PLANNING REPORT NO. 20

A REGIONAL HOUSING PLAN FOR SOUTHEASTERN WISCONSIN

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A REGIONAL HOUSING PLAN FOR SOUTHEASTERN WISCONSIN

Prepared by the
Southeastern Wisconsin Regional Planning Commission

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

February 1975

Inside Region $10.00
Outside Region $20.00

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STATEMENT OF THE CHAIRMAN

A decent home within a suitable living environment has been a highly desired but often elusive goal for many households residing in the Southeastern Wisconsin Region. The Commission, upon the specific request of the Mayor of the City of Milwaukee and with the approval of the seven constituent county boards, undertook a regional housing study to facilitate attainment of this very important goal. Funding for the study was provided by the seven county boards in the Region, the U. S. Department of Housing and Urban Development, and the Wisconsin Department of Local Affairs and Development. The study, with the exception of the social research component which was provided by the University of Wisconsin-Milwaukee, was conducted by the Commission under the direction of a technical and citizen advisory committee comprised of people from throughout the Region who were particularly knowledgeable about the housing problems of the area.

This report documents the major findings and recommendations of the regional housing study, and summarizes the information assembled in the extensive data collection and analysis phases of the program. The study represents a concentrated effort to identify the nature and extent of housing problems within the Region, assess the overall effectiveness of past attempts to resolve these problems, and develop an areawide housing plan to meet the current and probable future housing needs of the Region.

The regional housing plan for the abatement of areawide housing problems presented in this report consists of two basic plan elements. The first element is a housing allocation strategy, which provides a basis for the geographic distribution of publicly assisted housing units required to eliminate physical housing need in the Region. The second element is comprised of a series of recommendations which are designed to significantly reduce, if not eliminate, the Region's unmet housing needs by removing housing availability constraints and facilitating the provision of publicly assisted housing to households in housing need. Importantly, the regional housing plan also serves to support and reinforce the adopted regional land use plan, and together with the land use plan, the series of comprehensive watershed plans, and the sanitary sewerage system plan, provides the Region, its public officials, and its citizens with a sound, coordinated approach to regional development.

It is hoped that the regional housing allocation strategy formulated under this plan will serve as a guide to federal, state, and local agencies which seek a more rational basis for the distribution of limited housing subsidy funds. The housing and housing related data provided in the plan should also serve as a sound point of departure for communities preparing applications for community development funds under the Housing and Community Development Act of 1974. Finally, the regional housing plan should satisfy the "housing element" requirement of the Federal Housing and Urban Development Act of 1968, and therefore enable continued financial assistance for comprehensive planning programs carried out under Section 701 of that Act.

In accordance with the role assigned to the Commission, the regional housing plan is completely advisory to the local, areawide, state, and federal agencies and units of government concerned with housing in the Region. It is, therefore, only through the voluntary cooperative efforts of both the private housing sector and the various units and agencies of government that the housing allocation strategy and the housing recommendations formulated as part of the regional housing plan will be transformed into local housing programs to alleviate housing need in the Region.

In its continuing role as a center for the coordination of plan implementation activities within the Region, the Commission stands ready to provide such assistance as may be requested of it by the various units and agencies of government concerned in implementing the recommended regional housing plan.

Respectfully submitted,

George C. Berteau
Chairman

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INTRODUCTION

The regional housing study represents an attempt by the Southeastern Wisconsin Regional Planning Commission to: 1) identify the nature and extent of the housing problems within the Region; 2) assess the overall effectiveness of past attempts to resolve these problems; and 3) develop a workable housing plan to effectively meet the current and probable future housing needs of the Region. As such, the study provides an additional element of a comprehensive plan for the physical development of the Region and is an integral part of the overall work program of the Commission. An understanding, therefore, of the need for, and objectives of, regional planning and the manner in which these needs and objectives are being met in southeastern Wisconsin is necessary to a proper appreciation of the findings and recommendations of the regional housing study.

NEED FOR REGIONAL PLANNING

Regional planning may be defined as comprehensive planning for a geographic area larger than a county but smaller than a state, united by social and economic interests, geography, and common areawide developmental and environmental problems. The need for such planning has been brought about by important social and economic changes which, while national phenomena, have had far-reaching impacts on the problems facing local government. These changes include unprecedented urbanization; increasing agricultural and industrial productivity, income levels and leisure time; generation of mass recreational needs and pursuits; increasingly intensive use and consumption of natural resources; development of private water supply and sewage disposal systems; development of extensive electric power and communications networks; and development of limited access highway systems and mass automotive transportation. Under the effects of these changes entire regions, like southeastern Wisconsin, are becoming one large urban complex, creating areawide environmental and developmental problems of an unprecedented scale and complexity. Rural as well as urban people must increasingly concern themselves with these problems or face irreparable damage to their land and water resources and to their communities.

The areawide problems which necessitate a regional planning effort in southeastern Wisconsin all have their source in the unprecedented areawide urbanization occurring within the Region. These areawide problems include, among others, inadequate storm water drainage and increasing flood damages; underdeveloped sewerage and inadequate sewage disposal facilities; inadequate water supply; water pollution; deterioration and destruction of the natural resource base; increasing demand for outdoor recreation and for park and open-space reservation; inadequate transportation facilities; and, underlying all of the foregoing problems, rapidly changing and unplanned land use development. These problems are all truly regional in scope since they transcend the boundaries of any one municipality and can only be resolved within the context of a comprehensive regional planning effort and through the cooperation of all levels of government concerned.

THE REGIONAL PLANNING COMMISSION

The work of the Southeastern Wisconsin Regional Planning Commission (SEWRPC) represents an attempt to provide the necessary areawide planning services for the rapidly urbanizing, seven-county Southeastern Wisconsin Region. The Commission was created in August 1960, under the provisions of Section 66.945 of the Wisconsin Statutes, to serve and assist the local, state, and federal levels, units, and agencies of government in planning for the orderly and economical development of the Region. The Commission's role is entirely advisory; and participation by local units of government in its work is on a voluntary, cooperative basis. The Commission is composed of 21 citizen members, three from each county in the Region, who serve without pay.

The powers, duties, and functions of the Commission and the qualifications of the Commissioners are carefully set forth in the state enabling legislation. The Commission is authorized to employ experts and a staff as necessary to execute its responsibilities. Basic funds necessary to support Commission operations are provided by the member counties, with the budget apportioned among the seven counties on the basis of relative equalized assessed property valuation. The Commission is authorized to request and accept aid in any form from all levels and agencies of government to accomplish its objectives and is authorized to deal directly with the state and federal governments for this purpose. The Commission, its committee structure, and its staff organization, together with its relationship to the constituent counties, are shown in Figure 1.

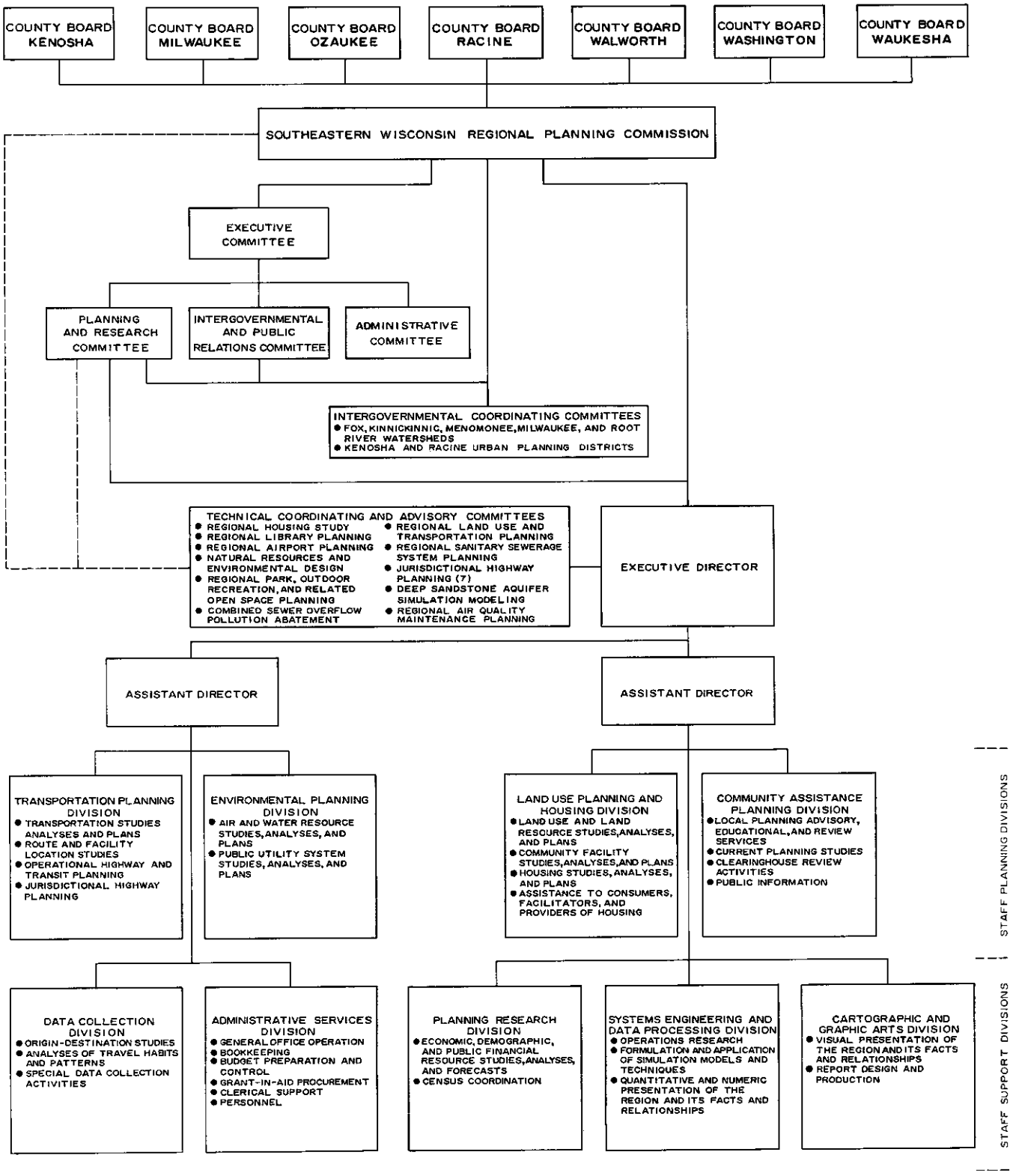
THE REGIONAL PLANNING CONCEPT IN SOUTHEASTERN WISCONSIN

Regional planning, as conceived by the Commission, is not a substitute for, but a supplement to, local, state, and federal planning efforts. Its objective is to assist the various levels, units, and agencies of government in finding solutions to areawide development and environmental problems which cannot be properly resolved within the framework of a single municipality or county. As such, regional planning has three principal functions:

1. Inventory—the collection, analysis, and dissemination of basic planning and engineering data on a uniform, areawide basis so that, in light of such

Figure 1

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION
STAFF AND COMMITTEE STRUCTURE: 1974



Source: SEWRPC.

data, the various levels and agencies of government and private investors operating within the Region can better make decisions concerning community development.

2. Plan Design—the preparation of a framework of long-range plans for the physical development of the Region, these plans being limited to those functional elements having areawide significance. To this end, the Commission is charged by law with the function and duty of "making and adopting a master plan for the physcial development of the Region." The permissible scope and content of this plan, as outlined in the enabling legislation, extend to all phases of regional development, implicitly emphasizing the preparation of alternative spatial designs for land use and for supporting transportation and utility facilities.

3. Plan Implementation—promotion of plan implementation through the provision of a center to coordinate the planning and plan implementation activities of the various levels and agencies of government operating in the Region and through the introduction of information on areawide problems, recommended solutions to these problems, and alternatives thereto into the existing decision-making process.

The work of the Commission, therefore, is visualized as a continuing planning process providing outputs of value to the making of development decisions by public and private agencies and to the preparation of plans and plan implementation programs at the local, state, and federal levels. It emphasizes close cooperation between the governmental agencies and private enterprise responsible for the development and maintenance of land uses in the Region and for the design, construction, operation, and maintenance of the supporting public works facilities. All Commission work programs are intended to be carried out within the context of a continuing planning program which provides for periodic reevaluation of the plans produced and for the extension of planning information and advice necessary to convert the plans into action programs at the local, regional, state, and federal levels.

THE REGION

The Southeastern Wisconsin Planning Region, as shown on Map 1, is comprised of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties. Exclusive of Lake Michigan, these seven counties have a total area of 2,689 square miles, or about 5 percent of the total area of the State of Wisconsin. About 40 percent of the state population (1970) lives in these seven counties, which contain three of the seven and one-half Standard Metropolitan Statistical Areas (SMSA's) in Wisconsin. The Region contains about half of the tangible wealth in Wisconsin as measured by equalized assessed property valuation, and represents the greatest wealth-producing area of the state, having about 40 percent of the state's total employment. The Region contains 154 local units of government, exclusive of school and other special-purpose districts, and encompasses all or parts of 11 major watersheds. It has been subject to rapid population growth and urbanization, and from 1960 to 1970 accounted for approximately 40 percent of the population increase in the state.

Geographically the Region is located in a relatively good position with regard to continued growth and development. It is bounded on the east by Lake Michigan, which provides an ample supply of fresh water for both domestic and industrial use, as well as being an integral part of a major international transportation network. It is bounded on the south by the rapidly expanding northeastern Illinois metropolitan region and on the west and north by the fertile agricultural lands and desirable recreational areas of the rest of Wisconsin. Many of the most important industrial areas and heaviest population concentrations in the Midwest lie within a 250 mile radius of the Region, and over 31 million people reside within this radius.

COMMISSION WORK PROGRAMS

Initial Work Program

The Commission's initial work program was directed entirely toward basic data collection. It included six basic regional planning studies, which were initiated in July 1963: a statistical program and data processing study, a base mapping program, an economic base and structure study, a population study, a natural resource inventory, and a public utilities study. These initial studies were directed toward providing basic planning and engineering data for regional planning and were documented in six published planning reports. None of these studies involved plan preparation, but the findings provided a valuable point of departure for all subsequent Commission work, including the regional housing study.

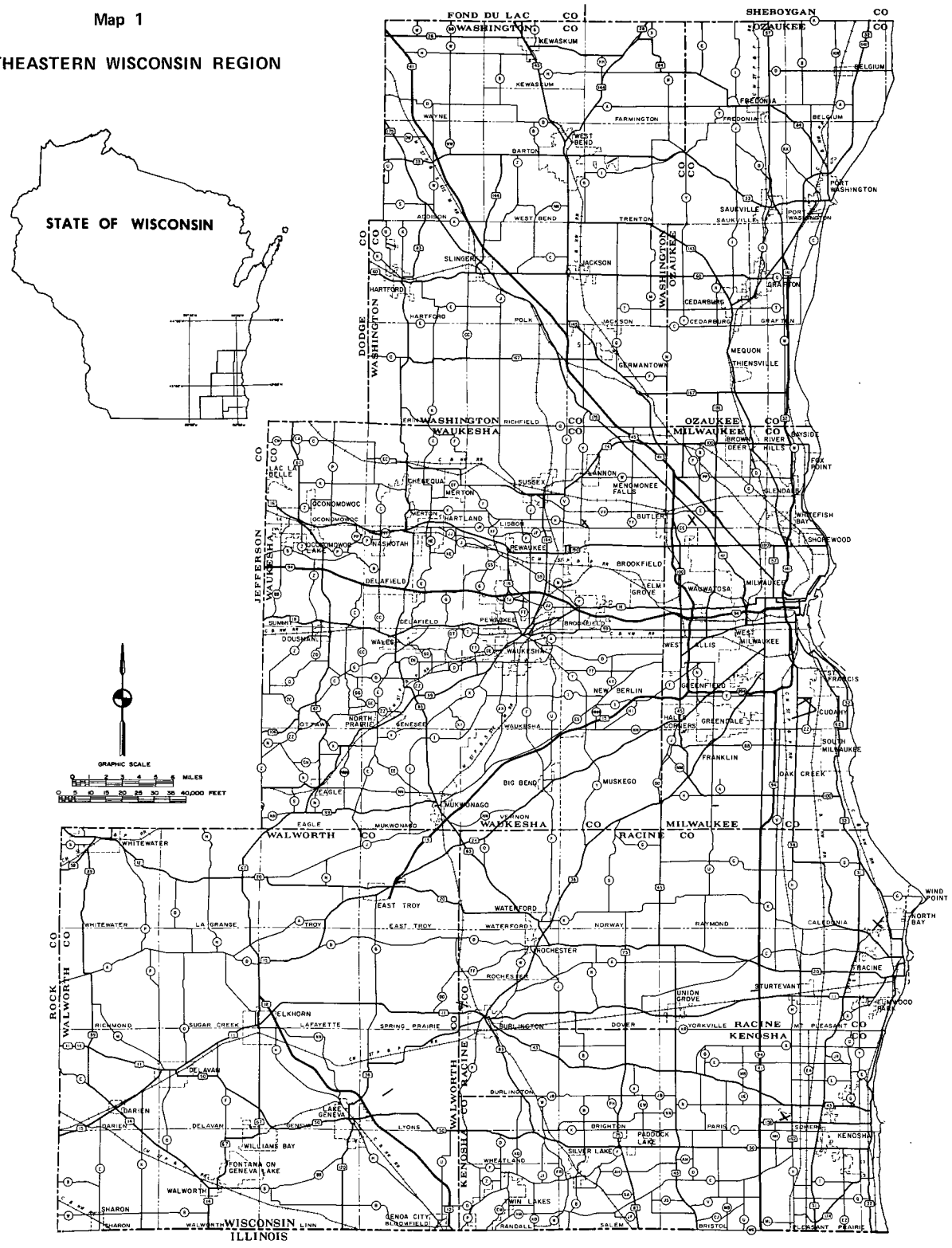
As part of its initial work program, the Commission also adopted a policy of community planning assistance, in which functional guidance and advice on planning problems are provided to local units of government and regional planning studies are interpreted locally so that the findings and recommendations of these studies may be incorporated into local development plans. Six local planning guides have been prepared under this program to provide information helpful in the preparation of local plans and plan implementation ordinances. These guides are intended to help implement regional and local plans and to assist local public officials in carrying out day-to-day planning functions. The subjects of these guides are subdivision control, official mapping, zoning, organization of local planning agencies, floodland and shoreland development, and use of soils data. All include model ordinances and provide a framework for plan implementation through local land use control measures.

Land Use-Transportation Study

The first major work program of the Commission actually directed toward the preparation of long-range development plans was a regional land use-transportation study, initiated in January 1963 and completed in December 1966. This study produced two key elements of a com-

Map 1

SOUTHEASTERN WISCONSIN REGION



The seven-county Southeastern Wisconsin Region encompasses a total area of about 2,689 square miles, or about 5 percent of the total area of the State of Wisconsin. About 40 percent of the state's population, however, resides in these seven southeastern counties. The Region employs about 42 percent of the state's labor force and contains about half of all the tangible wealth in the state as measured by equalized assessed property valuation. The Region has been subject to rapid population growth and urbanization, and from 1960 to 1970 accounted for about 40 percent of the total population increase of the state.

Source: SEWRPC.

prehensive plan for the physical development of the Region: a land use plan and a surface transportation plan, including highway and transit elements. The findings and recommendations of the study, which provided important inputs to the regional housing study, have been published in the three volume SEWRPC Planning Report No. 7, The Land Use-Transportation Study; in SEWRPC Planning Report No. 8, Soils of Southeastern Wisconsin; and in five supporting technical reports.

Continuing Regional Land Use-Transportation Study

Prior to the completion of the initial land use-transportation planning effort, the Commission, along with its constituent local units of government and the affected state and federal agencies of government, acted to establish a continuing regional land use-transportation planning effort in southeastern Wisconsin. This effort provides for maintaining current the basic data forecasts on which the adopted land use and transportation plans are based, and for conducting periodic reappraisals and revisions of the adopted regional land use and transportation plans based upon analyses of the results of the data base maintenance activities. Included in the surveillance activities are the collection of current, definitive data on changing public attitudes and values relating to both housing and transportation, on the amount and spatial location of changes in population and economic activity, on land use development, on automobile and truck availability, on trip generation and distribution, on mode of transportation utilized, on local land use and transportation plan development, and on plan implementation actions.

The continuing regional land use-transportation study effort is an integral part of the overall regional planning program. Much of the data and plans produced by this important study, particularly the socioeconomic, land use, and travel pattern data and the adopted land use plan itself, are useful, if not absolutely essential, to the preparation of a sound regional housing plan.

Comprehensive Watershed Studies

The regional planning program also recognized the significance of existing water-related resource problems, including flooding and water pollution. The natural watershed was selected by the Commission as the basic water and water-related resource planning unit, and comprehensive watershed plans have been completed for the Root, Fox, and Milwaukee River watersheds within the Region. In addition, the Commission has initiated a comprehensive planning program for the Menomonee River watershed and has agreed to prepare a prospectus for a Kinnickinnic River watershed planning program.

The basic purpose of watershed planning programs, as developed within the context of the overall regional planning program, is to permit public evaluation and choice of alternative water-resource development policies and plans and, through the preparation of a long-range plan for the development of water-related community facilities, to provide for the coordination of local, state, and federal water resource management programs within the Region and its watersheds. The more specific objectives of the watershed planning programs include the abatement of flood damage; the protection of floodways and floodplains from incompatible development; the abatement of water pollution and the protection of water supply; the preservation of land for park and related open space; the preservation of woodlands, wetlands, wildlife habitat, and prime agricultural lands; and the promotion of the wise and judicious use of the Region's limited land and water resources. In addition, the watershed plans serve to refine and adjust the regional land use plan, particularly in the riverine areas, and help achieve a more complete integration of land and water resource planning. The flood hazard studies of the comprehensive watershed planning programs provide important inputs to the regional housing study.

Other Regional and Subregional Planning Programs

Additional regional planning programs have been undertaken by the Commission, including a regional airport system planning program, a sanitary sewerage system planning program, and a regional library system planning program. The Commission has also completed detailed urban development plans for certain subareas of the Region, including the Kenosha and Racine Planning Districts. The sanitary sewerage system and the two district planning programs provide important inputs to the regional housing study.

THE REGIONAL HOUSING STUDY

In June 1968, the Regional Planning Commission was requested by the City of Milwaukee to "give serious and prompt consideration to establishing the initiation and execution of a housing inventory as its next major planning program."[1] The Commission, in its deliberations following receipt of this request, determined that a housing study would constitute a major contribution to the Commission's function of areawide research by facilitating the collection and analysis of a wide range of basic planning data not then available for the Region as a whole; would materially assist local, state, and federal governmental agencies and interested citizen groups in dealing with housing and housing-related problems within the Region; would be of value to private investors who deal extensively with housing and housing-related issues on a day-to-day basis throughout the Region; would contribute to the proper coordination of housing development with other aspects of comprehensive regional

[1] *Letter to Mr. George C. Berteau, Chairman, Southeastern Wisconsin Regional Planning Commission, from the Honorable Henry W. Maier, Mayor of the City of Milwaukee, dated June 8, 1968.*

development; and would contribute materially to implementation of the Commission's adopted regional land use plan.

Accordingly, the Commission on February 10, 1969, pursuant to Section 66.945(7) of the Wisconsin Statutes, created a Technical Advisory Committee on Regional Housing Studies to assist the Commission in its study of the housing problems of the Region. The Committee included representatives from the mortgage banking community, private land development firms, the home building industry, realtors and real estate appraisers, public and private housing agencies, the university community, and church groups and citizen organizations concerned with housing problems.

The Commission initially charged the Committee with the preparation of a Prospectus for a regional housing study. The purpose of the Prospectus was to document the need for such a study, and to determine and prepare a recommended time schedule, budget, and cost allocation for the study, which could be used as a basis to obtain the funding necessary to mount the study. The Prospectus was completed by the Committee in December 1969; approved by the Commission on March 5, 1970; and published and, in accordance with the advisory role of the Commission, transmitted to the governmental agencies concerned for their consideration and action. The seven county boards concerned and the U. S. Department of Housing and Urban Development subsequently endorsed the Prospectus and agreed to provide the local and federal funds necessary for execution of the program. The U. S. Department of Housing and Urban Development agreed to provide two-thirds of the needed funds, and the seven constituent counties the remaining one-third. Based on relative equalized assessed valuation, the proportionate shares of the total funding provided by each county were: Kenosha County, 2.2 percent; Milwaukee County, 19.9 percent; Ozaukee County, 1.1 percent; Racine County, 3.0 percent; Walworth County, 1.5 percent; Washington County, 1.2 percent; and Waukesha County, 4.5 percent.

The Prospectus, as prepared by the Advisory Committee, was not a finished study design. It was a preliminary design intended to obtain support and financing for the necessary study, an objective which it fully achieved. Major work elements, a staff and consultant organization, and a time schedule and cost estimates were outlined in a preliminary manner in the Prospectus. Work on the housing study, as outlined in the Prospectus, began in July 1970.

Need For the Study

The Prospectus found that there were three major considerations which dictated the need for an areawide housing study within the Southeastern Wisconsin Region:

1. A lack of timely, uniform, areawide information about the supply of, and demand and need for, housing within the Region. This lack of information concerns the quantity and quality of the existing supply of housing; the characteristics of housing demand; the regional housing market or markets, including geographic, sales, rental, low-income, and elderly housing markets; the present public land use control policies and practices; the shortage of certain types of housing units, particularly units for persons with low and moderate incomes; the lack of environmental considerations in residential development; the practice of discrimination as it affects the free choice of housing; the filtration of housing; and the resistance to new technology in the housing industry. This lack of information warrants a concerted effort to correct the situation through the conduct of a comprehensive regional housing study and thereby to provide the uniform, areawide data required to cope more intelligently and effectively with the housing problems of the Region.

2. The need for direction and guidance of the expanding role of government in the housing field, so that national, state, and local housing objectives can be met in a sound, coordinated manner. All of the levels and agencies of government within the Region are involved in housing in various ways and to various degrees, ranging from direct sponsorship of the construction and operation of low-income housing projects to land subdivision plat review and approval. It may be expected that this governmental role in housing will continue to increase in response to the changing aspirations of an increasingly affluent society. This increasing activity may take the form of housing loan, grant, and insurance programs at the state and federal levels; relocation housing programs at the local, state, and federal levels; public housing programs at the local level; and housing-related programs at the local, state, and federal levels, such as model cities and urban renewal programs. Increased activity by government in the housing field may be required in Wisconsin, not only by federal legislation and administrative policy but by state legislation requiring relocation housing programs in connection with all forms of major public works programs as a prerequisite for funding of such programs.

If public officials are to make sound decisions concerning housing, a full range of relevant information on housing problems must be made available. A regional housing study is needed to provide such information, as well as an assessment of the extent to which existing housing programs may be effective in meeting the total housing needs of the Region and to identify areas of need toward which future programs can be directed.

3. The relationship of housing need to effective demand[2] for housing within the Region has not been clearly identified and documented. An appraisal of areawide housing needs, as opposed to the effective demand for housing, is essential in view of the growing role of government in the housing field.

The foregoing considerations recognize the profound interrelationships between housing supply and demand factors, governmental constraints and program incentives, and the pressing need to provide all families and individuals with at least a minimum standard dwelling in a suitable environment.

In addition, the Federal Housing and Urban Development Act of 1968 requires that all comprehensive planning programs carried out with assistance under Section 701 of the Act must include a housing element, thus recognizing such an element as essential to the attainment of the national goal of a "decent home and suitable living environment for every American family." Failure on the part of the Regional Planning Commission to undertake and carry out a housing program as an integral part of its overall planning efforts, consequently, would not only hamper the attainment of the national housing goals but could result in the withholding of federal Section 701 planning funds from the Planning Commission. This could, in turn, jeopardize the eligibility of all levels and agencies of government operating within the seven-county Region for federal capital improvement grants for projects such as highways, mass transit facilities, sanitary sewerage and public water supply facilities, park and outdoor recreation facilities, airports, libraries, solid waste disposal facilities, and hospital and health research facilities.

These considerations, which together dictate the need for a regional housing study, are extremely complex and highly interrelated. It has been generally acknowledged by public officials and citizen leaders involved in housing affairs on a day-to-day basis within the Region that a housing problem exists within the Region, and that a comprehensive areawide approach to the resolution of this problem should be undertaken. The Commission, as the planning agency having the responsibilities and capabilities to conduct areawide planning studies, to prepare areawide plans and recommendations, and to promote coordination of planning and plan implementation activities of local agencies and units of government, is the logical agency to undertake a regional housing study designed to identify and assist in the solution of such problems.

Study Objectives

The primary objective of the regional housing study, in accord with the national housing objective as articulated by the President and the Congress, is to assist in achieving for every citizen within the Region decent, safe, and sanitary housing in a suitable living environment. To this end, the study is intended to produce an additional key element of a comprehensive plan for the physical development of the Region—a regional housing plan. This housing plan, to be effective, must be amenable to cooperative adoption and joint implementation by all levels and agencies of government concerned. The plan must be capable of functioning as a practical guide for the making of both public and private development decisions relating to housing within the Region on a day-to-day basis. The housing study is intended not only to recommend a sound spatial allocation of low- and moderate-income housing to the various urban and rural communities comprising the Region, but also to promote the development of a full range of housing costs, types, and styles in the best possible living environment by directing the development of housing to well-serviced locations. The study is thus intended to promote orderly, efficient, areawide development while discouraging premature development and the location of housing in areas poorly suited to residential use.

More specifically, the housing study should provide a framework of agreed-upon regional housing objectives and an accompanying set of housing standards relevant to the needs and values of the citizens of the Region; promote the development of an adequate stock of decent, safe, and sanitary housing within the Region consistent with the agreed-upon objectives and standards; contribute to the elimination of discriminatory practices in housing so that all residents of the Region have an equal opportunity in, and a broader choice of, housing; contribute to the removal of constraints to the provision of low- and moderate-income housing; seek to provide persons who have been displaced by public development programs with adequate relocation housing; promote technological flexibility within the housing industry; and encourage good housing project design and development within the broader context of a sound, comprehensive plan for the physical development of the Region. In addition, the regional housing study should lead to the establishment of an areawide housing market information system concerning the supply of, and demand and need for, housing within the Region, and provide a framework within which other Commission and local community planning programs can be interrelated to focus on the housing problem in conjunction with the resolution of other areawide developmental and environmental problems.

[2] *The economic concept of effective demand for housing relates to the housing accommodations for which people are able and willing to pay, and is not immediately or directly responsive to social goals or personal aspirations that cannot be fulfilled because of a lack of personal purchasing power. The concept of housing need, on the other hand, relates to the extent to which the quantity and quality of existing housing falls short to providing each family or individual with an acceptable minimum standard of decent, safe, and sanitary housing irrespective of ability to pay or personal preference. Although there is a relationship between these two concepts, there is also a profound difference, and it is possible that many of the problems associated with housing people in a rapidly changing society are more closely related to the housing needs concept than to the housing demand concept.*

Staff, Consultant, and Committee Structure

The basic organizational structure for the study is outlined in Figure 2 and consists of a consultant and the Commission staff who report to the Executive Director of the Commission. The Executive Director, in turn, serves as the project sponsor and reports to the Southeastern Wisconsin Regional Planning Commission, which has ultimate legal authority and responsibility for the study. The responsibilities of the cooperating federal agency, consultant, and Commission staff for the various work elements of the study are also briefly outlined in Figure 2.

