

WAUKESHA COUNTY OVERALL ECONOMIC DEVELOPMENT PROGRAM PLAN

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COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 118

WAUKESHA COUNTY OVERALL ECONOMIC
DEVELOPMENT PROGRAM PLAN

Prepared by the
Southeastern Wisconsin Regional Planning Commission
P. O. Box 769
Old Courthouse
916 N. East Avenue
Waukesha, Wisconsin 53187-1607

December 1985

Inside Region \$5.00
Outside Region \$10.00

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SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

916 NO. EAST AVENUE

• P.O. BOX 769

• WAUKESHA, WISCONSIN 53187-1607

• TELEPHONE (414) 547-6721

Serving the Counties of:

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December 17, 1985

Ms. Betty J. Cooper, Chairman
Waukesha County Board of Supervisors
Waukesha County Courthouse
515 W. Moreland Boulevard
Waukesha, Wisconsin 53188

Dear Ms. Cooper:

On September 27, 1984, the Waukesha County Board requested that the Southeastern Wisconsin Regional Planning Commission (SEWRPC) prepare an overall economic development program plan for Waukesha County. The decision by the Waukesha County Board of Supervisors to prepare such a program plan was based, in part, upon a determination by the U. S. Department of Commerce, Economic Development Administration, that the County was qualified for designation as a "redevelopment area" under the federal Public Works and Economic Development Act of 1965. Such designation requires the preparation of an overall economic development program plan meeting federal standards. Such designation would make the County and the local units of government within the County eligible to apply for federal grants in support of public works and other facility development which would result in the creation of permanent jobs. In addition, such designation would enable private businesses to apply to the EDA through local financial institutions for business loan guarantees.

This report, as approved by the Waukesha County Board of Supervisors on April 16, 1985, was submitted to the U. S. Department of Commerce, Economic Development Administration, and subsequently was approved by that agency as the overall economic development program plan for Waukesha County. As a result of this approval, the County will attain its status as a federally recognized redevelopment area and become eligible to apply to the federal Economic Development Administration for economic development grants and loans.

To meet federal guidelines, this report presents and analyzes pertinent data on the natural and man-made resource base in Waukesha County, including the physical characteristics, resident population, labor force, economy, and community facilities and services of the County. These analyses identify certain potentials for, and constraints on, economic development in the County. Recognizing those potentials and constraints, the report proposes a strategy that can help guide and coordinate the economic development efforts of local individuals and organizations concerned with the economic development of Waukesha County; help to facilitate the creation of employment opportunities; and foster a stable and diversified county economy.

The Commission and its staff were materially assisted in the preparation of this document by the Waukesha County Overall Economic Development Program Committee, which included representatives from a wide variety of economic development interests in Waukesha County. The assistance of the Committee contributed substantially to the quality of the finished report and is very much appreciated.

The Regional Planning Commission is pleased to have been of assistance to the County in this important planning program. The Commission stands ready, upon request, to assist the County and the constituent local units of government within the County in the implementation of the recommendations contained in this report.

Sincerely,



Kurt W. Bauer
Executive Director

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TABLE OF CONTENTS

Page

SUMMARY AND CONCLUSIONS.....	i
Introduction.....	i
Waukesha County Overall Economic Development Program (OEDP) Plan.....	i
Economic Development Program Goals.....	iv
Economic Development Program Objectives and Activities.....	v
Objective One.....	v
Activity One.....	v
Activity Two.....	v
Activity Three.....	v
Activity Four.....	vi
Activity Five.....	vi
Activity Six.....	vi
Objective Two.....	vi
Activity One.....	vi
Activity Two.....	vi
Activity Three.....	vii
Activity Four.....	vii
Activity Five.....	vii
Activity Six.....	vii
Activity Seven.....	vii
Objective Three.....	viii
Activity One.....	viii
Activity Two.....	viii
Activity Three.....	viii
Objective Four.....	viii
Activity One.....	viii
Activity Two.....	ix
Activity Three.....	ix
Objective Five.....	ix
Activity One.....	ix
Activity Two.....	ix
Activity Three.....	x
Activity Four.....	x
Activity Five.....	xi
Implementation and Evaluation of the Waukesha County Economic Development Program.....	xi
CHAPTER I - INTRODUCTION AND ASSESSMENT OF HISTORIC ECONOMIC DEVELOPMENT EFFORTS.....	1
Background.....	1
Overall Economic Development Program Committee of the Waukesha County Board.....	2
Waukesha County Board of Supervisors.....	3
Historical Assessment of Past Development Efforts in Waukesha County.....	3
Changes in the Labor Force.....	3
Total Labor Force.....	3

	Page
Industry Distribution of the Labor Force.....	15
Sex of the Labor Force.....	15
Unemployed Labor Force.....	16
Change in the Structure of the Economy.....	16
Recent Economic Development	
Activities in Waukesha County.....	17
Waukesha County Ad Hoc Economic Development Committee.....	17
Economic Development Hot Line.....	18
Local Area Chamber of Commerce Groups.....	18
Finer Waukesha Committee.....	18
Waukesha County Tourism Council.....	18
Waukesha County Airport System.....	20
Local Economic Development Activities.....	20
Town of Mukwonago.....	20
Village of Dousman.....	20
Village of Hartland.....	20
Village of Lannon.....	21
Village of Menomonee Falls.....	21
Village of Mukwonago.....	21
Village of Pewaukee.....	21
Village of Sussex.....	22
City of Muskego.....	22
City of New Berlin.....	22
City of Brookfield.....	22
City of Delafield.....	23
City of Oconomowoc.....	23
City of Waukesha.....	24
Study of Industrial Lands in Southeastern Wisconsin.....	24
Wisconsin IH 94, the Business Connection.....	25
 CHAPTER II - A DESCRIPTION OF THE NATURAL RESOURCES AND PHYSICAL CHARACTERISTICS AND COMMUNITY UTILITIES, FACILITIES, AND SERVICES IN WAUKESHA COUNTY.....	35
Introduction.....	35
Location.....	35
Natural Resource Base.....	35
Geologic and Physiographic Features.....	35
Soils	37
Woodlands.....	40
Wetlands.....	42
Surface Water, Floodlands, and Related Water Resource Features.....	42
Watershed Characteristics.....	44
Lakes.....	44
Streams.....	44
Floodlands.....	44
Environmental Corridors and Isolated Natural Areas.....	44
Prime Agricultural Areas.....	48
The Built Environment and Related Features.....	50
Land Use.....	50
Historic Urban Growth.....	50

	Page
Existing Land Use.....	50
Residential Land Use.....	50
Commercial Land Use.....	52
Industrial Land Use.....	53
Transportation, Communications, and Utilities.....	53
Governmental and Institutional Land Uses.....	54
Recreational Land Uses.....	54
Rural Land Uses.....	54
Sanitary Sewer and Water Supply.....	54
Sanitary Sewerage Facilities.....	54
Water Utilities.....	59
Solid Waste Disposal Facilities.....	59
Gas and Electric Utility Services.....	61
Transportation Facilities.....	61
Arterial Street and Highway System.....	61
Public Transit Facilities.....	63
Railway Freight Service.....	63
Water Transportation Facilities.....	65
Air Transportation Facilities.....	65
Educational Facilities and Services.....	65
Public Education Facilities.....	65
Private Education Facilities.....	66
Higher Education Facilities.....	66
Educational and Work-Related Programs for the Handicapped.....	68
Existing Housing Stock Inventory.....	68
Tenure Status.....	68
Measures of Housing Quality.....	68
Inadequately Housed Low- and Moderate-Income Households.....	70
Cultural Facilities and Services.....	70
Libraries.....	71
The Arts.....	71
Exhibition, Convention, Conference, and Meeting Facilities.....	72
Recreational Facilities and Tourism.....	72
Health Care Facilities and Services.....	73
Hospital and Clinic Facilities and Services.....	74
Rehabilitation/Nursing Home Facilities and Services.....	75
Physician Facilities and Services.....	75
Law Enforcement and Fire Protection Services.....	75
Services and Facilities for the Low-Income and Senior Citizen Populations in Waukesha County.....	77
Public and Private Financial Resource Base.....	78
Public Financial Resource Base.....	78
Resources Available for Financing Construction of Community Utilities and Facilities.....	78
Community Development Block Grant Program (CDBG).....	79
Tax Incremental Financing.....	80
U. S. Department of Housing and Urban Development, Urban Development Action Grants.....	81

	Page
U. S. Department of Agriculture, Farmers Home Administration Programs.....	81
Business Improvement Districts.....	81
U. S. Department of Commerce, Economic Development Administration (EDA).....	81
Resources Available for Financing Business Development.....	81
Small Business Administration, Section 503: Certified Development Company Program.....	81
Small Cities Community Development Block Grant Program.....	82
U. S. Department of Agriculture, Farmers Home Administration.....	82
Industrial Revenue Bonds.....	82
U. S. Department of Commerce, Economic Development Administration.....	82
Urban Development Action Grants (UDAG).....	82
Small Business Development Centers (SBDC's).....	82
Small Business Investment Company (SBIC).....	83
Job Training Partnership Act (JTPA).....	83
Wisconsin Housing and Economic Development Administration (WHEDA).....	83
Wisconsin Department of Development Technology Development Fund.....	83
Private Financial Resource Base.....	83
 CHAPTER III - A DESCRIPTION OF THE POPULATION, LABOR FORCE, AND ECONOMY OF WAUKESHA COUNTY.....	 85
Introduction.....	85
Population Trends and Characteristics.....	85
Historical Population Trends.....	85
Age Composition.....	89
Sex Composition.....	90
Racial Composition.....	91
Income Characteristics.....	91
Persons in Poverty.....	92
Household Composition.....	94
School Enrollment.....	94
Educational Attainment.....	95
Residential Mobility.....	96
Components of Population Change.....	96
Natural Increase and Net Migration.....	96
Population Projections.....	98
Labor Force Characteristics.....	100
Introduction.....	100
Historical Labor Force Size and Composition.....	101
Age Composition.....	102
Sex Composition.....	103
Racial Composition.....	103
Place of Work.....	103
Median Earnings and Average Weekly Wages.....	105
Industry Distribution.....	106
Occupational Distribution.....	111

	Page
Characteristics of the Unemployed Labor Force.....	111
Total Unemployment.....	111
Age of the Unemployed.....	113
Sex of the Unemployed.....	114
Race of the Unemployed.....	114
Job Applicants and Job Openings.....	116
Economic Base and Structure.....	117
Structure of the Waukesha County Economy.....	118
Recent Changes in Industry Employment.....	120
National Economic Trends.....	121
Regional and County Economic Trends.....	122
Future Economic Activity Levels.....	125
Distribution of County Employment Under the Regional Economic Activity Futures.....	128
Major Employers in Waukesha County.....	129
 CHAPTER IV - ECONOMIC DEVELOPMENT	
POTENTIALS AND CONSTRAINTS.....	131
Introduction.....	131
Economic Development Potentials.....	131
Potential One: Retention and Expansion of the County's Manufacturing Industry Base.....	131
Constraints Related to Potential One.....	133
Distribution of Economic Activity in the Nation.....	133
Structural Changes in the Economy.....	133
Changing World Product Markets.....	134
Perceived Negative Attitudes of Business Persons Regarding the State of Wisconsin's Attitude Toward Business.....	134
Availability of Financing for Business Expansions and New Business Start-ups.....	135
Federal Expenditures.....	135
Higher Worker Earnings.....	135
Lack of Awareness of Local Resources by the Resident Population and a Lack of a Waukesha County Identity.....	136
Lack of Availability of Local Economic Development Technical Assistance.....	136
Misconceptions Regarding the State's Corporate Income Tax Climate.....	136
The Need to Improve Various County Community Utilities, Facilities, and Services.....	137
Industry Acquisitions and the Effect on Local Economic Development.....	137
Aging of the Population.....	137
Potential Two: Generation of Employment Opportunities Through the Application of High Technology to Existing Industry, as Well as Other High Technology Industry Opportunities.....	138
Constraints to Potential Two.....	140
High Personal Income Taxes and a Perceived Anti-Business Reputation of the State of Wisconsin.....	140

	Page
Technological Innovations by the University System.....	140
Availability of High-Risk Venture Capital.....	140
Inability of the State of Wisconsin to Retain Highly Trained Members of the Labor Force.....	141
Lack of Identity with a Research Institution.....	141
Labor Force Implications of High Technology-Oriented Industry.....	141
Potential Three: Facilitating New Entrepreneurial Opportunities Directed Toward Small Business Expansions and Small Business Start-ups.....	142
Constraints Related to Potential Three.....	143
Lack of Availability of Financing for Small Businesses.....	143
Lack of Small Business Incubator Space.....	143
Government Regulations.....	143
Lack of Risk-Taking Attitude by Entrepreneurs.....	144
Potential Four: Expansion of the Retail Trade and Service Industries.....	144
Constraints Related to Potential Four.....	145
Location Problems.....	145
Arterial Street and Highway Transportation Improvements.....	145
Scattered Residential Development Pattern.....	145
Civilian Labor Force Issues.....	146
Potential Five: Expansion of the Recreation and Tourism Industry.....	146
Constraints Related to Potential Five.....	147
Perception of the Recreation and Tourism Industry as a Low Employment-Generating Industry.....	147
Interstate and Intrastate Competition in the Tourism Industry.....	147
Lack of Awareness of Local Resources by the Resident Population.....	147
Lack of Large Entertainment and Convention Facilities.....	147
Natural Resource Base Protection Issues.....	147
Restrictive Attitudes Toward New Public Recreational Facilities Development.....	148
Seasonal Operational Characteristics of Some Recreational Activities.....	148
Potential Six: Agriculture and Agri-Business Industry.....	148
Constraints Related to Potential Six.....	149
Declining Rural Land Use.....	149
Decreasing Farm Prices.....	149
Need for Educational Programs.....	149
Absentee Ownership of Farmland.....	149
Conflicts Between Agricultural and Residential Landowners.....	149
Lack of Erosion Control.....	149
Rising Energy Costs.....	150
Agricultural Financing Problems.....	150
CHAPTER V - ECONOMIC DEVELOPMENT STRATEGY.....	151
Introduction.....	151
Recent Economic Trends in Waukesha County.....	152

	Page
Unemployment Rates.....	152
Changes in the Structure of the Economy.....	152
Population Growth and Growth of the Economy.....	153
Economic Outlook.....	154
Probable Causes of Economic Problems in Waukesha County.....	156
The Recent National Economic Recession.....	156
Structural Changes in the Economy.....	156
Changing World Product Markets.....	157
Distribution of Economic Activity in the Nation.....	157
Intraregional Economic Activity Trends.....	157
Availability of Financing for Business	
Expansions and New Business Start-ups.....	158
Lack of a Coordinated Countywide	
Economic Development Program.....	158
Potentials for Generating New Employment	
Opportunities in Waukesha County.....	158
Retention and Expansion of the County's	
Manufacturing Industry Base.....	158
Generation of Employment Opportunities Through the	
Application of High Technology to Existing Industry, as	
Well as Other High Technology Industry Opportunities.....	159
Facilitating New Entrepreneurial Opportunities	
Directed Toward Small Business Expansions	
and Small Business Start-ups.....	160
Expansion of the Retail Trade and Service Industries.....	160
Expansion of the Recreation and Tourism Industry.....	161
Agriculture and the Agri-Business Industry.....	161
Goals of the Waukesha County Economic Development Program.....	161
Economic Development Program Goals.....	162
Criteria to Guide the Economic Development Program.....	162
Waukesha County Economic Development	
Program: Course of Action.....	163
Economic Development Program Objectives and Activities.....	164
Objective One.....	164
Activity One.....	164
Activity Two.....	164
Activity Three.....	164
Activity Four.....	165
Activity Five.....	165
Activity Six.....	165
Objective Two.....	165
Activity One.....	165
Activity Two.....	166
Activity Three.....	166
Activity Four.....	166
Activity Five.....	166
Activity Six.....	166
Activity Seven.....	167
Objective Three.....	167
Activity One.....	167
Activity Two.....	167

	Page
Activity Three.....	167
Objective Four.....	168
Activity One.....	168
Activity Two.....	168
Activity Three.....	168
Objective Five.....	168
Activity One.....	169
Activity Two.....	169
Activity Three.....	169
Activity Four.....	170
Activity Five.....	170
Implementation and Evaluation of the Waukesha County Economic Development Program.....	170

LIST OF EXHIBITS

Exhibit		Page
	Chapter I	
1	Waukesha County Overall Economic Development Committee Minutes of the Recommending Acceptance of the 1985 Waukesha County OEDP by the Waukesha County Economic Development Committee and the Waukesha County Board of Supervisors.....	4
2	Resolution of the Waukesha County Board of Supervisors Adopting the OEDP Document.....	5
3	Letter Transmitting the 1985 Waukesha County OEDP Document to Mr. Edward G. Jeep, Midwest Regional Director, U. S. Department of Commerce, Economic Development Administration.....	6
4	Status of U. S. Department of Commerce, Economic Development Administration, Approval of OEDP Document.....	7
5	Letter Transmitting the 1985 Waukesha County OEDP Document to Mr. Jack D. Price, Economic Development Representative, U. S. Department of Commerce, Economic Development Administration.....	8
6	Letter Transmitting the 1985 Waukesha County OEDP Document to the Wisconsin Department of Development.....	9
7	Letter of Response from the Wisconsin Department of Development.....	10
8	Letter Transmitting the 1985 Waukesha County OEDP Document to Mr. Anthony F. Balestrieri, Chairman, Southeastern Wisconsin Regional Planning Commission.....	11
9	Letter of Response from Mr. Kurt W. Bauer, Executive Director, Southeastern Wisconsin Regional Planning Commission.....	12
10	Waukesha County Board of Supervisors' Resolution Creating the Waukesha County Overall Economic Development Program Committee.....	13

LIST OF TABLES

Table		Page
	Chapter I	
1	Membership Composition of the Overall Economic Development Program Committee of the Waukesha County Board.....	14
2	Membership Composition of the Waukesha County Board of Supervisors.....	15
3	Local Area Chamber of Commerce Groups Within Waukesha County.....	19
4	Potential Industrial Sites: Waukesha County.....	26
	Chapter II	
5	Major Lakes in Waukesha County.....	46
6	Historic and Existing Land Use in Waukesha County.....	52
7	Municipal Wastewater Treatment Data for Facilities Serving Waukesha County: 1982.....	55
8	Sewer Service Area Population and Square Miles in Waukesha County: 1980 and 2000.....	58
9	Area and Population Served by Public Water Supply Facilities in Waukesha County: 1975.....	60
10	Base Commercial and Industrial Gas Utility Rates in Waukesha County: January 1983.....	62
11	Base Electric Utility Commercial Rates in Waukesha County: January 1983.....	62
12	Base Electric Utility Industrial Rates in Waukesha County: January 1983.....	63
13	Public School Enrollment for School Districts Serving Waukesha County: 1984-1985 School Year.....	66
14	Tenure Status of Existing Year-Round Housing Stock in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	69
15	Median Value and Median Monthly Contract Rent of Housing Units in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	69
16	Age of Total Year-Round Housing Units in Waukesha County, the Region, Wisconsin, and the United States.....	69
17	Inadequately Housed Low- and Moderate-Income Households in Waukesha County, the Region, and Wisconsin: 1980.....	70
18	Hospitals and Medical Clinics in Waukesha County.....	74
19	Rehabilitation and Nursing Homes in Waukesha County.....	75
20	Physicians per 100,000 Population by Specialty in Waukesha County, the Region, Wisconsin, and the United States: 1978.....	76
21	Percent Distribution of Persons by Travel Time to a Physician Within Waukesha County and the Region.....	76
22	Law Enforcement Agencies in Waukesha County.....	77
23	Fire Departments in Waukesha County.....	78
24	Fire Insurance Ratings for Communities in Waukesha County: 1983.....	78

Table		Page
25	Bond Ratings of Local Units of Government in Waukesha County.....	79
Chapter III		
26	Total Population in Waukesha County, the Region, Wisconsin, and the United States: 1980-1984.....	87
27	Population Distribution in the Region by County: Selected Years 1900-1980.....	87
28	Population in Waukesha County by Civil Division: 1960, 1970, 1980, and 1984.....	88
29	Urban and Rural Population in Waukesha County: Census Years 1880-1980.....	89
30	Age Composition of the Population in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	90
31	Sex Composition of the Population in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	90
32	Racial Composition of the Population in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	92
33	Average Household Income and Per Capita Income of Persons 15 Years and Older in Waukesha County, the Region, Wisconsin, and the United States: 1979.....	92
34	Median and Mean Household Income and Per Capita Income of Persons 15 Years and Older in Waukesha County Civil Divisions: 1979.....	93
35	Noninstitutionalized Persons Below the Poverty Level in 1979 in Waukesha County, the Region, Wisconsin, and the United States.....	93
36	Noninstitutionalized Persons Below the Poverty Level in Waukesha County Civil Divisions: 1979.....	94
37	Number of Households and Persons per Household in Waukesha County, the Region, Wisconsin, and the United States: 1960-1980.....	95
38	School Enrollment of Persons 5 to 24 Years of Age in Waukesha County, the Region, Wisconsin, and the United States: 1960-1980.....	95
39	Persons 18 Years of Age and Older by Years of School Completed in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	96
40	Residential Mobility of the Population 5 Years of Age and Older in Waukesha County, the Region, Wisconsin, and the United States Between 1965 and 1970 and 1975 and 1980.....	97
41	Rates of Population Change, Natural Increase, and Net Migration for Waukesha County, the Region, Wisconsin, and the United States: 1960-1980.....	97
42	Actual and Projected Population Levels in the Region by County: 1980, 1990, 2000, and 2010.....	99
43	Comparative Civilian Labor Force Size in Waukesha County, the Region, Wisconsin, and the United States: 1960-1980.....	101
44	Labor Force Participation Rates in Waukesha County, the Region, Wisconsin, and the United States: 1970 and 1980.....	102

Table		Page
45	Age Composition of the Civilian Labor Force in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	102
46	Comparative Civilian Labor Force Composition by Sex for Waukesha County, the Region, Wisconsin, and the United States: 1960-1980.....	104
47	Comparative Labor Force Composition by Race for Waukesha County, the Region, Wisconsin, and the United States: 1980.....	104
48	Place of Work for the Labor Force in Waukesha County, the Region, Wisconsin, and the United States: 1970 and 1980.....	105
49	Comparative Median Earnings by Sex by Occupational Group for the Civilian Labor Force in the Milwaukee Standard Metropolitan Statistical Area, the State of Wisconsin, and the United States: 1979.....	107
50	Comparative Average Weekly Wages by Industry for Waukesha County, the Region, and Wisconsin: 1983.....	107
51	Civilian Labor Force by Industry in Waukesha County, the Region, Wisconsin, and the United States: 1960-1980.....	108
52	Percentage of Civilian Labor Force by Industry for Waukesha County, the Region, Wisconsin, and the United States: 1960, 1970, and 1980.....	108
53	Percentage Change in Civilian Labor Force by Industry for Waukesha County, the Region, Wisconsin, and the United States: 1960-1970, 1970-1980, and 1960-1980.....	110
54	Occupation of Employed Persons 16 Years of Age and Older in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	112
55	Number of Unemployed in Waukesha County, the Region, Wisconsin, and the United States: 1960, 1970, 1980, and 1984.....	112
56	Monthly Unemployment Rates of Civilian Labor Force in Waukesha County: 1982-1984.....	113
57	Age Composition of the Unemployed Civilian Labor Force in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	115
58	Number of Unemployed by Sex in Waukesha County, the Region, Wisconsin, and the United States: 1960-1980.....	115
59	Unemployed by Specified Racial Groups in Waukesha County, the Region, Wisconsin, and the United States: 1980.....	116
60	Occupational Distribution of Waukesha County Job Service Applicants and Job Openings Received: September 23, 1984.....	117
61	Structure of the Waukesha County Economy and Waukesha Location Quotients for the Region, Wisconsin, and the United States: 1982.....	119
62	Economic Indicators for Regions of the United States.....	121
63	Industry Employment and Percent Change by Place of Work in Waukesha County, the Region, Wisconsin, and the United States: 1970 and 1980.....	124
64	Percentage Distribution of Jobs by County in the Region: 1950-1980.....	125

Table		Page
65	Employment Projections for the Region by Industry Group for the Year 2010: Alternative Futures Analysis.....	126
66	Estimated 1980 and Projected 1985, 1990, 2000, and 2010 Levels of Employment in the Region by Industry Group.....	127
67	Alternative Employment Projections for the Region by County for the Year 2010.....	129
68	Major Employers in Waukesha County.....	130

Chapter V

69	Wisconsin Economists' Outlook for 1985.....	155
----	---	-----

LIST OF MAPS

Map		Page
Chapter I		
1	Location of Suitable Industrial Sites in Waukesha County.....	33
Chapter II		
2	Location of Waukesha County Within Southeastern Wisconsin.....	36
3	Regional Setting of Waukesha County in the Midwest.....	38
4	Physiographic Features of Waukesha County.....	39
5	Suitability of Soils in the Region for Small Lot Residential Development Without Public Sanitary Sewer Service.....	41
6	Suitability of Soils in the Region for Residential Development With Public Sanitary Sewer Service.....	41
7	Woodlands and Wetlands in Waukesha County: 1980.....	43
8	Watersheds and Surface Water Resources of the Region.....	45
9	Floodlands in the Southeastern Wisconsin Region.....	47
10	Generalized Existing Land Use in the Southeastern Wisconsin Region: 1980.....	49
11	Urban Growth in the Southeastern Wisconsin Region.....	51
12	Recommended Public Sewage Treatment Plants and Sanitary Sewer Service Areas in the Region: 2000.....	57
13	Transportation Facilities in Waukesha County.....	64

WAUKESHA COUNTY OVERALL ECONOMIC DEVELOPMENT PROGRAM PLAN

SUMMARY AND CONCLUSIONS¹

INTRODUCTION

On September 27, 1984, the Waukesha County Board requested that the Southeastern Wisconsin Regional Planning Commission (SEWRPC) prepare an overall economic development program (OEDP) plan for Waukesha County. The decision by the Waukesha County Board of Supervisors to prepare such a program plan was based, in part, upon a determination by the U. S. Department of Commerce, Economic Development Administration (EDA), that the County was qualified for designation as a "redevelopment area" under the federal Public Works and Economic Development Act of 1965. Designation as a "redevelopment area" would require the preparation of an overall economic development program plan meeting federal standards. Such designation would make the County and the local units of government within the County eligible to apply for federal grants in support of public works and other facility development which would result in the creation of permanent jobs. In addition, the designation of the County as a redevelopment area would enable private businesses to apply to the EDA through local financial institutions for business loan guarantees. This memorandum is intended to provide a brief summary of the contents of the OEDP document that has been approved by the County OEDP Committee.

WAUKESHA COUNTY OVERALL ECONOMIC DEVELOPMENT PROGRAM (OEDP) PLAN

The Waukesha County OEDP plan is intended to meet the federal requirements for such a plan as a prerequisite to the designation of Waukesha County as a "redevelopment area." Accordingly, the plan document identifies historic economic development and related activities in the County; inventories and analyzes the economic development-related physical, social, and economic characteristics of the County; identifies economic development potentials and constraints within the County; and identifies the initial elements of an economic development program designed to help improve economic conditions in the County. The OEDP document was prepared with the assistance of the County's OEDP Committee, the membership of which is set forth in Table 1 of Chapter I of the OEDP document provided herewith.

¹The Waukesha County Overall Economic Development Program (OEDP) Plan, Summary and Conclusions, was presented to the Waukesha County Board of Supervisors on April 16, 1985.

The primary purpose of the plan, as identified by the Waukesha County OEDP Committee, was to:

1. Collect and analyze appropriate economic development data and information in order to identify the need for various economic program activities in Waukesha County;
2. Help to develop a consensus among public and private individuals and organizations in Waukesha County concerning both the potentials for, and the constraints on, economic development in the County;
3. Help to develop a consensus among public and private individuals and organizations in Waukesha County regarding the appropriate role of county government in the identification and implementation of specific economic development program activities that are designed to improve the economy of the County; and
4. Prepare an overall economic development program (OEDP) plan that meets the approval of the Waukesha County Board of Supervisors and the U. S. Department of Commerce, Economic Development Administration (EDA).

The Waukesha County OEDP document is comprised of five chapters. The first chapter, "Introduction and Assessment of Historic Economic Development Efforts": 1) provides background information regarding the initiation of the county OEDP planning process; 2) references various resolutions, endorsements, and correspondence as required by the EDA; 3) sets forth the overall purposes of the county OEDP document; 4) provides information required by the EDA regarding the membership composition of the Waukesha County Board of Supervisors, the Waukesha County Ad Hoc Economic Development Committee, and the Waukesha County OEDP Committee; and 5) provides a brief review of historic economic development.

The inventory and analyses portions of the Waukesha County OEDP document are presented in Chapters II, III, and IV. Chapter II, "A Description of the Natural Resources and Physical Characteristics and Community Facilities and Services in Waukesha County," describes and analyzes the natural and cultural features of the County pertinent to sound economic development. The natural features considered include geologic and physiographic features, soils, water resources and associated shorelands and floodlands, wetlands, woodlands, and wildlife habitat. The cultural features considered include land use, transportation, utilities, and community facilities and services.

Chapter III, "A Description of the Population, Labor Force, and Economy of Waukesha County," describes the recent and historic demographic and economic characteristics of the County, including important information on the labor force and the economic base and structure of the county economy.

Chapter IV, "Economic Development Potentials and Constraints," describes the potentials for, and constraints on, economic development in the County. The identification of the economic development potentials and constraints was based upon analyses of the information contained in Chapters I, II, and III of this report, as well as on the considered collective judgment of the County OEDP Committee. The economic development potentials and the attendant constraints identified in Chapter IV include:

Potential One: Retention and Expansion of the County's Manufacturing Industry Base.

Related Constraints

1. Lack of growth in the north-central region of the nation relative to other areas.
2. Structural changes in the economy evidenced by a declining percentage of manufacturing employment, and the growth of high technology employment.
3. Changing world product markets.
4. Perceived negative attitudes of businesspersons regarding the State of Wisconsin's attitude toward business development.
5. Lack of financing for business expansions and new business start-ups.
6. Lack of federal expenditures in Wisconsin and Waukesha County.
7. Higher worker earnings in Waukesha County.
8. Lack of awareness of local resources by the resident population and a lack of a Waukesha County identity.
9. Lack of available local economic development technical assistance.
10. Misconceptions regarding the State's corporate income tax climate.
11. A need to improve various county community utilities, facilities, and services.
12. Industry acquisitions and the effect on local economic development.
13. The aging of the County's population and the potential effect on the availability of younger workers.

Potential Two: Generation of Employment Opportunities Through the Application of High Technology to Existing Industry, as Well as Other High Technology Industry Opportunities.

Related Constraints

1. High personal income taxes and a perceived anti-business reputation of the State of Wisconsin.
2. Lack of technological innovations by the University of Wisconsin system.
3. Lack of high-risk venture capital.
4. Inability of the State of Wisconsin to retain highly trained members of the labor force.
5. Lack of a Waukesha County identity with a major research institution.
6. Smaller number of employment opportunities created by high technology industry.

Potential Three: Facilitating New Entrepreneurial Opportunities Directed Toward Small Business Expansions and Small Business Start-ups.

Related Constraints

1. Lack of available financing for small businesses.
2. Lack of small business incubator space.
3. Complexity of government regulations.
4. Lack of a risk-taking attitude by business entrepreneurs.

Potential Four: Expansion of the Retail Trade and Service Industries.

Related Constraints

1. Locational problems including: 1) proximity to enterprises located in Milwaukee County; 2) cost of public facility improvements to establishments located at the fringe of urban areas; 3) problems associated with the redevelopment of older central business districts.

2. Scattered residential development patterns and the resulting lack of access to some retail trade and service establishments.
3. Perceived negative attitudes by the civilian labor force of some retail trade and service industry jobs.

Potential Five: Expansion of the Recreation and Tourism Industry.

Related Constraints

1. Perception of the recreation and tourism industry as a low employment generating-industry.
2. Interstate and intrastate competition in the tourism industry.
3. Lack of awareness of local resources by the resident population.
4. Issues related to the protection of the County's natural resource base.
5. Restrictive attitudes toward new public recreational facilities development.
6. Seasonal operational characteristics of some recreational activities.

Potential Six: Agriculture and Agri-business Industry.

Related Constraints

1. Declining rural land use in the County.
2. The need for continuing educational programs for farm operators.
3. Absentee ownership of farmland.
4. Conflicts between agricultural and residential landowners.
5. Lack of soil erosion control.
6. Rising energy costs.
7. Problems in financing agricultural operations.

Chapter V, "Economic Development Strategy," based upon the data and analyses presented in Chapters I through IV, sets forth a recommended economic development program, including a set of economic development goals, objectives, and program activities designed to help improve the County's economy. A summary of the goals, objectives, and activities presented in Chapter V is set forth below:

Economic Development Program Goals

1. To identify the organizational characteristics of an initial countywide economic development program that will result in an ongoing countywide economic development program.
2. To identify the economic development activities that should be carried out under a countywide economic development program to supplement and complement the activities of such programs at the state and local levels of government and of private enterprise, and effectively help improve the economy of the County.
3. To ensure the continued eligibility of Waukesha County and local units of government in the County for U. S. Department of Commerce, Economic Development Administration (EDA), grant assistance and business loan guarantees.
4. To retain existing employment opportunities and to provide for the expansion of employment opportunities in Waukesha County by helping to meet the needs of existing employers.

5. To create new employment opportunities by helping local units of government and public and private development organizations in Waukesha County attract new employers to the County.
6. To assist in creating new employment opportunities by helping to facilitate entrepreneurial opportunities, especially for small businesses, in Waukesha County.
7. To continue to provide the community facilities and services that are necessary for the expansion of employment opportunities in Waukesha County.

Economic Development Program Objectives and Activities

Objective One: To establish the initial staff and advisory committee structure to initiate an ongoing Waukesha County economic development program; to ensure the continued eligibility of the County and local units of government for EDA programs; and to identify additional economic development program activities.

Activity One--The Waukesha County Board of Supervisors, with the assistance of the Regional Planning Commission staff, should ensure the submittal of this draft OEDP document to the U. S. Department of Commerce, EDA, regional office by April 30, 1985, as well as to local units of government in Waukesha County for review and comment. Following the review of the draft OEDP document by the EDA and local units of government, appropriate changes, if any, should be made and the revised document submitted by the OEDP Committee to the County Board of Supervisors for review and approval.

Activity Two--To submit an OEDP annual report to the EDA by June 30 of each year.

Activity Three--The Waukesha County Board of Supervisors should maintain a permanent Economic Development Committee of the County Board. A County Board Economic Development Committee will provide a forum for the discussion of, and recommendations for action upon, economic development issues and concerns that should be properly addressed by county government. The Chairperson of the Waukesha County Board of Supervisors should appoint the members of the permanent County Economic Development Committee. The Committee should consist of not fewer than nine persons, a majority of whom are private sector individuals, and three of whom are members of the Waukesha County Board. The Chairperson of the Committee will be a member of the Waukesha County Board. All of the Committee members should be appointed for staggered terms. The Committee will operate under the existing Waukesha County Board rules for committees of the County Board.

The Committee should be directed to implement the economic development program identified herein. As a first priority, the Committee should:

1. Recommend to the Waukesha County Board the appropriate staff support for an ongoing countywide economic development program.
2. Recommend to the Waukesha County Board the appropriate location for the offices of an ongoing countywide economic development program staff.

3. Recommend to the Waukesha County Board a three-year plan for providing the funding necessary for an ongoing countywide economic development program.

Activity Four--The Waukesha County Park and Planning Commission staff should provide the initial staff assistance to the Waukesha County Economic Development Committee. In addition, the Chairperson of the Waukesha County Board of Supervisors should request that the University of Wisconsin-Extension, the Waukesha County Technical Institute, and the Southeastern Wisconsin Regional Planning Commission provide additional, temporary staff support to the Committee.

Activity Five--Following the organization of a countywide Economic Development Committee, the Waukesha County Board of Supervisors should designate the advisory committee as the County's OEDP Committee. The continued maintenance of the OEDP Committee is a requirement of the EDA. The existing OEDP Committee should, however, continue to serve as the County's OEDP Committee until such time as the ongoing committee is appointed.

Activity Six--The staff of a countywide economic development program in Waukesha County should carefully consider the recommendations of the recently completed local industry retention surveys in determining future countywide economic development program efforts.

Objective Two: To retain business establishments currently located in Waukesha County. This study discusses the importance of economic development program activities that will assist in the expansion and retention of existing employers. Consequently, it is important for Waukesha County to initiate industry retention activities that will complement the efforts of local economic development practitioners in preventing the relocation of county industry establishments to locations outside the County. The initial activities designed to accomplish this objective are set forth below.

Activity One--Following the approval of the final OEDP document by the EDA, businesses located in Waukesha County will be eligible to apply to the EDA for business loan guarantees. In order to facilitate requests for business loan guarantees, Waukesha County should request that the EDA Wisconsin Economic Development Representative conduct an informational meeting with representatives of financial institutions and economic development practitioners in Waukesha County for the purpose of presenting the program procedures and other detailed information pertaining to the use of EDA business loan guarantees for business expansion projects.

Activity Two--Local units of government, other than the City of Waukesha, that are located in Waukesha County are currently eligible to receive economic development financial assistance from the U. S. Department of Housing and Urban Development Small Cities Community Development Block Grant (CDBG) program administered by the Wisconsin Department of Development (DOD). The CDBG regulations provide that these funds can be utilized for economic development purposes, including grants to local units of government for the provision, or improvement, of public facilities that will enable business establishments to create new jobs, and loans to businesses for the purchase of land and equipment and building construction and/or rehabilitation. To date, however, none of the local units of government that are eligible for the CDBG program have

submitted a grant application. Based on the ranking criteria utilized by the Wisconsin DOD, the local units of government with the best opportunity to receive these funds in Waukesha County are the Villages of Big Bend, Butler, Dousman, Hartland, and Pewaukee. The proposed Waukesha County economic development program staff should meet with representatives of these villages in order to determine the potential for submitting a grant application for Small Cities CDBG funds.

Activity Three--This report indicates that Waukesha County has a significant Hispanic population that resides predominately in the City of Waukesha. It is therefore important that the Waukesha County economic development program develop a working relationship with La Casa de Esperanza, Inc., a community-based organization serving the Hispanic population in Waukesha County, in order to assist in solving the unique economic development barriers to this minority population group. The County Economic Development Committee should assist La Casa de Esperanza in the development of strategies to establish a community-based economic development corporation and in the development of employment training programs that would help to facilitate the participation of Hispanics in the Waukesha County labor force. La Casa de Esperanza initiated the development corporation effort in 1982.

Activity Four--Following the organization of the proposed county economic development program, the program's staff should prepare a letter for transmittal to all manufacturing firms in the County that indicates the County's interest in retaining these firms in the County. The letter will also ask any firm facing problems which may result in a relocation or expansion outside Waukesha County to contact the economic development program staff. In turn, the program staff will notify the program's Committee Chairperson, the chief elected official of the local unit of government in which the firm is located, and the Wisconsin Department of Development in order to initiate a meeting with representatives of the firm to discuss solutions to the problems the firm is facing, or to discuss the various state and federal programs which may be of assistance in keeping the firm, or the firm's expansion, in Waukesha County.

Activity Five--During the preparation of the OEDP document, the County OEDP Committee identified the negative attitudes of businesspersons regarding the personal income tax climate in the State of Wisconsin as having a negative effect on economic development in the County. Accordingly, the County's Economic Development Committee of the County Board should work toward eliminating this perception.

Activity Six--The proposed county economic development program staff, in cooperation with the University of Wisconsin-Extension and the Waukesha County Technical Institute, will work with the Wisconsin Department of Development in sponsoring a series of periodic seminars, to be conducted at a location within Waukesha County, on securing government contracts and on product exporting. Publications that are available from the Wisconsin Department of Development on these topics should be displayed and made available to persons at the Waukesha County Park and Planning Department office and county economic development program office.

Activity Seven--The Wisconsin Housing and Economic Development Administration (WHEDA) provides low-interest financing to businesses with current sales

of \$35 million or less through its Small Enterprise Economic Development (SEED) program. SEED money can be used for the purchase, expansion, and improvement of land, plants, and equipment, and for depreciable research and development expenditures which result in the creation and maintenance of jobs. The utilization of the program is important to the retention of existing manufacturing establishments in the County. Accordingly, information regarding the SEED program should be included in the letter to be sent to county manufacturers as a part of Activity Four, Objective Two, as set forth herein.

Objective Three: To develop an ongoing role for Waukesha County in the attraction of new employers to the County.

Activity One--In order to assist in the attraction of new industry establishments to Waukesha County, the Waukesha economic development program should develop an ongoing working relationship with Forward Wisconsin, Inc. Forward Wisconsin, Inc., is the lead statewide agency for attracting new business and industry to Wisconsin, and a working relationship between the County's economic development program and the Forward Wisconsin industry attraction program could lead to the attraction of new business and industry establishments to Waukesha County.

Activity Two--Recently, Dane County and the University of Wisconsin-Extension developed a computerized inventory of commercial and industrial land use sites, available commercial and industrial buildings, and demographic and economic data for communities in Dane County. The system has proved to be very successful in providing locational information to business establishments interested in locating or expanding in Dane County. In order to facilitate the attraction of business establishments to Waukesha County, the County economic development program staff should work with the economic development staff of the Wisconsin Electric Power Company (WEPCo) to better utilize the computerized inventory data bank that is available for Waukesha County.

Activity Three--A variety of industrial and commercial land use sites and buildings, as well as other locational characteristics, are available in Waukesha County. At the present time, however, the local industry attraction efforts in the County are not coordinated. A countywide industry attraction effort not only would be a cost-effective way of attracting new industry to the County, but would make industry prospects aware of the full range of economic development locational characteristics in the County. The Waukesha County economic development program should encourage the development of a coordinated industry attraction effort in Waukesha County.

Objective Four: To develop existing county resources that can be utilized to facilitate business expansions and new business start-ups, especially for small businesses.

Activity One--The Waukesha County Technical Institute (WCTI) has set forth a proposal for the development of an incubator facility in Waukesha County. An incubator facility could provide a location where new businesses could develop in an appropriate manner. The proposed Waukesha County economic development program staff should work with the WCTI in determining the feasibility of the incubator project and, should the project be determined to be feasible, assist in the implementation of the project.

Activity Two--Economic activity studies have shown that the majority of jobs in Wisconsin result from the expansion of small businesses and from new business start-ups. The Small Cities Community Development Block Grant (CDBG) program, administered by the Wisconsin Department of Development, should be utilized by local units of government to establish low-interest business loan programs to finance small business expansion projects. However, the CDBG regulations do not award scoring points to applications for expansion projects involving the retention or creation of fewer than 25 jobs. The 1985 Small Cities CDBG regulations are, therefore, in conflict with the dominant characteristic of the job generation process in Wisconsin as documented herein. The Southeastern Wisconsin Regional Planning Commission will be conducting additional research on this apparent policy and program contradiction during 1985. Should the findings of the research by the Commission support this problem, the county economic development program should support appropriate changes to the Small Cities CDBG regulations.

Activity Three--The proposed economic development program staff and officials of the University of Wisconsin-Waukesha County campus should investigate the potential for use of the Wisconsin Department of Development Technology Development Fund in Waukesha County.

Objective Five: To improve existing community facilities and services that are identified as being deficient and to develop new community facilities and services to meet existing, but unmet, needs. While industry retention, attraction, and entrepreneurial activities are important to the County's economic development program, this study indicates that significant deficiencies in community facilities and services must be rectified in order to facilitate a successful economic development program.

Activity One--Following the approval of the final OEDP document by the EDA, Waukesha County, as well as all the local units of government in the County, will be eligible to apply for EDA public works grants that will facilitate economic development in Waukesha County. While EDA funds for public works projects are limited, the Waukesha County economic development staff and the representatives of local units of government should be aware of the grant assistance available from the EDA. Therefore, the Waukesha County economic development program staff should request that the U. S. EDA Wisconsin Economic Development Representative conduct an informational meeting for representatives of the County, local units of government in the County, and local economic development practitioners for the purpose of disseminating detailed information pertaining to the use of EDA public works grants for local public works improvement projects.

Activity Two--Recently, the Wisconsin Electric Power Company (WEPCo) announced a major industrial development program that involves the promotion of the IH 94 corridor in southeastern Wisconsin from the Wisconsin-Illinois border to the City of Milwaukee, and from the City of Milwaukee to Madison, Wisconsin. The purpose of the program is to encourage the growth and diversification of existing industries in southeastern Wisconsin by promoting the unique resources of the Region. Specifically, the WEPCo intends to attract new industries and stimulate the creation of new industries, especially in the area of automated manufacturing, biomedical technology, and agri-business/genetics, all of which are high technology industries. If the WEPCo program is to assist in the economic development of Waukesha County, it will be important for the

proposed Waukesha County economic development program staff to work closely with the WEPCo to ensure that the promotional program is successfully implemented.

Activity Three--This study documents the high quality of community facilities and services provided in Waukesha County. The continued provision of these facilities and services is critical to the economic development process in Waukesha County. Therefore, county government should strive to continue to provide the high level of community facilities and services, and should investigate the need for additional community facilities and services that could enhance the economic development process in the County. This document identifies the need to improve the following community facilities and services:

1. The Waukesha County OEDP Committee perceived a lack of affordable housing units in the County, and the description of the housing characteristics of the County showed that, in 1980, the median value of owner-occupied housing units was 123 percent of the median value of owner-occupied housing units in the Region. Therefore, the proposed county economic development program staff should work with existing organizations to determine more specifically the need for more moderately priced housing units in Waukesha County. Should this need be substantiated, the methods by which these housing units could be made available to the resident population should be determined.
2. This study documents the need for various highway system improvements in Waukesha County. The Wisconsin Department of Transportation indicated that about \$48 million in highway improvement expenditures is planned for Waukesha County from 1985 to 1991. These improvements could be among the most important public facility improvements having an effect on economic development in Waukesha County. Consequently, the proposed economic development staff should closely monitor the implementation of these improvements, with special emphasis on the widening of IH 94 between STH 164 and STH 18.
3. Throughout the State of Wisconsin, as well as throughout the nation, communities have lost direct access to railway freight service because of the abandonment of railway lines by railroad companies. In order to prevent a similar loss of railway service in Waukesha County, the county Economic Development Committee should monitor the status of railway lines in the County, and in the event a railway abandonment is imminent, take the steps necessary to preserve the line.

Activity Four--Waukesha County should continue its active participation in the Job Training and Partnership Act (JTPA) employment training programs administered by the Waukesha-Ozaukee-Washington (WOW) County Private Industry Council (PIC). Specifically, the proposed county economic development program staff should initiate discussions with the PIC staff regarding the development of better linkages between the JTPA employment training programs and the economic development efforts of Waukesha County and local units of government in the County. This activity is appropriate in light of the WOW Private Industry Council's allocation of approximately \$550,000 for fiscal year 1986 for on-the-job training contracts and industry-based customized training.

Activity Five--The Waukesha County OEDP Committee perceived that the Waukesha County population is not totally aware of the recreation and tourism resources available in the County and, therefore, does not utilize these resources to their greatest extent. As a result, the proposed economic development program staff should meet with the Waukesha County Tourism Council in order to: 1) indicate the OEDP Committee's perceptions to the Council; and 2) identify strategies to improve the utilization of local recreation and tourism resources by the resident population.

IMPLEMENTATION AND EVALUATION OF THE WAUKESHA COUNTY ECONOMIC DEVELOPMENT PROGRAM

This report indicates the need to establish a countywide economic development program in Waukesha County. Such a program would make Waukesha County, as well as all of the local units of government in the County and private businesses, eligible for financial assistance from the U. S. Department of Commerce, EDA, in support of projects that would create jobs. This report also indicates that such a countywide program should complement, rather than duplicate, economic development activities of local units of government in the County. This summary has set forth the goals, objectives, and activities necessary for an initial countywide economic development program. The initial county economic development program identified herein has been strongly influenced by such factors as: 1) the previous lack of a formal economic development program in the County; 2) the existing extent of economic development activities by local units of government and public and private economic development practitioners in Waukesha County; and 3) the need to build a consensus on an appropriate role for the County in economic development. The county economic development program activities are intended to be accomplished over a 12-month time period that would begin at the time the program is formally initiated.

In order to monitor and evaluate progress in implementing the economic development program activities, the existing Waukesha County OEDP Committee should convene a meeting following the review of the draft OEDP document by the U. S. Department of Commerce, Economic Development Administration.

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Chapter I

INTRODUCTION AND ASSESSMENT OF HISTORIC ECONOMIC DEVELOPMENT EFFORTS

BACKGROUND

On September 27, 1984, the Waukesha County Board requested that the Southeastern Wisconsin Regional Planning Commission (SEWRPC) prepare an overall economic development program (OEDP) plan for Waukesha County. The decision by the Waukesha County Board of Supervisors to prepare such a program plan was based, in part, upon a determination by the U. S. Department of Commerce, Economic Development Administration (EDA), that the County was qualified for designation as a "redevelopment area" under the federal Public Works and Economic Development Act of 1965. Designation as a "redevelopment area" would make the County and the local units of government within the County eligible to apply for federal grants in support of public works and other facility development which would result in the creation of permanent jobs. In addition, the designation of the County as a redevelopment area would enable private businesses to apply to the EDA through local financial institutions for business loan guarantees.

The Waukesha County OEDP plan as set forth herein assesses historic economic development and related activities in the County; inventories and analyzes the economic development-related physical, social, and economic characteristics of the County; identifies economic development potentials and constraints within the County; and identifies the initial elements of an economic development program designed to improve economic conditions in the County.

The primary purpose of the planning process, as identified by the Waukesha County OEDP Committee, was to prepare a document that would:

1. Collect and analyze appropriate economic development data and information in order to identify the need for various economic program activities in Waukesha County;
2. Help to develop a consensus among public and private individuals and organizations in Waukesha County concerning both the potentials for, and the constraints on, economic development in the County;
3. Help to develop a consensus among public and private individuals and organizations in Waukesha County regarding the appropriate role of county government in the identification and implementation of specific economic development program activities that are designed to improve the economy of the County; and
4. Provide an Overall Economic Development Program (OEDP) plan that meets the approval of the Waukesha County Board of Supervisors and the U. S. Department of Commerce, Economic Development Administration.

From September 1984 to March 1985, the Waukesha County OEDP Committee and the Regional Planning Commission staff conducted the research and analyses necessary to complete the OEDP document. Subsequently, the Committee recommended the approval of the OEDP document to the Waukesha County Board of Supervisors (see Exhibit 1). In August 1985, the Waukesha County Board of Supervisors, acting on the request of the OEDP Committee, approved the OEDP document (see Exhibit 2). Copies of the OEDP document were subsequently submitted to the EDA (see Exhibits 3, 4, and 5) and the Wisconsin Department of Development (see Exhibits 6 and 7), as well as to the Regional Planning Commission for approval (see Exhibits 8 and 9). Exhibit 4 indicates that while the EDA had informally approved the document at the time of publication, formal written certification of this approval was still forthcoming.

The Waukesha County OEDP document is comprised of five chapters. This first introductory chapter: 1) provides background information regarding the initiation of the county OEDP planning process; 2) references various resolutions, endorsements, and correspondence as required by the EDA; 3) sets forth the overall purposes of the county OEDP document; 4) provides information required by the EDA regarding the membership composition of the Waukesha County Board of Supervisors and the Waukesha County OEDP Committee; and 5) provides a brief review of historic economic development activities in the County.

The inventory and analyses portions of the Waukesha County OEDP document are presented in Chapters II, III, and IV. Chapter II, "A Description of the Natural Resources and Physical Characteristics and Community Facilities and Services of Waukesha County," describes and analyzes the natural and cultural features of the County pertinent to sound economic development. The natural features include geologic and physiographic features, soils, water resources and associated shorelands and floodlands, wetlands, woodlands, and wildlife habitat. The cultural features considered include land use, transportation, utilities, and community facilities and services. Chapter III, "A Description of the Population, Labor Force, and Economy of Waukesha County," describes the recent and historic demographic and economic characteristics of the County, including important information on the labor force and on the economic base and structure of the County. Chapter IV, "Economic Development Potentials and Constraints," describes the potentials for and constraints on economic development in the County. Identification of the economic development potentials and constraints described in Chapter IV was based upon the information contained in Chapters I, II, and III of this report, as well as on the considered collective judgment of the County OEDP Committee. Chapter V, "Economic Development Strategy," links the analyses presented in Chapters I through IV of the OEDP document and the economic development activities recommended to help improve the County's economy. The chapter sets forth goals, objectives, and program evaluation criteria for a county economic development program and identifies economic development needs. Chapter V also describes alternative economic development activities considered for inclusion in the county economic development program. Finally, the chapter sets forth a recommended economic development program strategy and implementation plan for Waukesha County.

OVERALL ECONOMIC DEVELOPMENT PROGRAM COMMITTEE OF THE WAUKESHA COUNTY BOARD

As already indicated, the Waukesha County Board of Supervisors appointed an OEDP Committee to direct and assist the Regional Planning Commission staff in

the preparation of the OEDP document (see Exhibit 10). The membership composition of the Committee was determined utilizing the guidelines promulgated by the EDA, and the Committee consists of 21 persons representing a variety of economic development interests and geographic subareas of the County. The membership of the County OEDP Committee is set forth in Table 1.

WAUKESHA COUNTY BOARD OF SUPERVISORS

The EDA guidelines require that OEDP documents include a table showing the composition of the governing bodies of the unit of government concerned--in this case, the Waukesha County Board of Supervisors. Accordingly, Table 2 sets forth the names, addresses, areas of representation, sex, and race of the members of the Waukesha County Board of Supervisors.

HISTORICAL ASSESSMENT OF PAST DEVELOPMENT EFFORTS IN WAUKESHA COUNTY

EDA guidelines require that counties which have had no previous history of organized economic development activities include in the OEDP document a brief history of the economy of the planning area, including a discussion of current economic conditions. Accordingly, this section presents summary information on certain aspects of the economy of the County and on the principal factors which have influenced the current economic conditions in the County. The economy of the County and the factors influencing economic conditions are considered in greater detail in Chapter III of this report. Also, this section briefly reviews the historic economic development efforts which have been undertaken by individual municipalities in Waukesha County. The review of past economic development activities can provide useful information regarding the types of activities which have been successful in an area. Such information could, in turn, help in the formulation of future economic development efforts.

Changes in the Labor Force

By definition, the labor force of an area consists of all residents who are 16 years of age or older, and are employed at one or more jobs or temporarily unemployed. Changes in the composition and distribution of an area's labor force tend to reflect changes in overall economic conditions.

Total Labor Force: The change over time in the size and distribution of the labor force of an area is one indicator of economic development conditions and constraints. Between 1960 and 1980, the total labor force in Waukesha County increased by 145 percent, whereas the total labor force of the Region, State and nation increased by only 38 percent, 48 percent, and 53 percent, respectively. The substantial increase in the labor force in the County between 1960 and 1980 reflects the rapid increase in the resident population of the County that occurred during this time period, and the growth in the female segment of the labor force. The relatively high rate of labor force growth in Waukesha County between 1960 and 1980 suggests that the county labor force should be capable of readily meeting the labor needs of existing and future employers in the County. Economic conditions in the County, however, are also affected by regional economic trends. Between 1960 and 1980, the labor force of the Southeastern Wisconsin Region grew at a slower rate than did the labor

Exhibit 1

MINUTES

OVERALL ECONOMIC DEVELOPMENT COMMITTEE

MARCH 20, 1985 7 p.m. Waukesha Room, County Office Building

PRESENT: Chairman Mulder, Supervisors Guhr and Finley, Mike Archie, Len Cors, Florence Whalen, Senator Lynn Adelman, Dick Wilks, June Moberly, Larry Schoenberger, Pam Parker, Hugh Hollister, Peter Gardner, Terry Foreman, Fred Guterriz, Laraine O'Brien, Margaret Farrow, Dave Williams, Robert Pieters, Committee members; Gordon Kacala, SEWRPC.

EXCUSED: Jack Spoerl, Bruce Berg, Robert Blessington, A. Eugene Neyhart.

The committee reviewed and discussed Chapter V of the Overall Economic Development Plan draft.

The following recommended changes were made and will be incorporated into the final draft document:

Under CRITERIA, add clause indicating there will be no purposeful "raiding" of industry/business from contiguous counties, and that the county will offer to facilitate cooperative efforts and areawide problems where municipal/town boundaries converge.

Under ACTIVITIES, in #4, change "determine" to "recommend" for approval by the County Board in items 1,2,3, & 4.

Also, a new committee structure replaces the "blue ribbon" concept. New structure to be a standing committee of the County Board consisting of no less than 9 persons, the majority of which shall represent the private sector.

Motion: Made by Peter Gardner, seconded by Florence Whalen - To adopt the draft of the Overall Economic Development Plan with changes proposed included, and to forward the document to the County Board for approval at the April 16th Board meeting. Carried unanimously.

The committee will meet one additional time to review the comments from local governments and the U.S. Department of Commerce following their respective reviews, adopt any pertinent changes, and resubmit the final OEDP to the County Board for adoption.

The meeting adjourned at 10:15 p.m.

Respectfully submitted,

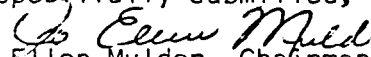

Jo Ellen Mulder, Chairman

Exhibit 2

RESOLUTION # 108 - 8/85

FINAL ADOPTION OF OVERALL ECONOMIC DEVELOPMENT PLAN

RECEIVED
AUG 29 1985
SEWRPC

WHEREAS Resolution #24 (4/85) approved the draft of the Overall Economic Development Plan for Waukesha County, and WHEREAS subsequently the draft was approved by the U.S. Department of Commerce, Economic Development Administration (EDA) without changes, and

WHEREAS the Federally approved draft has been circulated to the thirty-seven local governments within the County, and a public meeting on the same was held with no negative comments and no substantive changes forthcoming;

NOW THEREFORE BE IT HEREBY RESOLVED, that the Waukesha County Board of Supervisors gives its final approval to the Overall Economic Development Plan as drafted and reviewed, and hereby adopts the OEDP as its guideline for county economic development activities.

PRESENTED BY:

Betty J. Cooper
Betty J. Cooper

Jo Ellen Mulder
Jo Ellen Mulder

George W. Guhr
George Guhr

Gerald Wray
Gerald Wray

Earl Simpson
Earl Simpson

Administrative Committee

PRESENTED BY:

Jo Ellen Mulder
Jo Ellen Mulder

George W. Guhr
George Guhr

Dan Finley
Dan Finley

AD HOC COMMITTEE ON
ECONOMIC DEVELOPMENT

Approved:

Audrey Carlson
Audrey Carlson
County Clerk

Approved:
Robert Mawdsley
Robert Mawdsley
Corporation Counsel

CERTIFICATE

STATE OF WISCONSIN)

) ss.

COUNTY OF WAUKESHA)

Resolution No. 108 - 8/85

I, Audrey A. Carlson, County Clerk of said County, DO HEREBY CERTIFY That the attached resolution was adopted by the Waukesha County Board of Supervisors in regular session on the 20th day of August, A.D., 19 85;

CERTIFIED this 27th day of August, A.D., 19 85.

Audrey A. Carlson
Audrey A. Carlson
Waukesha County Clerk

Exhibit 3
COUNTY OF WAUKESHA



BETTY J. COOPER, Chairman
Waukesha County Board of Supervisors

515 West Moreland Blvd.
Waukesha, Wisconsin 53186
(414) 548-7002

April 25, 1985

RECEIVED
OCT 10 1985
SEWRPC

Mr. Edward Jeep, Regional Director
U. S. Department of Commerce
Economic Development Administration
175 West Jackson Boulevard
Suite A-1630
Chicago, Illinois 60604

Dear Mr. Jeep:

In a letter dated July 19, 1984, from Ms. J. Bonnie Newman, Assistant Secretary for Economic Development, U.S. Department of Commerce, Economic Development Administration (EDA), to Betty Cooper, Waukesha County was informed that the County had become statistically qualified for designation as a redevelopment area under Section 401(a)(8) of the Public Works and Economic Development Act of 1965, as amended. The letter also stated that in order for Waukesha County, and local units of government within the County, to be eligible for public works and development facilities grants and business loan guarantees from EDA, it would be necessary for the County to prepare an overall economic development program (OEDP) plan for submittal to EDA.

Pursuant to EDA regulations, the Waukesha County Overall Economic Development Program Committee with the assistance of the Southeastern Wisconsin Regional Planning Commission (SEWRPC), has prepared a draft OEDP document for Waukesha County. On behalf of the Waukesha County Board of Supervisors and the OEDP Committee, I am formally submitting to you herewith six copies of the draft OEDP document for your review and comment. Also, the draft OEDP document is being formally submitted to the State of Wisconsin, Department of Development, the EDA Economic Development Representative for Wisconsin, and the SEWRPC for review and comment. Following your review and approval of the draft OEDP, the Waukesha County OEDP Committee will complete a final OEDP document for Waukesha County.

The Waukesha County Board of Supervisors and the Waukesha County OEDP Committee look forward to your review and approval of the County OEDP. Should you have any questions concerning this matter, please do not hesitate to call me at (414) 548-7004, or Mr. Gordon M. Kacala, Chief Planner, SEWRPC, at (414) 547-6721 ext. 212.

Sincerely,


Betty J. Cooper, Chairman
Waukesha County Board of Supervisors

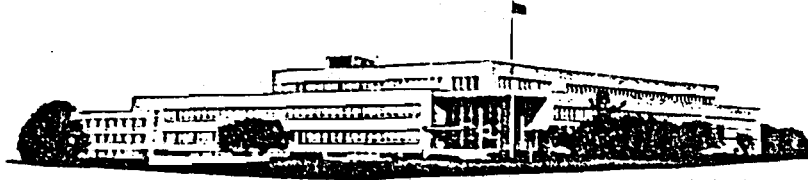
BJC/m
Enclosure

EXHIBIT 4

STATUS OF U. S. DEPARTMENT OF COMMERCE, ECONOMIC
DEVELOPMENT ADMINISTRATION, APPROVAL OF OEDP DOCUMENT

WHILE INFORMAL APPROVAL OF THE OEDP DOCUMENT HAD BEEN PROVIDED
BY THE U. S. DEPARTMENT OF COMMERCE, ECONOMIC DEVELOPMENT
ADMINISTRATION (EDA), AT THE TIME OF PUBLICATION OF THIS
DOCUMENT, FORMAL WRITTEN CERTIFICATION WAS STILL FORTHCOMING

Exhibit 5
COUNTY OF WAUKESHA



BETTY J. COOPER, Chairman
Waukesha County Board of Supervisors

515 West Moreland Blvd.
Waukesha, Wisconsin 53186
(414) 548-7002

April 25, 1985

Mr. Jack D. Price
Economic Development Representative
U. S. Department of Commerce
Economic Development Administration
510 S. Barstow Street
Eau Claire, Wisconsin 54701

LETTER TRANSMITTING THE 1985 WAUKESHA
COUNTY OEDP DOCUMENT TO MR. JACK D. PRICE,
ECONOMIC DEVELOPMENT REPRESENTATIVE, U. S.
DEPARTMENT OF COMMERCE, ECONOMIC DEVELOPMENT
ADMINISTRATION

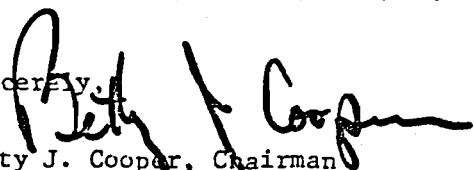
Dear Mr. Price:

In a letter dated July 19, 1984, from Ms. J. Bonnie Newman, Assistant Secretary for Economic Development, U. S. Department of Commerce, Economic Development Administration (EDA), to Betty Cooper, Waukesha County was informed that the County had become statistically qualified for designation as a redevelopment area under Section 401(a)(8) of the Public Works and Economic Development Act of 1965, as amended. The letter also stated that in order for Waukesha County, and local units of government within the County, to be eligible for public works and development facilities grants and business loan guarantees from EDA, it would be necessary for the County to prepare an overall economic development program (OEDP) plan for submittal to EDA.

