selection of a sanitary sewerage system plan for the District was perhaps the most difficult element of the entire work program of the first phase. Currently, there are four separate public sanitary sewerage systems serving the area, the largest being the system operated by the City of Racine and its contracting municipalities—the Village of North Bay, the Town of Caledonia Sewer Utility District No. 1, and the Town of Mount Pleasant Sewer Utility District No. 1, followed in size by the North Park-Crestview Sanitary Districts system, the Village of Sturtevant system, and the Caddy Vista Sanitary District system. In order to prepare a sound sanitary sewerage system plan element for the District, it was necessary to conduct economic analyses of the alternative means by which sewage flows generated over the existing and probable future urbanized area within the District could be collected, conveyed, treated, and disposed of. Initially, it was intended that the geographic scope of this investigation would be confined to the Racine Urban Planning District, since sanitary sewerage system plans had already been prepared and adopted by key agencies and units of government for the Kenosha Planning District to the south and for the Milwaukee-metropolitan sanitary sewerage system to the north. During the

SECOND DISTRICT PLAN—continued

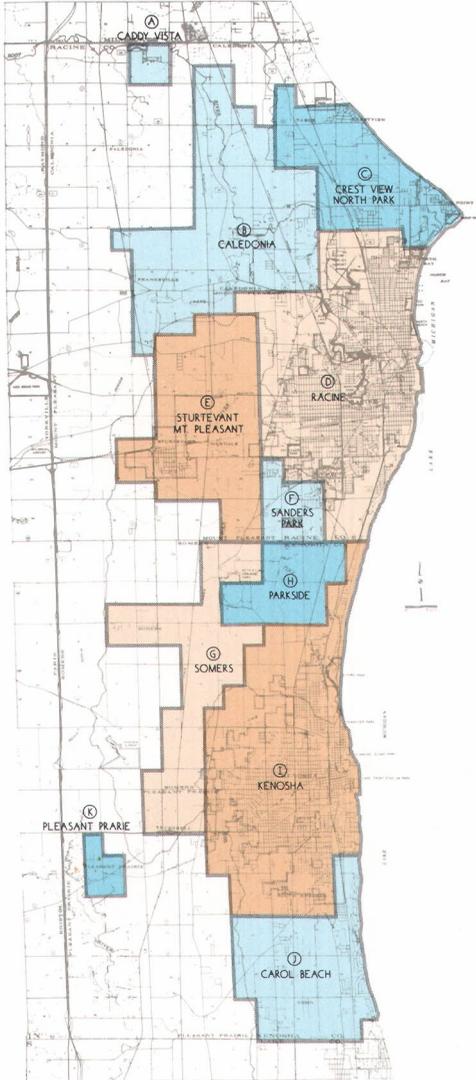
course of the study, however, the Town of Mount Pleasant proposed the location of a major new sewage treatment plant on the Pike River near the Racine-Kenosha County line to serve areas in both the Kenosha and Racine Planning Districts. This factor, combined with new federal and state planning requirements, which requirements are prerequisites to the award of any federal grants-in-aid for the construction of sewerage system components, required that areawide sanitary sewerage system plans be prepared and take into account the potential for interconnection of sanitary sewerage systems within natural drainage basins and metropolitan areas. Accordingly, the geographical scope of the study was expanded and the entire Kenosha-Racine area divided into rational sewer service analysis areas for the purpose of preparing and evaluating alternative sanitary sewerage system plans. The subdistrict analysis areas, as approximated by U. S. Public Land Survey quarter section boundaries, are shown on Map 14.

Five separate alternative sanitary sewerage system plans for the Kenosha-Racine area were considered in the study. In all five alternatives, the Caddy Vista sewage treatment plant is recommended to be abandoned and its service area connected to the Milwaukee-metropolitan sewerage system as initially recommended in the adopted Root River watershed plan. These five system plans are shown on Maps 15 through 19 and are briefly described as follows:

Alternative 1 (Map 15)

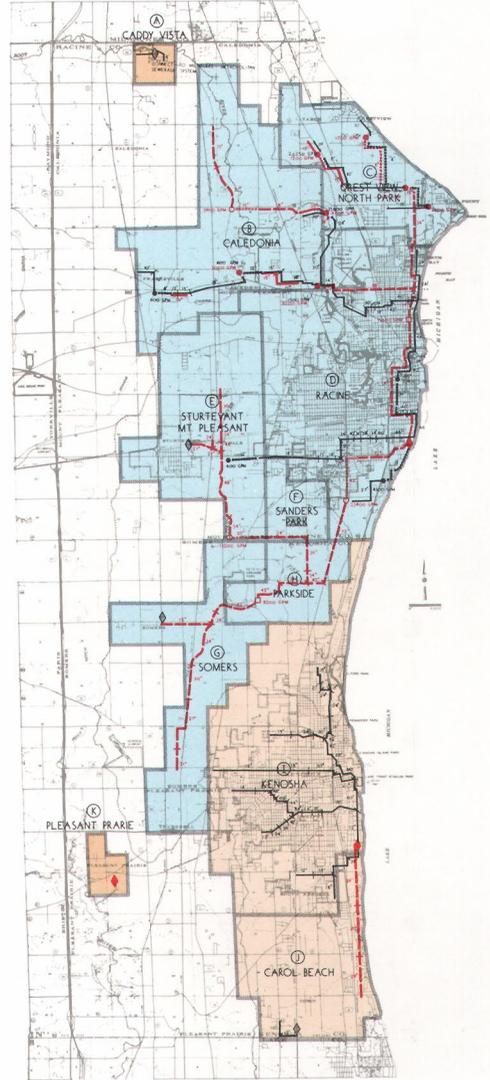
- Expand the Racine sewage treatment facility to serve all of the Racine Urban Planning District and the Somers and Parkside areas in the Kenosha Planning District.
- Expand the Kenosha sewage treatment facility to serve the Kenosha and Carol Beach areas in the Kenosha Planning District.

