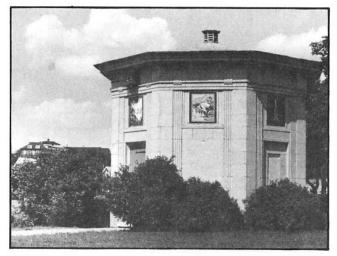
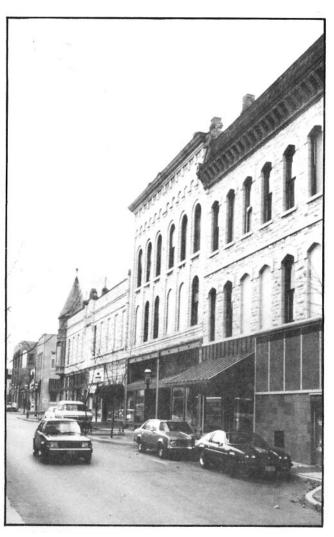
A LAND USE PLAN FOR THE CITY OF WAUKESHA PLANNING AREA: 2010







SUMMARY REPORT
SEPTEMBER 1993

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SUMMARY REPORT

SEPTEMBER 1993

INTRODUCTION

The land use plan for the City of Waukesha and environs described herein was adopted on July 14, 1993, by the City of Waukesha Plan Commission and on September 7, 1993, by the City of Waukesha Common Council. The plan was prepared cooperatively by staffs of the City of Waukesha and of the Southeastern Wisconsin Regional Planning Commission, under the direction of the City Plan Commission, with the participation of neighboring municipalities. The plan, together with supporting implementation devices, provides an important means for promoting the orderly growth and development of the City of Waukesha and environs over time.

The planning effort involved extensive inventories and analyses of the factors and conditions affecting land use development in the Waukesha area, including existing and probable future resident population and employment levels, the natural resource base, existing land uses, and existing local plan implementation devices. The planning effort also involved both the identification of an expanded Waukesha urban service area in which urban development could occur and be provided with public sanitary sewerage services and public water supply facilities and also the identification of a Waukesha rural service area that is not expected to be provided with urban services during the planning period, and, as such, should be maintained in agricultural, open space, or very-low-density residential use through at least the year 2010.

The land use plan is based, in part, upon development objectives and supporting standards for the urban and rural service areas. The recommended land use plan accommodates the forecast population and employment levels while meeting the agreed-upon land use development objectives. The planning effort also includes recommendations for implementing the land use plan over time.

GENERAL DESCRIPTION OF THE WAUKESHA PLANNING AREA

The Waukesha planning area, shown on Map 1, encompasses an 81-square-mile area including all of the City and all of the Town of Waukesha, portions of the Cities of Brookfield and New Berlin, and portions of the Towns of Brookfield, Pewaukee, Delafield, and Genesee. For plan presentation purposes, the planning area was divided into four subareas: a newly defined year 2010 Waukesha urban service area, the combined Brookfield and Pewaukee urban service areas, lands lying in the

City of New Berlin, and the remainder of the planning area, identified as the Waukesha rural service area. The Waukesha rural service area includes those portions of the Towns of Pewaukee, Delafield, Genesee, and Waukesha that are not expected to be provided with public water, sewer, or other urban services during the planning period but which generally lie within the three-mile extraterritorial planning jurisdiction of the City of Waukesha.

WAUKESHA URBAN SERVICE AREA

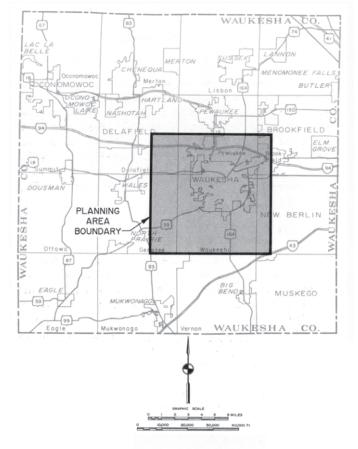
The existing planned sanitary sewer service area, or urban service area, for the City of Waukesha was delineated and adopted by the City and the Regional Planning Commission in 1985 and is documented in SEWRPC Community Assistance Planning Report No. 100, Sanitary Sewer Service Area for the City of Waukesha and Environs. The existing planned urban service area encompasses about 30.5 square miles.

The land use planning effort has resulted in a recommended expansion of the urban service area to accommodate expected urban growth through the year 2010. Sound planning requires that such growth be served by public sanitary sewerage and public water supply facilities. Although it has generally been City policy to require annexation before City services are extended, the City can and has provided such services on a contractual basis, without requiring annexation. Consideration of probable future urban development in the Town of Waukesha and the provision of sewer and water services to such development was an important consideration in the design of the land use plan and the delineation of the expanded Waukesha urban service area. The existing planned and proposed future expanded Waukesha urban service areas are shown on Map 2.

The proposed new Waukesha urban service area includes the entire urban service area delineated in 1985, plus all lands in the Town of Waukesha lying generally eastward of the Vernon Marsh. This represents the maximum area envisioned to be served by urban facilities, including sanitary sewer, to the year 2010; it will probably accommodate additional growth beyond the year 2010. The newly defined urban service area will provide some flexibility to accommodate market demand in the location of new development and in the size of new residential lots. The proposed expanded urban service area encompasses about 42.6 square miles. An amendment to the existing sewer service area plan will be needed before sanitary sewer service can be provided

Map 1

LOCATION OF THE WAUKESHA PLANNING AREA IN WAUKESHA COUNTY







to areas outside the limits of the sanitary sewer service area adopted in 1985.

ANTICIPATED GROWTH AND CHANGE

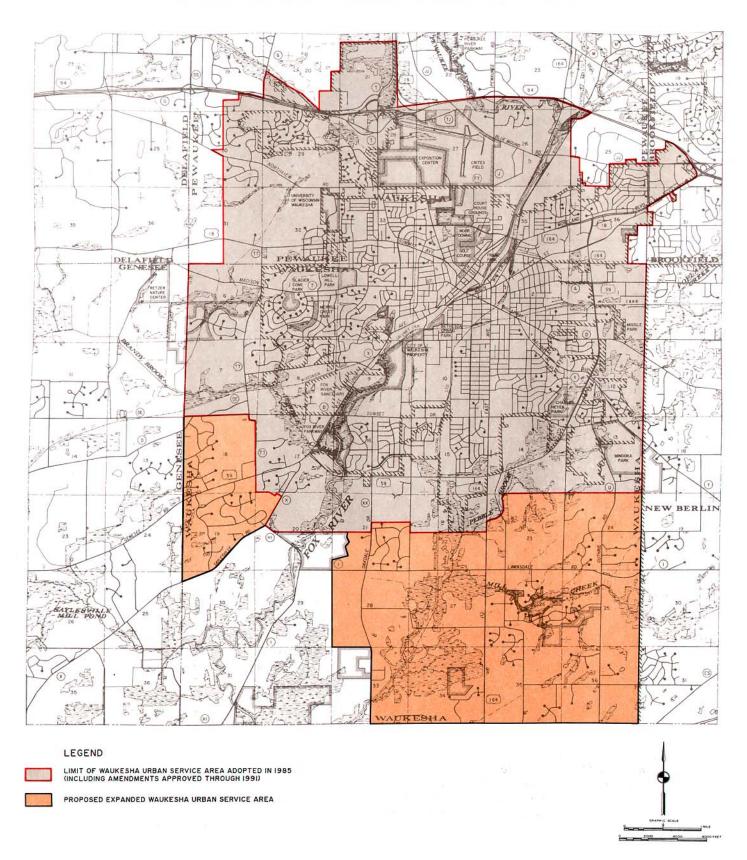
Information on the size, characteristics, and distribution of the resident population and employment in both the planning area and urban service area is an essential part of any planning effort, as are sound forecasts of likely changes in these factors over time. This information is essential to the preparation of a sound community land use plan, since the expected number of residents and employees in the urban service area directly influences the amount of land set aside for the various types of land uses.