Only one consultant was employed in the study, that consultant being retained to supplement Commission staff skills in the area of social research. The University of Wisconsin-Milwaukee, Department of Sociology was selected as the consultant, based not only on the outstanding qualifications of the university in the area of social research, but on the potential contribution which the university, as a major urban university, could make in the future toward implementation of the recommendations growing out of the housing study. In addition, the development of a closer working relationship between the university and the Commission would have mutual benefits in the areas of research and education. Under the contract entered into between the university and the Commission, the former, in return for a fee of $101,000, agreed to conduct social surveys and provide information and analyses concerning the characteristics, perceptions, and beliefs of housing consumers and housing producers, providers, and facilitators. These data were to be used by the Commission in the analysis of housing supply and demand within the Region, the determination of need for specific types and sizes of housing units, and the measurement and evaluation of community and personal attitudes and preferences toward community and household living conditions.

A regional housing study covers a broad spectrum of related governmental and private development programs, and no agency, whatever its function or authority, can "go it alone" in the conduct of such a study. The basic Commission organization provides for the attainment of the necessary interagency coordination and lay citizen advisory function through the establishment of advisory committees, as well as through interagency staff assignments. For the regional housing study, one committee was created after careful deliberation to perform two basic functions: the technical and lay citizen advisory functions.

The technical advisory function is intended to provide technical policy direction to the study and to place at the disposal of the study the experience, knowledge, and resources of the represented federal, state, and local agencies having responsibilities for initiating and administering housing programs and for preparing and administering building construction codes, health codes, zoning ordinances, and subdivision ordinances. In addition, the technical advisory function should ensure that the planning and code criteria of the operational agencies are incorporated into the study work where possible, and should place the experience and knowledge of professional organizations in the real estate field at the disposal of the study.

The lay citizen advisory function is intended to ensure that the housing study and recommendations growing out of that study are responsive to the needs and values of the citizens affected. The purpose of this type of function is to provide nontechnical policy direction to the study through the active involvement of concerned citizen groups in the planning program. (The full membership of the Advisory Committee is set forth in Appendix A.) The Technical and Citizen Advisory Committee was furnished with staff assistance as necessary in order to make its work as convenient and effective as possible.

The planning effort and this report are the result of the efforts of the Commission, the Advisory Committee, and the University of Wisconsin-Milwaukee. The major work elements of the regional housing study include the detailed study design; formulation of housing objectives, principles, and standards; analysis of housing resource problems and capabilities; determination of housing resource requirements; plan synthesis, test, and evaluation; and report writing.

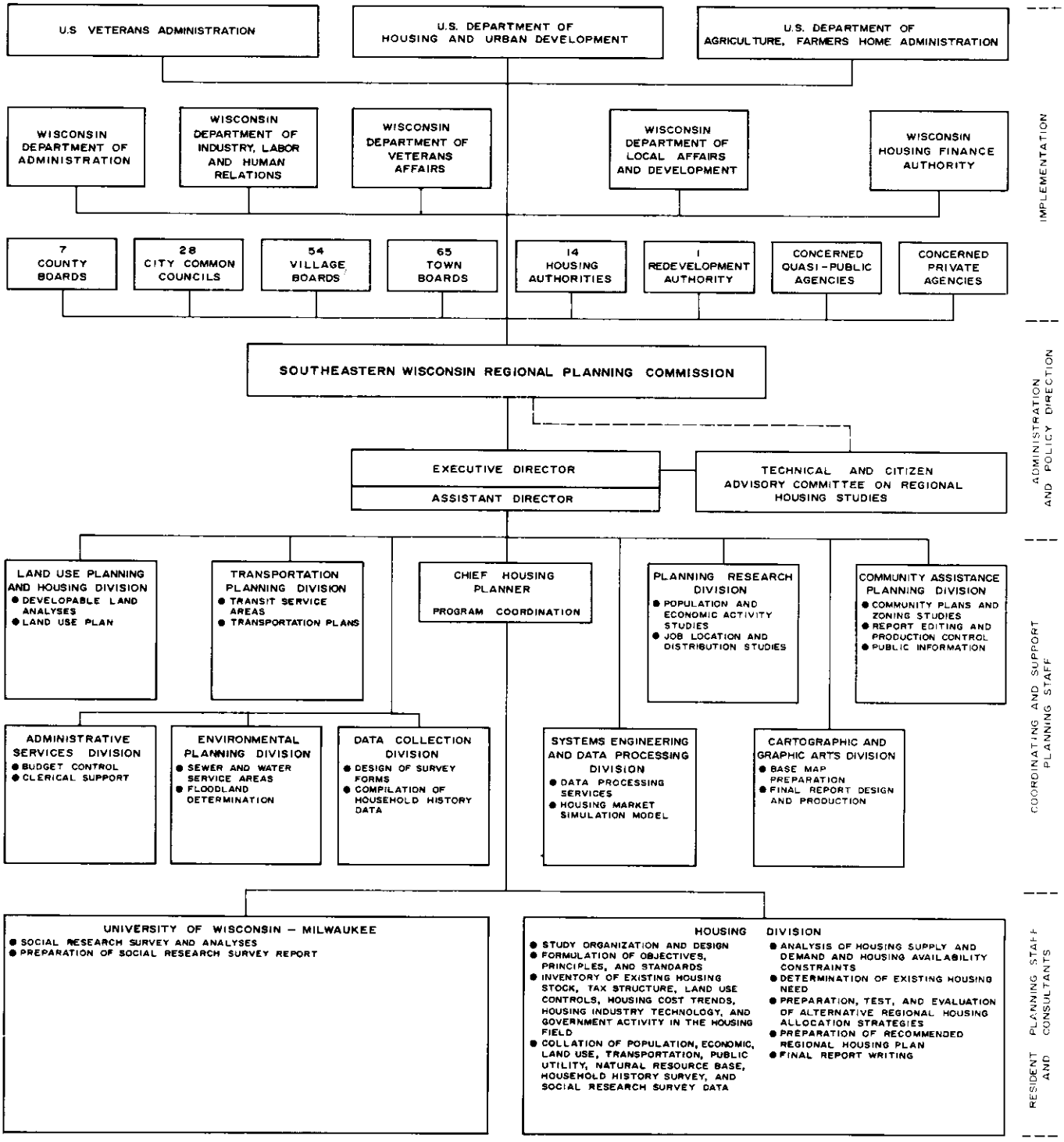
Scheme of Presentation

The major findings and recommendations of the regional housing study are documented in this report. The report sets forth the basic principles and concepts underlying the study, documents the salient findings of program inventories, sets forth the results of pertinent forecasts and analyses based on the inventories, explores alternative regional housing strategies, and sets forth a recommended plan based upon regional housing objectives adopted by the Technical and Citizen Advisory Committee. In addition, the report contains specific recommendations for plan implementation.

This report is intended to allow careful critical review of the potential housing strategies by public officials, agency staff personnel, and citizen leaders within the Region and to provide the basis for plan implementation by the federal, state, and local agencies of government concerned. The report can only summarize in brief fashion the information assembled in the extensive data collection, analysis, and forecasting phases of the regional housing program; and due to its magnitude and complexity, the reproduction of all of this information in report form is impractical. All of the basic data is on file in the Commission offices, and is available at cost to member units and agencies of government and to the public in general upon specific request. This report, therefore, serves the additional purpose of indicating the type of data available from the Commission which may be of value in assisting federal, state, and local units of government and private investors in making decisions concerning present and future housing requirements and related land use development in the Region.

Figure 2

BASIC ORGANIZATIONAL STRUCTURE FOR THE REGIONAL HOUSING STUDY



Source: SEWRPC.

Short-Term Action Oriented Housing Program

It should be noted that a short-term action oriented program was conducted as part of the overall work program of the regional housing study, pursuant to a request made by the Regional Administrator of Region V of the U. S. Department of Housing and Urban Development in a letter dated March 31, 1971. The short-term program was structured to achieve five objectives, utilizing, to the maximum extent possible, information and staff resources available to the Commission at that time. The five objectives of the short-term action oriented housing work program, as set forth by the U. S. Department of Housing and Urban Development, are:

1. Identification of specific areas where low- and moderate-income housing should be constructed.

2. Identification of sites within those areas appropriate for the construction of these units.

3. Identification of obstacles to the construction of housing on these sites; e.g., cost, zoning, building codes, community resistance.

4. Determination of various methods for the immediate removal of those inappropriate obstacles, thus bringing the cost of a feasible level.

5. Initiation of communications with the producers and financiers of housing to get housing constructed on the sites.

The funding for the short-range housing study was provided by the U. S. Department of Housing and Urban Development and the Wisconsin Department of Local Affairs and Development, as outlined in contractual agreements entered into between the agencies on September 10, 1971, and June 25, 1971, respectively. The short-range housing study was completed in July 1972, and the findings and recommendations were published in SEWRPC Technical Report No. 12, A Short-Range Action Housing Program for Southeastern Wisconsin—1972 and 1973.

The findings and recommendations set forth in this technical report not only fully met but went beyond the requirements of the short-term housing study as originally envisioned by the U. S. Department of Housing and Urban Development when that Department set forth the five objectives outlined above. The technical report not only identified areas and sites suitable for the immediate construction throughout the Region of 2,000 units of low- and moderate-income housing, as specifically requested by the U. S. Department of Housing and Urban Development, but included a recommended method of allocating these housing units among the suitable areas. Thus, the report not only identified those areas within the Region wherein publicly subsidized housing should be developed in the near future but identified the proportionate share of such housing which should be developed in each area. This allocation was based upon consideration of both the need for low- and moderate-income housing in the various areas of the Region and upon the need to provide a greater diversity of housing opportunities in those areas which have proportionately fewer housing opportunities for low- and moderate-income individuals and families. The findings and recommendations set forth in Technical Report No. 12 were intended to serve the Region in the interim pending completion of the long-range regional housing study. Consequently, to the extent that the findings and recommendations contained in this report differ from those contained in Technical Report No. 12, this report supercedes the technical report and represents the official position of the Commission.

Chapter II

BASIC HOUSING PRINCIPLES AND CONCEPTS

INTRODUCTION

The application of comprehensive planning principles and practices to housing problems at the regional level is a relatively new development, and little practical experience has been accumulated to date within the United States in such application. Many planning efforts relating to housing and housing-related problems have been undertaken within the Region in the past, but these efforts have been largely local and fragmented in nature and have not been coordinated with one another on a comprehensive, areawide basis. Consequently, given the present areawide character of urban development within the Region, the overall effectiveness of these efforts has been less than desired.[1] Because the regional housing study represents an attempt to apply comprehensive planning principles and practices to housing problems on an areawide basis, a brief exposition of the basic principles on which the planning approach used in the regional housing study is based is in order. This exposition should contribute to a better understanding of not only the approach taken in the regional housing study but also of the specific housing problems identified in, and the solutions to these problems recommended in, the study.

THE REGION AS A PLANNING UNIT FOR HOUSING

Housing planning in a multi-community urbanizing region must be conducted on an areawide basis. The amount and the spatial distribution of the demand for housing to be accommodated is determined by basic social and economic forces which operate over the entire urbanizing Region with little regard to artificial corporate limit lines. These basic social and economic factors are reflected in the areawide character of the land use and travel patterns of the Region and in the changes occurring in these patterns. Thus, housing planning cannot be accomplished successfully within the confines of a single municipality or even a single county if that municipality or county is part of a larger urban complex. Although necessary, regional planning is not sufficient to the resolution of housing problems. Such resolution requires private as well as federal, state, and local governmental action, albeit action coordinated by a regional housing plan.

Although the Region is a sound, basic geographic unit for housing planning, the housing planning effort must also recognize the existence within the Region of subareas relevant to the analysis of housing problems, the identification of housing needs, and the mounting of action programs to meet these needs. Such subareas could be defined in a number of ways, but ideally would consist of three overlapping levels of geographic areas existing within the Region which, for the purposes of this study, have been termed housing analysis areas. Because of the practical difficulty of precisely delineating the geographic boundaries of true housing market[2] areas, and because of the need to consider—given the imperfections of the private real estate market—other factors in delineating subareas for housing planning purposes, three kinds of housing analysis areas were identified and delineated for the regional housing study. The first of these was termed the primary, or aggregate, regional housing analysis area and was defined as the geographic area which is coterminous with the seven-county planning jurisdictional area of the Regional Planning Commission. As a true socio-economic unit, the Region constitutes a gross housing market area and, as such, a sound basis for overall housing market analyses and the preparation of forecasts of housing demands and needs and of the factors determining such demands and needs.

The second of the geographic housing analysis areas was termed "secondary housing analysis area," and was defined as the area comprising the U. S. Bureau of the Census defined Standard Metropolitan Statistical Areas (SMSA's) within the Region. These include: the Milwaukee SMSA, comprised of Milwaukee, Ozaukee, Waukesha, and Washington Counties; the Kenosha SMSA, comprised of Kenosha County; and the Racine SMSA, comprised of Racine County. In addition, Walworth County, which in 1970 was not included within any of the three SMSA's within the Region, was considered as a separate secondary housing market area. The criteria used by the U. S. Bureau of the Census in the delineation of SMSA's—which criteria include consideration of such

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[1] *During the preparation of the Regional Housing Study Prospectus, a review was made of the 51 available documented reports on the housing studies conducted within the Region since 1930 by official public, quasi-public, and private agencies. For a summary of the findings of this review, see SEWRPC Regional Housing Study Prospectus, December 1969.*

[2] *A housing market is defined for the purposes of the regional housing study as the process of exchange which brings about the production and allocation of all types of housing facilities in accordance with the preferences, desires, needs, and financial abilities of the consumers. This exchange function results in price establishment and adjustments in the quantity, quality, and spatial location of the housing stock. Although this definition of the term housing market does not conceptually relate or refer to any geographic area per se, geographic limits within which the market forces operate are nevertheless implied.*

factors as home-to-work commuting patterns, limits of local telephone service areas, newspaper circulation, and department store delivery areas—are intended to define areas which are socially and economically integrated with the largest central city in each urbanized area and which, as such, comprise sound geographic subareas for housing planning within the larger Region.

The third of the geographic housing analysis areas was termed "local housing analysis area"[3] and was defined as individual communities or civil divisions and subcommunity areas as well as groups of minor civil divisions—cities, villages, and towns—within each of the four secondary housing analysis areas. The factors considered in determining the boundaries of these housing analysis areas included, in addition to the corporate limits of the minor civil divisions, such factors as current census tracts, existing and potential central sanitary sewer and public water supply service areas, existing and potential mass transit service areas, and availability of certain other urban facilities and services; residential neighborhood boundaries; travel patterns centered on major commercial and industrial land use concentrations; school district boundaries; natural and man-made barriers, such as environmental corridors and major transportation corridors; existing and probable future land use development; soils; the operational areas of private real estate firms, land developers, and builders and banking and mortgage loan institutions; and the assumed existence of a community of interest that can be marshalled in the establishment of subregional planning programs. In cases where single minor civil divisions were considered too large to constitute a meaningful local analysis area, subcommunity areas were delineated within the civil division as the local housing analysis areas.

The primary, secondary, and local housing analysis areas, as delineated in the housing study, are shown on Map 2. Housing development in these three areal levels must be fully coordinated for the purpose of effecting economies in the provision of housing; guiding land use development on a sound, areawide basis; protecting the underlying and sustaining natural resource base; and meeting true housing needs within the Region by providing a full range of housing types, styles, and costs in suitable environments for human life.

THE HOUSING PLANNING PROBLEM

Housing is becoming a matter of increasing concern to public officials, citizen leaders, and technicians within the Region. Housing probably has a greater impact on daily life than any of the other facilities which together comprise the physical plant of an urban or rural area, and housing problems are, therefore, a matter of wide popular concern. In addition to shelter, housing provides a sense of place and a sense of individual and social identification. It is a symbol of status, an extension of personality, and a determinant of many of the advantages and disadvantages of modern society: good schooling; good municipal services, including police protection; a safe, healthy, attractive, and efficient neighborhood environment; and access or lack of access to many opportunities of contemporary life and culture. Quality, condition, and location of housing can determine personal as well as public, physical, and mental health, and can command pride and respect or lead to despair and unrest.

Because of the many complex social as well as economic and physical factors involved in housing, the manner in which housing problems are considered and ultimately resolved involves many important public and private policy determinations. Such determinations must be made in view of an urbanizing Region which is constantly changing and, therefore, should be based upon a comprehensive planning process able to objectively scale changing demands and needs for housing against the available stock of housing, and to recommend means for meeting the needs within the constraints of the limited available cultural and natural resource base. Only within such a planning process can the effect of different courses of action with respect to the development of an adequate stock of housing within the Region be properly evaluated, the best course of action intelligently selected, and the public funds available for housing most effectively invested.

Accordingly, the basic purpose of the housing planning process should be twofold:

1. To permit broad public evaluation and choice of alternative housing development plans, policies, and programs leading to the provision of decent, safe, and sanitary housing for all residents of the Region.

2. To provide, through the medium of a long-range plan for housing development, full coordination of housing with other functional forms of regional development such as transportation, public utility, and community facility development; and full coordination of local, state, and federal housing development policies and programs within the Region.

More specifically, the housing planning process should:

1. Provide a framework of agreed-upon regional housing objectives and a supporting set of housing standards relevant to the needs and values of the citizens of the Region. These objectives and standards should be useful in measuring existing and probable future housing needs against existing and probable future housing supply in terms of quantity, quality, location, and cost.

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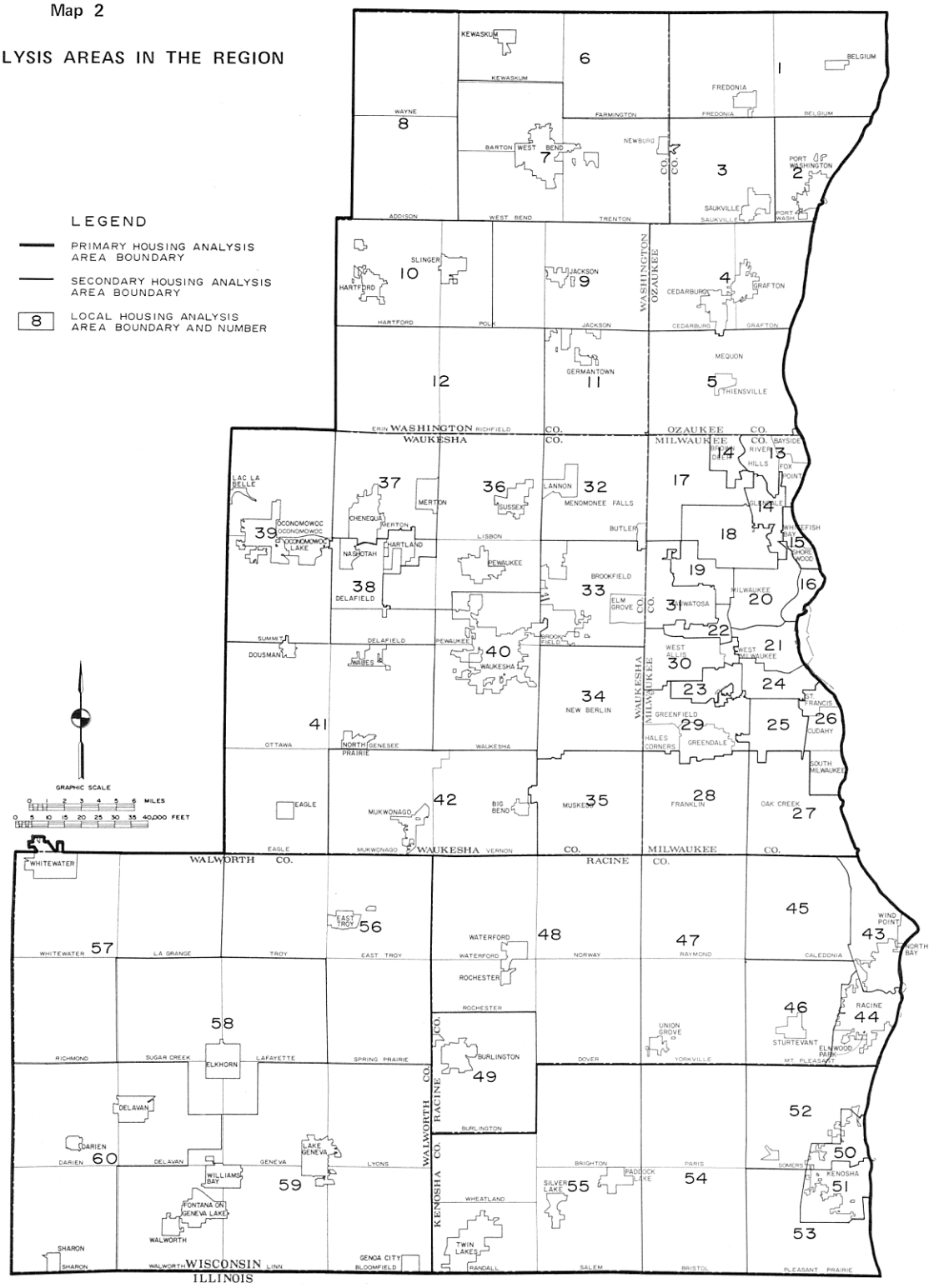
[3] *Local housing analysis areas are coterminous with planning analysis areas designed by the Commission to carry out a multitude of regional planning activities in the Southeastern Wisconsin Region. These planning analysis areas serve as a common geographic basis within which basic demographic, economic, land use, transportation, water resource, and housing data can be presented, analyzed, and utilized in the preparation and implementation of subregional plans.*

Map 2

HOUSING ANALYSIS AREAS IN THE REGION



While the Region is a sound, basic geographic unit for housing planning, the regional housing planning effort must also recognize the existence of subregional areas relevant to the analysis of housing problems, to the identification of housing needs, and to the mounting of action programs to meet these needs. Primary, secondary, and local housing analysis areas were defined under the housing study. The single primary analysis area consists of the entire Region; the four secondary analysis areas consist of the Milwaukee, Kenosha, and Racine Standard Metropolitan Statistical Areas and Walworth County; and the 60 local analysis areas consist of groups of minor civil divisions or, in cases where single minor civil divisions were considered too large to constitute a meaningful local analysis area, subcommunity areas within a minor civil division.

Source: SEWRPC.

2. Provide for the collection, analysis, and dissemination on a continuing basis of timely, uniform, areawide information about the supply of, and demand and need for, housing within the Region. This information should include the basic economic, demographic, and land use data which ultimately determine the basic demand and need for housing in the Region; data on existing and probable future housing needs, with emphasis upon the housing needs of low- and moderate-income families and upon relocation housing needs precipitated by such major public works programs as highway construction, urban renewal, and park and open space acquisition; and data on existing federal, state, and local governmental housing programs directed toward meeting the needs of low- and moderate-income families and individuals. This information system should provide a single good source for obtaining relevant information by all units and agencies of government concerned with housing within the Region, and a good measure of progress toward the agreed-upon housing objectives.

3. Provide recommendations concerning the role of government and the private sector in meeting true housing needs within the Region by augmenting the operations of the private housing market. These recommendations should assist local units of government in considering not only public actions which might directly contribute to the solution of the housing problems, such as participation in the development of publicly subsidized housing projects, but should assist the local units of government in considering all actions related to housing, such as decisions concerning the extension of public utility services; the provision of public transportation services; the provision of other public facilities and services such as parks, schools, libraries, solid waste collection, and police and fire protection; and decisions concerning zoning changes and land subdivision plat approvals. The housing plan should provide a framework within which all local community planning and development programs can be interrelated to focus on the housing problem in conjunction with the resolution of other problems, and thereby provide a sounder basis for proper impartial public decision-making in the housing area.

BASIC PRINCIPLES OF THE HOUSING PLANNING PROCESS

Based upon the foregoing considerations, seven basic principles were formulated under the regional housing study which together form the basis for the specific housing planning process applied in that study. These are:

1. Housing planning must be regional in scope. Housing demand and needs develop in response to basic social and economic forces over an entire urban region without regard to corporate limits. Moreover, the high level of transportation service offered by the developing regional freeway system, and proposed to be offered by a regional rapid transit system, makes the existing and potential stock of housing within any given subarea of the Region potentially usable by a widening population segment. Housing planning, however, must also recognize the existence of subregional housing analysis areas and relate the needs and problems within these areas to the Region.

2. Housing planning must be conducted concurrently with, and cannot be separated from, land use planning. The land use pattern determines the amount and spatial distribution of housing which should be provided within the Region, and housing development shapes the developing land use pattern, influencing not only residential land uses per se, but commercial, industrial, and other uses as well.

3. Housing planning must recognize the existence of a limited natural resource base to which urban and rural development must be properly adjusted to ensure a pleasant and habitable environment. Land, water, and air resources are limited and subject to grave misuse through improper land use and housing related development. Such misuse can lead to serious developmental and environmental problems which may be difficult and costly or impossible to correct, and which may adversely affect the character of housing development as well as the natural resource base.

4. Housing planning must take into consideration the proper relationship to existing and proposed highway and transit facilities. Adequate transportation facilities are necessary to provide a means of access to areas of employment and essential services, including major retail and service centers, major medical centers, major outdoor recreation facilities, vocational and higher education centers, and certain social services. Access to public transit service, in this respect, is particularly important to those families and individuals who do not or cannot operate an automobile.

5. Housing planning must take into consideration the provision of adequate public utilities and community facilities, such as centralized sanitary sewerage, public water supply, and school and park facilities, so that housing can be provided in an attractive, stable, safe, and healthy, as well as efficient and economical, environment.

6. Housing planning must be cognizant of the needs of housing consumers regardless of their income and must seek ways and means by which decent,

safe, and sanitary housing, along with a broader range of housing types, styles, and costs, may be made available through the Region. Particular attention must be given in this respect to the needs of low-income families, large families, and the elderly.

7. Housing planning must take into consideration the location of existing and probable future employment concentrations within the Region. The provision of adequate housing for workers in locations convenient to employment opportunities is important not only to provide the opportunity for a reduction in travel demand and in the time and resources spent in commuting over long distances, but also to provide an adequate pool of labor near existing and potential job concentrations and thereby enhance the opportunities for economic development.

THE HOUSING PLANNING PROCESS

Based upon the foregoing principles, the Commission employed a six-step planning process through which the principal factors affecting housing development within the Region could be identified and described both graphically and numerically; the primary areas of housing need identified, and to the extent possible, quantified; and different courses of action to meet these needs formulated and evaluated. These steps are: study design; formulation of objectives and standards; inventory; analysis and forecast; preparation, test, and evaluation of alternative regional housing strategies; and plan selection and adoption. Plan implementation, although necessarily beyond the foregoing planning process, must be considered throughout the process if the plans are to be realized.

The principal results of the above planning process are a regional housing plan; recommendations concerning the role of government activity and private industry in meeting existing and probable future housing needs within the Region; and the establishment of techniques to obtain housing and related data on a continuing, areawide basis, all consistent with regional development objectives. In addition, the process is the beginning of a continuing planning effort that permits modification and adaptation of the plans and the means of implementation to changing conditions.

Each step in this process includes individual operations which must be carefully designed, scheduled, and controlled to fit into the overall process. An understanding of this is essential to appreciate and comprehend the results. Each step is diagrammed in Figure 3 and described briefly below.

Study Design

Every planning program must embrace a formal structure or study design so that the program can be carried out in a logical and consistent manner. This study design must specify the content of the fact-gathering operations, define the geographic area for which data will be gathered and plans prepared, and outline the manner in which the data collected are to be processed and analyzed.

The study design for the regional housing study took the form of 16 detailed staff memoranda which set forth the exact methods and procedures to be followed in accomplishing each work element.[4] All of the memoranda with one exception were prepared by the staff of the Southeastern Wisconsin Regional Planning Commission and presented to the Technical and Citizen Advisory Committee on Regional Housing Studies for review and approval. The University of Wisconsin-Milwaukee, Department of Sociology, prepared the memorandum setting forth the procedure to be used in the conduct of the work intended in the social research survey.

Formulation of Objectives and Standards

In its most basic sense, planning is a rational process to establish and meet objectives. The formulation of objectives is, therefore, essential before plans can be prepared. In order to be useful, the objectives must be stated clearly, be sound logically, and must relate to alternative physical development proposals. It is the duty and function of the Commission to prepare a comprehensive plan for the Region's physical development and its component parts; and it is the objective of the regional housing study to prepare one of the key elements of such a plan, namely, a long-range plan which would seek to provide decent, safe, and sanitary housing for every citizen. Only if the objectives clearly relate to physical development and are subject to objective test can a choice be made from alternative plans to select the one which best meets agreed-upon objectives. Logically conceived and well-expressed objectives must be translated into detailed standards to provide the basis for plan preparation, test, and evaluation. The housing objectives and standards ranged from objectives relating directly to the provision of adequate housing for all persons within the Region to objectives relating housing development to other forms of fundamental development and to the natural resource base of the Region. All objectives and standards were carefully reviewed and adopted by the Technical and Citizen Advisory Committee.