Pursuant to EDA regulations, the Waukesha County Overall Economic Development Program Committee with the assistance of the Southeastern Wisconsin Regional Planning Commission, has prepared a draft OEDP document for Waukesha County. On behalf of the Waukesha County Board of Supervisors and the OEDP Committee I am formally submitting to you herewith one copy of the draft OEDP document for your review and comment. Also, the draft OEDP document is being formally submitted to the State of Wisconsin, Department of Development, the Regional Director of EDA, and the SEWRPC for review and comment. Following your review and approval of the draft OEDP, the Waukesha County OEDP Committee will complete a final OEDP document for Waukesha County.

The Waukesha County Board of Supervisors and the Waukesha County OEDP Committee look forward to your review and approval of the County OEDP. Should you have any questions concerning this matter, please do not hesitate to call me at (414) 548-7004, or Mr. Gordon M. Kacala, Chief Planner, SEWRPC, at (414) 547-6721 ext. 212.

Sincerely,


Betty J. Cooper, Chairman
Waukesha County Board of Supervisors

BJC/m
Enclosure

med
4-26-85

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

916 NO. EAST AVENUE

P.O. BOX 769

WAUKESHA, WISCONSIN 53187-1607

TELEPHONE (414) 547-8721

LETTER TRANSMITTING THE 1985 WAUKESHA COUNTY OEDP
DOCUMENT TO THE WISCONSIN DEPARTMENT OF DEVELOPMENT

Serving the Counties of:

KENOSHA
MILWAUKEE
OSHAUKEE
RACINE
WALWORTH
WASHINGTON
WAUKESHA



April 30, 1985

Mr. Thomas M. Krauskopf
Analyst for Federal/State Relations
Division of State Executive Budget
and Planning
Wisconsin Department of Administration
101 S. Webster Street, 7th Floor
P. O. Box 7864
Madison, Wisconsin 53707

Mr. Rolf W. Wegank, Director of
the Bureau of Policy Analysis
and Intergovernmental Relations
Wisconsin Department of Development
123 W. Washington Avenue, Room 850
P. O. Box 7970
Madison, Wisconsin 53707

RE: BAI No. W1850426-027 J00000W
SEHRFC No. COM.DEV-264

Gentlemen:

The Southeastern Wisconsin Regional Planning Commission, as the grant application review clearinghouse for the Southeastern Wisconsin Region, has received for review an application by Waukesha County to the U. S. Department of Commerce, Economic Development Administration, for federal assistance in partial support of the Overall Economic Development Program for Waukesha County.

In accordance with the intent and purpose of gubernatorial Executive Order 29, the Commission hereby notifies your agency of the subject application. For your review, we are enclosing herewith a summary of the project application as received by the Commission. Because of the time schedule for review of this project, we would appreciate your providing review comments to us no later than May 15, 1985, so that they may be included with the Commission's own review statement.

Should you require additional information about this application, please do not hesitate to contact Mrs. Elaine I. Andersen of our staff.

Sincerely,

Kurt W. Bauer
Executive Director

KWB/ea
Enclosure

State of Wisconsin

Department of Development

123 West Washington Avenue
Post Office Box 7970
Madison, Wisconsin 53707
608-266-1018

LETTER OF RESPONSE FROM THE WISCONSIN DEPARTMENT OF DEVELOPMENT

Anthony S. Earl
Governor

James T. Flynn
Lieutenant Governor

RECEIVED

MAY 16 1985

SEWRPC

May 10, 1985

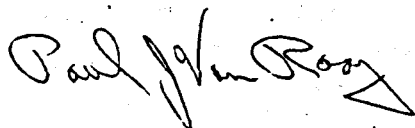
Mr. Kurt W. Bauer, Executive Director
Southeastern Wisconsin Regional Planning
Commission
916 North East Avenue
P. O. Box 769
Waukesha, WI 53187-1607

STATE APPLICATION IDENTIFIER NO. WI 850426-027-J-00000-WK

Dear Mr. Bauer:

The Department of Development has reviewed the materials contained in the "Notice of Intent." We appreciate the opportunity for comment, provided to us under the provisions of Gubernatorial Executive Order 29. On the basis of the materials contained in the notice, we have determined that the proposal is not in conflict with the plans or programs of the Department of Development. The Department recommends that the project be approved.

Sincerely,



Paul J. Van Rooy
Bureau of Community Development Services

PJV:tc

cc: Rolf Wegenke

Exhibit 8
COUNTY OF WAUKESHA



BETTY J. COOPER, Chairman LETTER TRANSMITTING THE 1985 WAUKESHA 515 West Moreland Blvd.
Waukesha County Board of Supervisors COUNTY OEDP DOCUMENT TO MR. ANTHONY F. Waukesha, Wisconsin 53186
BALESTRIERI, CHAIRMAN, SOUTHEASTERN WISCONSIN REGIONAL (414) 548-7002
PLANNING COMMISSION April 22, 1985

Mr. Anthony F. Balestrieri, Chairman
Southeastern Wisconsin Regional Planning Commission
P.O. Box 769
Old Courthouse
Waukesha, Wisconsin 53187

RECEIVED
APR 26 1985

Dear Mr. Balestrieri:

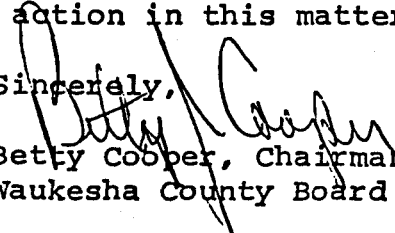
SEWRPC

In a letter dated July 19, 1984, from Ms. J. Bonnie Newman, Assistant Secretary for Economic Development, U.S. Department of Commerce, Economic Development Administration (EDA), to Betty Cooper, Waukesha County was informed that the County had become statistically qualified for designation as a redevelopment area under Section 401(a)(8) of the Public Works and Economic Development Act of 1965, as amended. The letter also stated that in order for Waukesha County, and local units of government within the County, to be eligible for public works and development facilities grants and business loan guarantees from EDA, it would be necessary for the County to prepare an overall economic development program (OEDP) plan for submittal to EDA.

Pursuant to EDA regulations, the Waukesha County Overall Economic Development Program Committee with the assistance of the Southeastern Wisconsin Regional Planning Commission staff, has prepared a draft OEDP document for Waukesha County. On behalf of the Waukesha County Board of Supervisors and the OEDP Committee I am formally submitting to the Regional Planning Commission herewith one copy of the draft OEDP document for review and comment. Please forward to us a letter setting forth the results of the review for enclosure in the final OEDP document.

The Waukesha County Board of Supervisors and the Waukesha County OEDP Committee look forward to your action in this matter.

Sincerely,


Betty Cooper, Chairman
Waukesha County Board

Enclosure

Exhibit 9

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

916 NO. EAST AVENUE

P.O. BOX 769

WAUKESHA, WISCONSIN 53187-1607

TELEPHONE (414) 547-6721

LETTER OF RESPONSE FROM MR. KURT W. BAUER,
EXECUTIVE DIRECTOR, SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION

Serving the Counties of:

KENOSHA

MILWAUKEE

OSHAUKEE

RACINE

WALWORTH

WASHINGTON

WAUKESHA



May 16, 1985

Ms. Betty J. Cooper, Chairman
Waukesha County Board of Supervisors
Waukesha County Courthouse
515 W. Moreland Boulevard
Waukesha, Wisconsin 53186

RE: SAI No. WI850426-027

J00000WK

SEWRPC No. COM.DEV-264

Dear Ms. Cooper:

This is to acknowledge receipt of your letter of April 22, 1985, requesting the Southeastern Wisconsin Regional Planning Commission, as the grant application review clearinghouse for federal grant applications from within the Southeastern Wisconsin Region, to review and comment on the Waukesha County Overall Economic Development Program Plan prepared for submission to the U. S. Department of Commerce, Economic Development Administration.

Pursuant to your request, the Commission has reviewed the Waukesha County Overall Economic Development Program Plan and finds that the proposed program is not in conflict with the regional plans prepared and adopted or under preparation by the Commission. Approval of the program is accordingly recommended.

In accordance with the intent and purpose of Gubernatorial Executive Order 29, the Commission offered an opportunity to the Wisconsin Departments of Administration and Development to review and comment on the subject application. To date, no review comments have been received. Any comments received will be promptly forwarded to you.

We trust that the foregoing information will be helpful to you. If we may be of further assistance in this matter, please do not hesitate to contact us.

Sincerely,

Kurt W. Bauer
Executive Director

KWB/ea

Exhibit 10

Adopted as Amended
9/15/84

RESOLUTION No. 155 - 9x84

WAUKESHA COUNTY BOARD OF SUPERVISORS RESOLUTION CREATING THE WAUKESHA COUNTY OVERALL ECONOMIC
Waukesha County Role in Economic Development DEVELOPMENT PROGRAM COMMITTEE

WHEREAS the Ad Hoc Committee on Economic Development was established by Resolution #21 (5-18-84) to "investigate the need for a countywide committee on economic development", and

WHEREAS the Ad Hoc Committee has actively pursued its study by meeting with representatives from the Southeastern Wisconsin Regional Planning Commission, University of Wisconsin Extension, Waukesha County Technical Institute, Job Training Partnership Act office, area Chambers of Commerce and community development organizations, and in addition held six informational hearings throughout the county soliciting input from business, industry, local officials and educators, and

WHEREAS the findings of its study (see attached report, also on file in Clerk's office) strongly indicate the need for a county coordinating role in economic development, and

WHEREAS during the course of the study, Waukesha County received notification of eligibility to apply for federal funds provided to local units of government by the U.S. Department of Commerce, Economic Development Administration (EDA) for local economic development activities if an Overall Economic Development Program plan (OEDP) is submitted by January 31, 1985,

BE IT THEREFORE HEREBY RESOLVED that Waukesha County contract immediately with the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to prepare an Overall Economic Development Program Plan that will meet eligibility requirements, for submittal to the U. S. EDA, at a cost to the county of ~~\$12,500~~ ^{12,350} with a matching share to be funded by SEWRPC, and

THAT the Waukesha County Board create an eighteen (18) member Economic Strategy Committee ^{As approved by the C.R. Chairman} that shall serve as the Overall Economic Development Program Committee and oversee the preparation of the OEDP document and the coordination of the activities it charts, and whose membership shall include: three (3) county board members; local government officials from cities, villages and towns; representatives of business, industry, finance, agriculture, the professions, organized labor, utilities, education, public health agencies, racial or ethnic minorities, and the unemployed or underemployed, and

BE IT FURTHER RESOLVED that in the interest of responding to the needs expressed at the informational hearings, Waukesha County contract, beginning January 1, 1985, with WCTI to provide and publicize an economic development "hot line" as a central information and referral source for economic development inquiries, and that funding for the contract, in the amount of \$2,000 be included in the 1985 budget, and

BE IT ALSO RESOLVED, that ^{12,350} ~~\$12,500~~ be appropriated from the contingency fund to Account #5101-3200 Contracts, in the 1984 County Board budget to cover the cost of the SEWRPC contract, and \$3,000 be appropriated from the Contingency Fund to Account #5101-5100 Work Assignment Travel in the 1984 County Board budget to underwrite expenses for the Economic Strategy Committee (OEDP) for the remainder of this year, and \$3000 be included in the 1985 budget for committee expenses from January through April, 1985

PRESENTED:

Jo Ellen Mulder
Jo Ellen Mulder, Chairman

Dan Finley
Dan Finley

George W. Gühr
George Gühr

AD HOC COMMITTEE ON ECONOMIC DEVELOPMENT

Table 1

MEMBERSHIP COMPOSITION OF THE OVERALL ECONOMIC DEVELOPMENT PROGRAM COMMITTEE OF THE WAUKESHA COUNTY BOARD

Name	Address	Race	Sex	Representation
Jo Ellen Mulder	N84 W14981 James Avenue Menomonee Falls, Wisconsin 53051	W	F	Supervisor, Waukesha County Board
Daniel M. Finley	N11 W27766 White Oak Court Waukesha, Wisconsin 53186	W	M	Supervisor, Waukesha County Board
George W. Guhr	W147 S6942 Durham Drive Hales Corners, Wisconsin 53130	W	M	Supervisor, Waukesha County Board
June R. Moberly	120 Bishop's Way Brookfield, Wisconsin 53005	W	F	Executive Director, Brookfield Chamber of Commerce
Jack J. Spoerl	P.O. Box 467 Hales Corners, Wisconsin 53130	W	M	Assistant Vice-President/Manager Muskego Branch State Bank of Hales Corners
Margaret Farrow	14905 Watertown Plank Road Elm Grove, Wisconsin 53122	W	F	President, Village of Elm Grove
Robert Pieters	N78 W14555 Appleton Avenue Menomonee Falls, Wisconsin 53051	W	M	President, Menomonee Falls Chamber of Commerce; Chairman, Greater Menomonee Falls Committee
Pam Parker	W180 N8085 Town Hall Road Menomonee Falls, Wisconsin 53051	W	F	Vice-President, Community Memorial Hospital
Dick Wilks	21330 Almesbury Brookfield, Wisconsin 53005	W	M	General Electric (Representing Industry)
Laraine O'Brian	1500 University Drive Waukesha, Wisconsin 53186	W	F	Assistant to the Dean, University of Wisconsin-Waukesha
Bruce Berg	P. O. Box 67 Genesee Depot, Wisconsin 53127	W	M	(Representing small business)
Hugh Hollister	200 Park Place Waukesha, Wisconsin 53186	W	M	Publisher, Waukesha Daily Freeman
Senator Lynn S. Adelman	4380 Moorland Road New Berlin, Wisconsin 53151	W	M	State Senator, Representing the 28th District
Peter H. Gardner	S78 W31090 Sugden Road Mukwonago, Wisconsin 53149	W	M	Chairman, Town of Mukwonago
Mike Archie	P. O. Box 187 Delafield, Wisconsin 53018	W	M	Marine Bank West--Delafield Lake County Task Force Representative
David Williams	S11 W28264 USH 18 Waukesha, Wisconsin 53186	W	M	Dairy Farmer, Agri-business Representative
Fred Gutierrez	410 Arcadian Avenue Waukesha, Wisconsin 53186	W	M	Executive Director, La Casa de Esperanza, Inc.
Larry Schoenberger	800 Main Street Waukesha, Wisconsin 53186	W	M	Deputy Director, Waukesha County Technical Institute
Mayor Florence Whalen	174 E. Wisconsin Avenue Oconomowoc, Wisconsin 53066	W	F	Mayor, City of Oconomowoc
Leonard Cors	500 Riverview Avenue Waukesha, Wisconsin 53186	W	M	Director, Job Training Partnership Act
Robert Blessington	6333 W. Bluemound Road Milwaukee, Wisconsin 53213	W	M	Director, Community Services Wisconsin State AFL/CIO
A. Eugene Neyhart	440 S. Executive Drive Brookfield, Wisconsin 53005	W	M	Wisconsin Bell, an Ameritech Company (Representing Utilities)
Terry Foreman	515 W. Moreland Boulevard Waukesha, Wisconsin 53186	W	M	Small Business Agent, University of Wisconsin-Extension

NOTE: Mr. Gutierrez is representative of the Hispanic community on the Waukesha OEDP Committee.

Source: Overall Economic Development Program Subcommittee of the Waukesha County Board.

force of the State and nation. This relatively slow rate of labor force growth indicates that the Region was not sharing in the economic growth occurring at the state and national levels. This phenomenon is, in part, directly related to the recent relative decline in the largest industrial employer within the Region, the export-based manufacturing industries, as well as the national economic recession that took place during the early 1980's. The continued decline of export-based manufacturing industry in the Region may limit the economic development potential of the County, and its ability to attract new economic enterprises.

Table 2

MEMBERSHIP COMPOSITION OF THE WAUKESHA COUNTY BOARD OF SUPERVISORS

Name	Address	District
Marian J. Ricker	333 North Lake Road, Oconomowoc	1
Carol A. Wilson	6032 Forest Bay Road, Oconomowoc	2
John P. Hilger	W299 N5352 CTH E, Hartland	3
Josephine M. Mason	N51 W27816 Willow Creek Drive, Pewaukee	4
Joe C. Marchese	N88 W22700 N. Lisbon Road, Sussex	5
Diane Lamping Hegman	N88 W17120 Elmwood Drive, Menomonee Falls	6
Bernetta K. Lingren	W149 N8301 Norman Drive, Menomonee Falls	7
Jo Ellen Mulder	N84 W14981 James Avenue, Menomonee Falls	8
James A. McCartan	14160 W. Lisbon Road, Brookfield	9
Eugene J. Nord	3250 Cullen Drive, Brookfield	10
John D. Steinbach	16760 W. North Avenue, Brookfield	11
Cheri Frederick	1900 Westmoor Terrace, Elm Grove	12
Earl J. Simon	985 Simon Drive, Brookfield	13
Gerald C. Wray	285 N. Brookfield Road, Waukesha	14
Daniel M. Finley	N11 W27766 White Oak Court, Waukesha	15
Richard L. Manke	N31 W28795 Lakeside Road, Pewaukee	16
Robert F. Hamilton	805 Milwaukee Street, Delafield	17
Thomas Schwaab	34245 Nashotah Road, Nashotah	18
Lloyd G. Owens	1840 W. Ottawa Avenue, Dousman	19
Lawrence Bartell	W320 S4353 Highview Road, Waukesha	20
Helen K. Davis	S40 W26950 Oak Grove Lane, Waukesha	21
Roland L. Merz	1407 Northview Road, Waukesha	22
Eugene R. Kraus	712 Delafield Street, Waukesha	23
John J. DeQuardo	844 Perkins Avenue, Waukesha	24
Billie A. Gross	1001 E. Wabash Avenue, Waukesha	25
Betty J. Cooper	127 E. Newhall Avenue, Waukesha	26
Edward J. Stoltz	106 N. Moreland Boulevard, Waukesha	27
Daniel A. Bodus	19531 W. Norwood Drive, New Berlin	28
William Grall	15920 W. Chipmunk Lane, New Berlin	29
Orville G. Martin	14825 W. Cleveland Avenue, New Berlin	30
Vera Stroud	16940 W. Shadow Drive, New Berlin	31
George W. Guhr	W147 S6942 Durham Drive, Hales Corners	32
Frank E. Narlock	W196 S7307 Hillendale Drive, Muskego	33
Donald DesMonie	W250 S10015 Center Drive, Big Bend	34
Karen J. McNelly	N312 S6510 Willow Spring Drive, Mukwonago	35

Source: Waukesha County Directory of Public Officials, 1984.

Industry Distribution of the Labor Force: In 1960, about 38 percent of the labor force in Waukesha County was employed in the manufacturing industry, while about 40 percent was employed in trade and service industries. In 1980, however, the manufacturing industry employed only 31 percent of the county labor force, while about 49 percent of the labor force was employed in the trade and service industries. Similar significant shifts in the distribution of the labor force occurred over the same time period at the regional, state, and national levels. These changes in the distribution of the labor force indicate a shift within the Region and the County from a manufacturing-oriented economic base to a trade and service-oriented labor force.

Sex of the Labor Force: The growth in the county labor force between 1960 and 1980 also resulted in part from a substantial increase in the number of females in the labor force. During this time period, the number of females in the county labor force increased by 259 percent, while the number of males increased by about 102 percent. This increase in the proportion of females to males in the county labor force is similar to the increases that occurred in the Region, State and nation over the same period. The relatively large increases in the number of females in the labor force may be attributed, in part, to the trend toward smaller families, the increasing number of wives working to supplement the family income, the accelerated growth in retailing and service jobs, emphasis on equal employment opportunities for females,

and the decision by an increasing number of females to pursue more actively full- or part-time employment in lieu of, or in addition to, marriage and family formation.

Unemployed Labor Force: The percentage of unemployed persons in Waukesha County in relation to the total county labor force is an important indicator of the economic health of the area. In 1970, the unemployment rate for Waukesha County, 3.2 percent, was less than that for the Region, 3.7 percent; the State, 4.0 percent; or the nation, 4.4 percent. By 1980, the unemployment rate in Waukesha County had increased to 4.8 percent; however, the county unemployment rate remained below that for the Region, 5.7 percent, and substantially below the unemployment rates for the State, 6.6 percent, and the nation, 6.4 percent. In 1984, the unemployment rate for Waukesha County, 6.8 percent, remained somewhat below that for the Region, 7.1 percent, State, 7.6 percent, and nation, 7.5 percent. The County's relatively high 1984 unemployment rate represented a total of 9,600 unemployed workers in the County, or one-third more unemployed workers than in 1970. This relatively high unemployment rate was due, in part, to the national economic recession and the effects of this recession on the durable goods manufacturing and construction industries in the County and the Region.

Change in the Structure of the Economy

Growth in the manufacturing industry has traditionally been viewed by local economic development practitioners as the most effective means for creating jobs and ensuring long-term economic growth. Over the past two decades, however, one of the most important changes that has occurred in the structure of the national economy is the declining importance of the manufacturing industry. Basic structural change in the national economy is also evidenced by a shift in the nature of manufacturing activities, with "high technology" industries accounting for a steadily increasing portion of all manufacturing jobs. In this regard, it has been estimated that in 1979 high technology jobs accounted for 40 percent of all manufacturing jobs.¹

The foregoing structural changes in the national economy are in part due to changing world economic conditions and world markets. American industries face continually increasing competition in markets which the United States once dominated. For example, United States production of steel decreased from 47 percent of world production in 1950 to only 14 percent in 1980. Domination by the

¹Joint Economic Committee, Congress of the United States, Location of High Technology Firms and Regional Economic Development, 1982. While recognizing that there is no general agreement on a definition of high technology industries, this study estimates high technology employment levels by analyzing selected Standard Industrial Classification (SIC) groups believed to be representative of high technology industries, including chemicals and allied products (SIC 28); machinery, except electrical (SIC 35); electrical and electronic machinery, equipment, and supplies (SIC 36); transportation equipment (SIC 37); and measuring, analyzing, and controlling instruments, photographic, medical, and optical goods, and watches and clocks (SIC 38). It is important to recognize that the Standard Industrial Classification system is not specifically designed to quantify high technology industry employment. Consequently, not all of the jobs in the foregoing SIC groups can rightfully be categorized as high technology jobs and, conversely, the foregoing SIC groups do not include all high technology jobs.

United States in the automobile industry has also ended, with Japan producing more passenger cars than the United States for the first time in 1980. Such changes in the international economy may be expected to have a strong bearing on the future size and structure of the national economy, as well as the economy of the Southeastern Wisconsin Region and of Waukesha County.

Certain structural changes which are occurring in the national economy are also evident in the State of Wisconsin. Following national economic trends, the percentage increase in manufacturing employment in the State was less than the percentage increase in total employment in the State between 1970 and 1980. Also consistent with national trends, the total employment in the service industry; the trade industry; and the finance, insurance, and real estate industry grew at a greater rate than did total employment in the State between 1970 and 1980.

A strong manufacturing sector has historically been the cornerstone of the economy in southeastern Wisconsin, and manufacturing industry employment still accounts for a large portion of total regional employment. However, manufacturing employment in the Region experienced a comparatively modest increase during the past three decades, which resulted in a decrease in the Region's relative share of manufacturing employment in the State and nation. While Waukesha County's manufacturing industry shows an equal percentage of manufacturing employment in 1980 and in 1970, the decline in the relative importance of manufacturing jobs in the Region could, in the future, directly affect the economy of the County because of the relatively high concentration of jobs in manufacturing industries within the County.

Recent Economic Development Activities in Waukesha County

Waukesha County Ad Hoc Economic Development Committee: There are two particularly important reasons why the Waukesha County Board of Supervisors decided to prepare an OEDP document. First, as previously indicated, in 1984 the County became qualified for designation as a redevelopment area under the Public Works and Economic Development Act of 1965. Such designation would make the County and local units of government within the County eligible for federal EDA grants in support of public works and other economic development facilities projects which result in the creation of permanent jobs, as well as making local business establishments in the County eligible for EDA business loan guarantees. Second, the Waukesha County Board of Supervisors recognized that there is a growing interest in economic development activities by individual municipalities in the County, as well as by private individuals. In order to determine the appropriate role, if any, of the Waukesha County government in the economic development of the County, the County Board created the Ad Hoc Committee on Economic Development. The Ad Hoc Committee on Economic Development consisted of three members of the Waukesha County Board: Ms. Jo Ellen Mulder; Mr. Daniel M. Finley; and Mr. George W. Guhr. In addition to determining the probable role of county government in the area of economic development, the Committee was to determine what structure a county economic development effort might take. In conducting its activities, the Ad Hoc Committee defined economic development as the attraction of new businesses to the County, the retention of existing businesses, and the nurturing of small businesses.

In order to accomplish its objectives, the Ad Hoc Committee conducted six public meetings throughout Waukesha County. These meetings were held in the Cities of Delafield, Muskego, Oconomowoc, and Waukesha, and the Villages of

Menomonee Falls and North Prairie during July and August 1984. In addition, the Ad Hoc Committee contacted organizations with a role in the economic development of the County to solicit their opinions with regard to a county-wide economic development program in Waukesha County. These organizations included the Waukesha County Technical Institute; the Wisconsin Department of Industry, Labor and Human Relations; Waukesha Job Service Office; the Wisconsin Department of Development; and the Southeastern Wisconsin Regional Planning Commission. While the opinions of local individuals and organizations differ with regard to the County's role in the area of economic development, the Ad Hoc Committee concluded that a more detailed study of the potential for initiating a countywide economic development program should be undertaken. As a result of this determination, as well as the announcement of the eligibility of the County for designation by the EDA as a redevelopment area, the County undertook the preparation of this OEDP plan.

Economic Development Hot Line: Recognizing the need to provide up-to-date information to business and industry, as well as to local economic development practitioners in Waukesha County, the Waukesha County Board of Supervisors in September 1984 provided one-half of the necessary funding for the provision of an economic development "hot line" telephone service in Waukesha County, with remaining funding being provided by the Waukesha County Technical Institute, which also staffs and operates the hot line. The purpose of the hot line is to assist county businesses and industries in dealing with problems related to government regulations, financing, and human resources by referring the businesses and industries to sources of information. In addition, the hot line provides referrals to firms located outside the County.

Local Area Chamber of Commerce Groups: Local economic development activities have been promoted through the organized efforts of area chambers of commerce and business associations located within Waukesha County. Table 3 provides a complete listing of local area chambers of commerce, along with contact names and addresses of those organizations serving the Waukesha County area.

Finer Waukesha Committee: The Finer Waukesha Committee was organized with the intent of bringing together key community leaders for the purposes of examining problems that affect the economic health of Waukesha County and identifying strategies that will help maintain the high quality of life by improving the economic base and increasing business and employment opportunities. Economic development activities are carried out by more than 160 active members and 60 volunteers who work in cooperation with the Waukesha Chamber of Commerce and political leaders within Waukesha County to encourage existing industries to expand in this area and to help industries resolve problems. Other activities include developing an image and marketing program for the area, promoting and encouraging the adaptability of the work force, establishing an educational planning and advisory council, and reviewing, evaluating, and lending support to various community services.

Waukesha County Tourism Council: In 1981, the Waukesha County Tourism Council, a nonprofit corporate entity, was organized because of recognition of the importance of the hospitality, recreation, and tourism facilities and attractions in Waukesha County. The Council functions with the purpose of unifying and promoting the tourism community in Waukesha County, as well as acting as a liaison between the County and municipal governments, chambers of commerce, businesses, citizens, and organizations regarding all aspects of the tourism industry in Waukesha County.

Table 3

LOCAL AREA CHAMBER OF COMMERCE GROUPS WITHIN WAUKESHA COUNTY

Chamber of Commerce Group	Contact	Address	Telephone
Brookfield Chamber of Commerce	June Moberly Executive Director	120 Bishops Way, Suite 128 Brookfield, Wisconsin 53005	(414) 786-1886
Butler Chamber of Commerce	Carrie Stary Executive Director	4790 N. 126th Street, Box 331 Butler, Wisconsin 53007	(414) 781-5195
Delafield Chamber of Commerce	Michael Archie President	c/o Marine Bank, P.O. Box 187 Delafield, Wisconsin 53018	(414) 646-8100
Elm Grove Business Association	Sam Grauber President	c/o Mail Marketing, 2969 N. 114th Street Milwaukee, Wisconsin 53222	(414) 782-6700
Hartland Area Chamber of Commerce	Pam Weinhammer Executive Director	134 Cottonwood Avenue Hartland, Wisconsin 53209	(414) 367-7059
Menomonee Falls Area Chamber of Commerce	Reed Kammerer Executive Director	N85 W16100 Appleton Avenue P.O. Box 73 Menomonee Falls, Wisconsin 53051	(414) 251-2430
Mukwonago Business Association	Charlene Spencer President	P.O. Box 266 Mukwonago, Wisconsin 53149	(414) 363-8558
New Berlin Chamber of Commerce	Warren Henschel President	15350 W. National Avenue New Berlin, Wisconsin 53151	(414) 786-1750
Oconomowoc Area Chamber of Commerce	Susan Karr Executive Director	100 S. Main Street Oconomowoc, Wisconsin 53066	(414) 567-2666
Waukesha Chamber of Commerce	Richard Nettum Executive Vice-President	722 N. Grand Avenue Waukesha, Wisconsin 53186	(414) 542-4249
Okauchee Area Business Association	Dr. Brian Bergamann President	c/o Okauchee Dental Clinic N50 W34770 Wisconsin Avenue Okauchee, Wisconsin 53069	(414) 567-0770
Genesee Depot Businessmen's Association	Mel Parker Treasurer	W31360 Highway 83 Genesee Depot, Wisconsin 53217	(414) 555-1282
Nashotah Area Chamber of Commerce	President	P. O. Box 20 Nashotah, Wisconsin 53058	N/A
Muskego Chamber of Commerce	Jack Sporel President	c/o State Bank of Hales Corners S76 W17655 Janesville Road Muskego, Wisconsin 53150	(414) 679-2800

NOTE: N/A indicates data not available.

Source: Waukesha County Technical Institute and SEWRPC, 1985.

Specifically, the Waukesha County Tourism Council is designed to develop and otherwise encourage the tourism trade and preserve the natural resources and historical characteristics of the Waukesha County area. Other goals of the Council include encouraging the expansion of the existing tourism industry and seeking new development of tourist sites. Briefly, short-term objectives of the Council consist of the development of seasonal brochures; conducting a Marketing Implications Study introducing the visitor to the Waukesha County area; publishing a periodic newsletter of Waukesha County tourism attractions; and providing a speaker and visitors bureau for promotion of the tourism industry.

Early in 1985, the Waukesha County Tourism Council, was being restructured into the Waukesha County Visitors and Convention Bureau. It will continue to function in the promotion of the tourism industry.

Waukesha County Airport System: There are two privately owned and one publicly owned general aviation facilities open to the general public within Waukesha County. The publicly owned Waukesha County Airport, Crites Field, is located on the north side of the City of Waukesha; Capitol Airport is a privately owned airport in the City of Brookfield; and Aero Park in the Village of Menomonee Falls is privately owned. These airports are intended to serve smaller training, business, charter, agricultural, recreational, pleasure, and air taxi aircraft.

The Waukesha County Board of Supervisors has adopted the Airport Master Plan for Crites Field, Waukesha County's largest airport. This plan has made Crites Field eligible for federal funding assistance for future airport expansions, and provides a detailed plan for future expansions and developments.

Recent proposals for the upgrading of Crites Field to a basic utility airport include the construction of Runways 18/36, a cross-wind, north-south runway with connecting taxiways; lighting accessories for the newly designed runways and taxiways; and the addition of aircraft hangars. Related airport projects may consist of land acquisition for the extension of Runways 10/28, a primary east-west runway and associated taxiways, in order to accommodate corporate business jets, air taxis, and cargo carriers; lighting and related navigational aids such as a precision instrument landing system (ILS); and additional hangar facilities.

Local Economic Development Activities: While the interest in the role of the county government in economic development has only recently been identified, it should be noted that local units of government in the County have, in recent years, undertaken a variety of economic development activities. These activities were identified by the staffs of local units of government in the County in response to a questionnaire prepared under the OEDP planning effort.

Town of Mukwonago--In 1984, the Town of Mukwonago entered into agreement with the Village of Mukwonago to provide sanitary service to the Rainbow Springs Resort. It is anticipated that the Rainbow Springs Resort, which is not in operation, will be sold and that the subsequent reopening of the resort will create new jobs for area residents.

Village of Dousman--Recently, the Village of Dousman constructed a new wastewater treatment plant. The plant is currently operating at approximately 50 percent of its total capacity and can readily accommodate new development without jeopardizing the level of treatment provided.

Village of Hartland--In 1979, a tax incremental financing (TIF) district was formed which encompassed the downtown district and the Village Industrial Park. Through TIF infrastructure projects, new storm and sanitary sewers and water mains were installed, the revitalization of the downtown area has begun, and aesthetic improvements have been made for pedestrian traffic flow.

The Delafield-Hartland Water Pollution Control Commission's facilities were placed into operation in July 1980, enabling an intercepting sewer system, including various pumping stations, to convey raw wastewater from the Villages of Hartland and Nashotah and the City of Delafield to the newly built treatment plant. In addition, improvements were made to the sewage facilities in the industrial park, and new roadways into the park were constructed.

Projects to be implemented within the next few years include the development of a new industrial park to be located at the site of an old gravel pit, a new municipal garage, and expansion of the downtown area.

Village of Lannon--The Village of Lannon has undertaken several economic development activities in recent years, including the reconstruction of several roads throughout the Village and the reconstruction and resurfacing of Edgewood Drive and Circle Drive within the Village's industrial park. In addition, the Village has negotiated agreements with existing quarrying operations in the Village that allow these businesses to increase the depth of their operations in order to permit continued operation.

Village of Menomonee Falls--The Village of Menomonee Falls has undertaken a variety of activities encouraging economic growth, including the development of the village-owned industrial park. Recently, the Department of Community Development was created to promote economic and residential growth within the Village. In addition, the Central Business District Committee was formed--a cooperative effort of area businesses interested in downtown revitalization projects.

The Village is also working with area community groups, the Chamber of Commerce, and the Greater Menomonee Falls Committee, a nonprofit citizens' corporation, on a planning effort to protect the natural resource base while encouraging a healthy business climate.

A community survey was recently completed which identifies the future concerns and developments of business and residential users, emphasizing the efficient expansion of present land within the Village. A proposed second project, a historical survey, will gather historical data and create a historical preservation ordinance in the Village.

A major sanitary sewer expansion is planned--the Lily Creek Interceptor--which will connect all tributary and trunk sewer lines to the Milwaukee Metropolitan Sewerage District. This system will service all existing subdivisions and open up those vacant lands suitable for development.

Village of Mukwonago--On June 30, 1966, the Village of Mukwonago purchased approximately 77 acres of land for the purpose of creating the Mukwonago Industrial Park. An overall plan for the development of the park was formulated with the assistance of the Wisconsin Electric Power Company, and the Village has provided the necessary public facilities and improvements for the park, including grading, provision of streets, and provision of sanitary sewer and public water supply services. In addition, in the mid-1970's, the Village extended sewer and water service to the south side of the Village along County Highway ES, thereby facilitating retail trade and service establishment development.

Village of Pewaukee--The Village of Pewaukee has an industrial park located on the east side of the Village just south of the Chicago, Milwaukee, St. Paul & Pacific Railroad operating in full service capacity. In June 1984, a group of volunteers working with the Village of Pewaukee organized the Pewaukee Redevelopment Corporation. The profit-motive corporation was designed to redevelop the downtown area by revitalizing existing buildings and attracting commercial and retail businesses to the Village.

In 1984, the University of Wisconsin-Milwaukee, School of Architecture, created several development plans for the Village of Pewaukee, based upon forecast planning. These plans are currently under consideration for their feasibility in guiding village growth. Also under consideration is the proposal by Wisconsin Bell to complete an industry retention survey for the Village.

Village of Sussex--From 1979 through 1984, the Village of Sussex undertook a variety of infrastructure improvements that have resulted in providing businesses and industries in the Village with adequate public facilities and services. In 1979 and 1980, the Village extended sanitary sewer service into the northeastern section of the Village; constructed a municipal water supply pumping station; extended a 12-inch-diameter water main to the industrial park; and constructed a sanitary sewer force main and lift station to service the industrial park. In 1982, the Village extended a water main to specific properties within the industrial park. In addition, the Village purchased additional fire equipment which enabled the Village to provide adequate fire protection to the industrial park.

In 1983, the Village constructed new roadways within the industrial park. In addition, the Village extended a water main to the Sussex Plastics Company, located in the western portion of the Village. In 1984, the City expanded the village sewage treatment plant to accommodate economic growth.

City of Muskego--Economic development activities to create jobs in the City of Muskego include the fully improved development of a 117-acre industrial park located just south of STH 24. Early in 1985, the Big Muskego Lake and Northeast District treatment facilities serving the City of Muskego were abandoned, along with tributary service areas connecting with the Milwaukee Metropolitan Sewerage District.

City of New Berlin--The City of New Berlin is considered a pro-development community, encouraging well-planned, quality industrial growth. A 760-acre, 80 percent-developed industrial park is located on the north side of the City. A tax incremental financing district was created for various infrastructure improvements, including site conditioning within the industrial park. The City has also used industrial revenue bonds to create between 800 and 900 new jobs.

Currently, an Economic Development Council is being organized between local government and the existing industries, directed toward satisfying the changing needs and future development of industry. Related economic development retention efforts, which play a major role in the City's planning activities, include a questionnaire being distributed to the City's industries and area businesses which focuses on the problems or questions businesses may have, asking their opinions about quality-of-life factors in the City, and whether their needs are being satisfied by local services.

A land use and urban design plan for the City of New Berlin for the year 2000 is currently being prepared with the assistance of the Southeastern Wisconsin Regional Planning Commission. In addition, the City is planning a new industrial area, along with the extension and improvement of some major arterials.

City of Brookfield--The City of Brookfield has been involved in several economic development activities using industrial revenue bonding and tax

incremental financing districts. Presently, the City is expanding sanitary sewer facilities to accommodate the future demands of the City of Brookfield and surrounding communities, with the intention of eliminating private use of onsite sewage septic systems. This regional treatment plant is anticipated to have an increased capacity of five million gallons over the capacity of the present system. In addition, increased above-ground reservoir storage of public water facilities is being undertaken by the City.

The City of Brookfield has encouraged the well-planned, high-quality private development of Bishops Woods and Brookfield Lakes Corporate Office Center, promoted the relocation of businesses to area industrial parks, and encouraged the rezoning of city lands for residential and industrial developments.

In a major undertaking, the City of Brookfield and Waukesha County have worked in conjunction with neighboring municipalities on the expansion of 124th Street between North Avenue and Burleigh Streets--demonstrating a cooperative effort to solve common developmental problems.

Within the past few years, marketing studies were instrumental in demonstrating the need for restaurants and major retail establishments; additional infrastructure improvements will be required to accommodate this retail expansion. Recent major retail centers, Loehmann's Plaza at Market Square and the anticipated Brookfield Fashion Square, are providing for the orderly growth of commercial development along USH 18 through the City of Brookfield. Other projects involve the rezoning and renovation of closed area schools in order to accommodate them for suitable business purposes; the combining of smaller property parcels for commercial development; and the annexation of the Capitol Drive Airport to the City of Brookfield.

City of Delafield--The Delafield-Hartland Water Pollution Control Commission's facilities were placed into operation in July 1980, and include a wastewater treatment plant, intercepting sewer, pumping stations, and outfall sewers. The intercepting sewer system, including the various pumping stations, provides for the conveyance of raw wastewater from the City of Delafield and the Villages of Hartland and Nashotah to the treatment plant, with the outfall of sewage effluent deposited into the Bark River downstream from the neighboring lakes.

The treatment plant is designed to treat an average flow of 2,200,000 gallons per day, with a capacity to serve 22,000 persons in the design year 2000.

City of Oconomowoc--The City of Oconomowoc has undertaken a variety of activities that have assisted in job creation in the City's central business district, as well as in the City's industrial park. In 1981, the City established a tax incremental financing district in its central business district. The establishment of the district allowed the City to improve five new parking lots in the downtown area and to improve nearby lakefront property, as well as to make street lighting and streetscape improvements. Major private sector business development projects that are, in part, a result of the public facility improvements in the central business district include: a new bank building; a high-rise condominium complex; and a shopping mall and savings and loan building, as well as smaller commercial developments that have together provided approximately 50 new jobs in the City's central business district.

In addition, the City has issued several industrial revenue bonds that have assisted local businesses in their expansion projects. These projects include: the expansion of Memorial Hospital; Wilkinson Clinic; Sentry Equipment Company; First Bank of Oconomowoc; a new shopping mall in the downtown area; and the Carnation Machine Shop Company. Also, on December 4, 1984, the Common Council of the City of Oconomowoc approved a resolution retaining the services of the Regional Planning Commission to prepare an overall economic development program (OEDP) plan for the City. The OEDP plan is designed to identify specific activities that will help to retain existing and attract new businesses and industries to the City. Preparation of the plan will begin in the spring of 1985.

City of Waukesha--The City of Waukesha has actively pursued the creation of tax incremental financing districts to provide the necessary public facilities and services for new development in the central business district, as well as in city-owned industrial parks. Within the last five years, the City created Tax Increment Financing District No. 1 and constructed water mains, sewer mains, and streets in order to make an existing city-owned industrial park more attractive for development. As a result, a number of new industries have located in the park, and a new shopping center is being constructed nearby. The City estimates that approximately 500 part-time and full-time jobs have been created as a result of these efforts.

The City's Tax Increment Financing District No. 2, created in 19 and located in the City's central business district, included projects that provided approximately 200 new parking spaces, as well as a variety of sidewalk, street, and streetscape improvements in the downtown area. These improvements have resulted in the overall renewal of the City's central business district, as well as in a number of private sector building renovations.

The City's Tax Increment Financing District No. 3, created in 19 , provided new sanitary sewer and water supply facilities to the new General Electric Company Magnetic Resonant Plant. It is anticipated that this new General Electric plant will employ as many as 2,500 people.

In 1983 the City, in cooperation with the Wisconsin Telephone Company (now Wisconsin Bell, an Ameritech Company), conducted an industry retention survey of more than 60 local industries. The results of the survey provided the City and the Waukesha Chamber of Commerce with valuable information regarding the history, problems, and future plans of some of the largest employers in the City.

Study of Industrial Lands in Southeastern Wisconsin: Late in 1982, the Wisconsin Electric Power Company (WEPCo) initiated a program to attract and encourage industrial development in the Region. In undertaking the program, the power company found that there was a lack of information regarding industrial land use in the Region, information important to the WEPCo development program. Specifically, the WEPCo found that a comprehensive areawide inventory of existing industrial land and additional land suitable for industrial development did not exist. Recognizing that such information would be essential to an effective industrial development program, and recognizing that such information would be useful in areawide and local public planning efforts, the WEPCo requested the assistance of the Regional Planning Commission in the conduct of a study of industrial land use in southeastern Wisconsin. The overall

purpose of the study was to document the historic trends in industrial land absorption in the Region, to analyze historic and probable future economic activity levels within the Region, and to assess the probable future industrial land needs. The study concluded that while there is sufficient industrial land available, over the long term, to accommodate anticipated increases in industry-related employment in the Region, there are relatively few suitable sites available for immediate industrial use, and such sites may, in fact, be unable to meet the specific needs of industries seeking to locate or relocate in the Region.

This study conclusion has important implications for Waukesha County communities that may be considering the expansion of industrial parks, or the development of a new park. While the study concluded that there are relatively few suitable industrial sites available, the study cautioned that any community, prior to undertaking an industrial park development, will need to evaluate carefully the local demand for such sites, as well as the attendant cost of such a development.

During the preparation of the study, the Commission staff gathered information on existing industrial land in southeastern Wisconsin which may be suitable for or could be made available to industrial development. As shown in Table 4, the study identified a total of 52 sites in Waukesha County, or a larger number of sites than in any other county in the Region, which are suitable for major industrial development. The sites are located primarily in the central and northeastern sections of the County (see Map 1). Of the major sites in Waukesha County, there was a total combined area of 6,715 acres suitable for industrial development. There were 10 Class I sites, or sites zoned for industrial use which have public sanitary sewer facilities available within the site and which have internal streets for industrial parcel access, comprising 1,235 acres; 12 Class II sites, or sites which are zoned for industrial use and have public sanitary sewer facilities available at the site, but which lack internal streets for site access, comprising 975 acres; and 30 Class III sites, or sites which are not zoned for industrial use or which do not have public sanitary sewer facilities available and which lack internal streets for site access, comprising 4,505 acres.

Wisconsin IH 94, the Business Connection: Recently, the Wisconsin Electric Power Company announced a major industrial development program that involves the promotion of IH 94 in southeastern Wisconsin from the Wisconsin-Illinois border to the City of Milwaukee and from the City of Milwaukee to Madison, Wisconsin. The purpose of the program is to: 1) encourage the growth and diversification of existing industries in southeastern Wisconsin by promotion of the unique resources of the Region; 2) attract new industries and stimulate the creation of new industries, especially in the areas of automated manufacturing, bio-medical technology, and agri-business/genetics; 3) increase technology transfer among educational institutions, research organizations, and industries; 4) promote job opportunities in emerging industries; 5) work with communities to encourage the development of sites suitable for industrial location and the utilization of available facilities; and 6) increase the competitive advantage of new and existing industries through improved energy utilization.

Table 4

POTENTIAL INDUSTRIAL SITES: WAUKESHA COUNTY

Number on Map 1	Location	Size (acres)		Classification	Zoning	Sanitary Sewer and Water Supply	Transportation Access		Adjacent Land Uses	Number of Owners	Physical Limitations	
		Gross	Net								Type	Acreage
1	South of STH 16 West of Oconomowoc Road City of Oconomowoc T8N R17E, Sections 31/32	55	50	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: Adjacent - STH 16 1 mile - STH 67 Rail: Adjacent - CMStP&P	Airport: 17 miles - Waukesha County 40 miles - Mitchell Field Proposed Freeway/Highway: 2 miles - Related STH 16	35% Industrial 35% Residential 30% Agricultural	1 - 3	100-year floodplain Very severe soils Steep slopes	5
2	East of CTH E North of IH 94 Town of Delafield T7N R18E, Section 22/23	345	285	III	Nonindustrial	Sewer - Adjacent Water - Not Available	Existing Freeway/Highway: Adjacent - IH 94 1 mile - STH 83 Rail: 4 miles - CMStP&P	Airport: 4 miles - Waukesha County 27 miles - Mitchell Field	30% Residential 30% Transportation 20% Natural Area 10% Agricultural 10% Recreational	7 +	Primary environmental corridor Wetlands Very severe soils Steep slopes	60
3	East of STH 83 South of Bark River Village of Hartland T7N R18E, Section 10	210	205	III	Nonindustrial	Sewer - 0.5 mile Water - 1 mile	Existing Freeway/Highway: Adjacent - STH 83 2 miles - IH 94 Rail: 1.5 miles - CMStP&P	Airport: 8 miles - Waukesha County 31 miles - Mitchell Field	75% Agricultural 25% Natural Area	1 - 3	Steep slopes	5
4	West of CTH E North of Bark River Village of Hartland T7N R18E, Section 3	60	35 ^a	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: 0.5 mile - STH 83 3.5 miles - IH 94 Rail: Adjacent - CMStP&P	Airport: 9 miles - Waukesha County 32 miles - Mitchell Field	45% Industrial 35% Natural Area 20% Residential	1 - 3	Primary environmental corridor Wetlands 100-year floodplain Steep slopes Very severe soils	20
5	East of CTH J North of STH 74 Village of Sussex T8N R19E, Section 22	80	75	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: Adjacent - STH 74 1.5 miles - STH 164 Rail: Adjacent - C&NW	Airport: 6 miles - Capitol Drive 26 miles - Mitchell Field	70% Agricultural 15% Industrial 15% Residential	1 - 3	Primary environmental corridor Site split by Waukesha County bike trail	5
6	North of Good Hope Road East and West of Soo Line Railroad Village of Sussex T8N R19E, Section 13	105	55	III	Industrial	Sewer - 0.25 mile Water - 0.25 mile	Existing Freeway/Highway: 1 mile - STH 74 1 mile - STH 164 Rail: Onsite - Soo Line	Airport: 5.5 miles - Capitol Drive 28 miles - Mitchell Field	75% Natural Area 25% Agricultural	1 - 3	Wetlands 100-year floodplain Steep slopes Very severe soils	50
7	North of STH 74 East of Waukesha Road Village of Sussex T8N R19E, Sections 23/24	300	195	II	Industrial	Sewer - Onsite Water - Adjacent	Existing Freeway/Highway: Adjacent - STH 74 0.1 mile - STH 164 Rail: Onsite - Soo Line Onsite - C&NW	Airport: 5 miles - Capitol Drive 28 miles - Mitchell Field	30% Open Land 25% Natural Area 25% Industrial 10% Residential 10% Agricultural	4 - 6	Wetlands 100-year floodplain Steep slopes Very severe soils	105
8	South of STH 74 East of Soo Line Railroad Village of Sussex T8N R19E, Sections 25/26	170	135 ^b	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: Adjacent - STH 74 0.1 mile - STH 164 Rail: Adjacent - Soo Line 0.25 mile - C&NW	Airport: 5 miles - Capitol Drive 28 miles - Mitchell Field	50% Agricultural 15% Residential 15% Open Land 10% Industrial 10% Institutional	1 - 3	--	--

Table 4 (continued)

Number on Map 1	Location	Size (acres)		Classification	Zoning	Sanitary Sewer and Water Supply	Transportation Access		Adjacent Land Uses	Number of Owners	Physical Limitations	
		Gross	Net								Type	Acres
9	South of CTH Q East of CTH YY Village of Menomonee Falls T8N R20E, Section 2	80	80	III	Nonindustrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 0.5 mile - STH 145 0.25 mile - USH 41/45 Rail: 0.25 mile - WSOR 1.5 mile - C&NW	Airport: 6.5 miles - Timmerman Field 24 miles - Mitchell Field	50% Residential 25% Industrial 25% Agricultural	1 - 3	--	--
10	North of WSOR Railroad East of CTH YY Village of Menomonee Falls T8N R20E, Section 2	60	60	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 0.1 mile - USH 41/45 1.5 miles - STH 145 Rail: Adjacent - WSOR 1.5 miles - C&NW	Airport: 6 miles - Timmerman Field 23.5 miles - Mitchell Field	75% Industrial 15% Agricultural 10% Residential	1 - 3	--	--
11	West of STH 145 South of CTH Q Village of Menomonee Falls T8N R20E, Section 1	60	40 ^c	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: Adjacent - STH 145 0.5 mile - STH 74 Rail: Onsite - WSOR 1 mile - C&NW	Airport: 6 miles - Timmerman Field 23.5 miles - Mitchell Field	50% Industrial 50% Residential	4 - 6	100-year floodplain	5
12	West of STH 145 North of STH 74 Village of Menomonee Falls T8N R20E, Sections 1/2	75	70	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: Adjacent - STH 145 Adjacent - STH 74 Rail: 0.1 mile - WSOR 1.5 miles - C&NW	Airport: 5.5 miles - Timmerman Field 23 miles - Mitchell Field	50% Industrial 40% Residential 10% Commercial	4 - 6	100-year floodplain	5
13	Between CTH Q and STH 74 East of STH 145 Village of Menomonee Falls T8N R20E, Section 1	170	165 ^d	III	Industrial	Sewer - 0.25 mile Water - 0.25 mile	Existing Freeway/Highway: Adjacent - STH 145 Adjacent - STH 74 Rail: Onsite - WSOR 0.5 mile - C&NW	Airport: 5.5 miles - Timmerman Field 23 miles - Mitchell Field	70% Open Land 20% Residential 10% Agricultural	7 +	--	--
14	West of Boundary Road North of STH 74 Village of Menomonee Falls T8N R20E, Section 1	115	90	III	Industrial	Sewer - 0.5 mile Water - 0.5 mile	Existing Freeway/Highway: 0.1 mile - STH 74 0.1 mile - STH 145 Rail: Onsite - WSOR 0.1 mile - C&NW	Airport: 5.5 miles - Timmerman Field 23 miles - Mitchell Field	40% Agricultural 40% Open Land 10% Natural Area 10% Industrial	4 - 6	Very severe soils Open water	25
15	West of STH 145 Northeast of USH 41/45 Village of Menomonee Falls T8N R20E, Section 12	45	45	III	Industrial	Sewer - 0.1 mile Water - 0.1 mile	Existing Freeway/Highway: Adjacent - STH 145 0.25 mile - USH 41/45 Rail: 1 mile - WSOR 1.5 mile - C&NW	Airport: 4.5 miles Timmerman Field 21 miles - Mitchell Field	35% Commercial 25% Recreational 30% Open Land 10% Industrial	1 - 3	--	--
16	North of Silver Spring Road 0.25 Mile West of CTH YY Village of Menomonee Falls T8N R20E, Section 27	250	240	III	Industrial	Sewer - 2 miles Water - 2 miles	Existing Freeway/Highway: 3 miles - USH 41/45 2.5 miles - STH 190 Rail: Adjacent - C&NW	Airport: 4 miles - Timmerman Field 21 miles - Mitchell Field	35% Agricultural 35% Open Land 30% Natural Area	4 - 6	Primary environmental corridor Steep slopes	10

Table 4 (continued)

Number on Map 1	Location	Size (acres)		Classification	Zoning	Sanitary Sewer and Water Supply	Transportation Access		Adjacent Land Uses	Number of Owners	Physical Limitations	
		Gross	Net								Type	Acreage
17	South of Silver Spring Drive 0.25 Mile West of CTH YY Village of Menomonee Falls T8N R20E, Section 34	105	100	III	Industrial	Sewer - 2 miles Water - 2 miles	Existing Freeway/Highway: 3 miles - USH 41/45 2 miles - STH 190 Rail: 0.5 mile - C&NW	Airport: 4 miles - Timmerman Field 21 miles - Mitchell Field	90% Agricultural 10% Open Land	7 +	Steep slopes	5
18	South of C&NW Railway East of CTH YY Village of Menomonee Falls T8N R20E, Section 26	45	45	III	Industrial	Sewer - 1.5 miles Water - 1.5 miles	Existing Freeway/Highway: 2 miles - USH 41/45 2.5 miles - STH 190 Rail: Adjacent - C&NW	Airport: 4 miles Timmerman Field 21 miles - Mitchell Field	50% Industrial 25% Open Land 20% Natural Area 5% Residential	1 - 3	--	--
19	East of Lilly Road 0.25 Mile South of Mill Road Village of Menomonee Falls T8N R20E, Section 25	75	70	III	Industrial	Sewer - 1 mile Water - 1 mile	Existing Freeway/Highway: 1 mile - STH 175 1 mile - USH 41/45 Rail: 0.1 mile - C&NW	Airport: 3 miles - Timmerman Field 20 miles - Mitchell Field	35% Industrial 35% Residential 30% Agricultural	1 - 3	Wetlands	5
20	North of C&NW Railway East of Menomonee River Village of Menomonee Falls T8N R20E, Section 25	45	45	III	Industrial	Sewer - 0.25 mile Water - 0.25 mile	Existing Freeway/Highway: 0.5 mile - USH 41/45 1 mile - STH 175 Rail: Adjacent - C&NW	Airport: 2 miles - Timmerman Field 19 miles - Mitchell Field	40% Open Land 25% Industrial 25% Natural Area 10% Residential	1 - 3	--	--
21	East of Lilly Road South of Silver Spring Drive Village of Menomonee Falls T8N R20E, Section 36	230	170 ^e	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: 1 mile - USH 41/45 1.25 miles - STH 190 Rail: 0.25 mile - C&NW	Airport: 2 miles - Timmerman Field 19 miles - Mitchell Field	25% Industrial 25% Natural Area 25% Residential 25% Agricultural	4 - 6	Primary environmental corridor Wetlands 100-year floodplain Steep slopes	50
22	South of Blue Mound Road East of Sunny Slope Road City of Brookfield T7N R20E, Sections 25/36	115	70 ^f	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: 1.5 miles - IH 94 Adjacent - USH 18 Rail: 0.5 mile - CMS&P&P	Airport: 8 miles - Timmerman Field 13.5 miles - Mitchell Field	50% Residential 25% Commercial 25% Transportation	1 - 3	Wetland	5
23	South of Blue Mound Road 0.25 mile West of Calhoun Road City of Brookfield T7N R20E, Sections 28/33	90	80	80 I	Industrial Nonindustrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: Adjacent - USH 18 1 mile - IH 94 Rail: 2 miles - C&NW	Airport: 5.5 miles - Capitol Drive 16 miles - Mitchell Field	25% Residential 25% Commercial 25% Natural Area 25% Utility	1 - 3	100-year floodplain	10
24	South of Burleigh Road West of Calhoun Road City of Brookfield T7N R20E, Section 16	70	40	III	Industrial	Sewer - 0.1 mile Water - 0.5 mile	Existing Freeway/Highway: 1 mile - STH 190 4 miles - IH 94 Rail: Adjacent - CMS&P&P	Airport: 3.5 miles - Capitol Drive 18 miles - Mitchell Field	75% Residential 25% Natural Area	1 - 3	Wetlands Very severe soils	30

Table 4 (continued)

Number on Map 1	Location	Size (acres)		Classification	Zoning	Sanitary Sewer and Water Supply	Transportation Access		Adjacent Land Uses	Number of Owners	Physical Limitations	
		Gross	Net								Type	Acreage
25	South of CTH M West of CTH Y City of Brookfield T7N R20E, Section 19	60	45	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 2 miles - IH 94 1.5 miles - STH 164 Rail: Adjacent - CMStP&P	Airport: 2 miles - Capitol Drive- 19 miles - Mitchell Field	50% Residential 30% Natural Area 20% Agricultural	1 - 3	Wetlands 100-year floodplain Primary environmental corridor	15
26	South of CMStP&P Railroad East of CTH Y City of Brookfield T7N R20E, Section 17	55	45 ^g	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 2 miles - IH 94 1 mile - STH 190 Rail: Adjacent - CMStP&P	Airport: 2 miles - Capitol Drive 19 miles - Mitchell Field	50% Natural Area 40% Agricultural 10% Residential	1 - 3	Primary environmental corridor Wetlands	5
27	South of CMStP&P Railroad West of CTH Y City of Brookfield T7N R20E, Section 18	90	65	III	Industrial	Sewer - 0.5 mile Water - Adjacent	Existing Freeway/Highway: 3 miles - IH 94 1 mile - STH 190 Rail: Adjacent - SMStP&P	Airport: 2 miles - Capitol Drive 19 miles - Mitchell Field	30% Agricultural 30% Open Land 20% Natural Area 20% Residential	1 - 3	Primary environmental corridor Wetlands Very severe soils Steep slopes	25
28	South of STH 190 East of Springdale Road City of Brookfield T7N R20E, Sections 7/18	240	175	III	Industrial	Sewer - 1.5 miles Water - 0.8 mile	Existing Freeway/Highway: Adjacent - STH 190 3 miles - IH 94 Rail: Onsite - CMStP&P	Airport: 0.25 mile - Capitol Drive 19 miles - Mitchell Field	40% Residential 40% Natural Area 10% Agricultural 10% Transportation	1 - 3	Primary environmental corridor Wetlands Very severe soils Steep slopes 100-year floodplain	65
29	South of Green Road East of Soo Line Railroad City of Pewaukee T7N R19E, Section 13	50	45	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 0.5 mile - STH 190 2 miles - IH 94 Rail: Onsite- CMStP&P Adjacent - Soo Line	Airport: 1 mile - Capitol Drive 19.5 miles - Mitchell Field	40% Residential 35% Industrial 25% Open Land	1 - 3	Steep slope	5
30	South of CMStP&P Railroad West of STH 164 City of Pewaukee T7N R19E, Section 14	175	175	III	Industrial Nonindustrial	Sewer - 1.5 miles Water - 0.1 mile	Existing Freeway/Highway: 0.5 mile - STH 190 1.5 miles - IH 94 Rail: Adjacent - CMStP&P	Airport: 2.5 miles - Waukesha County 20 miles - Mitchell Field	25% Agricultural 25% Natural Area 25% Open Land 25% Industrial	1 - 3	--	--
31	North of CTH SS East of CTH F City of Pewaukee T7N R19E, Section 14	160	155	III	Nonindustrial	Sewer - 0.5 mile Water - 0.25 mile	Existing Freeway/Highway: 1.5 miles - IH 94 0.5 mile - STH 190 Rail: Adjacent - CMStP&P	Airport: 2 miles Waukesha County 20.5 miles - Mitchell Field	45% Agricultural 45% Natural Area 10% Utility	4 - 6	Wetlands	5
32	North of IH 94 East of STH 164 City of Pewaukee T7N R19E, Sections 23/24	80	40 ^h	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: Adjacent - IH 94 Adjacent - STH 164 Rail: Adjacent - Soo Line Adjacent - CMStP&P	Airport: 1.5 miles - Waukesha County 19 miles - Mitchell Field	35% Natural Area 35% Agricultural 15% Commercial 15% Transportation	4 - 6	--	--

Table 4 (continued)