The population and employment forecasts used for planning in the Waukesha area were based on consideration of alternative population and employment projections developed at the regional level to the plan design year 2010. Four alternative resident population and employment projections for the year 2010 were considered for the Waukesha urban service area, with population projections ranging from about 62,885 to about 101,320 persons and employment projections ranging from about 41,260 to about 54,485 jobs. These projections were based on the number of residents and jobs anticipated within the proposed expanded Waukesha urban service area by the year 2010 under a range of varying social and economic conditions, including a range of fertility and mortality rates, rates of migration into and out of the Region, and the distribution of population and employment within the Region.

The intermediate-growth decentralized population and employment projections were selected for use in the planning effort. Under this scenario, the year 2010 resident population of the proposed expanded urban service area may be expected to reach about 86,340 persons, an increase of about 24,950 persons over the 1985 resident population level of 61,390 persons. The total number of jobs may be expected to reach about 48,250, an increase of about 12,505 jobs over the 1985 level of 35,745 jobs.



Map 2
ADOPTED AND PROPOSED WAUKESHA URBAN SERVICE AREA

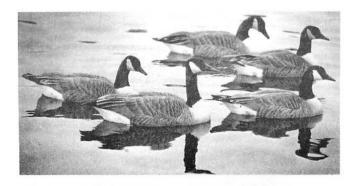


There was steady growth in both housing units and population in the City of Waukesha and environs between 1970 and 1985; however, the rate of increase in the number of households has exceeded the rate of increase in population because of a decline in the number of persons per household. In 1985, the average household size in the Waukesha urban service area was estimated to be 2.74 persons. The average household size in the urban service area may be expected to decrease to about 2.47 persons by the plan design year 2010. The decrease in average household size has important implications for residential land use planning, since average household size is used to convert resident population forecasts to the number of housing units needed by the plan design year. On the basis of the anticipated increase in population and the decrease in average household size, about an additional 12,500 housing units may be expected to be needed in the urban service area to serve the housing needs of the anticipated year 2010 household population of about 84,300 persons.

THE NATURAL ENVIRONMENT

The natural resources of the Waukesha area are unique and are vital to its ability to provide a pleasant and habitable environment for human life. Natural resources not only condition, but are conditioned by, urban growth and development. Any meaningful planning effort must, therefore, recognize the existence of a natural resource base to which urban development must be properly related if serious environmental and urban development problems are to be avoided.

As part of the planning effort, inventories were made of the natural resource base of the area, including soil characteristics, topography and surface water drainage patterns, floodlands, wetlands, woodlands, prairies, wildlife habitat, and prime agricultural lands. Such related elements as scientific and natural areas and parks, trails, and other recreational sites were also considered. One of the basic objectives of the land use plan is to exclude urban development from areas containing high-value natural resources, particularly those areas identified as primary environmental corridors, and from areas with poor soils or steep slopes, or from floodlands, in all of which development would be subject to potential hazards. Such areas should be preserved in essentially natural, open uses for the life of the plan and beyond.





Soil Suitability

Soil properties exert a strong influence on land use. Soil suitability maps of the Waukesha area were prepared and analyzed and soil limitations for urban development with and without sanitary sewer services were identified. In general, areas with soils unsuitable for onsite sewage disposal systems should not be considered for urban development.

Steep Slopes

The topography, or relative elevation of the land surface, in the Waukesha planning area is generally level to gently rolling, with the low-lying areas associated with wetlands and stream valleys. Lands that are gently sloping or nearly level are best suited to agricultural production and to high density residential, commercial, or industrial uses. Lands with steep slopes, that is, slopes of 12 percent or more, are poorly suited for urban development as well as for most agricultural purposes and should therefore be maintained in natural cover for erosion control. Approximately 4,900 acres, or about 9 percent of the planning area, has slopes of 12 percent or more.

Floodlands

The floodlands of a river or stream are defined as the wide, gently sloping areas contiguous to, and usually lying on both sides of, the river or stream channel which are

¹The household population is the total resident population minus those persons housed in such group quarters as college dormitories, homes for the aged, and prisons. The forecast year 2010 group-quarter population in the Waukesha urban service area is about 2,000 persons.

periodically inundated by flood flows. For planning and regulatory purposes, floodlands are normally defined as the areas, excluding the channel, subject to inundation by floods up to and including the 100-year recurrence interval flood event. Floodland areas are generally not well suited to urban development, not only because of the flood hazard, but because of the presence, usually, of high water tables and of soils poorly suited to urban use. The floodland areas, however, often contain such important elements of the natural resource base as high-value woodlands, wetlands, and wildlife habitat and, therefore, constitute prime locations for needed park and open space areas. Every effort should be made to discourage urban development on floodlands while encouraging compatible park and open space use. Floodlands encompass about 6,500 acres, or about 12 percent of the planning area. Development of these areas for urban use will create serious and costly problems.

Primary Environmental Corridors

Environmental corridors are linear areas in the landscape that encompass concentrations of important natural resources. The protection of these corridors is one of the more important objectives of the plan. In 1985, primary environmental corridors covered about 9,950 acres, or about 19 percent of the planning area, and about 4,365 acres, or about 16 percent of the proposed expanded urban service area.

The primary environmental corridors in the Waukesha planning area are generally located along the major perennial streams: the Fox and Pewaukee Rivers, Mill Creek, Pebble Creek, and Pebble Brook. They include the large wetland and floodland complexes associated with these and other, smaller, streams. The primary environmental corridors contain the best remaining woodlands, wetlands, prairies, and wildlife habitat areas in the planning area and have truly immeasurable environmental and recreational value. Preservation of these primary corridors in an essentially open, natural state, including park and open space uses and very-low-density residential uses, will serve to maintain a high level of environmental quality in the area, protect the natural beauty of the area, and provide valuable recreational opportunities. Preservation will also avoid the creation of such serious and costly environmental and developmental problems as flood damage, poor drainage, wet basements, failing pavements, excessive infiltration of clear waters into sanitary sewers, and water pollution.

Secondary Environmental Corridors and Isolated Natural Areas

The plan also identifies secondary environmental corridors in the area. These corridors, while not as significant as the primary environmental corridors in terms of overall resource values, should be considered for preservation in essentially open, natural uses to the

extent practicable as urban development proceeds within the planning area, since the maintenance of such corridors in open use can facilitate drainage, maintain "pockets" of natural resource features, and serve as local parks and open space areas. As of 1985, lands encompassing about 1,230 acres, or about 2 percent of the planning area, were classified as secondary environmental corridors; 325 acres, or about 1 percent of the expanded urban service area, were so classified.

In addition, the plan urges the protection and preservation of isolated natural areas whenever possible. These areas sometimes serve as the only available wildlife habitat in an area, provide good locations for local parks, and lend diversity to an area. In 1985, isolated natural areas totaled about 1,580 acres, or 3 percent of the planning area, and 580 acres, or about 2 percent of the expanded urban service area.

THE BUILT ENVIRONMENT

In order for the land use plan for the Waukesha area to constitute a sound and realistic guide for making decisions concerning the physical development of the City and surrounding areas, pertinent features of the built environment must be given due consideration. For purposes of the planning effort, the pertinent features of the built environment were identified as existing land uses, public facilities, and public utilities.

A detailed inventory of existing land use in the Waukesha planning area was conducted to determine the type, amount, and spatial distribution of existing urban development and rural land uses in the area. This information was mapped and analyzed to provide a basis for determining probable land use requirements in the year 2010, and to assist in the development of an appropriate pattern of future land use.

Land uses in the Waukesha planning area in 1985 are shown on Map 3 and summarized in Figure 1. Of the approximately 52,255 acres in the planning area, about 34,565 acres, or about 66 percent, were devoted to nonurban land uses, including wetlands, woodlands, agricultural lands, and undeveloped lands. Undeveloped lands include large tracts of unused lands in rural areas as well as small tracts such as outlots and excess transportation rights-of-way in both rural and urban areas. Urban land uses occupied about 17,690 acres, or about 34 percent of the planning area, in 1985.

Several important elements of the character of the planning area can be noted from Figure 1 and from Map 3. First, agriculture was the largest single land use in the planning area in 1985, encompassing about 19,830 acres, or about 38 percent of the planning area. The next largest land use in the planning area in 1985 was single-family residential development, encompassing about 8,980 acres, or about 17 percent of the planning area.