Map 14
 SUBDISTRICT SEWER SERVICE
 ANALYSIS AREAS--RACINE-KENOSHA
 SUBREGIONAL AREA



SUBDISTRICT ANALYSIS AREA
 --- BOUNDARY
 ○ LETTER DESIGNATION
 --- NAME

ALTERNATIVE SANITARY
 SEWERAGE SYSTEM PLAN NO. 1
 FOR THE KENOSHA-RACINE
 SUBREGIONAL AREA



SUBDISTRICT ANALYSIS AREA
 --- BOUNDARY
 ○ LETTER DESIGNATION
 --- NAME

TRUNK SEWER
 --- EXISTING SEWER
 - - - PROPOSED IMPROVEMENT TO EXISTING SEWER
 --- PROPOSED NEW SEWER

FORCE MAIN
 --- EXISTING FORCE MAIN
 - - - PROPOSED IMPROVEMENT TO EXISTING FORCE MAIN
 --- PROPOSED NEW FORCE MAIN

PUMPING STATIONS
 ● EXISTING
 ○ EXISTING--TO BE EXPANDED
 □ PROPOSED

LIFT STATIONS
 □ PROPOSED

TREATMENT PLANTS
 ◆ EXISTING--TO BE ABANDONED
 ◆ EXISTING--TO BE EXPANDED
 ◆ PROPOSED

SECOND DISTRICT PLAN—continued

- Abandon the existing Sturtevant, Crestview-North Park, Somers, and Pleasant Park sewage treatment facilities.
- Construct trunk sewers to serve the 1990 urban area and effect abandonment of sewage treatment plants.

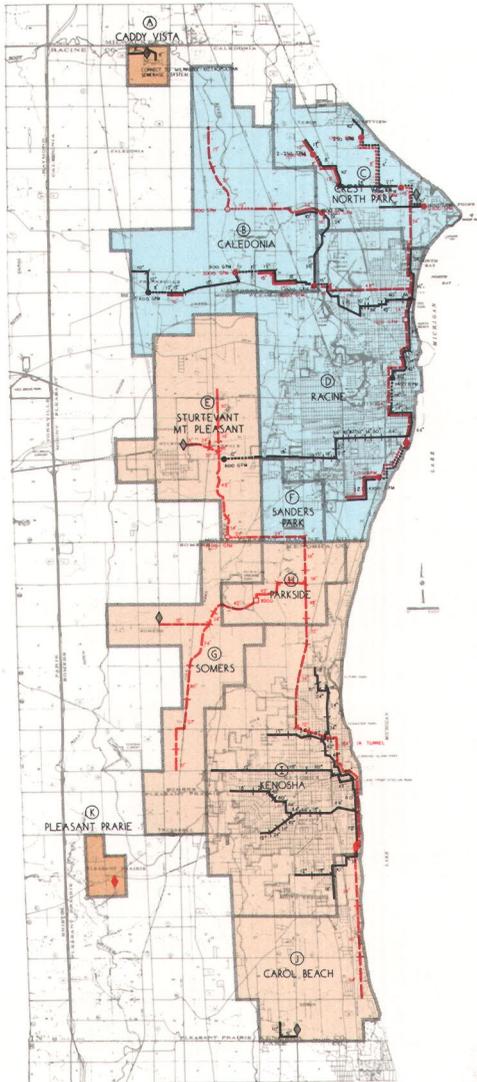
Alternative 2 (Map 16)

- Expand the Kenosha sewage treatment facility to serve all of the Kenosha Planning District and the Sturtevant-Mount Pleasant area in the Racine Urban Planning District.
- Expand the Racine sewage treatment facility to serve the Racine, Sanders Park, Caledonia, and Crestview-North Park areas in the Racine Urban Planning District.
- Abandon the existing Sturtevant, Crestview-North Park, Somers, and Pleasant Park sewage treatment facilities.
- Construct trunk sewers to serve the 1990 urban area and effect abandonment of sewage treatment plants.

Alternative 3 (Map 17)

- Expand the Racine sewage treatment facility to serve all of the Racine Urban Planning District.
- Expand the Kenosha sewage treatment facility to serve all of the Kenosha Planning District.
- Abandon the Sturtevant, Crestview-North Park, Somers, and Pleasant Park sewage treatment facilities.

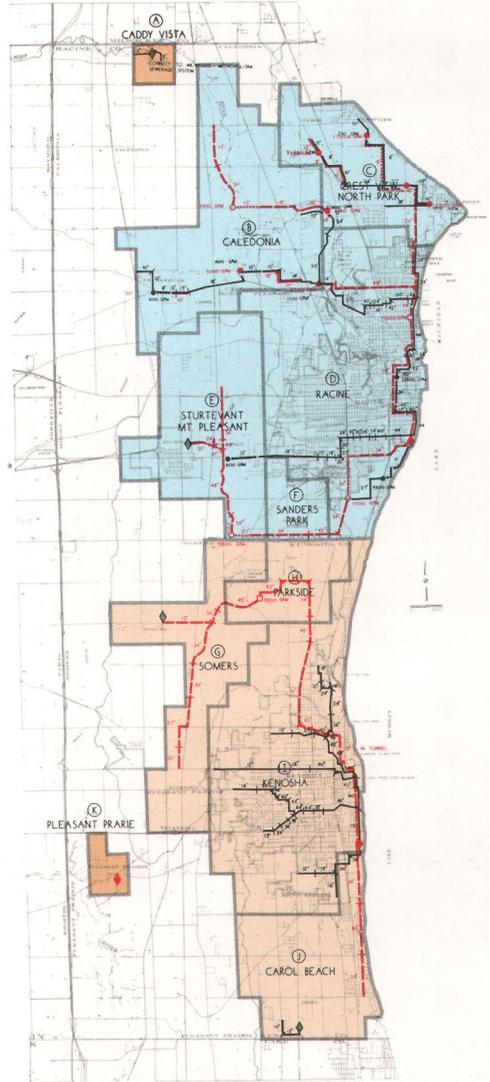
ALTERNATIVE SANITARY SEWERAGE SYSTEM PLAN NO. 2 FOR THE KENOSHA-RACINE SUBREGIONAL AREA