Number on Map 1	Location	Size (acres)		Classification	Zoning	Sanitary Sewer and Water Supply	Transportation Access		Adjacent Land Uses	Number of Owners	Physical Limitations	
		Gross	Net								Type	Acreage
33	0.25 Mile South of CTH SS West of STH 164 City of Pewaukee T7N R19E, Section 23	120	120	III	Nonindustrial	Sewer - 2.5 miles Water - 0.1 mile	Existing Freeway/Highway: 0.25 mile - IH 94 Adjacent - STH 164 Rail: 0.5 mile - CMStP&P 0.5 mile - Soo Line	Airport: 1.5 miles - Waukesha County 19 miles - Mitchell Field	50% Natural Area 20% Agricultural 15% Open Land 15% Utility	1 - 3	--	--
34	North of IH 94 East of CTH G City of Pewaukee City of Waukesha T7N R19E, Section 20	500	380	III	Nonindustrial Industrial	Sewer - 0.25 mile Water - 0.25 mile	Existing Freeway/Highway: Adjacent - IH 94 0.5 mile - STH 16 Rail: 3 miles - Soo Line 2 miles - CMStP&P	Airport: 1.5 miles - Waukesha County 23 miles - Mitchell Field	25% Residential 25% Transportation 20% Natural Area 20% Agricultural 10% Open Land	7 +	Primary environmental corridor Wetlands Very severe soils Steep slopes 100-year floodplain	120
35	North of CTH FT East of CTH T City of Pewaukee T7N R19E, Sections 27/28	345	310	III	Nonindustrial	Sewer - Adjacent Water - Onsite	Existing Freeway/Highway: 0.25 mile - IH 94 0.25 mile - STH 16 Rail: 1 mile - CMStP&P 1 mile - Soo Line	Airport: Adjacent - Waukesha County 22 miles - Mitchell Field	40% Transportation 25% Institutional 20% Residential 15% Open Land	4 - 6	Wetlands Steep slopes	35
36	North of CTH FT West of CTH F City of Pewaukee T7N R19E, Section 27	85	85	III	Nonindustrial	Sewer - 0.25 mile Water - Adjacent	Existing Freeway/Highway: 0.5 mile - IH 94 0.5 mile - STH 164 Rail: 0.5 mile - CMStP&P 0.5 mile - Soo Line	Airport: Adjacent - Waukesha County 22 miles - Mitchell Field	50% Transportation 25% Industrial 25% Agricultural	1 - 3	--	--
37	South of CTH FT West of CTH F City of Pewaukee T7N R19E, Section 34	150	135	III	Nonindustrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 1 mile - IH 94 0.5 mile - STH 164 Rail: 0.5 mile - CMStP&P 0.5 mile - Soo Line	Airport: Adjacent - Waukesha County 22 miles - Mitchell Field	30% Residential 30% Agricultural 20% Natural Area 10% Transportation 10% Recreational	1 - 3	Steep slopes Wetlands Very severe soils	15
38	South of CTH Y East of CTH A T6N R19 E, Section 1 Town of Waukesha T7N R19E, Section 36 City of Pewaukee	120	70	III	Nonindustrial	Sewer - 0.25 mile Water - Adjacent	Existing Freeway/Highway: 0.25 mile - USH 18 1.5 miles - IH 94 Rail: 0.5 mile - C&NW 1.5 miles - Soo Line	Airport: 2.5 miles - Waukesha County 21 miles - Mitchell Field	55% Residential 35% Open Land 10% Industrial	1 - 3	Very severe soils Steep slopes	50
39	North of CTH D East of CTH TT Town of Waukesha T6N R19E, Sections 7/8	190	115	III	Nonindustrial	Sewer - 0.25 mile Water - Adjacent	Existing Freeway/Highway: 1 mile - STH 59 2 miles - USH 18 Rail: Onsite - CWRC 1 mile - CMStP&P	Airport: 4 miles - Waukesha County 23 miles - Mitchell Field Proposed Freeway/Highway: Onsite - STH ¹	50% Residential 25% Natural Area 25% Agricultural	4 - 6	Primary environmental corridor Wetlands Very severe soils 100-year floodplain	75
40	North of CTH D 0.25 Mile West of CTH X Town and City of Waukesha T6N R19E, Section 8	95	45	II	Industrial	Sewer - Onsite Water - Adjacent	Existing Freeway/Highway: 1 mile - STH 59 2.5 miles - USH 18 Rail: Onsite - CWRC 1 mile - CMStP&P	Airport: 4 miles - Waukesha County 23 miles - Mitchell Field	25% Natural Area 20% Industrial 20% Commercial 20% Agricultural 15% Open Land	1 - 3	Primary environmental corridor Wetlands Very severe soils 100-year floodplain	50

Table 4 (continued)

Number on Map 1	Location	Size (acres)		Classification	Zoning	Sanitary Sewer and Water Supply	Transportation Access		Adjacent Land Uses	Number of Owners	Physical Limitations	
		Gross	Net								Type	Acreage
41	North of CTH D West of Sentry Drive City of Waukesha T6N R19E, Section 9	75	75	I	Industrial	Sewer - Onsite Water - Adjacent	Existing Freeway/Highway: 0.8 mile - STH 59 1.5 miles - USH 18 Rail: 0.5 mile - C&NW/ CWRC/Soo Line	Airport: 3.5 miles - Waukesha County 22 miles - Mitchell Field	50% Industrial 25% Residential 25% Natural Area	1 - 3	- -	- -
42	South of STH 59 East of Center Road Town of Waukesha T6N R19E, Sections 15/22	235	160	III	Nonindustrial	Sewer - 0.25 mile Water - 0.25 mile	Existing Freeway/Highway: Adjacent - STH 59 3 miles - USH 18 Rail: Onsite - Soo Line	Airport: 5 miles - Waukesha County 22 miles - Mitchell Field	60% Natural Area 20% Agricultural 20% Residential	4 - 6	Primary environmental corridor Wetlands Very severe soils	75
43	South of STH 59 West of CTH F Town of Waukesha T6N R19E, Sections 15/22	190	55 ^j	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: Adjacent - STH 59 3 miles - USH 18 Rail: Adjacent - Soo Line	Airport: 5 miles - Waukesha County 22 miles - Mitchell Field	50% Natural Area 20% Residential 20% Agricultural 10% Industrial	1 - 3	Primary environmental corridor Wetlands Very severe soils Steep slopes 100-year floodplain	115
44	North of Lincoln Avenue 0.25 Mile East of Springdale Road City of New Berlin T6N R20E, Section 6	65	50	III	Industrial	Sewer - 2 miles Water - 2 miles	Existing Freeway/Highway: 1 mile - STH 59 3 miles - IH 94 Rail: 0.25 mile - C&NW	Airport: 5 miles - Waukesha County 17 miles - Mitchell Field	75% Natural Area 25% Agricultural	4 - 6	Primary environmental corridor Wetlands 100-year floodplain	15
45	North of Lincoln Avenue 0.25 Mile East of Danny Road City of New Berlin T6N R20E, Section 5	50	40	III	Industrial	Sewer - 1 mile Water - 1 mile	Existing Freeway/Highway: 1.5 miles - STH 59 4 miles - IH 94 Rail: 0.25 mile - C&NW	Airport: 6 miles - Waukesha County 17 miles - Mitchell Field	60% Natural Area 20% Industrial 20% Agricultural	4 - 6	Steep slope 100-year floodplain	10
46	South of Lincoln Avenue 0.25 Mile West of Calhoun Road City of New Berlin T6N R20E, Sections 8/9	145	115	III	Industrial	Sewer - 0.25 mile Water - 0.25 mile	Existing Freeway/Highway: 1.5 miles - STH 59 3 miles - IH 94 Rail: 0.5 mile - C&NW	Airport: 7 miles - Waukesha County 16 miles - Mitchell Field	35% Natural Area 30% Agricultural 30% Open Land 5% Residential	4 - 6	Primary environmental corridor Wetlands Very severe soils Steep slopes 100-year floodplain	30
47	North of CTH FF East of Calhoun Road City of New Berlin T6N R20E, Section 15	155	60 ^k	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: 2 miles - STH 59 4 miles - IH 94 Rail: 1.5 miles - C&NW	Airport: 8.5 miles - Waukesha County 14.5 miles - Mitchell Field	70% Agricultural 25% Industrial 5% Residential	1 - 3	Wetlands 100-year floodplain	45
48	South of Gemini Drive West of CTH Y City of Muskego T5N R20E, Sections 16/17	95	60	III	Nonindustrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 0.5 mile - STH 24 3 miles - STH 15 Rail: 8 miles - Soo Line	Airport: 13 miles - Mitchell Field	50% Agricultural 25% Industrial 25% Residential	4 - 6	Very severe soils 100-year floodplain	35

Table 4 (continued)

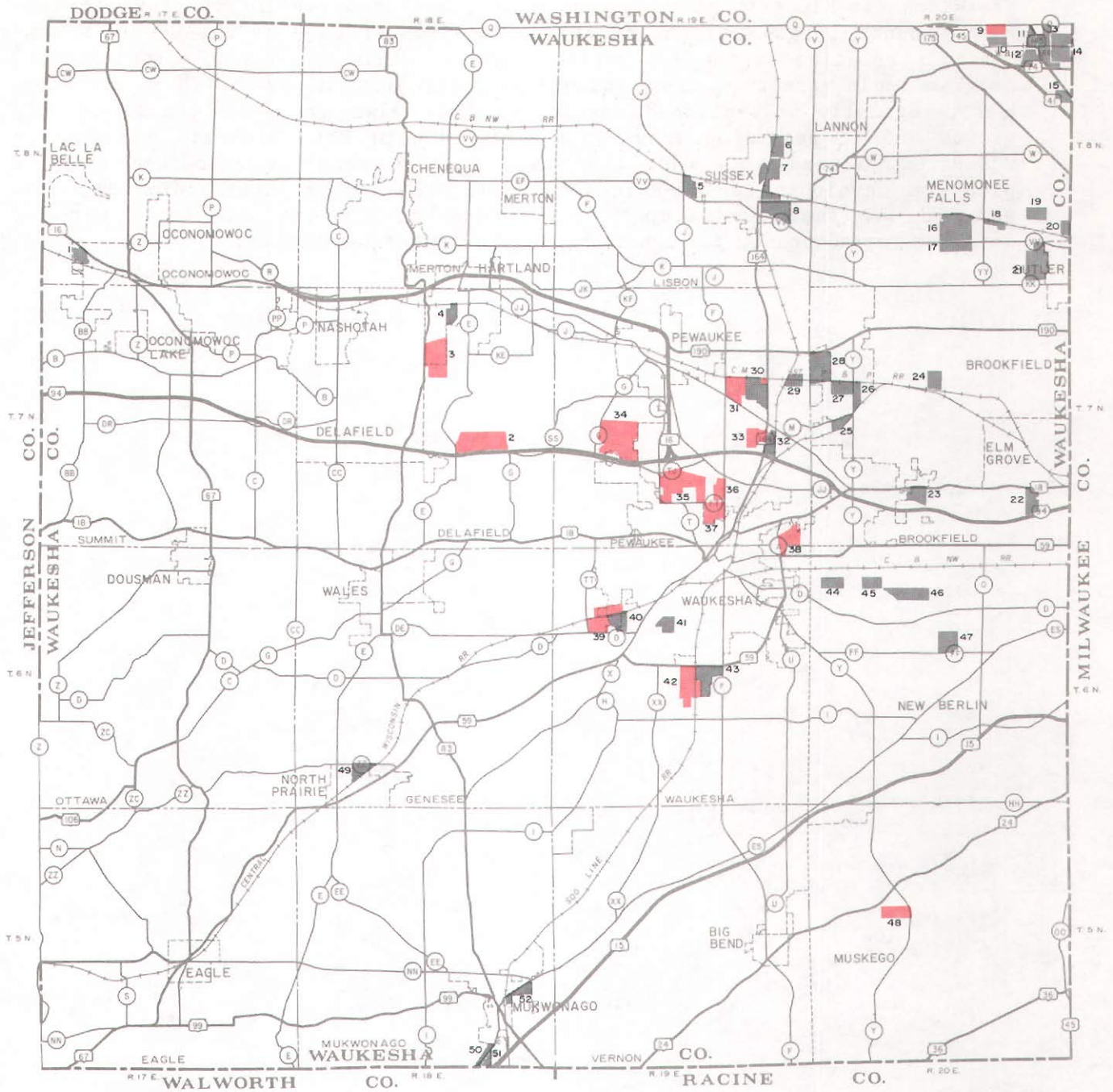
Number on Map 1	Location	Size (acres)		Classification	Zoning	Sanitary Sewer and Water Supply	Transportation Access		Adjacent Land Uses	Number of Owners	Physical Limitations	
		Gross	Net								Type	Acreage
49	South of STH ZZ Northwest of CMStP&P Railroad Town of Genesee T6N R18E, Section 32	80	75	III	Industrial	Sewer - Not Available Water - Not Available	Existing Freeway/Highway: 0.5 mile - STH 59 2 miles - STH 83 Rail: Adjacent - CMStP&P	Airport: 11 miles - Waukesha County 27 miles - Mitchell Field	50% Agricultural 20% Open Land 15% Natural Area 15% Industrial	1 - 3	Steep slopes	5
50	North of Walworth County Line West of CTH ES Town of Mukwonago T5N R18E, Section 35	40	40	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 0.5 mile - STH 83 1 mile - STH 15 Rail: Adjacent - East Troy Railroad 0.5 mile - Soo Line	Airport: 14 miles - Burlington 23 miles - Mitchell Field	25% Agricultural 25% Residential 25% Commercial 25% Open Land	4 - 6	--	--
51	North of Walworth County Line East of CTH ES Town of Mukwonago T5N R18E, Section 35	45	45	II	Industrial	Sewer - Adjacent Water - Adjacent	Existing Freeway/Highway: 0.5 mile - STH 83 1 mile - STH 15 Rail: 0.5 mile - Soo Line 0.25 mile - East Troy Railroad	Airport: 14 miles - Burlington 23 miles - Mitchell Field	35% Agricultural 35% Residential 30% Open Land	1 - 3	--	--
52	South of CTH ES East of Soo Line Railroad Village of Mukwonago T5N R18E, Sections 25/26	70	65 ^d	I	Industrial	Sewer - Onsite Water - Onsite	Existing Freeway/Highway: 0.1 mile - STH 83 1 mile - STH 15 Rail: Adjacent - Soo Line	Airport: 14 miles - Waukesha County 23 miles - Mitchell Field Proposed Freeway/Highway: Onsite - Relocation of STH 83	40% Agricultural 40% Residential 20% Commercial	1 - 3	--	--

^aExcludes five acres of development as of 1984.^bExcludes 10 acres of development as of 1984.ⁱExisting County Trunk Highway TT.^bExcludes 35 acres of development as of 1984.^fExcludes 40 acres of development as of 1984.^jExcludes 20 acres of development as of 1984.^cExcludes 15 acres of development as of 1984.^gExcludes five acres of development as of 1984.^kExcludes 50 acres of development as of 1984.^dExcludes five acres of development as of 1984.^hExcludes 40 acres of development as of 1984.^lExcludes five acres of development as of 1984.

Source: Wisconsin Electric Power Company and SEWRPC.

Map 1

LOCATION OF SUITABLE INDUSTRIAL SITES IN WAUKESHA COUNTY



LEGEND

- ZONED FOR INDUSTRIAL USE
- PROPOSED FOR INDUSTRIAL USE

Source: SEWRPC.

The Wisconsin Electric Power Company promotional program is important to Waukesha County because of the strategic location of many of the County's communities relative to the interstate highway. While a successful promotional program could result in major industrial development along the IH 94 corridor, a strategically well-planned development may also serve to ensure orderly growth and to guarantee long-range protection of both economic and natural resources. Toward this end, the Power Company recently announced that it plans on developing a 300-acre industrial park at the intersection of IH 94 and STH 64. The Power Company has indicated that the industrial park is intended for occupancy by high technology-oriented industries.

Chapter II

A DESCRIPTION OF THE NATURAL RESOURCES AND PHYSICAL CHARACTERISTICS AND COMMUNITY UTILITIES, FACILITIES, AND SERVICES IN WAUKESHA COUNTY

INTRODUCTION

Inventories of the physical and socioeconomic characteristics of Waukesha County, and of the community utilities, facilities, and services provided within the County, are essential to the preparation of a sound economic development program. The purpose of this chapter is to describe the natural resource base and physical characteristics of the built environment in Waukesha County.

LOCATION

Waukesha County is located in southeastern Wisconsin and is part of the seven-county Southeastern Wisconsin Planning Region (see Map 2). Waukesha County encompasses a total area of 581 square miles. Geographically, the County is in a good position for continued growth and development. It is an integral part of the Milwaukee metropolitan area, being linked to the center of that area by an excellent freeway system, so that the residents of the County can enjoy all of the facilities and services of a large urban area set within one of the most attractive regions of the country, rich in agricultural and recreational resources. In addition, as shown on Map 3, many of the most important industrial areas and heaviest population concentrations in the Midwest are within 350 miles of Waukesha County.

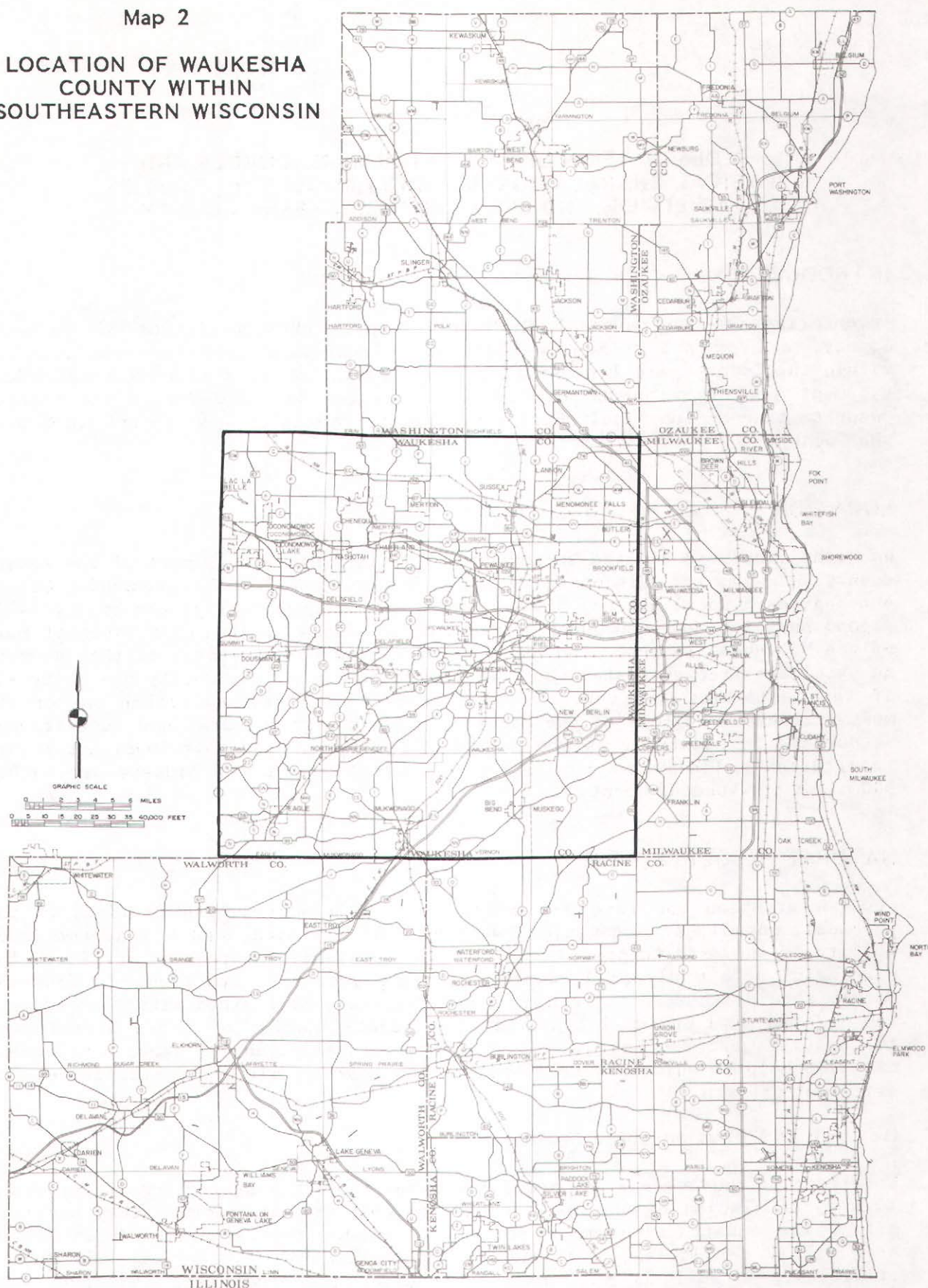
NATURAL RESOURCE BASE

The conservation and wise use of the natural resource base is vital to the physical, social, and economic development of any area, and to the continued ability of the area to provide a pleasant, habitable environment for life. Any meaningful effort directed toward improving economic conditions in Waukesha County should, therefore, recognize the existence of limited natural resources and related environmental concerns. The identification of those elements of the natural resource base which affect, or are affected by, urban development can also help to guide new development into a more healthful, attractive, and efficient pattern.

Geologic and Physiographic Features

Knowledge of bedrock and the surficial deposits overlying bedrock is important in the formulation of an economic development program, because they directly affect the construction costs related to urban improvements such as street and highway facilities, drainage and flood control facilities, and public utilities, as well as the costs of housing and commercial and industrial

LOCATION OF WAUKESHA
COUNTY WITHIN
SOUTHEASTERN WISCONSIN



Source: SEWRPC.

development. In addition, the placement of the improvements in relation to the bedrock and surficial deposits may directly or indirectly affect the quality and quantity of the groundwater resources of the County.

Most of Waukesha County is underlain by dolomite bedrock. In several large areas, aligned across the County in a northeast-southwest fashion, the dolomite bedrock is at or close to the surface. Several bedrock outcroppings are located along this alignment. The physiographic features of Waukesha County have been determined largely by the configuration of the bedrock geology in combination with glacial action. The bedrock formation in Waukesha County dips gently toward the east. Consequently, the bedrock lying immediately underneath unconsolidated, surficial deposits at the western edge of Waukesha County includes older rocks of the Ordovician Period, whereas the eastern one-half of the County includes younger rocks of the Silurian and Devonian Periods.

The bedrock of the County is, for the most part, covered by deep, unconsolidated glacial deposits attaining a thickness of 500 feet in the south-central and northwest portions of the County, while the northeast and southwest portions of the County contain areas where glacial deposits are very thin or nonexistent.

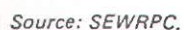
As shown on Map 4, the most dominant physiographic feature in Waukesha County is the Kettle Moraine, an interlobate till deposit formed between the Green Bay and Lake Michigan tongues of the continental glacier which moved in a generally southerly direction from its point of origin in what is now Canada. A portion of the Kettle Moraine, which is oriented in a general northeast-southwest direction, traverses the western portion of the County. The Kettle Moraine is a complex system of kames, or crudely stratified conical hills; kettle bowls marking the sites of glacial ice blocks that became separated from the ice mass and melted to form depressions; and eskers, consisting of long, narrow ridges of drift deposited in abandoned drainageways. In addition, the physiography of the eastern portion of the County consists of gently sloping and rolling ground moraines, which are the result of the recession of glacial ice.

The glacial land forms in Waukesha County are of economic significance not only because they provide sources for sand, gravel, and rock used in local building and highway construction, but also because they provide a very attractive setting for residential development and a rich recreational base. High-quality sand and gravel deposits are located in the glacial outwash areas near the fringes of the Kettle Moraine. The deposits in these areas consist of uniformly consolidated material. Several major commercial sand and gravel extraction operations are located in Waukesha County.

Soils

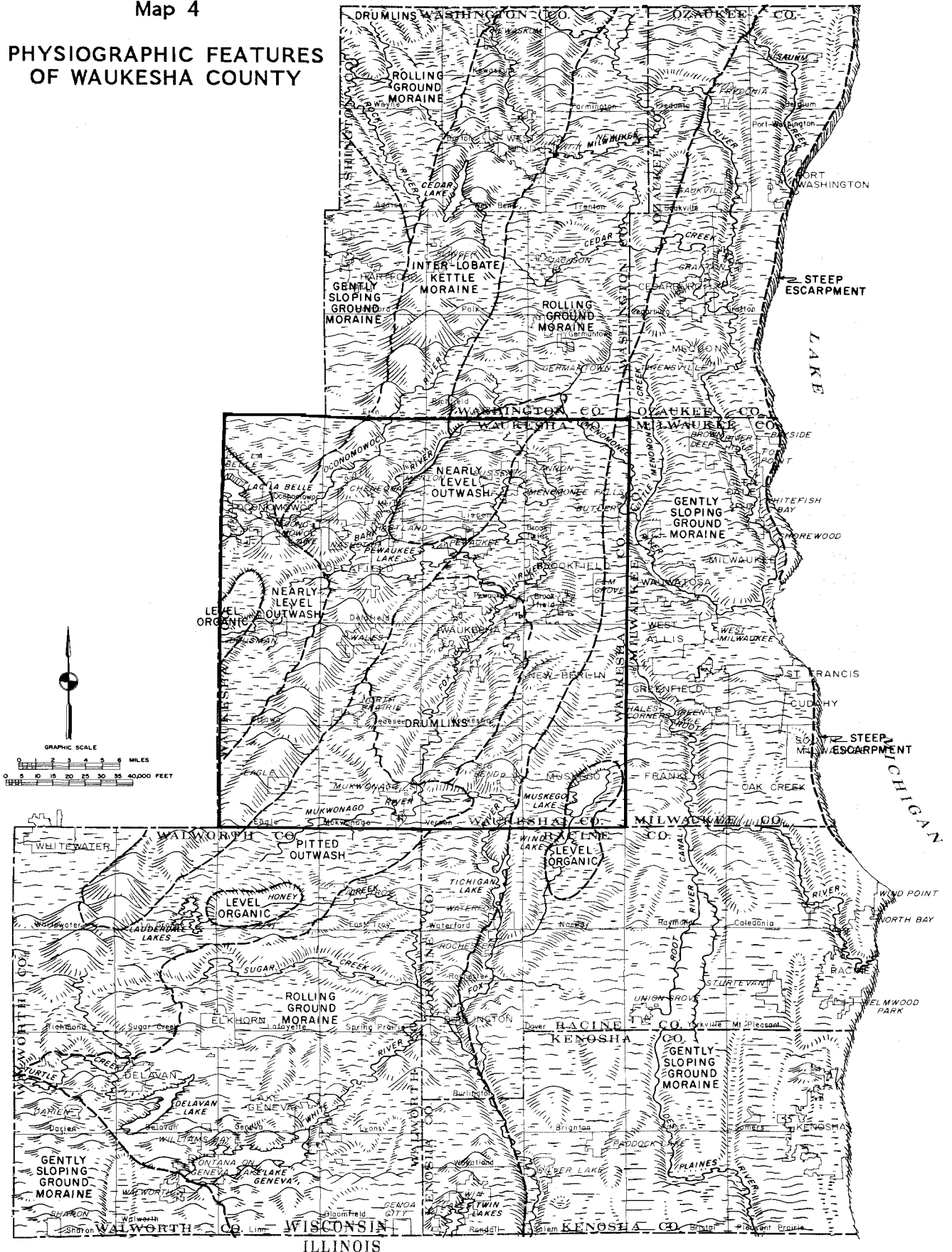
Soil properties exert a strong influence on how land may be used. Knowledge of the character and suitability of the soils in Waukesha County is an invaluable aid in analyzing existing development patterns and, more specifically, in identifying suitable sites for urban development of various types. Economic development programs encouraging the development of urban land uses in areas having suitable soils for such uses minimize the potential for the creation of costly environmental problems. Information on soils is, accordingly, essential to any sound determination of urban growth patterns.

REGIONAL SETTING OF WAUKESHA COUNTY IN THE MIDWEST



Map 4

PHYSIOGRAPHIC FEATURES OF WAUKESHA COUNTY



Source: SEWRPC.

Map 5 shows the portions of Waukesha County covered by soils having severe or very severe limitations for residential development on lots less than one acre in size not served by public sanitary sewerage systems. Characteristically, these soils have one or more of the following properties: slow permeability rates, fluctuating or high water tables, high shrink-swell potential, and shallow depth to bedrock. In addition, they may be located on steep slopes, or may be subject to periodic flooding or surface ponding in low areas. While soils having such limitations are scattered throughout much of Waukesha County, such soils are typically associated with low-lying areas adjacent to perennial watercourses, and the low-lying, poorly drained areas associated with the interlobate Kettle Moraine, which dominates the western portion of Waukesha County.

Map 6 depicts soil limitations for residential development served by public sanitary sewerage systems. These soils are highly organic, poorly drained, subject to periodic flooding and ponding, and located on steep slopes. These soils in some cases also cover areas having a shallow depth to bedrock, which makes urban development difficult and costly. Soils having severe or very severe limitations for residential development served by public sanitary sewerage systems within Waukesha County are primarily concentrated along watercourses and in the low-lying, poorly drained areas associated with the interlobate Kettle Moraine physiography of the County.

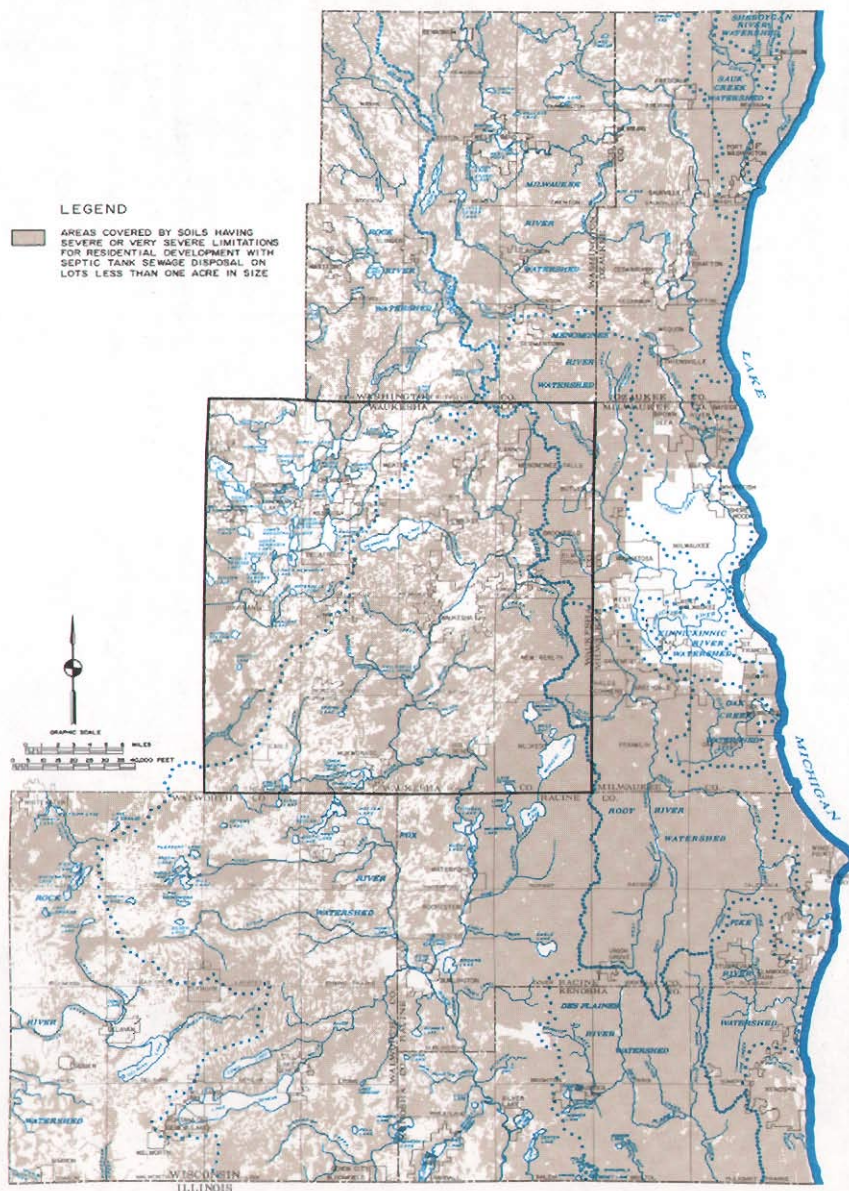
The suitability of soils for commercial and industrial development is also important to the overall economic development of the County. The soil characteristics which typically impose severe limitations for commercial and industrial development include poor bearing capacity, high shrink-swell potential, low shear strength, high frost hazard, high compressibility, seasonal high water table, steep slopes, and shallow depth to bedrock. The soil limitations for commercial and light industrial development are based on the assumption that such structures are generally three stories or more in height, and that such structures have at least 2,500 square feet of floor space on any given level. Also, the soil limitations assume that commercial and light industrial structures can best be built on level to slightly sloping sites, but can also be built on slopes to 12 percent if such slopes do not exceed 200 or 300 feet in length. Soil ratings for commercial and light industrial use are based on the characteristics of properties of the substratum, because foundations for structures rest on this part of the soil. While soil suitability information is available on an areawide basis for commercial and light industrial development, these land uses typically comprise less than 1 percent of the total area of a community such as Waukesha County, and therefore soil suitability maps for these uses were not prepared as a part of this study. Soil limitations for heavy industrial uses have not been determined since they require larger structures, which need base materials having greater bearing capacity than typically provided in nature. Onsite foundation investigations are required for the design of these types of buildings.

Woodlands

Woodlands have both economic and ecological value, and under good management can serve a variety of uses providing multiple benefits. Located primarily on ridges and slopes and along streams and lakeshores, woodlands provide an attractive natural resource of immeasurable value. Woodlands accentuate the beauty of the lakes, streams, and topography of the area, and are essential to

Map 5

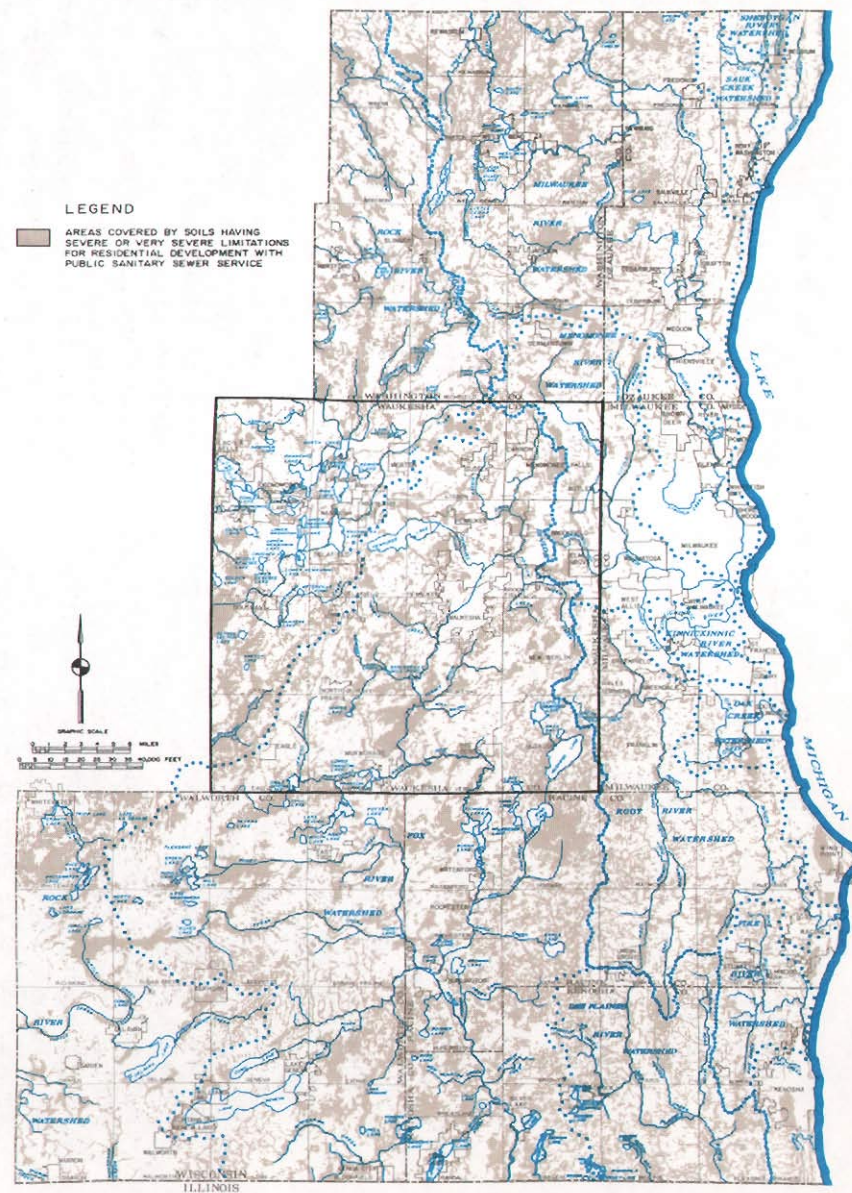
SUITABILITY OF SOILS IN THE REGION
FOR SMALL LOT RESIDENTIAL DEVELOPMENT
WITHOUT PUBLIC SANITARY SEWER SERVICE



Source: U. S. Soil Conservation Service and SEWRPC.

Map 6

SUITABILITY OF SOILS IN THE REGION
FOR RESIDENTIAL DEVELOPMENT WITH
PUBLIC SANITARY SEWER SERVICE



Source: U. S. Soil Conservation Service and SEWRPC.

the maintenance of the overall environmental quality of the area. In addition to contributing to clean air and water, woodlands can contribute to the maintenance of a diversity of plant and animal life in association with human life, and can provide for important recreational opportunities. Woodlands maintained for their total values--scenic, wildlife, educational, recreational, and watershed protection--as well as for their forest products will encourage the long-range benefits of these natural resources. Under balanced use and sustained yield management, woodlands can serve many of these benefits simultaneously.

As shown on Map 7, in 1980 woodlands in Waukesha County covered a total area of 46.0 square miles, or approximately 7.9 percent of the total area of the County.

Wetlands

Wetlands provide one of the most important landscape features of an area, and can serve to enhance proximate uses. Wetlands represent a variety of stages in the natural filling of lake and pond basins, as well as floodplain areas. Such areas are generally unsuited or poorly suited for most agricultural or urban development purposes. Wetlands, however, have important ecological value in a natural state. Wetlands contribute to flood control and water quality enhancement, since such areas naturally serve to store excess runoff temporarily, and thereby tend to reduce peak flood flows and to trap sediments, nutrients, and other water pollutants. It has been found that except during periods of unusually high runoff, concentrations of nutrients in waters leaving such areas are considerably lower than in waters entering the wetlands. Those wetlands with standing water are well suited for waterfowl and marsh furbearers, while drier types support upland game because of the protection afforded by vegetative cover. Protection of the environmental attributes of such areas serves to maintain the natural resource base while deterring costly--monetarily and environmentally--wetland draining, filling, and urbanization.

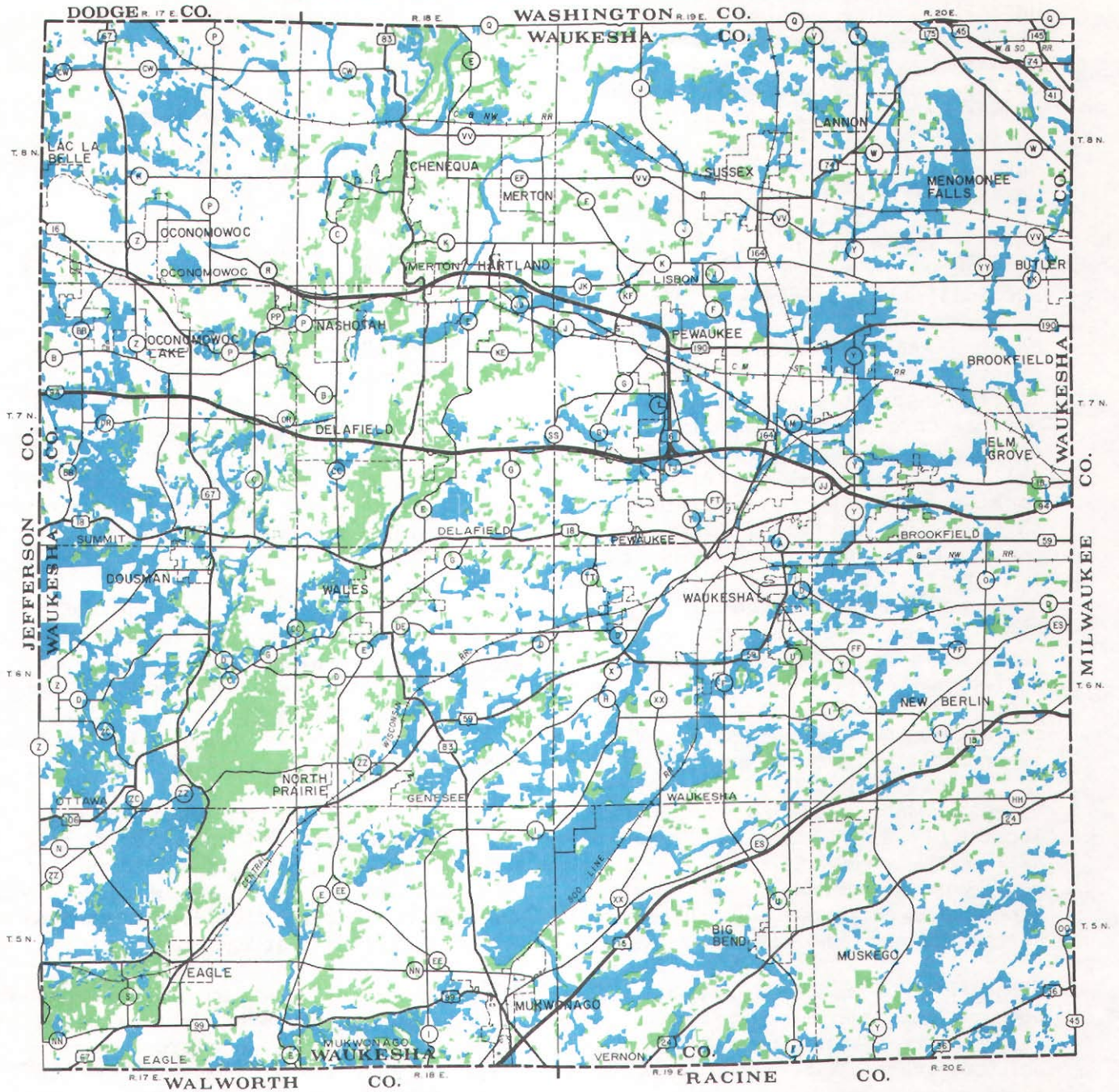
As shown on Map 7, wetlands covered about 80.1 square miles in Waukesha County in 1980, or about 13.8 percent of the area of the County.

Surface Water, Floodlands, and Related Water Resource Features

Surface water resources, consisting of lakes and streams and their associated floodlands, are particularly important elements of the natural resource base of Waukesha County. These lakes and streams have immeasurable value to the economic and social well-being of the County, providing areas for passive and active recreation, and enhancing the aesthetic quality of the County. It is important to note that lakes and streams are extremely susceptible to deterioration through improper land use development and management. Water quality can degenerate as a result of excessive nutrient loads from malfunctioning or improperly placed septic systems, inadequate operation of waste treatment facilities, and careless agricultural practices. Lakes and streams are also adversely affected by the excessive development of lakeshore and riverine areas in combination with the filling of peripheral wetlands, which removes valuable nutrient and sediment traps while adding nutrient and sediment sources.

Map 7

WOODLANDS AND WETLANDS IN WAUKESHA COUNTY: 1980



Source: SEWRPC.

Watershed Characteristics: A major subcontinental divide, which is oriented in a generally northwesterly to southeasterly direction, bisects eastern Waukesha County so that only about one-eighth of the County is tributary to the Great Lakes-St. Lawrence drainage basin, and the remainder drains to the Mississippi River. The lands in the County located east of the subcontinental divide drain toward the Great Lakes by way of the Root River, Menomonee River, and other drainages, while the lands located west of this divide drain toward the Mississippi River by way of the Fox River, Rock River, and other drainages. The subcontinental divide and the major watersheds within Waukesha County are shown on Map 8.

Lakes: As shown on Map 8, lakes in Waukesha County are almost exclusively of glacial origin, having been formed by depressions in outwash deposits, terminal and interlobate moraines, ground moraines, and kettles.

Major lakes are defined herein as having 50 acres or more of surface water area, a size capable of supporting reasonable recreational use with relatively little degradation of the resource. As indicated in Table 5, there are 33 major lakes in Waukesha County, the largest of which are Pewaukee Lake, 2,493 acres; Big Muskego Lake, 2,260 acres; Okauchee Lake, 1,187 acres; and Lac La Bell, 1,164 acres. Water resource-oriented recreational activity is intensive on most of the major lakes in Waukesha County. The major lakes in the County have a combined surface water area of about 22 square miles, or about 4 percent of the total area of the County.

Minor lakes are defined as those having less than 50 acres of surface water area. There are a total of 84 minor lakes in Waukesha County. The minor lakes, which have been formed primarily in kettle hole depressions, have a combined surface water area of about two square miles, or less than 1 percent of the total area of the County. In most cases, the primary values of the minor lakes are ecological and aesthetic. These minor lakes are fragile, and their value is readily lost with any degree of improper shoreline development.

Streams: As already noted, the surface drainage system in Waukesha County is located in four individual watersheds. As shown on Map 8, the rivers and streams located west of the subcontinental divide, within the Rock River and Fox River watersheds, primarily flow to the northwest, west, and southwest. The rivers and streams located east of the subcontinental divide, within the Root River and Menomonee River watersheds, primarily flow east and southeast.

Floodlands: Floodlands may be defined as the areas along watercourses and around lakes subject to inundation by the 100-year recurrence interval flood event. This is the flood event that would be reached or exceeded in severity on the average of once every 100 years; or stated another way, it is the flood event that has a 1 percent chance of being reached or exceeded in any given year. The 100-year recurrence interval flood hazard areas within Waukesha County are shown on Map 9. These areas should not be developed for intensive urban uses. Every effort should be made to discourage indiscriminate, incompatible development on floodlands, while encouraging compatible park and open space uses.

Environmental Corridors and Isolated Natural Areas

Studies conducted by the Regional Planning Commission have shown that the best remaining elements of the natural resource base in southeastern Wisconsin

WATERSHEDS AND SURFACE WATER RESOURCES OF THE REGION

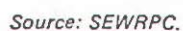


Table 5
MAJOR LAKES IN WAUKESHA COUNTY ^a

Name of Lake	Surface Area (acres)	Maximum Depth (feet)
Ashippun Lake.....	84	40
Beaver Lake.....	316	49
Big Muskego Lake.....	2,260	26
Crooked Lake.....	58	16
Denoon Lake.....	162	55
Eagle Spring Lake.....	311	8
Fowler Lake.....	78	50
Genesee Lake, Lower.....	66	45
Genesee Lake, Middle.....	109	40
Golden Lake.....	250	46
Hunters Lake.....	65	46
Keesus Lake.....	237	42
Lac La Bell.....	1,164	45
Larkin Lake.....	57	4
Little Muskego Lake.....	506	65
Moose Lake.....	81	61
Nagawicka Lake.....	917	90
Nashotah Lake, Lower.....	90	43
Nashotah Lake, Upper.....	133	53
Nemahbin Lake, Lower.....	271	36
Nemahbin Lake, Upper.....	283	61
North Lake.....	437	78
Oconomowoc Lake.....	767	62
Okauchee Lake.....	1,187	94
Pewaukee Lake.....	2,493	45
Phantom Lake, Lower.....	433	12
Phantom Lake, Upper.....	107	29
Pine Lake.....	703	85
Pretty Lake.....	64	35
School Section Lake.....	117	8
Silver Lake.....	222	44
Spring Lake.....	105	22
Waterville Millpond.....	68	12

^aMajor lakes are considered to be at least 50 acres in size.

Source: Wisconsin Department of Natural Resources, 1981.






occur in elongated, linear patterns which the Commission has termed "environmental corridors." Several elements of the natural resource base are considered to be basic elements of the environmental corridors. These are: 1) lakes and streams and their associated shorelands and floodlands; 2) wetlands; 3) woodlands; 4) prairies; 5) wildlife habitat areas; 6) wet, poorly drained, and organic soils; and 7) rugged terrain and high-relief topography. In addition, there are five natural resource base-related elements which are not a part of the natural resource base per se, but which are so closely linked to that base as to warrant consideration in delineating environmental corridors. These are: 1) existing park sites; 2) potential park sites; 3) historic sites and structures; 4) areas having natural and scientific value; and 5) scenic vistas and viewpoints.

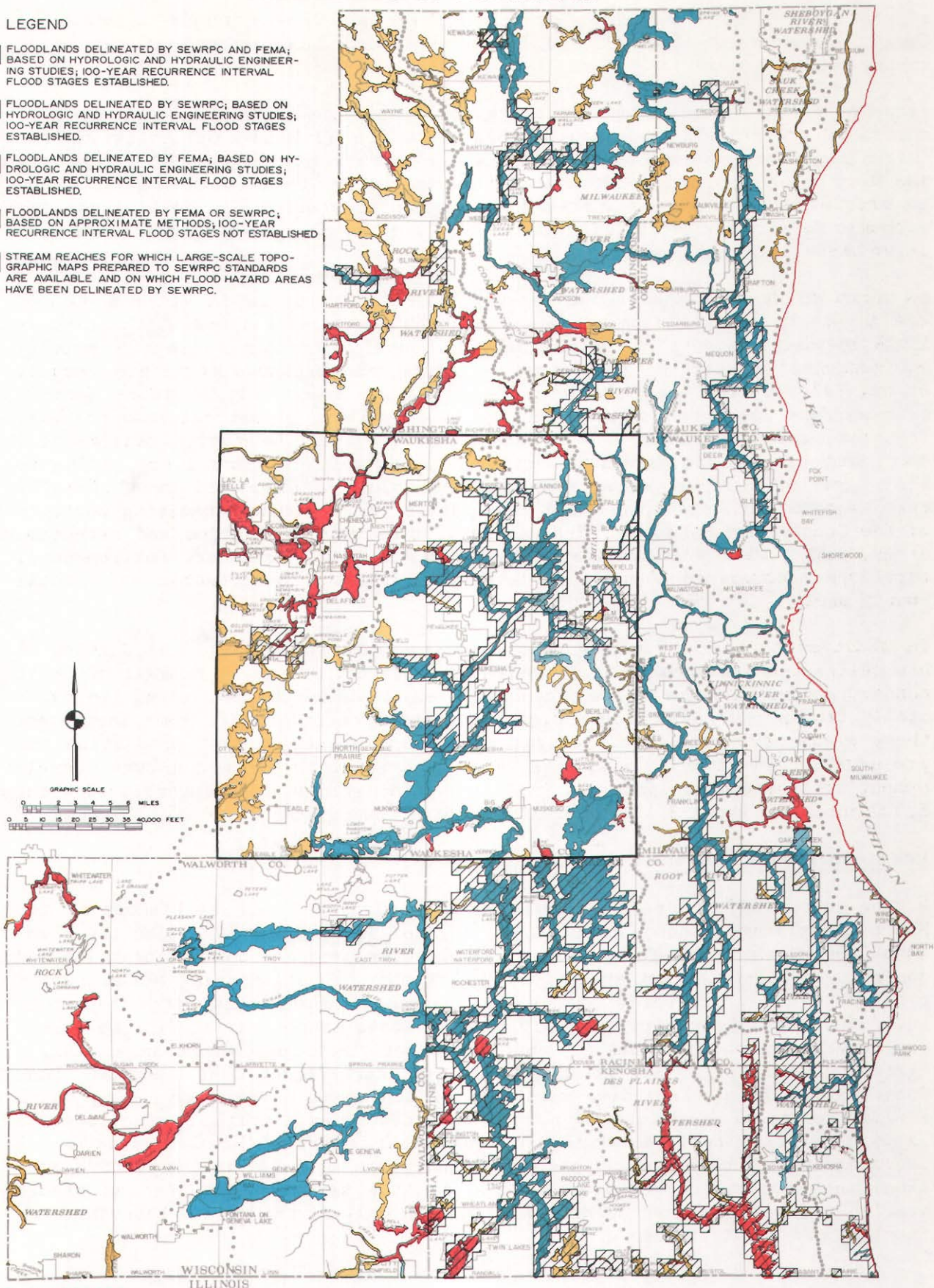
Environmental corridors within Waukesha County have been classified into two categories: primary and secondary. As shown on Map 10, the primary environmental corridors of Waukesha County primarily occur along major stream valleys and adjacent to major lakes, and contain almost all of the high-value woodlands, wetlands, and wildlife habitat within the County, as well as undeveloped floodlands and shorelands. The primary environmental corridors are, in effect, a composite of the best of the individual elements of the natural resource base of the County and have truly immeasurable environmental and

Map 9

FLOODLANDS IN THE REGION

LEGEND

-  FLOODLANDS DELINEATED BY SEWRPC AND FEMA; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
-  FLOODLANDS DELINEATED BY SEWRPC; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
-  FLOODLANDS DELINEATED BY FEMA; BASED ON HYDROLOGIC AND HYDRAULIC ENGINEERING STUDIES; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES ESTABLISHED.
-  FLOODLANDS DELINEATED BY FEMA OR SEWRPC; BASED ON APPROXIMATE METHODS; 100-YEAR RECURRENCE INTERVAL FLOOD STAGES NOT ESTABLISHED.
-  STREAM REACHES FOR WHICH LARGE-SCALE TOPOGRAPHIC MAPS PREPARED TO SEWRPC STANDARDS ARE AVAILABLE AND ON WHICH FLOOD HAZARD AREAS HAVE BEEN DELINEATED BY SEWRPC.



Source: SEWRPC

recreational value. In 1980, primary environmental corridors in Waukesha County encompassed about 92,200 acres, or about 24.8 percent of the total county area.

Because of their desirable natural resource amenities, primary environmental corridors are subject to urban encroachment. The unplanned or poorly planned intrusion of urban development into these corridors not only tends to destroy the very resources and related amenities sought by the development, but tends to create severe environmental and developmental problems as well. Thus, any economic development activities involving land use changes should seek to preserve these corridor lands.

As shown on Map 10, the secondary environmental corridors in Waukesha County are generally located along intermittent and perennial streams which serve as links between segments of primary environmental corridors. Like the primary environmental corridors, secondary environmental corridors contain a variety of natural resource base elements. Secondary environmental corridors facilitate surface water drainage, maintain open "pockets" of natural resource base features, and provide for the movement of wildlife. Secondary environmental corridors are not as important as primary environmental corridors, owing to their smaller size; however, such areas should be considered over time for retention in park and open space use--particularly in the urbanizing portions of the County--as greenways, drainageways, stormwater detention and retention areas, and public and private open spaces. In 1980, secondary environmental corridors encompassed about 7,800 acres, or about 2.1 percent of the total county area.

In addition to primary and secondary environmental corridors, the Commission has delineated isolated natural areas. Isolated natural areas consist of small concentrations of natural resource base elements which are separated geographically from primary and secondary environmental corridors. In some instances, these areas have sufficient natural resource value to warrant protection and preservation in natural, open uses in conjunction with urban and rural development of surrounding lands. In 1980, isolated natural areas encompassed about 8,800 acres, or about 2.4 percent of the total county area.

Prime Agricultural Areas

Having recognized the need to preserve agricultural lands in Wisconsin, the State Legislature adopted Chapter 29, Laws of 1977, commonly called the Farmland Preservation Act. The farmland preservation program combines planning and zoning provisions and tax incentives for the purpose of ensuring the preservation of prime agricultural lands. The program provides that after September 30, 1982, farmland owners are eligible for state income tax credits to offset property taxes on farmland if such lands have been placed in an exclusive agricultural zoning district which has been certified by the Wisconsin Land Conservation Board. Exclusive agricultural zoning is defined as zoning which limits the use of land to agricultural use; specifies a minimum parcel size of 35 acres for a residence or farm operation; and prohibits structures or improvements on the land unless consistent with agricultural uses. In addition, the farmland owners are eligible for the maximum level of tax credit available for their particular tax situation only if the county has adopted a farmland preservation plan.

GENERALIZED EXISTING LAND USE IN THE SOUTHEASTERN WISCONSIN REGION: 1980



A farmland preservation plan was completed for Waukesha County in 1981 by the County Park and Planning Commission. The plan was adopted by the County Board, and certified by the Wisconsin Land Conservation Board. The farmland preservation plan identifies primary, secondary, and transitional farmland preservation areas. The plan delineates preservation areas in relation to primary environmental corridors, potential sewer service areas for the year 2000, incorporated city and village areas, and major public land holdings. The plan recognizes the prime agricultural lands of Waukesha County as an important economic resource and recommends that such farmlands be carefully preserved and managed. The plan also provides for orderly development of the urban growth centers and selected rural areas of the County, and provides for the preservation of existing natural areas.

In November 1984, the Waukesha County Board adopted the exclusive agricultural zoning district regulations required to implement the farmland preservation plan. By the end of 1984, the Towns of Oconomowoc, Mukwonago, and Eagle, the Cities of Muskego and Pewaukee, and the Village of Pewaukee had applied the exclusive agricultural zoning district to protect prime agricultural lands. The Towns of Lisbon, Delafield, and Ottawa are currently considering such zoning.

THE BUILT ENVIRONMENT AND RELATED FEATURES

Land Use

Land use is an important consideration in any economic development effort. Information regarding the amount of land utilized, as well as readily available, for the various types of land use can assist in the identification of local economic development potentials and constraints.

Historic Urban Growth: Prior to the 1950's, urban development within Waukesha County occurred in a relatively compact pattern primarily contiguous to, and outward from, the established urban centers, including the Cities of Oconomowoc and Waukesha and the Villages of Big Bend, Butler, Chenequa, Dousman, Eagle, Hartland, Lac La Belle, Lannon, Menomonee Falls, Merton, Mukwonago, North Prairie, Pewaukee, Sussex, and Wales, as shown on Map 11. After about 1950, urban development within the Region and the County became discontinuous and diffused, with much new urban development occurring in outlying rural areas. Thus, the urban development comprising the "greater Milwaukee area" had by 1980 spread outward from Milwaukee County and the urban centers in Waukesha County, as well as in Ozaukee, Racine, and Washington Counties.

Existing Land Use

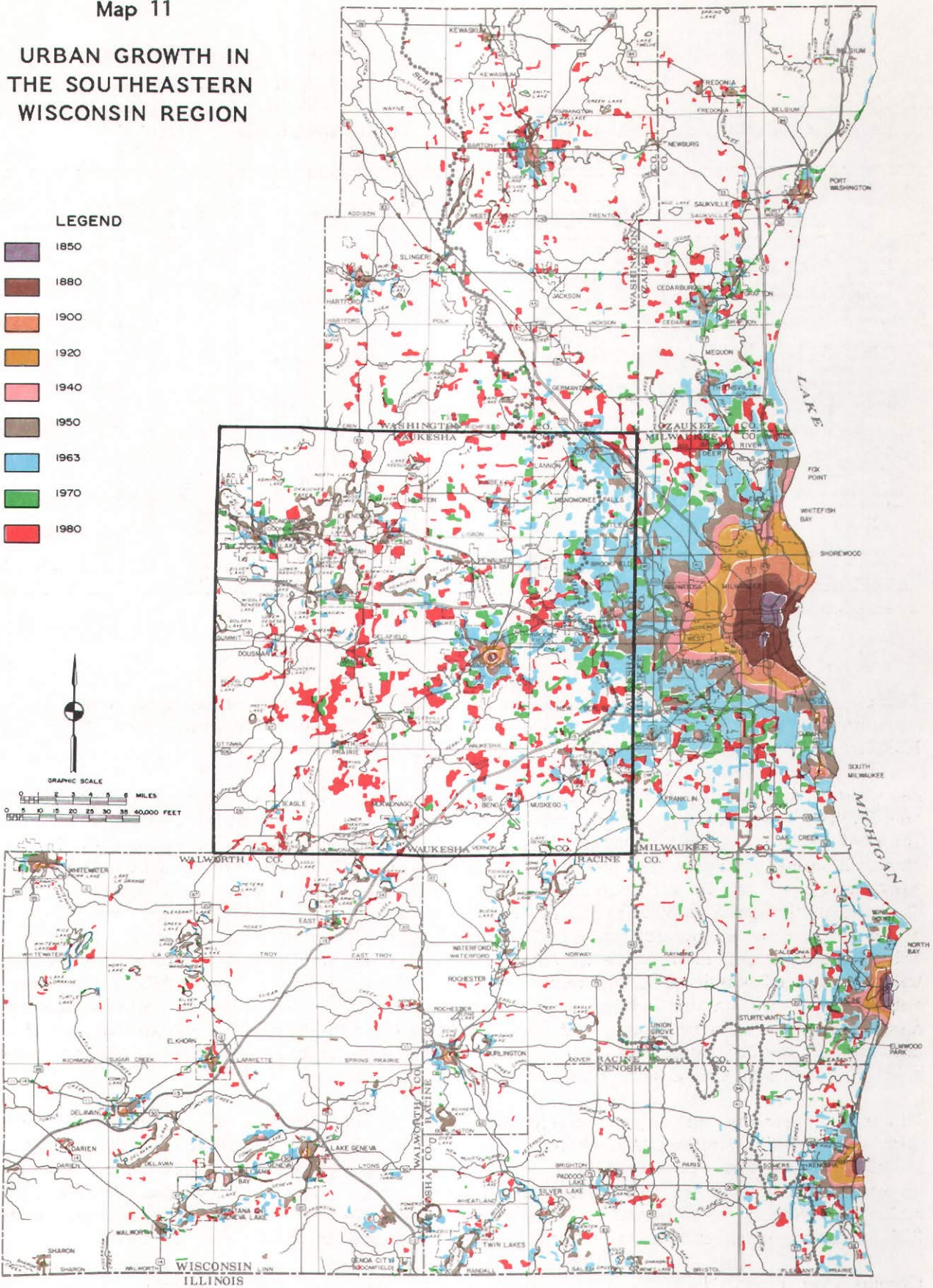
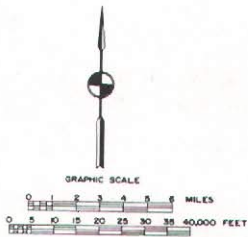
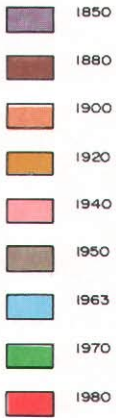
Map 11 shows the land use pattern of Waukesha County in 1980, including the principal commercial, industrial, governmental, institutional, and recreational land use concentrations, and the rural land uses in the County. In 1980, urban land uses in Waukesha County comprised a total of 149.9 square miles, or 26 percent of the total area of the County. Rural land uses, however, still occupied the largest portion of Waukesha County, comprising a total of 430.7 square miles, or 74 percent of the total area of the County.

Residential Land Use: As shown in Table 6, in 1980 residential land use accounted for about 83.7 square miles in Waukesha County, or about 55.8 percent of the urban land uses and about 14.4 percent of all land uses in the

Map 11

URBAN GROWTH IN THE SOUTHEASTERN WISCONSIN REGION

LEGEND



Source: SEWRPC.

Table 6
HISTORIC AND EXISTING LAND USE IN WAUKESHA COUNTY

Land Use Category	1975			1980			Change: 1975-1980	
	Square Miles	Percent of Subtotal	Percent of Total	Square Miles	Percent of Subtotal	Percent of Total	Square Miles	Percent
Urban								
Single-Family Residential....	64.0	47.6	11.0	77.5	51.7	13.3	13.5	21.0
Two-Family Residential.....	0.5	0.4	0.1	0.7	0.5	0.1	0.2	40.0
Multi-family Residential.....	0.8	0.6	0.1	1.1	0.7	0.2	0.3	37.5
Residential Land Under Development.....	7.6	5.6	1.4	4.4	2.9	0.8	- 3.2	-42.1
Commercial.....	2.6	1.9	0.5	2.9	1.9	0.5	0.3	11.5
Industrial.....	2.8	2.1	0.5	3.3	2.2	0.6	0.5	17.9
Transportation, Communica- tions, and Utilities.....	35.0	26.0	6.0	38.0	25.4	6.6	3.0	8.6
Governmental and Institutional.....	5.4	4.0	0.9	5.5	3.7	0.9	0.1	1.9
Recreational.....	8.4	6.2	1.4	8.7	5.8	1.5	0.3	3.6
Unused Urban.....	7.5	5.6	1.3	7.8	5.2	1.3	0.3	4.0
Urban Subtotal	134.6	100.0	23.2	149.9	100.0	25.8	15.3	11.4
Rural								
Agricultural.....	269.6	60.4	46.4	252.4	58.6	43.5	-17.2	- 6.4
Water.....	26.2	5.9	4.5	26.2	6.1	4.5	--	--
Wetlands.....	80.4	18.0	13.9	80.1	18.6	13.8	- 0.3	- 0.4
Woodlands.....	47.6	10.7	8.2	46.0	10.7	7.9	- 1.6	- 3.4
Unused and Other Open Lands.....	22.2	5.0	3.8	26.0	6.0	4.5	3.8	17.1
Rural Subtotal	446.0	100.0	76.8	430.7	100.0	74.2	-15.3	- 3.4
Total	580.6	--	100.0	580.6	--	100.0	--	--

Source: SEWRPC.