Map 3

EXISTING LAND USE IN THE WAUKESHA PLANNING AREA: 1985

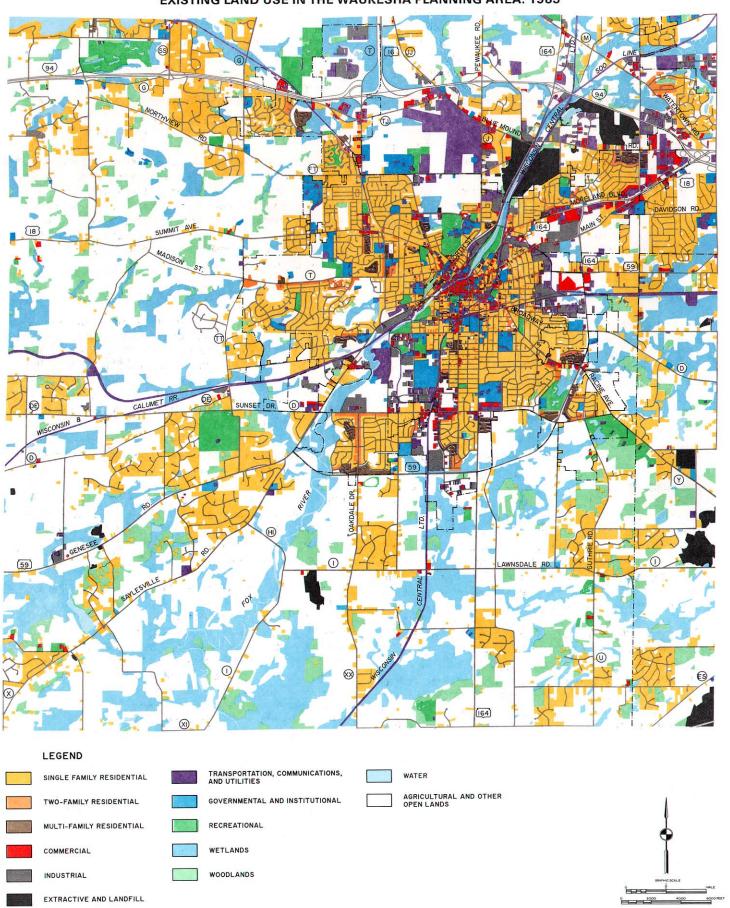
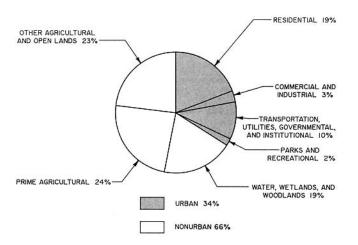


Figure 1
SUMMARY OF LAND USES IN THE
WAUKESHA PLANNING AREA: 1985



The incorporated area of the City of Waukesha in 1985 occupied approximately 9,840 acres, or about 19 percent of the planning area. Figure 2 presents the percentage of land within the City devoted to each land use category in 1985. Developed urban land uses occupied about 7,050 acres, or about 72 percent of the incorporated area, while nonurban land uses occupied about 2,790 acres, or about 28 percent of the incorporated area. Residential development was the predominate land use in the City in 1985, encompassing about 3,475 acres, or about 35 percent of the incorporated area. Over 80 percent of the area devoted to residential use in the City was occupied by single-family residential development.

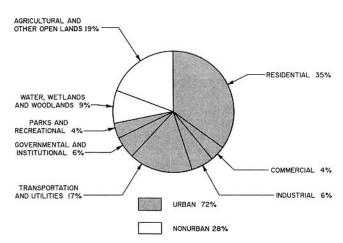
In 1990, approximately 9,385 acres were served by the City of Waukesha sanitary sewerage system and approximately 9,445 acres were served by the City of Waukesha Water Utility. The systems served virtually all the developed portions of the City and, on a contract basis with the City, limited areas in the Towns of Pewaukee and Waukesha.

EXISTING LOCAL PLAN IMPLEMENTATION DEVICES

Land use development can be guided and shaped in the public interest through sound application of public land use controls. Existing land use regulations in effect in the planning area were examined as they relate to the physical development of the City of Waukesha and environs and to the ability of the City and other affected local governments to implement the adopted land use plan.

Zoning ordinances within the planning area include the City of Waukesha zoning ordinance; the zoning ordinances of the Towns of Brookfield, Delafield, Pewaukee, and Waukesha; the Waukesha County Zoning Ordinance; and

Figure 2
SUMMARY OF LAND USES IN
THE CITY OF WAUKESHA: 1985





the Waukesha County Shoreland and Floodland Protection Ordinance. The Cities of Brookfield and New Berlin have also adopted municipal zoning ordinances; however, since they apply to separately incorporated areas, they were not considered in relation to the land use plan for the City of Waukesha and environs.

City of Waukesha Zoning Ordinances

The City of Waukesha Zoning Ordinance in 1990 defined 19 zoning districts, including one agricultural district, one lowland conservancy district, three single-family residential districts, one two-family residential district, three multi-family residential districts, four business districts, three industrial districts, and three public use districts. In 1990, almost 60 percent of the City was zoned for residential use, about 7 percent was zoned for commercial use, and about 20 percent was zoned for industrial use. About 9 percent of the City was zoned for such public uses as parks, schools, and cemeteries, and about 4 percent



was zoned Conservancy. The City Zoning Ordinance also includes a historic preservation overlay district, approved by the Common Council in September 1990.

The City of Waukesha Floodland Zoning Ordinance, adopted in 1971 and substantially amended in 1982, is a special-purpose zoning ordinance intended to reduce hazard to life and property and to minimize expenditures for flood relief and flood control projects. The ordinance includes three floodland overlay districts: the Floodway District, the Flood Storage District, and the Urban Flood District.

Town Zoning Ordinances

Four of the Towns in the planning area, Brookfield, Delafield, Pewaukee, and Waukesha, have adopted Town zoning ordinances. The Town of Genesee is under the jurisdiction of the Waukesha County Zoning Ordinance. A review of Town zoning for areas in the planning area outside an existing urban service area indicates that the potential exists for up to an additional 3,100 residential lots smaller than five acres in size to be created. Designation of large tracts of land for specific uses far beyond the short-term need for such uses is known as overzoning. It can lead to scattered, premature development of productive farmland and other areas that lack essential public services. Large tracts of undeveloped land, particularly those outside a planned urban service area, should be placed in an agricultural or conservancy zoning district until urban development becomes imminent.

Land Division Regulations

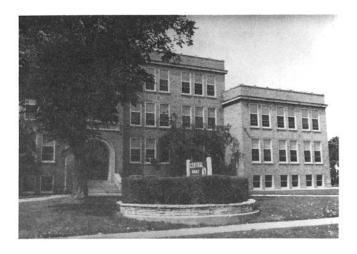
Land division in the planning area is regulated by a group of ordinances. The City of Waukesha's ordinance covers land in the City and in the extraterritorial plat approval jurisdiction of the City, which extends to areas three miles beyond the City's corporate limits, except where the three-mile limit overlaps with the extraterritorial jurisdiction of the Cities of Brookfield or New Berlin, which also exercise extraterritorial platting authority. In cases where extraterritorial platting jurisdictions overlap, a line equidistant from the corporate boundaries of each City is used to determine the limit of extraterritorial jurisdiction.

The five Towns in the planning area each have their own land division control ordinance. In addition, Waukesha County has adopted an ordinance that regulates land divisions in shoreland areas of the County. Each land division ordinance contains design standards and prescribes specific data to be provided on all preliminary plats, final plats, and certified survey maps.

DEVELOPMENT OBJECTIVES, PRINCIPLES, STANDARDS, AND RELATED URBAN DESIGN CRITERIA

Early in the planning process, land use objectives, principles, standards, and related urban design criteria were formulated. The objectives, principles, and standards address the allocation of land to the various land use categories, the spatial distribution of the various land uses, the protection of the natural resources of the area, the preservation of high-quality open space land for environmental protection and recreational purposes, the provision of parks and other recreational areas, the provision of an integrated transportation system, the provision of high-quality fire protection, the provision of a variety of housing types, and the preservation of the historical heritage of the planning area.