- SUBDISTRICT ANALYSIS AREA**
- BOUNDARY
 - ⊙ LETTER DESIGNATION
 - EXISTING SEWER
 - PROPOSED IMPROVEMENT TO EXISTING SEWER
 - PROPOSED NEW SEWER
 - EXISTING FORCE MAIN
 - PROPOSED IMPROVEMENT TO EXISTING FORCE MAIN
 - PROPOSED NEW FORCE MAIN

- PUMPING STATIONS**
- EXISTING
 - EXISTING - TO BE EXPANDED
 - PROPOSED
- LIFT STATIONS**
- PROPOSED
- TREATMENT PLANTS**
- ◆ EXISTING - TO BE ABANDONED
 - ◆ EXISTING - TO BE EXPANDED
 - PROPOSED

ALTERNATIVE SANITARY SEWERAGE SYSTEM PLAN NO. 3 FOR THE KENOSHA-RACINE SUBREGIONAL AREA



- SUBDISTRICT ANALYSIS AREA**
- BOUNDARY
 - ⊙ LETTER DESIGNATION
 - EXISTING SEWER
 - PROPOSED IMPROVEMENT TO EXISTING SEWER
 - PROPOSED NEW SEWER
 - EXISTING FORCE MAIN
 - PROPOSED IMPROVEMENT TO EXISTING FORCE MAIN
 - PROPOSED NEW FORCE MAIN

- PUMPING STATIONS**
- EXISTING
 - EXISTING - TO BE EXPANDED
 - PROPOSED
- LIFT STATIONS**
- PROPOSED
- TREATMENT PLANTS**
- ◆ EXISTING - TO BE ABANDONED
 - ◆ EXISTING - TO BE EXPANDED
 - PROPOSED

SECOND DISTRICT PLAN—continued

- Construct trunk sewers to serve the 1990 urban area and effect abandonment of sewage treatment plants.

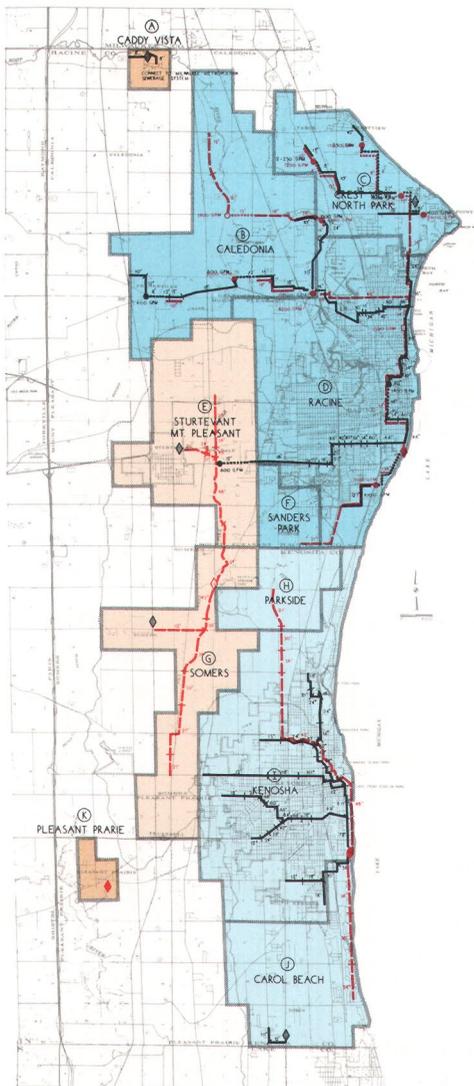
Alternative 4 (Map 18)

- Expand the Racine sewage treatment facility to serve the Racine, Caledonia, Crestview-North Park, and Sanders Park areas in the Racine Urban Planning District.
- Expand the Kenosha sewage treatment facility to serve the Kenosha, Parkside, and Carol Beach areas in the Kenosha Planning District.
- Construct a new sewage treatment facility on the Pike River to serve the Sturtevant-Mount Pleasant area in the Racine Urban Planning District and the Somers area in the Kenosha Planning District.
- Abandon the existing Sturtevant, Crestview-North Park, Somers, and Pleasant Park sewage treatment facilities.
- Construct trunk sewers to serve the 1990 urban area and effect abandonment of sewage treatment plants.

Alternative 5 (Map 19)

- Expand the Racine sewage treatment facility to serve the Racine, Sanders Park, and Caledonia areas in the Racine Urban Planning District.
- Expand the Kenosha sewage treatment facility to serve the Kenosha, Parkside, and Carol Beach areas in the Kenosha Planning District.

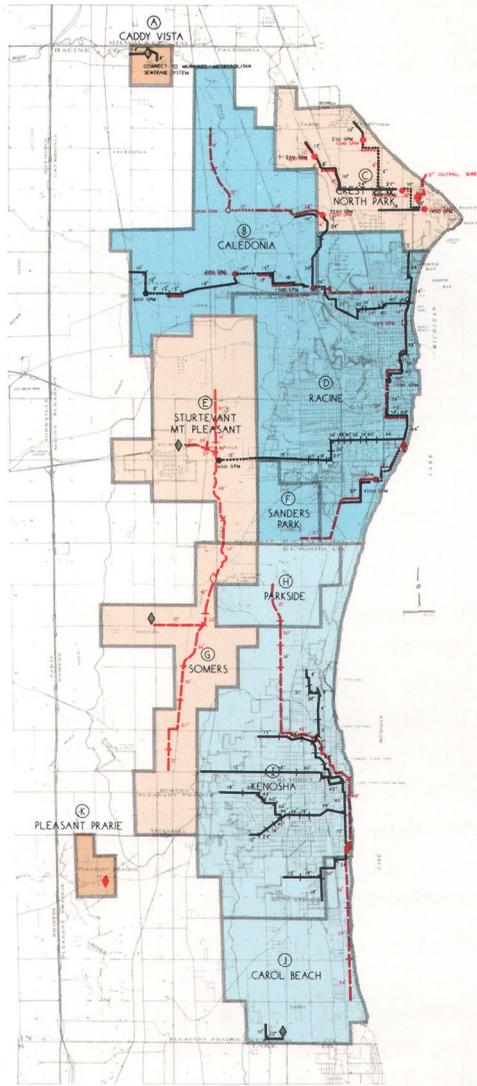
ALTERNATIVE SANITARY SEWERAGE SYSTEM PLAN NO. 4 FOR THE KENOSHA-RACINE SUBREGIONAL AREA