County. This represents an increase of about 1.8 square miles, or about 14.3 percent, over the 1975 figure, as well as the largest increase from 1975 to 1980 for all urban land use categories in the County.

As shown on Map 10, the residential land uses are widely scattered throughout the County. As already noted, prior to the 1950's, residential development was located primarily in the established urban growth centers of the County. Since then, however, there has been a proliferation of urban residential development, much of it in small scattered enclaves throughout the rural areas of the County, although a substantial portion has occurred in the eastern one-fourth of the County adjacent to, and outward from, the Milwaukee area. However, urban residential development has also continued to occur within and adjacent to the established urban growth centers of the County. Since 1950, the most substantial new concentrations of urban residential development in the County have occurred on the north and south sides of the City of Oconomowoc, on the north and south sides of the Villages of Mukwonago and Sussex, and on the north, west, and south sides of the City of Waukesha.

Table 6 presents data pertaining to specific categories of residential land use in Waukesha County. As shown in the table, in 1980 residential development in the County was comprised primarily of single-family dwellings, which occupy about 51.7 percent of the total urban land use in the County. Two-family and multiple-family residential development comprised only about 0.5 percent and 0.7 percent, respectively, of total urban land use in the County in 1980.

Commercial Land Use: In 1980, commercial land use accounted for about 2.9 square miles in Waukesha County, or 1.9 percent of the urban land uses and 0.5 percent of all land uses in the County (see Table 6). This represents an increase of 0.3 square mile over the 1975 figure. The central business

districts of the Cities of Oconomowoc and Waukesha represent major concentrations of commercial land uses in Waukesha County. Since 1980, both of these cities have attempted to stimulate commercial business growth and improve local economic conditions through the implementation of substantial revitalization and redevelopment programs.

Since the early 1960's, substantial residential development and population growth in Waukesha County has provided a growing market for commercial retailers offering consumer goods and services. Because of the perceived constraints on the development of additional commercial facilities in the central business districts of the established urban growth centers of the County, commercial land use development has occurred, and continues to occur, at the developing fringes of several urban growth centers in Waukesha County. The most substantial of the new commercial developments constructed to date within the County is the Brookfield Square Shopping Center, a regional shopping center located at the corner of USH 18 and Moorland Road in the City of Brookfield. This center attracted substantial office park development within its environs such as the Brookfield Lakes Corporate Office Center designed by a private developer as an office park and research and development center. Fringe-area commercial developments, which are primarily oriented to neighborhood and community retail needs, are also being developed at the western and eastern edge of the City of Waukesha along USH 18.

Small concentrations of commercial land uses comprised of several commercial business establishments are scattered throughout the outlying areas of Waukesha County. These commercial areas provide primarily convenience goods and services and places of entertainment oriented toward serving the needs of the rural residents of the County.

Industrial Land Use: In 1980, industrial land uses accounted for about 3.3 square miles in Waukesha County, or about 2.2 percent of the urban land uses and 0.6 percent of all land uses in the County (see Table 6). This represents an increase of 0.5 square mile, or 17.9 percent, over the 1975 figure. Map 10 shows that the principal concentrations of industrial land use are located in the north, northeast, east-central, and south-central portions of the City of Waukesha, the northwest portion of the City of Oconomowoc, the north-central portion of the City of New Berlin, the northeast portion of the Village of Menomonee Falls, the southeast portions of the Villages of Sussex and Pewaukee, the western portion of the Village of Hartland, and throughout the Village of Butler.

Transportation, Communications, and Utilities: The transportation, communications, and utilities land use category includes public street and highway rights-of-way; railway rights-of-way and yards; airport, rail, ship, bus, and truck terminals; communications facilities, such as radio and television stations and transmission towers; utility rights-of-way and plants, such as sewage disposal and water treatment and storage facilities; and off-street parking areas containing more than 10 parking spaces. In 1980, transportation, communications, and utility land uses accounted for about 38.0 square miles in Waukesha County, or about 25.4 percent of the urban land uses and 6.6 percent of all land uses in the County (see Table 6). This represents an increase of 8.6 percent over the 1975 figure.

Governmental and Institutional Land Uses: Governmental and institutional land uses include public and private schools; government buildings such as city halls, fire stations, and post offices; and churches and cemeteries. In 1980 these uses in the County totaled 5.5 square miles, or about 3.7 percent of the urban land uses and 0.9 percent of all land uses in Waukesha County. This represents an increase of about 0.1 square mile over the 1975 figure (see Table 6).

Recreational Land Uses: The recreational land use category includes public and private, local, and regional recreational facilities, as well as related recreational land uses. In 1980, recreational land uses in Waukesha County totaled about 8.7 square miles, or about 5.8 percent of all urban land uses and 1.5 percent of all land uses in the County (see Table 6). This represents an increase of 0.3 square mile over the 1975 figure. Recreational land use in Waukesha County is primarily comprised of state forest, state wildlife habitat areas, county parks, community and neighborhood parks, and a variety of private recreational areas, including ski hills, golf courses, campgrounds, and sportmen's clubs. The major state- and county-owned recreational areas in Waukesha County include the Southern Unit of the Kettle Moraine State Forest, Old World Wisconsin, Lapham Peak Park, Menomonee Park, Minooka Park, Monches County Park, Mukwonago Park, Muskego Park, Nagawaukee Park, Nashotah Park, Ottawa Lake Recreation Area, Resinosa Campground, Retzer Nature Area, Wanaki Golf Course Center, Moor Downs Golf Course, and the Exposition Center. The state-owned wildlife habitat areas in the County include the Lake Keesus Preservation Area, Scuppernong Wildlife Area, and Vernon Marsh Wildlife Area.

Rural Land Uses: Rural land uses include wetlands, woodlands, and surface water, as well as agricultural and related open lands. As shown in Table 6, in 1980, rural land uses in Waukesha County totaled 430.7 square miles, or 74.2 percent of all land uses in the County, representing a decrease of 2.6 square miles from the 1975 figure. Land uses within this category are spread over most of western, southern, and northern Waukesha County, and, as such, are still the dominant land uses in the County.

Sanitary Sewer and Water Supply

Public utility systems are one of the most important and permanent elements of urban growth and development. Urban development today is highly dependent upon these utility systems, which provide the individual land uses with power, light, communication, heat, water, and sanitary sewerage service. Water supply and sanitary sewerage utilities have a particularly important interrelationship. Water supply facilities bring potable water from its sources to the user, while sanitary sewerage facilities collect the used water, convey it to a treatment plant, and after treatment return it to the natural environment from which it came.

Sanitary Sewerage Facilities: There are 19 public sanitary sewerage systems served by a total of 10 public sewage treatment plants in Waukesha County. In addition, there are a number of private sewage treatment facilities within Waukesha County. Wastewater treatment is also provided to eastern portions of the County by the Milwaukee Metropolitan Sewerage District located in Milwaukee County, and to the Lake Denoon area in the City of Muskego by the Town of Norway Sanitary District located in Racine County. Table 7 indicates the municipal wastewater treatment data for facilities serving Waukesha County.

Table 7

**MUNICIPAL WASTEWATER TREATMENT DATA
FOR FACILITIES SERVING WAUKESHA COUNTY: 1982**

Name of Sewage Treatment Plant	1982 Loading		Design Capacity	
	Average Annual Hydraulic (mgd)	Maximum Monthly Average Hydraulic (mgd)	Average Hydraulic (mgd)	Peak Hydraulic (mgd)
Milwaukee Metropolitan Sewerage District ^a				
Jones Island.....	120.00	140.00	200.00	300.00
Proposed Plant.....	--	--	300.00	450.00
South Shore.....	73.00	124.00	120.00	320.00
Proposed Plant.....	--	--	250.00	250.00 ^b
Waukesha County Sewage Treatment Plants				
City of Brookfield.....	4.75	7.50	5.00	7.50
City of Muskego ^c				
Big Muskego.....	0.58	0.88	0.86	1.20
Northeast.....	0.34	0.51	0.82	2.79
City of New Berlin.....	0.50	0.74	0.30	N/A
City of Oconomowoc.....	2.06	2.79	1.50	3.00
City of Waukesha.....	11.29	14.60	16.00	28.00
Delafield-Hartland Water Pollution Control Commission.....	0.97	1.08	2.10	N/A
Village of Mukwonago.....	0.44	0.72	1.50	N/A
Village of Dousman.....	0.22	0.31	0.35	0.87
Village of Sussex.....	0.63	1.30	0.30	N/A
Town of Norway Sanitary District				
Lake Denoon Area.....	-- ^d	-- ^d	-- ^d	-- ^d

NOTE: N/A indicates data not available.

^aThe Milwaukee Metropolitan Sewerage District (MMSD) serves the Cities of Brookfield and New Berlin, and the Villages of Butler, Elm Grove, and Menomonee Falls.

^bInformation is provided in the MMSD south shore facility plan.

^cEarly in 1985, the City of Muskego treatment plants were abandoned, with service lines connected with the Milwaukee Metropolitan Sewerage District.

^dArea connected to the Town of Norway Sanitary District in Racine County. Separate loading and design data are not available.

Source: Wisconsin Department of Natural Resources and SEWRPC.

The 1982 average annual hydraulic loading and the maximum monthly average hydraulic loading are presented in the table for the Milwaukee Metropolitan Sewerage District, Waukesha County sewerage treatment plants, and the Town of Norway Sanitary District. Also shown in Table 7 are the average hydraulic design capacity and peak hydraulic design capacity of these plants. Map 12 shows the existing and proposed sewer service areas for Waukesha County.

As shown in Table 8, the public sewage treatment plants which service Waukesha County together serve a sewer service area of about 71 square miles, or about 12 percent of the total area of the County. These systems served a resident population of about 163,700 persons in 1980, or about 58 percent of the total county population. As further shown in Table 8, the public sewage treatment plants servicing Waukesha County are anticipated to serve an area of about 171 square miles, or about 30 percent of the total county area, in the year 2000. These service areas are expected to have a population of 369,600 persons, or about 88 percent of the total proposed county population.

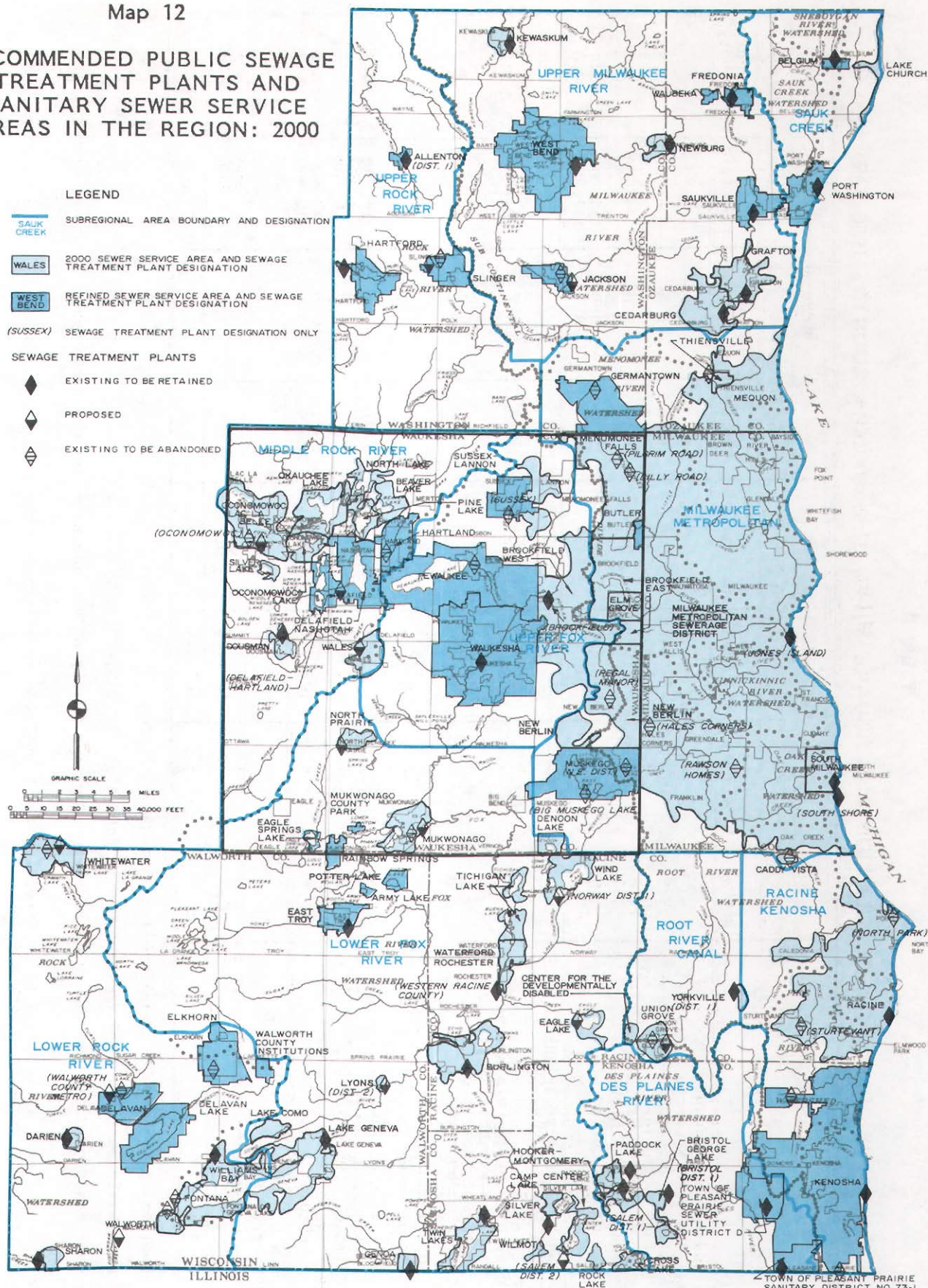
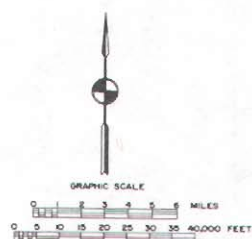
The adopted regional water quality management plan, as documented in SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for South-eastern Wisconsin: 2000, Volume One, Inventory Findings; Volume Two, Alternative Plans; and Volume Three, Recommended Plan, as well as subsequent refinements that reflect detailed local planning considerations, recommend the sanitary sewer service areas for Waukesha County shown on Map 12. This plan, formally adopted by the Waukesha County Board of Supervisors on October 23, 1979, also recommends service areas attendant to each existing or proposed public sewage treatment facility in Waukesha County. The adopted regional water quality management plan and subsequent refinements contain the following recommendations.

1. The Village of Sussex sewage treatment facility, which was upgraded and expanded in 1976 to serve about 9,600 persons, is recommended to be ultimately abandoned and its service area connected to the City of Brookfield sewage treatment plant. The abandonment of the Sussex plant and subsequent connection to the Brookfield system is not expected to take place until 1995.
2. Early in 1985, the two sewage treatment facilities serving the City of Muskego, the Northwest (Big Muskego) and Northeast treatment plants, were abandoned and the tributary service areas were connected to the Milwaukee Metropolitan Sewerage District.
3. The sewage treatment plant serving the City of New Berlin (Regal Manors) is to be abandoned and service is to be provided by the Milwaukee Metropolitan Sewerage District.
4. Two major regional sewage treatment plants are recommended to serve the entire Upper Fox River watershed--the City of Brookfield sewage treatment plant and the City of Waukesha sewage treatment plant.
5. The Delafield-Hartland, City of Oconomowoc, and Village of Dousman sewage treatment facilities are recommended to serve as regional treatment plants in other areas of the County.

Map 12

RECOMMENDED PUBLIC SEWAGE TREATMENT PLANTS AND SANITARY SEWER SERVICE AREAS IN THE REGION: 2000

- LEGEND**
- SAUK CREEK SUBREGIONAL AREA BOUNDARY AND DESIGNATION
 - WALES 2000 SEWER SERVICE AREA AND SEWAGE TREATMENT PLANT DESIGNATION
 - WEST BEND REFINED SEWER SERVICE AREA AND SEWAGE TREATMENT PLANT DESIGNATION
 - (SUSSEX) SEWAGE TREATMENT PLANT DESIGNATION ONLY
 - SEWAGE TREATMENT PLANTS
 - ◆ EXISTING TO BE RETAINED
 - ◊ PROPOSED
 - ◊ EXISTING TO BE ABANDONED



Source: SEWRPC.

Table 8

SEWER SERVICE AREA POPULATION AND SQUARE MILES IN WAUKESHA COUNTY: 1980 AND 2000

	Existing 1980				Proposed 2000			
	Square Miles		Population Served		Square Miles		Population Served	
	Number	Percent of County ^a	Number	Percent of County ^b	Number	Percent of County ^a	Number	Percent of County ^c
Served by the Milwaukee Metropolitan Sewerage District								
Village of Menomonee Falls.....	5.5	0.9	16,515	5.9	16.2	2.8	56,100	13.3
Village of Butler.....	0.8	0.1	2,004	0.7	0.8	0.1	2,200	0.5
City of Brookfield.....	11.9	2.0	17,898	6.4	11.9	2.0	21,600	5.1
Village of Elm Grove.....	3.3	0.6	6,690	2.4	3.3	0.6	7,000	1.7
City of New Berlin.....	5.2	0.9	10,680	3.8	17.5	3.0	51,000	12.1
Subtotal	26.7	4.6	53,787	19.2	49.7	8.6	137,900	32.8
Served by Sewage Treatment Plants Within Waukesha								
City of Brookfield.....	15.9	2.7	16,270	5.8	38.8 ^d	6.7	61,800 ^e	14.7
City of Muskego (Big Muskego Lake and Northeast District Treatment Facilities) ^f	4.5	0.8	11,000	3.9	14.4	2.5	19,000	4.5
City of Oconomowoc.....	2.7	0.5	10,136	3.6	20.8	3.6	31,900	7.6
City of New Berlin (Regal Manors).....	0.8	0.1	1,821	0.6	--	--	--	--
City of Waukesha.....	12.8	2.2	52,292	18.7	25.5	4.4	77,900	18.5
Delafield-Hartland Water Pollution Control Commission...	4.0	0.7	9,039	3.2	11.1	1.9	18,200	4.3
Village of Mukwonago.....	1.5	0.3	4,245	1.5	4.2	0.7	9,200	2.2
Village of Dousman.....	0.5	0.1	1,236	0.4	1.7	0.3	2,100	0.5
Village of Sussex.....	1.6	0.3	3,480	1.3	4.1	0.7	10,800	2.6
Subtotal	44.3	7.6	109,519	39.1	120.6	20.8	230,900	54.9
Served by the Town of Norway Sanitary District								
Lake Denoon Area	0.3	0.1	349	0.1	1.1	0.2	800	0.2
Subtotal	0.3	0.1	349	0.1	1.1	0.2	800	0.2
Total	71.3	12.3	163,655	58.4	171.4	29.5	369,600	87.9

^aPercent based on 581 total square miles in Waukesha County.

^bPercent based on total 1980 Waukesha County population of 280,200.

^cPercent based on projected 2000 population for Waukesha County of 420,600 based on the recommended land use plan for the year 2000.

^dIncludes the area anticipated to be served by the Brookfield facility upon the proposed abandonment of the Regal Manors sewage treatment facility in New Berlin.

^eIncludes the population anticipated to be served by the Brookfield facility upon the proposed abandonment of the Regal Manors sewage treatment facility in New Berlin.

^fEarly in 1985, the sewage treatment facilities serving the City of Muskego were abandoned, with tributary service areas connected with the Milwaukee Metropolitan Sewerage District.

Water Utilities: In 1975, there were a total of 14 publicly owned water utilities in Waukesha County. In addition, there were numerous small private water utilities serving isolated residential and institutional land uses. As shown in Table 9, public water utilities in Waukesha County served a combined area of about 35 square miles, or about 6 percent of the total area of the County. These utilities served a total resident population of about 116,700 persons, or about 42 percent of the total county population. All water supplied by the publicly owned water utilities in 1975 was drawn from wells. All units of government in Waukesha County which provide public water supply service maintain a policy of providing such service only to properties within their municipal corporate limits or utility district boundaries.

SEWRPC Planning Report No. 30, A Regional Water Quality Management Plan for Southeastern Wisconsin: 2000, Volume Two, and SEWRPC Technical Record, Vol. 4, No. 1, discuss the physical and economic factors affecting water quality management, water pollution abatement plans, and groundwater supply factors to be considered by a municipality when encouraging development. The studies indicate that the largest suburban communities of Waukesha County have an ample supply of quality groundwater to meet their current and future needs; however, the smaller densely populated communities may be operating at a deficit. However, with cooperative water planning with neighboring communities, directed industrial and residential growth within the community, and protection of recharge areas and prevention of the contamination of groundwater, there will be an ample supply of groundwater for years to come.

Solid Waste Disposal Facilities

Solid waste collection for residential users in Waukesha County is provided chiefly by private collection services, many of which contract with local municipalities. Commercial and industrial establishments in many cases are responsible for their own solid waste collection and disposal.

Currently, solid waste is either incinerated at the large facility in the City of Waukesha or landfilled at general-use landfills located within the County and immediately adjacent to the County.

In addition, there are six special-use landfills within Waukesha County designated for more specific institutional, commercial, and industrial uses. Negotiations and planning efforts are currently underway to supplement the existing system with the City of Waukesha incinerator, to be purchased and expanded by the Waukesha County Solid Waste Management Board to provide county-wide use of the facility. The City of Waukesha incinerator was constructed in 1970, operates 24 hours per day Monday through Friday, and has a capacity of 175 tons per day. The waste-heat recovery processes incorporated into the system provide the steam generated from heat contained in gases, which is sold to firms adjacent to the incinerator and the wastewater treatment plant as heat recovery and an auxiliary fuel. Waukesha County is pursuing a solid waste management plan that will reduce its dependency on landfilling; the plan will investigate incinerating much of the County's wastes to produce steam and electricity. If and when the Waukesha incinerator is purchased and extensively renovated, the service needs of both the City and the County will be met for several years.

Table 9

**AREA AND POPULATION SERVED BY PUBLIC WATER
SUPPLY FACILITIES IN WAUKESHA COUNTY: 1975**

Public Water Utility		Area Served (square miles)	Estimated Population Served	Estimated Average Consumption (mgd)
Name	Location			
Butler Water Utility.....	Village of Butler	0.80	2,200	0.667
City of Brookfield Water Utility.....	City of Brookfield	4.93	4,800	0.985
City of Oconomowoc Electric and Water Departments.....	City of Oconomowoc	3.48	11,000	1.306
Hartland Municipal Water Utility.....	Village of Hartland	1.40	4,000	1.308
Mukwonago Municipal Water Utility.....	Village of Mukwonago	1.45	3,400	0.345
Muskego Water Utility.....	City of Muskego	2.36	4,800	N/A
New Berlin Water Utility.....	City of New Berlin	2.99	7,300	1.082
Pewaukee Water and Sewage Utility.....	Village of Pewaukee	1.28	4,400	0.520
Sussex Municipal Water Utility.....	Village of Sussex	0.96	4,100	N/A
Village of Dousman Water Utility.....	Village of Dousman	0.49	1,000	0.065
Village of Eagle Water Utility.....	Village of Eagle	0.37	900	0.046
Village of Menomonee Falls Water Utility.....	Village of Menomonee Falls	4.38	18,800	2.181
Waukesha Water Utility.....	City of Waukesha	9.96	49,000	9.141
Westbrooke Sanitary Districts Nos. 1 and 2.....	Town of Brookfield	0.39	1,000	0.050
Total		35.24	116,700	17.696

NOTE: N/A indicates data not available.

Source: Wisconsin Public Service Commission, Wisconsin Department of Natural Resources, and SEWRPC.

Gas and Electric Utility Services

The availability of relatively inexpensive natural gas and electric power service is ubiquitous within the County and, as such, does not constitute a major constraint on the location or intensity of urban development. Since 1973, however, when the nation was suddenly faced with sharply rising energy costs, energy requirements have become a more important development consideration. Consequently, the cost of energy utilized to sustain the County's development pattern may be expected to be an important consideration in the ability of the area to retain existing and attract new industries and businesses.

Public gas service is provided to Waukesha County in part by the Wisconsin Natural Gas Company and in part by the Wisconsin Gas Company. Table 10 indicates the base commercial and industrial gas utility rates per month for utility companies serving Waukesha County. The major privately owned electric utility authorized to operate within Waukesha County is the Wisconsin Electric Power Company (WEPCo). Table 11 indicates the base commercial electric utility rates and Table 12 indicates the base industrial electric utility rates in Waukesha County. In addition, a municipal electric power utility is operated by the City of Oconomowoc.

Transportation Facilities

The existing transportation system in Waukesha County--consisting of the public arterial street and highway system, the public transit and railway systems, and the airport and seaport systems--is an important determinant of economic development (see Map 13). These facilities influence the path and mode and cost and frequency of personal travel and of the shipment of goods. The provision of highly accessible commercial and industrial areas is particularly important to the economic development of the County. Transportation facilities form the basic framework for both urban and rural development and, to a considerable extent, determine the efficiency of the other functional aspects of such development.

Arterial Street and Highway System: The public street and highway system of Waukesha County consists of three functional subsystems: land access streets, collector streets, and arterial streets and highways, the latter being composed of surface arterials and freeways (see Map 13). One of the major factors influencing the location of commercial and industrial activities, such as retail and wholesale trade, financial institutions, and professional, personal, and business services, is the availability of good highway transportation facilities.

Waukesha County is served by a well-developed, well-maintained, all-weather street and highway system. There were a total of 2,364 miles of streets and highways open to traffic in the County in 1980. Of this total, 804 miles, or 34 percent, were classified as arterial streets and highways. Every city and village in Waukesha County except the Village of Merton is served by a state trunk highway, thus virtually eliminating trucking restrictions to and from each of the communities. Interstate highway 94 connects the County with the Milwaukee and Chicago metropolitan areas to the east and south, and to the Madison, La Crosse, and Twin Cities areas to the west and north. The Rock Freeway--STH 15--crosses the County diagonally in the southeast corner and provides access to the Cities of Janesville, Beloit, and Rockford, Illinois, as well as to the Milwaukee area.

Table 10

**BASE COMMERCIAL AND INDUSTRIAL GAS UTILITY
RATES IN WAUKESHA COUNTY: JANUARY 1983**

Company ^a	Base Rates for Regular Service per Month						Rate Schedule ^b
	Number of Therms						
	Minimum	500	1,000	10,000	100,000	500,000	
Wisconsin Natural Gas Company.....	\$ 3.00	\$ 274.00	\$ 544.00	\$5,404.00	\$54,004.00	\$270,004.00	CG-1
Wisconsin Gas Company.....	5.00	249.10	493.20	4,887.00	48,825.00	244,105.00	CG-1
Base Rates for Interruptible Service per Month							
Wisconsin Natural Gas Company.....	\$4,726.00	\$4,726.00	\$4,726.00	\$4,726.00	\$47,260.00	\$236,300.00	IG-2
Wisconsin Gas Company.....	0.00	211.70	423.40	4,234.00	42,340.00	211,700.00	SI-1

^a Pipeline suppliers include: Michigan-Wisconsin Pipeline Co.; Midwestern Gas Transmission Co.; and the Northern Natural Gas Co.

^bCG-1 refers to commercial gas; IG-2 refers to interruptible gas; SI-1 refers to service interrupted.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, Bulletin No. 10, Comparison of Net Monthly Bills of Wisconsin Gas Utilities, January 1, 1983; and SEWRPC.

Table 11

BASE ELECTRIC UTILITY COMMERCIAL RATES IN WAUKESHA COUNTY: JANUARY 1983

Company	Commercial Utility Base Rates per Month					Rate Schedule ^a
	3 Kilowatts, 375 Kilowatt Hours per Month	6 Kilowatts, 750 Kilowatt Hours per Month	12 Kilowatts, 1,500 Kilowatt Hours per Month	30 Kilowatts, 6,000 Kilowatt Hours per Month	40 Kilowatts, 10,000 Kilowatt Hours per Month	
Wisconsin Electric Power Company						
Summer	\$38.93	\$68.85	\$128.70	\$487.80	\$807.00	CG1S
Winter	37.50	66.00	123.00	465.00	769.00	CG1W
Summer	38.93	68.85	128.70	487.80	807.00	CG1S
Winter	37.50	66.00	123.00	465.00	769.00	CG1W

^aCG1S refers to commercial gas, summer; and CG1W refers to commercial gas, winter.

Source: Public Service Commission of Wisconsin, Accounts and Finance Division, Bulletin No. 9, Comparison of Net Monthly Bills of Wisconsin Electric Utilities, January 1, 1983; and SEWRPC.

Table 12

**BASE ELECTRIC UTILITY INDUSTRIAL RATES
IN WAUKESHA COUNTY: JANUARY 1983**

Rate Classification	Industrial Utility Base Rates per Month		
	Wisconsin Electric Power Company		
	Summer Cost	Winter Cost	Rate Schedule ^a
75 Kilowatts, 15,000 Kilowatt Hours.....	\$ 1,489.98	\$ 1,445.73	CP1
75 Kilowatts, 30,000 Kilowatt Hours.....	2,035.45	1,991.20	CP1
150 Kilowatts, 30,000 Kilowatt Hours.....	2,504.95	2,416.45	CP1
150 Kilowatts, 60,000 Kilowatt Hours.....	3,595.90	3,507.40	CP1
300 Kilowatts, 60,000 Kilowatt Hours.....	4,534.90	4,357.90	CP1
300 Kilowatts, 120,000 Kilowatt Hours.....	6,716.80	6,539.80	CP1
500 Kilowatts, 100,000 Kilowatt Hours.....	7,241.50	6,946.50	CP1
500 Kilowatts, 200,000 Kilowatt Hours.....	10,878.00	10,583.00	CP1
1,000 Kilowatts, 200,000 Kilowatt Hours.....	14,008.00	13,418.00	CP1
1,000 Kilowatts, 400,000 Kilowatt Hours.....	21,281.00	20,691.00	CP1

^aCP1 refers to commercial power.

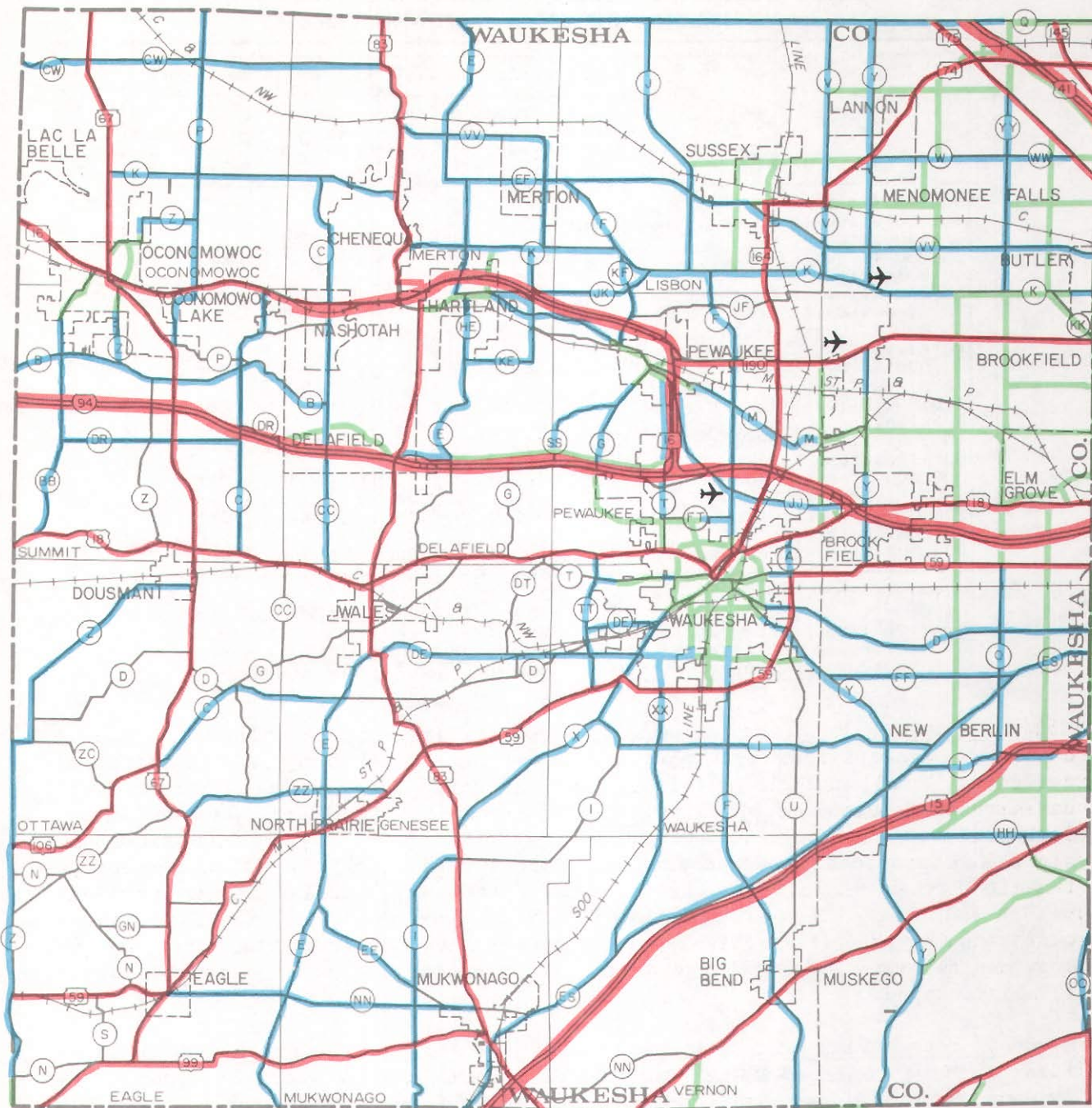
Source: Public Service Commission of Wisconsin, Accounts and Finance Division, Bulletin No. 9, Comparison of Net Monthly Bills of Wisconsin Electric Utilities, January 1, 1983; and SEWRPC.

Public Transit Facilities: Existing transit services in Waukesha County consist of specialized transportation services for elderly and handicapped residents, local taxicab services, and intercity bus service. Interregional bus service is provided by three private bus companies--Badger Coaches, Inc., Greyhound Bus Lines, Inc., and the Peoria-Rockford Bus Company. Commuter bus service is provided by Wisconsin Coach Lines, Inc., and the Milwaukee County Transit System. Local bus service within the City of Waukesha is provided by Waukesha Metro Transit. Intracounty transit service with flexible transportation routes is available through La Casa de Esperanza, Inc., which provides two vans, one with hydraulic lift capacity, for the Hispanic elderly and handicapped.

Railway Freight Service: Railway freight service in Waukesha County is provided by five railroad companies: the Chicago & North Western Transportation Company; the Soo Line Railroad Company; the Chicago, Milwaukee, St. Paul & Pacific Railroad Company (Milwaukee Road); the Wisconsin & Southern Railroad Company; and the municipality of East Troy Wisconsin Railroad (see Map 13). Railway freight service within the County is provided over a total of 114 miles of railway main line by these companies. The Chicago & North Western and Milwaukee Road trackage routes and branch lines form an east-west pattern and serve communities in the northern one-half of the County. The Soo Line Railroad Company, traveling mainly in a north-south direction and serving communities in the eastern portion of Waukesha County, provides freight shippers in the City of Waukesha with intermodal facilities, including both tractor trailers and containers to be loaded and unloaded from flat cars. The Municipality of East Troy Wisconsin Railroad serves as a connecting line from the

Map 13

TRANSPORTATION FACILITIES IN WAUKESHA COUNTY

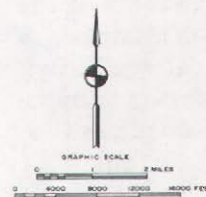


LEGEND

- STATE TRUNK FREEWAY
- STATE TRUNK NONFREEWAY
- COUNTY TRUNK
- LOCAL TRUNK

 AIRPORT

Source: SEWRPC.



Village of East Troy to the Soo Line in the Village of Mukwonago. The extreme northeastern corner of the City of Menomonee Falls is served by the Wisconsin & Southern Railroad Company.

Water Transportation Facilities: While Waukesha does not have direct access to water transportation facilities, it has ready access to a major international water transportation system--the Great Lakes-St. Lawrence Seaway, which extends from the Great Lakes to the Gulf of St. Lawrence on the Atlantic Ocean. Major harbor facilities, dockage, and heavy cargo-handling equipment are concentrated in the Port of Milwaukee to handle both bulk and containerized shipments (see Map 13).

The water transportation facilities available to the County are enhanced by the location of a foreign trade zone in the City of Cudahy in Milwaukee County. This trade zone was the 41st foreign trade zone in the United States to receive U. S. Department of Commerce authorization. The Milwaukee foreign trade zone encourages international commerce by providing foreign, duty-free and quota-free entry for goods for an unlimited period of time. Goods brought into the zone may be stored, exhibited, repacked, labeled, inspected, assembled, or otherwise processed, and are subject to duty only at the time they are shipped out of the zone into U. S. customs territory.

Air Transportation Facilities: The present air transportation system in Waukesha County includes a total of 10 airports, of which three are general aviation facilities open for use by the general public: Crites Field, Capitol Airport, and Aero Park Airport (see Map 13). All three airports are able to meet the needs of corporate business and other commercial users, as well as of recreational and other personal users. Currently, only Crites Field can accommodate small corporate jet aircraft and similar business aircraft. The airport is in the process of improving and expanding in order to better accommodate corporate jet aircraft. General Mitchell Field--an airport served by 16 certified air carriers--is also located nearby. This major regional terminal provides commercial airline service to the general public on a regularly scheduled basis.

EDUCATIONAL FACILITIES AND SERVICES

The educational institutions in Waukesha County serve not only individuals, but also the corporations and communities of the County. Sound educational programs are important to the development of the skilled labor force required by business and industry.

Public Education Facilities

Public elementary schools, middle schools, and senior high schools in Waukesha County are organized under five kindergarten-through-12th grade school districts and include the Elmbrook, Hamilton, Kettle Moraine, Menomonee Falls, Mukwonago, Muskego-Norway, New Berlin, Norris, Oconomowoc, Palmyra-Eagle, Pewaukee, and Waukesha School Districts, and the Arrowhead Union High School District which is comprised of eight middle and/or elementary school districts.

There are a total of 70 elementary schools, 15 middle schools, and 26 senior high schools serving Waukesha County. As shown in Table 13, a total of 62,465 students were enrolled in the school districts in Waukesha County in 1984-1985. Of the total enrollment, there were 40,879 elementary and/or middle school students, and 21,586 senior high school students.

Table 13

**PUBLIC SCHOOL ENROLLMENT FOR SCHOOL DISTRICTS
SERVING WAUKESHA COUNTY: 1984-1985 SCHOOL YEAR**

School District	District Enrollment	
	Elementary and/or Middle Schools Pre- K-8th Grade	Senior High Schools 9th-12th Grade
Arrowhead Union High School District.....	471	1,688
Joint School District No. 6 - Delafield.....	121	--
Joint School District No. 3 - Hartland/Lakeside.....	1,059	--
Joint School District No. 2 - Lisbon.....	248	--
Joint School District No. 4 - Merton.....	217	--
Joint School District No. 7 - Merton.....	233	--
Joint School District No. 8 - Merton.....	215	--
Joint School District No. 9 - Merton.....	399	--
Joint School District No. 2 - Nashotah.....	184	--
Elmbrook School District.....	5,522	3,041
Hamilton School District.....	2,371	1,177
Kettle Moraine School District.....	2,710	1,442
Menomonee Falls School District.....	2,867	1,666
Mukwonago School District.....	3,687	1,560
Muskego-Norway School District.....	2,526	1,402
New Berlin School District.....	3,226	1,828
Norris School District.....	6	54
Oconomowoc Area School District.....	3,387	1,716
Palmyra-Eagle Area School District ^a	869	385
Pewaukee School District.....	878	423
Waukesha School District.....	9,683	5,204
Total	40,879	21,586

^aThe Palmyra-Eagle Area School District serves the southeastern corner of Waukesha County.

Source: Wisconsin Department of Public Instruction and SEWRPC.

Private Education Facilities

There are a total of 55 private primary and secondary schools in Waukesha County. All are supported by various organizations and religious groups and are subject to the standards in education required by each group. The school programs in the private schools are similar to those in the public schools with the exception of religious instruction in the parochial schools. Private schools in Waukesha County are funded through private donations and tuition. Also located within the County are 94 licensed day nurseries and child care facilities which provide structured academic and care programs for preschool-aged children.

Higher Education Facilities

Three institutions of higher learning serve Waukesha County. These three institutions are briefly described below.

The State of Wisconsin has a strong post-secondary educational system. The first vocational, technical, and adult education [VTAE] system to be established in the United States was established in the State of Wisconsin in 1911. The primary goal of the statewide VTAE system is to prepare students for gainful employment in a manner which meets the needs of the labor market. Accordingly, the state system emphasizes vocational training and education for jobs

that require special technical skills. The VTAE system school serving Waukesha County is the Waukesha County Technical Institute (WCTI) in the Village of Pewaukee, with additional campuses in the City of Waukesha and the Village of Menomonee Falls.

A wide range of programs are available at WCTI, including business occupations--such as data processing and accounting; industrial occupations--such as electronics and robotics repair; and service occupations--such as practical nursing and police science. WCTI provides assistance to adults who desire to develop basic skills, including assistance to persons preparing to take the GED high school equivalence test without charge. In addition, adult and continuing education courses are available which enable adults to pursue associate degree or vocational diplomas for career advancement in their present jobs, or in preparation for new occupations. WCTI provides a full range of student services and counseling, testing, employment, and financial aids, health assessment, and student activities.

The University of Wisconsin-Extension office, located in the Waukesha County Courthouse, is one of the 71 cooperating extension services located in the State of Wisconsin. The purpose of the Extension office is to develop human resources, to discover and disseminate knowledge, and to further apply that knowledge beyond the boundaries of its university campuses. The cooperative extension service is an educational outreach program funded through the U. S. Department of Agriculture and state and county government.

Specific program areas include agriculture, natural resources, home economics and family living, horticulture, recreation, 4-H youth development, and small business.

The University of Wisconsin-Waukesha County campus, located in the City of Waukesha, is one of 14 two-year campuses in the University of Wisconsin system. As an accredited transfer institution, UW-Waukesha offers a strong, well-balanced program of liberal and pre-professional courses. As an accredited two-year center, UW-Waukesha offers an associates degree in arts and sciences. The courses offered at UW-Waukesha, which are fully transferable to four-year colleges and universities, provide students with a foundation for over 50 different professional and specialized fields of study. Specifically, the UW-Waukesha center offers night courses for individuals to work toward a bachelors degree in business administration and a masters degree in business administration awarded through the University of Wisconsin-Whitewater.

Carroll College, Wisconsin's first college, is a four-year liberal arts college offering bachelor of arts and bachelor of science degrees. Carroll College offers day and evening classes in a strong program of liberal and professional courses. In addition, Carroll College provides a full range of student services, counseling, financial aids, work-study programs, employment counseling, and student activities.

Public and private post-secondary educational facilities located nearby in Milwaukee County include the University of Wisconsin-Milwaukee, Marquette University, the Medical College of Wisconsin, the Milwaukee School of Engineering, and three liberal arts colleges--Alverno, Mount Mary, and Cardinal Stritch. Also, the University of Wisconsin-Madison is located in nearby Dane County.

Educational and Work-Related Programs for the Handicapped

Quality educational facilities, work-related training programs, and community services are offered for handicapped and developmentally disabled persons residing in Waukesha County. The Waukesha County Division of Community Services has recognized 30 community facility areas in which standard program units for the residents have been designed. Waukesha County has facilities for the developmentally disabled, mentally or emotionally impaired, correctional clients, and physically disabled, as well as alcohol and drug abuse clinics and facilities dealing with the infirmities of aging.

EXISTING HOUSING STOCK INVENTORY

The existing housing stock is an important consideration in any economic development effort. In particular, data concerning the quantity and quality of housing in Waukesha County are useful in determining the extent to which the housing stock is able to satisfy any new housing demand accompanying an economic development action, as well as the current housing requirements of the resident population of the County.

Tenure Status

As shown in Table 14, there were a total of 92,622 housing units in Waukesha County in 1980. Of this total, 91,366 were year-round housing units. Year-round housing units are comprised of all occupied housing units and vacant year-round housing units, the latter being vacant units which are intended for occupancy at any time of the year.

In 1980, occupied housing units totaled 88,552 units, or about 97 percent of the total housing units in the County. Of this total, 69,154 units, or 78 percent, were owner-occupied, while 19,398 units, or about 22 percent, were renter-occupied. A housing unit was considered occupied if it was the usual place of residence of the person or persons living in it at the time of the census enumeration. As indicated in Table 14, Waukesha County has a larger percentage of owner-occupied housing units, 78 percent, than does the Region, 62 percent; the State, 68 percent; or the nation, 64 percent. The percentage of vacant housing units in the County, 3 percent, was less than in all of the areas of comparison. The lower percentage of vacant housing units indicates that persons locating in Waukesha County may have a somewhat more limited choice of housing units than in other areas.

Measures of Housing Quality

For the purposes of this study, the relative quality of housing in Waukesha County was determined by comparing information on the cost, age, and renter vacancy rates for housing in Waukesha County with such information for housing in the Region, State, and nation. The data indicate that, overall, the housing stock in Waukesha County is of somewhat higher quality than that of the Region, State, and nation. As shown in Table 15, the median value of owner-occupied housing units in Waukesha County, \$74,300, is substantially higher than that for the Region \$60,271, the State, \$48,600, or the nation, \$47,300. Similarly, the median monthly contract rent of \$252 for renter-occupied housing units in Waukesha County is higher than for the Region, \$211, State, \$186, or nation, \$199.

Table 14

**TENURE STATUS OF EXISTING YEAR-ROUND
HOUSING STOCK IN WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1980**

Status of Housing Units	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Occupied Housing Units.....	88,552	96.9	627,955	95.8	1,652,261	94.3	80,389,673	92.7
Owner-Occupied.....	69,154	78.1	389,381	62.0	1,127,367	68.2	51,794,545	64.4
Renter-Occupied.....	19,398	21.9	238,574	38.0	524,894	31.8	28,595,128	35.6
Vacant Housing Units....	2,814	3.1	27,791	4.2	100,708	5.7	6,303,150	7.3
Total Year-Round Housing Units	91,366	100.0	655,746	100.0	1,752,969	100.0	86,692,823	100.0

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

Table 15

**MEDIAN VALUE AND MEDIAN MONTHLY CONTRACT RENT
OF HOUSING UNITS IN WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1980**

Characteristic	Waukesha County	Region	Wisconsin	United States
Median Value, Specified Owner- Occupied Noncondominium Housing Units.....	\$74,300	\$60,271	\$48,600	\$47,300
Median Monthly Contract Rent, Specified Renter-Occupied Housing Units.....	\$ 252	\$ 211	\$ 186	\$ 199

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

Table 16

**AGE OF TOTAL YEAR-ROUND HOUSING UNITS IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES**

Year Structure Was Built	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Before 1940	16,060	17.6	213,394	32.5	642,905	36.6	22,414,352	25.8
1940 to 1949	6,056	6.6	77,590	11.8	176,466	10.1	9,642,209	11.1
1950 to 1959	18,165	19.9	128,901	19.7	254,792	14.5	14,871,096	17.1
1960 to 1969	21,503	23.5	114,226	17.4	276,902	15.8	17,086,673	19.7
1970 to 1974	12,293	13.5	60,539	9.2	188,144	10.7	11,348,219	13.1
1979 to 1980	3,411	3.7	13,391	2.1	49,001	2.7	3,031,370	3.6
Total	91,385	100.0	655,795	100.0	1,756,311	100.0	86,758,717	100.0

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

Data pertaining to the age of housing units, when evaluated along with other housing characteristics, can provide a basis for determining housing quality and the degree to which existing stock is able to satisfy current housing needs. Table 16 indicates that about 32 percent of the total housing units in Waukesha County were built between 1970 and 1980. This is a substantially greater level of recently built first-rate homes than found in the Region, 19 percent; the State, 23 percent; and the nation, 26 percent. Correspondingly, Table 16 shows that only about 44 percent of the total housing units in Waukesha County were built prior to 1960, compared with 64 percent for the Region, 61 percent for the State, and 54 percent for the nation.

Table 17

**INADEQUATELY HOUSED LOW- AND MODERATE-INCOME HOUSEHOLDS
IN WAUKESHA COUNTY, THE REGION, AND WISCONSIN: 1980**

Tenure Status	Inadequately Housed Low- and Moderate-Income Households			Total All Households
	Number	Percent	Total Households	Number
Waukesha County				
Owner.....	503	8.6	0.6	69,154
Renter.....	5,363	91.4	6.0	19,398
Total	5,866	100.0	6.6	88,552
Region				
Owner.....	9,150	11.0	1.5	389,381
Renter.....	74,300	89.0	11.8	238,574
Total	83,450	100.0	13.3	627,955
Wisconsin				
Owner.....	43,424	21.3	2.6	1,127,367
Renter.....	160,506	78.7	9.7	524,894
Total	203,930	100.0	12.3	1,652,261

Source: Wisconsin Department of Development, Housing Information System; and SEWRPC.

Inadequately Housed Low- and Moderate-Income Households

While most households in Waukesha County are able to obtain decent, safe, and sanitary housing through the normal operation of the housing market, some low- and moderate-income households are presently inadequately housed. Data regarding unmet housing needs are provided for local units of government in Wisconsin through the Housing Information System (HIS), developed and maintained by the Wisconsin Department of Development. The Housing Information System data are widely used as the statistical basis for housing planning in Wisconsin.

According to the Wisconsin Information System, the Southeastern Wisconsin Region and the State of Wisconsin have a significantly greater percentage of inadequate housing than does Waukesha County. As indicated in Table 17, 5,866 low- and moderate-income households in Waukesha County, or about 7 percent of all households in the County, were considered to be inadequately housed. In Wisconsin, 203,930 low- and moderate-income households, or about 12 percent of all households, were considered to be inadequately housed, and a similar number of households in the Region were considered to be inadequately housed.

CULTURAL FACILITIES AND SERVICES

Because most cultural facilities and functions exist primarily through the donations of private citizens, their continued existence can be directly related to the economy of the community. When unemployment is high and the job outlook is bleak, support of cultural facilities and services lags. Conversely, when the economy is strong and a wide number and variety of jobs are available, the support of cultural programs increases. Cultural programs, like recreational programs, respond to the interests and needs of the individ-

ual by providing a host of activities, ranging from educational services to pure entertainment. Waukesha County has a wide variety of cultural facilities and events offered for the use and enjoyment of its residents.

Libraries

In 1981, the Waukesha County Federated Library System was begun in order to provide complete public library services to all county residents by assisting the 15 member libraries in giving better service to all areawide users. Public libraries in the Waukesha County Federated System include Big Bend Village Library; Butler Public Library; Delafield Public Library; Alice Baker Memorial Library, Eagle; Elm Grove Public Library; Hartland Public Library; Maude Shunk Library, Menomonee Falls; Floyd and Jessie McKenzie Library, Mukwonago; Muskego Public Library; New Berlin Public Library; Town Hall Library, North Lake; Oconomowoc Public Library; Barbara Sanborn Public Library, Pewaukee; Sussex Public Library; and Waukesha Public Library. In addition, there is one suburban library, the Brookfield Public Library, which is not a member of the Library System.

The member libraries of the Library System loan books, sculptures, 16mm films, government documents, cassettes, and magazines. Items not obtainable from a local library can be borrowed through an inter-library loan procedure from other libraries in the Library System around Wisconsin or across the United States. Post-secondary institutions in Waukesha County have also made their library resources available to the public.

The Arts

Waukesha County is also served by theaters such as the Sunset Playhouse in Elm Grove and the Waukesha Civic Theatre in Waukesha, as well as a symphony orchestra which holds performances at Carroll College in the City of Waukesha. The Waukesha County Historical Museum located in the City of Waukesha is a community resource agency offering a wide variety of services pertaining to local history. Its 10 exhibit areas are devoted to aspects of Waukesha County history and include: Pioneers and Indians, the Springs and Resort Era, Military History, Toys, Natural History, and other changing exhibits. The museum also houses the office of the County Historian, and an outstanding collection of local history material is available in the Research Center.

In addition, nearby Milwaukee County's privately funded Performing Arts Center--home of the Milwaukee Symphony Orchestra, the Milwaukee Ballet Company, and the Florentine Opera Company--presents a diversity of musical and theatrical events. The Milwaukee Art Museum's collection, in downtown Milwaukee, offers a collection which spans the history of art from ancient Egypt to modern America.

One of the most energetic historic restoration sites in the nation is Old World Wisconsin located near the Village of Eagle and part of the Kettle Moraine State Forest--Southern Unit. Here, the State Historical Society is reconstructing a variety of authentic ethnic homesteads on more than 570 acres of rolling meadow lands. Structures which were located in other regions of the State were carefully dismantled, moved to this location, and carefully reassembled. Homesteads of all of the major nationalities which settled the Wisconsin territory are represented.

Exhibition, Convention, Conference, and Meeting Facilities

Waukesha County is well served to meet industrial and business needs for meeting, conference, convention, and exhibit facilities. The County's major hotels and motels provide approximately 1,400 first-class rooms, a sufficient supply of meeting rooms and suites, and the opportunity to combine business meetings and conferences with various outdoor recreational activities such as golf, tennis, and skiing. In addition, the Waukesha County Exposition Center and Forum is a civic and convention center containing over 25,000 square feet and is equipped to handle most types of meetings, shows, and exhibits. Every July, the Waukesha County Fair Association organizes and promotes the Waukesha County Fair, the County's single largest event, on the north side of Waukesha at the Exposition Center. The five-day, family-oriented festival provides an educational opportunity for 4-H youth members to exhibit their crafts and collections, gives senior citizens and others a chance to display artwork, allows commercial businesses the chance to promote areawide goods and services, and creates the setting for local community livestock competition. Nightly entertainment, a children's parade, an amusement park, a livestock auction, tractor pulls, and car demolition derbies are added attractions of the County Fair. In 1984, the Waukesha County Fair set an attendance record of 90,000 people.

RECREATIONAL FACILITIES AND TOURISM

In the past, public outdoor recreational facilities have been located primarily in urban areas and designed to be intensively utilized both for active outdoor recreation activities such as baseball, swimming, tennis, and golf, and for passive outdoor recreation activities such as walking, picnicking, and relaxing. Currently, such factors as increased leisure time and the diffusion of urban residential development into otherwise rural areas have increased the demand and need for outdoor recreational areas. Increased interest in relatively new recreational activities such as cross-country skiing, nature study, and camping have generated needs for new types of outdoor recreational facilities and areas, which rely heavily on the use and enjoyment of the underlying and sustaining natural resource base. The provision of high-quality recreational facilities in a manner which provides for the protection and wise use of the natural resource base is, therefore, important to the economic development of the County.

Existing public and private outdoor recreation sites are well distributed throughout Waukesha County. The public outdoor recreation sites in Waukesha County are primarily general-use outdoor recreation sites and rural open space sites. Public general-use outdoor recreation sites comprise areas of land and water whose primary function is the provision of space and facilities for outdoor recreation. Public rural open space sites comprise woodlands, wetlands, wildlife habitat, or related areas owned by agencies of government for the purpose of preserving such lands in an essentially natural, open state.

The general-use outdoor recreation sites in Waukesha County are primarily concentrated in the urban growth centers of the County and are comprised of regional, multi-community, community, and neighborhood parks. Regional park sites, like Nagawaukee Park in the Cities of Delafield and Pewaukee, typically are 250 or more acres in area, have a multi-county service area, and rely heavily for their recreational value and character on natural resource amenities. Multi-community park sites, like Muskego Park in the City of Muskego,

typically range from 100-249 acres in size and provide facilities such as picnic areas, hiking and ski-touring trails, ice skating rinks, playfields, and nature study areas. Community park sites, like Calhoun Park in the City of New Berlin, typically range from 25 to 100 acres in size and provide facilities such as swimming pools, tennis courts, nature study areas, playfields, and passive activity areas. Neighborhood park sites, like Westover Park in the City of Oconomowoc, are typically less than 25 acres in size and provide picnic areas, playfields, tennis courts, basketball goals, and passive activity areas.

Natural area sites are land or water areas which encompass a variety of natural resource elements such as wetlands, forests, and scientific sites. In Waukesha County, natural areas provide over 19,000 acres of public park and open space sites--including the significant natural areas of the Kettle Moraine State Forest--Southern Unit and the Vernon Marsh Wildlife Area.

Special-use recreation sites provide for spectator or participant activities. An example of spectator-oriented recreation sites in Waukesha County is the Waukesha County fairgrounds and Exposition Center located in the City of Pewaukee. Sites which provide facilities for unique recreational pursuits include skeet- and trap-shooting areas, miniature golf courses, go-carting tracks, and golf driving ranges. An example of a participant-oriented recreation site is the Waukesha Gun Club located in the City of Pewaukee. In addition, a 98-acre University of Wisconsin Field Station for prairie plants is located on the west side of Waukesha County at the intersection of USH 18 and CTH C in the Town of Ottawa. This biological field station is a special-use site designed for educational and experimental projects concerning the restoration of native prairie plants in Waukesha County.

Waukesha County is ranked third in the State in pure tourism sales. In 1983, pure tourism sales totaled over \$245 million, while pure tourism sales and tourism-sensitive sales together totaled over \$400 million. Hospitality, recreation, and travel employment accounted for about 8,639 jobs, or about 8 percent of total employment. Waukesha County is ranked third out of 72 counties in the State in total receipts of recreation and tourism sales.

Nearby Milwaukee County is the home of the American League's Milwaukee Brewers and the National Basketball League's Milwaukee Bucks. In addition, the National Football League's Green Bay Packers play a portion of their home games at Milwaukee County Stadium. Sports fans also enjoy the Admirals, a team in the professional International Hockey League, and the Milwaukee Wave, a team in the American Indoor Soccer Association; the Greater Milwaukee Golf Open; Marquette University's basketball team, the Warriors; and the University of Wisconsin Milwaukee's soccer team, the Panthers.

Special attractions located within 20 minutes or less travel time to Milwaukee include the Milwaukee County Zoo, the Mitchell Park Conservatory, the Holiday Folk Fair, Winterfest, Summerfest, and Wisconsin's State Fair--providing opportunities for educational and cultural activities, sight-seeing, and family participation in an attractive setting.

HEALTH CARE FACILITIES AND SERVICES

The Southeastern Wisconsin Health Systems Agency (SEWHSA) is charged with the responsibility of developing a health systems plan for southeastern Wisconsin.

The latest document produced by SEWHSA, entitled Health Systems Plan for Southeastern Wisconsin, 1980-1981, and its subsequent updates and revisions provide direction for increased accessibility and continuity of high-quality health care services which are acceptable to the residents of southeastern Wisconsin at a reasonable cost. Basically, this plan sets forth long-range goals and five-year objectives for the reduction of death and disability and improvements in health service delivery. A detailed health system analysis can be found in the report by SEWHSA.

Hospital and Clinic Facilities and Services

The communities of Waukesha County are served by a full range of health facilities and health professionals. Hospitals in the County are classified into two types: general and special. A general hospital is an establishment that provides--through an organized medical staff--permanent facilities that include inpatient beds, medical services, continuous nursing services, and diagnosis and treatment (both surgical and nonsurgical) for patients who have any of a variety of medical conditions. In Waukesha County there are five hospitals classified as general: Community Memorial Hospital of Menomonee Falls, Elmbrook Memorial Hospital, Memorial Hospital of Oconomowoc, New Berlin Memorial Hospital, and Waukesha Memorial Hospital. Special hospitals have many of the characteristics of general hospitals but provide diagnosis and treatment for patients who have specific medical conditions. Waukesha County has three hospitals classified as special: Kettle Moraine Hospital, Northview Home and Hospital, and Rogers Memorial Hospital. In addition, Waukesha County has eight clinics providing medical care to its residents. Medical clinics are facilities in which several physicians work cooperatively to provide diagnosis and treatment of outpatients. The names and locations of the hospitals and clinics in Waukesha County are listed in Table 18.

Table 18

HOSPITALS AND MEDICAL CLINICS IN WAUKESHA COUNTY

Hospitals and Clinics	Location
Hospitals	
Community Memorial Hospital.....	Village of Menomonee Falls
Elmbrook Memorial Hospital.....	City of Brookfield
Memorial Hospital.....	City of Oconomowoc
New Berlin Memorial Hospital.....	City of New Berlin
Northview Home and Hospital.....	City of Waukesha
Rogers Memorial Hospital.....	City of Oconomowoc
Waukesha Memorial Hospital.....	City of Waukesha
Clinics	
Beaumont Family Medical Clinic.....	City of New Berlin
Brookfield General Clinic.....	City of Brookfield
Falls Medical Group.....	Village of Menomonee Falls
Kettle Moraine Hospital	
Outpatient Clinic.....	City of Waukesha
Medical Associates.....	Village of Menomonee Falls
Moreland Medical Center.....	City of Waukesha
Muskego General Clinic.....	City of Muskego
Southside Medical Clinic.....	City of Waukesha
Wilkinson Clinic.....	City of Oconomowoc

Source: Southeastern Wisconsin Health Systems Agency, Inc., and SEWRPC.

Rehabilitation/Nursing Home Facilities and Services

Waukesha County is served by 17 nursing and rehabilitation facilities, which are listed in Table 19. The facilities provide a range of skilled, intermediate, and personal care for the physically disabled and the aged by licensed personnel. Some of the facilities are equipped for both bed-fast or ambulatory patients and provide rehabilitation therapy programs, as well as planned recreational activities. In addition, the facilities provide a range of services and programs which help residents restore, maintain, and improve their physical, social, emotional, speech, and cultural activity levels.

Physician Facilities and Services

The availability of physicians to diagnose and treat illnesses, to provide preventive care, and to maintain or improve an individual's health are important considerations in economic development decisions. The availability of physicians may be determined by examining the supply of various specialists or groups of specialists. Table 20 presents the number of physicians per 100,000 people by specialty categories for Waukesha County. As shown in the table, there are approximately 98 physicians per 100,000 people in Waukesha County. Of that total, about 23 are general or family practitioners, about 11 practice internal medicine, and about 8 practice general surgery. Table 21 indicates that most county residents are within 30 minutes travel time to a physician. The table also indicates that travel times for county residents traveling to a physician are approximately equal to the average travel times to a physician for the residents of the Region.

LAW ENFORCEMENT AND FIRE PROTECTION SERVICES

This section provides information regarding existing law enforcement agencies and fire departments in Waukesha County. Law enforcement agencies and fire/rescue departments have one common goal--the safety and protection of life and property.

Table 19

REHABILITATION AND NURSING HOMES IN WAUKESHA COUNTY

Rehabilitation and Nursing Homes	Location
Global Medicare Inns, Inc.....	City of Waukesha
Goodwill Industries.....	City of Waukesha
Menomonee Falls Nursing Home.....	Village of Menomonee Falls
Muskego Nursing Home, Inc.....	City of Muskego
Northview Home - Waukesha County.....	City of Waukesha
OMNI - Therapy.....	City of Waukesha
The Ranch Rehabilitation Service.....	Village of Menomonee Falls
Redemptorist Health Care Center.....	City of Oconomowoc
River Hills Nursing Home West.....	Village of Pewaukee
Lutheran Homes of Oconomowoc, Inc.....	City of Oconomowoc
Somed, Inc.....	City of Oconomowoc
The Virginia Nursing Home.....	City of Waukesha
Waukesha Physical Therapy Clinic.....	City of Waukesha
Westmoreland Manor.....	City of Waukesha
Wisconsin Therapy Services.....	City of Waukesha

Source: SEWRPC.