The standards developed as part of the planning process perform a particularly important function in land use plan design since they form the basis on which estimates of future land use needs are based. The per capita and accessibility standards were two of the more important considerations in the design of the plan. The per capita standards, set forth in Table 1, were used to help estimate the number of acres in each land use category expected to be needed to serve the resident population by the year 2010. Accessibility standards, set forth in Table 2, are expressed as a service radius for facilities such as parks, schools, and shopping centers. The accessibility standards were used to distribute needed facilities in locations that will be convenient to the population to be served. The urban design criteria are intended to help develop solutions to urban design problems with respect to residential, commercial, and industrial development. These criteria can be used by





local officials to evaluate development proposals and related site and building plans for projects proposed within the Waukesha urban service area.

YEAR 2010 LAND USE AND FACILITY REQUIREMENTS

Land Use Requirements

As already noted, the standards were applied to the population and employment forecasts to estimate the amount of land needed to meet the year 2010 resident population and employment forecasts of about 86,300 persons and 48,300 jobs. Table 3 summarizes future urban land use requirements for the Waukesha urban service area to the year 2010. An estimated 5,715 acres, or 8.9 square miles, of rural and other open lands in the Waukesha area would need to be converted to urban use between 1985 and 2010 to meet these forecast population and employment levels at the specified standards.

A total of about 34,150 occupied housing units may be expected to be needed in the Waukesha urban service area by the year 2010, an increase of 12,500 housing units over the 1985 total of 21,650 units. In the plan design effort, the additional housing units were distributed among five residential density classifications, in order to provide for a wide range of housing types. As indicated in Table 3, approximately 4,450 additional acres in the Waukesha urban service area will be needed to provide housing for the household population of 84,340 persons anticipated by the year 2010 under the intermediate decentralized population forecast.

Community Facility Needs

Public school enrollment in the Waukesha planning area, which closely approximates the area within the School District of Waukesha, may be expected to range from about 14,000 to about 17,000 students by the year 2010. The year 2010 enrollment ranges from an increase of about 1,600 students to an increase of about 4,600

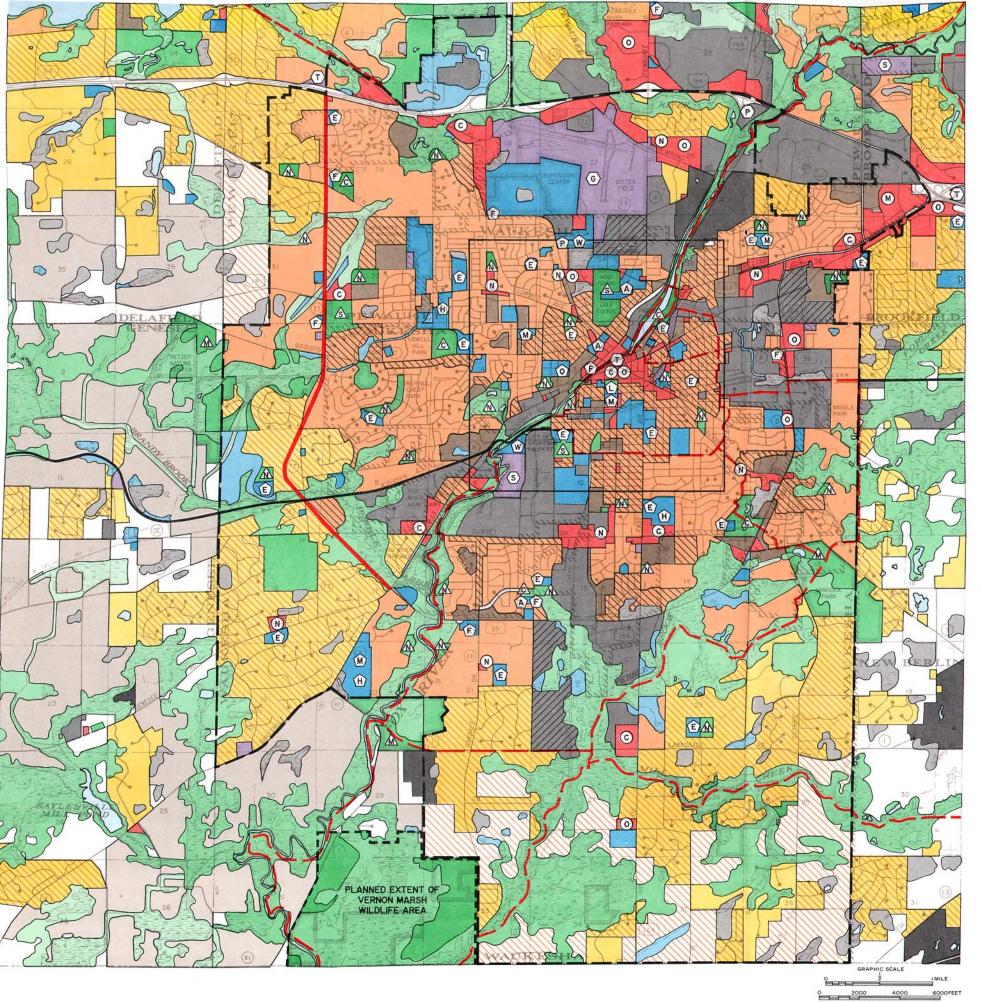
students over 1985 enrollments. Based on the school capacity standards contained in Table 2, the school enrollment estimates indicate that there may be a need for up to three new elementary schools, in addition to the Summit View School opened in 1992, and an additional middle school by the year 2010.

In 1990, there were six fire stations located in the Waukesha urban service area. Four were operated by the City of Waukesha, one was operated by the Town of Waukesha, and one was operated by the Town of Pewaukee. The land use plan standards call for all urban development, with the exception of one- and two-family residential buildings,² to be located within 1.5 miles of a fire station. Certain areas of existing or planned multifamily residential and institutional development, including areas near the intersection of Sunset Drive and STH 59 in the southeastern portion of the urban service area, the new high school in the southwestern portion of the urban service area, and the residential areas near the intersection of CTH TT and Madison Street on the west side of the City lie outside the recommended 1.5mile travel distance from a fire station. This indicates that there may be a need for additional fire stations within the urban service area by the year 2010.

THE LAND USE PLAN

For plan preparation purposes, the planning area was divided into the four subareas shown on Map 5 on page 16: a newly defined year 2010 Waukesha urban service area; the Waukesha rural service area; the combined Brookfield and Pewaukee urban service areas; and lands lying in the City of New Berlin. The adopted land use plan for the Waukesha planning area does not

²The standards call for one- and two-family buildings to be located within two miles of a fire station. This distance may be increased to four miles in areas where such buildings are separated by 100 feet or more.

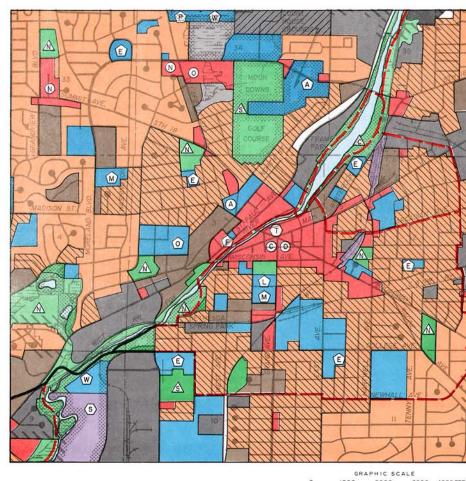


Map 4

ADOPTED LAND USE PLAN FOR THE WAUKESHA PLANNING AREA: 2010



Source: SEWRPC.