- SUBDISTRICT ANALYSIS AREA**
- BOUNDARY
 - ⓐ LETTER DESIGNATION NAME
- TRUNK SEWERS**
- EXISTING SEWER
 - - - PROPOSED IMPROVEMENT TO EXISTING SEWER
 - ⋯ PROPOSED NEW SEWER
- FORCE MAINS**
- EXISTING FORCE MAIN
 - - - PROPOSED IMPROVEMENT TO EXISTING FORCE MAIN
 - ⋯ PROPOSED NEW FORCE MAIN

- PUMPING STATIONS**
- EXISTING
 - ⊙ EXISTING - TO BE EXPANDED
 - PROPOSED
- LEFT STATIONS**
- PROPOSED
- TREATMENT PLANTS**
- ◆ EXISTING - TO BE ABANDONED
 - ◇ EXISTING - TO BE EXPANDED
 - PROPOSED

ALTERNATIVE SANITARY SEWERAGE SYSTEM PLAN NO. 5 FOR THE KENOSHA-RACINE SUBREGIONAL AREA



- SUBDISTRICT ANALYSIS AREA**
- BOUNDARY
 - ⓐ LETTER DESIGNATION NAME
- TRUNK SEWERS**
- EXISTING SEWER
 - - - PROPOSED IMPROVEMENT TO EXISTING SEWER
 - ⋯ PROPOSED NEW SEWER
- FORCE MAINS**
- EXISTING FORCE MAIN
 - - - PROPOSED IMPROVEMENT TO EXISTING FORCE MAIN
 - ⋯ PROPOSED NEW FORCE MAIN

- PUMPING STATIONS**
- EXISTING
 - ⊙ EXISTING - TO BE EXPANDED
 - PROPOSED
- LEFT STATIONS**
- PROPOSED
- TREATMENT PLANTS**
- ◆ EXISTING - TO BE ABANDONED
 - ◇ EXISTING - TO BE EXPANDED
 - PROPOSED

SECOND DISTRICT PLAN—continued

- Expand the Crestview-North Park sewage treatment facility to serve the entire Crestview-North Park area in the Racine Urban Planning District.
- Construct a new sewage treatment facility on the Pike River to serve the Sturtevant-Mount Pleasant area in the Racine Urban Planning District and the Somers area in the Kenosha Planning District.
- Abandon the existing Sturtevant, Somers, and Pleasant Park sewage treatment facilities.
- Construct trunk sewers to serve the 1990 urban area and effect abandonment of sewage treatment plants.

In each alternative, the sewage treatment facilities would provide an advanced level of waste treatment beyond that currently provided at any of the sewage treatment facilities in the District. Such treatment would include nutrient (phosphorus) removal at all facilities located on Lake Michigan, and, in the case of the Pike River sewage treatment facility in Alternatives 4 and 5, would include, in addition to nutrient removal, the conversion of ammonia nitrogen to nitrate in order to reduce the nitrogenous oxygen demand and toxic ammonia concentrations in the sewage effluent so that the state-established water quality objectives for the Pike River will be met.

Cost estimates of constructing, operating, and maintaining each of the five alternative sanitary sewerage systems were prepared. These costs are summarized in Table 1. From a total annual cost point of view, which view takes into account long-range operating and maintenance costs, as well as initial construction costs, it is apparent that the first three alternatives presented, which alternatives provide for two major sewage treatment facilities in the Kenosha-Racine area, are more eco-

SECOND DISTRICT PLAN--continued

nomical than Alternatives 4 and 5 which provide for additional sewage treatment facilities on the Pike River and at the North Park Sanitary District, respectively. The difference in costs between the lowest cost alternative—Alternative 1—and the highest cost alternative—Alternative 5—is about 11 percent, however, within the range of precision with which the costs of each of these five alternative plans could be estimated.

Since cost alone was not a clear cut, nor sufficient basis upon which the Citizens Advisory Committee and, ultimately, the Regional Planning Commission, the Racine County Board, and the local elected officials, could make a selection from among the alternatives presented, other considerations were presented for discussion. The following paragraphs summarize the advantages and disadvantages of the alternatives as discussed by the Committee:

Table 1

COST SUMMARY
ALTERNATIVE SANITARY SEWERAGE SYSTEMS PLANS
FOR THE KENOSHA-RACINE SUBREGIONAL AREA

Alternative Plan		Estimated Cost				
		Capital Construction	Equivalent Annual			Per Capita
Number	Sewage Treatment Plants		Construction	Operation and Maintenance	Total	
1	Kenosha Racine	\$35,463,000	\$2,057,500	\$2,736,100	\$4,793,600	\$16
2	Kenosha Racine	37,470,000	2,147,000	2,738,400	4,885,400	16
3	Kenosha Racine	38,223,000	2,212,600	2,711,900	4,924,500	17
4	Kenosha Racine Pike River	40,388,500	2,443,000	2,847,800	5,290,800	18
5	Kenosha Racine Pike River North Park	39,821,900	2,401,800	2,948,100	5,358,900	18

Source: Harza Engineering Company and SEWRPC.