Inventory

Reliable planning data collected on a uniform, areawide basis are essential to the formulation of workable development plans. Consequently, inventory becomes the first

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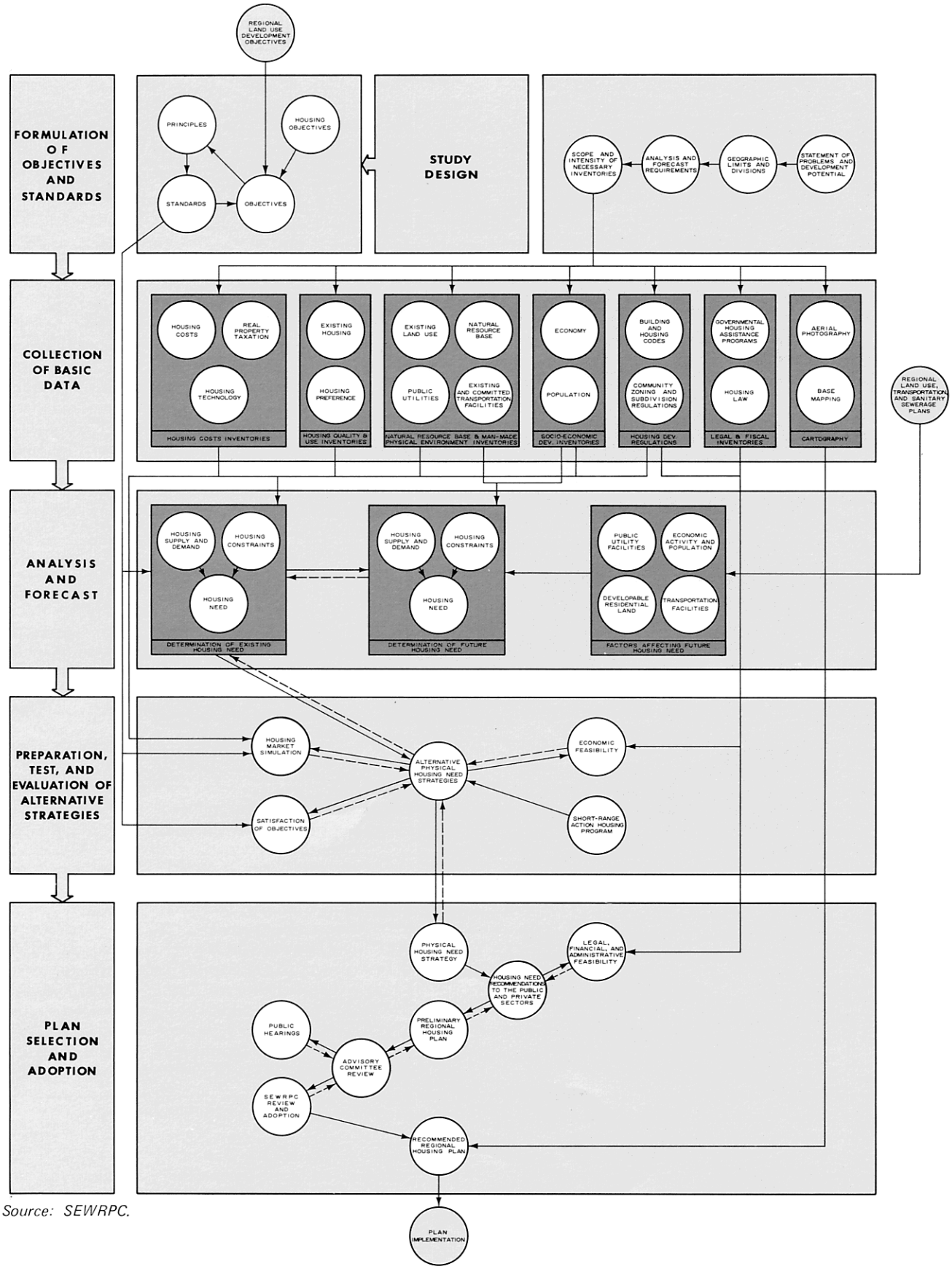
[4] *The study design was comprised of the following Commission and University staff memoranda: Regional Housing Study Design Memorandum No. 1, "Alternative Advisory Committee Structures and Size;" No. 2, "Public Utilities Inventory;" No. 3, "Soil Capabilities Inventory;" No. 4, "Land Use Inventory;" No. 5, "Consultant Services Required;" No. 6, "Housing Production Cost Trends Inventory;" No. 7, "Existing Housing Stock Inventory;" No. 8, "Land Use Controls Inventory;" No. 9, "Population Inventory;" No. 10, "Government Sponsored Housing Programs Inventory;" No. 11, "Tax Structure Inventory;" No. 12, "Inventory of Technological Changes in the Housing Industry;" No. 13, "Land Availability Inventory;" No. 14, "Economic Activity Inventory;" No. 15, "Housing Analysis Area Identification;" and University of Wisconsin-Milwaukee, Regional Housing Study Design Memorandum No. 11, "Social Research Component,"*

Figure 3

GENERAL STEPS IN A COMPREHENSIVE HOUSING PLANNING STUDY



Source: SEWRPC.

operational step in any planning process, since no intelligent forecasts can be made or alternative courses of action selected without knowledge of the current state of the system being planned.

Sound regional housing plan formulation requires data on soil capabilities; the kind, location, and intensity of existing and probable future land uses; public land use controls; transportation facilities, both existing and proposed; public utility facilities and services, both existing and proposed; population levels and densities; economic activity; cost trends in housing; technological changes in the housing industry; tax structure; government sponsored housing programs; existing housing stock; and on the attitudes and opinions of both producers and consumers of housing within the Region. In the regional housing study, data collection included review of prior publications, perusal of agency files, personal interviews with private citizens and public officials, committee meetings of staff and technical advisors, and original attitudinal and exterior housing condition field surveys.

Analysis and Forecast

Inventories provide factual information about past and present situations, but analyses and forecasts are necessary to understand the relationship between housing supply and demand factors and the extent of existing housing activities within the Region, and to provide estimates of future conditions, including housing needs, and the accompanying land use, transportation, and supporting public utility facilities. Future needs must be determined from a sequence of interlocking forecasts. Supply forecasts, including factors associated primarily with the probable future supply of housing, and demand forecasts, including factors associated with population size, population characteristics, income levels, population distribution, and mobility, enable the determination of future growth within the Region. This, in turn, can be translated into future demand for housing development or redevelopment. These future demands can then be scaled against the existing supply and plans formulated to meet any deficiencies.

To illustrate the complexity of this task in regional housing planning, consider that to prepare a forecast of future housing needs it was necessary to analyze and to interrelate the following factors: the quantity and quality of the existing supply of housing; the characteristics of housing demand, including population size, and distribution, vacancies, price levels, land, construction and financing costs, and expanding economic activity; and the practice of discrimination as it affects the free choice of housing.

Both the land use pattern and the supply of housing facilities must be planned for anticipated demand at some future point in time. The need to fully coordinate housing development with areawide land use, transportation, and utility system development dictated the use of the same basic forecast and design year used in the preparation of other regional plan elements, 1990, with an intermediate forecast for the year 1980. This forecast and design period, while conservative, provides the means for locking the housing forecast and design periods and requirements into the previously determined regional land use, transportation, and utility forecast and design period.

Preparation, Test, and Evaluation of Alternative Housing Strategies

The inventory and analysis of housing supply and demand data and the subsequent application of regional housing objectives, and standards to such data permits the identification of true housing need. The next logical step in the planning process is the preparation, test, and evaluation of alternative housing strategies designed to meet this need. Such strategies consist essentially of alternative geographic allocations of subsidized or assisted housing units required to meet the existing housing need in a manner consistent with Commission adopted land use and transportation, as well as housing, objectives and standards. The alternative strategies must be subjected to several levels of review and evaluation, including economic feasibility, technical feasibility, financial feasibility, legality, and citizen and political reaction. Interagency meetings and public hearings may be used as devices to test and evaluate the strategies. This step should help to clearly demonstrate which alternative strategy is technically sound, financially feasible, legally possible, and politically practical.

Plan Selection and Adoption

The general approach used for the selection of the final housing allocation strategy from among the alternatives advanced was to proceed through presentation of the alternatives and the analyses of the technical, economic, financial, and legal feasibility of the strategy and its alternatives to the Technical and Citizen Advisory Committee on Regional Housing Studies, interagency meetings, public informational meetings, and public hearings to a final decision and adoption by the Commission in accordance with the provisions of the state regional planning enabling legislation. The role of the Commission is solely to recommend to federal, state, and local units of government and private investors the best final housing allocation strategy for consideration and action. The best housing allocation strategy together with specific recommendations to both the public and private housing sectors, required to implement this strategy and minimize future housing need as well, represents the recommended regional housing plan. The final decisive step to be taken in the process is the acceptance or rejection of the plan by these units of government and subsequent plan implementation by public and private action. Therefore, plan selection and adoption must be founded in the active involvement of the various governmental bodies, technical agencies, and private interest groups concerned with development throughout the Region. The use of advisory committees and both formal and informal public hearings appears to be the most practical and effective procedure for achieving such involvement in the planning process and for openly arriving at agreement on objectives and on a final plan which can be cooperatively adopted and jointly implemented.

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Chapter III

DEMOGRAPHIC AND ECONOMIC BASE OF THE REGION

INTRODUCTION

The resident population of, and the economic activities taking place within, the Region are important factors which determine the need for and the ability to provide decent, safe, and sanitary housing. Demographic data relating to the size and distribution of the population and to such population characteristics as age and sex composition, marital status, size of household, educational attainment, and income are important factors determining the adequacy of the existing housing stock and the need for action to improve that stock. Trends in the size, characteristics, and distribution of the population are important indicators of the quantity of housing units required and of the desirable locations of such units; trends in the characteristics of population and households, such as age and sex composition, marital status, and size of household are important indicators of the type and sizes of housing units required; and trends in educational attainment and income are important indicators of the ability of the population to provide adequate housing for itself.

Economic base data related to changes in the levels and distribution of economic activity as measured in terms of changes in the regional labor and work force size, composition, and distribution are also important to any sound housing planning effort. Shifts in the distribution of the labor and work force may indicate the need for additional housing units in a given geographic location. Shifts in the size and composition of the work force may also directly affect the number, size, and type of housing units required, and the ability to provide such units.

This chapter, therefore, presents data on the resident population and economic activity levels within the Region, and on trends in these levels as such data may affect housing supply and demand and the determination of true housing need. Additional detailed data concerning the economic and demographic base of the Region may be obtained from Southeastern Wisconsin Regional Planning Commission Technical Reports No. 10 and 11, entitled, respectively, The Economy of Southeastern Wisconsin and The Population of Southeastern Wisconsin.

DEMOGRAPHIC BASE

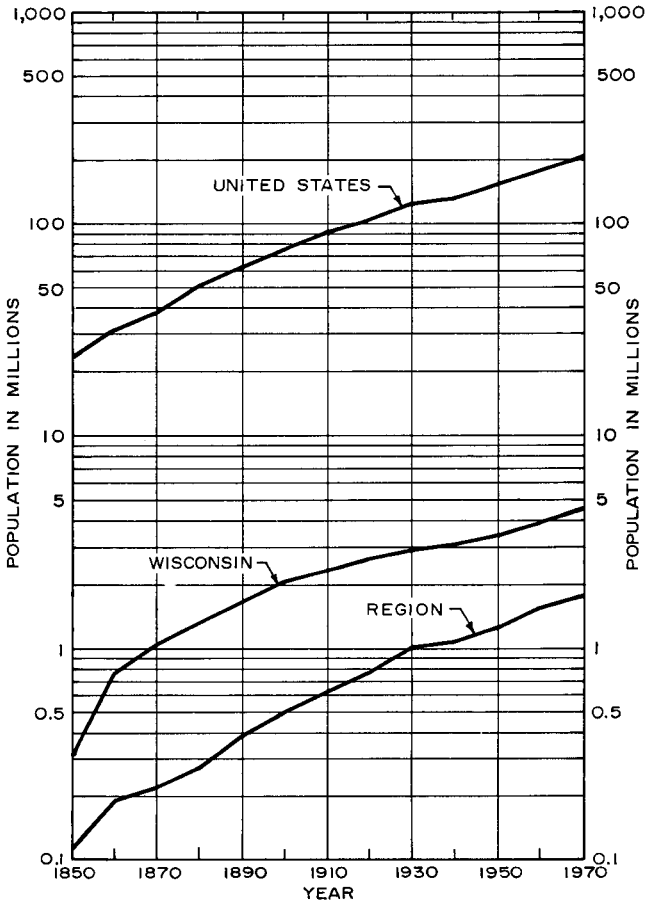
Population Size

Population size and change in population size, although not a primary determinant, are together one of several measures of the need for housing in an area. Depending upon the age of an urban community or neighborhood, the change or absence of change in total population may indeed be significant to the need for housing in that area. The population of the Region, which presently stands at 1,756,086 persons, grew at a rate of about 18,000 persons per year from 1960 to 1970, a rate considerably lower than the approximately 33,000 persons per year growth rate experienced from 1950 to 1960. While the population of the Region increased by 182,000 persons from 1960 to 1970, the population of the central city of Milwaukee—the twelfth largest city in the nation—followed national trends and decreased by almost 24,000 persons. Older suburbs adjacent to the City of Milwaukee also showed population decreases, while large increases in population occurred in the newer outlying suburban areas and particularly in the rural-urban fringe areas of the Region.

Population growth within the Region over the past century has generally occurred at a higher rate than for the state and nation (see Figure 4 and Table 1). Consequently, the regional share of the total national popula-

Figure 4

POPULATION LEVELS IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1850-1970



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

Table 1

POPULATION LEVELS IN THE REGION, WISCONSIN, AND THE UNITED STATES: SELECTED YEARS 1850-1970

Year	Population			Region Population As Percent of United States Total	Region Population As Percent of Wisconsin Total
	Region	Wisconsin	United States		
1850	113,389	305,391	23,196,876	0.5	37.1
1860	190,409	775,881	31,443,321	0.6	24.5
1870	223,546	1,054,670	38,558,371	0.6	21.2
1880	277,119	1,315,497	50,155,783	0.5	21.1
1890	386,774	1,693,330	62,947,714	0.6	22.8
1900	501,808	2,069,042	75,994,575	0.6	24.2
1910	631,161	2,333,860	91,972,266	0.7	27.0
1920	783,681	2,632,067	105,710,620	0.7	29.8
1930	1,005,997	2,939,006	122,775,046	0.8	34.2
1940	1,067,699	3,137,587	131,669,275	0.8	34.0
1950	1,240,618	3,434,575	151,325,798	0.8	36.1
1960	1,573,620	3,952,771	179,323,175	0.9	39.8
1970	1,756,086	4,417,933	203,184,772	0.9	39.7

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

tion increased from 0.49 percent in 1850 to 0.88 percent in 1960, while the regional share of the state population increased from 37 percent in 1850 to nearly 40 percent in 1960. Between 1960 and 1970, however, the population growth rate for the Region was somewhat lower than that for the nation and state, and consequently, the regional share of the total population of the nation and state declined slightly over the past decade.

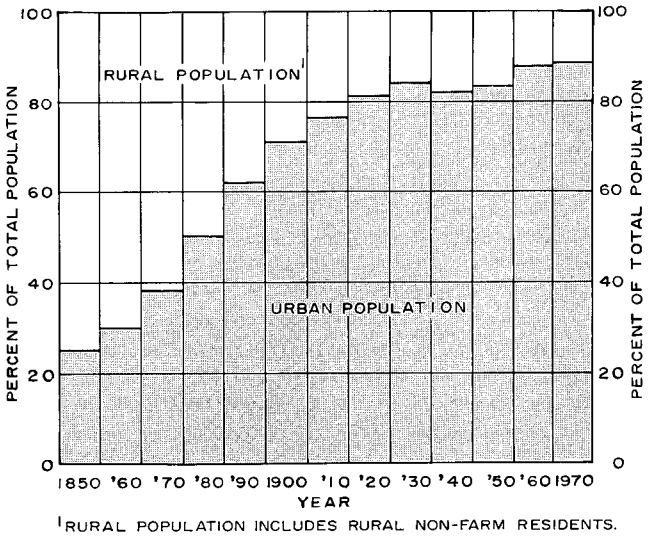
Population Distribution

This long-term growth trend in the regional population has been marked by two phenomena which are of considerable importance to understanding existing, as well as future, housing needs. First, the Southeastern Wisconsin Region, like most metropolitan regions in the United States, is becoming increasingly urban. In 1850, the population of the Region was approximately 75 percent rural and 25 percent urban; by 1900, this relationship had almost reversed to 30 percent rural and 70 percent urban; and by 1970, only 12 percent of the regional population was considered rural, while 88 percent was considered urban. The 120-year rural-urban change is shown graphically in Figure 5. This trend toward urbanization is one of the most significant distributional changes taking place within the Region, the state, and the nation today.

Secondly, the population within the Region is being increasingly decentralized, spreading out across established city and county boundaries. During the 30-year period from 1900 to 1930, the highest rates of population increase occurred in the three urban Counties of Kenosha, Milwaukee, and Racine. Urban decentralization over the last four decades (1930-1970), however, has reversed this trend. Between 1960 and 1970 rates of population increase of more than 35 percent were observed in certain outlying counties of the Region, notably Ozaukee, Washington, and Waukesha Counties, while the population increased by only 2 percent in Milwaukee County (see Table 2).

Figure 5

DISTRIBUTION OF URBAN AND RURAL POPULATION IN THE REGION: 1850-1970



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

These varying rates of population growth have resulted in significant distributional shifts of population among the seven counties. The most dramatic distributional changes over the entire 70-year period have occurred in Milwaukee and Waukesha Counties (see Figure 6). The Milwaukee County proportion of the total regional population increased by about 6 percent from 1900 to 1930 and then decreased by over 12 percent from 1930 to 1970. The proportion of the total regional population in Waukesha County decreased by about 2 percent from 1900 to 1930 and then increased by about 8 percent from 1930 to 1970. The result of the most recent changes in population distribution within the Region has been an areawide diffusion of population around the central cities of Milwaukee, Racine, and Kenosha.

The phenomenon of urban decentralization has been accompanied by a decrease in the average population density of the developed urban area of the Region, from about 11,400 persons per square mile in 1920 to about 4,300 persons per square mile in 1970. Although population densities within any given urbanized area are not uniform and will vary considerably within small subareas from the overall average, it should be emphasized that a continuation of development patterns which foster a decline in urban population densities can have significant implications for the provision of suitable housing, and of the essential supporting public services, for the existing as well as future resident population.

Population Characteristics

Data relating to the age and sex composition, racial composition, marital status, educational attainment, and residential mobility of the regional population are all relevant to any study of housing needs.

Table 2

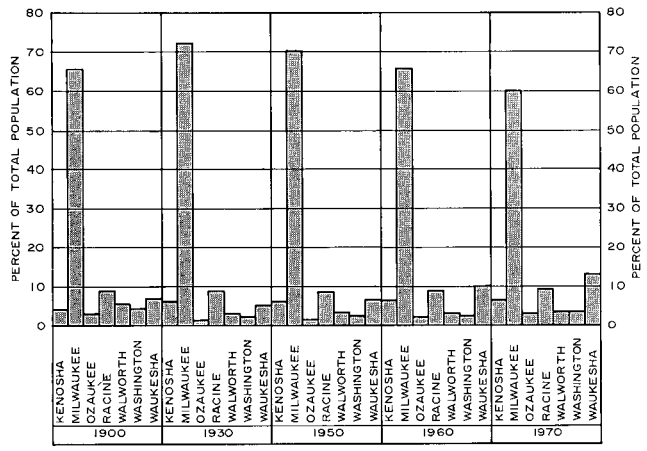
POPULATION IN THE REGION BY COUNTY: 1900, 1930, 1950, 1960, and 1970

County	Population								
	Number					Percent Change			
	1900	1930	1950	1960	1970	1900-1930	1930-1950	1950-1960	1960-1970
Kenosha . . .	21,707	63,277	75,238	100,615	117,917	191.5	18.9	33.7	17.2
Milwaukee . .	330,017	725,263	871,047	1,036,047	1,054,249	119.8	20.1	18.9	1.8
Ozaukee . . .	16,363	17,394	23,361	38,441	54,461	6.3	34.3	64.6	41.7
Racine . . .	45,644	90,217	109,585	141,781	170,838	97.7	21.5	29.4	20.5
Walworth . .	29,259	31,058	41,584	52,368	63,444	6.1	33.9	25.9	21.2
Washington . .	23,589	26,430	33,902	46,119	63,839	12.0	28.3	36.0	38.4
Waukesha . .	35,229	52,358	85,901	158,249	231,338	48.6	64.1	84.2	46.2
Region	501,808	1,005,997	1,240,618	1,573,620	1,756,086	100.5	23.3	26.8	11.6

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

Figure 6

DISTRIBUTION OF THE POPULATION IN THE REGION BY COUNTY: 1900, 1930, 1950, 1960, AND 1970



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

Age: As indicated in Figure 7, the age composition of the regional population changed significantly between 1960 and 1970. The most striking changes are the increase in the proportion of young persons between the ages of 10 and 24 years, the decreases in the proportion of children under 5 years, the decreases in the proportion of adults between 30 and 39 years, and the increase in the proportion of the population age 70 and over. As indicated in Table 3, there is a considerable variation in the proportion of the population comprised by each age group among the seven counties. For example, the proportion of young persons under 20 years of age ranged from 37 percent in Milwaukee County to 44 percent in Ozaukee, Washington, and Waukesha Counties. On the other hand, the proportion of elderly persons age 65 years and over was very low in Waukesha County (6 percent) and relatively high in Walworth County (12 percent). The variations among the counties in the age composition are further indicated by the median age of the population in each county, which ranged from 24.9 years in Washington County to 28.6 years in Milwaukee County.

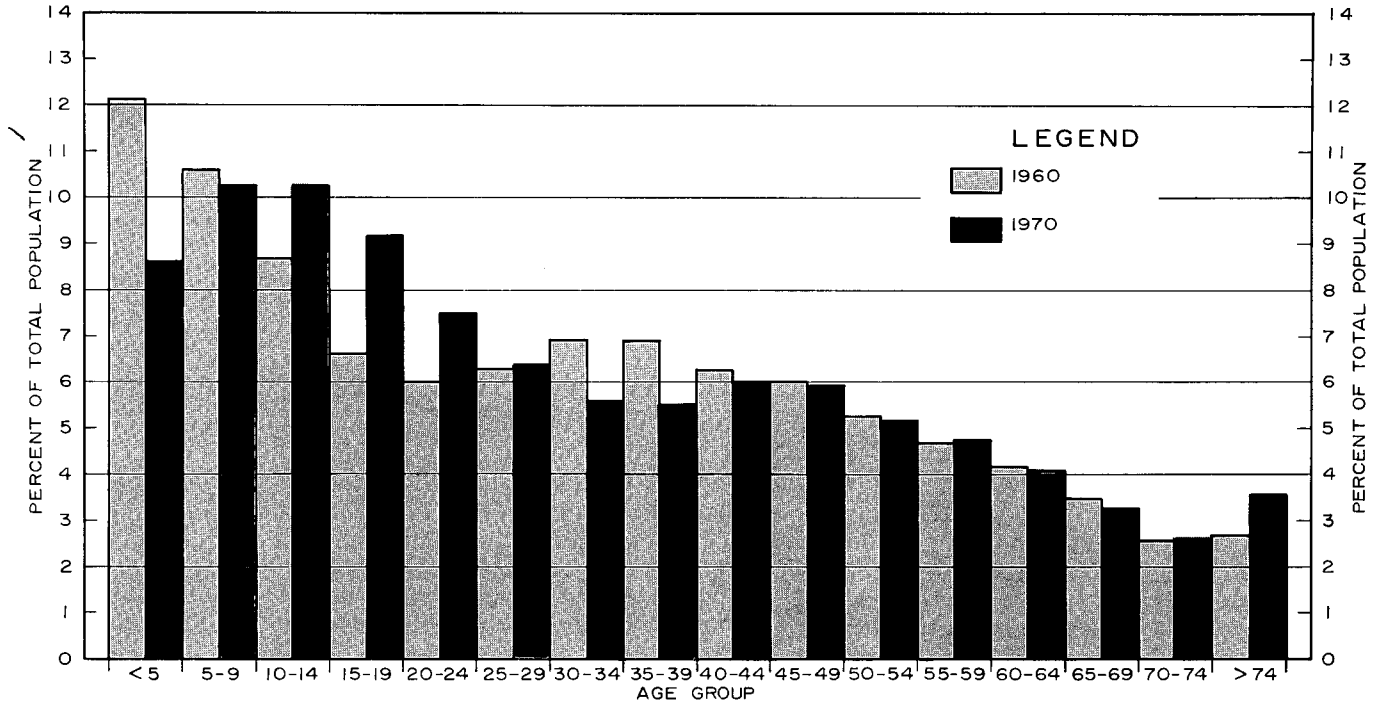
Sex: The sex composition of the regional population has also been changing. As indicated in Table 4, there was a significant decrease in the proportion of males in the regional population between 1960 and 1970, with at least slight decreases being observed within each 10 year age group, except the 10-19 year group. A major cause of the increase in the proportion of females in the regional population is the fact that women have a longer life expectancy than men. The substantial reduction in the number of males per 100 females in the 60-69 and 70 and over age groups during the past decade reflects this longer female life expectancy.

As indicated in Table 5, there was a decrease in the sex ratios within each county between 1960 and 1970, with large decreases being observed in Kenosha and Milwaukee Counties. In fact, there was an absolute decrease in the number of males in Milwaukee County between 1960 and 1970. It is interesting to note that the lowest sex ratios in 1970 were found in the urban Counties of Kenosha, Milwaukee, and Racine, in keeping with the historical tendency for the female proportion of the population to be relatively high in urban areas and relatively low in rural areas.

Race: In addition to changes in the age and sex composition, the racial composition of the regional population, as indicated in Table 6, changed somewhat during the last decade. In the 1970 census, nearly 93 percent of the regional population was reported as white; while in the 1960 census, somewhat less than 95 percent was reported as white. The balance of the population was nonwhite, a category which includes persons reporting their race as black, American Indian, Japanese, Chinese, or other race.

Figure 7

AGE COMPOSITION OF THE POPULATION IN THE REGION: 1960 AND 1970



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

Table 3

AGE COMPOSITION OF THE POPULATION IN THE REGION BY COUNTY: 1970

County	Population														Median Age[b]
	Under 10		10-19		20-29		30-44		45-64		65 and Older		Total		
	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	
Kenosha	23,759	20.1	23,767	20.2	16,218	13.8	19,471	16.5	23,484	19.9	11,218	9.5	117,917	100.0	26.9
Milwaukee	190,252	18.1	198,589	18.8	157,237	14.9	172,169	16.3	224,478	21.3	111,338	10.6	1,054,063	100.0	28.6
Ozaukee	11,748	21.6	12,068	22.2	6,313	11.6	10,398	19.1	9,925	18.2	3,969	7.3	54,421	100.0	25.6
Racine	35,549	20.8	35,934	21.0	22,835	13.4	28,977	17.0	32,102	18.8	15,441	9.0	170,838	100.0	26.0
Walworth	10,997	17.3	13,493	21.3	9,910	15.6	9,459	14.9	12,177	19.2	7,408	11.7	63,444	100.0	26.4
Washington	14,672	23.0	13,410	21.0	8,256	12.9	11,309	17.7	10,945	17.2	5,247	8.2	63,839	100.0	24.9
Waukesha	49,549	21.4	52,637	22.8	25,945	11.2	46,706	20.2	41,734	18.0	14,794	6.4	231,365	100.0	25.4
Region	336,526	19.2	349,898	19.9	246,714	14.1	298,489	17.0	354,845	20.2	169,415	9.6	1,755,887[a]	100.0	27.6

[a] *The 1970 regional population of 1,755,887 excludes 199 persons who were added subsequent to the conduct of the 1970 census and not allocated to the various age group categories.*

[b] *The median age is that age which divides the population distribution into two equal parts, half being younger than the median age and half being older.*

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

Table 4

SEX COMPOSITION OF THE POPULATION IN THE REGION BY AGE GROUP: 1960 and 1970

Age Group	Sex Ratio[a]	
	1960	1970
Under 10	103.9	103.4
10-19	99.9	101.8
20-29	93.0	88.7
30-39	98.3	96.4
40-49	96.9	96.6
50-59	97.7	93.2
60-69	93.7	85.2
70 and Older	78.0	67.3
All Ages	97.3	94.3

[a] *The sex ratio indicates the number of males per 100 females within each age group.*

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

Table 5

SEX COMPOSITION OF THE POPULATION IN THE REGION BY COUNTY: 1960 and 1970

County	Sex Ratio[a]	
	1960	1970
Kenosha	102.0	95.9
Milwaukee	95.7	92.0
Ozaukee	100.0	99.6
Racine	97.6	95.6
Walworth	99.3	98.1
Washington	102.3	99.9
Waukesha	101.7	99.2
Region	97.3	94.3

[a] *The sex ratio indicates the number of males per 100 females within each county.*

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

In both 1960 and 1970, the overwhelming majority—over 90 percent—of the nonwhite population in the Region was comprised of persons of the black race.

As indicated in Table 7, the nonwhite population comprised about 2 percent of the total population in Kenosha County, nearly 11 percent in Milwaukee County, about 7 percent in Racine County, and less than 1 percent in the other counties in the Region. Furthermore, the nonwhite populations of the Region are concentrated in the central cities of Kenosha, Milwaukee, and Racine. In fact, nearly 96 percent of the nonwhite population in the Region and 98 percent of all blacks in the Region resided in these three cities in 1970.

Table 6

RACIAL COMPOSITION OF THE POPULATION IN THE REGION: 1960 and 1970

Race	Population			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
White	1,499,662	95.3	1,626,056	92.6
Nonwhite	73,952	4.7	129,831	7.4
Black	69,591	4.4	119,321	6.8
American Indian	2,225	0.1	4,617	0.3
Japanese	748	0.1	1,237	0.1
Chinese	603	0.1	1,234	--[a]
Filipino	247	--[a]	693	--[a]
Other	538	--[a]	2,729	0.2
Total	1,573,614	100.0	1,755,887	100.0

[a] *The percent of the total population is less than one-tenth of 1 percent.*

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

It should be noted that the Spanish American population is included in the white population in Tables 6 and 7 because Spanish Americans are not defined as a separate race by the U. S. Bureau of the Census. The Census Bureau, however, does enumerate Spanish Americans as a separate ethnic group. One of the three Spanish indicators used is the number of "persons of Spanish language." The results are summarized for the Region and the seven counties individually in Table 8. In 1970 there were more than 30,000 persons of Spanish language in the Region representing nearly 2 percent of the regional population. For the seven counties, the proportion of Spanish Americans ranged from less than 1 percent in Washington and Ozaukee Counties to 3 percent in Racine County. As was the case for the nonwhite population, the Spanish American population was heavily concentrated in the large urban areas of the Region. Thus in 1970, 77 percent of the Region's Spanish American population resided in the Cities of Kenosha, Milwaukee, Racine, and Waukesha.

Marital Status: The changing marital status of the regional population is an important consideration in the analysis of housing demand and determination of housing needs. Of particular significance is the probable change in an individual's housing requirements when the person marries or when dealth or divorce cause subsequent change in the person's marital status. The change between 1960 and 1970 in the marital status of persons 14 years old and older is summarized for the Region in

Table 7

RACIAL COMPOSITION OF THE POPULATION IN THE REGION BY COUNTY: 1970

County	Population											
	White		Nonwhite								Total	
			Black		American Indian		Other		Subtotal			
	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population	Number	Percent of County Population
Kenosha	115,623	98.1	1,930	1.6	143	0.1	221	0.2	2,294	1.9	117,917	100.0
Milwaukee	939,989	89.2	106,033	10.1	3,717	0.3	4,324	0.4	114,074	10.8	1,054,063	100.0
Ozaukee	54,197	99.6	92	0.2	61	0.1	71	0.1	224	0.4	54,421	100.0
Racine	159,511	93.4	10,572	6.2	343	0.2	412	0.2	11,327	6.6	170,838	100.0
Walworth	62,879	99.1	287	0.5	56	0.1	222	0.3	565	0.9	63,444	100.0
Washington	63,652	99.7	45	0.1	62	0.1	80	0.1	187	0.3	63,839	100.0
Waukesha	230,205	99.5	362	0.2	235	0.1	563	0.1	1,160	0.5	231,365	100.0
Region	1,626,056	92.6	119,321	6.8	4,617	0.3	5,893	0.3	129,831	7.4	1,755,887	100.0

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

Table 8

SPANISH AMERICAN POPULATION[a] IN THE REGION BY COUNTY: 1970

County	Persons of Spanish Language	
	Number	Percent of Total Population
Kenosha	2,690	2.3
Milwaukee	17,960	1.7
Ozaukee	370	0.7
Racine	5,440	3.2
Walworth	790	1.2
Washington	305	0.5
Waukesha	3,272	1.4
Region	30,827	1.8

[a] *Persons of Spanish language.*

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

Table 9 and Figure 8. The most significant change in marital status is the decrease in the proportion of married persons. In 1970, 62 percent of the population was married, considerably lower than the figure of nearly 68 percent in 1960. There was a corresponding increase in the never married population from 22 percent in 1960 to 27 percent in 1970. The proportion of widowed persons remained constant while the proportion of divorced persons increased slightly between 1960 and 1970.