GRAPHIC SCALE
0 1000 2000 3000 4000 FEET

Table 1

URBAN LAND USE STANDARDS FOR THE WAUKESHA SERVICE AREA

Land Use Category	Development Standard (gross area) ^a
Residential	
Low-Density (less than 2.2 housing units per	
net residential acre ^b)	88 acres per 100 housing units
Medium-Density (2.2 to 6.1 housing units per	100
net residential acre ^b)	32 acres per 100 housing units
net residential acre ^b)	17 acres per 100 housing units
High-Density (12.1 to 48.0 housing units per	To deles per 100 flousing units
net residential acre ^b)	9 acres per 100 housing units
Commercial	6 acres per 100 commercial employees
Industrial	9 ^C acres per 100 industrial employees
Governmental/Institutional	
Schools	d
Public Elementary	2.6 acres per 100 students ^d
Public Middle School	3.2 acres per 100 students ^e 3.0 acres per 100 students ^f
Other ^g	4.5 acres per 1,000 persons
Public Outdoor Recreational Sites	
Major	In accordance with the adopted Waukesha
	County Park and Open Space Plan
Community ^h	
In Park Sites	2.2 acres per 1,000 persons
In Middle Schools or High School Sites	0.9 acres per 1,000 persons
Park and School Combined	3.1 acres per 1,000 persons
Neighborhood ^h	
In Park Sites	1.7 acres per 1,000 persons
In Elementary School Sites	1.6 acres per 1,000 persons
Park and School Combined	3.3 acres per 1,000 persons ¹

^aGross area includes associated street rights-of-way and off-street parking for each land use category. These standards are based on existing land use studies of the Southeastern Wisconsin Region since 1963 and are reasonably responsive to expected future as well as to present conditions.

^bNet residential acreage includes only those areas occupied by housing units and associated buildings plus required yards and open spaces. It does not include associated street or utility areas.

 $^{^{}c}$ Assuming a net land-to-building ratio of from 5:1 to 7:1. If the net land-to-building ratio is between 3:1 and 5:1, then six acres per 100 employees should be used.

^dRatio for elementary schools with 600 students.

^eRatio for middle schools with 900 students.

^fRatio for high schools with 1,500 students.

 $^{^{}g}$ This category includes hospitals, municipal office buildings, libraries, post offices, police and fire stations, and other related governmental and institutional uses.

^hNatural areas may be incorporated into the design of a park site; however, areas in floodlands, drainageways, wetlands, woodlands, and areas of steep slopes should not be included when determining whether acreage standards have been met.

¹For a medium-density residential neighborhood of 6,500 residents, recreational facilities in a combined park and school site should occupy approximately 21.5 acres, exclusive of the area occupied by the school building and associated offstreet parking and loading facilities.

Table 2

FACILITY SITE AND SERVICE RADIUS STANDARDS FOR THE WAUKESHA URBAN SERVICE AREA

		Required	Service Radius in Medium-Density	Maximum One-Way Travel Time (minutes)	
Facility Type	Number of Persons Served	Site Area (gross acres)	Neighborhood ^a (miles)	Automobile at 25 mph	Transit Facility (total elapsed time)
Commercial					
Neighborhood Retail and Service Center	4,000-10,000	5-15	1.00	5	
Community Retail and Service Center	10,000-75,000	15-60	1.50	10	20
Major Retail and Service Center Highway-Oriented Commercial	75,001-150,000	60 or more	10.00	30	45
Development	15,000 ^b	5-25			
Community Office Center	1,000 or more employees	20 or more	; -	15	30
Major Office Development	3,500 or more employees	60 or more		30	45
Industrial	,				
Community	300-3,500 employees	20-320		15	30
Major	3,500 or more employees	320 or more		30	45
Local Transit			0.25 ^c		
Educational					
Public Elementary School (grades K-6)	600 students	16 ^{d,e}	0.50 ^c	4.4	
Public Middle School (grades 7-8)	900 students	29 ^{d,f}	0.75	10	20
Public Senior High School (grades 9-12)	1,500 students	45 ^{d,g}	1.00	15	30
Outdoor Recreational					
Neighborhood	6,500	5-24	0.75 ^c		
Community		25-249	2.00	10	20
Major		250 or more	10.00		

^a A medium-density neighborhood is defined as an area having between 2.2 to 6.1 housing units per gross acre, with a population of approximately 6,500 persons per one square mile.

present any new information relating to the City of New Berlin or to the Pewaukee or Brookfield urban service areas. Land use patterns for these areas were developed through other local planning efforts and are included on the plan map for informational purposes and to provide a context for reviewing recommended land uses in the Waukesha urban and rural service areas. Lands within the Waukesha rural service area are not expected to be provided with urban services during the planning period, and, as such, should be maintained in agricultural, open space, or very-low-density residential uses through at least the year 2010.

The adopted land use plan for the Waukesha planning area represents a pattern of land use development that could effectively accommodate the physical, social, and economic needs of the residents of the City of Waukesha and environs through and beyond the plan design year 2010. The land use plan is a long-range plan, providing means of taking into account long-term development needs and objectives as individual development projects are proposed. The adopted Waukesha land use plan, which is shown in graphic summary form on Map 4, is designed for a planning period extending up to and beyond the year 2010. The land use plan is intended to

 $^{^{}b}$ Minimum average weekday traffic volume required on abutting freeway or arterial street or highway.

^CMaximum one-way walking distance.

 $[^]d$ Includes land for both the school facility and the associated school-related outdoor recreation facilities.

^eElementary school site area is based upon the standard of 10 acres plus one acre for each 100 students.

 $[^]f$ Middle school site area is based upon the standard of 20 acres plus one acre for each 100 students.

 g_{High} school site area is based upon the standard of 30 acres plus one acre for each 100 students.

Table 3

URBAN LAND REQUIREMENTS IN THE WAUKESHA URBAN SERVICE AREA: 2020^a

	1985						Required Incremental Land Use		Total Urban Land Requirements: 2010	
Urban Land Use Category	Gross Area ^b (acres)	Percent of Total 1985 Gross Area	Estimated 1985 Number ^C	1985 Development Ratios	Development Standards	Forecast 1985-2010 Increment	Acreages per Development Standards	Year 2010 Forecast Number ^C	Gross Acres ^b	Percent
Residential Suburban-Density (1.5 to 4.9 acres per							_			
housing unit)	620	5.7	250 housing units	248 acres per 100 housing units	260 acres per 100 housing units	25 housing units ^d ,e	70 ^f	275 housing units	690	4.1
Low-Density (20,000 to 65,339 square		ł					1			
feet per housing unit)	2,995	27.3	2,060 housing units	145 acres per 100 housing units	88 acres per 100 housing units ⁹	1,925 housing units ⁸	1,865 ^f	3,985 housing	4,860	29.2
Medium-Density (8,000 to 19,999 square										
feet per housing unit)	2,850	26.0	8,390 housing units	33 acres per 100 housing units	32 acres per 100 housing units	4,930 housing units ⁶	1,735 ^f	13,320 housing units	4,585	27.5
Medium-High-Density (3,630 to 7,999 square	1,135	10.4	4.540 housing	25 acres per 100	17 acres per 100	2 E00 haveing	470 ^f	7.040.50.00	4 005	
feet per housing unit) High-Density	1,135	10.4	units	housing units	housing units	2,500 housing units ⁸	470	7,040 housing units	1,605	9.7
(less than 3,630 square									}	
feet per housing unit)	490	4.5	6,400 housing units	7 acres per 100 housing units	9 acres per 100 housing units	3,125 housing units ^e	310 ^f	9,525 housing units	800	4.8
Subtotal	8,090	73.9	21,640 housing units			12,505 housing units	4,450	34,145 housing units	12,540	75.3
Commercial	810	7.4	14,510 employees	5.6 acres per 100 employees	6.0 acres per 100 employees	5,860 employees ^h	355 ^h	20,370 employees	1,165	7.0
Industrial	1,075	9.8	15,300 employees	7.0 acres per 100 employees	9.0 acres per 100 employees	5,640 employees	510	20,940 employees	1,585	9.5
Governmental and Institutional	720 ⁱ	6.6	61,390 persons	11.7 acres per 1,000 persons	12.0 acres per 1,000 persons	24,950 persons	300	86,340 persons	1,020	6.1
Park and Recreational j	255	2.3	61,390 persons	4.2 acres per 1,000 persons	3.9 acres per 1,000 persons ^k	24,950 persons	100	86,340 persons	355	2.1
Total	10,950	100.0	••				5,715		16,665	100.0

⁸Refers to the newly delineated urban service area shown on Map 5.