Table 20

**PHYSICIANS PER 100,000 POPULATION BY
SPECIALTY IN WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1978**

Specialty	Waukesha County	Region	Wisconsin	United States ^a
General Practice.....	15	17	20	26 ^b
Family Practice.....	8	7	8	--
Internal Medicine.....	11	23	19	27
Obstetrics-Gynecology....	6	10	8	10
Pediatrics.....	6	10	8	10
Psychiatry.....	6	10	8	13
Radiology/Nuclear Medicine.....	5	10	8	8
General Surgery.....	8	13	11	15
Other Surgery.....	1	6	5	9
Pathology.....	3	6	5	6
Anesthesiology.....	7	8	6	6
Ophthalmology.....	5	6	5	5
Other.....	17	33	26	55
Total	98	159	137	190

^aTemporary foreign physicians are not included in national figures.

^bIncludes general and family physicians.

Source: Southeastern Wisconsin Health Systems Agency, Health Systems Plan for Southeastern Wisconsin, 1980-1981, and SEWRPC.

Law enforcement agencies are concerned with crime detection and prevention. Within the various departments, bureaus are set up which specialize in the various aspects of police work. Table 22 lists the law enforcement agencies in Waukesha County and the various services each agency has to offer. Fire services include fire-fighting service, rescue service, ambulance and medical service, and, most recently, hazardous material incident mitigation. Table 23 lists the fire departments in Waukesha County.

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Fire protection services in a community are evaluated through fire insurance ratings. In Wisconsin, fire insurance ratings for most properties are established by Insurance Services of Wisconsin, a nonprofit agency licensed by the State of Wisconsin. Insurance Services of Wisconsin periodically surveys the fire protection systems of municipalities, evaluates the fire defenses by

Table 21

**PERCENT DISTRIBUTION OF
PERSONS BY TRAVEL TIME TO A
PHYSICIAN WITHIN WAUKESHA
COUNTY AND THE REGION**

Travel Time in Minutes	Region	Waukesha County
0 - 10	45.5	47.3
11-20	37.7	35.3
21-30	11.9	12.2
31-60	4.1	5.1
Over 1 hour	0.8	0.1
Total	100.0	100.0

Source: Southeastern Wisconsin Health Systems Agency, Health Systems Plan for Southeastern Wisconsin, 1980-1981, and SEWRPC.

Table 22

LAW ENFORCEMENT AGENCIES IN WAUKESHA COUNTY

Law Enforcement Agency	Services Offered ^a
Village of Big Bend Police Department.....	A-D
City of Brookfield Police Department.....	A-B-C-D-G-I-K-M
Town of Brookfield Police Department.....	A-D
Village of Butler Police Department.....	A-I
Village of Chenequa Police Department.....	A-I
City of Delafield Police Department.....	A-D-I
Village of Dousman Police Department.....	A
Village of Eagle Police Department.....	A
Village of Elm Grove Police Department.....	A-D-I
Village of Hartland Police Department.....	A-D-I
Village of Lannon Police Department.....	A
Town of Lisbon Police Department.....	A
Village of Menomonee Falls Police Department...	A-B-C-D-G-I-K
Village of Mukwonago Police Department.....	A-B-I
City of Muskego Police Department.....	A-B-C-D-I-K
City of New Berlin Police Department.....	A-B-C-D-I-K-L
Village of North Prairie Police Department.....	A
City of Oconomowoc Police Department.....	A-B-E-G-I-K
Town of Oconomowoc Lake Police Department.....	A-I
Town of Oconomowoc Police Department.....	A-B-E-I
Village of Pewaukee Police Department.....	A-B-E-I
City of Pewaukee Police Department.....	A-I
Town of Summit Police Department.....	A-D-E
City of Waukesha Police Department.....	A-B-C-G-I-K
Waukesha County Sheriff Department.....	A-B-C-D-E-F-G- H-I-J-K-L

^aBureaus within the various law enforcement agencies include:

A-Patrol and Traffic	G-Jail (overnight only)
B-Detectives	H-Jail (long term)
C-Juvenile	I-Records
D-Emergency Medical Technicians	J-Warrants
E-Lake Patrol	K-ID Bureau
F-Civil Process	L-Snow Rescue
	M-Ambulances

Source: Waukesha County Office of Emergency Government and SEWRPC, 1984.

applying a grading schedule, and, based upon the results, places municipalities in one of 10 classes of fire protection. Table 24 shows the fire protection classes of the cities, villages, and towns in Waukesha County.

SERVICES AND FACILITIES FOR THE LOW-INCOME AND SENIOR CITIZEN POPULATIONS IN WAUKESHA COUNTY

A wide range of facilities and services are provided for the low-income and senior citizen populations in Waukesha County. These services and facilities include housing; nutrition sites; education, recreation, and socialization activities; health services; transportation services; welfare benefits; and supportive services such as counseling, home repair, legal services, and referrals. The County Department of Social Services coordinates services available to the low-income population with the services offered by the Waukesha County Department of Aging, responsible for programs serving the County's senior citizens. Specific information on available facilities and services can be obtained by contacting the respective county agency.

Table 23

FIRE DEPARTMENTS IN WAUKESHA COUNTY

Fire Departments
Village of Big Bend Fire Department*
City of Brookfield Fire Department
Town of Brookfield Fire Department*
Village of Butler Fire Department*
Village of Chenequa Fire Department
City of Delafield Fire Department*
Town of Delafield Fire Department*
Village of Dousman Fire Department*
Village of Eagle Fire Department*
Village of Elm Grove Fire Department*
Village of Hartland Fire Department*
Village of Lannon Fire Department*
Town of Lisbon Fire Department*
Village of Menomonee Falls Fire Department*
Village of Merton Fire Department
Village of Mukwonago Fire Department*
City of Muskego Fire Department*
Village of Nashotah Fire Department
City of New Berlin Fire Department*
North Lake Fire Department
Village of North Prairie Fire Department
City of Oconomowoc Fire Department*
Okauchee Fire Department
Village of Pewaukee Fire Department*
Stone Bank Fire Department*
Town of Summit Fire Department*
Village of Sussex Fire Department*
Tess Corners Fire Department*
Village of Wales Fire Department*
City of Waukesha Fire Department*
Town of Waukesha Fire Department*

*Denotes ambulance service is provided.

Source: Waukesha County Office of Emergency
Government and SEWRPC, 1984.

PUBLIC AND PRIVATE FINANCIAL RESOURCE BASE

Public Financial Resource Base

Information pertaining to the availability of public financial resources in Waukesha County is important to the formulation of any sound economic development program. Existing industry, as well as industry that may be expected to locate in the County in the future, will consider the availability of public financial resources and will assess their adequacy for business activity and for meeting the needs of their employees. Consequently, communities that have the financial resources needed can more readily promote the expansion of employment opportunities.

Resources Available for Financing Construction of Community Utilities and Facilities: There are a number of methods by which improvements to community utilities and facilities may be financed in Waukesha County. Each method has its own advantages and disadvantages. The public financial resources available within the individual units of government in Waukesha County are dependent, in part, upon the current fiscal policies of each unit of government, as well as upon the current financial situation in each unit of government.

Table 24

FIRE INSURANCE RATINGS FOR COMMUNITIES IN WAUKESHA COUNTY: 1983

Area	Fire Insurance Rating
Cities	
Brookfield.....	4-9
Delafield.....	9
Muskego.....	9
New Berlin.....	5-9
Oconomowoc.....	5
Pewaukee.....	8-9
Waukesha.....	4
Villages	
Big Bend.....	9
Butler.....	6
Chenequa.....	9
Dousman.....	7
Eagle.....	6
Elm Grove.....	8-9
Hartland.....	6
Lac La Belle.....	9
Lannon.....	9
Menomonee Falls.....	5-9
Merton.....	9
Mukwonago.....	6
Nashotah.....	9
North Prairie.....	9
Oconomowoc Lake.....	9
Pewaukee.....	6
Sussex.....	6
Wales.....	9
Towns	
Brookfield.....	9
Delafield.....	9
Eagle.....	8-9
Genesee.....	9
Lisbon.....	8-9
Merton.....	9
Mukwonago.....	8-9
Oconomowoc.....	9
Ottawa.....	8-9
Summit.....	9
Vernon.....	9
Waukesha.....	8-9

Source: Insurance Services of Wisconsin
and SEWRPC.

Municipalities in Waukesha County have typically utilized general revenues, general obligation bonding, special assessments, and borrowing to finance improvements to municipal utilities and facilities. General revenues tend to be utilized by municipalities on a limited basis, since the property taxes received by a municipality may be expected to vary significantly from year to year, and because the cost of major improvement projects tends to cause relatively large short-term property tax increases to support the additional debt. General obligation bonds are frequently used by municipalities in Waukesha County to finance community utilities and facility improvements. The amount of outstanding bonding indebtedness a municipality may incur is limited by Wisconsin Statutes to not more than 5 percent of the total equalized valuation of all taxable property within the municipality. There is a healthy tendency in Waukesha County communities, as well as in other communities throughout southeastern Wisconsin, to maintain bonded indebtedness levels below the statutory limitations so that bonding capacity is always available for use in an emergency situation. Municipalities in Waukesha County also utilize special assessments to finance community utilities and facilities when the benefit of a project extends over a limited area in a community.

The cost of borrowing or debt financing for a local unit of government is determined, in part, by its credit rating, or bond rating. Moody's Investors Services has rated 15 taxing units in Waukesha County. The bond ratings of these taxing units are indicated in Table 25. Bonds which are rated in the A group are judged to be of high quality by all standards, and together comprise what are generally known as high-grade bonds. The lower-rated B and C groups have a lower margin of protection, a greater fluctuation of protective elements, or other elements present which make the long-term risks appear somewhat larger than in the A securities.

When conventional methods of financing cannot be utilized to finance improvements to community utilities and facilities, certain federal and state programs may be available to finance such projects. The following paragraphs summarize the various federal and state programs available for use in Waukesha County. Many of the programs are already being utilized, to varying degrees, by municipalities in Waukesha County.

Community Development Block Grant Program (CDBG)--A primary source of financing for community utilities and facilities is the Community Development Block Grant program for large and small cities. The Wisconsin Department of Development (DOD) administers the Small Cities Community Development Block Grant program for the U. S. Department of Housing and Urban Development (HUD). Eligible applicants under the program are limited to general-purpose local units of government, including towns, villages, cities, and counties that are not an entitlement city under the program or a part of an eligible urban county. All local governments in Waukesha County except the City of Waukesha

Table 25

**BOND RATINGS OF LOCAL
UNITS OF GOVERNMENT
IN WAUKESHA COUNTY**

Civil Division	Bond Rating
Brookfield (City)	Aa1
Brookfield (Town)	Baa1
Butler (Village)	A
Delafield (City)	A
Hartland (Village)	A
Menomonee Falls (Village)	A1
Mukwonago (Village)	A
Muskego (City)	Baa1
New Berlin (City)	A
North Prairie (Village)	Baa1
Oconomowoc (City)	A1
Pewaukee (Village)	A
Sussex (Village)	A
Waukesha (City)	Aa
Waukesha County	Aa1

Source: Moody's Investors Service, November 1984; and SEWRPC.

are eligible to apply. In order to receive funding, local units of government must compete against other municipalities in the State for the funds through an annual grant competition administered by the DOD. A quantitative scoring system is utilized by the DOD in evaluating the applications. Factors such as need, relationship of the proposed project to existing local economic development policies, and the economic development impact of the proposed project are assessed by the DOD in evaluating an application.

The City of Waukesha in Waukesha County is considered an entitlement city under the CDBG program and, therefore, is not eligible for the Small Cities CDBG program. On an annual basis the City of Waukesha receives funding appropriations that are determined by population, poverty levels, overcrowded housing, and the age of the housing stock. The CDBG program for large cities is administered by the U. S. Department of Housing and Urban Development. The objective of this program is to develop viable urban communities with decent housing and suitable living environments and to expand economic opportunities, principally in low- and moderate-income areas. Funds may be used for a wide range of activities directed toward neighborhood revitalization and economic development, including neighborhood conservation, urban planning, continuing urban renewal projects, and social services. In addition, funds may be provided to local development corporations, and may be used to finance commercial or industrial building construction, and to rehabilitate privately owned properties.

Other activities that are eligible for funding under the CDBG program include: acquisition of real property; acquisition, construction, reconstruction, or installation of public works facilities and other improvements; and the construction of new buildings and rehabilitation of existing buildings. The application process is very competitive, with about one-third of all grant applications receiving approval annually.

Tax Incremental Financing--Tax incremental financing (TIF) is a local financing program authorized by Wisconsin Statutes Section 66.46 that allows a city or village to designate a portion of its area as a tax incremental financing district. At least 50 percent of the property within the district must be blighted, in need of redevelopment, or suitable for industrial sites, and the district must be a continuous geographic area.

Creation of a TIF district allows the municipality to finance urban redevelopment and industrial development projects within the boundaries of a TIF district through the taxes collected on the increase in value of taxable property resulting from the proposed project. The tax collected from the base value of the properties within the district at the time of its creation are distributed among all taxing jurisdictions just as the taxes from property outside the district are distributed. However, the incremental tax revenues received from the increased values of properties within the district, as a result of completed development on them, are allocated to a special fund to be used by the city or village for the payment of costs associated with the completion of projects as listed in the community district project plan. The initial creation of or amendment to a TIF district plan must be approved by a joint review board. This board is made up of representatives from the city or village, the county, the affected school district, and the VTAE districts, in addition to one citizen representative. The TIF district terminates when all costs of all projects are paid or 15 years following the last expenditure identified in the community project plan. In recent years, TIF has been utilized extensively by municipalities in southeastern Wisconsin to finance sanitary sewerage system and water supply system improvements.

U. S. Department of Housing and Urban Development, Urban Development Action Grants--The eligible applicants for Urban Development Action Grants are any city or urban county that meets required criteria demonstrating physical and economic distress and that has a record of providing low- and moderate-income housing and employment programs. Urban Development Action Grant (UDAG) funds may be used for virtually any capital improvement expenditure (e.g., construction, renovation, site work, and capital equipment). UDAG funds may not be used for working capital, retirement of existing debts, operating expenditures, movable equipment, or buy-outs. There are no local units of government eligible for this program in Waukesha County; however, the program should be considered for use if any local units of government in Waukesha County become eligible.

U. S. Department of Agriculture, Farmers Home Administration Programs--The Farmers Home Administration provides community facility loans, and funds for new or improved water and waste disposal systems for rural communities. Eligible applicants for community facility loans in southeastern Wisconsin are public bodies and nonprofit corporations serving the residents in rural communities, including towns with populations under 20,000. Activities that are eligible for these loans include the construction, enlargement, or improvement of community facilities providing essential services to rural areas such as fire protection, health care, industrial parks, and community, social, or cultural services. Applicants eligible for funds for water and waste disposal systems in Waukesha County include public bodies such as municipalities, counties, districts, authorities, or other political subdivisions of the State, and nonprofit organizations in rural areas and towns having less than 10,000 population. Eligible activities include the construction, repair, improvement, expansion, or modification of rural water and waste disposal facilities.

Business Improvement Districts--Chapter 66.608 of the Wisconsin Statutes provides authorization to cities, villages, and towns to create one or more business improvement districts (BID's) to allow businesses within those districts to develop, manage, and promote the districts, and to establish an assessment method to fund these activities. Under the law, an operating plan must be adopted for the redevelopment, maintenance, operation, and promotion of the business improvement district.

U. S. Department of Commerce, Economic Development Administration (EDA)--The U. S. Department of Commerce, Economic Development Administration (EDA), provides grants to eligible local units of government for projects in support of public works and other facility developments which result in the creation of permanent jobs. Also, private businesses can apply to the EDA through local financial institutions for business loan guarantees. Following the approval of this OEDP document by the EDA, local units of government in Waukesha County will be eligible to apply for these grants.

Resources Available for Financing Business Development: Historically, the state and federal governments have made a variety of programs available to eligible local units of government, as well as to business establishments located within such areas, to assist qualifying businesses in expansion projects. Below is information about the business financing programs available in Waukesha County.

Small Business Administration, Section 503: Certified Development Company Program--Certified development companies organized under provisions set

forth by the U. S. Department of Commerce, Small Business Administration, provide long-term, fixed-asset financing for the acquisition of land; building construction, expansion, and renovation; and the purchase of equipment. Loans are usually available for up to 25 years at below-market rates.

Small Cities Community Development Block Grant Program--General-purpose local units of government of less than 50,000 population may apply to the Wisconsin Department of Development for funds to meet the needs of local business. Generally, grants are awarded to the local unit of government, which then lends the money to a business for construction, renovation, or expansion of the building; purchase of lands; or purchase of machinery and equipment. The application process is very competitive, with about one-third of all grant applications receiving approval annually.

U. S. Department of Agriculture, Farmers Home Administration--The U. S. Department of Agriculture, Farmers Home Administration (FmHA), provides loan guarantees for the construction, conversion, and modernization of property; the purchase of land, equipment, and supplies; and working capital. Applicants can include individuals and public and private organizations in any area outside a city of 50,000 population or more and its adjacent urban area having a population density of more than 100 per square mile.

Industrial Revenue Bonds--Industrial revenue bonding is a method of public financing used to assist private industry in the construction, enlargement, or equipping of business and industrial firms. Industrial revenue bonds are issued by a local unit of government, and serve to build the community's industrial base, broaden the property tax base, and provide additional employment opportunities. Industrial revenue bonds are attractive in the bond market because the purchasers of the bond are not required to pay taxes on the interest earned by the bond. Therefore, industrial revenue bonds are not general obligations of the issuing local unit of government. The local unit of government issuing industrial revenue bonds is simply in partnership with the business or industry.

U. S. Department of Commerce, Economic Development Administration--The U. S. Department of Commerce, Economic Development Administration, provides loan guarantees to banks that are making loans to businesses for expansion projects. While no business establishments in Waukesha County are currently eligible for the EDA loan guarantees, the approval of this OEDP document by the EDA will make business establishments eligible throughout Waukesha County.

Urban Development Action Grants (UDAG)--A city designated as eligible by the U. S. Department of Housing and Urban Development can apply for an Urban Development Action Grant which the city can then lend to a private business or developer for such projects as job creation and rehabilitation and/or construction of public, commercial, industrial, and residential structures. Currently, no local units of government in Waukesha County are designated as eligible for this program.

Small Business Development Centers (SBDC's)--The University of Wisconsin system, through its Cooperative Extension Services, has created a number of centers of business management and development assistance at campuses across the State. The centers provide information on sources of business financing, as well as on how to solve business management problems and problems related to new business start-ups. In Waukesha County, those interested in obtaining

information should contact the small business agent at the Cooperative Extension Service's University of Wisconsin-Extension Waukesha County office, located in the County Courthouse buildings in the City of Waukesha.

Small Business Investment Company (SBIC)--The Small Business Investment Company is a privately owned and operated company which has been licensed by the U. S. Department of Commerce, Small Business Administration, to provide equity capital and long-term loans to small businesses. Several licensed SBIC's are located in the Milwaukee metropolitan area and in Madison, Wisconsin.

Job Training Partnership Act (JTPA)--The U. S. Department of Labor provides funding through the Job Training Partnership Act (JTPA) to local private industry councils (PIC's) that provide employment training services to eligible persons. Funding is available for work experience programs whereby a portion of the wages paid to employees by a business is reimbursed by the council. The PIC involved in JTPA activities in Waukesha County is the Waukesha, Ozaukee, and Washington (WOW) Consortium.

Wisconsin Housing and Economic Development Administration (WHEDA)--The Wisconsin Housing and Economic Development Administration provides low-interest financing to businesses and individuals with current annual sales of \$35 million or less through its small enterprise economic development (SEED) program. SEED money can be used for the purchase, expansion, and improvement of land, plants, and equipment, and for depreciable research and development expenditures, so long as such projects result in the creation and maintenance of jobs. Eligible projects include manufacturing establishments, and storage and distribution facilities for manufactured products; national or regional headquarters; retail establishments located in Urban Development Action Grant projects or tax incremental districts; research and development facilities; recreational and tourism facilities; or facilities involving the production of raw agricultural commodities. The SEED program is most useful to firms purchasing existing facilities, to firms located in municipalities which do not offer industrial revenue bond programs, to firms which require fixed-rate, long-term capital, and to credit-worthy firms that cannot find a buyer for their bonds.

Wisconsin Department of Development Technology Development Fund--Funding may be provided to a consortium composed of a company headquartered in Wisconsin and an institution that is part of the University of Wisconsin system or another Wisconsin institution of higher learning. Grants are made in support of research and development for new products.

Private Financial Resource Base

The private financial resource base of Waukesha County primarily consists of banks and savings and loan institutions and venture capital groups. The banks and savings and loan institutions in Waukesha County provide capital, financial operating systems, and technical assistance in financial management to local business and industry. In Waukesha County there are approximately 23 banks with total deposits equaling about \$875,776,000, and 48 savings and loan institutions with total deposits equaling about \$777,089,000.¹ In addition

¹Office of the Commissioner of Banking, 1981; and FSLIC-Insured Savings and Loan Associations, 1982.

to banks and savings and loan institutions, a number of venture capital groups have been formed to assist new businesses in projects that are of high risk, but have the ability to provide long-term, above-average growth potential. Each investment by a venture capital group is individually structured and could include subordinated debt with warrants and/or conversion rights, income participation debentures, preferred stock, and common stock.

Chapter III

A DESCRIPTION OF THE POPULATION, LABOR FORCE, AND ECONOMY OF WAUKESHA COUNTY

INTRODUCTION

Data on the characteristics of the resident population and labor force and on the economic structure of the County are necessary to the preparation of a sound county economic development program. These socioeconomic characteristics serve as indicators of development patterns and trends, and therefore assist in the identification of economic development problems and needs.

POPULATION TRENDS AND CHARACTERISTICS

Data pertaining to the size and distribution of the resident population, and to such population characteristics as age, sex, size of household, educational attainment, and income, are important indicators of economic development patterns and trends. An examination of such data is important in formulating needed economic development efforts in that it helps to identify the local market potential for various consumer products and services; the characteristics of the population available to meet local employment needs; and the present and probable future demands for various community facilities and services placed upon society by different groups of people.

Historical Population Trends

An important factor in the study of an area's population is the examination of its changing size, composition, and spatial distribution over time. Such a time series analysis provides an overview of cumulative population growth, and thereby provides insights important to the proper conduct of a comprehensive economic development planning program. As shown in Table 26, in 1880 about 29,000 persons, or about 10 percent of the then total population of the seven-county Southeastern Wisconsin Region, resided in Waukesha County. During the following 50-year time period, the county population grew to a total of about 52,400 persons, an increase of about 23,400 persons, or 81 percent. This increase in Waukesha County population, however, was less than the increases in population for the Region, the State, and the nation of 263 percent, 123 percent, and 145 percent, respectively. This slight increase in Waukesha County's population is indicative of the largely rural or agricultural character of the County during this period. From 1930 to 1950, the population of the County grew to about 85,900 persons, an increase of about 33,500 persons, or 64 percent. This moderate population growth reflects the availability of mass transit into Waukesha County. This increase was substantially greater than that for the Region, 23 percent; the State, 17 percent; or the nation, 23 percent. From 1950 to 1984, the resident population of Waukesha County grew considerably to about 198,100 persons, or an increase of about 231 percent, largely as a result of post-World War II suburbanization, the extensive use of the automobile, and the construction of IH 94 in Waukesha County. This

increase was also substantially greater than that for the Region, 40 percent; the State, 39 percent; or the nation, 55 percent.

The increase in the resident population of the County, and in the percentage of the regional population, is indicative of recent, significant, geographic population shifts. As shown in Table 27, prior to the 1930 to 1950 time period, the three highly urbanized counties in the Region--Kenosha, Milwaukee, and Racine--showed a continued increase in percentage of regional population. The dispersion of the urban population and decentralization of both work- and leisure-related activities which began in the 1920's and 1930's reversed this trend, however, resulting in significant shifts in the distribution of the population among the Region's seven counties. As shown in Table 27, the most dramatic changes in population distribution from 1950 to 1980 occurred in Milwaukee and Waukesha Counties. The Milwaukee County portion of the total regional population increased by about 6 percent from 1900 to 1930, and then decreased by about 2 percent from 1930 to 1950, and by about 11 percent from 1950 to 1980. In contrast, the Waukesha County portion of the total regional population decreased by approximately 2 percent from 1900 to 1930, and then increased by about 2 percent from 1930 to 1950, and from 1950 to 1980 increased by 9 percent. The large increase in total population in Waukesha County since 1950 has been due, in part, to growth pressure generated by the expansion of the Milwaukee urbanized area into eastern Waukesha County.

Recent changes in the resident population of minor civil divisions within Waukesha County are shown in Table 28. These changes reflect the shifts in the regional distribution of the population and national trends of population movement away from large cities to suburban and rural areas. Between 1960 and 1980, almost all communities in Waukesha County experienced substantial population growth, with the largest increases occurring in the Villages of Dousman, Sussex, and Wales, and in the Towns of Lisbon, Mukwonago, and Vernon. However, from 1980 to 1984, the populations of the minor civil divisions leveled off or decreased, due largely to the national economic recession which greatly affected housing starts.

As shown in Table 29, the population of Waukesha County is becoming increasingly concentrated in the urban areas of the County. In 1880, about 2,969 persons, or about 10 percent of the county population, resided in urban areas; and 25,988 persons, or about 90 percent, resided in rural areas. Between 1880 and 1980 the urban population of the County increased steadily and rapidly. In 1980, 217,952 persons, or about 78 percent of the total county population, were classified as urban, while 62,374 persons, or about 22 percent, were classified as rural. However, from 1970 to 1980, the urban population in Waukesha County decreased by about 2 percent, from about 80 percent in 1970 to about 78 percent in 1980, while the rural nonfarm population increased by about 3 percent, from about 18 percent in 1970 to about 21 percent in 1980. This increase in the rural nonfarm population indicates a trend toward decentralization of the established urban centers.

The rural population of the County is becoming increasingly comprised of non-farm dwellers who are living in scattered locations throughout the rural and rural/urban fringe areas of the County, and who are not involved in typical farming activities. Despite their rural surroundings, these residents require basic urban services and facilities, which are generally costly and inefficient to provide to scattered, isolated residential areas. Moreover, scattered

Table 26

**TOTAL POPULATION IN WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1980-1984**

Year	Population											
	Waukesha County			Region ^a			Wisconsin			United States		
	Population	Change From Preceding Absolute	Census Percent	Population	Change From Preceding Absolute	Census Percent	Population	Change From Preceding Absolute	Census Percent	Population	Change From Preceding Absolute	Census Percent
1880	29,000	--	--	277,100	--	--	1,315,500	--	--	50,155,800	--	--
1890	33,300	4,300	14.8	386,800	109,700	39.6	1,693,300	377,800	28.7	62,947,700	12,791,900	25.5
1900	35,200	1,900	5.7	501,800	115,000	29.7	2,069,000	375,700	22.2	75,994,600	13,046,900	20.7
1910	37,100	1,900	5.4	631,200	129,400	25.8	2,333,900	264,800	12.8	91,972,300	15,977,700	21.0
1920	42,600	5,500	14.8	783,700	152,500	24.2	2,632,100	298,200	12.8	105,710,600	13,738,300	14.9
1930	52,400	9,800	23.0	1,006,100	222,400	28.4	2,939,000	306,900	11.7	122,775,000	17,064,400	16.1
1940	62,700	10,300	19.7	1,067,700	61,600	6.1	3,137,600	198,600	6.8	131,669,300	8,894,500	7.2
1950	85,900	23,200	37.0	1,240,600	172,900	16.2	3,434,600	297,000	9.5	151,325,800	19,656,200	14.9
1960	158,200	72,300	84.2	1,573,600	333,000	26.8	3,952,800	518,200	15.1	179,323,200	27,997,400	18.5
1970	231,300	73,100	46.2	1,756,100	182,500	11.6	4,417,900	465,100	11.8	203,302,000	23,978,900	13.4
1980	280,200	48,900	21.1	1,764,800 ^b	8,800	0.5	4,705,800	287,900	6.5	226,549,400 ^b	23,202,800	11.4
1984	284,000 ^c	3,800	1.4	1,736,500 ^c	-28,400	-1.6	4,774,400 ^c	71,600	1.5	235,110,000	8,605,200	3.8

^aThe Southeastern Wisconsin Region comprises Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties.

^bThis number reflects a revision to the 1980 census.

^cWisconsin Department of Administration 1984 estimates.

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

Table 27

**POPULATION DISTRIBUTION IN THE REGION
BY COUNTY: SELECTED YEARS 1900-1980**

County	1900		1930		1950		1960		1970		1980	
	Population	Percent of Region	Population	Percent of Region	Population	Percent of Region	Population	Percent of Region	Population	Percent of Region	Population	Percent of Region
Kenosha.....	21,707	4.3	63,277	6.3	75,238	6.1	100,615	6.4	117,917	6.7	123,137	7.0
Milwaukee.....	330,017	65.8	725,263	72.1	871,047	70.2	1,036,047	65.8	1,054,249	60.1	964,988	54.7
Ozaukee.....	16,363	3.3	17,394	1.7	23,361	1.9	38,441	2.5	54,461	3.1	66,981	3.8
Racine.....	45,644	9.1	90,217	9.0	109,585	8.8	141,781	9.0	170,838	9.7	173,132	9.8
Walworth.....	29,259	5.8	31,058	3.1	41,584	3.4	52,368	3.3	63,444	3.6	71,507	4.0
Washington....	23,589	4.7	26,551	2.6	33,902	2.7	46,119	2.9	63,839	3.6	84,848	4.8
Waukesha.....	35,229	7.0	52,358	5.2	85,901	6.9	158,249	10.1	231,335	13.2	280,203 ^a	15.9
Region	501,808	100.0	1,006,118	100.0	1,240,618	100.0	1,573,620	100.0	1,756,083	100.0	1,764,796	100.0

^aThis number is a revision of the 1980 U. S. Census.

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

Table 28
POPULATION IN WAUKESHA COUNTY BY CIVIL DIVISION: 1960, 1970, 1980, AND 1984

Civil Division	1960	1970	1980	1984	1960-1970 Change		1970-1980 Change		1960-1980 Change		1960-1984 Change		1980-1984 Change	
					Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Cities														
Brookfield.....	19,812	31,761	34,035	33,387	11,949	60.3	2,274	7.2	14,223	71.8	13,575	68.5	-648	- 1.9
Delafield.....	2,334	3,182	4,083	4,308	848	36.3	901	28.3	1,704	73.0	1,974	84.6	225	5.5
Muskego.....	--	11,573	15,277	15,756	11,573	--	3,704	32.0	--	--	--	--	479	3.1
New Berlin.....	15,788	26,910	30,529	30,448	11,122	70.4	3,619	13.4	14,741	93.4	14,660	92.9	- 81	- 0.3
Oconomowoc.....	6,682	8,741	9,909	9,901	2,059	30.8	1,168	13.4	3,227	48.3	3,219	48.2	- 8	- 0.1
Waukesha.....	30,004	39,695	50,365	51,146	9,691	32.3	10,670	26.9	20,361	67.9	20,361	67.9	781	1.6
Villages														
Big Bend.....	797	1,148	1,345	1,452	351	44.0	197	17.2	548	68.8	655	82.2	107	8.0
Butler.....	2,274	2,261	2,059	2,040	-13	-0.6	-202	-8.9	-215	-9.5	-234	-10.3	- 19	- 0.9
Chenequa.....	445	642	532	499	197	44.3	-110	-17.1	87	19.6	4	0.9	- 33	- 6.2
Dousman.....	410	451	1,153	1,300	41	10.0	702	155.7	743	181.2	890	217.1	147	12.7
Eagle.....	620	745	1,008	1,052	125	20.2	263	35.3	388	62.6	432	69.7	44	4.4
Elm Grove.....	4,994	7,201	6,735	6,180	2,207	44.2	-446	-6.5	1,741	34.9	1,186	23.7	-555	- 8.2
Hartland.....	2,088	2,763	5,559	6,047	675	32.3	2,796	101.2	3,471	166.2	3,959	189.6	488	8.8
Lac La Belle.....	276	227	289	270	-49	-17.8	62	27.3	13	4.7	- 6	- 2.2	- 19	- 6.6
Lannon.....	1,084	1,056	987	997	-28	-2.6	-69	-6.5	-97	-8.9	-87	- 8.0	- 10	- 1.0
Menomonee Falls...	18,276	31,697	27,845	27,093	13,421	73.4	-3,852	-12.2	9,569	52.4	8,817	48.2	-752	- 2.7
Merton.....	407	646	1,045	1,094	239	58.7	399	61.8	638	156.8	687	168.8	49	4.7
Mukwonago.....	1,877	2,367	4,014	4,044	490	26.1	1,647	69.6	2,137	113.9	2,167	115.5	30	0.7
Nashotah.....	321	410	513	527	89	27.7	103	25.1	192	59.8	206	64.2	14	2.7
North Prairie.....	489	669	938	1,016	180	36.8	269	40.2	449	91.8	527	107.8	78	8.3
Oconomowoc Lake...	414	599	524	409	185	44.7	-75	-12.5	110	26.6	- 5	- 1.2	-115	-21.9
Pewaukee.....	2,484	3,271	4,637	4,649	787	31.7	1,366	41.8	2,153	86.7	2,165	87.1	12	0.3
Sussex.....	1,087	2,758	3,482	3,799	1,671	1.5	724	26.3	2,395	220.3	2,712	249.5	317	9.1
Wales.....	356	691	1,992	2,126	335	94.0	1,301	188.3	1,636	459.6	1,770	497.2	134	6.7
Towns														
Brookfield.....	1,990	4,303	4,364	4,394	2,313	116.2	61	1.4	2,374	119.3	2,404	120.8	30	0.7
Delafield.....	2,822	3,750	4,597	4,775	928	32.9	847	22.6	1,775	62.9	1,953	69.2	178	3.9
Eagle.....	1,103	1,250	1,758	1,839	147	13.3	508	40.6	655	59.4	736	66.7	81	4.6
Genesee.....	2,183	3,172	5,126	5,313	989	45.3	1,954	61.6	2,943	134.8	3,130	143.4	187	3.6
Lisbon.....	2,885	4,709	8,352	8,837	1,824	63.2	3,643	77.4	5,467	189.5	5,952	206.3	485	5.8
Merton.....	3,077	4,424	6,025	6,121	1,347	43.8	1,601	36.2	2,948	95.8	3,044	98.9	96	1.6
Mukwonago.....	1,579	1,930	4,979	5,728	351	22.2	3,049	158.0	3,400	215.3	4,149	262.8	749	15.0
Muskego.....	8,888	--	--	--	--	--	--	--	--	--	--	--	--	--
Oconomowoc.....	4,465	6,010	7,340	7,535	1,545	34.6	1,330	22.1	2,875	64.4	3,070	68.8	195	2.7
Ottawa.....	1,092	1,698	2,795	2,928	606	55.5	1,097	64.6	1,703	156.0	1,836	168.1	133	4.8
Pewaukee.....	5,797	7,551	8,922	9,161	1,754	30.3	1,371	18.2	3,125	53.9	3,364	58.0	239	2.7
Summit.....	3,472	3,809	4,050	3,987	337	9.7	241	6.3	578	16.6	515	14.8	- 63	- 1.6
Vernon.....	2,037	2,857	6,372	7,025	820	40.3	3,515	123.0	4,335	212.8	4,988	244.9	653	10.2
Waukesha.....	3,540	4,408	6,668	6,866	868	24.5	2,260	51.3	3,128	88.4	3,326	94.0	198	3.0
Waukesha County	158,249	231,335	280,203^a	284,049	73,086	46.2	48,868	21.1	121,954	77.1	125,800	79.5	3,846	1.4

^aNumber reflects a revision to the 1980 census.

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

Table 29

**URBAN AND RURAL POPULATION IN
WAUKESHA COUNTY: CENSUS YEARS 1880-1980**

Year	Population									
	Urban and Rural Place of Residence									
	Urban		Nonfarm		Farm		Total Rural ^a		Total	
	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population	Number	Percent of Total Population
1880	2,969	10.3	--	--	--	--	25,988	89.7	28,957	100
1890	9,050	27.2	--	--	--	--	24,226	72.8	33,270	100
1900	10,299	29.2	--	--	--	--	24,930	70.8	35,229	100
1910	11,794	31.8	--	--	--	--	25,306	68.2	37,100	100
1920	15,859	37.2	--	--	--	--	26,753	62.8	42,612	100
1930	21,366	40.8	15,770	30.1	15,222	29.1	30,992	59.2	52,358	100
1940	23,804	37.9	22,244	35.5	16,696	26.6	38,940	62.1	62,744	100
1950	29,137	33.9	43,275	50.4	13,489	15.7	56,764	66.1	85,901	100
1960	103,002	65.1	49,268	31.1	5,979	3.8	55,247	34.9	158,249	100
1970	185,524	80.2	41,881	18.1	3,930	1.7	45,811	19.8	231,335	100
1980	217,952	77.7	59,925	21.4	2,449	0.9	62,374	22.3	280,326	100

^a The rural population has been divided into rural farm and rural nonfarm since the 1930 census.

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

urban development in rural areas, unlike planned urban development, lessens the viability of the area for farming; results in deterioration of the natural resource base; and in general lessens the opportunity for an economic base to become established.

Age Composition

Knowledge of the age composition of the population is important to the formulation of a sound, comprehensive, economic development planning program, since age generally governs when a person completes his or her schooling, enters the labor market, marries, begets a family, and retires from the labor force. Since each age group exerts different demands on the County for facilities and services, it is important to know the number of persons currently in each age group. The needs of an older, more mature population are quite different from those of the younger population. Moreover, each group contributes differently to the economic support of society.

Table 30 compares the 1980 age distribution of the population in Waukesha County to the age distribution of the population in the Southeastern Wisconsin Region, Wisconsin, and the United States. As shown in Table 30, the age distribution in Waukesha County is similar to that for the areas of comparison. However, the County has a slight over-representation of the populations in the 5 to 9, 10 to 14, 15 to 19, 30 to 34, 35 to 44, and 45 to 54 age categories. This over-representation is due in part to the importance of in-migration as a component of the County's recent population growth. Persons between 35 and 44 years of age are generally more mobile than are persons in other age categories. Persons in this more mobile age group are more likely to have children in the 5 to 19 year age category, accounting for the over-representation of that age group in the county population. The slight under-representation in the county population of the 20 to 24 and 25 to 29 year age categories may, in part, be the result of the availability of jobs in Milwaukee County. The general similarity of the age distribution in Waukesha County to the age distribution in the Region, State, and nation, however, generally indicates that a relatively good supply of workers of all ages is available in the county labor force.

Table 30

**AGE COMPOSITION OF THE POPULATION IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1980**

Age Group	Population							
	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Under 5	20,054	7.2	128,085	7.3	346,940	7.4	16,348,254	7.2
5-9	22,762	8.1	127,834	7.2	344,804	7.3	16,699,956	7.3
10-14	28,095	10.0	146,252	8.3	392,247	8.3	18,242,129	8.1
15-19	29,532	10.5	168,897	9.6	466,612	9.9	21,168,124	9.3
20-24	20,669	7.4	166,934	9.5	450,026	9.6	21,318,704	9.4
25-29	20,428	7.3	153,984	8.7	401,915	8.5	19,520,919	8.6
30-34	23,893	8.5	134,573	7.6	348,115	7.4	17,560,920	7.8
35-44	38,987	13.9	194,058	11.0	501,973	10.7	25,634,710	11.3
45-54	32,092	11.5	182,119	10.3	452,945	9.6	22,799,787	10.1
55-59	13,116	4.7	90,688	5.1	229,046	4.9	11,615,254	5.1
60-64	9,784	3.5	76,201	4.3	206,947	4.4	10,087,621	4.5
65 and Older	20,914	7.4	195,294	11.1	564,197	12.0	25,549,427	11.3
Total	280,326	100.0	1,764,919	100.0	4,705,767	100.0	226,545,805	100.0
Median Age	29.7	--	29.7	--	29.4	--	30.0	--

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

Table 31

**SEX COMPOSITION OF THE POPULATION IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1980**

Area	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Waukesha County....	139,726	49.8	140,600	50.2	280,326	100.0
Region.....	854,125	48.4	910,794	51.6	1,764,919	100.0
Wisconsin.....	2,305,427	49.0	2,400,340	51.0	4,705,767	100.0
United States.....	110,053,161	48.6	116,492,644	51.4	226,545,805	100.0

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

Table 30 also indicates the median age for the County, Region, State, and nation. The median age for the County and the Region is 29.7 years, which is somewhat lower than that for the United States, but slightly higher than that for the State.

Sex Composition

In most populations, the number of males and females tends to be nearly equal, with males slightly outnumbering females at the younger ages and females slightly outnumbering males at the older ages. Large imbalances in sex composition tend to be unusual and temporary. To the extent that imbalances in sex composition affect social, economic, and community life, a measure of sex composition is important to comprehensive economic development planning.

The population in Waukesha County shows only a slight deviation from the other areas when examining the distribution of the population by sex (see Table 31). In 1980, the resident population of Waukesha County was about 50 percent male and about 50 percent female. As shown in Table 31, females only slightly outnumber males, while in the areas of comparison females outnumber males by a

range of from 2 to 3 percent. The larger percentage of males in the Waukesha County population, when compared to the areas of comparison, to a slight degree affects the size of the county labor force. This is discussed further in this chapter under the section entitled "Labor Force Characteristics."

Racial Composition

The number and type of racial minorities in a population have important implications for an area's economy. Minority residents have traditionally borne the burden of discriminatory policies in housing, education, and employment, and therefore, in many cases, have not had the opportunity to become skilled and experienced members of the labor force.

Table 32 indicates the racial composition of the population in Waukesha County, the Region, Wisconsin, and the United States in 1980. As shown in Table 32, the nonwhite population in Waukesha County, about 2 percent, is less than that in the Region, 12 percent; the State, 6 percent; and the nation, 17 percent. In 1980, the nonwhite population of Waukesha County totaled 4,221 persons. The largest racial minority group in Waukesha County is comprised of persons of the "other" race category, 1,577 persons, or about 1 percent of the total population. Blacks, American Indians, Eskimos, Aleuts, and Asian and Pacific Islanders totaled 2,644 persons, or about 1 percent of the resident population of Waukesha County. Persons of Spanish origin in Waukesha County included approximately 3,998 persons, or about 1 percent of the total population of the County. However, it is important to indicate that the County's population of Spanish origin is concentrated in the City of Waukesha. In 1980, 2,637 persons of Spanish origin, or about 66 percent of the county total, resided in the City of Waukesha. Overall, about 5.2 percent of the City of Waukesha population is of Spanish origin, a greater percentage than that for the Region or the State, and a slightly lower percentage than that for the nation.

Income Characteristics

Income characteristics of families and persons in Waukesha County, the Region, the State, and the nation are shown in Table 33. In 1979, the per capita income in Waukesha County, \$9,211, was greater than that in the Region, \$8,154; Wisconsin, \$7,243; or the nation, \$7,298. The median household income in Waukesha County, \$25,827, was also greater than that in the Region, \$20,096; Wisconsin, \$17,680; or the nation, \$16,841.

Table 34 shows the median and mean household income and per capita income of persons in the civil divisions within Waukesha County. As indicated in Table 34, a number of the older civil divisions in Waukesha County have mean and median household incomes and per capita incomes that are significantly lower than those of the other areas, with the comparison of median incomes of the civil divisions indicative of the relative differences. The City of Oconomowoc has the lowest median income of all the cities in Waukesha County, the Village of Butler has the lowest median income of all the villages, and the Town of Eagle has the lowest median income of all the towns in Waukesha County. The wide range of household incomes in Waukesha County has important implications for countywide economic development. Persons residing in communities with lower household incomes are more likely to be in need of the benefits of economic development activities, including the creation of jobs for the unemployed and the upgrading of jobs for the underemployed.

Table 32

**RACIAL COMPOSITION OF THE POPULATION IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1980**

	White		Black		American Indian Eskimo, Aleut		Asian and Pacific Islander	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Waukesha County....	276,105	98.5	733	0.3	458	0.2	1,453	0.6
Region.....	1,558,076	88.3	167,876	9.5	7,416	0.4	8,919	0.5
Wisconsin.....	4,443,035	94.4	182,592	3.9	29,499	0.6	18,164	0.4
United States.....	188,371,622	83.1	26,495,025	11.7	1,420,400	0.6	3,500,439	1.6

	Other Race ^a		Total Nonwhite		Spanish Origin ^b		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Waukesha County....	1,577	0.5	4,221	1.5	3,998	1.4	280,326	100
Region.....	22,632	1.3	206,843	11.7	46,452	2.6	1,764,919	100
Wisconsin.....	32,477	0.7	262,732	5.6	62,972	1.3	4,705,767	100
United States.....	6,758,319	3.0	38,174,183	16.9	14,608,673	6.5	226,545,805	100

^a Includes races not where else coded in the U. S. Census.

^b The 1980 U. S. Census did not count persons of Spanish origin as a separate race category. Therefore, the Spanish origin category includes persons of Spanish origin who are also included in other race categories.

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

Table 33

**AVERAGE HOUSEHOLD INCOME AND PER CAPITA INCOME
OF PERSONS 15 YEARS AND OLDER IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1979**

Income	Households							
	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
\$0-\$4,999	3,784	4.3	59,308	9.4	181,943	11.0	10,663,441	13.2
\$5,000-\$9,999	6,879	7.8	83,645	13.3	259,020	15.7	12,772,409	15.9
\$10,000-\$14,999	8,089	9.1	82,607	13.1	248,555	15.0	12,342,073	15.3
\$15,000-\$19,999	10,277	11.6	87,216	13.9	249,541	15.1	11,379,049	14.1
\$20,000-\$29,999	26,126	29.5	161,400	25.6	401,832	24.3	17,441,615	21.7
\$30,000-\$39,999	17,230	19.5	87,240	13.9	182,148	11.0	8,582,674	10.7
\$40,000-\$49,999	8,003	9.0	35,701	5.7	68,236	4.1	3,594,101	4.5
\$50,000 and Over	8,153	9.2	32,100	5.1	63,502	3.8	3,692,065	4.6
Median.....	\$25,827	--	\$20,096	--	\$17,680	--	\$16,841	--
Mean.....	\$29,001	--	\$22,756	--	\$20,382	--	\$20,306	--
Per Capita.....	\$ 9,211	--	\$ 8,154	--	\$ 7,243	--	\$ 7,298	--
Total Households	88,552	100.0	627,955	100.0	1,652,261	100.0	80,389,673	100.0

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

Persons in Poverty

Table 35 indicates the number and proportion of noninstitutionalized persons with incomes below the poverty level in 1979 in Waukesha County, the Region, Wisconsin, and the United States. As shown in the table, the proportion of persons below the poverty level in the County is significantly less than the proportions for the Region, the State, and the nation. In 1979, 8,592 persons in Waukesha County, or about 3 percent of the noninstitutionalized population of the County, had incomes below the poverty level, with the Region, State, and nation having percentages of 8, 9, and 12, respectively. As indicated in Table 36, the local governmental units in Waukesha County with the greatest number of persons in poverty include: the City of Waukesha, 2,503 persons, or 29 percent of the county total; the City of Brookfield, 708 persons, or 8 per-

Table 34

**MEDIAN AND MEAN HOUSEHOLD INCOME AND PER
CAPITA INCOME OF PERSONS 15 YEARS AND OLDER
IN WAUKESHA COUNTY CIVIL DIVISIONS: 1979**

Civil Division	Income		
	Median	Mean	Per Capita
Cities			
Brookfield.....	\$32,159	\$37,861	\$11,551
Delafield.....	25,131	29,792	10,456
Muskego.....	25,648	27,610	8,197
New Berlin.....	28,547	30,780	9,359
Oconomowoc.....	20,169	22,035	7,943
Waukesha.....	21,175	22,299	7,898
Villages			
Big Bend.....	\$21,083	\$22,826	\$ 6,646
Butler.....	19,444	20,120	7,918
Chenequa.....	45,833	62,333	20,137
Dousman.....	23,203	23,574	6,507
Eagle.....	22,978	22,856	7,316
Elm Grove.....	38,922	57,108	18,423
Hartland.....	22,255	23,179	7,618
Lac La Belle.....	28,958	36,161	9,514
Lannon.....	20,294	22,709	8,094
Menomonee Falls.....	26,804	28,818	9,097
Merton.....	26,071	27,427	7,739
Mukwonago.....	23,415	23,616	7,641
Nashotah.....	24,583	26,889	8,277
North Prairie.....	22,824	25,094	8,119
Oconomowoc Lake.....	36,884	53,583	16,053
Pewaukee.....	19,773	21,623	8,228
Sussex.....	25,191	25,674	7,719
Wales.....	27,258	28,703	8,089
Towns			
Brookfield.....	\$30,979	\$38,468	\$10,978
Delafield.....	27,381	31,828	9,462
Eagle.....	23,045	23,899	7,310
Genesee.....	28,018	31,829	8,985
Lisbon.....	27,487	29,146	8,492
Merton.....	26,922	33,300	10,464
Mukwonago.....	27,140	28,582	8,130
Oconomowoc.....	24,358	26,696	8,585
Ottawa.....	26,290	27,398	7,889
Pewaukee.....	27,437	28,911	8,434
Summit.....	24,244	28,023	9,135
Vernon.....	26,667	27,861	7,802
Waukesha.....	29,936	32,365	9,595
Waukesha County	\$25,827	\$29,001	\$ 9,211

Source: U. S. Bureau of the Census.

Table 35

**NONINSTITUTIONALIZED PERSONS BELOW THE
POVERTY LEVEL IN 1979 IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES**

Poverty Status	Area							
	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Persons Below the Poverty Level.....	8,592	3.1	136,732	7.9	397,813	8.7	27,392,580	12.4
Total Persons Above and Below the Poverty Level...	275,954	100.0	1,727,257	100.0	4,582,005	100.0	220,845,766	100.0

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

cent; the City of New Berlin, 557 persons, or about 7 percent; the City of Muskego, 417 persons, or 5 percent; and the Villages of Menomonee Falls and Elm Grove with 397 persons and 382 persons, or about 5 percent each.

Household Composition

A household is, by definition, composed of all persons who occupy a group of rooms or a single room which constitutes a housing unit--that is, separate living quarters. A household is a useful unit of analysis for various kinds of market analysis, and for public utility and transportation system planning. All persons not living in households are classified as living in group quarters such as hospitals for the chronically ill, homes for the aged, correctional institutions, college dormitories, and military barracks.

Between 1960 and 1980 the number of households in Waukesha County grew from 42,394 to 88,552, an increase of about 109 percent. During that same period, the number of households in the Region, State, and nation increased about 35 percent, 44 percent, and 52 percent, respectively (see Table 37). Since the rate of household growth was greater than the rate of total population growth during this 20-year period, the number of persons per household declined from 3.66 in 1960 to 3.11 in 1980. This same trend is evident in the Region, State, and nation for the 1960 to 1980 time period, as shown in Table 37.

School Enrollment: Table 38 indicates the number of persons age 5 to 24 years who were enrolled in schools within Waukesha County, the Region, the State, and the nation in 1960, 1970, and 1980. As shown in Table 38, Waukesha County experienced an increase in school enrollment of about 85 percent from 1960 to 1970. The school enrollment increase in Waukesha County during this time period was substantially greater than that for the Region, 37 percent; Wisconsin, 36 percent; or the United States, 32 percent. As shown in Table 38, school enrollments in Waukesha County have decreased slightly, while in the Region and State they have declined sharply since 1970. In 1980, 78,137 students were enrolled in Waukesha County schools, a decrease of less than 1 percent since 1970. The percentage decline in the County was less than that experienced in the Region,

Table 36

NONINSTITUTIONALIZED PERSONS BELOW THE POVERTY LEVEL IN WAUKESHA COUNTY CIVIL DIVISIONS: 1979

Civil Division	Persons Below the Poverty Level	
	Number	Percent
Cities		
Brookfield.....	708	8.2
Delafield.....	173	2.0
Muskego.....	417	4.8
New Berlin.....	557	6.5
Oconomowoc.....	281	3.3
Waukesha.....	2,503	29.1
Villages		
Big Bend.....	61	0.7
Butler.....	94	1.1
Chenequa.....	29	0.3
Dousman.....	51	0.6
Eagle.....	39	0.5
Elm Grove.....	382	4.5
Hartland.....	166	1.9
Lac La Belle.....	41	0.5
Lannon.....	40	0.5
Menomonee Falls.....	397	4.6
Merton.....	21	0.2
Mukwonago.....	106	1.2
Nashotah.....	37	0.4
North Prairie.....	20	0.2
Oconomowoc Lake.....	34	0.4
Pewaukee.....	167	1.9
Sussex.....	95	1.1
Wales.....	40	0.5
Towns		
Brookfield.....	111	1.3
Delafield.....	176	2.0
Eagle.....	118	1.4
Genesee.....	118	1.4
Lisbon.....	248	2.9
Merton.....	131	1.5
Mukwonago.....	62	0.7
Oconomowoc.....	279	3.3
Ottawa.....	109	1.3
Pewaukee.....	240	2.8
Summit.....	169	2.0
Vernon.....	298	3.5
Waukesha.....	74	0.9
Waukesha County	8,592	100.0

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

Table 37

**NUMBER OF HOUSEHOLDS AND PERSONS PER HOUSEHOLD
IN WAUKESHA COUNTY, THE REGION, WISCONSIN,
AND THE UNITED STATES: 1960-1980**

Area	Household			Percent Change			Number of Persons per Household		
	1960	1970	1980	1960-1970	1970-1980	1960-1980	1960	1970	1980
Waukesha County....	42,394	61,935	88,552	46.1	43.0	108.9	3.66	3.66	3.11
Region.....	465,913	536,485	627,955	15.1	17.0	34.8	3.30	3.20	2.75
Wisconsin.....	1,146,040	1,328,804	1,652,261	16.0	24.3	44.2	3.36	3.22	2.77
United States.....	53,023,875	62,874,000	80,389,673	18.6	27.9	51.6	3.33	3.14	2.75

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

Table 38

**SCHOOL ENROLLMENT OF PERSONS 5 TO 24 YEARS OF AGE
IN WAUKESHA COUNTY, THE REGION, WISCONSIN,
AND THE UNITED STATES: 1960-1980**

Area	Total Enrolled in School			Percent Change	
	1960	1970	1980	1960-1970	1970-1980
Waukesha County....	42,443	78,553	78,137	85.1	- 0.5
Region.....	375,665	516,260	432,121	37.4	-16.3
Wisconsin.....	982,588	1,337,797	1,216,384	36.1	- 9.1
United States.....	42,727,632	56,240,936	54,691,023	31.6	- 2.8

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

16 percent; the State, 11 percent; or the nation, 3 percent. These declines in school enrollment have been due, in part, to the tendency for families to have fewer children and the general aging of the County's population.

Educational Attainment: The level of formal education attained is a significant determinant of the social and economic status of the population. For many people, the degree of participation in and understanding of the complex technological changes occurring in society today is directly related to the extent of their formal education. For example, persons with less than a fifth grade education are considered functionally illiterate. Such persons are generally relegated to unskilled jobs in a technologically advancing society and often find themselves part of the unemployed labor force.

Since most required formal education is completed by age 18, educational attainment is most relevant when related to the population 18 years of age and older. Table 39 indicates the educational attainment of this age group in 1980 in Waukesha County, the Region, the State, and the nation. Employers often regard educational attainment as an important aspect of a worker's job readiness and, in most cases, require that a potential employee, at a minimum, complete his or her high school education. In 1980, 42 percent of the individuals in Waukesha County and the State had completed high school, compared to 41 percent in the Region and 36 percent in the nation. In addition, a greater percentage of the Waukesha County population--19 percent--had completed four or more years of college, in comparison to 15 percent in the Region, 12 percent in the State, and 14 percent in the nation. Also, a greater percentage of the population in Waukesha County--39 percent--had completed at least one year of college, in comparison to 32 percent in the Region,

Table 39

**PERSONS 18 YEARS OF AGE AND OLDER BY YEARS OF
SCHOOL COMPLETED IN WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1980**

Education	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Elementary Through High School								
One to Three Years.....	35,967	18.9	350,714	27.8	945,674	28.3	51,697,642	31.8
High School, Four Years....	80,508	42.4	510,428	40.5	1,413,216	42.2	59,069,903	36.3
College								
One to Three Years.....	37,516	19.7	217,090	17.2	548,953	16.4	28,289,943	17.4
Four Years.....	22,926	12.1	108,972	8.6	258,175	7.7	12,939,870	8.0
Five or More Years.....	13,169	6.9	73,601	5.9	180,312	5.4	10,519,122	6.5
Total	190,086	100.0	1,260,805	100.0	3,346,330	100.0	162,516,480	100.0

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

30 percent in the State, and 32 percent in the nation. The educational attainment level of the County's population thus should not present a problem for local employers.

Residential Mobility: Educational and occupational status, together with age, sex, and marital status, are prime determinants of mobility. In the course of any one year, about 18 percent of the nation's population is likely to move from one house to another. However, some of these moves are made by the same persons more than once. These moves are represented simply by the term residential mobility. Some of these moves are made within the same county, some are made from one county to another, and some from one state to another. Intercounty and interstate moves are termed migratory, while the others are considered local or nonmigratory moves.

As shown in Table 40, the 1970 and 1980 Waukesha County population included an identical percentage of nonmovers, 56 percent. In addition, in 1980 the County and the Region had an identical percentage of nonmovers, and the County had a smaller percentage of nonmovers than did the State, 60 percent, and the nation, 54 percent. However, Waukesha County had a smaller percentage of local movers, 18 percent, than did the Region, 28 percent, the State, 24 percent, and the nation, 25 percent, and a larger percentage of migratory movers, or persons who previously resided in a different county, 25 percent, than did the Region, 15 percent, the State, 16 percent, and the nation, 20 percent.

Components of Population Change

Population increases result from births and in-migration; population decreases result from deaths and out-migration. Thus, population change is not a simple phenomenon, but is comprised of four components: fertility (births); mortality (deaths); in-migration (inflows); and out-migration (outflows). The balance between births and deaths is termed "natural increase" and the balance between in-migration and out-migration is termed "net migration."

Natural Increase and Net Migration: Table 41 indicates the population changes occurring in Waukesha County, the Region, the State, and the nation from 1960 to 1980 due to natural increase and net migration. As shown in Table 41, Waukesha County experienced a high rate of net in-migration, 13 percent, between 1970 and 1980, and a higher rate, 30 percent, from 1960 to 1970.

Table 40

**RESIDENTIAL MOBILITY OF THE POPULATION 5 YEARS OF AGE
AND OLDER IN WAUKESHA COUNTY, THE REGION, WISCONSIN, AND
THE UNITED STATES BETWEEN 1965 AND 1970 AND 1975 AND 1980**

Area and Time Period	Nonmovers		Local Movers		Migratory Movers		Abroad		Moved--No Report on Last Residence		Total Population
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
Waukesha County 1965-1970 1975-1980	119,029 146,066	56.5 56.1	31,170 47,055	14.8 18.1	49,141 65,581	23.3 25.2	864 1,456	0.4 0.6	10,321 N/A	5.0 N/A	210,525 260,158
Region 1965-1970 1975-1980	896,919 913,195	56.0 55.8	398,447 458,044	24.9 28.0	206,891 253,045	12.9 15.4	10,452 13,449	0.6 0.8	90,072 N/A	5.6 N/A	1,602,781 1,637,733
Wisconsin 1965-1970 1975-1980	2,332,293 2,451,424	57.8 59.5	896,232 1,111,150	22.2 23.6	600,345 767,649	14.9 16.3	23,443 29,401	0.6 0.6	183,479 N/A	4.5 N/A	4,035,792 4,359,624
United States 1965-1970 1975-1980	98,563,661 112,695,416	53.0 53.5	43,356,797 52,749,574	23.3 25.1	31,736,866 40,946,465	17.1 19.5	2,696,618 3,931,836	1.4 1.9	9,740,880 N/A	5.2 N/A	186,094,822 210,323,291

NOTE: N/A indicates data are not available and are not expected to become available.

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

Table 41

**RATES OF POPULATION CHANGE, NATURAL INCREASE,
AND NET MIGRATION FOR WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1960-1980**

Area	1960-1970			1970-1980		
	Population Change	Natural Increase	Net Migration	Population Change	Natural Increase	Net Migration
Waukesha.....	46.2	16.2	30.0	21.2	7.8	13.2
Region.....	11.6	12.9	-1.3	0.5	6.4	- 5.9
Wisconsin.....	11.8	11.8	0.0	6.5	6.2	0.3
United States....	13.3	11.5	1.8	11.4	5.9	5.5

Source: U. S. Bureau of the Census, Wisconsin Department of Health and Social Services,
and SEWRPC.

The Waukesha County rate of in-migration during this time period was substantially greater than the in-migration experienced in Wisconsin, 0.3 percent; and the nation, 6 percent.

The high rate of net in-migration to Waukesha County was the primary reason for the continued rapid increase in the county population from 1970 to 1980. The net in-migration of 13 percent in addition to the natural increase in the County's population, 8 percent, resulted in a total population increase of 21 percent. This in-migration is indicative of the process of suburbanization in Waukesha County that also continues to be an important factor in metropolitan development patterns in the United States.

Population Projections

The preparation of population projections for Waukesha County is a particularly difficult task, fraught with uncertainties and subject to periodic revision as new information becomes available. The population projections presented in this report were developed using the cohort survival technique and are based on a series of assumptions concerning the behavior of regional age-specific fertility, mortality, and migration rates over time.¹ Three different projections were made, using different combinations of assumed fertility, mortality, and migration rates, in an attempt to ascertain the probable size of the population of the Region and the County under a range of possible future conditions. Age-sex-race-specific rates were developed. These sets of conditions, or alternative futures, are intended to represent consistent, reasonable scenarios of future change.

The alternative futures approach was applied in three phases. The first phase consisted of the development of alternative future scenarios consisting of factors which, while operating externally to the Region, affect the growth or decline of the Region. These factors represent variables over which public and private decision-makers within the Region have little or no influence, and to which the Region must therefore respond in the future. Examples of such external factors are the price and availability of energy, and population lifestyles. The second phase consisted of a determination of the amount of regional growth or decline likely under each of the alternative scenarios for the external factors. The third phase consisted of the postulation of alternative land use development patterns to accommodate the change expected under each regional growth scenario.

Population projections for the Region to the year 2010 range from a high of approximately 2,316,100 persons under an optimistic population growth scenario, to about 1,517,100 persons under a pessimistic scenario, with the intermediate level being 1,872,100 persons. These population levels represent an increase of over 31 percent and 6 percent under the optimistic and intermediate projections and a decrease of nearly 15 percent under the pessimistic projection in comparison to the 1980 regional population of 1,764,919 persons. These projected population levels are shown in Table 42.

¹See SEWRPC Technical Report No. 25, Alternative Futures for Southeastern Wisconsin, December 1982, and SEWRPC Technical Report No. 11, The Population of Southeastern Wisconsin (2nd Edition).