There was considerable variation in the marital status of the population 14 years old and over among the counties in 1970 (see Table 10). Of the seven counties, Walworth County had the highest proportion of never married males (34 percent) and lowest proportion of married males (60 percent); conversely, Ozaukee County had the lowest proportion of never married males (nearly 28 percent) and the highest proportion of married males (nearly 69 percent). For the female population, the never married proportion ranged from 22 percent in Kenosha

Table 9

MARITAL STATUS OF PERSONS 14 YEARS OF AGE AND OLDER IN THE REGION: 1960 and 1970

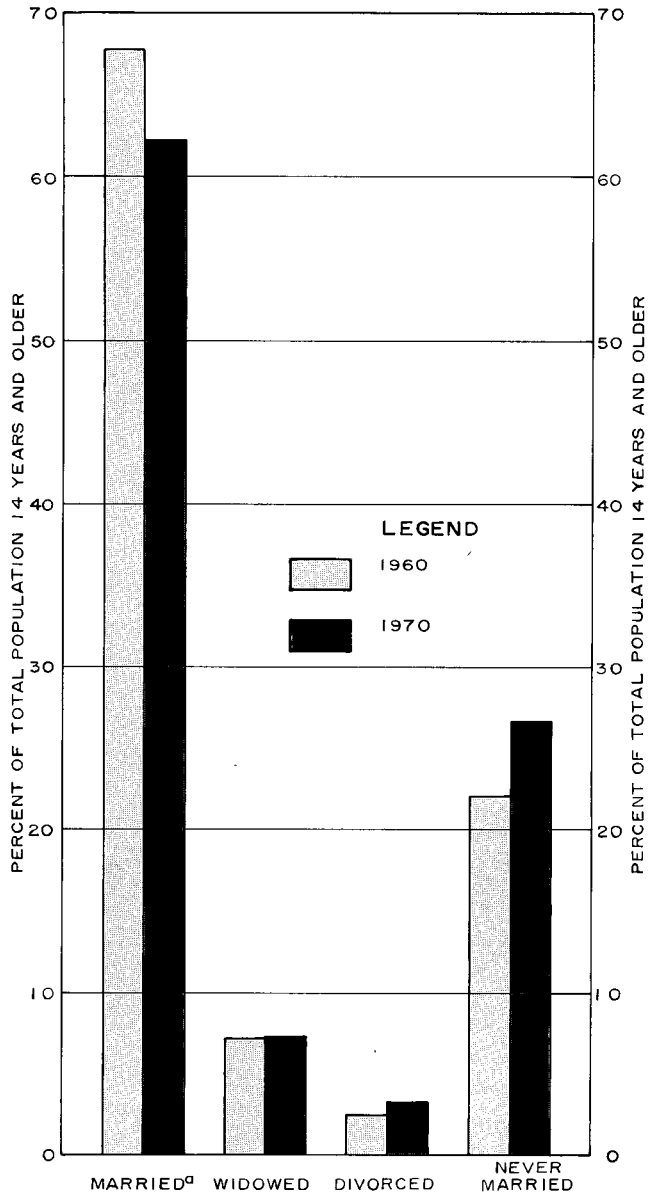
Marital Status	Population 14 Years of Age and Older											
	1960						1970					
	Male		Female		Total		Male		Female		Total	
	Number	Percent of Total Males 14 and Over	Number	Percent of Total Females 14 and Over	Number	Percent of Total Population 14 and Over	Number	Percent of Total Males 14 and Over	Number	Percent of Total Females 14 and Over	Number	Percent of Total Population 14 and Over
Married[a]	372,485	69.7	373,134	66.0	745,619	67.8	392,760	65.0	397,847	59.9	790,607	62.3
Widowed	19,343	3.6	61,841	10.9	81,184	7.4	18,387	3.0	75,687	11.4	94,074	7.4
Divorced	11,914	2.2	15,826	2.8	27,740	2.5	16,645	2.8	25,097	3.8	41,742	3.3
Never Married	131,082	24.5	114,885	20.3	245,967	22.3	176,549	29.2	165,573	24.9	342,122	27.0
Total	534,824	100.0	565,686	100.0	1,100,510	100.0	604,341	100.0	664,204	100.0	1,268,545	100.0

[a] *The number of married persons includes persons reported in the census as being separated. The number of separated persons in the Region totaled 9,788 in 1960 and 15,636 in 1970.*

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

Figure 8

DISTRIBUTION OF THE POPULATION 14 YEARS OF AGE AND OLDER IN THE REGION BY MARITAL STATUS: 1960 AND 1970



[a]THE NUMBER OF MARRIED PERSONS INCLUDES PERSONS REPORTED IN THE CENSUS AS BEING SEPARATED. THE PROPORTION OF THE REGIONAL POPULATION AGE 14 YEARS AND OVER REPORTED AS SEPARATED WAS 0.89 PERCENT IN 1960 AND 1.23 PERCENT IN 1970.

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

County to 27 percent in Walworth County. The married proportion ranged from 57 percent in Milwaukee County to 67 percent in Ozaukee County.

Education: The level of formal education is one indicator of the social and economic status of the population. Since most formal education is completed by the time a person reaches age 25, the statistical measure of educational attainment pertains to the population over 25 years of age. The educational attainment of the population over 25 years of age, as shown in Table 11 and Figure 9, increased substantially between 1960 and 1970. The median number of years of schooling completed[1] increased from 11.0 years in 1960 to 12.2 years in 1970. A further indication of the general rise in educational attainment is the increase in the proportion of the population over 25 who had completed high school or attended college, from nearly 44 percent in 1960 to 56 percent in 1970.

As indicated in Table 12, there was much variation in the educational attainment of the population over 25 among the counties in the Region. The proportion of the population with some college or four or more years of college was lowest in Kenosha County (15 percent) and highest in Waukesha County (nearly 29 percent). On the other hand, the proportion of persons over 25 who had an elementary education or less was lowest in Waukesha County (nearly 18 percent) and highest in Washington County (32 percent). This variation in the educational attainment of the population among the seven counties is summarized by the median number of years of schooling completed for persons over 25 in each county, presented in Table 12. The median number of years of schooling in 1970 was highest in Waukesha County (12.5 years) and lowest in Kenosha County (11.8 years).

Residential Mobility: Still another population characteristic which must be considered in the analysis of housing demand is the residential mobility of the regional population. From data collected on a sample basis in the 1970 census, information was obtained with regard to the place of residence in 1965 for persons five years old and over. Similar information was obtained in the 1960 census. Persons who lived in the same residence five years prior to census enumeration were classified as nonmovers. Persons who lived in a different residence five years earlier were classified as local movers if that residence was in the same county, and as migratory movers if that residence was in a different county in Wisconsin, in a different state, or outside the United States.

As indicated in Table 13, 44 percent of the regional population five years old and over lived in a different residence in 1970 than in 1965 and were, therefore, classified as movers. A comparison of 1960 and 1970 census data reveals that, while there were slight decreases in the proportion of the population who lived in a different county in the state, in a different state, or abroad five years previous, the most striking change was the decrease in the proportion of local movers from nearly 34 percent to 25 percent.

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[1] *The median number of years of school completed is the number which divides the distribution of persons over age 25 in half, with half having completed more years of school than the median and half fewer years.*

Table 10

DISTRIBUTION OF MALES AND FEMALES 14 YEARS OF AGE AND OLDER IN THE REGION BY MARITAL STATUS BY COUNTY: 1970

County	Males 14 Years of Age and Older				Females 14 Years of Age and Older			
	Never Married	Married[a]	Widowed or Divorced	Total	Never Married	Married[a]	Widowed or Divorced	Total
Kenosha	27.8	66.7	5.5	100.0	22.3	63.2	14.5	100.0
Milwaukee	29.6	63.8	6.6	100.0	25.6	57.4	17.0	100.0
Ozaukee	27.7	68.7	3.6	100.0	23.6	66.8	9.6	100.0
Racine	28.1	66.6	5.3	100.0	24.1	62.1	13.8	100.0
Walworth	34.2	60.5	5.3	100.0	27.3	58.1	14.6	100.0
Washington	28.4	67.5	4.1	100.0	23.0	65.9	11.1	100.0
Waukesha	27.9	68.5	3.6	100.0	23.6	66.5	9.9	100.0
Region	29.2	65.0	5.8	100.0	24.9	59.9	15.2	100.0

[a] *The percentage of married persons includes persons reported in the census as being separated.*

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

Table 11

EDUCATIONAL ATTAINMENT LEVELS OF THE POPULATION 25 YEARS OF AGE AND OLDER IN THE REGION: 1960 and 1970

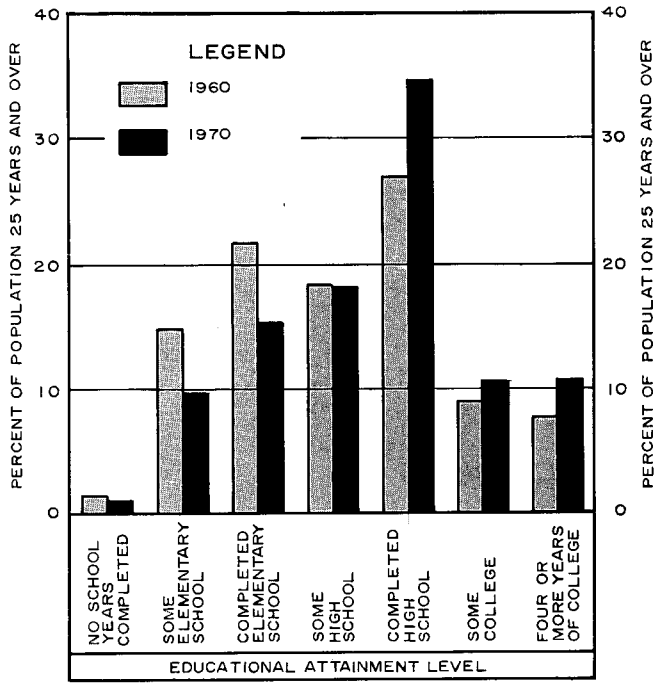
Levels of Educational Attainment	Population 25 Years of Age and Older			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
No School Years Completed	11,305	1.3	9,830	1.0
Some Elementary School	131,150	14.9	89,452	9.6
Completed Elementary School	191,349	21.7	143,104	15.3
Some High School	162,249	18.4	170,115	18.1
Completed High School	237,848	27.0	325,357	34.7
Some College	79,033	9.0	99,195	10.6
Four or More Years of College	68,016	7.7	99,936	10.7
Total	880,950	100.0	936,989	100.0
Median Number of School Years Completed[a]	11.0		12.2	

[a] *The median number of school years completed is the number which divides the distribution of persons over age 25 in half; that is, half completed more years of school than the median and half completed fewer years.*

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

Figure 9

DISTRIBUTION OF THE POPULATION 25 YEARS OF AGE AND OLDER IN THE REGION BY EDUCATIONAL ATTAINMENT LEVEL: 1960 AND 1970



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

Table 12

EDUCATIONAL ATTAINMENT LEVELS OF THE POPULATION 25 YEARS OF AGE AND OLDER IN THE REGION BY COUNTY: 1970

County	Population 25 Years of Age and Older																Median Years Of School Completed[b]
	No School Years Completed		Some Elementary School		Completed Elementary School		Some High School		Completed High School		Some College		Four or More Years of College		Total		
	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	
Kenosha	1,004	1.6	6,557	10.6	9,446	15.3	14,685	23.7	20,830	33.7	5,109	8.3	4,216	6.8	61,847	100.0	11.8
Milwaukee	6,405	1.1	60,406	10.5	88,647	15.3	107,751	18.6	195,714	33.8	60,090	10.4	59,487	10.3	578,500	100.0	12.1
Ozaukee	178	0.7	1,705	6.2	4,588	16.6	3,729	13.5	9,647	34.9	3,487	12.6	4,282	15.5	27,616	100.0	12.4
Racine	1,311	1.5	9,019	10.3	14,101	16.1	17,587	20.0	29,940	34.1	8,079	9.2	7,723	8.8	87,760	100.0	12.1
Walworth	199	0.6	2,493	7.6	5,442	16.6	4,996	15.2	11,942	36.5	3,918	12.0	3,754	11.5	32,744	100.0	12.3
Washington	132	0.4	2,966	9.3	7,129	22.4	4,283	13.5	11,858	37.4	2,898	9.1	2,524	7.9	31,790	100.0	12.1
Waukesha	601	0.5	6,306	5.4	13,751	11.8	17,084	14.6	45,426	38.9	15,614	13.4	17,950	15.4	116,732	100.0	12.5
Region	9,830	1.0	89,452	9.6	143,104	15.3	170,115	18.1	325,357	34.7	99,195	10.6	99,936	10.7	936,989	100.0	12.2

[a] *Percent of population 25 years of age and older in each county.*

[b] *The median number of years of school completed is the number which divides the distribution of persons over age 25 in half, with half having completed more years of school than the median and half fewer years.*

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

Table 13

RESIDENTIAL MOBILITY OF THE POPULATION FIVE YEARS OF AGE AND OLDER IN THE REGION: 1960 and 1970

Residential Mobility Status[a]	Population 5 Years of Age and Older			
	1960		1970	
	Number	Percent Of Total	Number	Percent Of Total
Nonmovers	680,196	49.2	896,919	56.0
Movers	703,234	50.8	705,862	44.0
Local	466,849	33.7	398,447	24.8
Migratory	216,126	15.6	217,343	13.6
From Different County in State	111,046	8.0	113,750	7.1
From Different State	91,441	6.6	93,141	5.8
From Abroad	13,639	1.0	10,452	0.7
Moved, Residence in 1965 (1955) Not Reported	20,259	1.5	90,072	5.6
Total Population	1,383,430	100.0	1,602,781	100.0

[a] *Residential mobility status is based on the place of residence five years prior to census enumeration.*

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

With the exception of Walworth County, the proportion of the population living in a different house in 1970 than in 1965 varied little among the counties in the Region (see Table 14). Thus, between 41 and 45 percent of the population five years old and over within each county except Walworth were classified as movers in 1970. In Walworth County, 49 percent of the population five years old and over were so classified. There was, however, greater variation among the seven counties in the nature of residential moves. In the urban Counties of Kenosha, Milwaukee, and Racine, the number of local moves was far greater than the number of migratory moves. On the other hand, migratory moves predominated in Ozaukee, Walworth, Washington, and Waukesha Counties. The distinction between local and migratory moves is important because migratory moves contribute to a county's population growth or decline, while local moves do not affect the size of the county's population.

Number and Distribution of Households

While the size, distribution, and characteristics of the regional population are essential considerations in the analysis of housing demand, data relating to households in the Region are more important, since the household is the basic unit in the analysis of housing demand. A household is composed of all persons who occupy a single housing unit. The number of households is by definition the number of occupied housing units. As indicated in Table 15, there were a total of 536,486 households in the Region in 1970. The number of households in the Region increased rapidly (31 percent) between 1950 and 1960, and less rapidly (15 percent) during the last decade. As further shown in Table 15, the number of households in the Region has increased at a faster rate than the household population since 1950. This rapid growth in households relative to growth in the household population reflects significant changes in the size of households in the Region over the last two decades. Since household size is a very important determinant of housing demand, the size of households in the Region is analyzed in more detail in a later section of this chapter.

The number of households increased for each county in the Region between 1960 and 1970. Variation in this rate of increase is a further reflection of the decentralization of the regional population (see Table 16). Thus, high rates of increase in households during the past decade were observed in outlying counties of the Region,

Table 14

RESIDENTIAL MOBILITY OF THE POPULATION FIVE YEARS OF AGE AND OLDER IN THE REGION BY COUNTY: 1970

County	Population 5 Years of Age and Older[a]											
	Nonmovers		Movers								Total	
			Local		Migratory		Moved, Residence in 1965 Not Reported		Subtotal			
	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]
Kenosha	63,241	58.9	22,577	21.0	14,938	13.9	6,647	6.2	44,162	41.1	107,403	100.0
Milwaukee	537,231	55.7	276,066	28.6	91,354	9.5	60,271	6.2	427,691	44.3	964,922	100.0
Ozaukee	28,015	56.8	6,590	13.4	12,895	26.1	1,842	3.7	21,327	43.2	49,342	100.0
Racine	86,988	56.2	39,893	25.7	21,660	14.0	6,341	4.1	67,894	43.8	154,882	100.0
Walworth	29,718	50.8	12,170	20.8	14,183	24.2	2,451	4.2	28,804	49.2	58,522	100.0
Washington	32,697	57.2	9,981	17.5	12,308	21.5	2,199	3.8	24,488	42.8	57,185	100.0
Waukesha	119,029	56.5	31,170	14.8	50,005	23.8	10,321	4.9	91,496	43.5	210,525	100.0
Region	896,919	56.0	398,447	24.8	217,343	13.6	90,072	5.6	705,862	44.0	1,602,781	100.0

[a] *Residential mobility is enumerated for the period 1965 to 1970.*

[b] *Percent of the population five years of age and older in county.*

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

Table 15

NUMBER OF HOUSEHOLDS AND HOUSEHOLD POPULATION IN THE REGION: 1950, 1960, and 1970

Year	Number of Households	Household Population
1950	354,544	1,190,193
1960	465,913	1,537,235
1970	536,486	1,714,200
Percent Change:		
1950-1960	31.4	29.2
1960-1970	15.1	11.5

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

notably Ozaukee, Washington, and Waukesha Counties. The lowest growth rate in the number of households among the seven counties between 1960 and 1970 was found in Milwaukee County.

The varying rates of increase of households in the counties of the Region during the last decade have resulted in significant distributional shifts of households among the counties. As indicated in Table 16, with the exception of Milwaukee County, each county's proportion of all households in the Region increased only slightly between 1960 and 1970. The proportion of the Region's households in Waukesha County increased by 2 percent during the last decade, more than any other county in the Region, while Milwaukee County's share of the Region total decreased significantly by 4 percent.

Household Characteristics

Of equal importance to the number and distribution of households in the analysis of housing demand is an understanding of various household characteristics. Data

Table 16

DISTRIBUTION OF HOUSEHOLDS IN THE REGION BY COUNTY: 1960 AND 1970

County	Households					
	1960		1970		Change: 1960-1970	
	Number	Percent of Total	Number	Percent of Total	Number	Percent
Kenosha	29,545	6.3	35,468	6.6	5,923	20.0
Milwaukee	314,875	67.6	338,605	63.1	23,730	7.5
Ozaukee	10,417	2.2	14,753	2.8	4,336	41.6
Racine	40,736	8.8	49,796	9.3	9,060	22.2
Walworth	15,414	3.3	18,544	3.5	3,130	20.3
Washington	12,532	2.7	17,385	3.2	4,853	38.7
Waukesha	42,394	9.1	61,935	11.5	19,541	46.1
Region	465,913	100.0	536,486	100.0	70,573	15.1

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

relating to the type, size, and income of households in the Region, as well as the size of household related to size of housing unit, are most pertinent to such analysis and are therefore summarized in this section.

Household Type: In the 1970 census, one person within each household was identified as the household head. Households are classified by the age and type of household head. As indicated in Table 17, a household head is classified either as the head of a family or as a primary individual, a primary individual being a person who lives alone or a person designated as the head of the household in a nonfamily situation.[2]

As shown in Table 17, 80 percent of all households in the Region were comprised of families. Nearly 88 percent of these, or 70 percent of all households, were families in which both husband and wife were present, and the balance of families in the Region were families having either a male or female head, but not both. Of this latter group, the number of families having a female head was almost four times the number of families with a male head only.

[2] *It is important to note the distinction between a household and a family. A household is composed of all persons who occupy a single housing unit. A family is composed of two or more persons living in the same housing unit who are related by blood, marriage, or adoption. Thus, a household may consist of a family, a family and unrelated person(s) living in the same housing unit, unrelated persons living in the same housing unit, or persons living alone.*

As further indicated in Table 17, females comprised the majority of primary individuals in 1970, heavily outnumbering male primary individuals in the 45 and older age group. It should be noted that 88 percent of all primary individuals were persons living alone.

Household Size: As previously noted, an understanding of the changing size of households in the Region is essential in the analysis of existing and future housing demand. Household size is a key variable in the analysis of housing **demand** because more than any other variable it determines a household's housing requirements. The changes in household size within the Region from 1960 to 1970 are summarized in Table 18 and Figure 10. The most striking change is the 5 percent increase in the proportion of one-person households, which reflects the substantial decrease in the marriage rate between 1960 and 1970. The proportion of three-, four-, and five-person households decreased by a total of 6 percent. These changes have also contributed to the decrease in the median household size from 3.0 persons per household in 1960 to 2.7 persons per household in 1970.

Variations exist in the size of households among the seven counties. In general, the proportion of one- and two-person households was relatively large in the urban Counties of Kenosha, Milwaukee, and Racine, as well as in Walworth County, and was smaller in Ozaukee, Washington, and Waukesha Counties (see Table 19). On the other hand, large households of five persons or more generally comprised a smaller proportion of all households in Kenosha, Milwaukee, Racine, and Walworth Counties, and a larger proportion in the other three counties. For the seven counties, the median

Table 17

AGE AND TYPE OF HOUSEHOLD HEAD FOR HOUSEHOLDS IN THE REGION: 1970

Age of Household Head	Type of Household Head															
	Head of a Family								Primary Individual						Total	
	Male in Husband-Wife Family[a]		Male Head of Family[b]		Female Head of Family[c]		Subtotal		Male		Female		Subtotal			
	Number	Percent[d]	Number	Percent[d]	Number	Percent[d]	Number	Percent[d]	Number	Percent[d]	Number	Percent[d]	Number	Percent[d]	Number	Percent[d]
14-24	22,994	4.3	543	0.1	3,459	0.7	26,996	5.1	5,385	1.0	6,061	1.1	11,4 6	2.1	38,442	7.2
25-34	80,178	15.0	1,085	0.2	7,857	1.5	89,120	16.7	6,670	1.2	4,331	0.8	11,001	2.0	100,121	18.7
35-44	84,171	15.7	1,919	0.4	8,500	1.6	94,590	17.7	5,127	1.0	3,168	0.6	8,295	1.6	102,885	19.3
45-64	143,469	26.7	4,407	0.8	14,906	2.8	162,782	30.3	11,400	2.1	21,124	3.9	32,524	6.0	195,306	36.3
65 Years and Older	46,846	8.7	2,759	0.5	7,910	1.5	57,515	10.7	9,879	1.8	32,338	6.0	42,217	7.8	99,732	18.5
All Ages	377,658	70.4	10,713	2.0	42,632	8.1	431,003	80.5	38,461	7.1	67,022	12.4	105,483	19.5	536,486	100.0

[a] *According to census definitions, in households where the husband and wife are present, the male is assumed to be the head of the household.*

[b] *The head of the family is male; no spouse of family head present.*

[c] *The head of the family is female; no spouse of family head present.*

[d] *Percent of all households in the Region.*

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

Table 18

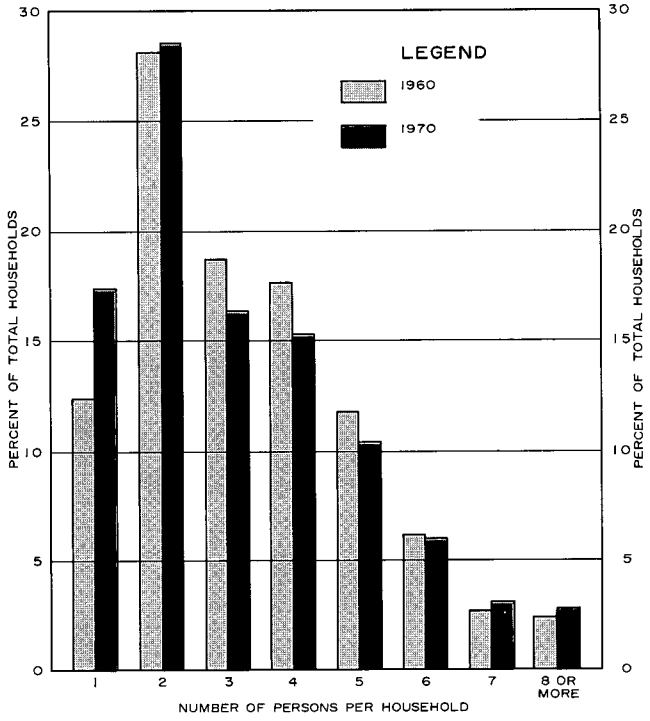
NUMBER OF HOUSEHOLDS IN THE REGION BY HOUSEHOLD SIZE: 1960 and 1970

Number of Persons Per Household	Households			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
1	57,787	12.4	93,102	17.4
2	131,044	28.1	153,669	28.6
3	87,253	18.7	88,033	16.4
4	82,283	17.7	82,026	15.3
5	54,988	11.8	55,699	10.4
6	28,750	6.2	32,103	6.0
7	12,700	2.7	16,840	3.1
8 or More . .	11,108	2.4	15,014	2.8
All Households	465,913	100.0	536,486	100.0
Median Number of Persons Per Household	3.0		2.7	

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

Figure 10

DISTRIBUTION OF PERSONS PER HOUSEHOLD IN THE REGION: 1960 AND 1970



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

household size ranged from 2.5 persons per household in Milwaukee County to 3.5 persons per household in Waukesha County.

Overcrowding: Overcrowding exists when a household occupies a housing unit which is too small to satisfy the household's spatial requirements based on some selected measure of household size related to housing unit size in terms of number of rooms or number of bedrooms. One statistical measure of overcrowding of households is the tabulation of households by the average number of persons per room. A commonly accepted standard is that a household is overcrowded if there is an average of more than one person per room. At best, this standard provides a crude measure of overcrowding. Thus, it is very likely that many households with an average of more than one person per room are adequately housed, while other households with less than one person per room require more space. Determination of the number of overcrowded households on the basis of this standard is nevertheless an indicator of possible unmet housing needs which should be considered in any analysis of true housing need.

As shown in Table 20, there was an absolute decrease in the number of overcrowded households in the Region between 1960 and 1970, causing a decrease in the proportion of overcrowded households in the Region from nearly 9 percent to 7 percent. Among the seven counties, the proportion of overcrowded housing units in 1970 ranged from more than 5 percent in Walworth County to 9 percent in Kenosha County (see Table 21 and Figure 11). It is also interesting to note that the highest proportion of severely overcrowded housing units was found in Kenosha County (1 percent) while the lowest proportion was found in Waukesha County (less than 1 percent).

Household Income: While household size is one of the most important determinants of a household's housing requirements, household income[3] is the fundamental determinant of whether the household has the economic ability to meet its housing requirements. Personal income[4] in the Region has been increasing at a rapid

[3] *Household income as tabulated by the Census Bureau consists of the income of the family or primary individual occupying the housing unit; that is, the sum of the income of the head of family and all other members of the family 14 years old and over or the income of the primary individual. Incomes of persons living in the unit but not related to the head of household are not included in this sum. As a result, the incomes of households which consist of a family and unrelated persons as well as the incomes of households which consist of two or more unrelated persons are generally understated in this report.*

[4] *Personal income as defined by the U. S. Bureau of the Census includes income from wages, salaries, self-employment earnings, social security, pensions, rent, interest, and other transfer payments. It excludes income such as that received in kind, receipts from sale of personal property, capital gains, and insurance payments.*

Table 19

NUMBER OF HOUSEHOLDS IN THE REGION BY HOUSEHOLD SIZE BY COUNTY: 1970

County	Persons Per Household												Total Households		Median Number of Persons Per Household
	1		2		3		4		5		6 or More				
	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	
Kenosha	5,666	16.0	10,015	28.2	5,783	16.3	5,631	15.9	3,985	11.2	4,388	12.4	35,468	100.0	2.9
Milwaukee	67,598	20.0	100,754	29.7	55,774	16.5	48,220	14.2	31,082	9.2	35,177	10.4	338,605	100.0	2.5
Ozaukee	1,432	9.7	3,712	25.2	2,437	16.5	2,694	18.3	2,010	13.6	2,468	16.7	14,753	100.0	3.4
Racine	7,669	15.4	13,666	27.5	8,081	16.2	7,811	15.7	5,631	11.3	6,938	13.9	49,796	100.0	2.9
Walworth	3,069	16.6	5,848	31.5	2,949	15.9	2,674	14.4	1,857	10.0	2,147	11.6	18,544	100.0	2.6
Washington	2,019	11.6	4,414	25.4	2,814	16.2	2,911	16.7	2,190	12.6	3,037	17.5	17,385	100.0	3.3
Waukesha	5,649	9.1	15,260	24.6	10,195	16.5	12,085	19.5	8,944	14.5	9,802	15.8	61,935	100.0	3.5
Region	93,102	17.4	153,669	28.6	88,033	16.4	82,026	15.3	55,699	10.4	63,957	11.9	536,486	100.0	2.7

[a]*Percent of total households in county.*

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

Table 20

NUMBER OF PERSONS PER ROOM FOR OCCUPIED HOUSING UNITS IN THE REGION: 1960 and 1970

Number of Persons Per Room	Occupied Housing Units			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
1.00 or Less	425,122	91.2	498,612	92.9
1.01 or More	40,791	8.8	37,874	7.1
Total	465,913	100.0	536,486	100.0

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

rate, and in 1970 total income was over $6 billion (see Table 22). From 1950 to 1970 total income in the Region increased by $4.4 billion, or 263 percent. Since the increase in total income has occurred at a much faster rate than the increase in the number of households, the average (mean) household income increased considerably, from $4,682 in 1950 to $11,238 in 1970. The per household income reflects not only an increase in the earnings of the heads of each household, but also the tendency for other household members, wives in particular, to supplement household income. It should be noted that the aforementioned income data are expressed in actual dollars. The change in total income and average household income between 1950 and 1970 is considerably less when expressed in constant dollars.[5]

[5]*The U. S. Bureau of Labor Statistics 1967 Consumer Price Index was used to adjust dollar figure to constant dollars. Constant dollar figures allow comparison free of price distortion.*

Table 21

NUMBER OF PERSONS PER ROOM FOR OCCUPIED HOUSING UNITS IN THE REGION BY COUNTY: 1970

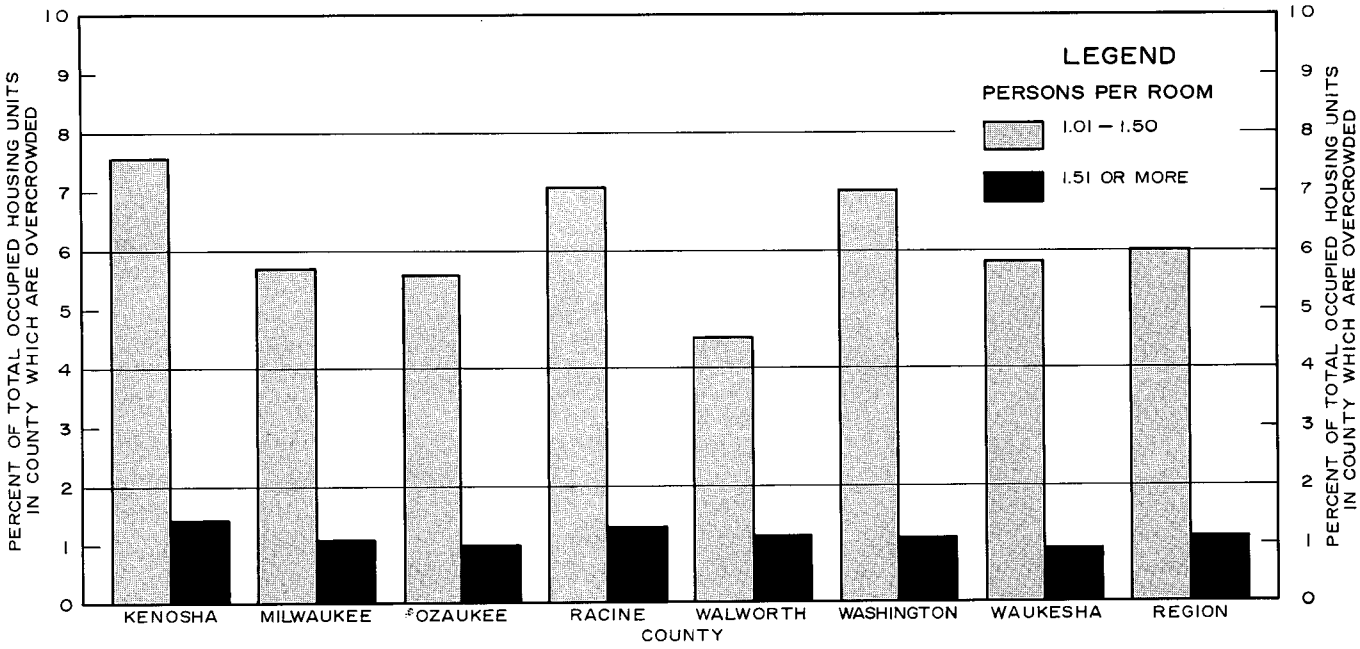
County	Number of Persons Per Room								Total Occupied Housing Units	
	1.00 or Less		1.01 or More							
			1.01-1.50 (Overcrowded)		1.51 or More (Severely Overcrowded)		Subtotal			
	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]
Kenosha	32,263	91.0	2,705	7.6	500	1.4	3,205	9.0	35,468	100.0
Milwaukee	315,652	93.2	19,249	5.7	3,704	1.1	22,953	6.8	338,605	100.0
Ozaukee	13,774	93.4	833	5.6	146	1.0	979	6.6	14,753	100.0
Racine	45,640	91.6	3,528	7.1	628	1.3	4,156	8.4	49,796	100.0
Walworth	17,499	94.4	839	4.5	206	1.1	1,045	5.6	18,544	100.0
Washington	15,971	91.9	1,220	7.0	194	1.1	1,414	8.1	17,385	100.0
Waukesha	57,813	93.3	3,584	5.8	538	0.9	4,122	6.7	61,935	100.0
Region	498,612	92.9	31,958	6.0	5,916	1.1	37,874	7.1	536,486	100.0

[a]*Percent of total occupied housing units in county.*

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

Figure 11

PERCENT OF OCCUPIED HOUSING UNITS WHICH ARE OVERCROWDED IN THE REGION BY COUNTY: 1970



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

Table 22

INCOME LEVELS IN THE REGION: 1950, 1960, and 1970

Year	Total Income (Millions of Dollars)		Average (Mean) Household Income[a]	
	Actual	Constant[b]	Actual	Constant[b]
1950	$1,660	$2,299	$ 4,682	$6,487
1960	3,492	3,941	7,496	8,460
1970	6,029	5,189	11,238	9,671

[a] *The mean household income is obtained by dividing total income by the number of households in the Region.*

[b] *Constant dollars are adjusted for price change; the base year equals 1967.*

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

As shown in Table 23 and Figure 12, there was much variation in household income among the counties in 1970. Household incomes were generally quite high in Ozaukee and Waukesha Counties. Thus, the proportion of households with incomes of $15,000 or more was relatively high in both of these counties (30 percent in Ozaukee and 31 percent in Waukesha) while the proportion of households with incomes less than $7,000 in these counties was small (less than 20 percent). On the other hand, relatively low household incomes were found in Walworth County, where 40 percent of all households had an income of less than $7,000 and only 16 percent of all households had an income of $15,000 or more. The median household income presented in Table 23 shows the variation in household income among the seven counties. As might be expected from the above discussion, the median household income ranged from a low of $8,500 in Walworth County to over $12,000 in Ozaukee and Waukesha Counties.