SECOND DISTRICT PLAN—continued

1. Alternatives 1, 2, and 3 are very similar in that they all have the advantage of relying heavily on the existing Racine and Kenosha sanitary sewerage systems and on the technical staff capabilities which have been acquired over the years in the construction, operation, and maintenance of the systems, thus avoiding proliferation and duplication of staff and facilities. These three plans have the additional advantage of minimizing the number of remaining point sources of pollution from municipal treatment plants in the Kenosha-Racine subregional area and thus would contribute to a more effective and efficient monitoring system of sewage effluent discharges in future years. Alternatives 1 and 2 have the major disadvantage of requiring the transmission of large amounts of sewage across a county boundary, thereby requiring the establishment of a bi-county institutional structure. Alternatives 1 and 2 also have the disadvantage of being inconsistent with existing intergovernmental sewage treatment agreements in the Racine Urban Planning District and the already adopted comprehensive plan for the Kenosha Planning District. On the other hand, Alternative 3 would fully carry out the existing intergovernmental sewage treatment agreements in the Racine Urban Planning District and the comprehensive plan for the Kenosha Planning District. Between the first three alternatives, then, which have many common advantages, Alternative 3 has the fewest disadvantages since it most closely carries out previous commitments made in the Racine-Kenosha subregional area.
2. Alternative 4 differs from Alternative 3 only in that it creates a new sanitary sewerage system to serve urban development in the Pike River watershed in both the Racine and Kenosha Planning Districts. As such, this alternative does not correspond to either the adopted comprehensive plan for the Kenosha Planning District or the existing intergovernmental sewage treatment

SECOND DISTRICT PLAN—continued

agreements between the City of Racine and the Town of Mount Pleasant. It would, moreover, require the transmission of considerable amounts of sewage across a county boundary and thereby require the establishment of a bi-county institutional structure. A new staff would be needed to properly operate and maintain the proposed sewerage system for the Pike River watershed, including a major new sewage treatment plant facility which would have to provide a very advanced level of waste treatment. This alternative, however, has several advantages. The ultimate 15 mgd sewage treatment facility on the Pike River would contribute to the flow of the River, augmenting the very low flows of this stream during certain seasons. In addition, should diversion of sewage effluent from the Lake Michigan basin be ultimately required, such diversion could more readily be accomplished, at least in part, under this alternative than under Alternatives 1, 2, or 3. Finally, from a political—as opposed to technical—point of view expressed by some Committee members, Alternative 4 has an advantage over Alternatives 1, 2, and 3 in that this plan provides for flexibility in overcoming apparent stalemates in the provision of sanitary sewer service to the developing areas of the Pike River watershed in the Kenosha and Racine Planning Districts. Such stalemates have been brought about by intergovernmental disagreements concerning annexation, incorporation, and the extension of municipal services among and between several units of government in both the Racine and Kenosha Planning Districts.

3. The fifth alternative has basically the same advantages and disadvantages as the fourth alternative, with the added disadvantages of retaining another point source of pollution along the Lake Michigan shoreline and creating the need to provide another highly capable, parallel technical staff to operate and maintain the sewage treatment facility in order to provide high levels of

SECOND DISTRICT PLAN—continued

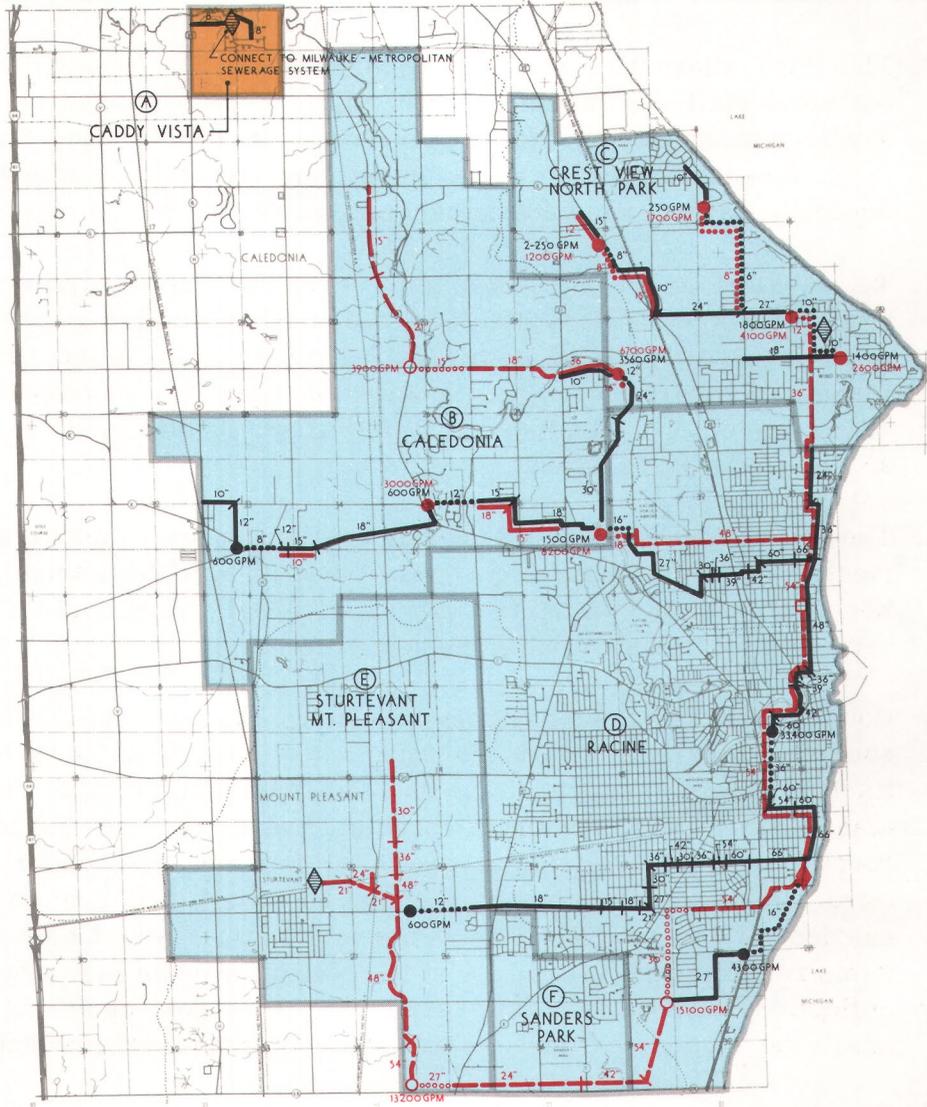
advanced waste treatment. This alternative does, however, have the advantage of building upon the existing institutional structure in the North Park and Crestview Sanitary Districts.