Table 42

**ACTUAL AND PROJECTED POPULATION LEVELS IN THE
REGION BY COUNTY: 1980, 1990, 2000, AND 2010**

County	Actual 1980 Population Level	Projected Population Levels					
		Pessimistic		1990 Intermediate		Optimistic	
		Number	Percent	Number	Percent	Number	Percent
Kenosha.....	123,137	109,900	-10.7	117,300	-4.7	135,700	10.2
Milwaukee.....	964,988	861,700	-10.7	924,300	-4.2	964,900	-- ^a
Ozaukee.....	66,981	60,500	-9.7	69,700	4.1	84,000	25.4
Racine.....	173,132	152,900	-11.7	165,200	-4.6	188,400	8.8
Walworth.....	71,507	66,900	-6.4	78,200	9.4	85,600	19.7
Washington....	84,848	78,000	-8.1	97,500	14.9	114,300	34.7
Waukesha.....	280,326	267,700	-4.5	302,000	7.7	353,800	26.2
Region	1,764,919	1,597,600	-9.5	1,754,200	-0.6	1,926,700	9.2

County	Actual 1980 Population Level	Projected Population Levels					
		Pessimistic		2000 Intermediate		Optimistic	
		Number	Percent	Number	Percent	Number	Percent
Kenosha.....	123,137	105,200	-14.6	118,000	-4.2	152,900	24.2
Milwaukee.....	964,988	831,800	-13.8	892,200	-7.5	991,900	2.8
Ozaukee.....	66,981	58,800	-12.2	75,000	12.0	106,200	58.6
Racine.....	173,132	146,800	-15.2	166,000	-4.1	206,000	19.0
Walworth.....	71,507	65,000	-9.1	85,600	19.7	106,200	48.5
Washington....	84,848	75,800	-10.7	104,500	29.1	135,900	60.2
Waukesha.....	280,326	264,400	-5.7	336,000	19.9	424,800	51.5
Region	1,764,919	1,547,800	-12.3	1,782,300	1.0	2,123,900	20.3

County	Actual 1980 Population Level	Projected Population Levels					
		Pessimistic		2010 Intermediate		Optimistic	
		Number	Percent	Number	Percent	Number	Percent
Kenosha.....	123,137	101,800	-17.3	123,300	0.1	166,800	35.5
Milwaukee.....	964,988	818,100	-15.2	911,300	-5.6	1,009,800	4.6
Ozaukee.....	66,981	57,700	-13.9	81,900	22.3	139,000	107.5
Racine.....	173,132	139,600	-19.4	171,800	-0.8	224,700	29.8
Walworth.....	71,507	63,700	-10.9	89,900	25.7	129,700	81.4
Washington....	84,848	74,400	-12.3	116,000	36.7	164,400	93.8
Waukesha.....	280,326	261,800	-6.6	378,000	34.8	481,700	71.8
Region	1,764,919	1,517,100	-14.8	1,872,100	6.1	2,316,100	31.2

^aLess than one-half of 1 percent.

Source: SEWRPC.

Some of the more important changes that may be expected to occur in the coming decades will be an overall decrease in the population in the 0-19-year age group from the 1980 level, and a significant increase in the population 65 years of age and older. The 0-19 age group is expected to include between 25 percent and 23 percent of total residents under all three scenarios in the year 2010, representing a sharp decrease from 1980, when this group represented 32 percent of the total regional population. The retirement age population--those residents 65 years of age and older--is expected to show dramatic increases in 2010 under all three scenarios. This age group is projected to

rise from a 1980 base level of 195,300 persons to 381,000 persons under the optimistic scenario and 261,500 persons under the pessimistic scenario. These figures represent increases of 185,700 and 66,200 persons, respectively, by the year 2010. In that year, approximately 17 percent of the population will fall into that age category under all three scenarios, a substantial increase over the 1980 level of approximately 11 percent.

As indicated in Table 42, Waukesha County's population is projected to increase under both the optimistic and intermediate scenarios, with the total increase reaching approximately 481,700 persons and 378,000 persons, respectively, by 2010. The 201,400-person increase under the optimistic scenario would represent an increase of 72 percent over the projection period, or approximately 2.4 percent per year for 30 years. The 97,700-person increase under the intermediate scenario represents an increase of 35 percent over the projection period, or approximately 1.2 percent per year for 30 years. The population of Waukesha County would decline under the pessimistic scenario, with the total loss reaching approximately 18,500 persons by 2010.

A meaningful comparison of Waukesha County's projected population relative to that of other counties in southeastern Wisconsin is important to understanding the interrelationships of the demographics of the Region's counties. As indicated in Table 42, under the year 2010 intermediate population projection, Milwaukee County and Racine County are the only two counties in the Region that would experience a decline in population. The decline in Milwaukee County's population of about 6 percent and in Racine County's population of about 1 percent are indicative of the continued decline of population in the Region's older and larger urban centers.

As might be expected, the projected population declines in Milwaukee and Racine Counties are accompanied by a relatively large population increase in the counties surrounding the urban counties. Under the year 2010 intermediate population projection, the largest increase in total population is expected to occur in the Counties of Waukesha, 35 percent, Washington, 37 percent, and Walworth, 26 percent, with a smaller increase, 22 percent, expected to occur in Ozaukee County.

LABOR FORCE CHARACTERISTICS

Introduction

The quality and size of a community's labor force are important factors influencing the economic development of an area. The importance of the labor force to private business is indicated in a 1978 report by the U. S. Congressional Budget Office. The report, entitled Barriers to Local Economic Development, stated that for every dollar of value added by business in the United States, 66 cents is spent on labor--nearly four times the expenditure on land, plants, and equipment combined. Consequently, productive labor is an important factor in the locational decisions of businesses and industries. Accordingly, it is important for proponents of economic development in Waukesha County to be concerned with the quality and size of the County's labor force. This section of this chapter presents pertinent information on the County's labor force, including historic trends in the size and composition of the labor force and characteristics of the employed and unemployed segments of the labor force.

Table 43

**COMPARATIVE CIVILIAN LABOR FORCE SIZE IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1960-1980**

Area	Labor Force			Percent Change		
	1960 ^a	1970 ^b	1980 ^b	1960-1970	1970-1980	1960-1980
Waukesha County....	58,216	92,390	142,774	58.7	54.5	145.2
Region.....	636,901	736,078	876,152	15.6	19.0	37.6
Wisconsin.....	1,527,722	1,774,008	2,263,413	16.1	27.6	48.2
United States.....	68,144,079	80,051,046	104,449,817	17.5	30.5	53.3

^aFourteen years of age and older.

^bSixteen years of age and older.

Source: U. S. Bureau of the Census; Wisconsin Department of Industry, Labor and Human Relations; and SEWRPC.

Historical Labor Force Size and Composition

By definition, the labor force of an area consists of all of its residents who are 16 years of age or older who are either employed at one or more jobs or temporarily unemployed.² Historical changes in the size and composition of an area's labor force can indicate change in the economy of the area and population growth or decline, especially in the working age groups, and provide insight into the migration habits and mobility of the population. Table 43 shows the changes that have occurred in the size of the labor force in Waukesha County, the Region, the State, and the United States during the 30-year period from 1950 to 1980.

Table 43 indicates that the labor force in Waukesha County has grown at a substantially greater rate than the labor force of the Region, Wisconsin, and the United States. The labor force in Waukesha County increased from 58,216 workers in 1960 to 142,774 workers in 1980, an overall increase of about 145 percent. The rate of increase from 1970 to 1980 in Waukesha County, 55 percent, was nearly identical to the rate of increase in the 1960's. During the 1960's and 1970's, the growth rate of the Waukesha County labor force was significantly greater than that of all other areas shown in Table 43. From 1960 to 1980, the Waukesha County labor force grew by 145 percent, compared to growth rates of 38 percent in the Region, 48 percent in Wisconsin, and 53 percent in the United States.

A good measure of change in labor force composition is the change in the participation rate. The participation rate compares the size of the labor force to the size of the population of labor force age--that is, the population 16 years of age and older. Table 44 shows the labor force participation rate for Waukesha County, the Region, Wisconsin, and the United States in 1970 and 1980. As indicated in Table 44, the 1980 labor force participation rate in Waukesha County, 70.2, is greater than that for the Region, 65.9; the

²This definition of labor force was first used in the 1970 U. S. Census of Population. Prior to 1970, the labor force was defined as all persons over 14 years of age.

Table 44

**LABOR FORCE PARTICIPATION RATES IN
WAUKESHA COUNTY, THE REGION, WISCONSIN,
AND THE UNITED STATES: 1970 AND 1980**

Area	Rate		Percent Change
	1970	1980	1970-1980
Waukesha County.....	63.0	70.2	11.4
Region.....	61.5	65.9	7.2
Wisconsin.....	59.1	64.1	8.5
United States.....	56.7	61.0	7.6

Source: Wisconsin Department of Industry, Labor and Human Relations and SEWRPC.

Table 45

**AGE COMPOSITION OF THE CIVILIAN LABOR FORCE IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1980**

Area	Civilian Labor Force						Total Civilian Labor Force
	Young Workers 16-19 Years		Mature Workers 20-64 Years		Older Workers 65 Years and Older		
	Number	Percent	Number	Percent	Number	Percent	
Waukesha County....	14,891	10.4	124,806	87.4	3,077	2.2	142,774
Region.....	81,011	9.3	771,655	88.1	23,486	2.6	876,152
Wisconsin.....	212,775	9.4	1,983,263	87.6	67,375	3.0	2,263,413
United States.....	8,148,628	7.8	93,079,934	89.1	3,221,225	3.1	104,449,817

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

State, 64.1; or the United States, 61.0. The percentage point change in the participation rate in Waukesha County from 1970 to 1980, 11.4, is greater than that for the Region, the State, or the nation. The increase in the labor force participation rate in the County is due primarily to the increase in the number of females in the labor force from 1970 to 1980.

Age Composition

The age composition of an area's labor force is significant in that it affects the ability of the labor force to fill a range of expanding employment opportunities. A low ratio of young workers in the labor force may, in part, indicate out-migration from the community, resulting in a potential shortage of workers to fill entry-level and unskilled jobs. A low ratio of mature workers in the labor force indicates that industry may experience difficulty in locating experienced, highly skilled workers.

Table 45 shows the age composition of the civilian labor force in Waukesha County, the Region, Wisconsin, and the United States in 1980. As indicated in Table 45, the age composition of the Waukesha County labor force is similar to the age composition of the compared areas. In 1980, younger workers, or workers 16 to 19 years of age, made up approximately 10 percent of the total civilian labor force, with mature workers, age 20 to 64 years, making up 87 percent of the civilian labor force, and older workers, or workers 65 years of age and older, making up approximately 2 percent of the labor force.

Sex Composition

As previously indicated, the increase in the labor force participation rate in Waukesha County was due primarily to the increase in the number of females in the labor force. Table 46 shows the civilian labor force composition by sex for Waukesha County, the Region, Wisconsin, and the United States for 1960, 1970, and 1980. As indicated in Table 46, the percentage of females in the Waukesha County labor force, 40 percent, is somewhat less than that for the compared areas, 43 percent. However, from 1960 to 1980, the County's female civilian labor force increased by 259 percent, while the County's male civilian labor force increased by only 102 percent. The previously indicated higher overall growth of the County's labor force has also resulted in a higher overall growth in the female portion of the County's labor force in comparison to the growth in other areas. From 1960 to 1980, the female portion of the labor force increased by 84 percent, 102 percent, and 99 percent in the Region, Wisconsin, and the United States, respectively. In addition, the higher rate of growth in the County's total labor force resulted in a substantially greater increase in the number of males in the County's labor force than in the labor force of the Region, State, or nation. From 1960 to 1980, the number of males in the labor force increased by 15 percent in the Region, 23 percent in Wisconsin, and 31 percent in the nation.

Racial Composition

The number of minority labor force members has important implications for an area's economy. As already noted, minority residents have traditionally borne the burden of discriminatory policies in housing, education, and employment, and therefore, in many cases, have not had the opportunity to become skilled and experienced members of the labor force. Consequently, minority residents usually show higher rates of labor force unemployment and underemployment than do nonminority residents. Table 47 shows the comparative labor force composition by race and Spanish origin for Waukesha County, the Region, the State, and United States in 1980. As shown in Table 47, in 1980, a total of 411 county labor force members were black, or less than 1 percent of the County's total labor force. This is a lower percentage than those for the other areas shown in Table 47. In addition, the county labor force included a total of 1,843 workers of Spanish descent, or about 1.3 percent of the total county labor force. The percentage of workers of Spanish descent was greater in the labor force in the County than in the labor force in the State, 1.1 percent; but less than in the labor force in the Region, 2.1 percent; and the nation, 5.7 percent. It is important to indicate that a total of 1,160 workers of Spanish origin, or about 63 percent of all county workers of Spanish origin, resided in the City of Waukesha. The total number of nonwhite workers in the County's labor force should be a cause of concern to local economic development practitioners. Specifically, local economic development efforts should recognize that the lower educational attainment and lack of job experience of many nonwhite workers, and the decentralization of employment opportunities and lack of capital for minority business development, continue to be major obstacles to full labor force participation by minority workers and businesspersons.

Place of Work

The salaries and wages earned by the resident labor force of an area may not, in all cases, be generated within the community of residence. Workers may travel outside the local labor market for employment, especially when a nearby

Table 46

**COMPARATIVE CIVILIAN LABOR FORCE COMPOSITION BY SEX FOR WAUKESHA
COUNTY, THE REGION, WISCONSIN, AND THE UNITED STATES: 1960-1980**

Area	Civilian Labor Force						Percent Change		
	1960 ^a		1970 ^b		1980 ^b		1960- 1970	1970- 1980	1960- 1980
	Number	Percent	Number	Percent	Number	Percent			
Waukesha County									
Male	42,193	72.5	60,200	65.2	85,256	59.7	42.7	41.6	102.1
Female	16,023	27.5	32,190	34.8	57,518	40.3	100.9	78.7	259.0
Total	58,216	100.0	92,390	100.0	142,774	100.0	58.7	54.5	145.2
Region									
Male	430,601	67.6	451,094	61.3	496,957	56.7	4.8	10.2	15.4
Female	206,300	32.4	284,984	38.7	379,195	43.3	38.1	33.1	83.8
Total	636,901	100.0	736,078	100.0	876,152	100.0	15.6	19.0	37.6
Wisconsin									
Male	1,056,747	68.9	1,108,584	62.5	1,299,739	57.4	4.9	17.2	23.0
Female	476,194	31.1	665,424	37.5	963,674	42.6	39.7	44.8	102.4
Total	1,532,961	100.0	1,774,008	100.0	2,263,413	100.0	15.7	27.6	47.6
United States									
Male	45,762,669	67.2	49,549,239	61.9	59,926,488	57.4	8.3	20.9	31.0
Female	22,381,410	32.8	30,501,807	38.1	44,523,329	42.6	36.3	46.0	98.9
Total	68,144,079	100.0	80,051,046	100.0	104,449,817	100.0	17.5	30.5	53.3

^aFourteen years and older.

^bSixteen years and older.

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

Table 47

**COMPARATIVE LABOR FORCE COMPOSITION BY RACE FOR WAUKESHA
COUNTY, THE REGION, WISCONSIN, AND THE UNITED STATES: 1980**

Area	Labor Force Composition									
	Total		Black		American Indian, Eskimo, and Aleut		Asian and Pacific Islander		Spanish Origin ^a	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Waukesha County.....	142,774	100.0	411	0.3	247	0.2	701	0.5	1,843	1.3
Region.....	876,152	100.0	65,245	7.4	3,336	0.4	4,546	0.5	18,407	2.1
Wisconsin.....	2,263,413	100.0	70,789	3.1	11,138	0.5	8,881	0.4	24,459	1.1
United States.....	104,449,817	100.0	10,582,436	10.1	584,479	1.0	1,772,836	1.7	5,992,723	5.7

^aThe 1980 U. S. Census did not count persons of Spanish origin as a separate race category. Therefore, the Spanish origin category includes persons of Spanish origin who are also included in other race categories.

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

Table 48

**PLACE OF WORK FOR THE LABOR FORCE IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1970 AND 1980**

Area and Work Place	1970		1980		Percent Change 1970-1980
	Number	Percent	Number	Percent	
Waukesha County					
All Workers ^a	87,478	100.0	133,867	100.0	--
Worked in County of Residence.....	44,257	50.6	71,334	53.3	2.7
Worked Outside County of Residence....	39,263	44.9	53,249	39.8	-5.1
Place of Work Not Reported.....	3,958	4.5	9,284	6.9	2.4
Region					
All Workers ^a	696,496	100.0	792,356	100.0	--
Worked in County of Residence.....	546,010	78.4	596,573	75.3	-3.1
Worked Outside County of Residence....	109,311	15.7	135,206	17.1	1.4
Place of Work Not Reported.....	41,175	5.9	60,577	7.6	1.7
Wisconsin					
All Workers ^a	1,680,729	100.0	2,016,410	100.0	--
Worked in County of Residence.....	1,344,379	80.0	1,596,400	79.2	-0.8
Worked Outside County of Residence....	230,456	13.7	268,598	13.3	-0.4
Place of Work Not Reported.....	105,894	6.3	151,412	7.5	1.2
United States					
All Workers ^a	76,852,389	100.0	93,915,026	100.0	--
Worked in County of Residence.....	57,464,606	74.8	69,998,780	74.5	-0.3
Worked Outside County of Residence....	13,688,172	17.8	15,626,582	16.6	-1.2
Place of Work Not Reported.....	5,699,611	7.4	8,289,664	8.8	1.4

^aExcludes workers working outside of their state of residence.

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

area offers a wider range of job opportunities or higher wages. Table 48 provides place-of-work information for the labor force of Waukesha County, the Region, the State, and the United States for 1970 and 1980.

As shown in Table 48, in 1980, Waukesha County had a substantially larger percentage of workers whose place of employment was outside the County, almost 40 percent, than did the Region, where 17 percent of all workers worked outside their county of residence; the State, where 13 percent of all workers worked outside their county of residence; and the nation, where 17 percent worked outside their county of residence. However, from 1970 to 1980, Waukesha County showed a decrease of about 5 percent in workers employed outside the County, and a corresponding increase of 3 percent in workers employed within Waukesha County. While the relatively high percentage of workers employed outside Waukesha County results from the traditional concentration of employment opportunities in urban areas, the decrease in the percentage of workers employed outside Waukesha County and the increase in the percentage of workers employed within the County could, in part, indicate the redistribution of jobs within the Region from highly urbanized areas to suburban, rural, and small communities.

Median Earnings and Average Weekly Wages

The salary and wage structure of an area is an important consideration in the locational decision-making of a business enterprise. Unduly high salaries and wages in the labor market area may discourage and, in some cases, prohibit the expansion of employment opportunities. Overall, the wages paid to workers in

Waukesha County are higher than those paid to workers in other areas. Table 49 shows the 1980 median earnings for selected occupational groups in the Milwaukee Standard Metropolitan Statistical Area (SMSA), the State, and the United States. As shown in Table 49, the 1979 median earnings for males were greater in the Milwaukee SMSA, \$19,262, than in Wisconsin, \$17,043; or the nation, \$17,107. The median earnings for females in the Milwaukee SMSA, \$11,135, were greater than for females in Wisconsin, \$9,929; or the United States, \$10,134.

Table 50 shows the average weekly wages by industry for Waukesha County, the Region, and Wisconsin in 1983. The data indicate that the higher weekly wages in Waukesha County occurred in the wholesale trade industry, while the lowest wage in the County occurred in the finance, insurance, and real estate industry.

Industry Distribution

Tables 51 and 52 indicate the industry distribution of the labor force in 1960, 1970, and 1980 in Waukesha County, the Region, Wisconsin, and the United States. As shown in Tables 51 and 52, the Waukesha County labor force is dominated by employment in the manufacturing industry and services industry. In 1980, 41,706 workers, or about 31 percent of the County's labor force, were employed in the manufacturing industry, compared to 29 percent in the State and 22 percent in the nation. However, the percentage of workers in the manufacturing industry was somewhat less in the County than in the Region, 33 percent. Tables 51 and 52 also indicate that in 1980, 32,353 workers, or about 78 percent of the Waukesha County manufacturing labor force, were employed in the durable goods segment of the manufacturing industry, compared to 77 percent in the Region, 67 percent in the State, and 62 percent in the nation.

The services industry in Waukesha County also employs a large number of the County's labor force. In 1980 this industry accounted for 35,157 workers, or about 26 percent of the total civilian labor force in the County, in comparison to 29 percent in the nation, 27 percent in Wisconsin, and 27 percent in the Region.

The concentration of the Waukesha County labor force employment in the manufacturing industry results in a smaller percentage distribution of employment in other industries. In comparison to the United States, the Waukesha County economy shows a smaller percentage of employment in the agricultural-related industries; construction industry; nondurable goods manufacturing industry; transportation, communications, and utilities industry; and public administration industry. The retail trade industry and the finance, insurance, and real estate industry in Waukesha County show a percentage distribution of employment that is similar to that for the nation.

As indicated in Table 52, the percentage distribution of the labor force by industry changed dramatically between 1960 and 1980. The County's manufacturing industry showed the greatest change in the percentage of total employment of all industries. In 1960, the manufacturing industry in the County employed about 38 percent of the total civilian labor force, or 21,269 workers, with approximately 77 percent of the manufacturing workers, or 16,364 workers, employed in the durable goods manufacturing industry. However, in 1980 this industry employed 41,706 workers, or 31 percent of the County's civilian labor force, a decline of about 7 percent from the 1960 figure. While the percentage

Table 49

**COMPARATIVE MEDIAN EARNINGS BY SEX BY OCCUPATIONAL GROUP FOR
THE CIVILIAN LABOR FORCE IN THE MILWAUKEE STANDARD METROPOLITAN
STATISTICAL AREA,^a THE STATE OF WISCONSIN, AND THE UNITED STATES: 1979**

Occupational Category	Milwaukee SMSA		Wisconsin		United States	
	Male	Female	Male	Female	Male	Female
Managerial and Professional Specialty.....	\$23,190	\$14,265	\$21,350	\$12,931	\$22,497	\$13,306
Technical Sales and Administrative Support.....	18,305	10,657	17,148	9,776	17,160	10,042
Service.....	15,215	8,213	13,586	7,667	12,459	7,375
Farming, Forestry, and Fishing.....	13,455	7,218	10,585	4,855	10,234	6,232
Precision Production, Craft, and Repair.....	20,197	12,219	17,596	10,670	17,124	10,439
Operators, Fabricators, and Laborers.....	17,109	11,606	16,035	10,006	15,011	8,841
Transportation and Material Moving.....	18,408	12,548	16,931	10,817	16,013	9,719
Handlers, Equipment Cleaners, Helpers, and Laborers...	15,140	9,906	14,148	9,707	12,535	8,909
Experienced Unemployed not Classified by Occupation...	6,610	7,000	6,902	7,421	7,480	7,198
Total Civilian Labor Force	\$19,262	\$11,135	\$17,043	\$ 9,929	\$17,107	\$10,134

NOTE: This table presents the earnings of individuals who worked year-round, full-time in 1979.

^aMilwaukee Standard Metropolitan Statistical Area includes Milwaukee, Ozaukee, Washington, and Waukesha Counties.

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

Table 50

**COMPARATIVE AVERAGE WEEKLY WAGES BY INDUSTRY FOR
WAUKESHA COUNTY, THE REGION, AND WISCONSIN: 1983^a**

Industry	Waukesha	Region	Wisconsin	County Wages as a Percent of Region Wages	County Wages as a Percent of State Wages
Agriculture, Forestry, and Fishing.....	\$237.94	\$209.11	\$239.87	113.79	99.20
Construction.....	407.52	389.39	389.22	104.66	104.70
Manufacturing.....	440.78	423.35	415.40	104.12	106.11
Transportation, Communications, and Utilities.....	415.37	355.57	408.38	116.82	101.71
Wholesale Trade.....	431.62	353.28	375.57	122.18	114.92
Retail Trade.....	165.04	157.38	159.31	104.87	103.60
Finance, Insurance, and Real Estate....	274.07	283.12	326.27	96.80	84.00
Services.....	258.41	230.29	249.06	112.21	103.75
Total for All Industries	\$333.15	\$319.55	\$316.71	104.26	105.19

^aNumbers reflect an annual average.

Source: Wisconsin Department of Industry, Labor and Human Relations, 1983; and SEWRPC.

Table 51

**CIVILIAN LABOR FORCE BY INDUSTRY IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1960-1980**

Industry	Area Employment											
	1960				1970				1980			
	Waukesha County	Region	Wisconsin	United States	Waukesha County	Region	Wisconsin	United States	Waukesha County	Region	Wisconsin	United States
Agriculture, Forestry, Fishing, and Mining.....	2,717	13,983	171,857	5,003,890	1,835	11,278	114,038	3,471,276	1,849	10,112	121,071	3,941,767
Construction.....	4,373	28,837	71,717	3,815,937	5,775	30,863	85,768	4,572,235	7,222	30,562	94,496	5,739,598
Manufacturing.....	21,269	253,292	483,783	17,513,086	30,265	256,772	528,407	19,837,208	41,706	273,882	602,507	21,914,754
Durable.....	16,364	188,569	303,929	9,828,689	23,473	194,093	346,033	11,741,017	32,353	210,530	402,862	13,479,211
Nondurable.....	4,905	64,723	179,854	7,684,397	6,792	62,679	182,374	8,096,191	9,353	63,352	199,645	8,435,543
Transportation, Communications, and Utilities.....	2,856	35,507	82,269	4,458,147	4,033	37,829	88,885	5,186,101	8,340	50,482	121,035	7,087,455
Wholesale Trade.....	2,110	18,747	40,121	2,212,984	4,679	29,857	59,526	3,133,382	7,674	32,750	79,267	4,217,232
Retail Trade.....	8,241	90,184	217,932	9,579,651	15,581	114,806	279,956	12,239,498	23,263	134,293	348,156	15,716,694
Finance, Insurance, and Real Estate....	1,749	23,001	45,199	2,694,630	3,747	31,746	64,637	3,838,387	7,876	45,844	105,040	5,898,059
Services.....	10,161	104,326	261,332	13,549,947	20,892	168,688	417,637	20,073,860	35,157	223,183	566,874	27,976,330
Public Administration.....	1,641	22,686	51,834	3,202,890	2,712	26,961	64,775	4,201,652	3,240	25,348	76,027	5,147,466
Industry Not Reported ^a	1,469	22,160	42,587	2,608,085	--	--	--	--	--	--	--	--
Total Employment	56,586	612,723	1,468,631	64,639,247	89,519	708,800	1,703,629	76,553,599	136,327	826,456	2,114,473	97,639,355

^aIndustry not reported was an additional category used in the 1960 census.

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

Table 52

**PERCENTAGE OF CIVILIAN LABOR FORCE BY INDUSTRY FOR WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1960, 1970, AND 1980**

Industry	Percentage of Area Employment											
	1960				1970				1980			
	Waukesha County	Region	Wisconsin	United States	Waukesha County	Region	Wisconsin	United States	Waukesha County	Region	Wisconsin	United States
Agriculture, Forestry, Fishing, and Mining.....	4.8	2.3	11.7	6.8	2.1	1.6	6.7	4.5	1.3	1.2	5.7	4.0
Construction.....	7.7	4.7	4.9	5.9	6.5	4.4	5.1	6.0	5.3	3.7	4.5	5.9
Manufacturing.....	37.6	41.3	32.9	27.1	33.8	36.2	31.0	25.9	30.6	33.1	28.5	22.4
Durable.....	76.9	74.5	62.8	56.1	77.6	75.6	65.5	59.2	77.6	76.9	66.9	61.5
Nondurable.....	23.1	25.5	37.2	43.9	22.4	24.4	34.5	40.8	22.4	23.1	33.1	38.5
Transportation, Communications, and Utilities.....	5.0	5.8	5.6	6.9	4.5	5.3	5.2	6.8	6.1	6.1	5.7	7.3
Wholesale Trade.....	3.7	3.1	2.7	3.4	5.2	4.2	3.5	4.1	5.6	4.0	3.7	4.3
Retail Trade.....	14.6	14.7	14.8	14.8	17.4	16.2	16.4	16.0	17.1	16.2	16.5	16.1
Finance, Insurance, and Real Estate.....	3.1	3.8	3.1	4.2	4.2	4.5	3.8	5.0	5.8	5.6	5.0	6.0
Services.....	18.0	17.0	17.8	21.0	23.3	23.8	24.5	26.2	25.8	27.0	26.8	28.7
Public Administration.....	2.9	3.7	3.5	5.0	3.0	3.8	3.8	5.5	2.4	3.1	3.6	5.3
Industry Not Reported ^a	2.6	3.6	3.0	4.9	--	--	--	--	--	--	--	--
Total Employment	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

^aIndustry not reported was an additional category used in the 1960 census.

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

of total workers employed in the manufacturing industry has declined, the economy of the County has become increasingly concentrated in the durable goods manufacturing industry. As indicated previously, the durable goods manufacturing industry employed 77 percent of the manufacturing workers in 1960. However, in 1980, this industry employed about 78 percent of all manufacturing workers, or an increase of 1 percent. The decline in total manufacturing employment and the concurrent increase in durable goods manufacturing employment have important economic development implications for Waukesha County. Traditionally, the county economy has been highly susceptible to declines in national economic activity, showing high unemployment rates for long periods of time during national economic declines due to the concentration of employment in the durable goods manufacturing industry. Although the decline in total manufacturing employment from 1960 to 1980 could lessen the County's susceptibility to national economic conditions, the increasing concentration of the County's economy in the durable goods manufacturing industry, an industry that is very sensitive to national economic swings, may indicate an increasing susceptibility to national economic cycles.

Other county industries that show declines in employment as a percentage of total employment include the agriculture-related and mining industries, a decline of 3.5 percent; the construction industry, a decline of 2.4 percent; and the public administration industry, a decline of 0.5 percent during the 20-year period. The decline in agriculture-related and mining industry employment in the County may be due, in part, to the increasing urbanization of the County. The decline in construction industry employment in the County may be due, in part, to the national economic recession. The decline in public administration industry employment may be due, in part, to recent reductions in funding at the federal, state, and local levels for traditional government services.

The retail trade, finance, insurance, and real estate, and services industries showed the greatest increase in civilian labor force employment from 1960 to 1980 in Waukesha County. The finance, insurance, and real estate industry and the retail trade industry showed modest percentage increases in employment during this time period of 2.7 percent and 2.5 percent, respectively. The services industry, however, showed a dramatic increase in civilian labor force employment during the 20-year period. In 1960, this industry employed approximately 18 percent of all workers residing in Waukesha County. However, in 1980 the services industry employed approximately 26 percent of the total civilian labor force in the County.

Finally, the percentage change in total industry employment in the County from 1960 to 1980, 141 percent, is substantially greater than that in the compared areas, with the Region showing an increase of 35 percent; the State, 44 percent; and the nation, 51 percent (see Table 53). Only the agriculture and forestry, fishing, and mining industries showed a decline--32 percent--in employment in the County during this period. Other industries showed the following increases in employment during this period: finance, insurance, and real estate, 350 percent; wholesale trade, 264 percent; services, 246 percent; transportation, communications, and utilities, 192 percent; retail trade, 182 percent; public administration, 97 percent; manufacturing, 96 percent; and construction, 65 percent. It is interesting to note that the percentage increase in these industries, in all cases, was substantially greater than the increase in the Region, Wisconsin, or the United States.

Table 53

PERCENTAGE CHANGE IN CIVILIAN LABOR FORCE BY INDUSTRY
FOR WAUKESHA COUNTY, THE REGION, WISCONSIN, AND
THE UNITED STATES: 1960-1970, 1970-1980, AND 1960-1980

Industry	Percent Change											
	1960 to 1970				1970 to 1980				1960-1980			
	Waukesha County	Region	Wisconsin	United States	Waukesha County	Region	Wisconsin	United States	Waukesha County	Region	Wisconsin	United States
Agriculture, Forestry, Fishing, and Mining	-32.5	-19.3	-33.6	-30.6	0.8	-10.3	6.2	13.6	-31.9	-27.7	29.6	-21.2
Construction.....	32.1	7.0	19.6	19.8	25.1	-1.0	10.2	25.5	65.1	6.0	31.8	50.4
Manufacturing.....	42.3	1.4	9.2	13.3	37.8	6.7	14.0	10.5	96.1	8.1	24.5	25.1
Durable.....	43.4	2.9	13.9	19.5	37.8	8.5	16.4	14.8	97.7	11.6	32.6	37.1
Nondurable.....	38.5	-3.2	1.4	5.4	37.7	1.1	9.5	4.2	90.7	-2.1	11.0	9.8
Transportation, Communications, and Utilities.....	41.2	6.5	8.0	16.3	106.8	33.4	36.2	36.7	192.0	42.2	47.1	59.0
Wholesale Trade.....	121.8	59.3	48.4	41.6	64.0	9.7	33.2	34.6	263.7	74.7	97.6	90.6
Retail Trade.....	89.1	27.3	28.5	27.8	49.3	17.0	24.4	28.4	182.3	48.9	59.8	64.1
Finance, Insurance, and Real Estate.....	114.2	38.0	43.0	42.4	110.2	44.4	62.5	53.7	350.3	99.3	132.4	118.9
Services.....	105.6	61.7	59.8	48.1	68.3	32.3	35.7	39.4	246.0	113.9	116.9	106.5
Public Administration...	65.3	18.8	25.0	31.2	19.5	-6.0	17.4	22.5	97.4	11.7	46.7	60.7
Industry Not Reported ^a	--	--	--	--	--	--	--	--	--	--	--	--
Total Employment	58.2	15.7	16.0	18.4	52.3	16.6	24.1	27.5	140.9	34.9	44.0	51.1

^aIndustry not reported was an additional category used in the 1960 census.

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

Occupational Distribution

The occupational distribution of the labor force and the overall educational attainment level of the population are indications of the skill level of the labor force. As already noted, the educational attainment of the adult population in Waukesha County is comparable to that of the adult population in the Region, State, and nation, and should not present a significant problem for county employers.

Table 54 indicates the occupational distribution of the Waukesha County labor force in 1980, and provides additional information regarding the skill level of the County's labor force.

Table 54 indicates that, in comparison to the nation, the County's labor force is slightly over-represented in the following occupational categories: 1) managerial and professional occupations--specifically, the executive administrative and managerial occupations; 2) technical, sales, and administrative support occupations--specifically, the sales clerical occupation; and 3) the precision production, craft, and repair occupation. The Waukesha County labor force is, in comparison to the nation, under-represented in the: 1) service occupations; 2) farming, forestry, and fishing occupations; and 3) operators, fabricators, and laborers occupations.

Characteristics of the Unemployed Labor Force

The formulation of a sound economic development program for Waukesha County requires an assessment of the characteristics of the unemployed labor force. The characteristics of the unemployed labor force include the total number of unemployed; the seasonal variations in unemployment; the age, sex, and race of the unemployed labor force; and the number of job applicants versus the number of job openings. Unemployment in Waukesha County may have a number of different causes, including structural unemployment, or unemployment that results from a long-term shift in the demand for the skills attendant to the County's labor force; frictional unemployment, or unemployment that results from short-term irregularities in the demand for labor that are caused by seasonal or short-term product demand variations; cyclical unemployment, or unemployment that is the result of a general downturn in the nation's economy; and discriminatory unemployment that affects various labor force subgroups, such as racial and ethnic minorities and women. Abatement of differing causes of unemployment may require the formulation and implementation of differing sets of actions.

Total Unemployment: The unemployed segment of the labor force is defined as those members of the labor force who: 1) were neither "at work" nor "with a job, but not at work" during the recording period, 2) were looking for work during the previous four-week period, and 3) were available to accept a job. Also counted as unemployed are persons who did not work at all during the recording period and were waiting to be called back to a job from which they had been laid off. Table 55 indicates the total number of unemployed persons in Waukesha County, the Region, Wisconsin, and the United States during 1960, 1970, 1980, and 1984.

Perhaps the single most important indicator of the decline in recent economic conditions in Waukesha County is the County's unemployment rate. As shown in

Table 54

**OCCUPATION OF EMPLOYED PERSONS 16 YEARS OF AGE AND OLDER IN
WAUKESHA COUNTY, THE REGION, WISCONSIN, AND THE UNITED STATES: 1980**

Occupation Group	Waukesha County		Region		Wisconsin		United States	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Managerial and Professional Specialty.....	35,398	26.0	178,498	21.6	424,250	20.0	22,151,648	22.7
Executive, Administrative, Managerial.....	17,926	50.6	81,635	45.7	187,186	44.1	10,133,551	45.7
Professional Specialty.....	17,472	49.4	96,863	54.3	237,064	55.9	12,018,097	54.3
Technical, Sales, Administrative Support.....	43,636	32.0	249,449	30.2	579,351	27.4	29,593,506	30.3
Technicians and Related Support.....	4,385	10.0	25,271	10.1	61,000	10.5	2,981,951	10.1
Sales.....	16,712	38.3	81,057	32.5	191,172	33.0	9,760,157	33.0
Administrative Support, Including Clerical.....	22,539	51.7	143,121	57.4	327,179	56.5	16,851,398	56.9
Service.....	14,657	10.7	110,023	13.3	297,613	14.1	12,629,425	12.9
Private Household.....	296	2.0	2,486	2.3	8,204	2.8	589,352	4.7
Protective Service.....	1,154	7.9	11,721	10.6	25,419	8.5	1,475,315	11.7
Service, except Protective and Household....	13,207	90.1	95,816	87.1	263,990	88.7	10,564,758	83.6
Farming, Forestry, and Fishing.....	1,448	1.1	9,065	1.1	116,130	5.5	2,811,258	2.9
Precision Production, Craft, and Repair.....	18,304	13.4	100,953	12.2	255,333	12.1	12,594,175	12.9
Operators, Fabricators, and Laborers.....	22,884	16.8	178,468	21.6	441,796	20.9	17,859,343	18.3
Machine Operators, Assemblers, Inspectors...	13,136	57.4	109,787	61.5	253,362	57.3	9,084,988	50.9
Transportation and Material Moving.....	5,014	21.9	33,843	19.0	94,180	21.3	4,389,412	24.6
Handlers, Equipment Cleaners, Helpers, and Laborers.....	4,734	20.7	34,838	19.5	94,254	21.4	4,384,943	24.5
Total	136,327	100.0	826,456	100.0	2,114,473	100.0	97,639,355	100.0

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

Table 55

**NUMBER OF UNEMPLOYED IN WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1960, 1970, 1980, AND 1984**

Area	Unemployed								Percent Change		
	1960 ^a		1970 ^b		1980 ^b		1984 ^b		1960- 1970	1970- 1980	1980- 1984
	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
Waukesha County....	1,600	2.8	2,900	3.2	6,500	4.8	9,600	6.4	81.3	124.1	47.7
Region.....	24,174	3.8	27,278	3.7	49,696	5.7	62,900	7.1	12.8	82.2	26.6
Wisconsin.....	59,091	3.9	70,379	4.0	148,940	6.6	184,800	7.6	19.1	111.6	24.1
United States.....	3,504,827	5.1	3,497,447	4.4	6,810,462	6.5	8,523,000	7.5	-0.2	0.2	25.1

^aFourteen years and older.^bSixteen years and older.

Source: U. S. Bureau of the Census; Wisconsin Department of Industry, Labor and Human Relations; and SEWRPC.

Table 55, an annual average of about 9,600 persons were unemployed in Waukesha County in 1984, or an increase of about 48 percent over the number of unemployed in 1980, 6,500 persons. The percentage of unemployed persons in the County in 1984, 6.4 percent, was less than that for the Region, 7.1 percent, the State, 7.6 percent, or the nation, 7.5 percent. In 1980, the County's unemployment rate, 4.8 percent, was also less than that for the Region, 5.7 percent, Wisconsin, 6.6 percent, or the United States, 6.5 percent. This trend of a lower county unemployment rate was also evident in 1960 and 1970, indicating the importance of the most recent change in comparative unemployment rates.

Table 56 shows the monthly unemployment rates in Waukesha County for 1982, 1983, and 1984. As indicated in Table 56, the County does not show the seasonable unemployment problems that are often evident in a local economy and which are commonly the result of employment in the recreation and tourism industry. However, the table does indicate the detrimental effect of the recent economic recession on the County's economy, with increasing monthly unemployment rates in 1982 and the first half of 1983 and declining unemployment rates during the last half of 1983. The comparatively high 1983 unemployment rates in Waukesha County are, in part, cyclical in nature and reflect the national economic recession in the U. S. economy that began in 1979. The County's higher unemployment rates result from the previously noted concentration of county employment in the durable goods manufacturing industry, as well as from the national decline in housing starts that accompanied the national recession and dramatically affected employment in the construction industry. The general improvement in the County's economy can be seen throughout 1984 unemployment numbers. However, the most recent unemployment rates in Waukesha County remain above the 1980 unemployment rates, and substantially above the unemployment rate in 1970. Economic development practitioners in the County should be concerned with the potential for short-term lay-offs in the durable goods manufacturing industry in the County. Durable goods manufacturing firms will often lay-off workers for short periods of time during national economic recessions in order to balance inventories with recent consumer product demand. In addition, the continuation of unemployment rates in the 5 to 7 percent range should be of concern to local economic development practitioners because of the effect of such rates on the economic well-being of the County.

Age of the Unemployed: Table 57 compares the 1980 age distribution of the unemployed labor force in Waukesha County, the Region, the State, and the nation. As indicated in Table 57, the unemployment rate of county workers is greatest in the younger age category of 16 to 19 years--9.9 percent. However, the unemployment rate of younger workers is lower in Waukesha County than in the Region, 11.8 percent; the State, 12.1 percent; and the nation, 14.4 percent. The unemployment rate for the older age category, 65 years and older, is

Table 56

**MONTHLY UNEMPLOYMENT RATES
OF CIVILIAN LABOR FORCE IN
WAUKESHA COUNTY: 1982-1984**

Month	Percent Unemployed		
	1982	1983	1984
January.....	8.3	12.4	8.2
February.....	8.6	12.5	7.9
March.....	9.4	12.6	7.4
April.....	9.4	11.9	6.9
May.....	9.3	10.7	6.3
June.....	9.5	10.3	6.4
July.....	10.0	9.8	6.0
August.....	10.0	9.1	5.6
September.....	9.7	7.9	5.1
October.....	10.3	7.2	5.5
November.....	10.8	7.3	5.2
December.....	11.6	8.0	6.3
Yearly Average	9.8	10.0	6.4

Source: Wisconsin Department of Industry,
Labor and Human Relations, Job
Service Division; and SEWRPC.

greater in Waukesha County, 5.6 percent, than in the Region, 4.0 percent; Wisconsin, 4.8 percent; and the nation, 5.4 percent. However, the number of older workers who are unemployed, 172, is much lower than the number of unemployed younger workers, 1,478, or the number of unemployed mature workers 20 to 64 years of age, 4,797. Finally, the unemployment rate for the mature worker category, 20 to 64 years, of 3.8 percent is the lowest of all age categories in Waukesha County, and is lower than the comparable figure for the nation, 5.9 percent; the Region, 5.1 percent; or the State, 6.1 percent.

Sex of the Unemployed: The employment barriers that are specific to males and females have become more important as the number of females in the labor force has increased. Traditionally, women have entered the labor market having lower educational attainment and less job experience than males. Table 58 indicates the number and unemployment rate of persons by sex in 1960, 1970, and 1980 in Waukesha County and the areas of comparison. The increase in labor force participation by females is evidenced by the increase in the number of unemployed females in the County. From 1960 to 1980, the number of unemployed females increased by about 293 percent, while the number of unemployed males in Waukesha County increased by 297 percent. The increase in the number of unemployed females in Waukesha County during this 20-year time period is greater than the increase in the Region, 118 percent; Wisconsin, 189 percent; or the nation, 139 percent. From 1970 to 1980, the increase in the number of unemployed males in Waukesha County, 137 percent, was also greater than the increase in the number of unemployed females, 90 percent. Once more, the increase in the number of unemployed males in Waukesha County was substantially greater than the increase in the Region, 105 percent, and the nation, 104 percent, and less than the increase in the State, 140 percent.

The dramatic increase in the number of unemployed males in Waukesha County from 1970 to 1980 was due, in part, to the recent national economic recession. Male members of the work force, traditionally employed in the construction and durable goods manufacturing industries, experienced the early effects of the recession in terms of short-term lay-offs, resulting in an increase in the number of unemployed males. Should the existing economic recession continue during the 1980's, or should the County encounter ongoing difficulties in the durable goods manufacturing industry, the number of unemployed males in Waukesha County could become an ongoing problem, especially in the mature worker category.

Race of the Unemployed: Table 59 shows the estimated number of unemployed persons and the unemployment rate for specified racial groups in Waukesha County, the Region, the State, and the United States in 1980. As indicated in the table, the total minority unemployment rate for Waukesha County in 1980, 3.2 percent, is slightly lower than that for nonminorities in the County, 4.5 percent. Comparatively, the minority unemployment rate in Waukesha County is substantially less than that in the Region, 13.1 percent, the State, 13.4 percent, or the nation, 10.9 percent. Of the county minority unemployment rates indicated in Table 59, the unemployment of the American Indian labor force, 8.9 percent, is similar to the unemployment rate for persons of Spanish origin, 7.1 percent; and greater than the unemployment rate for blacks, 2.9 percent, and for Asians and Pacific Islanders, 1.3 percent. Once more, it is important to indicate that the Wisconsin Department of Industry, Labor and Human Relations projects a July 1985 unemployment rate of 14.4 percent for all nonblack minorities in the Milwaukee Standard Metropolitan Statistical Area. Consequently, the unemployment problems of American Indians and persons of Spanish origin are of special significance in Waukesha County.

Table 57

**AGE COMPOSITION OF THE UNEMPLOYED CIVILIAN LABOR FORCE IN
WAUKESHA COUNTY, THE REGION, WISCONSIN, AND THE UNITED STATES: 1980**

Area	Unemployed Civilian Labor Force						Total Unemployed Civilian Labor Force
	Young Workers 16-19 Years		Mature Workers 20-64 Years		Older Workers 65 Years and Older		
	Number	Unemployment Rate	Number	Unemployment Rate	Number	Unemployment Rate	
Waukesha County....	1,478	9.9	4,797	3.8	172	5.6	6,447
Region.....	9,529	11.8	39,225	5.1	942	4.0	49,696
Wisconsin.....	25,680	12.1	120,047	6.1	3,213	4.8	148,940
United States.....	1,175,187	14.4	5,461,984	5.9	173,291	5.4	6,810,462

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

Table 58

**NUMBER OF UNEMPLOYED BY SEX IN WAUKESHA COUNTY,
THE REGION, WISCONSIN, AND THE UNITED STATES: 1960-1980**

Area	Unemployed						Percent Change		
	1960 ^a		1970 ^b		1980 ^b				
	Number	Unemployment Rate	Number	Unemployment Rate	Number	Unemployment Rate	1960-1970	1970-1980	1960-1980
Waukesha County									
Male	1,035	2.5	1,735	2.9	4,110	4.8	67.6	136.9	297.1
Female	595	3.7	1,136	3.5	2,337	4.1	90.9	89.9	292.8
Total	1,630	2.8	2,871	3.1	6,447	4.5	76.1	124.6	295.5
Region									
Male	15,477	3.6	14,998	3.3	30,773	6.2	-3.1	105.2	98.8
Female	8,697	4.2	12,280	4.3	18,923	5.0	41.2	54.1	117.6
Total	24,174	3.8	27,278	3.7	49,696	5.7	12.8	82.2	105.6
Wisconsin									
Male	40,204	3.8	39,379	3.6	94,417	7.3	-2.1	139.8	134.8
Female	18,887	4.0	31,000	4.7	54,523	5.7	64.1	75.9	188.7
Total	59,091	3.9	70,379	4.0	148,940	6.6	19.1	111.6	152.1
United States									
Male	2,295,718	5.0	1,925,485	3.9	3,921,798	6.5	-16.1	103.7	70.8
Female	1,209,109	5.4	1,571,962	5.2	2,888,664	6.5	30.0	83.8	138.9
Total	3,504,827	5.1	3,497,447	4.4	6,810,462	6.5	-0.2	94.7	94.3

^aFourteen years and older.

^bSixteen years and older.

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

Table 59

UNEMPLOYED BY SPECIFIED RACIAL GROUPS IN WAUKESHA COUNTY, THE REGION, WISCONSIN, AND THE UNITED STATES:1980

Area and Racial Group	Total Labor Force	Total Unemployed	Unemployment Rate
Waukesha County			
White.....	140,787	6,336	4.5
Total Minority	1,359	43	3.2
Black.....	411	12	2.9
American Indian ^a	247	22	8.9
Asian and Pacific Islander.....	701	9	1.3
Total Spanish Origin ^b	1,843	130	7.1
Total	142,146	6,379	4.5
Region			
White.....	795,732	39,300	4.9
Total Minority.....	73,127	9,596	13.1
Black.....	65,245	8,938	13.7
American Indian ^a	3,336	389	11.7
Asian and Pacific Islander.....	4,546	269	5.9
Total Spanish Origin ^b	18,407	1,944	10.6
Total	868,859	48,896	5.6
Wisconsin			
White.....	2,163,408	135,643	6.3
Total Minority.....	90,809	12,202	13.4
Black.....	70,789	9,848	13.9
American Indian ^a	11,138	1,794	16.1
Asian and Pacific Islander.....	8,881	560	6.3
Total Spanish Origin ^b	24,459	2,678	10.9
Total	2,254,217	147,845	6.6
United States			
White	89,191,895	5,164,520	5.8
Total Minority.....	12,939,791	1,409,059	10.9
Black.....	10,582,436	1,248,388	11.8
American Indian ^a	584,479	76,865	13.2
Asian and Pacific Islander.....	1,772,876	83,806	4.7
Total Spanish Origin ^b	5,992,723	535,866	8.9
Total	102,131,686	6,573,579	6.4

^aAmerican Indian category also includes Eskimos and Aleutians.

^bThe 1980 U. S. Census did not count persons of Spanish origin as a separate race category. Therefore, the Spanish origin category includes persons of Spanish origin who are also included in other race categories.

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

Job Applicants and Job Openings: The ability of the unemployed to find meaningful employment is related not only to the job experience and education of the job applicant, but to the available job openings by occupation. Table 60 shows the occupational distribution of applicants to the Waukesha County office of the Wisconsin Department of Industry, Labor and Human Relations, Job Service Division and jobs orders received by this office as of September 23, 1984. It is important to indicate that Table 60 represents only those job openings and job applicants reported to the Job Service Division, rather than all job openings and job applicants in the County. As indicated in Table 60, the largest numbers of job openings were in the clerical and sales occupations, 583; the packaging and materials-handling and cleaners occupations, 461; the machine trades occupation, 293; and the agriculture, fishery, and forestry

Table 60

**OCCUPATIONAL DISTRIBUTION OF WAUKESHA COUNTY JOB SERVICE
APPLICANTS AND JOB OPENINGS RECEIVED: SEPTEMBER 23, 1984**

Major Occupational Category	Job Service Applicants	Job Openings	Applicant Surplus	Ratio of Applicants per Opening
Professional, Technical, and Managerial.....	1,592	174	1,418	9.1:1
Clerical and Sales.....	1,920	583	1,337	3.3:1
Service.....	922	268	654	3.4:1
Agricultural, Fishery, Forestry, and Related.....	399	336	63	1.2:1
Machine Trades.....	859	293	566	2.9:1
Structural Work.....	230	56	174	4.1:1
Benchwork.....	889	278	611	3.2:1
Packaging and Materials-Handling and Cleaners.....	649	461	188	1.4:1
Miscellaneous.....	242	165	77	1.5:4
Total	7,702	2,614	5,088	2.9:1

Source: Wisconsin Department of Industry, Labor and Human Relations and SEWRPC.

occupations, 336. In addition, these occupational categories could be interpreted as being the most difficult to fill based upon the ratio of job service applicants to job openings. As indicated in Table 60, the most difficult occupational category in which to locate workers would be the agriculture, fishery, and forestry occupational category, with a ratio of 1.2 applicants for every job opening. Other occupational categories in which employers could have difficulty in locating workers in Waukesha County include the packaging and materials-handling and cleaners occupational category, the machine trades occupational category, and the miscellaneous occupational category. While employers may have difficulty locating workers in these occupational categories, the ratios provided in Table 60 also indicate that workers with the appropriate education, training, and experience looking for employment in these categories may have a greater degree of success than in occupational categories where the ratio of applicants to job openings is much greater than those noted above.

ECONOMIC BASE AND STRUCTURE

The economic base of a community can consist of a variety of activities, including agricultural production; the exploitation of natural resources; the manufacture of products to be exported to regional, national, and international markets; and the performance of certain service activities to regional and national markets. In most cases, the economic base of a community is a combination of these economic activities, and a specialization in any one activity is the result of the availability of local resources, including natural, human, and man-made resources; the proximity of available markets; and the availability and condition of transportation facilities and services. The economic base of a community may change over time as a result of changes in local resources, markets, and transportation facilities and services.

The specific components of an economic development program for Waukesha County must be properly related to the economic base of the County. An analysis of the structure of the county economy can help to identify the relative importance of industry retention and expansion strategies, as well as the most

effective focus for these strategies. Accordingly, it is important for county economic development proponents and practitioners to understand the existing structure of, and recent changes in, the local economy. This section of this chapter presents information on the structure of the Waukesha County economy and on recent changes in that structure, and identifies the major employers in Waukesha County.

Structure of the Waukesha County Economy

Economic activity in Waukesha County can be classified into 10 major industry groups: 1) agriculture, forestry, and fishing; 2) construction; 3) mining; 4) manufacturing; 5) wholesale trade; 6) retail trade; 7) transportation, communications, and utilities; 8) finance, insurance, and real estate; 9) private services; and 10) government services. Table 61 shows the 1982 annual average employment enumerated at the employee's place of work in Waukesha County for each of the major industry groups. As indicated in Table 61, county industry employment totaled about 100,547 in 1982, with employment and, therefore, economic activity in the County heavily concentrated in the manufacturing industry and the services industry.

In 1982, about 29,600 jobs, or about 30 percent of total employment in the County, were in the manufacturing industry, and about 18,900 jobs, or about 19 percent, were in the services industry. Of the total employment in the manufacturing industry in 1982, 72 percent was in the durable goods manufacturing industry and 28 percent was in the nondurable goods manufacturing industry. Table 61 also shows the number of jobs in specific durable and nondurable goods manufacturing industries in Waukesha County. Three specific durable goods industries employ the largest number of workers. The nonelectrical machinery industry employs about 9,800 workers, or about 33 percent of all manufacturing employment, with the electrical equipment industry and the fabricated metal industry employing about 4,100 workers, or about 14 percent, and about 3,300 workers, or about 11 percent, respectively. Regarding the nondurable goods manufacturing industry, the printing and publishing industry employs about 3,700 workers, or about 12 percent; the rubber and miscellaneous plastic industry, 2,000 workers, or about 7 percent; and the food and kindred products industry, 1,500 workers, or about 5 percent.

Waukesha County also shows a high percentage of total employment in the retail trade industry, 17 percent; the government services industry, 11 percent; and the wholesale trade industry, 8 percent. Together, these industries employed about 36,400 workers, or about 36 percent of the total employment in the County.

Industries that show a smaller proportion of total county employment include: transportation and public utilities, 5 percent; construction, about 5 percent; finance, insurance, and real estate, 4 percent; agriculture, forestry, and fishing, 1 percent; and mining, less than 1 percent of total employment.

Those industries that are concentrated in Waukesha County and, therefore, that comprise the most significant aspect of the County's economic base can be identified by comparing the percentage distribution of industry employment in the County to the percentage distribution of industry employment in the United States, Wisconsin, and the Region. This comparison may be accomplished through the use of industry location quotients. An industry location quotient is defined as the ratio of the percentage employment within the County in any

Table 61

**STRUCTURE OF THE WAUKESHA COUNTY ECONOMY AND WAUKESHA LOCATION
QUOTIENTS FOR THE REGION, WISCONSIN, AND THE UNITED STATES: 1982**

Industry	Number and Percent Employment and Location Quotient (L.Q.)										
	United States ^a			Wisconsin			Region			Waukesha County	
	Number	Percent	L.Q.	Number	Percent	L.Q.	Number	Percent	L.Q.	Number	Percent
Agriculture, Forestry, and Fishing.....	1,912	2.0	0.35	13,551	0.7	1.00	2,916	0.4	1.75	730	0.7
Mining.....	1,124	1.2	0.08	1,887	0.1	1.00	277	--	NI	149	0.1
Construction.....	3,875	4.1	1.17	57,122	3.2	1.50	19,830	2.8	1.71	4,830	4.8
Manufacturing.....	18,986	20.4	1.45	498,489	27.6	1.07	220,096	30.7	0.96	29,634	29.5
Durable Goods											
Lumber and Wood Products.....	606	3.2	0.22	18,287	3.7	0.19	1,128	0.5	1.40	225	0.7
Furniture and Fixtures.....	436	2.3	0.22	8,858	1.8	0.28	1,617	0.7	0.71	168	0.5
Stone, Clay, Glass, and Concrete.....	578	3.1	0.68	7,940	1.6	1.31	2,497	1.1	1.91	610	2.1
Primary Metal.....	922	4.9	1.49	19,935	4.0	1.83	11,954	5.4	1.35	2,154	7.3
Fabricated Metal.....	1,437	7.6	1.47	50,901	10.2	1.10	26,466	12.0	0.93	3,325	11.2
Machinery, except Electrical.....	2,274	12.1	2.72	104,091	20.9	1.57	56,902	25.9	1.27	9,754	32.9
Electric and Electronic Equipment....	2,013	10.7	1.30	50,777	10.2	1.36	35,615	16.2	0.86	4,109	13.9
Transportation Equipment.....	1,739	9.3	0.08	29,829	6.0	0.12	18,138	8.3	0.08	199	0.7
Instruments and Related Products.....	912	3.8	0.45	10,621	2.1	0.81	4,851	2.2	0.77	517	1.7
Miscellaneous Manufacturing.....	387	2.1	0.48	10,120	2.0	0.50	4,142	1.9	0.53	284	1.0
Total Durable Goods	11,304	59.5	1.21	311,359	62.5	1.15	163,310	74.2	0.97	21,345	72.0
Nondurable Goods											
Food and Kindred Products.....	1,642	8.7	0.59	62,771	12.6	0.40	18,510	8.4	0.61	1,510	5.1
Textile Mill Products.....	749	4.0	NI	4,035	0.8	NI	694	0.3	NI	NI	NI
Apparel and Other Textile.....	1,163	6.2	0.06	6,388	1.3	0.31	1,925	0.9	0.44	121	0.4
Paper and Allied Products.....	661	3.5	0.63	46,674	9.4	0.23	4,458	2.0	1.10	658	2.2
Printing and Publishing.....	1,269	6.8	1.82	32,501	6.5	1.91	16,055	7.3	1.70	3,659	12.4
Chemicals and Allied Products.....	1,077	5.7	0.16	9,239	1.9	0.47	5,979	2.7	0.33	278	0.9
Petroleum and Coal Products.....	203	1.1	0.27	348	--	NI	143	0.1	3.00	94	0.3
Rubber and Miscellaneous Plastic.....	700	3.7	1.81	16,502	3.3	2.03	5,504	2.5	2.68	1,969	6.7
Leather and Leather Products.....	218	1.2	NI	8,672	1.7	NI	3,518	1.6	NI	NI	NI
Total Nondurable Goods	7,682	40.5	0.69	187,130	37.5	0.75	56,786	25.8	1.09	8,289	28.0
Transportation and Public Utilities....	5,082	5.4	1.00	81,052	4.5	1.20	29,855	4.2	1.29	5,489	5.4
Wholesale Trade.....	5,321	5.7	1.40	96,627	5.3	1.51	39,188	5.5	1.45	8,014	8.0
Retail Trade.....	15,204	16.3	1.03	331,515	18.3	0.92	118,621	16.5	1.02	16,856	16.8
Finance, Insurance, and Real Estate....	5,500	5.9	0.75	95,308	5.3	0.83	44,159	6.2	0.71	4,391	4.4
Services.....	20,415	21.9	0.86	351,575	19.5	0.96	156,483	21.8	0.86	18,932	18.8
Government.....	15,953	17.1	0.67	279,887	15.5	0.74	85,376	11.9	0.97	11,522	11.5

NOTE: Percents less than 1 percent have not been shown.
NI - Not indicated.

^aNumber of employees is shown in thousands.

Source: U. S. Department of Labor, Bureau of Labor Statistics; Wisconsin Department of Industry, Labor and Human Relations; and SEWRPC.

industry to the percentage employment in that industry in a compared area. The resulting ratio, if greater than 1, indicates a higher representation of county employment in the given industry, while a ratio of less than 1 indicates a lower representation of county employment in that industry.

Table 61 also provides a comparison of the 1982 percentage distribution of industry employment in Waukesha County with that of industry employment in the nation, State, and Region, as shown by industry location quotients. While Table 61 presents data for all areas of comparison, the most useful comparison is that of employment in the County with employment in the nation. As indicated in Table 61, a number of the industries previously identified as showing the largest percentage of county employment are over-represented in the County in comparison to the nation and, therefore, comprise the significant aspects of the County's economic base.

As shown in the table, the County's manufacturing industry shows the highest location quotient--1.46--for any major industry group and, therefore, can be identified as the major industry of the County's economic base. However, the nondurable goods manufacturing industry, with a location quotient of 0.68, is not concentrated in the County, while the durable goods manufacturing industries that are concentrated in the County include nonelectrical machinery, with a location quotient of 2.72; primary metals, with a location quotient of 1.49; fabricated metals, with a location quotient of 1.47; and electronic equipment, with a location quotient of 1.30. Specific nondurable goods manufacturing industries that are concentrated in the County include printing and publishing, with a location quotient of 1.82; and rubber and miscellaneous plastics, with a location quotient of 1.81.

An over-concentration of industry employment in any one industry is often detrimental to a community's economy because of that economy's dependence on the industry for its economic well-being. A short- or long-term decline in the demand for the goods and services produced in such an industry would cause large increases in unemployment and poor economic conditions. While the concentration of employment in the County's manufacturing industry and, specifically, the durable goods segment of this industry has been of concern to local economic development practitioners in the County, the County's economic base also shows a concentration of employment in the wholesale trade industry, with a location quotient of 1.40; the construction industry, with a location quotient of 1.14; and the retail trade industry, with a location quotient of 1.03. A major industry group in the County that shows a similar percentage of employment to that industry group in the nation is the transportation and public utilities industry, with a location quotient of 1.00.

Recent Changes in Industry Employment

Over much of the period since its settlement by European immigrants in the early 1800's, the Southeastern Wisconsin Region has been in a favorable position for industrial growth and development. During the past decade, however, there have been signs of a deterioration in the industrial base of the Region. This section of this chapter describes recent economic trends in southeastern Wisconsin and the State of Wisconsin, focusing on the effect of these trends on the Waukesha County economy. This section also describes those national economic trends which significantly affect the County. In addition, this section examines alternative economic growth scenarios for the County, and provides a general assessment of related industrial development needs.