Inasmuch as the size of a household is a basic determinant of its housing requirements and household income determines to a great extent a household's ability to satisfy its requirements, data in regard to household income is most meaningfully evaluated when related to household size. Accordingly, a tabulation of households in the Region by income and size is presented in Table 24. Of particular significance is the number of large, low-income households in the Region. In 1970, approximately 167,500 households, or 31 percent of all households in the Region, had an income of less than $7,000. Of these, 23,304 households, or 14 percent, were comprised of four persons or more while 7,525, or 4 percent, consisted of six persons or more. It is very likely that many of these large low-income households are incapable of adequately satisfying their housing requirements. Clearly, such household income is a very important consideration in any analysis of true housing need.

Population in Group Quarters

In addition to the population in households, about 41,500 persons, or almost 2 percent of the resident population of the Region, lived in group quarters in 1970. Group quarters are living arrangements for other than ordinary household life and are not normally considered to be part of the existing housing stock, although any large fluctuation in the population residing in group quarters would have a significant effect on the provision of housing. As indicated in Table 25, persons in homes for the aged and dependent and students in educational dormitories com-

Table 23

INCOME LEVELS FOR HOUSEHOLDS IN THE REGION BY COUNTY: 1970

County	Income Level														Total Households		Median Household Income[b]
	Less Than $3,000		$3,000-4,999		$5,000-6,999		$7,000-9,999		$10,000-14,999		$15,000-24,999		$25,000 or More				
	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	
Kenosha	4,720	13.3	3,216	9.1	3,787	10.7	7,580	21.4	10,368	29.2	4,942	13.9	855	2.4	35,468	100.0	$ 9,400
Milwaukee	48,554	14.3	32,341	9.6	33,330	9.8	65,591	19.4	94,071	27.8	52,065	15.4	12,653	3.7	338,605	100.0	9,500
Ozaukee	1,189	8.1	808	5.5	906	6.1	2,414	16.4	5,007	33.9	3,279	22.2	1,150	7.8	14,753	100.0	12,100
Racine	6,110	12.3	4,337	8.7	4,679	9.4	10,069	20.2	15,190	30.5	7,614	15.3	1,797	3.6	49,796	100.0	9,900
Walworth	3,381	18.2	2,081	11.2	1,964	10.6	3,771	20.3	4,353	23.5	2,391	12.9	603	3.3	18,544	100.0	8,500
Washington	1,782	10.2	1,386	8.0	1,273	7.3	3,547	20.4	5,436	31.3	3,159	18.2	802	4.6	17,385	100.0	10,600
Waukesha	4,592	7.4	3,472	5.6	3,588	5.8	9,493	15.3	21,588	34.9	15,004	24.2	4,198	6.8	61,935	100.0	12,300
Region	70,328	13.1	47,641	8.9	49,527	9.2	102,465	19.1	156,013	29.1	88,454	16.5	22,058	4.1	536,486	100.0	$10,000

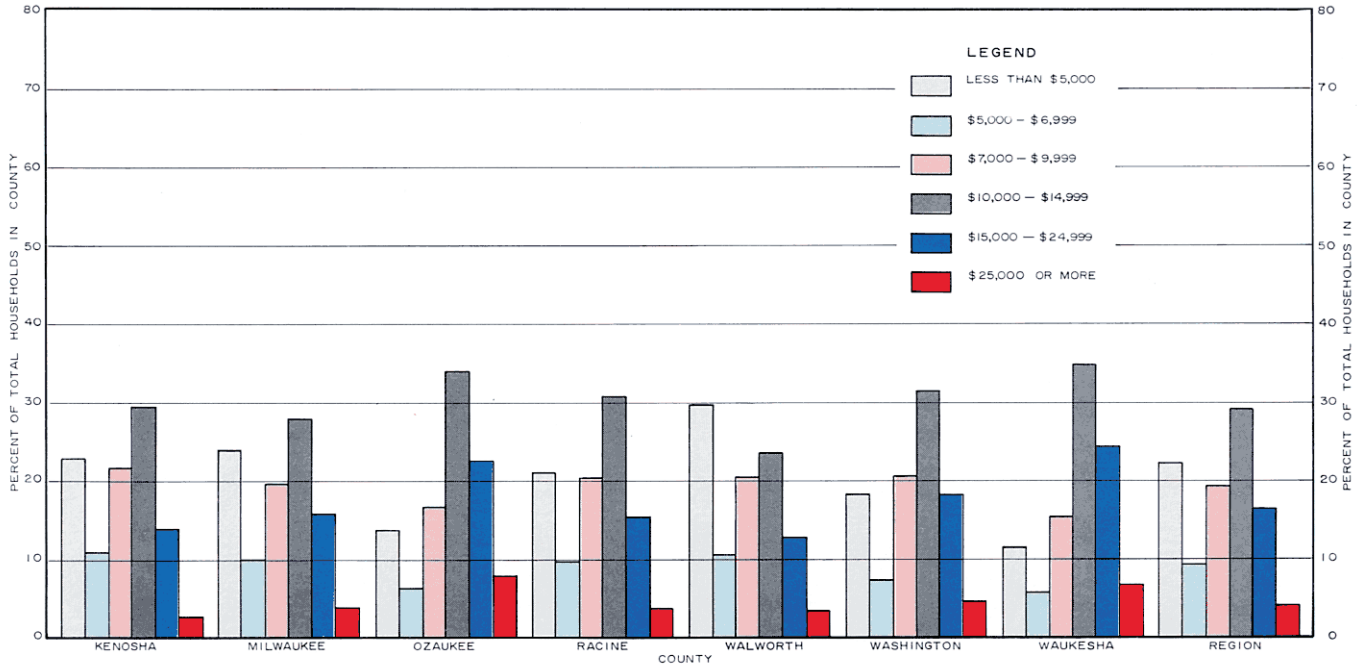
[a] *Percent of total households in county.*

[b] *The median household income is that income which divides the distribution of households into two equal parts, half having a higher income than the median and half having a lower income.*

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

Figure 12

DISTRIBUTION OF HOUSEHOLDS IN THE REGION BY HOUSEHOLD INCOME BY COUNTY: 1970



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

prised more than half of all persons in group quarters in 1970. Among the seven counties, the proportion of the population in group quarters ranged from less than 1 percent in Ozaukee County to nearly 8 percent in Walworth County. The large proportion of the population living in group quarters in Walworth County is due to the relatively large college population in the City of Whitewater.

GENERAL ECONOMIC BACKGROUND

Changes in the levels and distribution of the population of an area are closely related to changes in the amount and distribution of economic activity in that area. This is true not only because much of the population migration into an area is dependent upon the availability of jobs in that area, but also because jobs must ultimately be available to hold the natural increase and prevent the outmigration of native young people entering the labor force. The changes in the population levels and distribution of the Region may, therefore, be basically attributed to changes in the amount and distribution of the economic activity in the Region. These changes, in turn, generally affect the total supply of, and demand for, housing.

This section presents an analysis of the general trends in economic activity in the Southeastern Wisconsin Region over the past two decades. For the purpose of this report,

Table 24

INCOME LEVELS FOR HOUSEHOLDS IN THE REGION BY HOUSEHOLD SIZE: 1970

Number of Persons Per Household	Income Level														Total Households	
	Less Than $3,000		$3,000-4,999		$5,000-6,999		$7,000-9,999		$10,000-14,999		$15,000-24,999		$25,000 or More			
	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]
1	39,134	7.3	17,010	3.2	14,022	2.6	13,578	2.5	7,163	1.3	1,688	0.3	664	0.1	93,259	17.3
2	17,825	3.3	19,866	3.7	19,122	3.6	31,358	5.8	40,491	7.5	19,595	3.7	5,366	1.0	153,623	28.6
3	5,652	1.1	4,926	0.9	6,635	1.2	18,404	3.4	29,905	5.6	18,252	3.4	4,234	0.8	88,008	16.4
4	3,583	0.7	2,262	0.4	3,901	0.7	17,195	3.2	32,112	6.0	18,698	3.5	4,314	0.8	82,065	15.3
5	2,068	0.4	1,520	0.3	2,445	0.5	10,494	2.0	22,069	4.1	13,684	2.6	3,341	0.6	55,621	10.5
6 or More	2,066	0.4	2,057	0.4	3,402	0.6	11,436	2.1	24,273	4.5	16,537	3.1	4,139	0.8	63,910	11.9
All Households	70,328	13.2	47,641	8.9	49,527	9.2	102,465	19.0	156,013	29.0	88,454	16.6	22,058	4.1	536,486	100.0

[a]*Percent of total households in Region.*

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

Table 25

NUMBER OF PERSONS IN GROUP QUARTERS IN THE REGION BY COUNTY: 1970

County	Type of Group Quarters							Total	Population in Group Quarters as Percent of Total Population
	Mental Hospital	Home for the Aged and Dependent	Other Institution	Rooming House	Military Barracks	College Dormitory	Other		
Kenosha	15	654	274	99	0	915	248	2,205	1.9
Milwaukee	2,062	8,382	2,175	2,531	40	4,832	4,852	24,874	2.4
Ozaukee	0	165	24	37	0	62	174	462	0.8
Racine	0	1,129	1,501	161	0	369	662	3,822	2.2
Walworth	0	823	291	287	15	3,212	263	4,891	7.7
Washington	314	287	17	7	0	0	47	672	1.1
Waukesha	497	981	776	282	7	1,282	737	4,562	2.0
Region	2,888	12,421	5,058	3,404	62	10,672	6,983	41,488	2.4

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

changes in the levels and distribution of economic activity are measured in terms of changes in the regional labor force and work force size, composition, and distribution.

LEVEL OF ECONOMIC ACTIVITY

Labor Force Size and Composition

The segment of the population most closely related to the economy is the labor force. The labor force of an area consists of all of its residents who are 14 years of age and over enumerated at their place of residence and who are either employed at one or more jobs or temporarily unemployed. Changes in the size of the Region's labor force reflect, in part, changes which have taken place within the regional economy. Table 26 shows the changes that have occurred in the labor force size in the United States, Wisconsin, and the Region from 1950 to 1970.

The labor force in the Region increased from 540,100 persons in 1950 to 744,500 persons in 1970, an overall increase of 204,400 persons, or nearly 38 percent, over the 20-year period. The increase from 1960 to 1970 was at a slightly slower rate than from 1950 to 1960, with growth rates of nearly 17 percent and 18 percent, respectively, thus indicating a slowing down of economic activity in the Region during this period. Table 26 further shows that the rate of growth in the regional labor force was slower in the past decade than that of either the state or the nation, whereas from 1950 to 1960 the regional labor force grew at a more rapid rate than national and state averages. These labor force trends indicate that the Region has experienced difficulty in competing for economic growth with other parts of the United States and, to a lesser extent, with other areas of the State of Wisconsin.

Changes in the composition of the Region's labor force in terms of male and female members reflect the increasing role of female members. Table 27 and Figure 13 show the regional labor force composition trends from 1950 to 1970. It is apparent that female participation in the

Table 26

COMPARATIVE LABOR FORCE SIZE IN THE UNITED STATES, WISCONSIN, AND THE REGION: 1950, 1960, and 1970

Geographic Area	Labor Force			Percent Change	
	1950	1960	1970	1950-1960	1960-1970
United States	59,304,000	68,144,000	82,897,000	14.9	21.4
Wisconsin	1,396,400	1,533,000	1,799,300	11.0	17.4
Southeastern Wisconsin Region	540,100	638,700	744,500	18.3	16.6

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

Table 27

LABOR FORCE COMPOSITION IN THE REGION: 1950, 1960, and 1970

Labor Force Composition	1950		1960		1970		Percent Change	
	Number	Percent of Total Labor Force	Number	Percent of Total Labor Force	Number	Percent of Total Labor Force	1950-1960	1960-1970
Male	384,946	71.3	432,433	67.7	456,918	61.4	12.3	5.7
Female	155,111	28.7	206,300	32.3	287,596	38.6	33.0	39.4
Total	540,057	100.0	638,733	100.0	744,514	100.0	18.3	16.6

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

labor force is increasing rapidly relative to male participation. The female labor force members increased 39 percent from 1960 to 1970, compared to the male increase of nearly 6 percent. Furthermore, the female segment of the Region's labor force has increased at progressively faster rates over the 20-year period than the male segment. Consequently, the female portion of the labor force increased nearly 10 percent over the past two decades, from 29 to 39 percent. The male portion, conversely, has declined from 71 to 61 percent over this period. This increase in female participation may be attributed to the employment of wives supplementing the family income, accelerated growth in retailing and service jobs, and emphasis on equal employment opportunities for females. The decrease in male participation may be attributed to the need for more education and retirement at an earlier age.

The percentage of the total regional population who were members of the labor force from 1950 to 1970 is shown in Table 28. From 1960 to 1970, nearly a 2 percent increase occurred in the percentage of the population who were members of the labor force, in contrast to the downward trend experienced from 1950 to 1960. This percentage increase is termed the participation rate. The current participation rate is primarily the result of the accelerated growth of the female labor force and the rapidly declining birth rate in the Region during the 1960s.

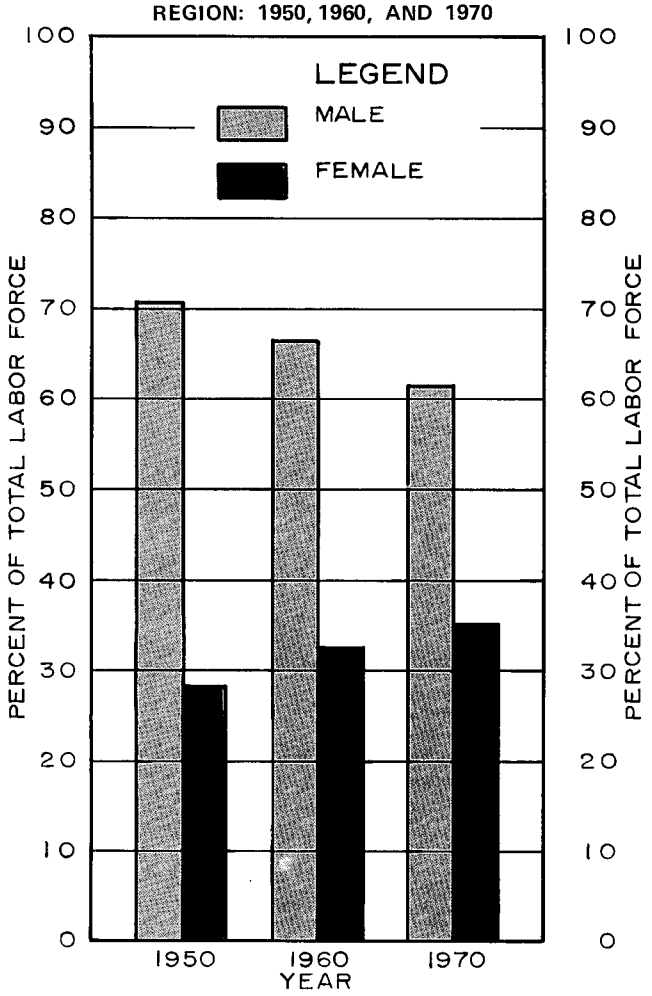
Work Force Size and Composition

Another important measure of economic activity in the Region is the size and components of the work force. The work force consists of employed workers 14 years of age and over enumerated at their place of work, and persons counted as unemployed residents of the Region. Work force data are tabulated monthly by the Wisconsin Department of Industry, Labor, and Human Relations. Work force trends closely parallel labor force trends, but absolute values differ because of the different means of enumeration. Because of the frequency of data tabulation, work force data provide for the analysis of annual changes in employment compared to the decennial labor force data enumerated as part of the U. S. Census of Population, which generates point estimates of the labor force every 10 years.

Table 29 shows the changes in the size of the work force for the United States, Wisconsin, and the Region from 1950 to 1970. The regional work force increase from 1950 to 1960 of nearly 18 percent occurred at a more rapid rate than that of the United States and Wisconsin during this same period. During the 1960 to 1970 period, however, work force increases nationally and in the State of Wisconsin exceeded regional growth, which is consistent with labor force trends previously discussed. This again indicates that the Region has been experiencing increasing difficulty in competing for industrial develop-

Figure 13

SEX COMPOSITION OF THE LABOR FORCE IN THE REGION: 1950, 1960, AND 1970



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

ment with other sections of the country and that other areas within the state have had more rapid economic growth than the Region in the recent past.

Number of Jobs

A measure of economic activity which is closely related to the work force is the number of jobs available to residents of the Region. The number of jobs within the Region consists of the employed component of the work force, which includes all employed persons 14 years of age and over enumerated at their place of work. Table 29 and Figure 14 show the absolute and relative changes in the number of jobs within the United States, the State of Wisconsin, and the Region from 1950 to 1970.

The amount of economic activity in the Region, as measured by the number of available jobs, has increased at varying rates in the recent past (see Figure 14). From 1950 to 1957, there was a rapid increase in the number of jobs in the Region, followed by a sharp decline in 1958 corresponding to a national economic recession. From 1958 to 1960, there was again a rapid increase in the number of jobs, followed by another sharp decline in 1961, again corresponding to a national economic recession. During the balance of the 1960s, job growth within the Region proceeded at a steady rate except for a slight economic slowdown from 1966 to 1967 and the recession of 1970.

The recent trend in regional economic activity has paralleled the trend in national economic activity. However, fluctuations in periods of expansion and recession are much greater for the Region than for the nation due to the high concentration of regional economic activity in the production of capital goods, which as a derived demand is highly responsive to lesser fluctuations in general consumer demand for goods and services. In addition, the growing divergence in the rates of growth

Table 28

LABOR FORCE IN THE REGION AS A PERCENT OF THE REGIONAL POPULATION: 1950, 1960, and 1970

Population and Labor Force	1950	1960	1970	Percent Change 1950-1960	Percent Change 1960-1970
Total Regional Population	1,240,618	1,573,620	1,756,086	26.8	11.6
Total Regional Population 14 Years and Over	952,095	1,100,497	1,258,506	15.6	14.4
Total Regional Labor Force	540,057	638,733	744,514	18.3	16.6

Population and Labor Force	1950	1960	1970	Percent Change 1950-1960	Percent Change 1960-1970
Labor Force as Percent of Total Population	43.5	40.6	42.4	-2.9	1.8
Labor Force as Percent of Population 14 Years and Over	56.7	58.0	59.2	1.3	1.2

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

Table 29

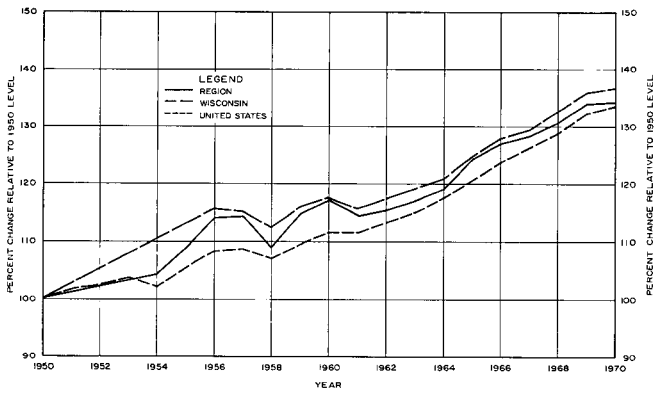
COMPARATIVE WORK FORCE SIZE IN THE UNITED STATES, WISCONSIN, AND THE REGION: 1950, 1960, and 1970

Geographic Area and Work Force	1950	1960	1970	Percent Change 1950-1960	Percent Change 1960-1970
United States					
Work Force	62,208,000	69,628,000	82,715,000	11.9	18.8
Percent Unemployed	5.3	5.5	4.9	--	--
Employed	58,911,000	65,798,500	78,662,000	11.7	19.5
Wisconsin					
Work Force	1,401,400	1,647,000	1,932,100	17.5	17.3
Percent Unemployed	3.8	3.9	4.6	--	--
Employed	1,348,100	1,582,800	1,842,400	17.6	16.4
Southeastern Wisconsin Region					
Work Force	572,200	673,200	776,200	17.6	15.3
Percent Unemployed	3.4	3.8	4.5	--	--
Employed	552,700	647,900	741,600	17.2	14.5

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

Figure 14

RELATIVE JOB GROWTH IN THE REGION, WISCONSIN, AND THE UNITED STATES: 1950-1970



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

in economic activity in the Region and the nation as measured by jobs reflects to a certain extent the increasing difficulty of the Region in competing for industrial development with other parts of the nation.

As further indicated in Table 29, unemployment in the Region ranged from 3 percent of the work force in 1950 to almost 4 percent of the Region's work force in 1960. The regional unemployment rate in 1970 averaged 4 percent of the work force, almost as high as the U. S. average, and reflects the 1970-1971 recession in the U. S. economy. In comparison, the 1950 and 1960 rates of regional unemployment were considerably below the U. S. average. The current regional unemployment rate reflects not only the capital goods orientation of the regional economy, but also recent decisions of some larger southeastern Wisconsin firms to locate or relocate some operations in other areas of the state or nation.

CHANGES IN DISTRIBUTION OF ECONOMIC ACTIVITY

Significant changes have occurred in the distribution of economic activity within the Region in the past two decades, and are shown in Table 30 in terms of comparative labor force and job totals. The number of jobs in the Region increased from 552,700 in 1950 to 741,600 in 1970, an increase of 188,900 jobs, or 34 percent. Most of this increase occurred in the 1950 to 1960 decade, when the number of jobs increased by 95,200, or 17 percent. The counties which experienced the largest relative job growth rates from 1950 to 1960 were Kenosha, Ozaukee, Walworth, Washington, and Waukesha Counties. All experienced faster growth rates than the regional average, indicating a shift in economic activity generally toward the suburban and rural counties in the Region. Kenosha County, however, is an exception to this shift in economic activity. Job growth in this county was directly related to the prosperity in the transportation equipment industry during this period. Conversely, Milwaukee and Racine Counties both experienced job growth during the 1950 to 1960 period at a rate lower than the regional average, indicating a shift of economic activity out of these areas.

Jobs in the Region increased by 93,700, or 14 percent, over the 1960 to 1970 decade. During this period, the largest relative job growth occurred in Ozaukee, Racine, Walworth, Washington, and Waukesha Counties, indicating

Table 30

COMPARATIVE LABOR FORCE AND JOB TOTALS IN THE REGION BY COUNTY: 1950, 1960, and 1970

County	1950	1960	1970	Percent Change 1950-1960	Percent Change 1960-1970
Kenosha					
Labor Force	32,600	39,800	47,700	22.1	19.8
Jobs	27,700	40,100	39,200	44.8	2.2
Milwaukee					
Labor Force	386,500	433,100	458,600	12.1	5.9
Jobs	438,100	486,400	510,000	11.0	5.0
Ozaukee					
Labor Force	9,600	14,400	22,400	50.0	55.6
Jobs	6,200	9,700	17,900	56.4	84.5
Racine					
Labor Force	46,800	55,000	69,300	17.5	26.0
Jobs	43,200	49,500	61,900	14.6	25.0
Walworth					
Labor Force	16,500	20,500	26,800	24.2	30.7
Jobs	12,300	19,000	24,200	54.5	27.4
Washington					
Labor Force	14,300	17,400	26,100	21.7	50.0
Jobs	9,700	12,400	20,300	27.8	63.7
Waukesha					
Labor Force	33,800	58,500	93,600	73.1	60.0
Jobs	15,500	30,800	67,200	98.7	118.2
Region					
Labor Force	540,100	638,700	744,500	18.3	16.6
Jobs	552,700	647,900	741,600	17.2	14.5

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

a further shift in economic activity away from the urban areas toward the suburban and rural areas of the Region. These shifts are a continuation of the economic activity location trends identified in the initial economic studies of the Commission.[6] The trend toward decentralization of jobs from Kenosha County is, however, more recent and results primarily from job reductions in the transportation equipment industry.

Table 30 also shows the labor force trends in each county in the Region over the past two decades. Since the labor force is enumerated at place of residence, the labor force changes generally parallel population changes. The greatest labor force increases during the periods 1950 to 1960 and 1960 to 1970 were in suburban Waukesha, Ozaukee, and Washington Counties, with the lesser increases in the urban Counties of Milwaukee, Kenosha, and Racine. This trend in economic activity parallels regional population trends for the same period. Table 30 also indicates that 1970 marks the first time since 1950 that the Region has had a larger labor force residing within its boundaries than it had available jobs. Also in 1970, all of the regional counties except Milwaukee had a larger labor force residing within their boundaries than they had jobs available. This indicates that, even though economic activity is decentralizing in the Region, Milwaukee County is still a major supplier of jobs to residents of the Region. To illustrate this further, the 1970 Census of Population indicates that nearly 51 percent of the workers residing in Waukesha County, nearly 56 percent residing in Ozaukee County, and 65 percent residing in Washington County work in the county in which they reside. Origin and destination studies now being conducted by the Regional Planning Commission will seek to identify the pattern of job location versus residence of the worker. Comparisons of this data will more specifically identify changes in these patterns.

The changes in land use that have resulted from the previously discussed changes in location of economic activity in the Region are shown in Table 31 and Map 3. As indicated in this table, about 3,000 acres of land within the Region were converted to commercial and industrial use between 1963 and 1970. More than half of this development occurred in Waukesha and Milwaukee Counties, although Milwaukee County's proportion of the Region's commercial and industrial land has diminished since 1963. The greatest net increase in commercial and industrial land use over the 1963 to 1970 period occurred in Waukesha County, followed by Milwaukee County. Map 3 graphically indicates the location of the commercial and industrial land use changes within the Region over the 1963 to 1970 period. The growth in commercial and industrial development in the suburban and rural areas of the Region, especially in suburban Milwaukee County and all of Waukesha County, is evident. The increased commercial and industrial activity in these areas has been generally manifested in large suburban shopping centers and industrial parks.

STRUCTURE OF THE ECONOMY

The character of the regional economy can best be described in terms of its economic base and structure,[7] since the number and types of industry directly affect land use and transportation needs which, in turn, affects the level and locational aspects of housing demand. In this regard, economic activity within the Region can be classified into nine major industry groups: 1) agriculture; 2) mining; 3) construction; 4) manufacturing; 5) trade; 6) transportation, communication, and utilities; 7) finance, insurance, and real estate; 8) private services; and 9) government services.

Economic activity within the Region is heavily concentrated in manufacturing (see Figure 15). Of the total number of jobs in the Region in 1970, 34 percent were in manufacturing compared to approximately 26 percent nationally. Also, approximately 22 percent of the total jobs in the Region were in private services compared to about 16 percent nationally. Private services include medical and other professional services provided by hospitals, clinics, dental offices, legal firms, and charitable institutions, as well as by architects, engineers, and social workers. The proportion of economic activity in all other industry groups within the Region, as measured by jobs, was less than the national averages.