The Citizens Advisory Committee spent many hours carefully deliberating the advantages and disadvantages of each of the alternatives presented, with discussion particularly centering on Alternatives 3 and 5. Alternatives 1 and 2 received relatively little consideration since they offered no advantages not found in Alternative 3 and would create additional problems relating to the establishment of bi-county institutional structures for the transmission and treatment of sewage. After several preliminary votes on this extremely important plan element, the Committee decided to include the third alternative sanitary sewerage system plan in the recommended comprehensive plan for the Racine Urban Planning District as that plan was to be presented at the necessary public hearings (see Map 20). The decision to include this alternative as the preliminary Committee recommendation was not unanimous. Several Committee members argued for inclusion of the fifth alternative as the one which best fit the needs of local government in the Racine Urban Planning District. The majority of the Committee, however, selected the third alternative plan as the preliminary recommendation. In that selection the Committee enunciated the following major reasons for its decision:

1. The third alternative is the most economical alternative available consistent with established major sanitary sewerage system patterns in both the Racine and Kenosha Planning Districts; with existing contractual agreements between the City of Racine, the Town of Mount Pleasant Sewer Utility District No. 1, and the Town of Caledonia Sewer Utility District No. 1; and with the sewerage system recommendations in the adopted comprehensive plan for the Kenosha Planning District.

Map 20

RECOMMENDED SANITARY SEWERAGE SYSTEM PLAN FOR THE RACINE URBAN PLANNING DISTRICT



LEGEND		SUBDISTRICT ANALYSIS AREA		FORCE MAINS		LIFT STATIONS	
--- COUNTY LINE	--- STATE TRUNK HIGHWAY	○ RACINE	● EXISTING FORCE MAIN	□ PROPOSED TREATMENT PLANTS			
--- TOWN AND RANGE LINE	--- COUNTY TRUNK HIGHWAY	○ LETTER DESIGNATION	●●● PROPOSED IMPROVEMENT TO FORCE MAIN	◇ EXISTING TO BE ABANDONED			
--- SECTION LINE	--- LOCAL OR MAIN STREET	--- TRUNK SEWERS	●●●● PROPOSED NEW FORCE MAIN	◇ EXISTING TO BE EXPANDED			
--- QUARTER SECTION LINE	--- RAILROAD	--- EXISTING SEWER	● PUMPING STATIONS				
--- STATE PLANE COORDINATE GRID	--- RIVER AND LAKE SHORELINE	--- PROPOSED IMPROVEMENT TO EXISTING SEWER	● EXISTING TO BE EXPANDED				
--- INCORPORATED CITY OR VILLAGE	--- INSTANT TERT STRAIN OR WATERCOURSE	--- PROPOSED NEW SEWER	○ PROPOSED				
--- INTERSTATE HIGHWAY	--- MAJOR PUBLIC AND SEMI-PUBLIC UTILITIES						
--- U.S. NUMBERED HIGHWAY	--- POWER LINES						
	--- MAJOR WATERSHED						
	--- BREAKWATER						



SECOND DISTRICT PLAN—continued

2. The third alternative takes maximum advantage of the existing technical staff capabilities in both planning districts and avoids any need to create parallel sewage treatment plant staffs. Similarly, specialized facilities, such as laboratories and administration buildings, need not be duplicated.
3. To a greater extent than any other alternative, the third alternative would readily lend itself to coordinated capital improvements programming for sewerage facilities in the Racine Urban Planning District and to implementation through a metropolitan sewerage district should such a district be recommended in the second phase of the planning program.
4. The third alternative would provide costly advanced waste treatment facilities on a fully areawide basis in both the Racine and Kenosha Planning Districts, with an attendant better correlation between needs and available financial resources.
5. Considering the Racine Urban Planning District as a single socioeconomic community, the third alternative would best lend itself to staged implementation and the resolution of waste water transmission and treatment problems utilizing the financial resources of the District as a whole. Furthermore, under the third alternative it would be feasible to ensure that each urban resident of the Racine Urban Planning District would bear the same relative burden in terms of the cost of providing for sewage collection, conveyance, and treatment. This goal could not as easily be met under any of the other alternatives presented.
6. The third alternative would more likely be the one most acceptable to the Regional Planning Commission, the Wisconsin Department of Natural Resources, and the U. S. Environmental Protection Agency, the key agencies which must approve sani-

SECOND DISTRICT PLAN—continued

tary sewerage system plans in order to meet federal planning prerequisites for federal grants-in-aid of the construction of sanitary sewerage system components. Accordingly, the early adoption and certification of the third alternative plan would likely best ensure the continued flow of federal funds to the District in support of badly needed sewerage system improvements.