Table 62

ECONOMIC INDICATORS FOR REGIONS OF THE UNITED STATES

Economic Indicator	United States Region ^a							
	Northeast		North-Central		South		West	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Population Change								
1960-1970.	4,383,000	9.8	4,970,000	9.6	7,839,000	14.3	6,785,000	24.2
1970-1980.	74,000	0.2	2,277,000	4.0	12,560,000	20.0	8,334,000	23.9
Net Population Migration								
1970-1980.	-1,917,000	-3.9	-1,429,000	-2.5	7,560,000	12.0	5,023,000	14.4
Per Capita Income Change (constant 1972 dollars)								
1970-1980.	878	18.3	1,080	25.0	1,143	31.1	1,192	26.1
Employment Change: 1970-1980								
Total Employment.	2,122,500	11.0	3,867,600	17.9	8,880,900	39.0	6,214,800	48.4
Manufacturing Employment. . .	-275,300	-4.8	189,100	2.9	1,251,000	23.7	912,700	37.1
Services Employment.	1,406,100	27.8	1,683,800	31.7	2,800,900	47.0	2,011,700	53.9

^a The northeast region includes the States of Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The southern region includes the States of Alabama, Arkansas, Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia, and the District of Columbia. The north-central region includes the States of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The western region includes the States of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Source: U. S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis; U. S. Department of Labor, Bureau of Labor Statistics; and SEWRPC.

National Economic Trends: An understanding of national economic trends can provide important insight into current economic activity patterns in the State and Region. Two national economic trends appear to have a direct bearing on economic activity patterns in the State, the Region, and the County--namely, the changing distribution of economic activity among the various multi-state and urban regions of the nation, and the changing structure of the national economy. The changing distribution of economic activity within the nation is evident in the economic growth indicators presented in Table 62. As indicated in Table 62, the economic growth indicators of the north-central region--which includes Wisconsin--and the northeastern region of the United States, including the relative change in population, personal income, and employment, have consistently lagged behind those of the southern and western regions. Of particular importance is the relative change in employment levels. Total employment in the southern and western regions of the nation increased by 39 percent and 49 percent, respectively, between 1970 and 1980, in comparison to relative increases of 18 percent and 11 percent for the north-central and northeastern regions, respectively. Manufacturing employment increased by 37 percent in the West and 24 percent in the South between 1970 and 1980, but only by 3 percent in the north-central region, and actually decreased by about 5 percent in the northeastern region during this time.

The second recent national economic trend that is important to the economic growth of the Southeastern Wisconsin Region and, therefore, of Waukesha County is the changing structure of the national economy--specifically, the declining importance of the manufacturing industry to employment growth. Growth in manufacturing industries has traditionally been viewed as the most effective means for creating jobs and ensuring long-term economic growth. However, the rate of

increase in manufacturing employment in the nation has declined significantly during the past decade. Nationally, as indicated in Table 53, manufacturing employment, enumerated by the employee's place of residence, increased by only about 13 percent during the 1960's, and by only about 11 percent during the 1970's. As a result, the nation's manufacturing employment declined from about 27 percent of total employment in 1960 to about 22 percent of total employment in 1980.

Basic structural change in the national economy is also evidenced by a shift in the nature of manufacturing activities, with "high technology" industries accounting for a continually increasing portion of all manufacturing jobs. In this regard, it has been estimated that high technology jobs accounted for 69 percent of the total increase in manufacturing jobs in the nation between 1955 and 1979; as a result, high technology industry's share of all manufacturing jobs increased significantly, from 33 percent in 1955 to 40 percent in 1979. The western and New England regions have experienced the highest growth in high technology jobs in recent years, while the Great Lakes region has lagged behind the national average growth rate.³

The foregoing national economic activity trends--particularly the structural change in the economy--may be attributed in part to changing world economic conditions and world markets. American industries face continually increasing competition in markets which the nation once dominated. For example, United States production of steel decreased from 47 percent of world production in 1950 to 20 percent in 1970, and further to only 14 percent in 1980. The domination of the United States in the automobile industry has ended, with Japan producing more passenger cars than were produced by the United States for the first time in 1980. United States domination of the semi-conductor industry, which began with the inception of the industry in the 1950's, is also being challenged by Japan, which accounted for 30 percent of the world market in 1982. Such changes in world markets may be expected to have a strong bearing on the future size and structure of the national economy, as well as the economy of the Southeastern Wisconsin Region and Waukesha County.

Regional and County Economic Trends: A strong manufacturing sector has historically been the cornerstone of the economy of southeastern Wisconsin and Waukesha County and, as previously indicated, manufacturing industry employment still accounts for a large portion of total regional and county employment. The national economic trends described above--namely, the increased

³Joint Economic Committee, Congress of the United States, Location of High Technology Firms and Regional Economic Development, 1982. While recognizing that there is no general agreement on a definition of high technology industries, this study estimates high technology employment levels by analyzing selected Standard Industrial Classification (SIC) groups believed to be representative of high technology industries, including chemicals and allied products (SIC 28); machinery except electrical (SIC 35); electrical and electronic machinery, equipment, and supplies (SIC 36); transportation equipment (SIC 37); and measuring, analyzing, and controlling instruments, photographic, medical, and optical goods, and watches and clocks (SIC 38). It is important to recognize that the Standard Industrial Classification system is not specifically designed to quantify high technology industry employment. Consequently, not all of the jobs in the foregoing SIC groups can rightfully be categorized as high technology jobs and, conversely, these SIC groups do not include all high technology jobs.

competition for economic activity, especially from the southern and western regions, and structural change in the national economy away from traditional manufacturing activities--have particularly important implications for the economy of southeastern Wisconsin because of its high dependence on manufacturing activities.

The examination of trends in the distribution of civilian labor employment presented earlier in this chapter highlighted the significant changes which have taken place in manufacturing employment within the Region and Waukesha County, with such employment declining from 41 percent of total regional employment in 1960 to 33 percent in 1980; and from 39 percent of total county employment in 1960 to 31 percent in 1980. Over the same period, service industry employment within the Region increased 10 percent, from 17 percent in 1960 to 27 percent in 1980; and within Waukesha County from 18 percent in 1960 to 26 percent in 1980, an increase of 8 percent.

Table 63 shows employment by the employee's place of work in 1970 and 1980 for Waukesha County, the Region, the State, and the nation. Employment data by an employee's place of work, versus by an employee's place of residence, provide a better indication of changes in the economic base because they provide a good measure of the actual jobs within the geographic area of concern. The place-of-work employment data shown in Table 63 support the previously discussed changes in the distribution of economic activity in the Region and Waukesha County.

As indicated in Table 63, while the percentage of employment in Waukesha County's manufacturing industry remained basically the same from 1970 to 1980, the percentage of manufacturing employment in the Region declined by about 4 percent; in the State by about 3 percent; and in the nation by about 4 percent. The share of total employment in the County's transportation, communications, and utilities industry and wholesale trade industry increased by about 2 percent each, a larger increase than experienced by these industries in the Region, the State, or the nation. Consequently, based upon the percentage point stabilization in the County's manufacturing industry and the percentage point increase in the County's transportation, communications, and utilities industry and wholesale trade industry, it can be concluded not only that the County's economy is being affected by national economic trends away from manufacturing employment and toward a more diversified industry employment, but that these effects are being felt in Waukesha County to a greater degree than in the compared areas. It should be noted, however, that even though the recent national economic recession has affected the growth of the County's manufacturing industry employment, a recovery by the County's industry should, if it occur, lessen to some degree the change in the structure of the County's economy.

Finally, other changes in the County's economy that are noted in Table 63 include small percentage point declines in employment in the following industries between 1970 and 1980: agriculture; construction; retail trade; and government. During the same time period, percentage point increases occurred in the finance, insurance, and real estate industry and services industry.

A related change in industry employment that should be noted is the overall change in industry employment. As previously noted, recent civilian labor force unemployment rates for Waukesha County, while improving, still averaged about 6 percent. However, the growth in total industry employment in Waukesha

Table 63

**INDUSTRY EMPLOYMENT AND PERCENT CHANGE BY
PLACE OF WORK IN WAUKESHA COUNTY, THE REGION,
WISCONSIN, AND THE UNITED STATES: 1970 AND 1980**

Major Employment Category	1970 Employment by Place of Work							
	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture.....	1,983	2.6	11,939	1.6	150,844	8.2	4,368,000	5.2
Construction.....	5,935	7.8	27,172	3.6	65,480	3.6	3,563,000	4.3
Manufacturing.....	21,559	28.2	252,318	33.5	504,184	27.5	19,410,000	23.1
Transportation, Communi- cations, and Utilities.....	2,077	2.7	36,739	4.9	81,277	4.4	4,510,000	5.4
Wholesale Trade.....	4,075	5.3	35,266	4.7	67,180	3.7	3,806,000	4.5
Retail Trade.....	12,027	15.7	115,741	15.4	270,748	14.7	11,469,000	13.7
Finance, Insurance, and Real Estate.....	1,479	1.9	32,759	4.3	61,636	3.4	3,739,000	4.5
Services.....	11,814	15.5	119,547	15.9	256,248	13.9	13,619,000	16.2
Government ^a	9,265	12.1	83,329	11.0	250,688	13.6	13,088,000	15.6
Nonfarm Properties.....	5,743	7.5	37,193	4.9	123,324	6.7	5,388,000	6.4
Miscellaneous ^b	547	0.7	1,740	0.2	6,087	0.3	928,000	1.1
Total Jobs	76,504	100.0	753,743	100.0	1,837,696	100.0	83,888,000	100.0

Major Employment Category	1980 Employment by Place of Work							
	Waukesha County		Region		Wisconsin		United States	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Agriculture.....	2,048	1.7	12,818	1.5	156,648	7.0	4,107,300	3.9
Construction.....	7,410	6.2	25,816	2.9	70,062	3.1	4,332,000	4.2
Manufacturing.....	33,771	28.3	261,754	29.6	560,200	24.8	20,375,000	19.6
Transportation, Communi- cations, and Utilities.....	5,205	4.3	39,610	4.5	92,625	4.1	5,156,000	5.0
Wholesale Trade.....	8,105	6.8	43,454	4.9	95,946	4.3	5,291,000	5.1
Retail Trade.....	18,352	15.4	131,866	14.9	341,240	15.1	15,086,000	14.5
Finance, Insurance, and Real Estate.....	3,777	3.2	46,403	5.3	96,578	4.3	5,268,000	5.1
Services.....	18,809	15.7	177,971	20.1	384,043	17.0	19,395,000	18.7
Government ^a	12,088	10.1	95,736	10.8	297,972	13.2	16,350,000	15.7
Nonfarm Proprietors.....	9,103	7.6	46,191	5.2	150,995	6.7	7,007,000	6.7
Miscellaneous ^b	794	0.7	2,526	0.3	9,984	0.4	1,594,000	1.5
Total Jobs	119,462	100.0	884,145	100.0	2,256,293	100.0	103,961,300	100.0

Major Employment Category	Percentage Point Change in Industry Employment			
	1970-1980			
	Waukesha County	Region	Wisconsin	United States
Agriculture.....	-0.9	-0.1	-1.2	-1.3
Construction.....	-1.6	-0.7	-0.5	-0.1
Manufacturing.....	0.1	-3.9	-2.7	-3.5
Transportation, Communi- cations, and Utilities.....	1.6	-0.4	-0.3	-0.4
Wholesale Trade.....	1.5	0.2	0.6	0.6
Retail Trade.....	-0.3	-0.5	0.4	0.8
Finance, Insurance, and Real Estate.....	1.3	1.0	0.9	0.6
Services.....	0.2	4.2	3.1	2.5
Government ^a	-2.0	-0.2	-0.4	0.1
Nonfarm Proprietors.....	0.1	0.3	--	0.3
Miscellaneous ^b	--	0.1	0.1	0.4
Total Jobs	--	--	--	--

^aExcludes armed forces.

^bIncludes agricultural services, forestry, commercial fishery, mining, and jobs held by residents working for international organizations.

Source: U. S. Bureau of Economic Analysis and SEWRPC.

County is a strong indicator of the current recovery in civilian labor force unemployment in the County. From 1970 to 1980, total employment increased by about 43,000 workers, with this increase of about 56 percent being more than double the increase in total employment for the Region, 17 percent; Wisconsin, 23 percent; and the nation, 24 percent (see Table 64). The employment growth of individual industry groups in Waukesha County was also encouraging in that nearly every industry in the County showed a larger percentage increase in employment than did the same industry group in the compared areas.

Finally, there has been a significant change in the spatial distribution of economic activity within the Region during the past three decades. Particularly evident is the change in the distribution of jobs, or employment opportunities, provided in the Region, with this change again an indication of the rise in economic conditions in Waukesha County.

Table 64 indicates a general shift in economic activity away from the established urban counties in the Region toward the suburban and rural counties. The most notable changes have occurred in Waukesha and Milwaukee Counties. Waukesha County's share of all jobs in the Region increased dramatically from about 3 percent in 1950 to 14 percent in 1980. Conversely, Milwaukee County's share of all jobs in the Region decreased from 79 percent to 62 percent during the same period.

Future Economic Activity Levels

On a recurring basis the Commission carries out a number of economic studies--including projections of the probable number, types, and spatial distribution

of jobs--pertinent to the proper performance of its primary responsibility to make and adopt an advisory plan for the physical development of the Region. One of these studies is SEWRPC Technical Report No. 10, The Economy of Southeastern Wisconsin (2nd Edition), 1984. The primary purposes of this report are to present the results of a recent reexamination and updating of the economic data contained in previous Commission reports on the regional economy, and to present new projections and forecasts of regional employment levels to the year 2010 as a basis for regional planning efforts. The purpose of this section of the Waukesha County OEDP plan is to summarize those regional forecasts.

As noted previously, an alternative futures approach was utilized in the preparation of regional population projections. Under this approach, a number of futures are chosen to represent a range of conditions which may be expected to occur over the plan design period. This same approach was also utilized in the preparation of regional employment projections.

In the application of the alternative futures approach to employment projection, an effort was made to understand the regional economy by gaining an understanding of the largest industries of the Region. These large important

Table 64

PERCENTAGE DISTRIBUTION OF JOBS BY COUNTY IN THE REGION: 1950-1980

County	Percent of Total Jobs In the Region				Percent Change 1950-1980
	1950	1960	1970	1980	
Kenosha	5.0	6.2	5.3	5.6	0.6
Milwaukee . . .	79.3	75.0	67.3	62.0	-17.3
Ozaukee	1.1	1.5	2.6	2.8	1.7
Racine	7.8	7.5	8.3	8.9	1.1
Walworth	2.2	2.8	3.3	3.6	1.4
Washington . .	1.8	2.2	3.1	3.6	1.8
Waukesha	2.8	4.8	10.1	13.5	10.7
Total	100.0	100.0	100.0	100.0	--

Source: Bureau of Economic Analysis, U. S. Department of Commerce; Wisconsin Department of Industry, Labor and Human Relations; and SEWRPC.

industries were defined as dominant industries. The criteria used to determine industry dominance or subdominance were the same as those used in prior Commission work efforts, with dominant industries being defined as those industry groups within the Region which accounted for 4 percent or more of total regional employment in 1980. Subdominant industries were defined as those industry groups accounting for 2 to 4 percent of total regional employment in 1980.

The resulting range of regional employment projections to the year 2010 is set forth in Table 65. The staging of these regional projections for selected years between 1980 and 2010 is set forth in Table 66. As indicated, employment in the Region by 2010 is projected to range from a low of approximately 870,900 under the most pessimistic alternative future, to a high of approximately 1,251,600 under the most optimistic alternative future. The span in this range illustrates the major differences in economic growth rates between the pessimistic and optimistic scenarios, which are intended to represent extremes, albeit reasonable extremes.

Table 65 indicates that the projected increases in employment over 1980 levels in the group of dominant industries range from a low of approximately 11,700 jobs under the pessimistic scenario to about 258,600 jobs under the optimistic

Table 65

EMPLOYMENT PROJECTIONS FOR THE REGION BY INDUSTRY GROUP
FOR THE YEAR 2010: ALTERNATIVE FUTURES ANALYSIS

Industry Group	Estimated Employment (thousands of jobs)				Alternative Employment Projections for 2010 (thousands of jobs)					
	1980	Percent of Total	1983	Percent of Total	Pessimistic	Percent of Total	Intermediate	Percent of Total	Optimistic	Percent of Total
Dominant										
Nonelectrical Machinery . . .	73.1	8.3	46.9	5.7	66.1	7.6	83.7	8.0	106.1	8.5
Electric and										
Electronic Machinery	40.1	4.5	33.2	4.0	39.7	4.6	44.9	4.3	50.2	4.0
Retail Trade	131.9	14.9	125.0	15.1	133.3	15.3	162.8	15.5	190.2	15.2
Medical and										
Professional Services	103.4	11.7	108.0	13.1	123.7	14.2	150.0	14.3	187.3	15.0
Educational Services	63.5	7.2	61.5	7.5	50.6	5.8	64.2	6.1	80.2	6.4
Wholesale Trade	43.5	4.9	42.3	5.1	44.9	5.2	56.3	5.4	67.6	5.4
Finance, Insurance, and Real Estate	46.4	5.2	48.9	5.9	55.3	6.3	67.1	6.4	78.9	6.3
Subtotal	501.9	56.8	465.8	56.4	513.6	--	629.0	--	760.5	--
Subdominant										
Fabricated Metals	31.8	3.6	25.2	3.1	29.5	3.4	41.9	4.0	57.7	4.6
Primary Metals	16.6	1.9	10.0	1.2	13.9	1.6	15.3	1.5	16.6	1.3
Transportation Equipment . .	21.5	2.4	21.7	2.6	17.7	2.0	18.6	1.8	21.5	1.7
Food and Beverage	20.9	2.4	18.1	2.2	16.7	1.9	18.6	1.8	20.9	1.7
Printing and Publishing	16.3	1.9	15.9	1.9	17.6	2.0	20.4	1.9	25.5	2.0
Construction	25.8	2.9	18.2	2.2	21.3	2.4	27.4	2.6	32.8	2.7
Public Administration	31.2	3.5	29.2	3.5	25.8	3.0	35.0	3.3	45.3	3.6
Subtotal	164.1	18.5	138.3	16.7	142.5	--	177.2	--	220.3	--
Total Dominant/ Subdominant Employment	666.0	75.4	604.1	73.1	656.1	75.3	806.2	75.4	980.8	78.4
Other Employment	218.2	24.7	222.0	26.9	214.8	24.7	245.1	24.6	270.8	21.6
Region Total	884.2	100.0	826.1	100.0	870.9	100.0	1,051.3	100.0	1,251.6	100.0

Source: SEWRPC.

Table 66

**ESTIMATED 1980 AND PROJECTED 1985, 1990, 2000, AND 2010
LEVELS OF EMPLOYMENT IN THE REGION BY INDUSTRY GROUP**

Pessimistic Regional Economic Growth Scenario					
Industry Group	Levels of Employment (thousands of jobs)				
	Estimated 1980	Projected			
		1985	1990	2000	2010
Dominant					
Nonelectrical Machinery	73.1	56.2	56.9	61.3	66.1
Electrical Machinery and Equipment	40.1	36.3	37.0	38.8	39.7
Retail Trade	131.9	123.4	126.8	130.0	133.3
Medical and Professional Services	103.4	103.9	106.5	114.8	123.7
Educational Services	63.5	59.4	53.2	52.4	50.6
Wholesale Trade	43.5	41.3	42.0	43.4	44.9
Finance, Insurance, and Real Estate	46.4	47.0	47.6	51.3	55.3
Subtotal	501.9	467.5	470.0	492.0	513.6
Subdominant					
Fabricated Metals	31.8	26.3	26.7	28.1	29.5
Primary Metals	16.6	13.5	13.2	13.5	13.9
Transportation Equipment	21.5	19.3	18.6	18.1	17.7
Food and Beverage	20.9	19.3	18.6	17.6	16.7
Printing and Publishing	16.3	15.5	15.9	16.7	17.6
Construction	25.8	21.3	21.3	21.3	21.3
Public Administration	31.2	27.5	27.2	26.5	25.8
Subtotal	164.1	142.7	141.5	141.8	142.5
Total Dominant/Subdominant Employment	666.0	610.2	611.5	633.8	656.1
Other Employment	218.2	199.3	199.8	207.1	214.8
Region Total	884.2	809.5	811.3	840.9	870.9

Intermediate Regional Economic Growth Scenario					
Industry Group	Levels of Employment (thousands of jobs)				
	Estimated 1980	Projected			
		1985	1990	2000	2010
Dominant					
Nonelectrical Machinery	73.1	64.5	68.6	75.8	83.7
Electrical Machinery and Equipment	40.1	38.1	39.4	42.1	44.9
Retail Trade	131.9	126.9	133.4	147.4	162.8
Medical and Professional Services	103.4	110.0	117.0	132.5	150.0
Educational Services	63.5	60.3	61.1	62.6	64.2
Wholesale Trade	43.5	41.8	43.9	49.7	56.3
Finance, Insurance, and Real Estate	46.4	48.8	52.0	59.1	67.1
Subtotal	501.9	490.4	515.4	569.2	629.0
Subdominant					
Fabricated Metals	31.8	28.9	31.1	36.1	41.9
Primary Metals	16.6	14.4	14.6	15.0	15.3
Transportation Equipment	21.5	19.8	19.6	19.1	18.6
Food and Beverage	20.9	19.8	19.6	19.1	18.6
Printing and Publishing	16.3	15.9	16.7	18.4	20.4
Construction	25.8	23.6	24.5	25.9	27.4
Public Administration	31.2	28.8	30.0	32.3	35.0
Subtotal	164.1	151.2	156.1	165.9	177.2
Total Dominant/Subdominant Employment	666.0	641.6	671.5	735.1	806.2
Other Employment	218.2	210.1	209.4	216.5	245.1
Region Total	884.2	851.7	880.9	951.6	1,051.3

Table 66 (continued)

Optimistic Regional Economic Growth Scenario					
Industry Group	Levels of Employment (thousands of jobs)				
	Estimated 1980	Projected			
		1985	1990	2000	2010
Dominant					
Nonelectrical Machinery	73.1	77.8	82.8	93.7	106.1
Electrical Machinery and Equipment	40.1	41.6	43.2	46.6	50.2
Retail Trade	131.9	140.4	149.0	168.4	190.2
Medical and Professional Services	103.4	114.2	126.0	153.6	187.3
Educational Services	63.5	66.0	68.6	74.2	80.2
Wholesale Trade	43.5	46.9	50.4	58.4	67.6
Finance, Insurance, and Real Estate	46.4	50.6	55.2	65.6	78.9
Subtotal	501.9	537.5	575.2	660.5	760.5
Subdominant					
Fabricated Metals	31.8	35.1	38.8	47.3	57.7
Primary Metals	16.6	16.6	16.6	16.6	16.6
Transportation Equipment	21.5	21.5	21.5	21.5	21.5
Food and Beverage	20.9	20.9	20.9	20.9	20.9
Printing and Publishing	16.3	17.6	18.9	22.0	25.5
Construction	25.8	26.8	27.9	30.3	32.8
Public Administration	31.2	33.2	35.3	40.0	45.3
Subtotal	164.1	171.7	179.9	198.6	220.3
Total Dominant/Subdominant Employment	666.0	709.2	755.1	859.1	980.8
Other Employment	218.2	225.3	232.8	251.5	270.8
Region Total	884.2	934.5	987.9	1,110.8	1,251.6

Source: SEWRPC.

scenario. Within the dominant industries, only the retail trade, medical and other professional services, wholesale trade, and finance, insurance, and real estate sectors are projected to show job increases under the pessimistic scenario, with all other dominant sectors showing declines under this scenario. All dominant industry groups would show increases under the optimistic scenario. The subdominant industries are expected to show relatively lesser rates of growth under both the pessimistic and optimistic scenarios, with several employment sectors, most notably the primary metals, food and beverage, and transportation equipment groups, showing no employment gains under even the most optimistic economic conditions.

Distribution of County Employment Under the Regional Economic Activity

Futures: As previously noted in this chapter, the historic trend in the spatial distribution of employment in the Region has been one of decentralization. Milwaukee County, which in 1960 contained 75 percent of the Region's jobs, contained 62 percent of the Region's jobs in 1980. The proportion of total regional jobs in Ozaukee, Racine, Walworth, and Washington Counties increased between 1 and 2 percentage points between 1960 and 1980, while the proportion of regional jobs in Waukesha County increased from about 5 percent in 1960 to about 14 percent in 1980. The pattern in Kenosha County during this period has been one of fluctuation rather than of steady increase or decrease. During this period, the proportion of regional jobs in Kenosha County ranged from a low of about 5 percent to a high of about 7 percent.

Table 67

**ALTERNATIVE EMPLOYMENT PROJECTIONS FOR
THE REGION BY COUNTY FOR THE YEAR 2010**

County	Existing				Projections for 2010					
	1960		1980		Pessimistic		Intermediate		Optimistic	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total
Kenosha	40.1	6.2	49.5	5.6	48.8	5.6	61.0	5.8	75.1	6.0
Milwaukee . . .	486.2	75.0	547.9	62.0	479.0	55.0	552.0	52.5	625.8	50.0
Ozaukee	9.5	1.5	24.8	2.8	26.1	3.0	36.8	3.5	50.1	4.0
Racine	48.5	7.5	78.7	8.9	78.4	9.0	105.1	10.0	137.7	11.0
Walworth	18.3	2.8	32.1	3.6	34.8	4.0	47.3	4.5	62.6	5.0
Washington . . .	14.5	2.2	31.8	3.6	39.2	4.5	52.6	5.0	68.8	5.5
Waukesha	30.8	4.8	119.4	13.5	164.6	18.9	196.6	18.7	231.5	18.5
Total	647.9	100.0	884.2	100.0	870.9	100.0	1,051.3	100.0	1,251.6	100.0

Source: U. S. Bureau of Economic Analysis; Wisconsin Department of Industry, Labor and Human Relations; and SEWRPC.

Alternative distributions of jobs by county under the three regional employment projections are set forth in Table 67. These distributions recognize both the magnitude and direction of historic trends in employment distribution in the Region, albeit as these trends might be tempered by the conditions of the alternative economic activity futures. Under each of the three employment projections, Milwaukee County may be expected to continue providing an ever-smaller percentage of total regional jobs--even under futures where the absolute number of jobs in Milwaukee County would continue to increase. Under all three alternative employment projections, both the absolute number of jobs and the percentage of total regional jobs may be expected to increase in Waukesha County. With respect to the remaining counties, a mix of slight losses or slight gains could be expected under the pessimistic economic scenario, while increases in both the numbers of jobs and in the percentages of total regional jobs may be expected under the other two alternatives, with the absolute increases being greater in all cases under the optimistic economic scenario.

It should be noted that these alternative projections are not necessarily intended to be used for long-range planning purposes, since one of the functions of areawide planning is to attempt to influence the distribution of economic activity when such action is deemed to be in the public interest. Consequently, areawide plans may attempt to change the projected course of events in such a manner as to alter historic trends. Therefore, the projections are presented not to determine the distribution of economic activity for which plans must be prepared, but rather to represent points of departure for use in plan preparation.

MAJOR EMPLOYERS IN WAUKESHA COUNTY

The EDA guidelines for the preparation of an OEDP document require that the document include a table showing the major employers in the County. Accordingly, Table 68 presents the names of the major private employers in Waukesha County. As indicated in Table 68, the County is the location of a number of the most prestigious and well-known employers in the nation.

Table 68
MAJOR EMPLOYERS IN WAUKESHA COUNTY

Manufacturing—Food and Kindred Products Brownberry, Division of Oroweat Carnation Company Holsum Foods	Manufacturing—Machinery Except Electrical Artos Engineering Company C.R.O. Inc. Custom Products Corporation Dresser Industries, Inc. Harnischfeger Corporation Hein-Werner Corporation Milwaukee Electric Tool Corporation Rexnord, Inc. Stolper Industries, Inc. Unit Crane & Shovel Corporation	K-Mart Discount Department Stores Kohl's—A Division of A & P McDonald's Restaurants Olympia Restaurant Corporation Sears Roebuck and Company Sentry Food Stores Shop-Rite/Pick 'N Save Super John's Super Valu Target Stores Walgreen Company, Illinois Zayre Department Store
Manufacturing—Paper and Allied Products Western Envelope Company		
Manufacturing—Printing and Publishing Arandell-Schmidt Corporation Quadgraphics, Inc. W. A. Krueger Company	Manufacturing—Electric and Electronic Equipment Generac Corporation General Electric Company Louis Allis Company RTE Corporation RTE-ASEA Corporation	Finance, Insurance, and Real Estate Allstate Insurance Company First National Bank Payco American Corporation
Manufacturing—Rubber and Miscellaneous Plastics Products Dickten & Masch Manufacturing Company Fibersin Industries, Inc.	Transportation and Public Utilities Safeway Transport, Inc. United Parcel Services, Inc. U. S. Postmaster Wisconsin Electric Power Company Wisconsin Telephone Company	Services Community Memorial Hospital of Menomonee Falls Elmbrook Memorial Hospital General Business Services, Inc. Industrial Towel and Uniform, Inc. L. M. Berry & Company Lutheran Homes of Oconomowoc, Inc. Marriott Inn Medical Associates of Menomonee Falls Memorial Hospital at Oconomowoc New Berlin Memorial Hospital Omega Technical Corporation Waukesha Memorial Hospital Westmoreland Manor Woodland Health Center, Inc.
Manufacturing—Primary Metals Industries General Casting Corporation International Harvester Company Quality Aluminum Casting Company Wisconsin Centrifugal, Inc.	Wholesale Trade Godfrey Company Honeywell, Inc.	
Manufacturing—Fabricated Metal Products Alloy Products Corporation Amron Corporation Bradley Corporation Koehring Company	Retail Trade Boston Store J. C. Penney Company	

NOTE: The foregoing list does not include education and government employers.

Source: Waukesha County, and SEWRPC, 1980.

Chapter IV

ECONOMIC DEVELOPMENT POTENTIALS AND CONSTRAINTS

INTRODUCTION

The preceding chapters of this report provide an assessment of historic economic development efforts in Waukesha County, and an inventory and analysis of the natural resources, community utilities, facilities, and services, and socioeconomic characteristics of the County. The information and analyses contained within the preceding chapters reveal certain characteristics of the County which have both positive and negative implications for economic development. This information provides a basis for the identification of the economic development potentials of the County, as well as the economic development constraints which may need to be overcome in order to improve the economy of the County. The purpose of this chapter is to set forth and summarize those economic development potentials and constraints, with specific information relative to each of the potentials and constraints included in the preceding chapters of this report.

It should be noted that in some cases, an economic development constraint has been identified as a result of the perceptions of the Waukesha County Overall Economic Development Program (OEDP) Committee, or of specific groups of persons or organizations in Waukesha County. In those cases where data are available to document these perceptions, the data are included herein. However, in those cases where documenting data are not available, the chapter indicates that the constraint is a perceived constraint.

ECONOMIC DEVELOPMENT POTENTIALS

The economic development potentials of an area result from certain positive attributes that give that area a comparative advantage in attracting and sustaining economic development. The economic development potentials for Waukesha County are summarized below.

Potential One: Retention and Expansion of the County's Manufacturing Industry Base

While retention and expansion of all industry employers in Waukesha County should be a priority in any county economic development program, the structure of the County's economy results in the need for a special emphasis on the retention and expansion of existing manufacturing employers, as well as the attraction of new manufacturing industries to the County. The retention and expansion of the County's manufacturing industry would provide a base for additional economic development. In 1982, approximately 29,634 jobs, or about 30 percent of all jobs in the County, were in the manufacturing industry, a larger number of jobs than in any other county industry. In comparison to the national economy, the county economy is concentrated in the primary metal, fabricated metal, nonelectrical machinery, electric and electronic equipment,

printing and publishing, and rubber and miscellaneous plastics manufacturing industries. The County, unlike the nation, State, and Region, did not show a decline in the percentage of persons employed in the manufacturing industry from 1970 to 1980. Once more, the share of total regional manufacturing jobs in the County's manufacturing industry increased from about 9 percent in 1970 to about 13 percent in 1980. Overall, the total number of jobs in the County increased by 42,900, or about 56 percent, from 1970 to 1980, a percentage increase that was substantially greater than that for the Region, 17 percent; the State, 23 percent; or the nation, 24 percent. A Wisconsin Department of Development report indicates that Waukesha County was the location of five new manufacturing firm locations in 1983, ranking the County second of all counties in Wisconsin in the attraction of manufacturing firms in 1983. Three of these firms were branch firms of existing state firms, and two firms were relocated state firms. Once more, Waukesha County ranked fourth of all Wisconsin counties in the number of expansions by existing manufacturing companies with 12 plant expansions, of which 10 were manufacturing plant additions and two were new manufacturing plants.¹ As a result of this employment growth and plant expansions, as well as the recent large increase in the resident population of the County, the OEDP Committee has indicated that the County is perceived as being growth-oriented, a perception that could lead to the location of new industry establishments in the County.

The County showed an increase of 1,771 acres, or about 245 percent, in industrial land, or land used for manufacturing, wholesaling, and storage and related parking, between 1963 and 1980, a greater increase than in any other county in the Region. In 1983, the County had 6,715 acres of suitable industrial sites, again a greater amount than in any other county in the Region. A total of 1,235 acres of these industrial sites are classified as Class I sites, or about 45 percent of the regional total. Class I sites are sites which are zoned for industrial use; have public sanitary sewer facilities available within the site; and have improved streets in place for site access.

The County's existing manufacturing industry base, together with the location of Waukesha County within 350 miles of some of the most important industrial areas and heaviest population concentrations within the Midwest, provides a good potential for the location of branch manufacturing plants in the County. The County is served by an excellent transportation system, including highway, airway, and railway facilities, and by nearby seaway transportation facilities at the Port of Milwaukee, which links it efficiently and economically not only to the rest of the Milwaukee metropolitan area and to major population and employment centers of the Midwest, but to major national and international markets as well. In addition, necessary public utilities, including sanitary sewerage, water supply, and gas and electric power systems in Waukesha County, all have sufficient service capacity to meet the needs of new industrial users. Finally, the locational characteristics of the County for manufacturing firms with worldwide markets are enhanced by the proximity of a foreign trade zone in the City of Cudahy in Milwaukee County.

The County's existing labor force, as well as the labor force of the entire Milwaukee metropolitan area, of which the County is an integral part, also

¹Wisconsin Department of Development, New Industries and Plant Expansions Reported in Wisconsin, 1983, June 1984.

provides an advantage to the County for the retention and expansion of the County's existing manufacturing industry base. The existing labor force is highly skilled and has a reputation for a strong work ethic, and the labor force educational attainment compares favorably to that of other areas of the nation. In addition, a wide range of high-quality labor force training programs are available to manufacturing establishments through the Waukesha, Ozaukee, and Washington Private Industry Council (PIC) and at the Waukesha County Technical Institute, as well as at the University of Wisconsin, University of Wisconsin-Extension, Carroll College, and the higher educational institutions located in proximity to the County, including: the Milwaukee School of Engineering, Marquette University, the University of Wisconsin-Milwaukee, and the University of Wisconsin-Madison. The skills and educational attainment of the existing labor force and available training facilities should act to encourage manufacturing industry establishments to locate in the County. The County OEDP Committee also perceived a good relationship between labor and management, a factor that is significant because of the increasing importance of labor productivity to the manufacturing production process, as well as the adversarial relationship this is evident in a number of areas throughout the country.

Finally, the recent interest in the identification and implementation of economic development activities by economic development practitioners at the state, regional, and local level can be expected to help facilitate the retention and expansion of the County's manufacturing industry base. A 1984 report by the Wisconsin Department of Development entitled The Job Generation Process in Wisconsin: 1969-1981 indicates that the majority of job gains in the State come from existing businesses that expand, rather than from new enterprises that start up in the State or migrate to the State from other areas.²

Constraints Related to Potential One:

Distribution of Economic Activity in the Nation--The distribution of economic activity in the nation could affect the ability of Waukesha County to retain existing and attract new manufacturing industry employers. Recent economic growth indicators for the north-central region of the nation, which includes Wisconsin, have consistently lagged behind those of the southern and western regions of the country. Of particular importance is the relative change in employment levels. Total employment in the southern and western regions of the nation increased by 39 percent and 49 percent, respectively, between 1970 and 1980, in comparison to relative increases of 18 percent and 11 percent for the north-central and northeastern regions, respectively. Manufacturing employment increased by 37 percent in the West and 24 percent in the South between 1970 and 1980, while increasing by only 3 percent in the north-central region, and actually decreased by about 5 percent in the northeastern region during this time.

Structural Changes in the Economy--Major changes are occurring in the structure of the national, state, and regional economies. Growth in manufacturing industries has traditionally been viewed as the most effective means for creating jobs and enjoying long-term economic growth. However, the rate of increase

²Wisconsin Department of Development, The Job Generation Process in Wisconsin: 1969-1981, December 1984.

in manufacturing employment in the nation has declined significantly during the past decade. As a result, from 1970 to 1980 the percentage of manufacturing jobs in the Region has declined from 34 percent to 30 percent. In addition, basic structural changes in the economy that affect the County's manufacturing industry are evidenced by the shift in the nature of manufacturing activities, with "high technology" industries accounting for a continually increasing portion of manufacturing jobs. In this regard, it has been estimated that high technology jobs accounted for almost 70 percent of the total increase in manufacturing jobs in the nation from 1955 to 1979. As a result, the County's manufacturing employers may need to reorient their manufacturing process to include the development of new high technology products.

Changing World Product Markets--American manufacturing industries face increasing competition in product markets which it once dominated, with this increasing competition an important factor in the ability of the County's manufacturing firms to increase employment levels. For example, over the past decade the production of steel and of passenger cars in the United States has decreased substantially because of the competition from Japan, as well as other countries. This internationalization of product producers and product markets may require Waukesha County manufacturing firms to reorient their production and marketing efforts. Labor costs have become particularly important in the locational decision-making of many industry establishments. The political affiliation of many third world countries with countries other than the United States may affect the ability of this nation's manufacturers to market their products in a number of foreign countries, thereby excluding some product markets. In addition, the internationalization of product markets has placed new importance on the value of the U. S. dollar. A report by the Wisconsin Strategic Development Commission indicates that the value of the dollar against foreign currencies is an important factor for Wisconsin's manufacturing firms serving world markets. Wisconsin ranks thirteenth among the states in the nation in manufacturing exports. The recent strong dollar has been damaging to the export sector and is one of the reasons why Wisconsin was more severely affected by the economic recession of the early part of this decade than other states.³ Such changes in world markets may be expected to affect the national economy, and specifically, the product marketing and product sales of Waukesha County manufacturing firms.

Perceived Negative Attitudes of Business Persons Regarding the State of Wisconsin's Attitude Toward Business--A report entitled Wisconsin Business Climate Study, prepared by Yankelovich, Skelly & White, Inc., Arthur Andersen & Company, and the Applied Population Laboratory of the University of Wisconsin-Extension, Madison, presents the results of a survey which asked a sample of business executives of Wisconsin business firms to rate the State in terms of several key location factors.⁴ Four percent of the respondents to the survey rated the attitudes of state officials as favorable to business and

³Wisconsin Strategic Development Commission, Phase I, The Mark of Progress, undated.

⁴Yankelovich, Skelly & White, Inc., Arthur Andersen & Company, and the Applied Population Laboratory, University of Wisconsin-Extension, Wisconsin Business Climate Study, April 1984.

industry, while 65 percent rated their attitudes as unfavorable. Twenty-three percent of the respondents rated the attitudes of community officials as favorable, while 30 percent rated these attitudes as unfavorable. While the previously indicated increase in economic development activities by the state and local governments should help to alleviate these perceptions, these negative attitudes regarding the State's attitude toward business may affect the ability of Waukesha County economic development practitioners to expand the existing manufacturing industry base.

Availability of Financing for Business Expansions and New Business Start-ups--The commitment of local financial institutions to economic development and the availability of financing for business expansion projects and new business start-ups is an important component of economic development. The OEDP Committee perceived that financial institutions in Wisconsin generally maintain conservative business lending practices and, therefore, the availability of financing for business expansion projects may be a problem for manufacturing firms in Waukesha County. The previously cited report by the Wisconsin Strategic Development Commission showed that a "lack of capital availability to certain businesses contributes to Wisconsin's economic dilemma." The report indicated that Wisconsin ranks low in banking deposits per capita (33rd in the nation), loan-to-deposit ratio (23rd in the nation), and commercial and industrial-loans-to-total-loan ratio (32nd in the nation). Wisconsin's largest bank ranks only 70th largest in the country. Consequently, the report indicated that the conservatism of financial institutions in Wisconsin may not be as much a problem as the availability of financial resources.

Federal Expenditures--The ability of business firms to secure federal government contracts has often been identified as important to local economic development. Recent studies have shown that the flow of federal funds into Wisconsin serves as a constraint to the expansion of the County's existing manufacturing industry. The report by the Wisconsin Strategic Development Commission indicates that the State ranks 43rd in the absolute amount, and 40th in the net per capita amount, of federal funds that are flowing into the State. Overall, the State ranks 47th in defense expenditures and 27th in non-defense expenditures. In addition, the State lags behind other states in the amount of federal research and development expenditures by the federal government, ranking 45th in defense research and development funding and 38th in nondefense research and development funding. While Wisconsin's ranking in the nation is relatively low with regard to the flow of federal funds, the federal funds flowing into Waukesha County are also a problem. A recent listing of the federal prime contracts in Wisconsin during the 1983 federal fiscal year (October 1982 to September 1983) indicates that a total of \$775,358,000 in prime federal contracts took place during this time period. However, only \$34,766,000 of this amount, or about 5 percent of the prime federal contracts, were awarded to business establishments located in Waukesha County. These data indicate that federal expenditures in Wisconsin, and specifically Waukesha County, could be a constraint on the economic development of Waukesha County and, therefore, an area of economic development concern.

Higher Worker Earnings--The salary and wage structure of an area is an important consideration in the locational decision-making of some industrial enterprises. Higher salaries and wages, as well as adversarial relationships between management and labor, may discourage and, in some cases, prohibit the expansion of employment opportunities. The latest available census data--for

1980--indicate that median earnings for all male occupational groups were greater in the Milwaukee metropolitan area, \$19,262, than in Wisconsin, \$17,043, or the United States, \$17,107. These data further indicate that median earnings for all female occupational groups were higher in the Milwaukee metropolitan area, \$11,135, than in Wisconsin, \$9,929, or the United States, \$10,134. These higher median wages in Waukesha County could act as a constraint to the expansion of manufacturing firms, as well as to the location of new manufacturing firms.

Lack of Awareness of Local Resources by the Resident Population and a Lack of a Waukesha County Identity--The success of an area's economic development efforts are often dependent on the resident population's awareness of the economic development resources that are available in the County. Overall, the OEDP Committee perceived that the Waukesha County population is not totally aware of the economic development potential of the County. Specifically, the OEDP Committee perceived that the County's population is not totally aware of the economic development resources in the County, does not have a clear vision of the economic development potential in the County, and often shows parochial attitudes toward economic development issues. Furthermore, the Committee perceived that the County lacks an identity as a location for economic development activities. These resident population characteristics could affect the ability of economic development practitioners in Waukesha County to implement economic development activities, and therefore improve the County's economy.

Lack of Availability of Local Economic Development Technical Assistance--Prior to 1980, the State of Wisconsin was not facing particularly difficult economic conditions. In fact, the previously cited Wisconsin Department of Development report of the State's manufacturing industry notes that in 1977, the Wall Street Journal indicated that Wisconsin's manufacturing sector was "the shining star of the snowbelt." The majority of state and local economic development activities carried out in Wisconsin, and therefore Waukesha County, had been initiated following the difficult economic conditions experienced after 1980. Because of the relatively recent initiation of these economic development activities, there is a perceived lack of availability of local economic development technical assistance in Waukesha County, a lack of knowledge by local public and private sector individuals about what can be done to improve economic development conditions, and a general lack of economic development activity by some local units of government. Although there are currently a variety of state, regional, and local economic development activities being carried out in Waukesha County, the OEDP Committee has indicated that there is no one central source for economic development data and information in the County. In addition, the OEDP Committee perceived that because of the lack of economic development technical assistance to local units of government and private businesses in the County, local officials are unable to react quickly to economic development issues and concerns.

Misconceptions Regarding the State's Corporate Income Tax Climate--A number of industry retention surveys that have been conducted throughout Wisconsin have shown that many businesspersons feel that the corporate tax climate in Wisconsin is not good in comparison to the tax climate of other states. However, a February 1983 study by the Wisconsin Department of Development indicated that in comparison to 15 other states, Wisconsin's corporate tax climate, in terms of total tax liability for various hypothetical corporations,

has improved over the 1979-1983 time period.⁵ In comparison to the other states studied, Wisconsin ranks no higher than 12th in terms of total tax costs for a given corporation, and ranks 16th in two instances and 15th in another. Overall, the total state and local tax liability in Wisconsin for a given corporation is 76 percent of the average total state and local tax liability for the other 15 states examined. As a result of this study, it can be concluded that the perception of Wisconsin as a high corporate income tax state is, in part, incorrect, and this continued perception could be detrimental to the State's, and therefore Waukesha County's, economic development.

The Need to Improve Various County Community Utilities, Facilities, and Services--This report has indicated the high quality of community utilities, facilities, and services in Waukesha County. However, the OEDP Committee perceived a need to improve various community utilities, facilities, and services, and this report has documented the need for these improvements. The needed improvements are discussed in Chapter II of this report, and include various transportation system improvements, especially the widening of the existing IH 94 freeway between STH 18 and STH 164, and the improvement of the process of disposing of solid wastes in the County. Issues that also need to be addressed are the higher cost of housing in the County and its effect upon persons of more moderate income, and the high cost of sewer service in many of the County's local municipalities. In addition to these community facility needs, the OEDP Committee perceived the need to improve the land use planning capabilities of local units of government in Waukesha County, as well as to improve the cooperation among local units of government with regard to zoning issues and public facility improvements.

Industry Acquisitions and the Effect on Local Economic Development--Recently, there have been a variety of attempts by industry establishments across the country to purchase or "take over" other industry establishments. In many cases, the reason for these take overs is to diversify the purchasing company's interest and investment and, therefore, minimize the negative effects of a downturn in business in any one industry. However, these take overs can often have negative impacts on the community where the acquired business is located. The Waukesha County OEDP Committee perceived that the industry acquisition trend is and can lead to future absentee ownerships of firms in Waukesha County, the investment of capital generated within Waukesha County in other areas of the State and nation, and, finally, a lack of corporate headquarters in Waukesha County. While the purchase of local industry establishments by firms located outside Waukesha County and the resulting effects are often beyond the control of local economic development practitioners, these factors should be taken into account when developing local economic development strategies for the retention of industry establishments and the attraction of new industry establishments to Waukesha County.

Aging of the Population--The population projections for the Region indicate an overall decrease in the population in the zero-19 year old age group from the 1980 level in the year 2010, and a significant increase in the population 65 years of age and older during this time period. Therefore, the OEDP

⁵Wisconsin Department of Revenue, Corporate Tax Climate: A Comparison of Sixteen States, February 1983.

Committee was concerned about the effect of the general aging of the Region's population on the future availability of younger workers for Waukesha County's employers.

Potential Two: Generation of Employment Opportunities
Through the Application of High Technology to Existing
Industry, as Well as Other High Technology Industry Opportunities

Basic structural changes in the national economy have been marked by the steadily increasing portion of manufacturing jobs that are oriented to high technology industries. High technology industries are, by definition, knowledge- and capital-intensive industries that employ a high percentage of highly trained workers and produce products based on recent scientific advances having high value to the consumer. It has been estimated that in 1979 high technology-related jobs accounted for 40 percent of all manufacturing jobs in the nation. Moreover, a recent report by the Joint Economic Committee of Congress found that high technology industries accounted for 75 percent of the net increase in manufacturing jobs in the nation from 1955 to 1979. This same study indicated that the Midwest region could receive more benefits from high technology industry growth than other regions of the nation, indicating that Waukesha County should consider the attraction of high technology industries and, more importantly, the application of high technology to existing manufacturing industries as an economic development potential.

It should be emphasized that this economic development potential pertains primarily to the application of high technology to existing industries, rather than the development of traditional high technology firms concentrated in other areas of the nation, such as Massachusetts, California, and North Carolina. While the location of such firms in the Waukesha County area is certainly possible, the application of high technology to existing industry may be a more reasonable expectation based upon the existing manufacturing industries in Waukesha County.

The application of high technology to the existing manufacturing base is an important economic development potential for the County because of a number of factors. First, as previously indicated, the Waukesha County economy includes a large number of manufacturing firms that manufacture products for a variety of industrial users, as well as for consumers. In order to remain competitive, these industries will need to pursue technological innovation to increase the quality of their products. Second, the County is either the location of, or in proximity to, a number of post-secondary educational institutions with the potential for research-oriented activities, as well as for training workers for high technology-oriented employment. The State of Wisconsin has one of the finest vocational/technical education systems in the country, a system that is highly capable of assisting in the retraining of workers in high technology occupations. In Waukesha County, the Waukesha County Technical Institute provides these education and employment training services to the resident population. The Medical College of Wisconsin, located directly east of Waukesha County at the Milwaukee County Institutions grounds, is a strong research institution. While the Milwaukee School of Engineering, Marquette University, and the University of Wisconsin-Milwaukee, all of which are located in Milwaukee County, also have significant research capabilities, the Medical College of Wisconsin's annual research budget was approximately \$23 million in

the basic sciences alone during the 1984-1985 budget year.⁶ Once more, in 1983, the University of Wisconsin-Milwaukee created an Office of Industrial Research and Technology Transfer. The Office's mission is to facilitate cooperative research projects between the University of Wisconsin-Milwaukee and local business and industry. Since its inception, the program has secured approximately \$1.25 million in research contracts. In addition, the County's location within an approximately one-hour travel time of the University of Wisconsin-Madison affords an opportunity to capitalize on the research capabilities of this institution.

The recently formed Milwaukee Innovation Center, a privately funded organization whose objective is to help inventors and entrepreneurs start new businesses which are based on innovative products or ideas with high growth potential, is an important new resource for the promotion of the development of high technology-related industry in the metropolitan Milwaukee area. The Milwaukee Innovation Center organized by private business leaders who believe that such new enterprises--carefully nurtured, structured, and developed--can inject new vigor into the Milwaukee area economy, should be of particular value in the development of high technology industry in Waukesha County. The Milwaukee Innovation Center together with Wisconsin for Research, a private, nonprofit organization initiated in 1979 to aid in the development of the State's economy by promoting cooperation between the University of Wisconsin system and private industry, are important recent efforts in Wisconsin that could help to facilitate the growth of high technology industry in Waukesha County.

While research and employment training activities are important to the development of high technology-related industry in Waukesha County, the availability of financing for new products is also important. Recently, the State of Wisconsin Legislature approved funding for a grant program termed the Technology Development Fund. The Fund is administered by the Wisconsin Department of Development, and consists of grants in support of research and development of new products to a consortium of a company headquartered in Wisconsin and an institution that is a part of the University of Wisconsin system, or another Wisconsin institution of higher learning.

The identification of this economic development potential for Waukesha County is based in part on a November 1982 report by the Joint Committee on Technology and Innovation for the Greater Milwaukee Committee and the Metropolitan Milwaukee Association of Commerce entitled, A Program for Wisconsin and Milwaukee--How to Create New Jobs in High Technology and Other Manufacturing. The study summarizes an analysis of the potential for the expansion of existing high technology industry and the location of new high technology industry in the greater Milwaukee area. The study indicates that the state research institutions, particularly the University of Wisconsin-Madison and the Medical College of Wisconsin, provide good opportunities for the expansion of high technology industry in the Milwaukee area. In addition, the study indicates that the Milwaukee area has a small core of high technology and research-oriented companies, along with a well-trained, highly skilled work force, and one of the best vocational-technical education systems in the country to help ensure that the work force remains at a high skill level. Lastly, the study

⁶Medical College of Wisconsin, 1984-1985 Budget.

indicates that Wisconsin is a high service state with a reputation for providing for the amenities, as well as essentials, of life, a factor which could help to attract the highly skilled and well-educated work force that is often required in high technology industries.

A final reason why high technology-related industry is an important economic development potential in the County is the recent announcement by the Wisconsin Electric Power Company (WEPCo) of a major industrial development program that involves the promotion of IH 94 in southeastern Wisconsin from the Wisconsin-Illinois border to the City of Milwaukee and from the City of Milwaukee to Madison, Wisconsin. The purpose of the program is to encourage the growth and diversification of existing industries in southeastern Wisconsin by promotion of the unique resources of the Region. Specifically, the WEPCo intends to attract new industries and stimulate the creation of new industries, especially in the areas of automated manufacturing, biomedical technology, and agri-business-genetics, all of which are high technology-oriented industries. While the proposed WEPCo program is important to the entire Southeastern Wisconsin Region, a recent announcement by the WEPCo that it plans on developing a 300-acre industrial park at the intersection of IH 94 and STH 64 could have direct benefits to Waukesha County, making the County a location for the firms that WEPCo is attempting to attract to the Region.

Constraints to Potential Two:

High Personal Income Taxes and a Perceived Anti-Business Reputation of the State of Wisconsin--A report entitled Wisconsin Manufacturing: Charting a Course for Renewed Vitality indicated that while "the State's relative corporate income taxes do not affect the State's share of industry employment, statistical analysis of Wisconsin and United States employment trends suggest that relatively high personal income taxes reduce the State's share of United States employment in labor-oriented industries;" many of which could have a high technology orientation. The previously referenced report by the Joint Committee on Technology and Innovation also states that Wisconsin has a national reputation "in the business community as being a high tax, anti-business State." This reputation is based, in part, the Joint Committee report indicates, on the State's "so-called long-standing progressive tradition of governing, which has produced a strain of anti-business sentiment in the Legislature and the bureaucracy that has hurt the State in recruiting and retaining industry." As a result of these factors, local economic development practitioners in the County may need to work with the Wisconsin State Legislature in reducing personal income and inheritance taxes, as well as eliminating unnecessary state and local regulations that discourage business activity in high technology-oriented and related industries.

Technological Innovations by the University System--One of the findings of the report of the Joint Committee on Technology and Innovation was that the University of Wisconsin system, and more specifically the University of Wisconsin-Madison, has not stimulated technological innovation in the manner that other universities have such as Stanford University in California and the Massachusetts Institute of Technology in Massachusetts. The report states that the lack of technological innovation in the State may be due, in part, to the lack of well-established innovation centers and university research parks.

Availability of High-Risk Venture Capital--In its study of high technology industry, the Joint Committee on Technology and Innovation reported that there

appears to be a scarcity of high-risk, venture capital available in the Milwaukee metropolitan area. The study indicates that conservative investment and banking practices, coupled with existing state securities regulations, have made it difficult for small firms to raise equity capital, and, as a result, discourage entrepreneurs from starting new businesses. Due to the fact that many high technology firms may be expected to be new firms, the lack of available venture capital could restrict the development of employment opportunities in this industry.

In addition, in a recent Milwaukee Sentinel article, Mr. Ralph L. Ells, a certified public accountant with the Milwaukee office of Arthur Young International and a member of the Certified Public Accountants Economic Development Committee, discussed the availability of venture capital, and indicated that "the problem with the venture capitalist is that they're downstream two or three years, after the product has taken off. What is needed most by the aspiring business person is an individual with \$50,000 or \$100,000 to invest, along with the time and expertise to guide the venture along."⁷ The Arthur Young Company is promoting new business ventures on a national basis and, as a result, is becoming increasingly aware of the problems in obtaining venture capital.

Inability of the State of Wisconsin to Retain Highly Trained Members of the Labor Force--Because of its orientation toward research and new product development, it is important for high technology-oriented industries to have available workers that are highly educated. The previously referenced Wisconsin Strategic Development Commission report indicates that while the quality of Wisconsin educational institutions is high, the State is losing more highly educated persons than other areas are. While "Wisconsin graduates more people from its colleges and universities than the national average, the State's adult population has fewer college graduates" than the national average. This "brain drain" suggests a lack of attractive employment opportunities for college graduates in the State. This should be of concern to local, as well as state, economic development practitioners.

Lack of Identity with a Research Institution--This chapter has indicated that Waukesha County is in proximity to a number of educational institutions that are engaging in high technology-oriented research activities. While the proximity of these institutions to the County is an advantage to local industry in the development and application of high technology to existing manufacturing processes, the OEDP Committee perceived that the lack of a research center location within Waukesha County could, to a degree, be a constraint to the location and expansion of high technology firms in the County.

Labor Force Implications of High Technology-Oriented Industry--Local economic development activities are often evaluated based upon the number of jobs that are created as a result of a plant expansion or a new plant location, as well as upon the increase in the local property tax base. While the application of new technology to existing manufacturing industries may result in an increase in the local property tax base, the application of this technology may have negative impacts on local employment growth due to the highly mechanized nature of new manufacturing processes, many of which utilize robotic

⁷John Torinus, Jr., "Seed Money for Start-Ups," Milwaukee Sentinel, November 6, 1984.

applications. Consequently, the number of jobs created as a result of the application of technology may be somewhat less than that in the past, and in some instances workers may actually be displaced.

Potential Three: Facilitating New Entrepreneurial Opportunities Directed Toward Small Business Expansions and Small Business Start-ups

There are several reasons why the encouragement of small business development, and specifically small manufacturing firms, is an important economic development potential in Waukesha County. Small businesses dominate the job generation process in Wisconsin. The previously documented study by the Wisconsin Department of Development entitled The Job Generation Process in Wisconsin: 1969-1981 indicates that very small businesses (1 to 20 employees) and small businesses (21 to 100 employees) generated 77 percent of the net new jobs created in Wisconsin between 1969 and 1976. More importantly, the report showed that from 1979 to 1981, a period of economic recession in Wisconsin, very small businesses created 100 percent of the net job gains in Wisconsin, suggesting that new business starts are an important key to generating new jobs during periods of both economic expansion and recession. The report indicates that very small businesses have a particularly important impact on job creation because when such firms are successful, they expand and grow rapidly and, therefore, tend to create significant numbers of new jobs. Finally, the report points out that between 1969 and 1981, very small manufacturing firms consistently created new jobs at a faster rate than did very small service sector businesses. Even during the 1980 to 1981 recession year, very small manufacturing firms continued to add more jobs than they lost, in sharp contrast to the trend of larger manufacturers. The existing manufacturing industry base in Waukesha County and this industry's potential for industry establishment "spin-offs" is an important consideration in the identification of small business development as an economic development potential of Waukesha County.

While the historic growth of small business in Wisconsin is a good indication of the potential for employment growth in the future, a number of other characteristics of Waukesha County indicate that the start-up and expansion of small businesses is an economic development potential of the County. The University of Wisconsin Small Business Development Center (SBDC), through the Cooperative Extension Service, University of Wisconsin-Extension, provides a wide range of information to entrepreneurs with regard to solving business management problems and problems related to new business start-ups. An SBDC representative is located at the County University of Wisconsin-Extension office in the City of Waukesha. The Waukesha representative is affiliated with the SBDC at the University of Wisconsin-Whitewater in nearby Walworth County.

The University of Wisconsin-Whitewater is also the location of the SBDC Technology Transfer Program. The overall goal of the Technology Transfer Program is to stimulate economic development in Wisconsin through the effective and efficient transfer of innovative ideas and inventions to the private sector. The SBDC is focusing its efforts on two specific activities. The first is the identification of commercially viable new product ideas and inventions. Following the identification of these inventions, a Wisconsin company is located to manufacture the product. The second activity is an innovative approach to the problem of linking inventors with companies seeking new product ideas. A Wisconsin manufacturing company identifies product line goals and determines

in broad terms the type of product it would like to pursue. Once the parameters for the product lines have been established, a fact sheet with all relevant information is then sent to a selected group of inventors. This approach allows the company to tap the creative talents of inventors throughout the country, and it allows the inventors a greater chance of selling new product ideas or inventions because the company has targeted its new product needs.

The Waukesha County Technical Institute (WCTI), realizing the importance of the growth of small businesses, has undertaken an economic development activity that could assist in the growth of small businesses. In 1985, the WCTI staff is expected to take the initial steps toward the development of a small business incubator facility for new business start-ups, as well as of an entrepreneurial support center. The incubator facility would provide new businesses with a low-cost location for their initial activities, with the support center providing counsel to small businesses regarding business development problems and concerns. The Waukesha area is also a good location for new and expanding small businesses because of the financing available for small businesses from the Milwaukee Economic Development Corporation, Small Business Administration (SBA), Section 503-Certified Development Company. SBA-Certified Development Companies provide long-term, fixed-asset financing for the acquisition of land, building construction, expansion, and renovation, and the purchase of equipment to companies throughout the Milwaukee metropolitan area. In the recent past, a number of venture capital organizations have been organized in the metropolitan Milwaukee area for the purpose of providing seed capital to business entrepreneurs. Finally, the Waukesha, Ozaukee, and Washington County Private Industry Council (PIC) has placed a high priority on providing Job Training Partnership Act (JTPA) services to small businesses. Together, the available resources for technical assistance to small business entrepreneurs, the available financing for small business operations, and the potential incubator facilities could, if utilized effectively, provide a basis for the expansion of employment opportunities through the start-up of new small businesses, as well as the expansion of existing small businesses.

Constraints Related to Potential Three:

Lack of Availability of Financing for Small Businesses--This chapter has indicated that the lending practices of financial institutions in Wisconsin are perceived as being conservative, and that there is a lack of capital available to financial institutions in the State. Conservative lending practices and the lack of capital within the State are particularly important problems to small businesses in that these businesses may not have the financing available from their existing operations that larger, more established businesses often have for expansion projects. It was also indicated that small amounts of seed capital, or amounts less than \$50,000, are not readily available to entrepreneurs in Wisconsin. This lack of seed capital is also a major constraint to the development and expansion of small businesses.

Lack of Small Business Incubator Space--The Waukesha County OEDP Committee identified the lack of incubator space for small businesses in Waukesha County as an economic development constraint. However, as indicated, the WCTI staff is currently fostering the development of incubator space for small businesses. This could help to alleviate this economic development constraint.

Government Regulations--In order to protect the general public from a variety of negative externalities that could result from the operation of

businesses in Wisconsin, a wide range of operational permits and business regulations have been developed by the State of Wisconsin and local units of government. The OEDP Committee indicated, however, that while the State and many local units of government are undertaking efforts to reduce the problems associated with business regulations, businesspersons perceive a lack of effective assistance by the State and local units of governments to small businesses in applying for the various permits that are necessary for new business operations, as well as meeting the requirements of ongoing business regulations.

Lack of Risk-Taking Attitude by Entrepreneurs--While the most-often identified problem regarding the development of small business in Wisconsin is the lack of venture capital, Mr. Dean Treptow, Co-Chairperson of Competitive Wisconsin, a statewide group of representatives from business, labor, education, and agriculture, has indicated that although there are currently 11 general-purpose venture capital funds in Wisconsin, entrepreneurs are not taking advantage of the funding available. Mr. Treptow indicated that "we're getting good proposals, but they're from people who are not willing to share in the ownership of their businesses."⁸ Venture capital funds usually require that the owner of a business relinquish a portion of the business's ownership in return for the high-risk financing. The lack of a risk-taking attitude by small business persons could act as a constraint to the initiation and expansion of small businesses.

Potential Four: Expansion of the Retail Trade and Service Industries

In 1982, the retail trade industry and the service industry together employed 35,788 workers in Waukesha County, or about 36 percent of all workers in the County. A larger number of workers were employed in the retail trade and service industries than in any single industry in Waukesha County. The service industry is becoming an increasingly important aspect of the County's economy. In 1970, the service industry accounted for about 15 percent of total industry employment in Waukesha County, while in 1980 this industry accounted for about 17 percent of total industry employment.