The structure of economic activity within the regional manufacturing industry, which is important in the regional economy, is also quite different from the struc-

[6] *The results of this work were published in SEWRPC Planning Report No. 3, The Economy of Southeastern Wisconsin, June 1963; and Planning Report No. 7, The Land Use-Transportation Study, Volume 2, Forecasts and Alternative Plans—1990, June 1966.*

[7] *The economic base of an area may be defined as those activities which provide the basic employment and income on which the rest of the area's economy depends. The economic structure of an area may be defined as the manner in which this employment is distributed among the major industrial sectors of the area's economy.*

Table 31

COMMERCIAL AND INDUSTRIAL LAND USE CHANGES IN THE REGION BY SUBAREA: 1963-1970

County Subarea[a]	Commercial Land Use[b]						Industrial Land Use[c]						Total Commercial and Industrial Land Use					
	1963		1970		Change 1963-1970		1963		1970		Change 1963-1970		1963		1970		Change 1963-1970	
	Acres	Percent of Total	Acres	Percent of Total	Number	Percent	Acres	Percent of Total	Acres	Percent of Total	Number	Percent	Acres	Percent of Total	Acres	Percent of Total	Number	Percent
Kenosha	452.93	8.2	504.08	7.7	51.15	11.3	684.97	8.6	811.02	8.1	126.05	18.4	1,137.90	8.4	1,315.10	7.9	177.20	15.6
29	251.39	4.5	281.87	4.3	30.48	12.1	559.96	7.0	614.73	6.2	54.77	9.8	811.35	6.0	896.60	5.4	85.25	10.5
30	102.66	1.9	122.46	1.9	19.80	19.3	90.54	1.2	122.80	1.2	32.26	35.6	193.20	1.4	245.26	1.5	52.06	26.9
31	98.88	1.8	99.75	1.5	0.87	0.9	34.47	0.4	73.49	0.7	39.02	113.2	133.35	1.0	173.24	1.0	39.89	29.9
Milwaukee	2,589.76	46.7	2,874.71	44.1	284.95	11.0	4,368.36	54.7	4,898.68	48.8	530.32	12.1	6,958.12	51.4	7,773.39	47.0	815.27	11.7
9	163.92	2.9	196.09	3.0	32.17	19.6	309.12	3.9	319.03	3.2	9.91	3.2	473.04	3.5	515.12	3.1	42.08	8.9
10	874.54	15.7	898.56	13.8	24.02	2.7	1,126.82	14.1	1,170.78	11.7	43.96	3.9	2,001.36	14.8	2,069.34	12.5	67.98	3.4
11	70.54	1.3	140.38	2.2	69.84	99.0	161.39	2.0	387.07	3.8	225.68	139.8	231.93	1.7	527.45	3.2	295.52	127.4
12	458.50	8.3	506.99	7.8	48.49	10.6	963.53	12.1	1,038.43	10.3	74.90	7.8	1,422.03	10.5	1,545.42	9.3	123.39	8.7
13	170.40	3.1	180.34	2.8	9.94	5.8	383.69	4.8	417.91	4.2	34.22	8.9	554.09	4.1	598.25	3.6	44.16	8.0
14	81.97	1.5	107.71	1.6	25.74	31.4	397.72	5.0	414.77	4.1	17.05	4.3	479.69	3.6	522.48	3.2	42.79	8.9
15	204.85	3.7	230.66	3.5	25.81	12.6	57.25	0.7	99.99	1.0	42.74	74.6	262.10	1.9	330.65	2.0	68.55	26.2
16	565.04	10.2	613.98	9.4	48.94	8.7	968.84	12.1	1,050.70	10.5	81.86	8.4	1,533.88	11.3	1,664.68	10.1	130.80	8.5
Ozaukee	289.40	5.2	330.50	5.1	41.10	14.2	304.40	3.8	444.42	4.4	140.02	46.0	593.80	4.4	774.92	4.7	181.12	30.5
1	46.09	0.8	51.78	0.8	5.69	12.3	69.67	0.9	108.68	1.1	39.01	56.0	115.76	0.8	160.46	1.0	44.70	38.6
2	31.68	0.6	41.84	0.7	10.16	32.1	76.13	0.9	81.20	0.8	5.07	6.6	107.81	0.8	123.04	0.7	15.23	14.1
3	85.44	1.5	97.63	1.5	12.19	14.3	128.54	1.6	176.67	1.7	48.13	37.4	213.98	1.6	274.30	1.7	60.32	28.2
4	126.19	2.3	139.25	2.1	13.06	10.3	30.06	0.4	77.87	0.8	47.81	159.0	156.25	1.2	217.12	1.3	60.87	39.0
Racine	486.49	8.8	574.80	8.8	88.31	18.2	632.34	7.9	1,098.05	10.9	466.16	73.7	1,118.83	8.3	1,673.30	10.1	554.47	49.6
25	268.76	4.9	294.87	4.5	26.11	9.7	372.81	4.7	499.38	5.0	126.57	34.0	641.57	4.8	794.25	4.8	152.68	23.8
26	49.29	0.9	70.87	1.1	21.58	43.8	102.39	1.3	302.64	3.0	200.25	195.6	151.68	1.1	373.51	2.2	221.83	146.2
27	84.27	1.5	113.59	1.7	29.32	34.8	84.60	1.0	163.21	1.6	78.61	92.9	168.87	1.2	276.80	1.7	107.93	63.9
28	84.17	1.5	95.47	1.5	11.30	13.4	72.54	0.9	133.27	1.3	60.73	83.7	156.71	1.2	228.74	1.4	72.03	46.0
Walworth	522.70	9.4	593.02	9.1	70.32	13.4	729.73	9.1	827.20	8.3	97.47	100.0	1,252.43	9.2	1,420.22	8.6	167.79	13.4
32	31.85	0.6	33.69	0.5	1.84	5.8	43.24	0.5	52.56	0.5	9.32	9.6	75.09	0.6	86.25	0.5	11.16	14.9
33	63.73	1.2	66.01	1.0	2.28	3.6	71.67	0.9	90.69	0.9	19.02	19.5	135.40	1.0	156.70	1.0	21.30	15.7
34	52.03	0.9	55.28	0.9	3.25	6.2	77.24	1.0	93.51	1.0	16.27	16.7	129.27	0.9	148.79	0.9	19.52	15.1
35	268.08	4.8	320.19	4.9	52.11	19.4	481.97	6.0	495.15	4.9	13.18	13.5	750.05	5.5	815.34	4.9	65.29	8.7
36	107.01	1.9	117.85	1.8	10.84	10.1	55.61	0.7	95.29	1.0	39.68	40.7	162.62	1.2	213.14	1.3	50.52	31.1
Washington	240.80	4.3	299.00	4.6	58.20	24.2	314.61	3.9	433.70	4.3	119.09	37.8	555.41	4.1	732.70	4.4	177.29	31.9
5	33.52	0.6	37.87	0.6	4.35	13.0	56.03	0.7	72.42	0.7	16.39	29.2	89.55	0.7	110.29	0.7	20.74	23.2
6	87.86	1.6	108.04	1.7	20.18	23.0	133.14	1.6	193.82	1.9	60.68	45.6	221.00	1.6	301.86	1.8	80.86	36.6
7	90.42	1.6	124.09	1.9	33.67	37.2	102.61	1.3	144.63	1.5	42.02	41.0	193.03	1.4	268.72	1.6	75.69	39.2
8	29.00	0.5	29.00	0.4	0.00	0.0	22.83	0.3	22.83	0.2	0.00	0.0	51.83	0.4	51.83	0.3	0.00	0.0
Waukesha	964.92	17.4	1,340.74	20.6	375.82	38.9	957.48	12.0	1,525.09	15.2	567.61	59.3	1,922.40	14.2	2,865.83	17.3	943.43	49.1
17	196.57	3.5	252.34	3.9	55.77	28.4	204.48	2.6	310.02	3.1	105.54	51.6	401.05	3.0	562.36	3.4	161.31	40.2
18	215.33	3.9	272.19	4.2	56.86	26.4	63.80	0.8	112.33	1.1	48.53	76.1	279.13	2.1	384.52	2.3	105.39	37.8
19	94.55	1.7	144.76	2.2	50.21	53.1	31.65	0.4	215.04	2.2	183.39	579.4	126.20	0.9	359.80	2.2	233.60	185.1
20	27.15	0.5	39.31	0.6	12.16	44.8	16.65	0.2	24.44	0.2	7.79	46.8	43.80	0.3	63.75	0.4	19.95	45.5
21	138.77	2.5	160.50	2.5	21.73	15.6	81.79	1.0	154.54	1.5	72.75	88.9	220.56	1.6	315.04	1.9	94.48	42.8
22	81.30	1.5	125.23	1.9	43.93	54.0	51.43	0.6	67.41	0.7	15.98	31.1	132.73	1.0	192.64	1.1	59.91	45.1
23	137.00	2.5	224.36	3.4	87.36	63.8	295.13	3.7	383.84	3.8	88.71	30.0	432.13	3.2	608.20	3.7	176.07	40.7
24	74.25	1.3	122.05	1.9	47.80	64.4	212.55	2.7	257.47	2.6	44.92	21.1	286.80	2.1	379.52	2.3	92.72	32.3
Region	5,547.00	100.0	6,516.85	100.0	969.85	17.5	7,991.89	100.0	10,038.61	100.0	2,046.72	25.6	13,538.89	100.0	16,555.46	100.0	3,016.57	22.3

[a] *See Map 3 for subarea location within the Region.*

[b] *Commercial land use as referred to herein includes land devoted to local and regional retail and service operations, exclusive of off-street parking areas.*

[c] *Industrial land use as referred to herein includes land devoted to manufacturing and open or enclosed wholesale storage operations, exclusive of off-street parking areas.*

Source: SEWRPC.

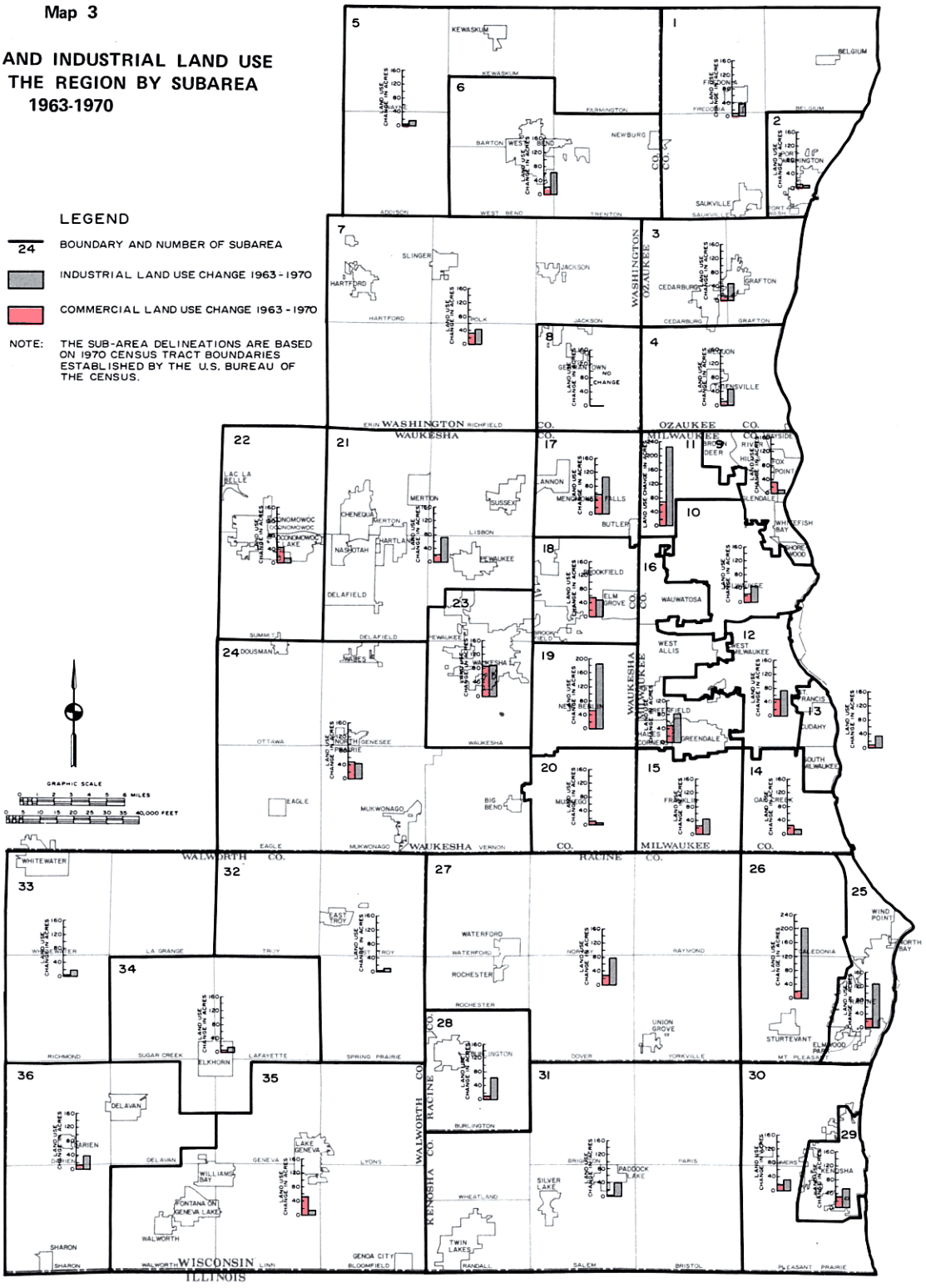
ture of the manufacturing industry nationally (see Figure 16). In contrast to the manufacturing industry of the United States, the manufacturing industry in the Region is more heavily concentrated in the production of durable goods, particularly machinery and electrical equipment. In 1970, about 43 percent of the total manufacturing jobs within the Region were in these industries compared to about 20 percent nationally. Compared to the national distribution, there is also a concentration of fabricated metal product manufacturing and printing and publishing activities. On the other hand, there is a relatively low concentration of activity associated with the production of nondurable goods, such as textile, apparel, leather, paper, wood, chemical, petroleum, rubber, and plastic products. The only nondurable goods manufacturing activity, in addition to printing and publishing, which has a proportion of manufacturing employment approximating that of the national economy is the production of food and beverage products. This is due primarily to the location of a number of very large breweries in the Region.

SUMMARY

The population of the Region increased at an average rate of about 18,000 persons per year from 1960 to 1970, and as of 1970 totaled 1,756,086 persons. This rate of population growth is lower than state and national growth

Map 3

COMMERCIAL AND INDUSTRIAL LAND USE CHANGES IN THE REGION BY SUBAREA 1963-1970

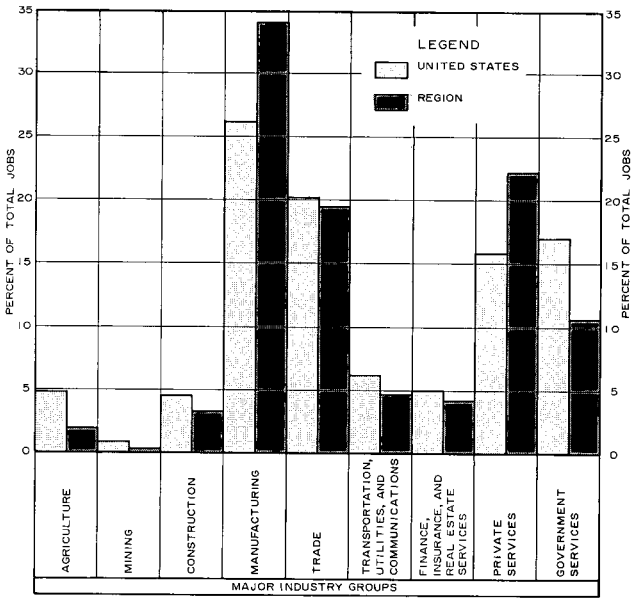


Between 1963 and 1970, about 3,000 acres of land within the Region were converted to commercial and industrial use. The general location of these land use changes during this period is shown on this map. Rapid commercial and industrial development is evident in the suburban and rural areas of the Region, particularly in suburban Milwaukee County and in Waukesha County. The increased commercial and industrial activity in these areas has been generally manifested in the development of large new suburban shopping centers and industrial parks.

Source: SEWRPC.

Figure 15

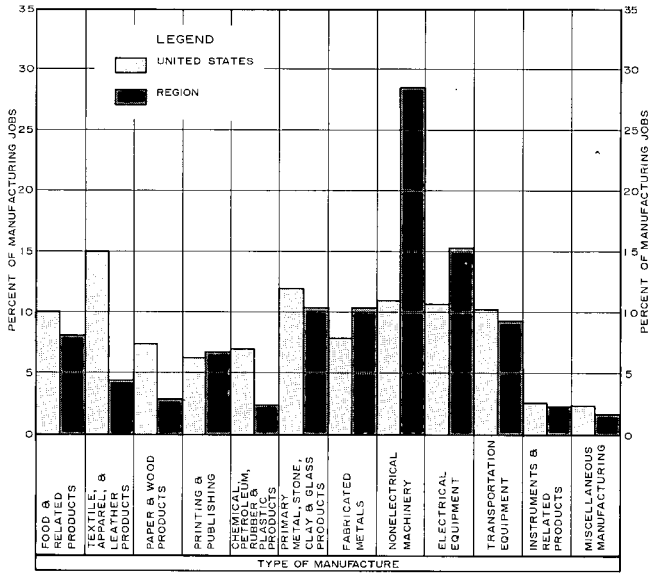
PERCENTAGE DISTRIBUTION OF JOBS IN THE REGION AND THE UNITED STATES BY MAJOR INDUSTRY GROUP: 1970



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

Figure 16

PERCENTAGE DISTRIBUTION OF MANUFACTURING JOBS IN THE REGION AND THE UNITED STATES BY TYPE OF MANUFACTURE: 1970



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

rates, and is considerably lower than the approximately 33,000 persons per year growth rate experienced within the Region from 1950 to 1960.

The changes in the size of the population have been accompanied by marked changes in population distribution. The Southeastern Wisconsin Region, like most metropolitan regions in the United States, is becoming increasingly urban. By 1970, 88 percent of the regional population was urban, while only 12 percent was rural. The regional population is also becoming increasingly decentralized, spreading out across established city and county boundaries. The most dramatic distributional changes over the 70-year period from 1900 to 1970 occurred in Milwaukee and Waukesha Counties. From 1900 to 1930, the Milwaukee County portion of the regional population increased by about 6 percent, but then decreased by over 12 percent from 1930 to 1970. Waukesha County, on the other hand, decreased by about 2 percent from 1900 to 1930 and then increased by about 8 percent from 1930 to 1970.

The characteristics of the regional population, including composition by age, sex, and race, marital status, educational attainment, and residential mobility, also changed significantly between 1960 and 1970. The most striking changes are the increase in the proportion of young persons between the ages of 10 and 24 years and the decreases in the proportion of children under 5 years and in the proportion of adults between 30 and 39 years. The sex composition of the regional population also changed in that there was a significant decrease in the proportion of males between 1960 and 1970, with at least slight decreases being observed within each 10-year age group except the 10-19 group. In addition to these population characteristic changes, the racial composition of the regional population changed somewhat during the last decade. The 1970 census indicated that 92.6 percent of the regional population was white, while in 1960 the percentage of white population was 95.3. The balance of the population was nonwhite, and in both 1960 and 1970 the vast majority of this group was comprised of persons of the black race. The Spanish American population is included in the white population because Spanish Americans are not treated as a distinct race by the Census Bureau.

The most significant change in marital status between 1960 and 1970 is the decrease in the proportion of married persons. In 1970, about 62 percent of the regional population 14 years old and above were married, while in 1960 almost 68 percent were married.

Educational attainment of the population over 25 years of age increased substantially between 1960 and 1970. The median number of years of schooling completed increased from 11.0 years in 1960 to 12.2 years in 1970. Also in 1960 about 44 percent of the population over 25 had completed high school or attended college, while in 1970 this number had increased to 56 percent.

The U. S. Census Bureau classifies persons who lived in a different residence five years earlier as local movers if that residence was in the same county. If the residence

was in a different county in Wisconsin, in a different state, or abroad, persons occupying it are classified as migratory movers. A comparison of 1960 and 1970 census data indicates a change in residential mobility, with a marked decrease in the proportion of persons who were classified as movers. There were also slight decreases in the proportion of the population classified as migratory movers, but the most striking change is the decrease in the proportion of local movers from 33.7 percent to 24.9 percent.

While the size, distribution, and characteristics of the regional population are essential considerations in the analysis of housing demand, of even greater importance are data relating to households in the Region, since the household is the basic unit of analysis in the analysis of housing demand. There were a total of 536,486 households in the Region in 1970, an increase of 70,573 households, or 15.2 percent, over 1960. The number of households also increased for each county between 1960 and 1970, with the variation in the rate of increase in households among the seven counties reflecting the decentralization of the regional population.

In addition to the number of households within the Region, household characteristics are important in the analysis of housing demand. In 1970, about 80 percent of all households in the Region were comprised of families while the remaining households were comprised of unrelated persons living together or persons living alone. It is significant that almost 88 percent of the families in the Region were families in which both a husband and a wife were present in the same household. The balance of the families in the Region were families having either a male head or female head but not both.

Changes in household size within the Region occurred between 1960 and 1970, with the most striking change being the increase of about 5 percent in the proportion of one-person households. This increase in one-person households reflects the substantial decrease in the marriage rate between 1960 and 1970. In contrast, the proportion of three-, four-, and five-persons households decreased by a total of about 6 percent. These changes have caused the median household size in the Region to decrease from 3.0 persons per household in 1960 to 2.7 persons per household in 1970.

There are several quantifiable measures of overcrowding among households. One such measure is the tabulation of households by the average number of persons per room. Assuming that a household is overcrowded if there is an average of more than one person per room, it was found that about 7 percent of all households in the Region were overcrowded in 1970. There was an absolute decrease in the number of overcrowded households in the Region between 1960 and 1970.

Household income is the fundamental determinant of whether or not the household has the economic ability to meet its requirement for housing. Within the Region, income has been increasing rapidly, with total income over $6 billion in 1970. Total income in the Region from 1950 to 1970 increased by $4.4 billion, or 263 percent. Increases in income have occurred at a much faster rate than the increase in the number of households so that the average (mean) household income increased from $4,682 in 1950 to $11,238 in 1970.

A major consideration in the housing planning process is the possibly unmet housing needs of large low-income families. It was found that within the Region in 1969, approximately 167,500 households, or 31.2 percent of all households, had an income of less than $7,000. Of these, 23,304 households were comprised of four persons or more while 7,525 consisted of six persons or more. Clearly, such data relating household income to household size are an important input in the determination of true housing need.

It should be noted that, while the majority of the population are members of households, about 41,500 persons, or 2.4 percent, of the regional population lived in group quarters, i.e., living quarters not considered to be part of the existing housing stock. Persons in homes for the aged and dependent and students in college dormitories comprised more than one-half of all persons in group quarters in the Region in 1970.

A general overview of the regional economy indicates a slowdown in economic growth in the 1960 to 1970 period compared to the 1950 to 1960 period. The regional labor force increased by 16.6 percent in the 1960s compared to 18.3 percent in the 1950s. The composition of the labor force has changed from 1950 to 1970. Female participation is increasing relative to male participation, with the female segment increasing 39.4 percent from 1960 to 1970 compared to the male increase of 5.9 percent for the same period.

The work force within the Region has also witnessed a change in size. From 1950 to 1960 the regional work force increased by 17.6 percent, a more rapid rate than experienced by the United States and Wisconsin. However, work force increases nationally and in the state exceeded regional growth during the 1960 to 1970 period.

Nearly 69 percent of the economic activity of the Region in 1970, as measured by jobs, was located in Milwaukee County; and approximately 14 percent was located in Kenosha and Racine Counties. A general trend toward the decentralization of manufacturing, distribution, and service activities from highly urbanized areas to more suburban and rural-urban fringe areas has taken place within the Region, with the intraregional distribution of jobs decreasing in Kenosha and Milwaukee Counties and increasing in the other five counties of the Region.

Economic activity within the Region can be classified as nine major industry groups: 1) agriculture; 2) mining; 3) construction; 4) manufacturing; 5) trade; 6) transportation, communications, and utilities; 7) finance, insurance, and real estate; 8) private services; and 9) government services. Of the total number of jobs in the Region in 1970, 34 percent were in manufacturing, thus indicating a heavy concentration of economic activity in the Region in the production of durable goods, particularly machinery and electrical equipment.

Chapter IV

THE NATURAL RESOURCE BASE AND THE MAN-MADE PHYSICAL ENVIRONMENT OF SOUTHEASTERN WISCONSIN

INTRODUCTION

The Southeastern Wisconsin Region is a complex of natural and man-made features which interact to comprise a changing environment for human life. The natural resource base of the Region is the primary determinant of its development potential and its ability to provide a pleasant and habitable environment for all forms of life. The principal elements of the natural resource base are climate, physiography, geology, soils, vegetation, and water resources. A proper understanding and recognition of these elements and their interrelationships is necessary so that human use and alteration of the natural environment does not proceed at the risk of excessive costs in terms of both monetary expenditures and the destruction of nonrenewable or slowly renewable resources. Also important to any consideration of future development within the Region, and particularly important to the development of decent, safe, and sanitary housing, are certain man-made features including existing land uses, as well as the supporting transportation and public utility networks which, together with the population which resides in the Region and the economic activities which take place in the Region, may be thought of as comprising the socioeconomic base of the Region. The population and economic activity level within the Region have been discussed in the previous chapter of this report.

The data presented in this chapter are intended to provide the information necessary to properly locate new residential development so that it will be compatible with both existing and planned future regional land use, transportation facility, and public utility development, and so that it will not adversely affect the underlying and sustaining natural resource base.

THE NATURAL RESOURCE BASE

As previously noted, the natural resource base is a primary determinant of the development potential of the Region and of its ability to provide a pleasant and habitable environment for all forms of life. In this age of high resource demand, urban expansion, and rapidly changing technology, it is especially important that the natural resource base be a primary consideration in any areawide planning effort, since these aspects of contemporary civilization make the underlying and sustaining resource base highly vulnerable to misuse and destruction. An understanding of the various components of the natural resource base and the extent to which each component is vulnerable to man-made development is, therefore, essential to sound, areawide regional housing planning. The following discussion briefly identifies and describes the significant elements of the natural resource base of the Southeastern Wisconsin Planning Region.[1] Particular emphasis is placed on the soil resources of the Region because consideration of this element of the natural resource base is particularly important to the proper location and design of housing developments.

Climate

Weather conditions greatly influence, directly or indirectly, the type, style, quality, and cost of housing construction in an area. Long periods of cold weather, for example, will not only influence the type, style, and quality of residential construction but will also have a direct bearing on the cost of materials and labor and may, due to severe working conditions, shorten the construction year. Other indirect costs to the homeowner, such as winter home maintenance and additional heating costs, as well as such community costs as snow and ice control operations, can also be expected to accrue under such weather conditions. The climate in an area should influence the proper location and orientation of the individual residence in order to take best advantage of such factors as the direction of the prevailing winds and the seasonal variations in the elevation of the sun.

The Region has a continental type climate which spans four seasons, each succeeding one another through varying periods of unsteady transition. Summer generally spans the months of June, July, and August. The summers are relatively warm, with occasional periods of hot, humid weather and sporadic periods of very cool weather. Winter generally spans the months of December, January, and February but may, in some years, be lengthened to include all or parts of the months of November and March. Winters tend to be cold, cloudy, and snowy. There is often a short midwinter thaw occasioned by brief periods of unseasonably warm weather. Streams and lakes begin to freeze over in November, with the larger and deeper bodies of water usually being covered with ice by mid-December. Lake and stream ice breakup occurs in late March or early April due to increasing solar radiation.

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[1] *A more detailed discussion of the natural resource base of the Region is presented in SEWRPC Planning Reports No. 5, The Natural Resources of Southeastern Wisconsin, No. 8, Soils of Southeastern Wisconsin, No. 16, A Regional Sanitary Sewerage System Plan for Southeastern Wisconsin, and Technical Report No. 4, Water Quality and Flow of Streams in Southeastern Wisconsin.*

Autumn and spring in the Region are transitional times of the year between the dominant seasons and are usually periods of unsettled weather conditions. Temperatures are extremely varied, and long periods of precipitation are common. Early spring is marked by a moderation of the low temperature of winter, and by late March, rainfall replaces snow as the predominant form of precipitation. Typical spring weather may extend from March through May and is characterized by cool, wet weather. Typical autumn weather may extend from September through November and is characterized by pleasant, mild, sunny days and cool nights.

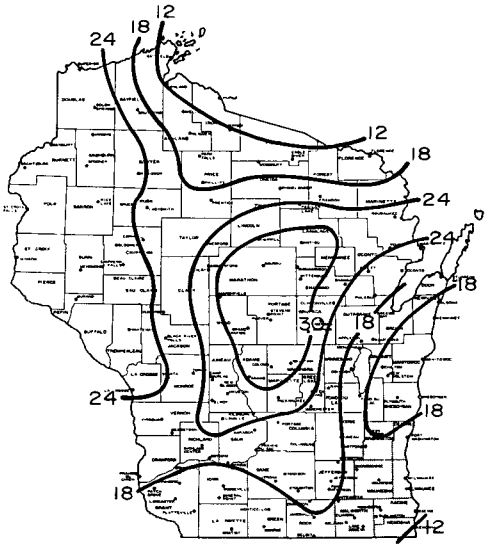
Air temperatures within the Region are subject to large seasonal change and yearly variations. Based on data encompassing periods of record ranging from 10 to 30 years for the various observation stations in the Region, the temporal and spatial variations in temperature and temperature ranges which may be expected to occur within the Region have been charted. Summer temperatures throughout the Region, as reflected by monthly means for July and August, range between 67.5°F to 73.0°F, with northerly lakeshore locations exhibiting lower monthly mean summer temperatures than southerly inland locations. Winter temperatures range between 18.0°F to 26.0°F for all stations. Ground freeze varies in time period and depth within the Region depending on specific locations, snow cover, and other short-term changes in weather conditions; however, as shown in Figure 17, frost depths in the Region by mid-winter range up to 12 to 18 inches. The first 32°F freeze usually occurs during the second week of October while the last 32°F freeze occurs during the last week of April for areas near Lake Michigan and during the first half of May for inland areas.

Precipitation within the Region occurs as rain, sleet, hail, and snow and ranges in intensity, duration, and significance from gentle showers to destructive thunderstorms and major rainfall or rainfall-snowmelt events. These events may result in property and crop damage, inundation of poorly drained areas, and stream flooding. Precipitation and snowfall data for six geographically representative observation stations in the Region located on the Lake Michigan shoreline are shown in Figure 18. The average annual total precipitation based on the six observation stations is 30.3 inches, expressed as water equivalent. Monthly averages range from a February low of 1.32 inches to a June high of 3.86 inches. Snow is most likely to occur in southeastern Wisconsin during the months of December, January, and February and averages 43.2 total inches annually, or 4.3 inches of precipitation. The percent of maximum possible sunshine in the Region ranges from a low of about 40 percent from November through February to a high of 60 percent or greater from May through September.

Prevailing winds within the Region follow a clockwise pattern, being northwesterly in the late fall and winter, northeasterly in the spring, and southwesterly in the summer and early fall. The windiest months are March, April, and November, while the least windy months are

Figure 17

AVERAGE FROST DEPTHS IN THE REGION FOR FEBRUARY 28 BASED ON DATA FOR THE PERIOD 1961-1966[a]



[a] *This map was constructed on the basis of frost depths for cemeteries as reported by funeral directors and cemetery officials. Since cemeteries have soils that are overlain by an insulating layer of turf, the mapped frost depths should be considered as minimum values.*

Source: Wisconsin Statistical Reporting Service, National Weather Service, and SEWRPC.

July and August. Figure 19 presents wind direction data for seven locations within the Region and seven additional sites located immediately north or west of the Region.