 $^{^{}b}$ Gross area includes associated street rights-of-way and off-street parking areas for each land use category.

^CThe estimated 1985 and forecast 2010 population numbers are expressed in number of housing units for residential land use categories; number of employees for commercial and industrial land use categories; and total population for governmental and institutional and park and recreational land use categories.

 $[^]dT$ he additional housing units in the suburban-density residential classification represent infilling of existing lots.

^eTo arrive at the forecast incremental population for each residential classification, the following allocations were used: 0.2 percent in the suburban-density residential category; 15.4 percent in the low-density residential category; 39.4 percent in the medium-density residential category; 20 percent in the medium-high-density residential category; and 25 percent in the high-density residential category.

^fThe required incremental land use acreages for residential uses include 10 percent more land, in addition to that required by applying the development standards, to provide for site suitability considerations, housing vacancies, and market choice.

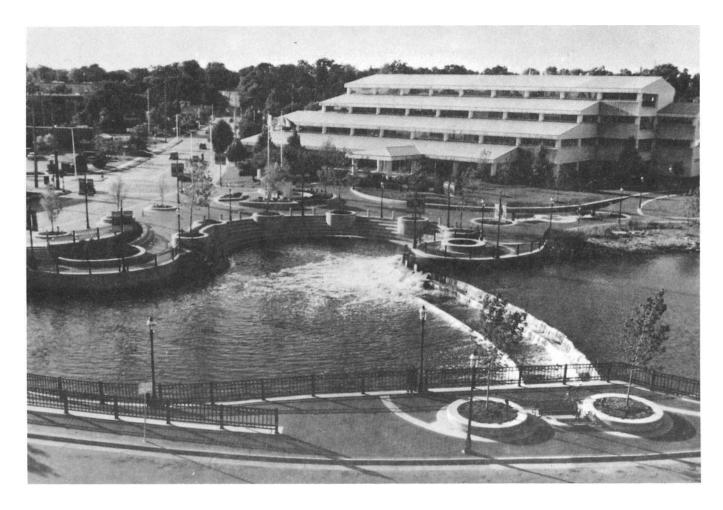
⁹Provides for 375 housing units, the number of new lots platted between 1985 and 1991, on approximately 41,000-square-foot lots, and 1,745 housing units, the number anticipated to be needed between 1991 and 2010, on approximately 30,000-square-foot lots.

h Includes an increase of 2,640 retail employees, requiring an additional 160 acres, and an increase of 3,220 service and transportation, communications, and utilities employees, requiring an additional 195 acres.

Does not include approximately 300 acres of undeveloped lands that are owned by Waukesha County and the City of Waukesha.

j This category includes only those areas with outdoor recreational facilities in neighborhood and community parks. It does not include undeveloped open space areas such as parkways, major parks such as the Moor Downs Golf Course and Minooka Park, or private recreational facilities.

k This standard applies only to community and neighborhood parks. Major parks should be provided in accordance with the adopted Waukasha County Park and Open Space Plan.



provide for the probable future as well as the present needs of the urban service area under the intermediate decentralized future scenario, with its related resident population, household, and employment forecasts. The recommended plan is designed to accommodate a resident population of about 86,300 persons in the urban service area by the year 2010.

Table 4 presents data regarding population, households, employment, public utilities, and major land uses for the Waukesha urban and rural service areas for the years 1985 and 2010. The plan provides somewhat more urban land than the minimum required to meet needs envisioned under the selected forecast population and employment levels. This is intended to provide some flexibility to accommodate the market demand with respect to the location and density of new residential development in areas within the proposed expanded urban service area.

Land Use Categories

The protection of primary environmental corridors in essentially open, natural uses is an important objective of the land use plan. The plan proposes to preserve about 4,595 acres, or about 17 percent, of the expanded urban service area as primary environmental corridors. Other

environmentally significant lands, including secondary environmental corridors and isolated natural areas, should be carefully integrated into urban development to protect natural resources to the extent practicable. Such areas are often well suited for public open space uses such as parks, drainageways, and stormwater detention areas.

The plan identifies five classifications of residential land use. Housing types in three of the five classifications, suburban-, low-, and medium-density, would consist primarily of single-family housing units. The mediumhigh-density classification would consist primarily of buildings with two to four housing units; the high-density residential classification would consist primarily of buildings with five or more housing units. Generally, residential development in areas proposed to remain under Town jurisdiction would fall in the low- or suburban-density classifications. Residential development in the medium-, medium-high-, and high-density residential classifications is proposed to be located in the City of Waukesha, where there is full range of available public services, including sidewalks, engineered stormwater drainage, public transit, and full-time emergency services, in addition to public water and sanitary sewer services.