Waukesha County has a good potential to expand its retail trade and service industries. Between 1960 and 1980, there was a substantial increase in the county population and labor force. This large increase in population provides a larger market for retail and service establishments, and the expanded labor force suggests that it is capable of meeting the labor needs of existing and future county employers. Downtown revitalization efforts, combined with recent fringe-area commercial developments in several communities within the County, indicate that these communities are focusing community development efforts on the retention and expansion of retail trade and service establishments. A well-developed transportation system makes the principal commercial areas of the County readily accessible not only to all areas of the County, but to large parts of the Milwaukee metropolitan area as well. The anticipated increase in the resident population of the County can be expected to provide a gradually expanding market for the retail trade and service industries. Finally, regional employment projections to the year 2010 indicate that for

⁸"Small Businesses Say Capital is Still Hard to Get," Milwaukee Journal, January 13, 1985.

other than the nonelectrical machinery industry, the largest percentage increases in employment should occur in the retail trade; medical and professional services; educational services; and finance, insurance, and real estate industries. The report entitled The Job Generation Process in Wisconsin: 1969-1981 indicates that the services industry sector is, and may be expected to continue to be, a consistent source of new jobs, and may be expected to continue to generate new jobs during periods of both economic expansion and recession.

The Waukesha County OEDP Committee particularly perceived the significance of the health services industry to the growth of jobs in Waukesha County. U. S. Census data indicate that from 1970 to 1980, the number of Waukesha County persons employed in the health services industry increased by 5,330, or about 101 percent, compared to increases of 57 percent in the Region, 58 percent in the State, and 71 percent in the nation. Once more, the health services industry is expected to continue to be a high growth industry throughout the nation during the remainder of this decade.⁹

Constraints Related to Potential Four:

Location Problems--Some commercial enterprises within the retail trade and service industries of the County operate at a disadvantage because of competition from commercial enterprises located in Milwaukee County. Also, efforts to expand the retail trade and service industry of the County through the establishment of new fringe-area commercial developments encounter problems associated with the initial high cost of extending sanitary sewer and water supply utility lines to such development. Finally, the design difficulties and high construction costs typically encountered in the redevelopment of the older central business districts, areas where retail trade and service establishments are concentrated in the County, tend to make such redevelopment a politically controversial issue. Expansion of retail trade and service establishments in the central business districts of the County also tends to be more difficult and more expensive to accomplish than new construction in outlying areas because of the complex pattern of property ownership in the older central business districts, and because of the structural and functional obsolescence of structures in the central business districts. Together, the location of the County with regard to Milwaukee County and the cost of providing for the location of new retail trade and service establishments within the County could constrain the expansion of these industries in the County.

Arterial Street and Highway Transportation Improvements--While the overall arterial street and highway transportation system in Waukesha County is of a high quality, the OEDP Committee indicated that there is a need to upgrade a number of arterial streets and highways in those communities that have experienced high rates of residential growth and development. In addition, the OEDP Committee indicated that highway travel in a north-south direction in the County is difficult.

Scattered Residential Development Pattern--Since the 1960's there has been a proliferation of urban residential development in the County, much of it in small, scattered, rural enclaves. This proliferation of outlying residential

⁹Glen C. Pulver, University of Wisconsin-Extension, "Future Employment Growth," Community Economics, No. 42, March 1980.

development, and the willingness of residents to travel long distances by auto for goods and services, somewhat lessens the market attraction of the County's retail trade and service enterprises located in the County's traditional central business districts. The scattered residential development pattern in the County could, in part, restrict the growth of employment opportunities in the retail trade and service industries in the County.

Civilian Labor Force Issues--There is a general lack of awareness on the part of the civilian labor force that the retail trade and service industries are, and will probably continue to be, growth industries, resulting in many new opportunities for employment. Many jobs in the retail trade and service industries, however, tend to pay lower wages and demand a relatively lower skill level, resulting in a negative image of these jobs by many members of the labor force. As a result, many retail trade and service industry jobs are perceived as providing little if any opportunity for career advancement. These factors could result in the lack of availability of quality workers for jobs in the retail trade and service industries and, therefore, act as constraints to this industry's future growth.

Potential Five: Expansion of the Recreation and Tourism Industry

Expansion of the recreation and tourism industry in Waukesha County could provide substantial additional employment opportunities. In 1983, recreation and tourism sales in Waukesha County, \$245 million, ranked the County third out of 72 counties in Wisconsin, and the tourism industry of the County accounted for about 8,639 jobs, or about 8 percent of total county employment, indicating that the tourism and recreation industry is an important segment of the county economy. Despite significant urbanization, Waukesha County encompasses an abundance of high-quality natural resource areas which provide an ideal setting for a wide range of outdoor recreational activities. County and state facilities provide a variety of nature study, hiking, and educational opportunities. In addition, the County provides a variety of indoor recreational opportunities, including restaurants, movie theaters, and related activities. The importance of the recreation and tourism industry is evidenced by the creation of the Waukesha County Tourism Council in 1981.

The County's 33 inland lakes--each having 50 acres or more of surface water area--and numerous rivers and streams provide ample opportunity for boating, fishing, and other aquatic activities. Pleasure driving, particularly over designated scenic routes in outlying areas, is also a popular way of enjoying the natural beauty and unique cultural heritage of Waukesha County.

One of the most energetic historic restoration sites in the nation is Old World Wisconsin, near the Village of Eagle in Waukesha County. The State Historical Society is reconstructing a variety of authentic ethnic homesteads on more than 570 acres of rolling meadowlands. The structures were located in other regions of the State, carefully dismantled, with each board and brick numbered, trucked to this location, and just as carefully reassembled. Homesteads of all of the major nationalities which settled the Wisconsin territory will be represented. The land is part of the Kettle Moraine State Forest-Southern Unit.

Waukesha County is able to meet industrial and business needs for small- and medium-size meeting, conference, convention, and exhibit facilities. The

County's major hotels and motels provide approximately 1,400 first-class rooms, a sufficient supply of meeting rooms and suites, and the opportunity to combine business meetings and conferences with various outdoor recreational activities such as golf, tennis, and skiing.

In addition, the Waukesha County Exposition Center and Forum is a civic and convention center containing over 25,000 square feet, and is equipped to handle all types of meetings, shows, and exhibits. Facilities are also provided for outdoor events, including horse shows and other livestock events.

Constraints Related to Potential Five:

Perception of the Recreation and Tourism Industry as a Low Employment-Generating Industry--The recreation and tourism industry is often considered a part of the larger retail trade and service industries. The magnitude of the manufacturing employment in the County, as well as throughout the Region, has historically resulted in local economic development practitioners primarily focusing on the manufacturing industry in their economic development activities. As a result, economic development practitioners have often failed to recognize the potential of the tourism and recreation industry in creating new employment opportunities.

Interstate and Intrastate Competition in the Tourism Industry--In the recent past, local and state governments have realized the importance of the recreation and tourism industry to the growth of their respective economies. As a result, there has been a recent increase in the competition for tourism sales. Consequently, economic development practitioners in Waukesha County will need to pursue development opportunities in the recreation and tourism industry in the same manner that they actively pursue other, more traditional economic development activities, such as the retention and expansion of the County's manufacturing industry base.

Lack of Awareness of Local Resources by the Resident Population--The success of an area's recreation and tourism industry is often dependent on the resident population's awareness and utilization of the available recreation and tourism resources. Overall, the OEDP Committee perceives that the Waukesha County population is not totally aware of the recreation and tourism resources available in the County and, therefore, does not utilize these resources to their greatest extent. This lack of awareness is due, in part, to the lack of a local countywide communication medium that is exclusively devoted to Waukesha County issues and concerns.

Lack of Large Entertainment and Convention Facilities--As previously indicated, numerous small- and medium-size entertainment and convention facilities are located throughout Waukesha County. However, the Waukesha County OEDP Committee perceived a need for an entertainment facility capable of accommodating events that would attract large audiences and/or large conventions.

Natural Resource Base Protection Issues--The recreation and tourism industry in Waukesha County is primarily oriented to the natural resource amenities of the County. In many instances, sound planning and design of recreational facilities located in proximity to or within areas of high natural resource base value can provide for orderly recreational facility development, resulting in minimal disturbance to or alteration of the natural resource base. However, in some instances conflicts between recreational facility development

objectives and objectives directed toward the preservation of the natural resource base cannot be avoided. In such instances, natural resource base preservation objectives may hinder, if not preclude, recreational facility development.

Restrictive Attitudes Toward New Public Recreational Facilities Development--

It was the perception of the OEDP Committee that many county residents view expansion of the recreation and tourism industry, particularly the establishment of new public recreational facilities oriented to areas possessing natural resource amenities, as a threat to the pleasant, rural quality of life enjoyed by county residents. Major public recreational facilities in the County could tend to attract a large influx of nonresidents. Many residents believe that continued development of this type could alter the predominantly rural character of the County, and place substantial additional burdens on the utilities, facilities, and services provided by the County and the local units of government within the County.

Seasonal Operational Characteristics of Some Recreational Activities--

The County's climate is characterized by four distinct seasons, which provide opportunities for a diverse range of outdoor recreational activities. Nevertheless, a substantial portion of the recreation and tourism industry is oriented toward business operation during one or perhaps two of these seasons. This seasonal orientation produces an annual cycle with periods of high-level business activity, and therefore high employment, and periods of low-level business activity, and therefore low employment. In addition, seasonal characteristics make the recreation and tourism industry in the County vulnerable to unseasonable weather conditions. Consequently, while this industry can be viewed as an economic development potential, its seasonal characteristics can cause unexpected unemployment.

Potential Six: Agriculture and Agri-Business Industry

While Waukesha County is a predominately urban country and a part of the Milwaukee metropolitan area, the Waukesha County OEDP Committee identified the agriculture and agri-business industry as an important economic development potential in the County. In 1980, approximately 1,850 persons, or about 1 percent of the county labor force, were employed in the agriculture, forestry, and fishing industry. However, this figures does not include the undeterminable number of persons in the labor force who are employed in agriculture-related industries who are dependent upon the agricultural production of Waukesha County, as well as the State of Wisconsin. While the number of acres devoted to agricultural land use declined by approximately 54,484 acres, or 25 percent, from 1963 to 1980, there were a total of 161,557 acres of agricultural land use, including land devoted to farm buildings, in Waukesha County in 1980. The decline in the amount of agricultural land in the County could be abated as a result of the adoption of the Waukesha County agricultural land preservation plan in 1984 by the Waukesha County Board of Supervisors. The farmland preservation plan identifies primary, secondary, and transitional farmland preservation areas. The plan delineates preservation areas in relation to primary environmental corridors, potential sewer service areas for the year 2000, incorporated city and village areas, and major public landholdings. The plan recognizes the prime agricultural lands of Waukesha County as an important economic resource and recommends that they be carefully preserved and managed. The plan also provides for orderly development of the urban

growth centers and selected rural areas of the County, and provides for the preservation of existing natural areas.

Constraints Related to Potential Six:

Declining Rural Land Use--As previously indicated, agricultural land use in Waukesha County consisted of approximately 161,557 acres in 1980, or a decline of 54,484 acres, or about 25 percent, from the 1963 total. A continued trend of displacement of agricultural land use to urban land uses will further erode the agricultural and agri-business industry in Waukesha County.

Decreasing Farm Prices--Because of the lack of land development that has resulted from the recent economic recession, the value of farmland has declined in Waukesha County. This decline will be documented in a publication to be issued in August 1985 by the Wisconsin Department of Agriculture, Agricultural Reporting Service. The declining land values are a cause of concern for farm owners.

Need for Educational Programs--A forthcoming report by the Wisconsin Department of Agriculture, Agricultural Reporting Service, will indicate that farmers in Waukesha County are substituting higher valued crops, such as fruits and vegetables, for more traditional crops such as wheat and corn. These higher valued crops generate a higher income per acre for farmers. However, Mr. Max Horwathich of the Agricultural Stabilization and Conservation Committee in Waukesha County indicates that an educational program is necessary in the County in order to provide farmers with information on growing and marketing these higher valued crops.

Absentee Ownership of Farmland--The Waukesha County Agricultural Stabilization and Conservation Committee office is currently compiling information on the degree of absentee ownership of farmland in Waukesha County. At the present time, however, Mr. Max Horwathich of the Committee staff indicates that, although land speculation has recently declined because of the lack of land development pressures and declining farm prices, the absentee ownership of farmland remains a problem in Waukesha County. Absentee farmland owners, in a number of cases, are less concerned with maintaining the high quality of farmland in the County.

Conflicts Between Agricultural and Residential Landowners--The OEDP Committee perceived that a conflict currently exists between owners of agricultural land and owners of residential property in Waukesha County. For example, owners of residential property are, in many cases, unfamiliar with the odors that often occur at and near farm locations. In addition, farmers have reported damage to crops and property by trespassers thought to be residents of nearby residential areas.

Lack of Erosion Control--The staff of the Waukesha County Agricultural Stabilization Committee indicates that, while efforts are necessary to control the erosion of farmland, farm owners are often reluctant to undertake these efforts because of their high cost. In addition, urban improvements in proximity to farmland often result in soil erosion even though preventive efforts have been implemented to reduce surface water absorption and topographical changes in the urbanizing areas.

Rising Energy Costs--The rising cost of petroleum, as well as of other energy sources, that occurred during the 1970's has had significant effects on farming operations, resulting in decreasing incomes for farm owners. The Wisconsin Department of Energy indicates that in 1980 about 83 percent of all Wisconsin on-farm energy requirements were met by petroleum products, with the remainder being met by electrical energy. The rising cost of petroleum experienced during the 1970's has resulted in experimenting with a range of structural changes in the methods by which farming operations are carried out, changes that will need to be implemented by the State's farmers in order to reduce the overall cost of energy.

Agricultural Financing Problems--A report by the Wisconsin Agricultural Reporting Service entitled Agricultural Finance Survey, Wisconsin, May 1984, indicates that "farm foreclosures, high interest rates, bankruptcies, and other farm credit problems...are a major issue and of deep concern to farmers, agricultural lenders, and agricultural policy makers in the State of Wisconsin." The study indicates that in May 1984, the delinquency rate of commercial bank loans to farm operators, 4.2 percent, compared to a normal delinquency rate of about 1.0 percent. In addition, during the first five months of 1984, the loan refusal rate for commercial bank loans to farm operators, 12.0 percent, was significantly higher than the normal loan refusal rate, 6.1 percent, and greater than the 1983 loan refusal rate, 6.7 percent.

Chapter V

ECONOMIC DEVELOPMENT STRATEGY

INTRODUCTION

The preceding chapters of this report have identified: 1) historic economic development efforts in Waukesha County; 2) characteristics of the natural resource base, built environment, and related features in the County pertinent to economic development; 3) socioeconomic characteristics of the County pertinent to economic development; and 4) the potentials for, and constraints on, continued economic development in Waukesha County. The purpose of this chapter is to identify specific economic development activities that together can constitute an initial economic development program for Waukesha County. The program is designed to expand employment opportunities within the County, and thereby to reduce local unemployment, to increase personal income, and generally to improve the overall quality of life in the County.

The economic development strategy proposed herein is the link between the findings of the inventories and analyses and the economic development program activities that are necessary to improve the County's economy. As such, this chapter presents: 1) recent economic trends, including the current condition of the economy, the economic outlook, the major probable causes of existing economic problems, and the potentials for generating new employment opportunities; 2) overall goals for a countywide economic development program; 3) specific criteria to be utilized to guide the ongoing operation of an economic development program; 4) a set of specific program objectives and activities; and 5) program evaluation criteria.

Waukesha County has undertaken a number of economic development activities, most notably activities relative to the employment training programs of the U. S. Department of Labor, Job Training Partnership Act (JTPA), and this act's predecessor, the Comprehensive Employment and Training Act (CETA), as well as providing one-half of the necessary funding for a countywide "hot-line" telephone service, with remaining funding being provided by the Waukesha County Technical Institute. However, Waukesha County has not, to date, been formally engaged in a comprehensive economic development program. Consequently, the economic development program activities recommended herein constitute initial activities that provide a foundation for additional activities as the program progresses.

The recommended county economic development program is not intended to duplicate, or to supplant, the existing economic development efforts of local units of government within the County, or of private development organizations. Although public economic development programs have in the past been carried out primarily at the state and the local municipal levels of government, county governments have become increasingly concerned over economic development and have mounted economic development programs. The economic development activities recommended herein are intended to enhance the economic development efforts of the cities, villages, and towns in Waukesha County.

RECENT ECONOMIC TRENDS IN WAUKESHA COUNTY

Unemployment Rates

Chapter III of this report analyzed the current condition of the Waukesha County economy as indicated by certain important economic indicators. This analysis indicated that a significant economic concern in Waukesha County is the high unemployment rate. The percentage of unemployed persons in Waukesha County in relation to the total county labor force is an important indicator of the economic health of the area. In 1970, the unemployment rate in Waukesha County, 3.2 percent, was less than that in the Region, 3.7 percent, and less than that in the State, 4.0 percent, and the nation, 4.4 percent. By 1980, the unemployment rate in Waukesha County had increased to 4.8 percent; however, the county unemployment rate remained below that in the Region, 5.7 percent, and below the unemployment rates in the State, 6.6 percent, and the nation, 6.5 percent. By 1983, the unemployment rate in Waukesha County had risen to 10.0 percent. The Waukesha County unemployment rate in 1983 was below that in the Region, 10.7 percent, and the State 10.4 percent, but greater than that in the nation, 9.6 percent. This relatively high unemployment rate in the County represented a total of 14,300 unemployed workers within the County, or over twice the number of unemployed workers in 1980.

While unemployment rates declined during 1984, reaching an annual average of 6.4 percent, the high rates of the recent past signal the existence of economic problems in the County. As indicated in Chapters III and IV, these relatively high unemployment rates are due, in part, to the most recent national economic recession, and to the effects of this recession on the durable goods manufacturing and construction industries in the County; to structural changes in the economy; and to changing world product markets.

Changes in the Structure of the Economy

Growth in the manufacturing industry has traditionally been viewed by local economic development practitioners as the most effective means for creating jobs and ensuring long-term economic growth. Over the past two decades, however, one of the most important changes that has occurred in the structure of the national economy is the decline in the importance of manufacturing activities and an increase in the importance of service activities, as well as the shift in the nature of manufacturing activities, with "high technology" industries accounting for a steadily increasing portion of all manufacturing jobs.

The structural changes in the national economy are due, in part, to changing world economic conditions and world markets. American industries face increasing competition in markets which the United States once dominated. For example, United States steel production decreased from 47 percent of world production in 1950 to only 14 percent in 1980. Domination by the United States in the automobile industry has also ended, with Japan producing more passenger cars than the United States for the first time in 1980. Such changes in the international economy may be expected to have a significant effect on the future size and structure of the national economy, as well as on the economy of Waukesha County.

Certain structural changes which are occurring in the national economy are also evident in the economy of the State of Wisconsin. Following national

trends, employment within the State in the manufacturing industry declined from 27 percent of total employment in 1970 to 25 percent in 1980. It is important to indicate, however, that the percentage of manufacturing industry employment in Waukesha County during this time period remained constant at 28 percent. However, employment within the Region's manufacturing industry declined from 34 percent of total employment in 1970 to 30 percent in 1980. A strong manufacturing sector has historically been the foundation of the economy of the State, as well as Waukesha County. Although manufacturing industry employment still accounts for a large proportion of total county employment, the recent sharp decline in the importance of this industry at the state and regional levels may have serious long-term effects on the economy of the County.

The increasing importance of high technology manufacturing may also be expected to have a significant effect upon the Waukesha County economy. In this regard, it has been estimated that in 1979 high technology jobs accounted for 40 percent of all manufacturing jobs in the United States. Such jobs accounted for only 33 percent of all manufacturing jobs in 1955.

Population Growth and Growth of the Economy

Although the unemployment problems and changes in the structure of the county economy should be of concern to local economic development practitioners, several economic indicators show that the condition of the Waukesha County economy may be somewhat better than the condition of the economy of the Region, State, and nation. Between 1920 and 1980, a period during which the County showed substantial increases in population, the population of the County grew to about 280,200 persons, an increase of almost 558 percent, while over this same time period population increases at the regional, state, and national levels were 125 percent, 79 percent, and 78 percent, respectively. From 1970 to 1980, the rate of population change in Waukesha County was about 22 percent, among the highest rates of increase in total population of any of the seven counties in the Southeastern Wisconsin Region. In 1979, the mean household and per capita incomes in Waukesha County were higher than those for the Region, State, and nation. From 1970 to 1980, the County's labor force grew at a rate of 55 percent, substantially greater than the rate of growth for the Region, 19 percent, the State, 28 percent, and the nation, 31 percent. A 1984 Wisconsin Department of Development report entitled, New Industries and Plant Expansions Reported in Wisconsin, 1983, indicates that Waukesha County was the location of five new manufacturing firms in 1983, ranking the County second of all counties in Wisconsin in attraction of new manufacturing firms. Three of these firms were branch firms of existing state firms, and two firms were relocated state firms. In addition, Waukesha County ranked fourth of all Wisconsin counties in the number of expansions by existing manufacturing companies with 12 plant expansions, of which 10 were manufacturing plant additions and two were new manufacturing plants.

As a result of the employment growth and plant expansions, as well as the recent large increase in the resident population in the County, the OEDP Committee has indicated that the County is perceived as being a growth-oriented County. The County's location within the Milwaukee metropolitan area, the well-developed transportation system, the service capacity of existing sanitary sewerage, water supply, and gas and electric power systems, the abundant natural resource amenities, and the wide range of high-quality educational,

cultural, and health service facilities and services provides a sound basis for continued economic growth and development.

Economic Outlook

Unemployment rates in Waukesha County have recently declined somewhat from the high annual average rate of 9.8 percent in 1982 and 10.0 percent in 1983, to an annual average of 6.8 percent in 1984. A continuing downward trend in unemployment rates in 1985 would seemingly indicate an improving county economy. However, recent economic reports indicate that economic conditions in 1985 in the Midwest region and Waukesha County may not continue to improve. A January 1985 report by the Federal Reserve Bank of Chicago indicates that the national economic recovery that is currently taking place is not being shared by the Midwest.¹ The report indicates that employment in the Bank's district--consisting of the States of Wisconsin, Michigan, Illinois, Iowa, and Indiana--rose 0.7 percent during the six-month period from April 1, 1984 to October 1, 1984--less than the 1.4 percent increase that could be expected based on 1983 employment increases.

A number of economists from business, industry, banking, and academia also foresee little short-term improvement in the State's economy. Recent forecasts by the economists listed in Table 69 indicate that unemployment rates are not expected to decline between now and the end of 1985, with only "nominal" growth in the economy of the State. Mr. Dale Landgren of the Wisconsin Electric Power Company predicted that while the State may gain about 30,000 jobs in 1985, southeastern Wisconsin may not gain any at all.

Although the unemployment problems, structural change in the economy, and pessimistic short-term economic outlook for the State should be of concern to local economic development practitioners, several other factors indicate that the Waukesha County economy could improve. The large manufacturing industry base of the County, together with the location of Waukesha County within 350 miles of some of the most important industrial areas and heaviest population concentrations in the Midwest, provides a good potential for the location of branch manufacturing plants in the County. The County is served by a good transportation system which links it efficiently and economically not only to the rest of the Milwaukee metropolitan area and to major population and employment centers of the Midwest, but to major national and international markets as well. In addition, the necessary public utilities, including sanitary sewerage, water supply, and gas and electric power systems in Waukesha County, all have sufficient service capacity to meet the needs of new industrial users.

A December 1984 report by the Metropolitan Milwaukee Association of Commerce (MMAC) indicated that nine of 15 indicators used to measure economic activity in the four-county Milwaukee metropolitan area were higher in December 1984 than in December 1983. The report further indicated that total employment rose 2.5 percent in November to 645,700, the highest level since June 1982. Manufacturing employment grew 1 percent. Wholesale and retail employment reached the highest level in four years and other employment reached 330,600, a record high.

¹Mr. George Cloos, Midwest Update, Federal Reserve Bank of Chicago, December 1984.

Table 69

WISCONSIN ECONOMISTS' OUTLOOK FOR 1985

Economist	1985 Forecast of the Percentage Growth in National Economic Indicators		
	Gross National Product	Inflation	Year-End Unemployment Rate
Mr. Victor Chou, University of Wisconsin-Milwaukee.....	3.5	4.0	7.0
Mr. Gordon Gunnlaugsson, Marshall and Ilsley Bank.....	3.5	4.2	6.8
Mr. Neil V. Pinsky, Robert W. Baird and Company.....	4.0	5.0	7.0
Mr. Don Hester, University of Wisconsin-Madison.....	2.5	3.7	7.5
Mr. Russell Kafka, Heritage Bank.....	4.0	4.7	7.0
Mr. Leon Kendall, Mortgage Guaranty Insurance Corporation.....	3.9	3.0	6.9
Mr. Dale Landgren, Wisconsin Electric Power Company.....	2.3	4.5	7.4
Mr. Robert Milbourne, Kohler Company....	3.6	4.8	6.8
Mr. Clare W. Zempel, First Wisconsin National Bank of Milwaukee.....	2.5	5.5	7.5
Average	3.3	4.4	7.1

Source: Milwaukee Journal, December 30, 1984; and SEWRPC.

A potential important economic development activity in Waukesha County is the recently announced development of a 300-acre industrial park by the Wisconsin Electric Power Company (WEPCo) at the intersection of IH 94 and STH 164 in the County, as well as the WEPCo's recently announced industrial development program that involves the promotion of IH 94 in southeastern Wisconsin from the Wisconsin-Illinois border to the City of Milwaukee and from the City of Milwaukee to Madison, Wisconsin. This program, whose goal is to attract new industries, especially in the areas of automated manufacturing, bio-medical technology, and agri-business/genetics, as well as the availability of the industrial land at the WEPCo industrial park, could help to generate new employment opportunities in Waukesha County.

The future economic development of Waukesha County will be affected by the economic development activities of local governmental units in the County, the activities of private economic development practitioners, and the economic development activities of local units of government in those counties contiguous to Waukesha County. A proliferation of economic development activities by local units of government and public and private economic development practitioners during the early 1980's indicates that there is a growing concern about the future of the county economy. The most significant of these efforts include: 1) the publication of a report by the Joint Committee on Technology and Innovation of the Greater Milwaukee Committee and the Metropolitan Milwaukee Association of Commerce on the opportunity for high technology industry employment in the Milwaukee area; 2) the completion of a study in 1983 by Goals for Greater Milwaukee 2000, which advanced seven goals for the economy of the Milwaukee metropolitan area; 3) the establishment in 1984 of a county-wide "hot-line" telephone service at the Waukesha County Technical Institute (WCTI); 4) the 1984 Regional Planning Commission and Wisconsin Electric Power Company study of available industrial lands in the County and the Southeastern Wisconsin Region; 5) the organizing of a coalition of chambers of commerce in

Waukesha County; 6) the recent completion of industry retention surveys by a number of local units of government in Waukesha County; 7) the organization of the Milwaukee Innovation Center in September 1984, designed to assist in the development of new business ventures in the Milwaukee metropolitan area; 8) the incorporation of Forward Wisconsin, Inc., a private corporation funded jointly by the State of Wisconsin and private business to attract new industry to Wisconsin; and 9) the efforts of the Wisconsin Electric Power Company IH 94 business connection campaign, which is designed to promote the development of the area by emphasizing and capitalizing on the variety of economic development assets that exist in the IH 94 corridor. In addition, a number of local units of government in Waukesha County have become concerned about the future of their local economies and are initiating economic development activities. The growing concern of local units of government and public and private economic development practitioners for the future of the Wisconsin and local economies can only serve to improve the prospects for improving economic conditions in Waukesha County.

Probable Causes of Economic Problems in Waukesha County

Chapter IV of this report indicated that Waukesha County possesses a number of characteristics that suggest a potential for growth in employment opportunities. In addition, Chapter IV discussed a wide range of economic development-related problems that currently exist in the County. While all of these problems need not be reiterated in this section, it is important to identify the major causes of these economic development problems.

The Recent National Economic Recession: The Waukesha County economy is concentrated in the manufacturing industry and, more specifically, in the durable goods manufacturing industry. In 1982, 30 percent of total industry employment within the County was in manufacturing, and 72 percent of the manufacturing employment was in the durable goods manufacturing industry. This concentration of county employment makes the County particularly vulnerable to national economic recessions. The relatively high county unemployment rates in 1982 and 1983 were due, in part, to the national economic recession that began in the early part of this decade, and the effects of this recession on the durable goods manufacturing and construction industries in the County. The recent national economic recession is perhaps the most important factor which has raised the level of concern of local public officials and private economic development practitioners over economic development in the County.

Structural Changes in the Economy: This chapter has indicated that major changes are occurring in the structure of the national, state, and regional economies. Growth in manufacturing industries has traditionally been viewed as the most effective means for creating jobs and enjoying long-term economic growth. While the growth in manufacturing employment in Waukesha County from 1970 to 1980, 57 percent, far exceeded that for the Region, State, and nation, the declining national importance of manufacturing employment could affect the economy of Waukesha County. In addition, basic structural changes in the economy that affect the manufacturing industry are also evidenced by the shift in the nature of manufacturing activities, with the application of high technology to existing manufacturing processes resulting in a change in the nature of many manufacturing jobs. These changes are affecting, and may be expected to continue to affect, the economy of the County, and will need to be taken into account by local economic development practitioners as economic development activities are identified and implemented.

Changing World Product Markets: The American manufacturing industry faces increasing competition in product markets which it once dominated, with this increasing competition an important factor in the ability of the County's manufacturing firms to increase employment levels in the future. This internationalization of product producers and product markets may require Waukesha County manufacturing firms to reorient product production and marketing efforts. Labor costs have become particularly important as the manufacturing industry relocates in undeveloped countries, and the higher level of wages in Waukesha County could negatively affect the ability of existing manufacturing industries to compete on a worldwide basis. In addition, the political affiliation of many third world countries with countries other than the United States may affect the ability of American manufacturers to market their products in some foreign countries. The internationalization of product markets has also placed new importance on the value of the United States dollar. A report by the Wisconsin Strategic Development Commission indicates that the value of the dollar against foreign currencies is an important factor for Wisconsin's manufacturing firms serving world markets. Wisconsin ranks thirteenth among the states in the nation in manufacturing exports. The recent strength of the United States dollar has been damaging to the export sector, and is one of the reasons why Wisconsin has been more severely affected by the recent economic recession than have other states. Such changes in world markets may be expected to affect the national economy and, more specifically, the product marketing and product sales of Waukesha County manufacturing firms.

Distribution of Economic Activity in the Nation: The distribution of economic activity in the nation could affect the ability of Waukesha County to retain existing and attract new manufacturing industries. Economic growth indicators for the north-central region of the nation, which includes Wisconsin, have consistently lagged behind those of the southern and western regions of the country. Of particular importance is the relative change in employment levels. Total employment in the southern and western regions of the nation increased by 39 percent and 49 percent, respectively, between 1970 and 1980, in comparison to relative increases of 18 percent and 11 percent for the north-central and northeastern regions, respectively. Manufacturing employment increased by 37 percent in the West and 24 percent in the South between 1970 and 1980, while manufacturing employment increased by only 3 percent in the north-central region during this time period.

Intraregional Economic Activity Trends: There has been a significant change in the spatial distribution of economic activity within the Region during the past three decades. Particularly evident is the change in the distribution of jobs, or employment opportunities, within the Region, with a general shift in economic activity away from the established older urban centers, including Milwaukee, Racine, and Kenosha Counties, outward to the suburban and rural-urban fringe areas of the Region. The most notable changes have occurred in Waukesha and Milwaukee Counties. Waukesha County's share of all jobs in the Region increased dramatically from about 3 percent in 1950 to 14 percent in 1980. Conversely, Milwaukee County's share of all jobs in the Region decreased from 79 percent to 62 percent over the same period. The changing distribution of economic activity has important implications for Waukesha County. While these regional economic activity trends should be an advantage for the County's future economic development, this activity could require local units of government to better prepare for continued urban development, development that could result in substantial public costs for the provision of basic government services.

Availability of Financing for Business Expansions and New Business Start-ups: The availability of financing for business expansion projects and new business start-ups is an important component of economic development in Waukesha County. The Waukesha County OEDP Committee perceived that financial institutions in Wisconsin generally maintain conservative business lending practices, and, therefore, the availability of financing for business expansion projects may be a problem for manufacturing firms in Waukesha County. A study by the Wisconsin Strategic Development Commission indicated that a lack of capital availability to certain businesses contributes to Wisconsin's economic dilemma. The report indicated that Wisconsin ranks low in bank deposits per capita (33rd in the nation); loan-to-deposit ratio (23rd in the nation); and commercial and industrial-loans-to-total-loan ratio (32nd in the nation). Wisconsin's largest bank ranks only 70th largest in the country. Consequently, the report indicated that the conservatism of financial institutions in Wisconsin may not be as great a problem as the sheer availability of financial resources.

Lack of a Coordinated Countywide Economic Development Program: This report has identified a wide range of public and private organizations that provide economic development and related employment and training services in Waukesha County. Nevertheless, the Waukesha County OEDP Committee has noted that there is a lack of countywide economic development activities in the County, including economic development planning, an ongoing countywide industry attraction and retention program, economic development technical assistance to local units of government in the County, and coordination of the available economic development services currently available in the County.

Potentials for Generating New Employment Opportunities in Waukesha County

It is important for any sound economic development program in Waukesha County to identify the greatest potentials for generating employment opportunities. This section summarizes the county economic development potentials, with a more detailed discussion of these potentials presented in Chapter IV of this report.

Retention and Expansion of the County's Manufacturing Industry Base: While retention and expansion of all industry employers in Waukesha County should be a priority in any county economic development program, the structure of the county economy results in the need for a special emphasis on the retention and expansion of existing manufacturing employers, as well as the attraction of new manufacturing industries to the County. In 1982, approximately 29,634 jobs, or 30 percent of all jobs in the County, were in the manufacturing industry, a larger number of jobs than in any other county industry. As indicated previously, the sheer size of the existing manufacturing industry base in the County, together with the location of the County within 350 miles of some of the most important industrial areas and heaviest population concentrations within the Midwest, provides a good potential for the location of branch manufacturing plants in the County. The County is served by a good transportation system which links it efficiently not only to the rest of the Milwaukee metropolitan area and to major population and employment centers of the Midwest, but to major national and international markets as well. In addition, necessary public utilities in Waukesha County, including sanitary sewerage, water supply, and gas and electric power systems, all have sufficient service capacity to meet the needs of new industrial users.

The County's existing labor force, as well as the labor force of the entire Milwaukee metropolitan area, of which the County is an integral part, also is an advantage to the County for the retention and expansion of the existing manufacturing industry base. The existing labor force is highly skilled, and the educational attainment of that labor force compares favorably to that of other areas of the nation. In addition, a wide range of high-quality labor force training programs are available to manufacturing establishments at the Waukesha County Technical Institute, the University of Wisconsin-Waukesha, the University of Wisconsin-Extension, and Carroll College, as well as at the post-secondary educational institutions located in proximity to Waukesha County in Milwaukee County and Dane County. Together, the skills and educational attainment of the existing labor force and available training facilities should serve to encourage manufacturing industry establishments to locate in the County.

A 1984 report by the Wisconsin Department of Development indicates that the majority of new jobs created in the State are created by existing businesses that expand, rather than by new enterprises that start-up in the State or migrate to the State from other areas. A second Department of Development report indicates that Waukesha County ranked fourth of all Wisconsin Counties in 1983 in the number of expansions by existing manufacturing firms, with 12 such expansions. These findings emphasize the importance of county economic development activities designed to retain and expand the existing manufacturing industry employment.

Generation of Employment Opportunities Through the Application of High Technology to Existing Industry, as well as Other High Technology Industry Opportunities: This chapter has discussed the basic structural changes taking place in the national economy, noting that these have been marked by the steadily increasing portion of manufacturing jobs that are oriented to high technology industries. High technology industries are, by definition, knowledge- and capital-intensive industries that employ a high percentage of highly trained workers and produce products based on recent scientific advances having high value to the consumer. It should be emphasized that this potential within Waukesha County would primarily entail the application of high technology to existing industries, rather than the development of the kinds of high technology firms concentrated in other areas of the nation, such as Massachusetts, California, and North Carolina. While the location of such firms in the Waukesha County area is certainly possible, the application of high technology to existing industry may be a more reasonable expectation.

One of the most important reasons why high technology industry may constitute an important economic development potential for Waukesha County is the nearby location of the Medical College of Wisconsin in Milwaukee County, a strong research-oriented institution located at the Milwaukee Institutions grounds. While the Milwaukee School of Engineering, Marquette University, and the University of Wisconsin-Milwaukee also have research capabilities, the Medical College of Wisconsin's annual research budget is approximately \$23 million in the basic sciences alone, while the annual research budgets for the University of Wisconsin-Milwaukee and Marquette University for both the basic and social sciences combined are approximately \$8 million and \$9 million, respectively. In addition, the County's location within approximately one-hour travel time of the University of Wisconsin-Madison also affords an opportunity to capitalize on the outstanding research capabilities of this institution, which has an annual research budget of approximately \$69.5 million.

The recently formed Milwaukee Innovation Center, a privately funded organization whose objective is to help inventors and entrepreneurs start new businesses which are based on innovative products or ideas with high growth potential, is an important new resource for the promotion of the development of high technology-related industry in the Milwaukee metropolitan area. The Milwaukee Innovation Center, organized by private business leaders who believe that such new enterprises--carefully nurtured, structured, and developed--can inject new vigor into the regional economy, should be of particular value in the development of high technology industry in Waukesha County. Finally, the previously discussed WEPCo IH 94 promotion, and the WEPCo's industrial park development in the County, should provide economic development opportunities in the County.

Facilitating New Entrepreneurial Opportunities Directed Toward Small Business Expansions and Small Business Start-ups: There are several reasons why Waukesha County should encourage small business development, specifically, the development of small manufacturing firms. Small businesses dominate the job generation process in Wisconsin. The Wisconsin Department of Development study entitled The Job Generation Process in Wisconsin: 1969-1981 indicates that very small businesses (1 to 20 employees) and small businesses (21 to 100 employees) generated 77 percent of the net new jobs created in Wisconsin between 1969 and 1976. More importantly, the report indicates that from 1979 to 1981, a period of economic recession in Wisconsin, very small businesses were responsible for virtually all of the net job gains in Wisconsin, suggesting that very small businesses are an important key to generating new jobs during periods of both economic expansion and recession. The report indicates that very small businesses have a particularly important impact on job creation because when such firms are successful, they tend to expand and grow rapidly and, therefore, to create significant numbers of new jobs. Finally, the report points out that between 1969 and 1981, very small manufacturing firms consistently created new jobs at a faster rate than did very small service sector businesses. Even during the 1980 to 1981 recession year, very small manufacturing firms continued to add more jobs than they lost, in sharp contrast to the trend of larger manufacturers. The existing manufacturing industry base in Waukesha County and this industry's potential for industry establishment "spin-offs" important consideration in the identification of small business development as an economic development potential of Waukesha County.

Expansion of the Retail Trade and Service Industries: Waukesha County has a good potential to expand its retail trade and service industries. In 1982, the retail trade and service industries employed 35,788 workers in Waukesha County, or about 36 percent of all workers in the County. The service industry is becoming an increasingly important aspect of the County's economy. In 1970, the service industry accounted for about 15 percent of total employment in Waukesha County, while in 1980 this industry accounted for about 17 percent of total employment. The continuation of large increases in the resident population of the County, most evident between 1960 and 1980, will provide a growing market for retail and service industry establishments. Of particular significance is the potential for growth in the health services industry. U. S. Census data indicate that from 1970 to 1980, employment in the health industry in Waukesha County increased by 5,330 persons, or about 101 percent, compared to increases of 57 percent in the Region, 58 percent in the State, and 71 percent in the nation. Furthermore, as indicated in Chapter IV of this report, the health services industry is expected to continue to be a high growth industry throughout the nation during the remainder of this decade.

As indicated in this report, redevelopment efforts in a number of the central business districts of communities in the County have recently taken place, and should help to provide retail and service industry establishments with good locations. The previously referenced report by the Wisconsin Department of Development sets forth findings based upon historical industry employment growth which indicate that the service industry sector is, and may be expected to continue to be, a consistent source of new jobs during periods of both economic expansion and recession. Finally, regional employment projections to the year 2010 indicate that for other than the nonelectrical machinery industry, the largest percentage increases in employment should occur in the retail trade; medical and professional services; educational services; and finance, insurance, and real estate industries.

Expansion of the Recreation and Tourism Industry: Expansion of the recreation and tourism industry in Waukesha County could provide substantial additional employment opportunities. In 1983, recreation and tourism sales in Waukesha County ranked the County third out of the 72 counties in Wisconsin; and the hospitality, recreation, and travel industry employed a total of 8,639 persons, or about 8 percent of total county employment, indicating that the tourism and recreation industry is an important segment of the county economy.

The abundance of cultural and recreational opportunities in Waukesha County, as well as the cultural and recreational opportunities available throughout the Milwaukee metropolitan area, are a part of this industry's potential in Waukesha County. Despite significant urbanization, Waukesha County encompasses an abundance of high-quality natural resource areas which provide an ideal setting for a wide range of outdoor recreational activities. County and state facilities, most notably the state-owned Kettle Moraine State Forest-Southern Unit, provide a variety of nature study, hiking, and educational opportunities.

Agriculture and the Agri-Business Industry: While Waukesha County is a predominately urban county and a part of the Milwaukee metropolitan area, the Waukesha County OEDP Committee identified the agriculture and agri-business industry as an important economic development potential in the County. In 1980, approximately 1,850 persons, or about 1 percent of the county labor force, were employed in the agriculture, forestry, and fishing industry. However, this figure does not include the undeterminable number of persons in the labor force who are employed in agricultural-related industries that are dependent upon the agricultural production of Waukesha County and the State of Wisconsin. In 1984, the Waukesha County Board adopted the Waukesha County agricultural land preservation plan. The farmland preservation plan identifies primary, secondary, and transitional farmland preservation areas. The plan delineates preservation areas in relation to primary environmental corridors, potential sewer service areas for the year 2000, incorporated city and village areas, and major public landholdings. The plan recognizes the prime agricultural lands of Waukesha County as an important economic resource and recommends that such farmlands be carefully preserved and managed. The plan also provides for orderly development of the urban growth centers and selected rural areas of the County, and provides for the preservation of existing natural areas.

GOALS OF THE WAUKESHA COUNTY ECONOMIC DEVELOPMENT PROGRAM

An economic development program in Waukesha County will be successful only if the program has clear goals that can guide the development and implementation of the program over time. A statement of such goals should reflect the type of

economic development program that is desired in the County, and to which specific economic development program objectives and activities can be related. Only in this way can an effective economic development program be formulated for Waukesha County, and, importantly, its effectiveness over time monitored.

Economic Development Program Goals

The Waukesha County OEDP Committee has recommended that a countywide economic development program be established to assist in addressing the economic development problems of the County. The economic development program goals proposed by the Committee to guide the program are as follows:

1. To identify the organizational characteristics of an initial countywide economic development program that will result in an ongoing countywide economic development program.
2. To identify the economic development activities that should be carried out under a countywide economic development program to supplement and complement the activities of such programs at the state and local levels of government and of private enterprise, and effectively help improve the economy of the County.
3. To ensure the continued eligibility of Waukesha County and local units of government in the County for U. S. Department of Commerce, Economic Development Administration (EDA), grant assistance and business loan guarantees.
4. To retain existing employment opportunities and to provide for the expansion of employment opportunities in Waukesha County by helping to meet the needs of existing employers.
5. To create new employment opportunities by helping local units of government and public and private development organizations in Waukesha County attract new employers to the County.
6. To assist in creating new employment opportunities by helping to facilitate entrepreneurial opportunities, especially for small businesses, in Waukesha County.
7. To continue to provide the community facilities and services that are necessary for the expansion of employment opportunities in Waukesha County.

CRITERIA TO GUIDE THE ECONOMIC DEVELOPMENT PROGRAM

The County's economic development program is envisioned as an ongoing effort to improve the economy. In order to guide the County in its selection of specific activities to improve the county economy, as well as to guide the decision-making that will be necessary during the course of the implementation of the economic development program, the OEDP Committee has identified the following criteria:

1. Unemployed and underemployed. The economic development objectives and activities identified in the County's economic development program should enhance the ability of the County's unemployed and underemployed workers to gain meaningful employment.

2. Nature of program activities. The County's economic development program activities should include: technical assistance to public and private economic development organizations and private businesses, and, as appropriate, assistance in locating financial assistance to facilitate economic development in the County. The County's economic development program should enhance local efforts by providing assistance that would otherwise not be available and by helping to coordinate existing economic development efforts in Waukesha County.
3. Economic development financial assistance. The economic development program should assist local business and industry and local units of government, as well as the County itself, in securing necessary financial assistance from available state and federal economic development programs. Such financial assistance may include business loans, public works grants and loans, and grants to carry out economic development program activities.
4. Location of economic development projects. The county economic development program should provide assistance only to those economic development projects that:
 - a. Utilize and improve to the greatest extent possible the existing urban infrastructure in Waukesha County.
 - b. Protect and preserve the County's natural resources.
 - c. Adhere to local land development and building code regulations.
5. Duplication of efforts. The county economic development program should not sponsor or support economic development activities that are a duplication of activities of existing public or private economic development agencies or organizations. The County's economic development program should enhance these local efforts by providing assistance that would otherwise not be available and by helping coordinate existing economic development efforts in Waukesha County.
6. Industry attraction activities. The county economic development program includes a number of industry attraction activities. However, the program's industry attraction activities should not be designed to encourage the deliberate solicitation of industry establishments from counties contiguous to Waukesha County unless the establishment would otherwise be forced to locate outside the Southeastern Wisconsin Region.
7. Coordination of local units of government. The county economic development program should help facilitate cooperation among local units of government that are jointly affected by an economic development activity, such as an industry expansion, a new industry establishment location, or the improvement of public facilities and services.

WAUKESHA COUNTY ECONOMIC DEVELOPMENT PROGRAM: COURSE OF ACTION

The Waukesha County economic development program "course of action" consists of a set of specific objectives and the initial activities that should be undertaken to enable the County to achieve those objectives and, thereby, its

economic development goals set forth earlier herein. In addition, the program objectives and activities should help overcome the economic development constraints that have been identified in this report, as well as utilize the County's economic development potentials to provide for the expansion of employment opportunities.

Economic Development Program Objectives and Activities

The economic development program objectives and activities indicated below are intended to provide the foundation for an ongoing economic development program in the County, and are designed to be carried out during the first year of the program. As previously indicated, the County has not, to date, undertaken a formal economic development program and, as a result, the identification of program activities that may take place beyond the first year of such a program would be inappropriate.

Objective One: To establish the initial staff and advisory committee structure necessary to initiate an ongoing Waukesha County economic development program; to ensure the continued eligibility of the County and local units of government for EDA programs; and to identify additional economic development program activities. This objective is directly related to Goals 1, 2, and 3. Activities designed to accomplish this objective are set forth below.

Activity One--The Waukesha County Board of Supervisors, with the assistance of the Regional Planning Commission staff, should ensure the submittal of this draft OEDP document to the U. S. Department of Commerce, EDA, regional office by April 30, 1985, as well as to local units of government in Waukesha County for review and comment. Following the review of the draft OEDP document by the EDA and local units of government, appropriate changes, if any, should be made and the revised document submitted by the OEDP Committee to the County Board of Supervisors for review and approval.

Activity Two--To submit an OEDP annual report to the EDA. The EDA requires that counties eligible for EDA programs submit to the EDA, on an annual basis by June 30 of each year, an OEDP annual report. The OEDP annual report documents the current state of the economy; the progress of a county government in implementing the identified economic development program activities; and economic development program activities that are proposed for the forthcoming program year.

Activity Three--The Waukesha County Board of Supervisors should maintain an Economic Development Committee of the County Board. As indicated in this report, economic development may be expected to continue to be an issue of concern to county officials, local economic development practitioners, and county residents. A County Board Economic Development Committee will provide a forum for the discussion of, and recommendations for action upon, economic development issues and concerns that should be properly addressed by county government.

The Chairperson of the Waukesha County Board of Supervisors should appoint the members of the permanent County Economic Development Committee. The Committee should consist of not fewer than nine persons, a majority of whom are private sector individuals and three of whom are members of the Waukesha County Board. The Chairperson of the Committee will be a member of the Waukesha County Board. All the Committee members should be appointed for staggered terms. The Committee will operate under the existing Waukesha County Board rules for committees.

The Committee should be directed to implement the economic development program identified herein. As a first priority, the Committee should:

1. Recommend to the Waukesha County Board the appropriate staff support for an ongoing countywide economic development program.
2. Recommend to the Waukesha County Board the appropriate location for the offices of an ongoing countywide economic program staff.
3. Recommend to the Waukesha County Board a three-year plan for providing the funding necessary for an ongoing countywide economic development program.

Activity Four--The Waukesha County Park and Planning Commission staff should provide the initial staff assistance to the Waukesha County Economic Development Committee. In addition, the Chairperson of the Waukesha County Board of Supervisors should request that the University of Wisconsin-Extension, the Waukesha County Technical Institute, and the Southeastern Wisconsin Regional Planning Commission provide additional, temporary staff support to the Committee.

Activity Five--Following the organization of a countywide Economic Development Committee, the Waukesha County Board of Supervisors should designate the advisory committee as the County's OEDP Committee. The continued maintenance of the OEDP Committee is a requirement of the EDA. The existing OEDP Committee should, however, continue to serve as the County's OEDP Committee until such time as the ongoing committee is appointed.

Activity Six--Chapter I of this report indicated that a number of local units of government in Waukesha County have completed, or are in the process of completing, local industry retention surveys. The industry retention surveys are intended to analyze and interpret the opinions of the chief elected officials of selected Waukesha County industrial establishments regarding the recommended local economic development activities. The results of these studies should be used in determining the nature of additional economic program activities in the County. Consequently, the staff of a countywide economic development program in Waukesha County should carefully consider the recommendations of these studies in determining future economic development program efforts.

Objective Two: To retain business establishments currently located in Waukesha County. This study has discussed the importance of economic development program activities that will assist in the expansion and retention of existing employers. Consequently, it is important for Waukesha County to initiate industry retention activities that will complement the efforts of local economic development practitioners in preventing the relocation of county industry establishments to locations outside the County. This objective is directly related to Goal 4. The initial activities designed to accomplish this objective are set forth below.

Activity One--Following the approval of the final OEDP document by the EDA, businesses located in Waukesha County will be eligible to apply to the EDA for business loan guarantees. In order to facilitate requests for business loan guarantees, Waukesha County should request that the EDA Wisconsin Economic Development Representative conduct an informational meeting with representatives of financial institutions and economic development practitioners in Waukesha County for the purpose of presenting the program procedures and other detailed information pertaining to the use of EDA business loan guarantees for business expansion projects.

Activity Two--Local units of government, other than the City of Waukesha, that are located in Waukesha County are currently eligible to receive economic development financial assistance from the U. S. Department of Housing and Urban Development Small Cities Community Development Block Grant (CDBG) program administered by the Wisconsin Department of Development (DOD). The CDBG regulations provide that these funds can be utilized for economic development purposes, including grants to local units of government for the provision, or improvement, of public facilities that will enable business establishments to create new jobs, and loans to businesses for the purchase of land and equipment and building construction and/or rehabilitation. To date, however, none of the local units of government that are eligible for the CDBG program have submitted a grant application. Based on the ranking criteria utilized by the Wisconsin DOD, the local units of government with the best opportunity to receive these funds in Waukesha County are the Villages of Big Bend, Butler, Dousman, Hartland, and Pewaukee. The proposed Waukesha County economic development program staff should meet with representatives of these villages in order to determine the potential for submitting a grant application for Small Cities CDBG funds.

Activity Three--This report has indicated that Waukesha County has a significant Hispanic population that resides predominately in the City of Waukesha. As a result, it is important that the Waukesha County economic development program develop a working relationship with La Casa de Esperanza, Inc., a community-based organization serving the Hispanic population in Waukesha County, in order to assist in solving the unique economic development barriers to this minority population group. The County Economic Development Committee should assist La Casa de Esperanza in the development of strategies that would establish a community-based economic development corporation and in the development of employment training programs that would help facilitate the participation of Hispanics in the Waukesha County labor force. La Casa de Esperanza initiated the development corporation effort in 1982.

Activity Four--Following the organization of the proposed county economic development program, the program's staff should prepare a letter for transmittal to all manufacturing firms in the County that indicates the County's interest in retaining the firms in the County. The letter will also ask any firm facing problems which may result in relocation or expansion of the firm outside Waukesha County to contact the economic development program staff. In turn, the program staff will notify the program's Committee Chairperson, the chief elected official of the local unit of government in which the firm is located, and the Wisconsin Department of Development in order to initiate a meeting with representatives of the firm to discuss solutions to the specific problems the firm is facing or to discuss the various state and federal programs which may be of assistance in keeping the firm, or the firm's expansion, in Waukesha County.

Activity Five--During the preparation of the OEDP document, the County OEDP Committee identified the perceived negative attitudes of businesspersons regarding the personal income tax climate in the State of Wisconsin as having a negative effect on economic development in the County. Accordingly, the County's Economic Development Committee of the County Board should work toward eliminating this perception.

Activity Six--An activity that is often carried out as part of a local economic development program is the provision of information to business firms

regarding government contracts and product exporting. The proposed county economic development program staff, in cooperation with the University of Wisconsin-Extension and the Waukesha County Technical Institute, will work with the Wisconsin Department of Development in sponsoring a series of periodic seminars, to be conducted at a location within Waukesha County, on securing government contracts and on product exporting. Publications that are available from the Wisconsin Department of Development on these topics should be displayed and made available to persons at the Waukesha County Park and Planning Department office and county economic development program office.

Activity Seven--The Wisconsin Housing and Economic Development Administration (WHEDA) provides low-interest financing to businesses with current sales of \$35 million or less through its Small Enterprise Economic Development (SEED) program. SEED money can be used for the purchase, expansion, and improvement of land, plants, and equipment, and for depreciable research and development expenditures which result in the creation and maintenance of jobs. The application of the program is important to the retention of existing manufacturing establishments in the County. Accordingly, information regarding the SEED program should be included in the letter to be sent to county manufacturers as a part of Activity Four, Objective Two, as set forth herein.

Objective Three: To develop an ongoing role for Waukesha County in the attraction of new employers to the County. This objective and the activities indicated below are related to Goal 5 of the economic development program.

Activity One--An important economic development activity for the Waukesha County economic development program is the coordination and "networking" of existing economic development resources in the County. In order to assist in the attraction of new industry establishments to Waukesha County, the Waukesha economic development program should develop an ongoing working relationship with Forward Wisconsin, Inc. Forward Wisconsin, Inc., is the lead statewide agency for attracting new business and industry to Wisconsin, and a working relationship between the County's economic development program and the Forward Wisconsin industry attraction program could lead to the attraction of new business and industry establishments to Waukesha County.

Activity Two--Recently, Dane County and the University of Wisconsin-Extension developed a computerized inventory of commercial and industrial land use sites, available commercial and industrial buildings, and demographic and economic data for communities in Dane County. The system has proved to be very successful in providing locational information to business establishments interested in locating or expanding in Dane County. In order to facilitate the attraction of business establishments to Waukesha County, the county economic development program staff should work with the economic development staff of the Wisconsin Electric Power Company (WEPCo) to better utilize the computerized data bank that is available for Waukesha County.

Activity Three--A variety of industrial and commercial land use sites and buildings are available in Waukesha County, as are other locational characteristics. At the present time, however, the local industry attraction efforts in the County are not coordinated. A countywide industry attraction effort not only would be a cost-effective way of attracting new industry to the County, but would make industry prospects aware of the full range of economic development locational characteristics in the County. The Waukesha

County economic development program should encourage the development of a coordinated industry attraction effort in Waukesha County.

Objective Four: To develop existing county resources that can be utilized to facilitate business expansions and new business start-ups, especially for small businesses.

Activity One--Local units of government across the nation are finding that it is necessary to provide low-cost, high-quality facilities for the start-up of new small businesses. As a result, many of these communities are constructing incubator business facilities that can be utilized by a number of different businesses during their first years of operation. The Waukesha County Technical Institute (WCTI) has set forth a proposal for the development of an incubator facility in Waukesha County. An incubator facility could provide a location where new businesses could develop in an appropriate manner. The proposed Waukesha County economic development program staff should work with the WCTI in determining the feasibility of the incubator project, and, should the project be determined to be feasible, assist in the implementation of the incubator project.

Activity Two--As previously discussed, economic activity studies have shown that the majority of jobs in Wisconsin result from the expansion of small businesses and from new business start-ups. The Small Cities Community Development Block Grant (CDBG) program, administered by the Wisconsin Department of Development, should be utilized by local units of government to establish low-interest business loan programs to finance small business expansion projects. However, the CDBG regulations do not award scoring points to applications for business expansion projects involving the retention or creation of fewer than 25 jobs. The 1985 Small Cities CDBG regulations are, therefore, in conflict with the dominant characteristic of the job generation process in Wisconsin. The Southeastern Wisconsin Regional Planning Commission will be conducting additional research on this apparent policy and program contradiction during 1985. Should the findings of the research by the Commission support this problem, the county economic development program should support appropriate changes to the Small Cities CDBG regulations.

Activity Three--Grants in support of research and development of new products are available through the Wisconsin Department of Development Technology Development Fund to consortiums composed of a company headquartered in Wisconsin and an institution that is part of the University of Wisconsin system, or another Wisconsin institution of higher learning. The proposed economic development program staff and officials of the University of Wisconsin-Waukesha County campus should investigate the potential for use of the Wisconsin Department of Development Technology Development Fund in Waukesha County.

Objective Five: To improve existing community facilities and services that are identified as being deficient and to develop new community facilities and services to meet existing, but unmet, needs. While industry retention, attraction, and entrepreneurial activities are important to the County's economic development program, this study has indicated that significant deficiencies in community facilities and services must be rectified in order to facilitate a successful economic development program. This objective, and the activities indicated below, are directly related to Goal 7.

Activity One--Following the approval of the final OEDP document by the EDA, Waukesha County, as well as all the local units of government in Waukesha County, will be eligible to apply for EDA public works grants that will facilitate economic development in Waukesha County. While EDA funds for public works projects are limited, the Waukesha County economic development staff and the representatives of local units of government should be aware of the grant assistance available from the EDA. Therefore, the Waukesha County economic development program staff should request that the U. S. EDA Wisconsin Economic Development Representative conduct an informational meeting for representatives of the County, local units of government in the County, and local economic development practitioners for the purpose of disseminating detailed information pertaining to the use of EDA public works grants for local public works improvement projects.

Activity Two--Recently, the Wisconsin Electric Power Company (WEPCo) announced a major industrial development program that involves the promotion of the IH 94 corridor in southeastern Wisconsin from the Wisconsin-Illinois border to the City of Milwaukee, and from the City of Milwaukee to Madison, Wisconsin. The purpose of the program is to encourage the growth and diversification of existing industries in southeastern Wisconsin by promoting the unique resources of the Region. Specifically, the WEPCo intends to attract new industries and stimulate the creation of new industries, especially in the areas of automated manufacturing, biomedical technology, and agri-business/genetics, all of which are high technology industries. If the WEPCo program is to assist in the economic development of Waukesha County, it will be important for the proposed Waukesha County economic development program staff to work closely with the WEPCo to ensure that the promotional program is successfully implemented.

Activity Three--This study has documented the high quality of community facilities and services provided in Waukesha County. The continued provision of these facilities and services is critical to the economic development process in Waukesha County. Therefore, county government should strive to continue to provide the high level of community facilities and services, and should investigate the need for additional community facilities and services that could enhance the economic development process in the County. This document has identified the need to improve the following community facilities and services:

1. The Waukesha County OEDP Committee perceived a lack of affordable housing units in the County, and the description of the housing characteristics of the County showed that, in 1980, the median value of owner-occupied housing units was 123 percent of the median value of owner-occupied housing units in the Region. Therefore, the proposed county economic development program staff should work with existing organizations to determine more specifically the need for more moderately priced housing units in Waukesha County. Should this need be substantiated, the methods by which these housing units could be made available to the resident population should be determined.
2. This study has documented the need for various highway system improvements in Waukesha County. The Wisconsin Department of Transportation indicated that about \$48 million in highway improvement expenditures is planned for Waukesha County from 1985 to 1991. These improvements could

be one of the most important public facility improvements having an effect on economic development in Waukesha County. Consequently, the proposed economic development staff should closely monitor the schedule and implementation of these improvements with special emphasis on the widening of IH 94 between STH 164 and STH 18.

3. Throughout the State of Wisconsin, as well as throughout the nation, communities have lost direct access to railway freight service because of the abandonment of railway lines by railroad companies. In order to prevent a similar loss of railway service in Waukesha County, the County Economic Development Committee should monitor the status of railway lines in the County and, in the event a railway abandonment is imminent, take the steps necessary to preserve the line.

Activity Four--Waukesha County should continue its active participation in the Job Training and Partnership Act (JTPA) employment training programs administered by the Waukesha-Ozaukee-Washington (WOW) County employment and training consortium. Specifically, the proposed county economic development program staff should initiate discussions with the WOW consortium staff regarding the development of better linkages between the JTPA employment training programs and the economic development efforts of Waukesha County and local units of government in the County. This activity is appropriate in light of the WOW Private Industry Council's allocation of approximately \$550,000 for fiscal year 1986 for on-the-job training contracts and industry-based customized training.

Activity Five--The Waukesha County OEDP Committee perceived that the Waukesha County population is not totally aware of the recreation and tourism resources available in the County and, therefore, does not utilize these resources to their greatest extent. As a result, the proposed economic development program staff should meet with the Waukesha County Tourism Council in order to: 1) indicate the OEDP Committee's perceptions to the chambers of commerce; and 2) work with the Tourism Council to identify strategies to improve the utilization of local recreation and tourism resources by the resident population.

IMPLEMENTATION AND EVALUATION OF THE WAUKESHA COUNTY ECONOMIC DEVELOPMENT PROGRAM

This report has indicated the need to establish a countywide economic development program in Waukesha County. Such a program would make Waukesha County, as well as all of the local units of government in the County and private businesses, eligible for financial assistance from the U. S. Department of Commerce, EDA, in support of projects that would create jobs. This report has also indicated that such a countywide program should complement, rather than duplicate, existing economic development activities of local units of government in the County. This chapter has set forth the goals, objectives, and activities necessary for an initial countywide economic development program. The initial county economic development program identified herein has been strongly influenced by such factors as: 1) the previous lack of a formal economic development program in the County; 2) the existing extent of economic development activities by local units of government and public and private economic development practitioners in Waukesha County; and 3) the need to

build a consensus on an appropriate role for the County in economic development. The county economic development program activities are intended to be accomplished over a 12-month time period that would begin at the time the program is formally initiated.

In order to monitor and evaluate progress in implementing the economic development program activities, the existing Waukesha County OEDP Committee should convene a meeting following the review of the draft OEDP document by the U. S. Department of Commerce, Economic Development Administration.

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**SOUTHEASTERN WISCONSIN REGIONAL
PLANNING COMMISSION STAFF**

Kurt W. Bauer, PE, AICP, RLS. Executive Director
Philip C. Evenson Assistant Director
Kenneth R. Yunker, PE Assistant Director
Robert P. Biebel, PE Chief Environmental Engineer
John W. Ernst. Data Processing Manager
Gordon M. Kacala Chief Economic Development Planner
Leland H. Kreblin Chief Planning Illustrator
Donald R. Martinson Chief Transportation Engineer
Thomas D. Patterson Chief of Planning Research
Bruce P. Rubin Chief Land Use Planner
Roland O. Tonn, AICP. Chief Community Assistance Planner
Joan A. Zenk Administrative Officer

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