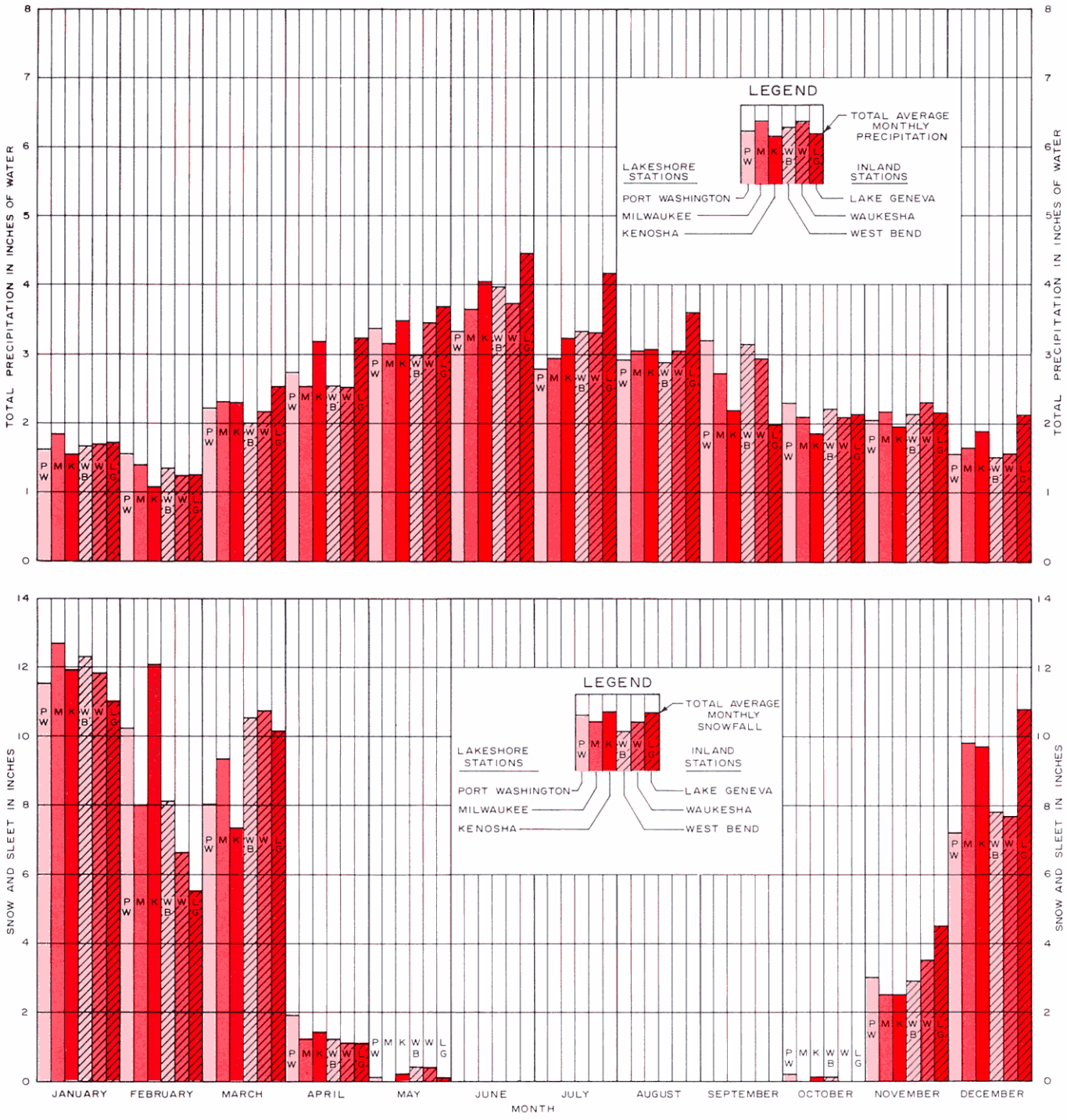
In addition to marked temporal weather changes, the Region exhibits spatial weather differences, the most significant of which is the summer cooling attributable to Lake Michigan and experienced primarily in areas close to the lake. The annual temperature range, based on monthly means for six geographically representative observation stations, extends from a January average low of 20.7°F to a July average high of 71.0°F. Figure 20 presents temperature data for the six observation stations.

Physiography

The 2,689 square mile Southeastern Wisconsin Region has been subjected to several stages of continental glaciation. The last stage, called the Wisconsin stage, ended about 11,000 years ago and largely determined the physiographic and topographic features of the entire Region. The most dominant feature is the Kettle Moraine, an interlobate glacial deposit, or moraine, formed between the Green Bay and Lake Michigan lobes of the continental glacier. The Kettle Moraine is a complex system of kames, or kettle holes, marking the site of glacial ice blocks that became separated from the ice mass and melted to form depressions and abandoned drainageways. It is also the area of the highest elevations within south-

Figure 18

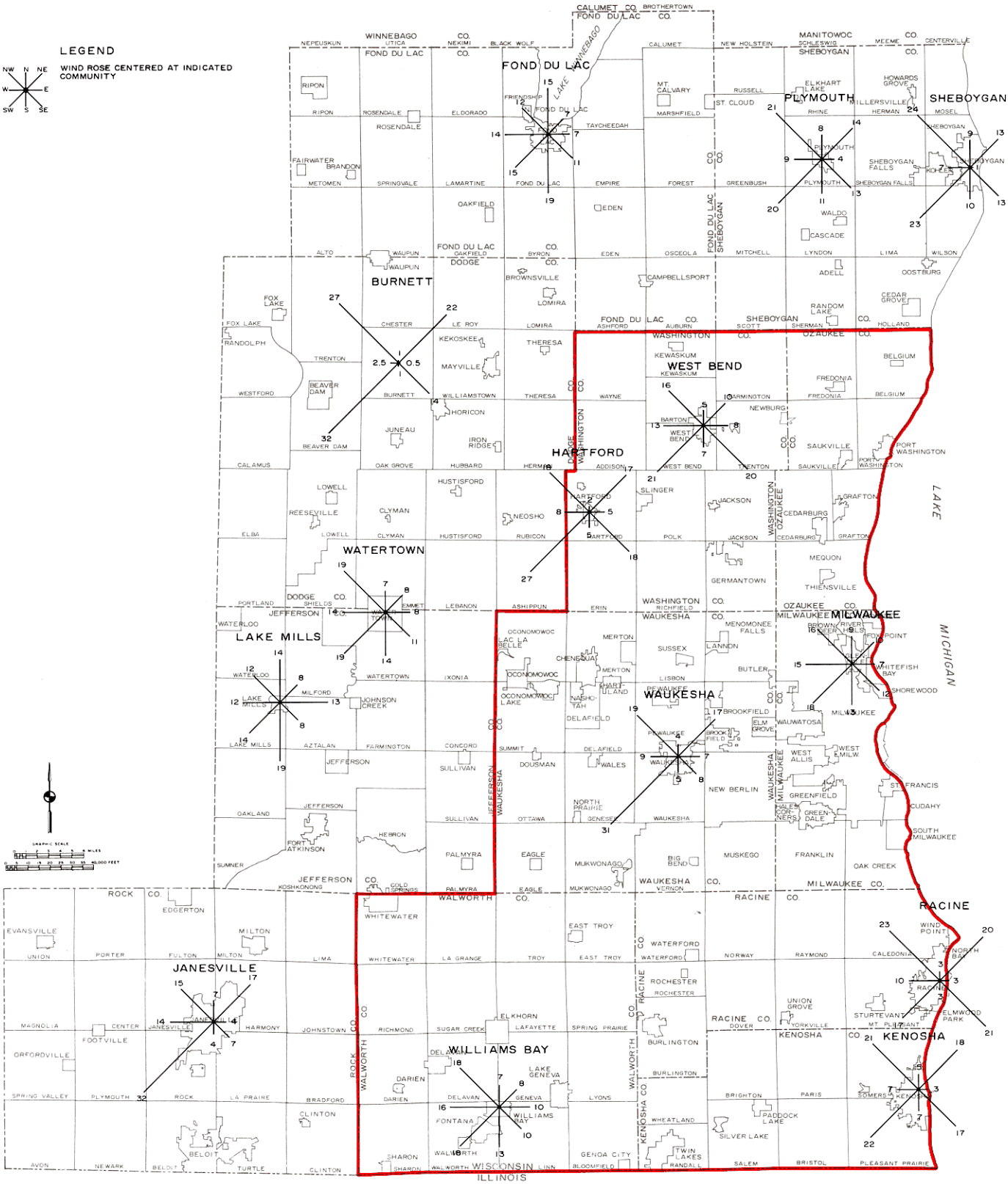
PRECIPITATION CHARACTERISTICS AT SELECTED LOCATIONS IN THE REGION



Source: Wisconsin Crop Reporting Service, National Weather Service, and SEWRPC.

Figure 19

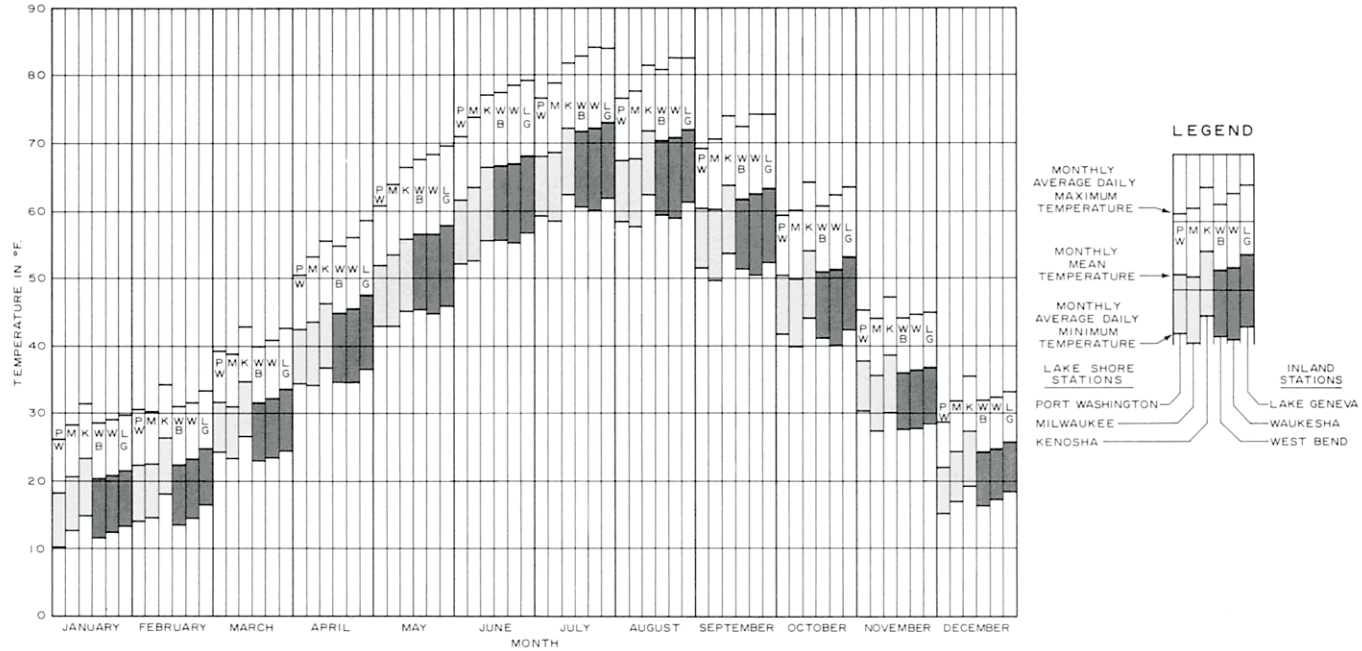
ANNUAL FREQUENCY DISTRIBUTION OF WIND DIRECTION IN THE REGION



Source: Substation monthly record sheets compiled by the Wisconsin State Planning Board in 1944. (Data adjusted to equal 100%.)

Figure 20

TEMPERATURE CHARACTERISTICS AT SELECTED LOCATIONS IN THE REGION



Source: Wisconsin Statistical Reporting Service and National Weather Service.

eastern Wisconsin. Some of the most attractive and interesting natural landscapes in southeastern Wisconsin can be found in the Kettle Moraine. Extensive urban development in this area would result in the destruction of these natural landscapes; would adversely affect the preservation of various natural resources which make up the Kettle Moraine, including woodland cover, wildlife habitat, and geologic and topographic features; and would adversely affect recharge of the deep sandstone aquifer underlying the Region.

The effects of recent glaciation have caused surface drainage to be poorly developed but highly diverse within the Region. The land surface contains thousands of closed depressions ranging in size from mere pits to large areas. Significant areas of the Region are covered by wetlands, and many streams are mere threads of water through these wetlands. In addition, a major subcontinental divide separating the Mississippi River drainage basin from the Great Lakes-St. Lawrence River basin, and oriented in a generally northwesterly-southeasterly direction, bisects the Region, exerting a major physical influence on the gross drainage pattern of the Region. This subcontinental divide has a direct, as well as indirect, effect on not only the location and density of housing development, but the cost of such development as well. Interstate and international compacts, as well as the existing body of water law, regulate the diversion of substantial quantities of water across this divide which, in turn, has a direct effect on the provision of public water supply and public sanitary sewerage disposal facilities within the Region.

Geology

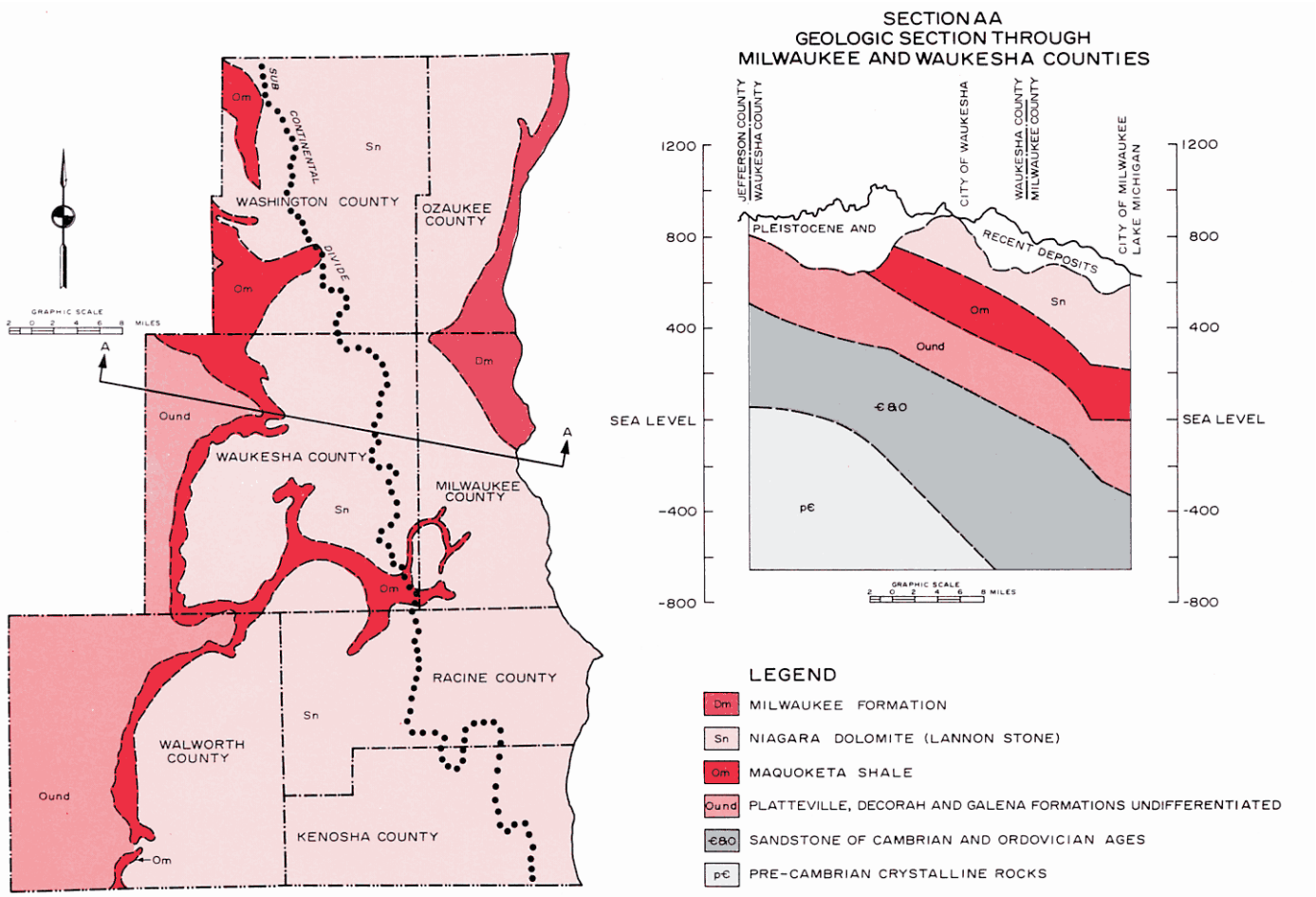
The geology of southeastern Wisconsin has important implications for the construction of housing in the Region. The bedrock formations in the Region provide a vehicle, or aquifer, for two sources of groundwater in the Region. An understanding of the formations underlying the Region is important so that the use of the groundwater aquifers may be properly managed to ensure the quality and quantity of the future groundwater supplies.

Underlying the unconsolidated surficial deposits of southeastern Wisconsin are bedrock formations consisting of Cambrian through Devonian period rocks of the Paleozoic era that attain a thickness in excess of 1,500 feet along the eastern limits of the Region. These eastern areas of the Region are underlain by older, predominantly crystalline rocks of the Precambrian era. Bedrock lying immediately beneath the unconsolidated surficial deposits in the western extremities of the Region are older rocks of the Ordovician period, whereas in the east along Lake Michigan, younger rocks of the Silurian and Devonian periods lie immediately beneath the surficial deposits.

The basic structure of the geologic formations underlying the Region is shown in Figure 21. The Region is basically underlain by two major aquifers. A waterbearing limestone formation is located near the surface, interconnected with the overlying glacial till. A deep sandstone aquifer is located below this limestone aquifer and separated from it by the relatively impervious Maquoketa

Figure 21

MAP AND CROSS SECTION OF BEDROCK GEOLOGY IN THE REGION



Source: SEWRPC.

Shale formation. The limestone formation and interconnected glacial till comprise the very complex shallow aquifer in the Region from which many suburban and rural homes draw their domestic water supply. This shallow aquifer is recharged locally by rainfall-runoff and is, therefore, highly susceptible to pollution from onsite sewage disposal systems, from urban and agricultural runoff, and from improperly designed and operated solid waste disposal sites. The deep sandstone aquifer is the major source of water supply for many of the urban communities and the major industries in the Region, particularly those communities and industries located west of the subcontinental divide. This aquifer provides a fairly high quality of water and is vulnerable to pollution only through improperly constructed wells penetrating the aquifer, or from septic tanks and surface runoff located in the recharge area for the deep sandstone aquifer. This recharge area is located in the Kettle Moraine area of the western portion of the Region.

Wetlands, like most elements of the natural resource base, are vulnerable to destruction by man. Improper location of individual housing or housing developments may drastically affect viability of a wetland area and may indeed destroy it through runoff filtration; direct, fecal, or chemical pollution; or by inadvertent drainage. Woodland areas, on the other hand, offer an aesthetic setting for individual home or housing development placement which may enhance the quality of the home or development. Care must be taken, however, to properly locate buildings, streets, and utilities so as not to destroy the resource in the process.

Water Resources

Groundwater: If the large quantity of groundwater underlying the Region is to remain a valuable asset to southeastern Wisconsin, regional development must be managed so as to protect the quality of that resource, with particular emphasis on sound land use policies, regional housing plans, and public sanitary sewerage system plans. It is important that, with the construction of housing, public sanitary sewerage systems as well as private onsite sewage disposal systems be located, designed, constructed, and operated with due cognizance of the need for safeguarding the quality and quantity of the recharge water for the aquifers of the Region. Poorly located residential development with malfunctioning public and private systems can readily pollute the sand

and gravel aquifer and may also contaminate the shallow dolomite aquifer in areas where it is creviced and covered by thin, permeable glacial deposits. Areas of southeastern Wisconsin with bedrock outcrops and relatively shallow glacial deposits are shown on Map 4 and serve to identify locations of potential pollution of the shallow dolomite aquifer.

Surface Water: Lakes and streams and their floodlands, which comprise the surface water resources of southeastern Wisconsin, constitute an extremely valuable part of the natural resource base because of their multi-faceted functions, including support of numerous popular water-oriented recreation activities; habitat for fish and wildlife; desirable sites for vacation homes and permanent residential developments; and provision of water for domestic, municipal, and industrial water users. The Region contains 1,148 lineal miles of major streams and 100 major lakes, the latter having a total surface area of 57 square miles, or about 2 percent of the area of the Region, and a total shoreline length of 448 miles.[2]

These surface water resources are very vulnerable to man's activities because their quality can be easily degenerated. Lakeshore and riverine development may adversely affect lake and stream water quality by increasing pollution loadings while, at the same time, removing wetlands which serve as valuable nutrient and sediment traps.

Commission comprehensive watershed studies reveal that many of the major lakes and many miles of major streams in the planning region are being degraded as a result of man's activities to the point where they now have, or soon will have, little or no value for recreational purposes, as desirable locations for controlled water-oriented residential development, or as aesthetic assets of southeastern Wisconsin.

Floodlands: The location of the floodlands of southeastern Wisconsin is important to regional housing planning primarily for two reasons. First, floodplain areas are generally not well suited to residential development because of flood hazards, high water tables, and the presence of soils otherwise poorly suited for residential development. Floodland soil conditions and high water tables generally may be expected to result in significantly higher residential development costs and higher construction, operation, and maintenance costs for sanitary sewerage systems; and therefore, in the interest of achieving economies in housing development and concomitant savings in public utilities and services, including sanitary sewerage systems, floodland development for urban uses should be avoided. Second, the floodlands are, in contrast, generally prime locations for much needed open space uses. Therefore, within the context of regional land use planning as well as regional housing planning, public development policies and practices with respect to housing, public utilities and services, and sanitary sewerage systems should be such so as to encourage maintenance of those floodlands in open space uses. In addition, the significant annual loss of property and life due to inundation of existing urban developments in flood-prone areas has precipitated enactment of legislation[3] related to floodplain development which has important implications for many households in the Region.

In planning for the proper use of floodlands, it is useful to subdivide the total floodland area on the basis of the hydraulic function which the various subareas are to perform as well as on the basis of the differing degrees of flood hazard that may be present (see Figure 22). Under natural conditions, the floodlands may be considered as consisting of two components, the channel of the river, or stream itself, and the adjacent natural floodplains. The channel may be defined as the continuous linear area occupied by the river or stream in times of normal flow. The natural floodplain may be defined as the wide, flat-to-gently sloping area contiguous with and adjacent to the channel, usually on both sides. The floodplain is normally bounded on its outer edges by higher topography. A river may be expected to overflow its channel banks and occupy some portion of its floodplains on the average of once every two years. How much of the natural floodplain will be occupied by any given flood will depend upon the severity of that flood and, more particularly, upon its elevation or stage. Thus, an infinite number of outer limits of the natural floodplain may be delineated, each related to a corresponding specified flood recurrence interval. The Commission has, therefore, recommended that the natural floodplains of a river or stream be specifically defined as those corresponding to a flood having a recurrence interval of 100 years; that is, a flood having a 1 percent chance of occurring in any given year.

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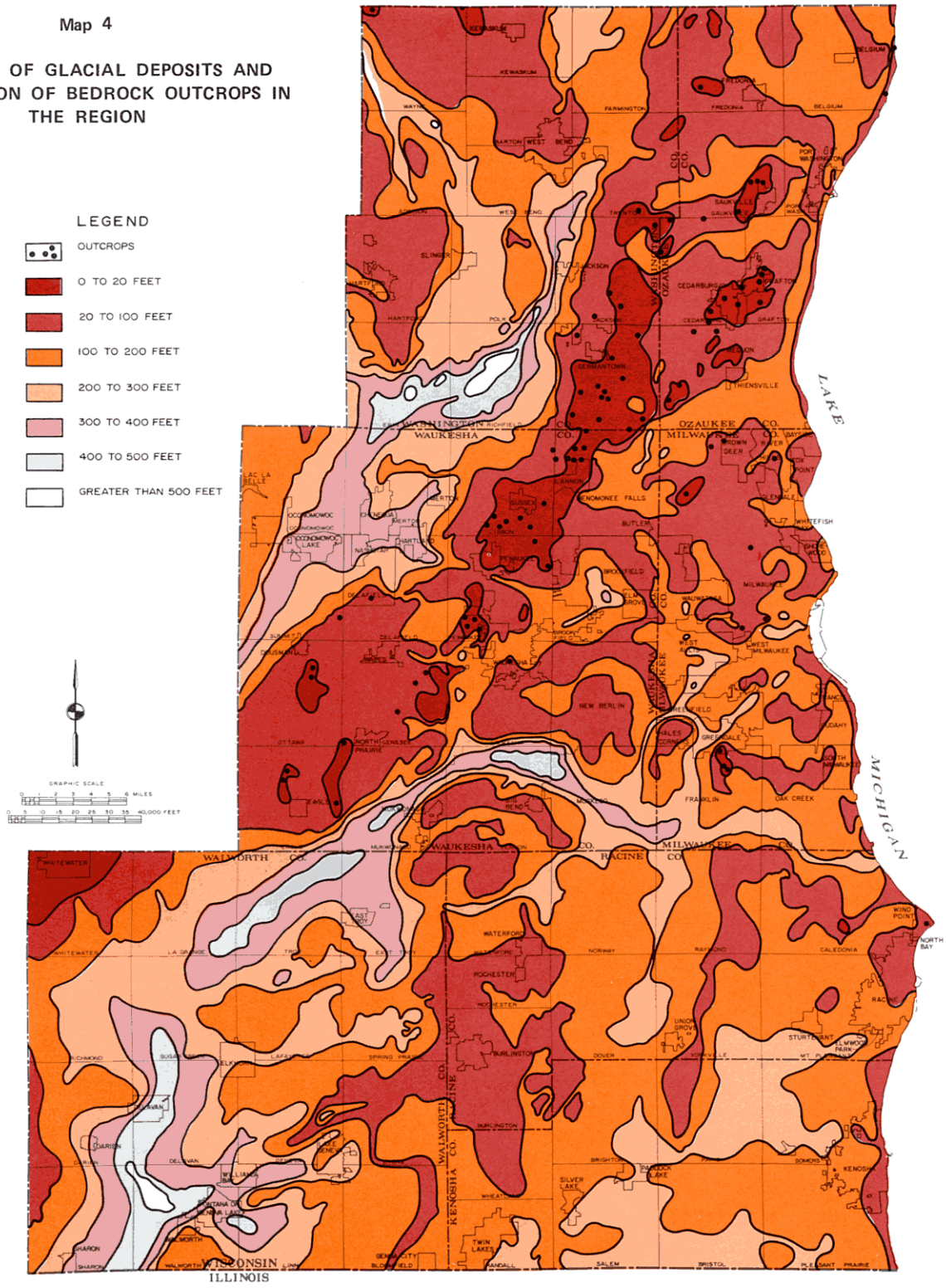
[2] *See Appendix C of SEWRPC Planning Guide No. 5, Floodland and Shoreland Development Guide, for a detailed tabulation by county of lakes and ponds in southeastern Wisconsin, indicating the location of each lake and pond and also summarizing pertinent morphometric parameters such as surface area, maximum depth, and shoreline length. Some of the morphometric parameters for major lakes have been revised under the Commission's Fox and Milwaukee River watershed studies published as SEWRPC Planning Report No. 12, A Comprehensive Plan for the Fox River Watershed, Volumes 1 and 2, and SEWRPC Planning Report No. 13, A Comprehensive Plan for the Milwaukee River Watershed, Volumes 1 and 2.*

[3] *The National Flood Insurance Act of 1968 enables property owners to purchase subsidized insurance to cover losses caused by floods. In addition, the Act requires the initiation of local government land use control activity that would seek to assure, on a nationwide basis, that future urban development within floodlands would be held to a minimum. The Federal Flood Disaster Protection Act of 1973 requires all federally enacted and insured lending institutions to require as a prerequisite to the insurance of mortgage loans the purchase of flood insurance for all new buildings proposed to be constructed in "special flood hazard areas" as determined by the Secretary of the U. S. Department of Housing and Urban Development.*

Map 4

THICKNESS OF GLACIAL DEPOSITS AND THE LOCATION OF BEDROCK OUTCROPS IN THE REGION

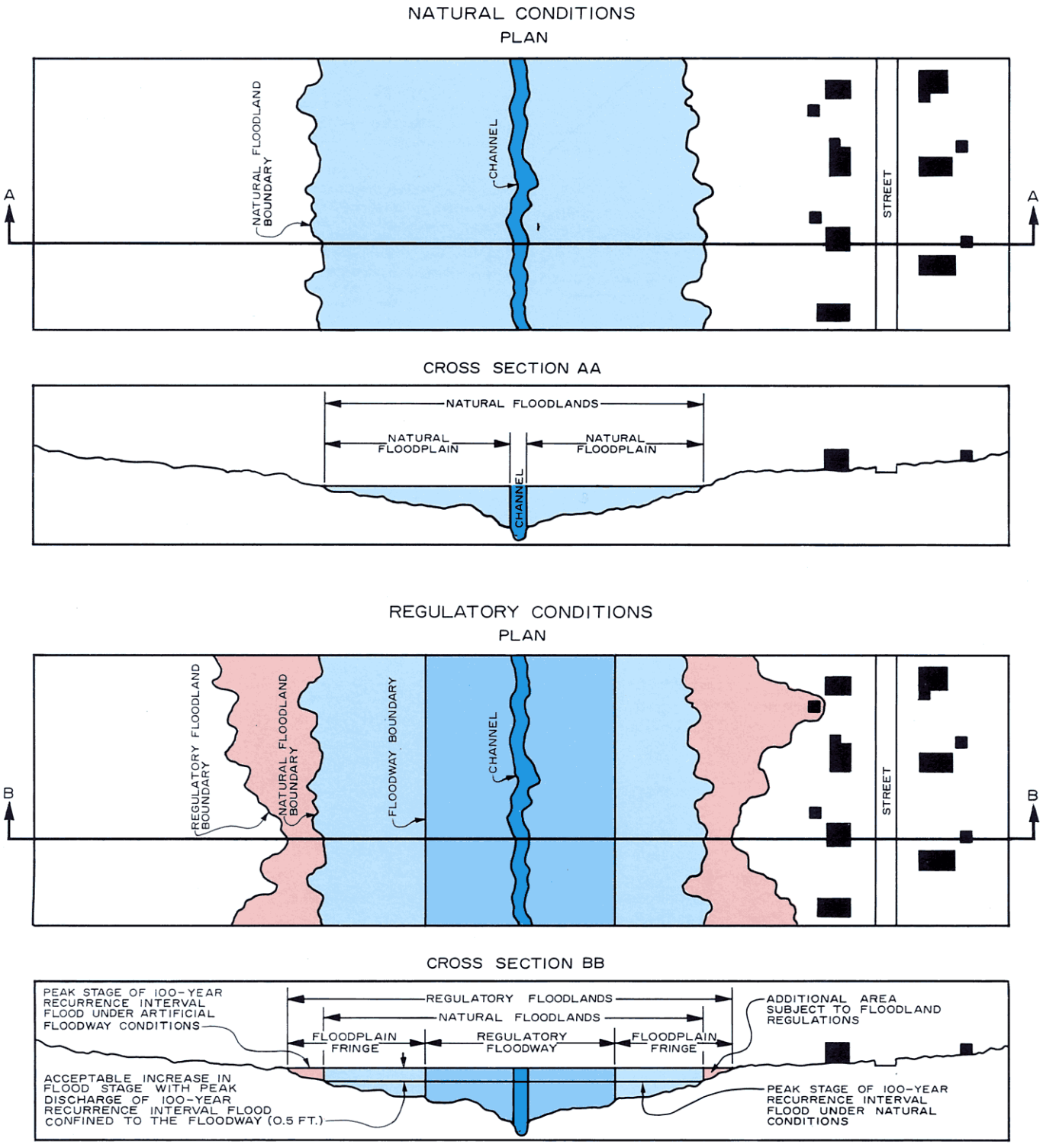


Most of the Region is covered by unconsolidated glacial drift deposited by continental glaciers. This drift attains a thickness in excess of 500 feet in some preglacial valleys. Dolomitic bedrock lies within 20 feet of the surface or is actually exposed as outcrops in areas totaling about 150 square miles. Poorly located residential development with malfunctioning private onsite sewage disposal systems can pollute the sand and gravel aquifer and may also contaminate the shallow dolomite aquifer in areas where it is creviced and covered by thin, permeable glacial deposits.