Map 5

RECOMMENDED SERVICE AREAS IN THE WAUKESHA PLANNING AREA: 2010

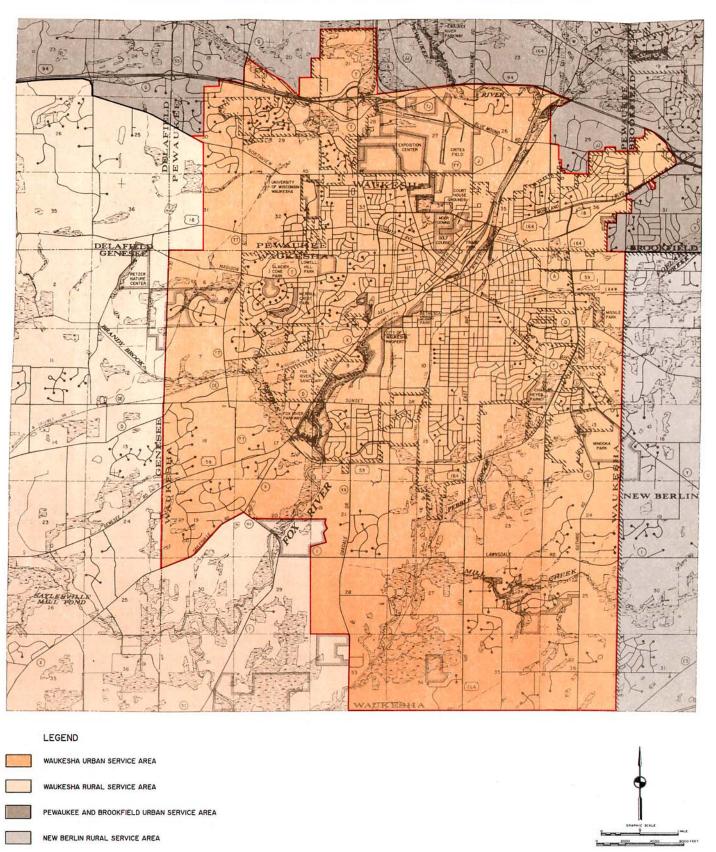


Table 4

SUMMARY OF 1985 EXISTING AND 2010 PLANNED LAND
USE IN THE WAUKESHA URBAN AND RURAL SERVICE AREAS

		Waukesha Rural Service Area ^b							
			Change				Change		
ltem	Existing 1985	Planned 2010	Number	Percent	Existing 1985	Planned 2010	Number	Percent	
Population and Employment Population Households Jobs	61,390 persons 21,640 households 35,745 jobs	84,340 persons 34,140 households 48,250 jobs	24,950 persons 12,500 households 12,505 jobs	40.6 57.8 35.0	2,560 persons 750 households 515 jobs	2,720 persons 900 households 525 jobs	160 persons 150 households 10 jobs	6.3 20.0 1.9	
Public Sanitary Sewer and Water Supply Facilities Population Served Area Served	50,300 persons 8,560 acres	86,340 persons 19,470 ^c acres	36,040 persons 10,910 acres	71.6 127.5	O persons O acres	O persons O acres	O persons O acres	0.0 0.0	
Environmentally Significant Areas Primary Environmental Corridors Secondary Environmental Corridors	4,365 acres 325 acres	4,595 acres	230 acres	5.3 -44.6	3,335 acres 590 acres	3,590 acres	255 acres	7.6 20.3	
Isolated Natural Areas Other Environmentally Significant Areas	580 acres O acres	425 acres 575 acres	-155 acres 575 acres	-26.7	0 acres	350 acres 45 acres	-195 acres 45 acres	-35.8	
Total Acres	5,270 acres	5,775 acres	505 acres	9.6	4,470 acres	4,695 acres	225 acres	5.0	
Residential Land Uses Residential Reserve ^d Suburban-Density Low-Density Medium-Density Medium-High-Density High-Density	0 acres 620 acres 2,995 acres 2,850 acres 1,135 acres 490 acres	1,525 acres 435 acres 4,180 acres 5,355 acres 1,670 acres 790 acres	1,525 acres -185 acres 1,185 acres 2,505 acres 535 acres 300 acres	0.0 -29.8 39.6 87.9 47.1 61.2	O acres 420 acres 610 acres 0 acres 0 acres 0 acres 0 acres	300 acres 960 acres 695 acres 0 acres 0 acres 0 acres	300 acres 540 acres 85 acres 0 acres 0 acres 0 acres	0.0 128.6 13.9 0.0 0.0	
Total Acres	8,090 acres	13,955 acres	5,865 acres	72.5	1,030 acres	1,955 acres	925 acres	89.8	
Commercial Land Uses Neighborhood Shopping Centers Number Acres	5 centers 30 acres	8 centers 60 acres	3 centers 30 acres	60.0 100.0	O acres	O acres	0 acres 0 acres	0.0 0.0	
Community Shopping Centers Number	5 centers 155 acres 625 acres	7 centers ^e 215 acres ^e 910 acres	2 centers 60 acres 285 acres	40.0 38.7 45.6	O acres O acres 15 acres	O acres O acres 15 acres	O acres O acres O acres	0.0 0.0 0.0	
Total Acres ^f	810 acres	1,185 acres	375 acres	46.3	15 acres	15 acres	0 acres	0.0	
Industrial Land Uses	1,075 acres	2,320 acres ^g	1,245 acres	115.8	35 acres	35 acres	0 acres	0.0	

^aThe newly defined Waukesha urban service area occupies 27,250 acres. The urban service area adopted in 1985 occupies 19,530 acres. This represents an increase of 7,720 acres, or 39.5 percent.

^bThe Waukesha rural service area occupies 13,650 acres.

^cIncludes all lands in the newly defined urban service area planned for urban uses in the year 2010.

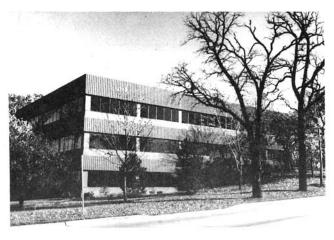
dLands designated as residential reserve are not expected to be developed until after the year 2010. These areas should be retained in agricultural or other open space use during the planning period.

 $^{^{\}it e}$ Includes the Waukesha Central Business District, which occupies about 70 acres.

 $^{^{\}it f}$ Includes retail, service, and office, and commercial.

 $g_{\it Includes}$ 1,890 acres of general industrial lands and 430 acres of industrial park lands.





The recommended land use plan depicts a variety of areas devoted to commercial land uses. Together, these areas encompass approximately 1,185 acres, or about 4 percent, of the urban service area. The plan calls for the development of three new neighborhood shopping centers, two new community shopping centers, and one new office center.

The land use plan standards recommend that all new retail commercial uses be located within planned shopping centers. Shopping centers are classified as major, community, or neighborhood centers, depending on the size and the types of goods and services located in the center. Shopping centers include both retail establishments, such as grocery, drug, variety, and clothing stores; and service establishments, such as banks, dry cleaners, hair salons, and restaurants. The amount of land designated for retail uses on the plan map has been adjusted to compensate for service-oriented establishments that often locate in shopping centers.

Three new neighborhood shopping centers are recommended by the plan. They are proposed to be located on the north side of STH 59 and west of the extension of Brookhill Drive, near Rose Glen School; at the intersec-

tion of CTH J and CTH JJ, near Crites Field; and on the east side of Oakdale Drive north of Dale Drive. The plan map designates a specific location for each of the proposed centers on the basis of a preliminary analysis; however, final selection of a site for neighborhood shopping center development should be based on a detailed plan for each of the neighborhoods concerned.

Community shopping centers should provide for the sale of convenience goods that are normally found in neighborhood centers, as well as shopper goods, such as clothing, furniture, or building supplies and such specialty items as jewelry, hobby, or music stores. Two new community shopping centers have been proposed to serve the anticipated population by the year 2010. The centers are proposed to be located on the northeast corner of the intersection of USH 18 and the future western bypass and at the northwest corner of the intersection of Lawnsdale Road and STH 164. As is the case for the proposed neighborhood shopping centers, final selection of the community shopping center sites should be based upon more detailed neighborhood development plans.

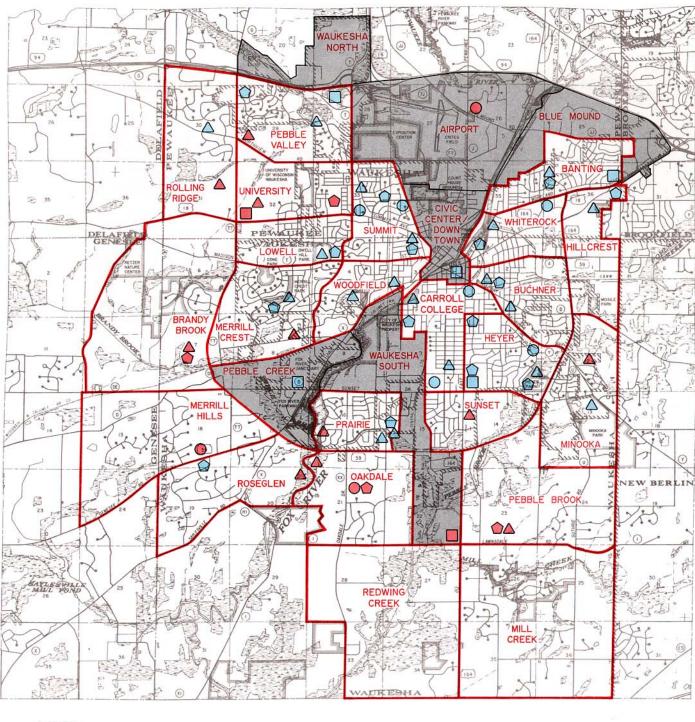
Existing community shopping centers include the Waukesha Central Business District; the Westbrook, Fox Run, and Silvernail Shopping Centers; and the K-Mart and the Pick 'n Save Center on Sunset Drive. The plan recommends that the Fox Run Shopping Center be expanded to include a site for a small department or discount store and designates an area to the north of the existing center for that expansion. At present, the proposed expansion area is developed with older single-family homes on lots ranging from one to three acres in size.

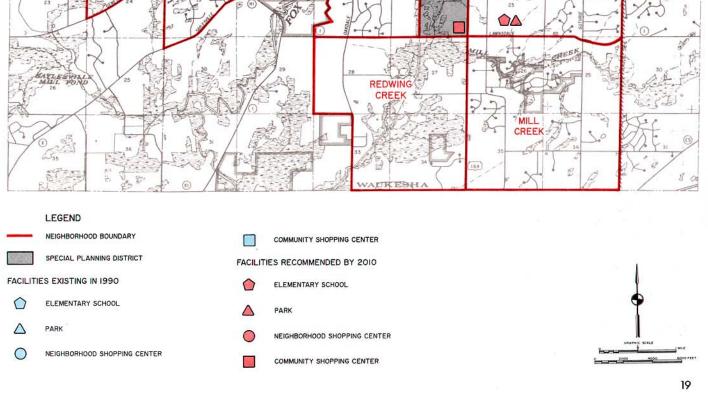
The plan also recommends that the City continue to maintain and improve the vitality of the Waukesha central business district. To this end, continued implementation of the Fox River Corridor Plan, adopted by the City in 1991, would serve to enhance the attractiveness of the downtown area for residents, workers, and visitors to the area.