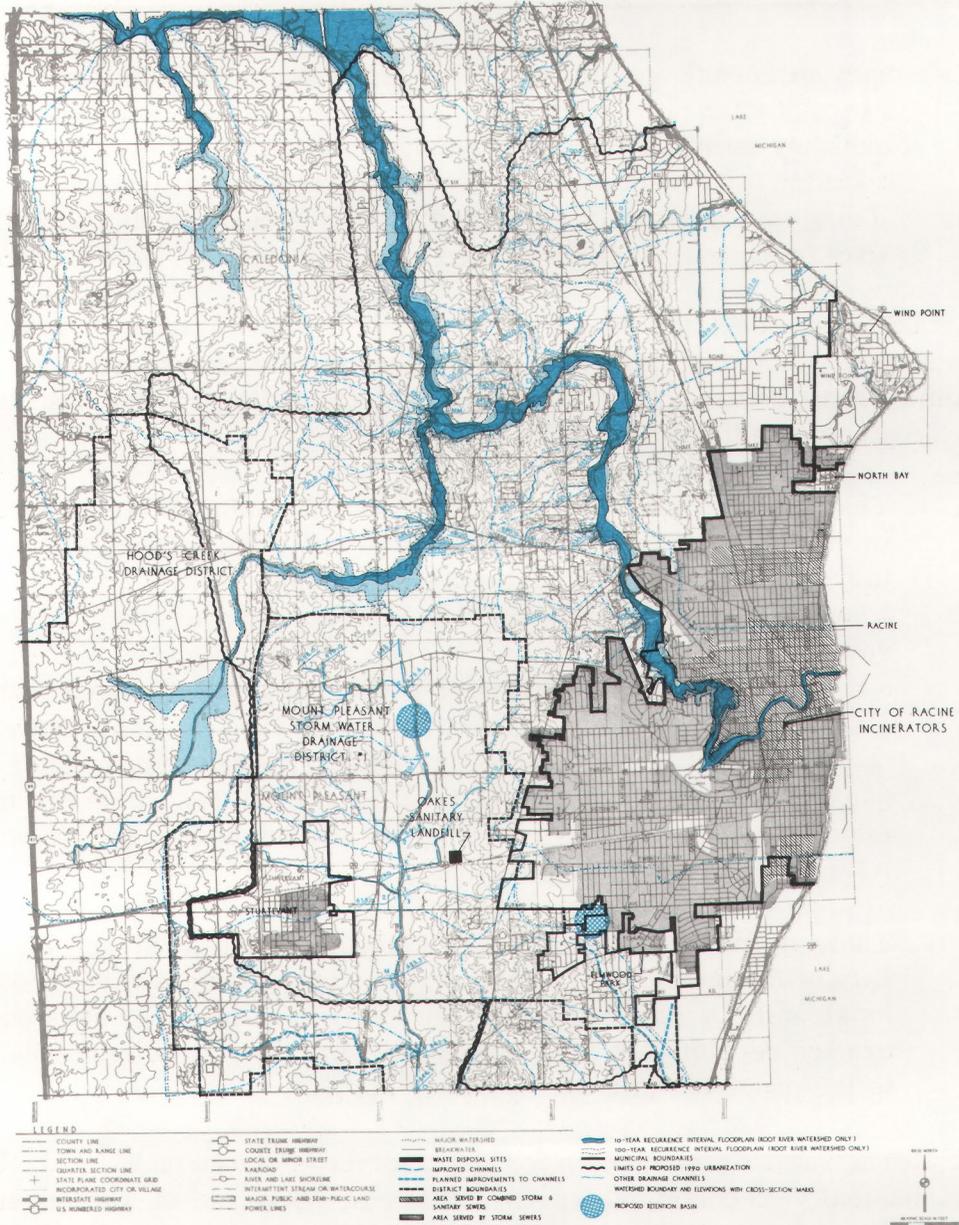
In making the decision to recommend the third alternative sanitary sewerage system plan for inclusion in the comprehensive plan for the Racine Urban Planning District as readied for public hearing, the Committee also made the following comments:

1. That there exists in the Racine Urban Planning District several immediate, pressing problems relating to the provision of sanitary sewer service to rapidly developing areas and that, in adopting a long-range plan for the provision of such sanitary sewer service to the entire District, the Committee recognizes a need for all of the implementing governmental agencies to consider the provision of interim sewerage facility improvements, including, but not necessarily being limited to, the interim expansion of existing sewage treatment facilities which are ultimately recommended for abandonment and the provision of interim trunk sewer connections.
2. That, upon adoption of the District plan set forth herein, the City of Racine commence negotiations upon request with all other local units of government in the District in order to seek cooperative resolution of any immediate, pressing problems relating to the provision of sanitary sewer service.

The storm water drainage plan for the District is shown on Map 21. The plan basically recommends preservation in open use of the existing natural floodplains, and reserving rights-of-way for needed open storm

Map 21

RECOMMENDED STORM DRAINAGE SYSTEMS AND SOLID WASTE DISPOSAL SITES FOR THE RACINE URBAN PLANNING DISTRICT



SECOND DISTRICT PLAN—continued

water drainage channels throughout much of the urbanizing portions of the District. The plan recommends the utilization of open channel systems wherever possible in order to minimize the capital investment necessary in the urban storm water drainage system.

The solid waste disposal element of the public utility plan consists of a recommendation to fully utilize the newly established Oaks Site in the Town of Mount Pleasant for solid waste landfill operation. The plan also recommends that two sites of approximately 50 acres each be purchased in the District to provide for flexibility in future landfill operations.

Concluding Remark—District Comprehensive Plan

Like any plan, the comprehensive plan for the Racine Urban Planning District is not intended to be a rigid straitjacket to which all future development in the District must conform. The plan can well serve, however, as a point of departure against which development proposals can be evaluated by local public officials as they arise on a day-to-day basis and, in the light of which, better development decisions can be made by all concerned. In addition, the development of the District must be continually monitored in order to assess the validity over time of the forecasts and other assumptions underlying the plan, and to change such forecasts and assumptions accordingly. It will be necessary in future years, therefore, for the local units of government in the District to carefully monitor growth and development, review such data in light of regional growth trends, and appropriately modify or adjust the elements of the comprehensive plan. In this way, the plan will remain a viable working document.

PLAN IMPLEMENTATION RECOMMENDATIONS

Many detailed plan implementation recommendations directed at local planning and plan implementation agencies are set forth in a chapter of SEWRPC Planning Report No. 14, A Comprehensive Plan for the

SECOND DISTRICT PLAN--continued

Racine Urban Planning District, Volume 2, The Recommended Comprehensive Plan. It should be recognized that such implementation recommendations are interim in nature pending completion of the second, or jurisdictional, phase of the two-phase planning program, since such recommendations are based largely on the existing governmental structure of the District. In addition, model plan implementation ordinances were prepared in the District study and presented in SEWRPC Planning Report No. 14, A Comprehensive Plan for the Racine Urban Planning District, Volume 3, Model Plan Implementation Ordinances. This volume contains a model zoning ordinance, a model land subdivision ordinance, a model sanitary ordinance, and a model official map ordinance. Each of these model ordinances may be adapted to the needs of the local communities within the Racine Urban Planning District for a coordinated, cooperative approach to District plan implementation.