A site has been designated for a new office center on the north side of Blue Mound Road, between CTH J and Busse Road. This site has characteristics suitable for the development of a community office park, including adequate size; ready access to, and high visibility from, the arterial street system; and proximity to both the freeway system and the Waukesha County Airport at Crites Field.

The areas proposed for industrial land uses would total about 2,320 acres, or about 8.5 percent of the urban service area, by the year 2010. Most of the increase in industrial land would be accomplished by the infilling of vacant industrial lots in the Airport Industrial Park, development of the Hillcrest Business Center, and additional industrial development in the area bounded by STH 59, Center Road, Lawnsdale Road, and STH 164.

Map 6 NEIGHBORHOODS AND SPECIAL PLANNING DISTRICTS AND NEIGHBORHOOD **FACILITIES IN THE WAUKESHA URBAN AND RURAL SERVICE AREAS**





Community Facilities

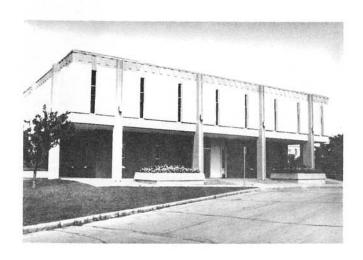
The plan indicates locations of existing and proposed elementary schools, parks, and shopping centers. The locations of these facilities were selected on the basis of the delineation of 23 identified neighborhoods and six special planning districts, as shown on Map 6. Detailed development and redevelopment plans should be prepared for each of these neighborhoods and special planning districts as an important means of guiding and shaping urban land use development and redevelopment in the urban service area. The preparation of such plans is based upon the concept that an urban area should be formed of, and developed in, a number of spatially organized, individually planned units, rather than a single, formless mass. Ultimately, a residential neighborhood should promote convenience in living and traveling within an urban area, promote the attractiveness of the built environment and protect the beauty of any remaining natural features, and provide a comfortable living situation at a scale that encourages urban dwellers to take an active part in neighborhood and community affairs.

Fire Stations: To provide adequate fire protection services for anticipated future urban development, the plan recommends the construction of one new City of Waukesha fire station and the relocation of two existing fire stations. It is recommended that the new and relocated stations be located near the Waukesha bypass. Such locations would afford rapid access to most areas of the City and also to outlying areas, should the surrounding Towns wish to contract with the City at some time in the future for fire and emergency rescue services. Specifically, it is recommended that the existing Sentry Drive Station be relocated to the south and west to the vicinity of the intersection of STH 59 with the Fox River, that the existing station on Stardust Drive be relocated to the south to the vicinity of STH 164 and Arcadian Avenue, and that one new station be constructed near the intersection of USH 18 and CTH TT.

Schools: School enrollment estimates developed as part of the planning process indicate that there may be a need for up to three new elementary schools, in addition to the Summit View School, and an additional middle school by the year 2010. If enrollments reach or exceed the higher end of the those projected by the plan, it may be necessary to expand existing schools in addition to constructing new facilities. Three potential elementary school sites are identified by the plan. The selection of these sites was based upon recommended area and service radius standards. Proposed sites were located in neighborhoods that currently do not have an elementary school and that have, or are expected to be faced with, additional residential growth. New schools have been proposed in the southeastern portion of the Town of Waukesha, north of the subdivisions developed in the Mill Creek area in the late 1980s; in the area east of the new high school, which is experiencing growth from







several recently-approved subdivisions; and in the area west of CTH TT, near its intersection with MacArthur Road, an area expected to develop during the planning period. New elementary school sites were located in residential areas away from major arterials to promote the neighborhood school concept and to maximize the number of students that could safely walk to school. An additional middle school, if needed, could be constructed on the grounds of the new West High School.

A comprehensive study has been initiated by school district officials, in cooperation with planning staff from the City and County of Waukesha and the Regional Planning Commission, to determine more definitively short- and long-range school facility needs. The study is expected to determine the need for school additions or new schools in the Waukesha area during the next 15-to 20-year period, as well as identify sites for new schools. If the sites identified differ from those shown on the land use plan, the plan will be amended appropriately.

Parks: The plan recommends that 10 new neighborhood parks and one additional community park be provided to serve the recreational needs of Waukesha area residents. Each of the neighborhoods identified in the plan will be served by a neighborhood park. In some neighborhoods, more than one park is recommended so that each resident is within 0.50 to 0.75 mile of a park. A new community park is proposed to be located at the northeast corner of the intersection of Northview and Meadowbrook Roads, next to the Town of Pewaukee Fire Station.

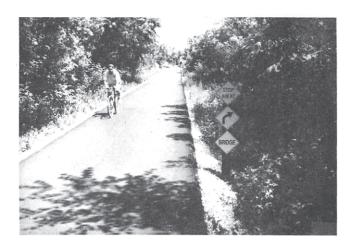
The plan map also designates an approximately 25 acre site at the southeast corner of the intersection of USH 18 and CTH TT for the development of a youth baseball and softball complex. It is envisioned that a warehouse for use by the City Parks Department would also be constructed on the site. As described earlier, it is proposed that a new fire station be constructed in the vicinity of the USH 18-CTH TT intersection. If feasible, development plans for the site should be designed to accommodate the new fire station as well as the youth baseball/softball complex and park warehouse.

The plan also recommends that Waukesha County continue to acquire land for major parks, parkways, and recreational trails as an integral part of a countywide park system, as recommended in the adopted Waukesha County park plan. It recommends that the City of Waukesha continue to implement the adopted Fox River corridor plan, which calls for the construction of a riverwalk, nature center and trails, and other facilities to increase access to, and enjoyment of, the Fox River.

PLAN IMPLEMENTATION

The adopted land use plan provides a design for the attainment of the community development objectives. The plan is not complete, however, until the steps necessary to implement the plan are specified. An important step







in plan implementation is the adoption of the plan by the City of Waukesha Plan Commission and Common Council. As previously noted, the Land Use Plan was adopted by the City of Waukesha Plan Commission on July 14, 1993, and by the Waukesha Common Council on September 7, 1993.

It is intended that the City Plan Commission initiate appropriate amendments to the City's zoning ordinance and zoning map, where necessary, to help implement the land use plan and related urban design criteria. Suggested changes to the City zoning ordinance regulations include the addition of an upland conservancy zoning district and modification of existing multi-family residential, commercial, and industrial districts to make them exclusive-use districts. It is also recommended that the three floodplain overlay zones, currently contained in a separate special-purpose zoning ordinance, be incorporated into the comprehensive zoning ordinance and included on the City zoning map.

To continue to ensure that the built environment will foster the attractiveness of the City as a place to live and work, the City's zoning ordinance should establish minimum landscaping and architectural review requirements. Site plan review and approval by the City Plan Commission should be required for all multi-family residential, commercial, and industrial projects. Requirements for building foundation plantings, parking lot landscaping and screening, and dumpster and mechanical equipment screening for all multi-family residential, commercial, and industrial projects should also be included in the ordinance.

Within the framework of the plan, detailed development plans should be prepared for the 23 neighborhoods and six special planning districts identified by the plan. Subsequent to the adoption of such plans, proposed new



streets, highways, public transit facilities, fire stations, parks, playgrounds, schools, and other public sites should be incorporated into the official map of the City and environs. Proposed facilities requiring public expenditures should be integrated into the capital improvements program.

CONCLUSION

The adopted land use plan for the City of Waukesha and environs, together with supporting implementation devices, provides an important means for promoting the orderly growth and development of the Waukesha area and for preserving and enhancing the unique and desirable environmental quality of the area over time. Consistent application of the plan will assure that individual development proposals are properly related to the development of the City and surrounding areas and will help to avoid costly developmental and environmental problems.





This is a summary of SEWRPC Community Assistance Planning Report No. 169, <u>A Land Use Plan for the City of Waukesha Planning Area: 2010</u>, prepared by the Southeastern Wisconsin Regional Planning Commission in cooperation with the City of Waukesha. For further information contact:

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