MEETING AND HEARING SCHEDULE

Before completing its work on the first phase of the comprehensive planning program for the District and making its final recommendations to the Racine County Board of Supervisors, the Citizens Advisory Committee has scheduled a series of public informational meetings and a public hearing in order to inform the public officials and citizens in the District of the preliminary Committee recommendations and to obtain reactions to such recommendations. The first such meeting will be directed at the elected and appointed public officials in the District and will be held on January 17, 1973, at 7:30 p. m. in the Golden Rondell Theatre. Following that meeting there will be a series of three public informational meetings held throughout the District on consecutive evenings. The first will be held on January 30, 1973, at 7:30 p. m. at the Starbuck Junior High School. The second will be held on January 31, 1973 at 7:30 p. m. at the J. I. Case High School. The third will be held on February 1, 1973, at 7:30 p. m. at the Gifford Junior High School. These meetings have been scheduled at these schools in order to provide

SECOND DISTRICT PLAN—continued

a reasonably convenient location for all residents of the planning District. While the meeting at the Starbuck School is directed primarily at residents of the City of Racine; the meeting at the Case School directed primarily at residents of the Villages of Elmwood Park and Sturtevant and the Town of Mount Pleasant; and the meeting at the Gifford School directed primarily at residents of the Villages of North Bay and Wind Point and the Town of Caledonia, residents from any municipality in the District are welcome to attend any or all of the three public informational meetings.

Following the informational meetings, a formal public hearing will be held by the Committee on February 7, 1973, at 7:30 p.m. at the J. I. Case High School. The purpose of this public hearing will be to formally record citizen comments on and reactions to the recommended plan. Following the hearing, the Committee members will reconvene to consider the public reaction to the preliminary plan recommendations and formulate final recommendations for transmittal to the Racine County Board.

REPORT AVAILABILITY

All of the three volumes of the planning report prepared to document the findings and recommendations of the first phase of the comprehensive planning program for the Racine Urban Planning District are available from the office of the Racine County Planning Director. The reports will be widely distributed within the Racine Urban Planning District to all interested public officials. Copies of the report will also be placed in public libraries and schools throughout the District. Limited copies are available for purchase from the office of the Racine County Planning Director. Any inquiries in this respect should be directed to that office.

QUESTION BOX

WHO SERVES ON THE "MORATORIUM COMMITTEE?"

Membership on the Racine Urban Planning District Citizens Advisory Committee, commonly called the "Moratorium Committee," is largely determined by the terms of the Moratorium and Long-Range Planning Agreement itself. The Agreement provides that the Committee shall consist of no more than 21 members. Four of the members are ex-officio, that is, they serve by virtue of their position or office. These four are the Chairman of the Racine County Board of Supervisors, the Mayor of the City of Racine, the President of the Village of Sturtevant, and the Chairman of the Town of Mount Pleasant. Each of these four units of government are signatories to the Agreement. Beyond that, the Agreement provides that the members shall represent a diversity of views, interests, and talents. The Committee is appointed jointly by the Racine County Board of Supervisors and the Southeastern Wisconsin Regional Planning Commission. As a manner of informal policy, each of the seven local units of government in the District has been directly represented on the Committee throughout the length of the study by its chief elected officials.

Currently, the membership of the Racine Urban Planning District Citizens Advisory Committee is as follows:

J. David Rowland	Executive Vice President and Chairman	Treasurer, Carpenter-Rowland- Battensburg Insurance Company
Eric Schroder	Former Board Member, Racine Vice-Chairman	Unified School District
Marshall Lee, Jr.	Secretary	Marshall E. Lee Agency, Inc.
Paul T. Bishop	President, Racine Unified School District	
Paul Cody		Urban Affairs Manager, S. C. Johnson and Son, Inc.

QUESTION BOX—continued

David Grimm President, Village of Wind Point
Wesley Hansche Chairman, Town of Mount
Pleasant Plan Commission
Jack Harvey City Attorney, City of Racine
Steven R. Horvath Chairman, Town of Caledonia
Kenneth L. Huck Mayor, City of Racine
LeRoy H. Jerstad, Jr. President, Village of North Bay
Richard LaFave Chairman, Racine County Board
of Supervisors
John Margis, Jr. First Vice-Chairman, Racine
County Board of Supervisors
Edward Mickelson, Jr. President, Village of Sturtevant
Mrs. Orby Moss, Jr. Instructor, Dominican College
Stephen F. Olsen Alderman, City of Racine
Henry Rohner Chairman, Town of Mount Pleasant
Virgil Schultz Trustee, Village of Sturtevant
Mrs. Beryl Strieff President, Village of Elmwood Park
Willard Walker Executive Vice-President,
Walker Forge, Inc.

The following individuals also participated in the work of the Committee as nonvoting members: Gilbert Berthelsen, Racine County Administrator; Arnold L. Clement, Racine County Planning Director; Lester Hoganson, City Engineer, City of Racine; Karl B. Holzwarth, Racine County Park Director; Thomas N. Wright, Director of Planning, City of Racine; and Donald Zenz, Racine County Highway Engineer.

QUOTABLE QUOTE.....

"Planning is the way of patience, system, and direction. Indeed, it is painstaking and time-consuming. Yet only through the mechanism of careful, comprehensive planning will the manifold interacting problems of modern society find resolution. It is not the easy way or the quick way, but it is about the only way--even if only to help us survive our 'good works.'"

"Planning a Live-In World"
by Neil L. Drobny and Norbert Dee
Battelle Research Outlook,
Planning Today
for Tomorrow's Environment
Volume 4/Number 2/1972

SOUTHEASTERN WISCONSIN REGIONAL
PLANNING COMMISSION

Old Courthouse
P. O. Box 769
Waukesha, Wisconsin
53186

Phone (414) 547-6721

Kurt W. Bauer
Executive Director

ADDRESS CORRECTION REQUESTED
RETURN POSTAGE GUARANTEED

BULK RATE
U. S. POSTAGE
WAUKESHA, WIS.
PERMIT NO. 645

The preparation of this publication was financed in part through a comprehensive planning grant from the U. S. Department of Housing and Urban Development and through a State planning assistance grant from the Wisconsin Department of Local Affairs and Development under the provisions of Section 22.14 of the Wisconsin Statutes.