Source: SEWRPC.

Figure 22

FLOODLAND COMPONENTS UNDER NATURAL AND REGULATORY CONDITIONS



Source: SEWRPC.

Under ideal regulatory conditions, the entire natural floodlands as defined above would be maintained in an open, essentially natural state and, therefore, would not be filled and utilized for incompatible, intensive urban land uses. Conditions permitting an ideal approach to floodland regulation, however, generally occur only in rural areas. In areas which have already been developed for intensive urban use without proper recognition of the flood hazard, a practical regulatory approach must embrace the concept of a floodway. The floodway may be defined as a designated portion of the floodlands that will safely convey the 100-year recurrence interval flood discharge, with small, acceptable upstream and downstream stage increases, generally limited in Wisconsin to 0.5 foot. The regulatory floodway includes the channel. Land use controls applied to the regulatory floodway should recognize that the designated floodway area is not suited for human habitation and should essentially prohibit all fill, structures, and other development that would impair floodwater conveyance by adversely increasing flood stages or velocities.

The floodplain fringe is that remaining portion of the floodlands lying outside of or beyond the floodway. Because the use of a regulatory floodway may result in increases in the stage of a flood of a specified occurrence interval that would occur under natural conditions, the floodplain fringe may include at its very edges areas that would not be subject to inundation under natural conditions, but would be subject to inundation under regulatory floodway conditions and, therefore, come within the scope of necessary floodplain fringe regulation. Normally, flood water depths and velocities are low in the floodplain fringe and, accordingly, filling and urban development may be permitted although regulated so as to minimize flood damages. Under "real world" conditions, the floodplain fringe usually includes many existing buildings constructed in natural floodlands prior to the advent of sound floodland regulations.

Flood hazard data for the numerous streams of the Region—and particularly data on the limits of the natural floodplains of the streams for a flood of a specified recurrence interval—are increasingly being made available for public use by various agencies. The SEWRPC itself provides, as an integral part of its comprehensive watershed studies, definitive data—including the delineation of the limits of the floodplains—on the 10- and 100-year recurrence interval floods for most of the perennial streams in each watershed. The Commission believes that such data are most appropriately developed for an urbanizing Region within the context of an overall comprehensive watershed study, wherein appropriate consideration may be given to the potential effects of changing land use patterns on flood flows and flood hazards, as well as to alternative methods for abating flood damages in those flood-prone areas already committed to urban development. Each Commission comprehensive watershed study, therefore, includes the hydrologic and hydraulic engineering studies necessary for a proper delineation of floodland boundaries for land use regulation and floodland management purposes.

The status of existing flood hazard data in the Region is summarized on Map 5. The Commission has completed comprehensive watershed studies for the Root, Fox, and Milwaukee River watersheds resulting in the delineation of floodlands for about 458 miles of major stream channel, not including stream channels in the Milwaukee River watershed lying outside of the Region in Sheboygan and Fond du Lac Counties. Both 10- and 100-year recurrence interval floodplains have been established for the indicated stream reaches in these watersheds by the Commission. It is important that a flood used to delineate floodlands for land use regulation purposes have a specified recurrence interval so that a sound economic analysis of the benefits and costs and of the advantages and disadvantages of various combinations of land use regulation, public acquisition, and public construction for flood damage abatement and prevention can be fully analyzed.

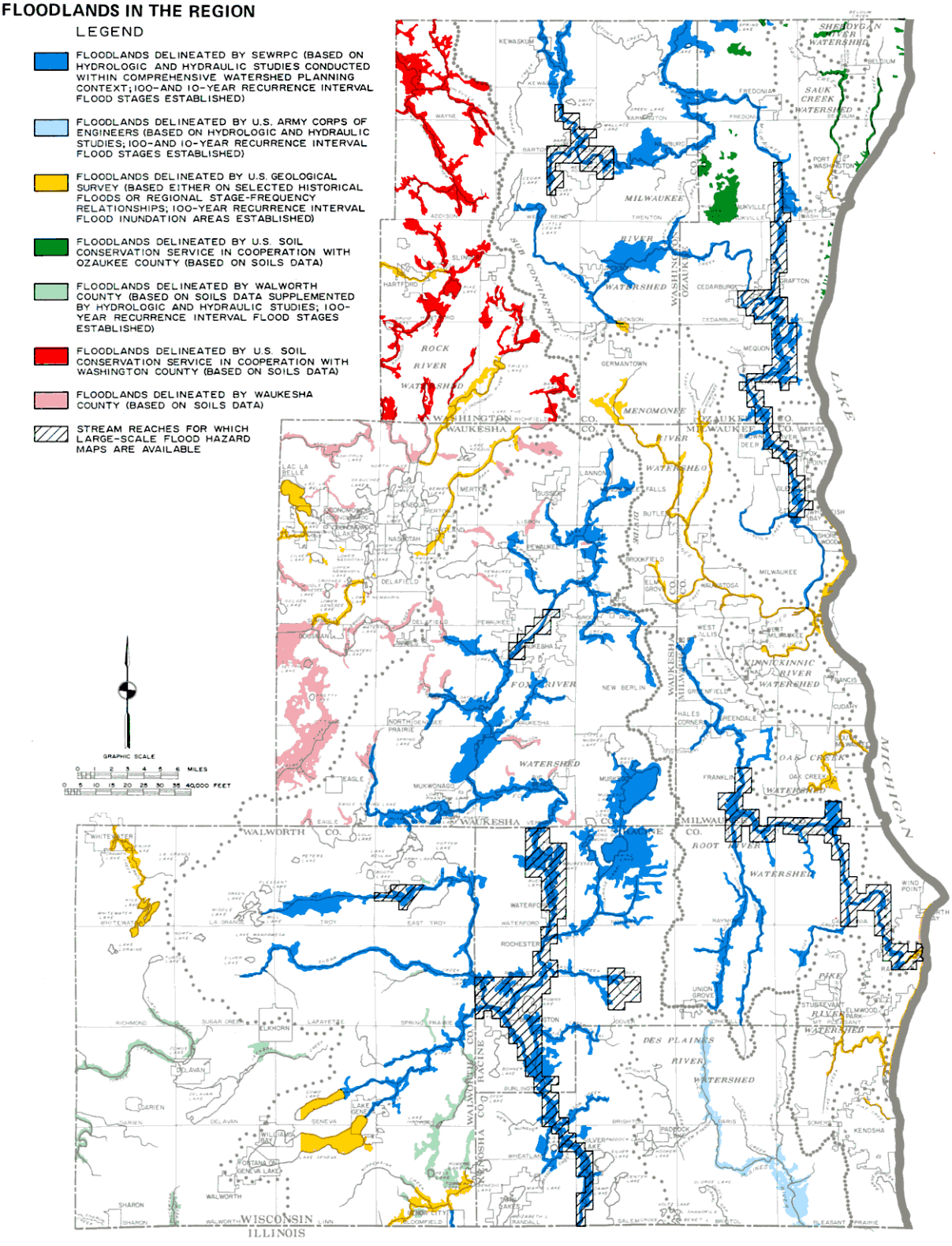
While the Commission is the only agency which has developed flood hazard data for the Region on the basis of comprehensive watershed studies, other federal and local agencies have developed flood hazard data for additional stream reaches within the Region. At the request of the Commission, the U. S. Army Corps of Engineers has developed flood hazard data for about 20 miles of stream channel in the Des Plaines River watershed. The Corps identified the "greater probable" and "intermediate" floods for the Des Plaines River, which approximate the 100-year and 10-year recurrence interval floods, respectively, recommended by the Commission for floodland management purposes. The floodland delineation in the Des Plaines River watershed did not, however, explicitly consider the possible effects of any changes in flood flows due to urbanization or water control facility construction.

The U. S. Geological Survey (USGS) is also authorized to prepare and publish flood inundation maps. The flood inundation lines shown on USGS maps are constructed from selected historic floods and from regional stage frequency analyses, and approximate the limits of the 100-year recurrence interval floodlands. To date, the USGS has developed and published flood hazard data for a number of stream reaches in the Region, totaling about 122 miles of major stream channel.

Several county agencies in the Region have also developed flood hazard data to supplement the data available from federal and regional sources. In Ozaukee County, the county staff and local staff of the U. S. Soil Conservation Service have established regulatory floodplains for about 28 miles of major stream channel, with such delineations based upon interpretations of soil survey data. Similarly, the Washington County staff, also in cooperation with the local staff of the U. S. Soil Conservation Service, has delineated floodplains for about 81 miles of major stream channel based upon soil survey interpretations. In Waukesha County, the county staff has utilized soil interpretations and historical flood data to determine regulatory floodplains for about 93 miles of major stream channel. Finally, in Walworth County, the county staff has used

Map 5

FLOODLANDS IN THE REGION



Delineation of the floodlands of southeastern Wisconsin is extremely important for sound local, as well as regional, planning and development, including housing development. The above map summarizes the status of floodland data in the Region as of the end of 1973. The Regional Planning Commission itself provides, as an integral part of its comprehensive watershed studies, definitive data on the 10- and 100-year recurrence interval floods for most of the perennial streams in each watershed. Other agencies which have to date made flood hazard data available for various stream reaches in the Region are the U. S. Army Corps of Engineers; the U. S. Geological Survey; the U. S. Soil Conservation Service; and county zoning and planning staffs in Ozaukee, Washington, Waukesha, and Walworth Counties. In addition to identifying the stream reaches for which existing flood hazard data in the Region are available, and in further identifying the agency from which the data are available, the above map also shows those stream reaches for which detailed, large-scale flood hazard maps are available from the Commission. These maps are available at scales of either 1" = 100' with 2' contour intervals, or 1" = 200' with 2'-4' contour intervals, and enable substantially more precise delineation of the floodplains to be accomplished.

Source: SEWRPC.

both soil survey data and hydrologic and hydraulic studies, including the establishment of 100-year recurrence interval flood stages, to delineate floodlands along nearly 50 miles of major stream channel. If carefully interpreted and utilized, soil survey data can provide an acceptable approximation of historic floods of record.

The Commission is currently conducting a comprehensive watershed study for the Menomonee River watershed which will provide flood hazard data for about 70 additional miles of major stream channel. In addition, the Commission is developing detailed flood hazard data outside the context of a comprehensive watershed study for about 3.5 miles of major stream channel along the Rubicon River at the request of the City of Hartford. The U. S. Army Corps of Engineers is currently undertaking detailed floodplain information studies along Whitewater Creek and along the Oconomowoc River at the requests of the City of Whitewater and the City of Oconomowoc, respectively. Finally, the U. S. Soil Conservation Service is conducting detailed floodplain information studies in the Pike River watershed, at the request of Racine and Kenosha Counties, and along the Bark River at the request of the Village of Dousman.

Soils

The nature of the soils of the Region has been determined primarily by the interaction over time of the parent glacial deposits covering the Region with the topography, climate, plants, and animals of the Region. Within each soil profile, the effects of these soil-forming factors are reflected in the transformation of soil material in place, chemical removal by wind or water erosion, additions by chemical precipitation or by physical deposition, and transfer of some soil components from one part of the soil profile to another.

Soil Diversity and the Regional Soil Survey: Soil forming factors, particularly topography and the nature of the parent glacial materials, exhibit wide spatial variations in southeastern Wisconsin and, therefore, hundreds of different soil types have developed within the Region. In order to assess the significance of these unusually diverse soil types to sound regional development, the Commission in 1963 negotiated a cooperative agreement with the U. S. Soil Conservation Service under which detailed operational soil surveys were completed for the entire planning region. The results of the soil surveys have been published in SEWRPC Planning Report No. 8, Soils of Southeastern Wisconsin. The regional soil survey has not only resulted in the mapping of the soils within the Region in great detail and the provision of data on the physical, chemical, and biological properties of the soils, but has also provided interpretations of the soil properties for engineering, agricultural, and resource conservation purposes, and for planning for various rural and urban uses, including proper location and design of housing developments.

Soil Characteristics and Properties: Soil characteristics, resulting from the interaction of soil-forming factors and processes, are important to the prediction of soil properties, the making of soil interpretations, and the classification of soils. The principal soil characteristics used in the regional soil survey to describe and interpret soils are soil texture, structure, color, consistence, reaction, slope, and position. Soil texture is an expression of the proportion of sand, silt, and clay-sized particles in the soil mass. It is one of the more important soil characteristics with respect to the suitability of a soil for housing development because of the number of properties and interpretations that are affected by it, including soil permeability, or the relative ease with which water passes through the soil, which is a critical factor in the proper operation of onsite sewage disposal systems, available moisture capacity and fertility holding capacity, soil erodibility, and bearing capacity.

The shape and stability of soil particles in the soil mass is a characteristic expressed as soil structure. This soil characteristic influences, to some degree, the aforementioned soil permeability and erodibility properties of the soil. Soil color is a characteristic used as an indicator of the relative organic matter content and the quality of soil drainage. Consistence is described in terms that indicate resistence to change of form or rupture, and is an expression of the adhesion between soil particles comprising the soil mass.

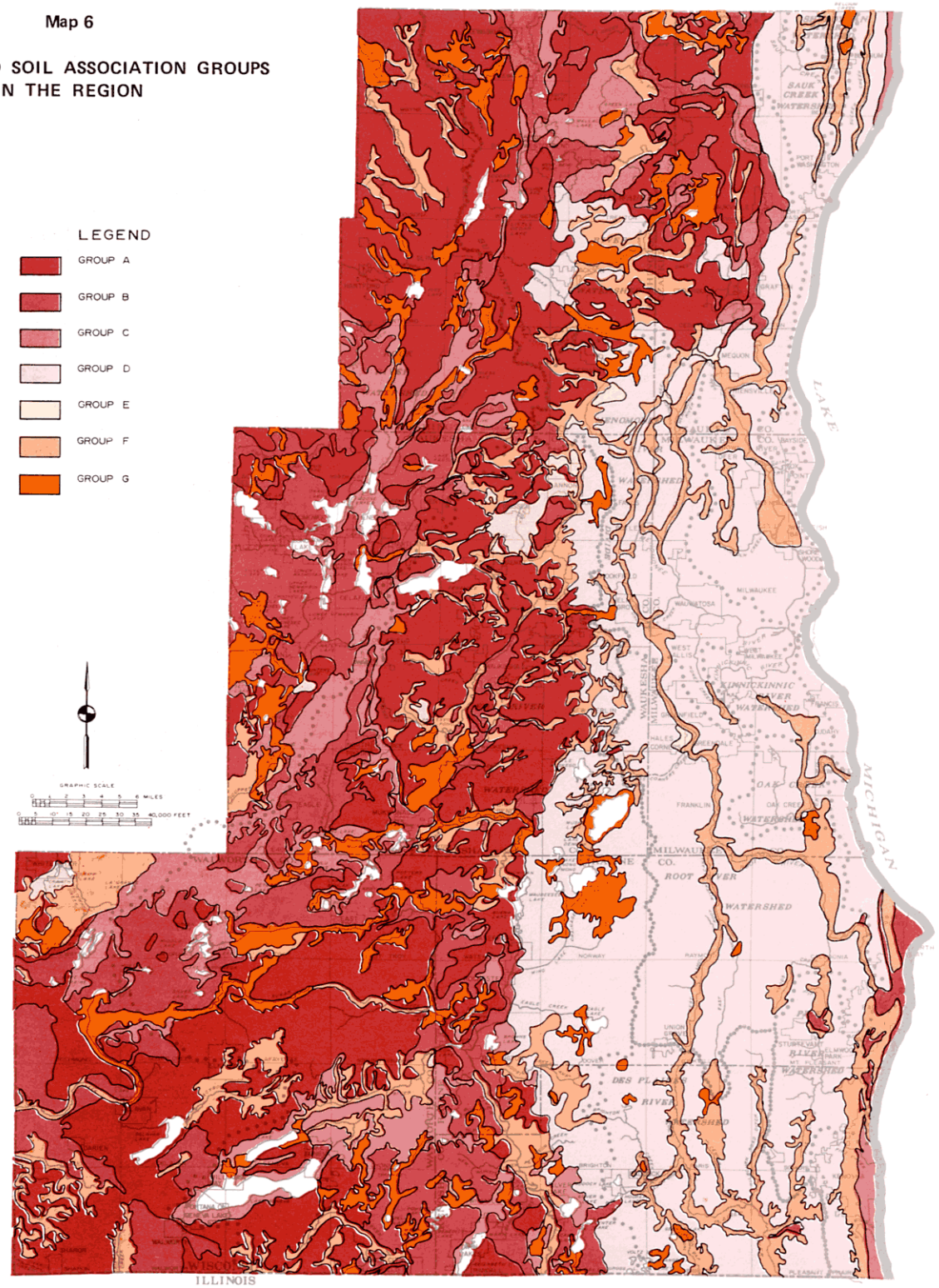
Soil slope is a primary determinant of the amount of runoff that occurs and of the rate at which it occurs; and, therefore, slope is a measure of erosion susceptibility. Slope is also a limiting factor in residential construction activity and in the development and operation of onsite sewage disposal systems. Soil position relative to the surrounding topography is the principal controlling factor in determining the quality of drainage and, therefore, also has important implications for the construction of housing and for the construction and operation of public sanitary sewerage systems and private sanitary sewerage systems to serve residential as well as other areas of development.

Findings of the Regional Soil Survey: Under the regional soil survey, all of the soils of the Region were mapped; their characteristics and properties, as noted above, were identified; and, most important, the data were interpreted so as to provide a detailed description on a consistent, areawide basis of the soil resources of southeastern Wisconsin. The usefulness of generalized soil maps for definitive planning purposes within the Region is severely limited because of the wide range of soil diversity resulting from the Region's glacial history; and, therefore, one of the primary values of the operational soil surveys lies in their detail. Any generalization of the findings of the soil surveys can only be meaningful in light of a full understanding of the complexity of the soil relationships in the Region and of the fact that such a generalization, while useful to a broad identification of general areawide development problems relating to soils, cannot be used in plan preparation and implementation.

Generalized Soil Suitability Interpretations: Map 6 shows, in very generalized form, the major soil relationships existing within the Region based upon seven broad suitability associations. The soils designated on this map as

Map 6

GENERALIZED SOIL ASSOCIATION GROUPS IN THE REGION



As shown on this generalized soil map of the seven-county Southeastern Wisconsin Region, nearly half of the 2,689 square mile Region is covered by soils in groups D, E, F, or G which are generally poorly suited for development with onsite soil absorption sewage disposal systems. Urban development undertaken in disregard of these soil conditions is not only expensive to construct and maintain, but also may create severe environmental problems for the Region. The detailed soil survey completed for the Region in 1966 provides more definitive soils data for use in local, as well as regional, planning and development.

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

Group "A," which cover about 29 percent of the Region, are generally well suited for both agricultural use and urban development. These soils are not only very productive as cropland but have good drainage and foundation characteristics for all types of urban development, including the development of residential areas. This soils group occurs generally in a belt lying between the present westerly limits of intensive urban development and the easterly limits of the Kettle Moraine. It is interesting to note that this broad soils group does not occur at all in Milwaukee County and occurs to only a very limited extent in Ozaukee, Kenosha, and Racine Counties.

The soils designated as Group "B" generally have a sandy-gravelly subsurface and are well suited to both agricultural use and urban development with septic tank sewage disposal systems. Approximately 14 percent of the Region is covered by this general soils group, which occurs in the Kettle Moraine and the Recessional Moraine areas of the Region and to a very limited extent along the Lake Michigan shore.

The soils designated as Group "C" are fair to poorly suited for agricultural use. Their suitability for urban development is limited by characteristically steep slopes. These soils are suited for very large lot residential development which does not disturb the natural topography. Approximately 8 percent of the Region is covered by this soils group, which is prevalent in the Kettle Moraine and the Recessional Moraine areas of the Region.

The soils designated as Group "D" are generally well suited for agricultural use but generally poorly suited for urban development requiring the use of onsite septic tank sewage disposal systems. Urban development on these soils generally requires a high level of municipal improvements and careful attention to storm water drainage. Nearly 31 percent of the Region is covered by this general soils group, which occurs primarily between the Lake Michigan shore and the westerly limits of present urban development. Most of the existing urban development in the Region has occurred on the soils in this group.

The soils designated as Group "E" are generally not well suited for either cropland or urban development. Bedrock normally occurs within four feet of the surface, and bedrock outcrops are common. Good gravel and rock deposits, which are suitable for commercial development, can be found in this group. Approximately 1 percent of the Region is covered by this group, which occurs primarily in isolated pockets throughout the Region.

The soils designated as Group "F" are generally poorly drained, have a high water table, and are interspersed with areas of peat, muck, and other organic soils. Approximately 11 percent of the Region is covered by this group, which generally occurs along streams and watercourses of the Region; and for this reason the soils in this group are commonly subject to flooding. These characteristics generally preclude their use for nearly all forms of development except limited agricultural, wetland, forest, wildlife conservation, and recreational uses.

The soils designated as Group "G" are peat and muck soils generally unsuited for urban development of any kind. These areas, when left in a natural state, are ideally suited for wildlife habitat and if properly drained are suited for certain types of agricultural use. Approximately 6 percent of the Region is covered by this soils group, which occurs in scattered corridors and pockets throughout the Region.

It is important to note that, irrespective of the generalized groupings described above, analysis of the detailed soil survey data conclusively indicates that soils having questionable characteristics for onsite sewage disposal are widespread throughout the Region. Approximately 40 percent of the estimated 125 soils series[4] occurring within the Region have been found to be troublesome in this respect. Urban development undertaken in disregard of these soil conditions has actually created severe environmental problems within the Region, with the result that the State Board of Health has, from time to time, placed restrictions on the development of new subdivision plats in certain areas of the Region and has issued orders for the installation of public sanitary sewer facilities in other areas originally developed with onsite soil absorption sewage disposal systems. It should also be noted that soils poorly suited or unsuited for urban development, even if served by public sewer, are also widespread throughout the Region. These include generally wet soils which either have a high water table, a high water holding capacity, or are poorly drained. Urban development on these soils types is not only expensive to construct initially but expensive to maintain. Again, it should be stressed that the widespread occurrence of soils having questionable characteristics for certain types of urban development, coupled with the highly complex soil relationships, indicates the need for basing regional and local development plans, including a regional housing plan, on the results of the detailed soil surveys rather than on any generalized soils data.

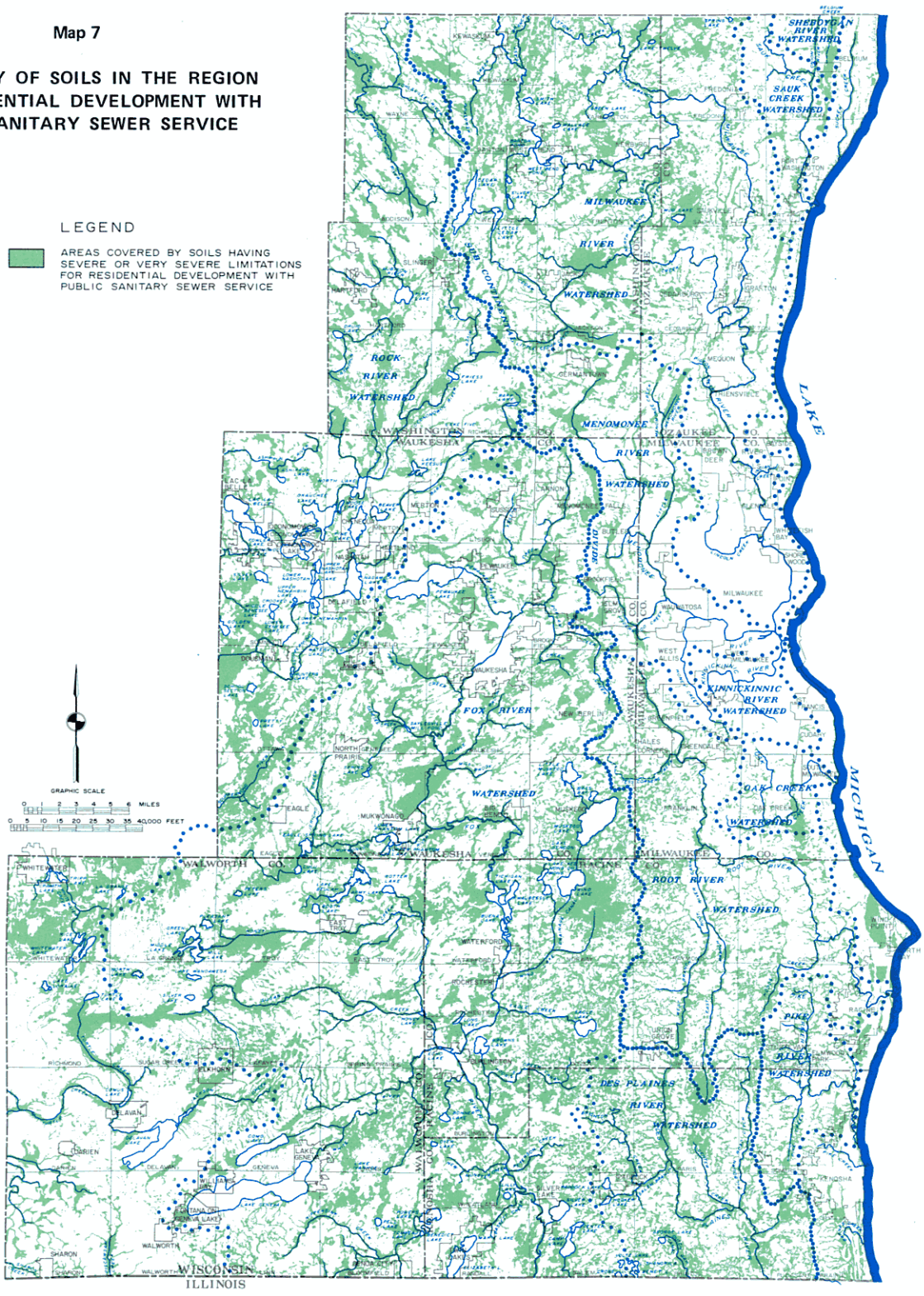
Detailed Soil Suitability Interpretations: Particularly important to housing development are the soil suitability interpretations for specified types of urban development. These are: residential development with public sanitary sewer service, residential development without public sanitary sewer service on lots smaller than one acre in size, and residential development without public sanitary sewer service on lots one acre or larger in size. Some of the more important considerations in determining soil suitability for urban development include depth to bedrock, depth of water table, likelihood of flooding, soil permeability, and slope.

On the basis of the detailed soil surveys, it is evident that much of the Southeastern Wisconsin Region exhibits severe or very severe limitations for specific types of urban development. As illustrated on Map 7, approximately 716 square miles, or about 27 percent of the

[4] *A soil series is defined as a group of soils developed from a common parent material and having horizons with similar characteristics, except for the texture of the surface soil.*

Map 7

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



A recognition of the limitations inherent in the soil resource base is essential to the sound urban and rural development of the Region. About 716 square miles, or about 27 percent of the area of the Region, are covered by soils which are poorly suited for residential development with public sanitary sewer service or poorly suited for residential development of any kind. These soils, which include wet soils having a high water table or poor drainage, organic soils which are poorly drained and provide poor foundation support, and soils which have a flood hazard, are especially prevalent in the riverine areas of the Region.

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

Region, are covered by soils which are poorly suited for residential development with public sanitary sewer service or poorly suited for residential development of any kind. Approximately 1,637 square miles, or about 61 percent of the Region, are covered by soils which are poorly suited for residential development without public sanitary sewer service on lots smaller than one acre in size (see Map 8). As illustrated on Map 9, approximately 1,181 square miles, or about 44 percent of the Region, are covered by soils poorly suited for residential development without public sanitary sewer service on lots one acre or larger in size. It should be noted that the use suitability ratings on which these maps are based are empirical, being based upon the performance of similar soils elsewhere for the specified uses, permeability, high shrink-swell potential, low bearing capacity, frost heave, and frequent flood overflow.

Vegetation

The vegetation cover of the Region as it existed shortly after the settlement of the Region by Europeans consisted primarily of woodlands, with the predominant woodland types being maple, oak, and beech. This vegetation cover has been changed quite significantly by man in his efforts to provide food and fiber for a growing Region, state, and nation; and only small areas of virgin timber and virgin prairie exist within the Region today. Vegetational patterns in southeastern Wisconsin were originally determined by natural factors, such as climate, glacial deposits, soil type, fire, topography, and drainage characteristics; but man, since his settlement of the Region, has increasingly influenced the quantity and quality of woodlands, wetlands, and aquatic vegetation. Woodlands comprised 123,822 acres, or approximately 7 percent, of the regional land area in 1970; and, in addition to commercial value, have significant aesthetic value when viewed in conjunction with the beauty of the Region's lakes, streams, and glacial land forms. Wetlands, which covered about 131,909 acres, or nearly 8 percent of the seven-county planning Region in 1970, attenuate peak flood flows, protect stream water quality by serving as nutrient and sediment traps, and provide necessary wildlife habitat.

Environmental Corridors

One of the most important tasks which was completed as part of the initial regional land use planning effort was the identification and delineation of those areas of the Region in which concentrations of scenic, recreational, and historical resources occur and which, therefore, should be preserved and protected from urban encroachment. Such areas normally include one or more of the following seven elements of the natural resource base which are essential to the maintenance of both the ecological balance and natural beauty of the Region: lakes, rivers, and streams and their associated floodlands; wetlands; forests and woodlands; wildlife habitat areas; rugged terrain and high-relief topography; significant geological formations and physiographic features; and wet or poorly drained soils.

Although the foregoing elements comprise the integral parts of the natural resource base, there are four additional elements which, although not a part of the natural resource base per se, are closely related to, or centered on, that base and are a determining factor in identifying and delineating areas with scenic, recreational, and historic value. These additional elements are: existing outdoor recreation sites; potential outdoor recreation and related open space sites; historic sites and structures; and significant scenic areas and vistas. The delineation of these natural resource and natural resource-related elements on a map of the Region results in an essentially lineal pattern encompassed in narrow, elongated areas which have been termed "environmental corridors."

There are two types of environmental corridors defined by the Commission. Primary environmental corridors are those areas which encompass three or more of the aforementioned eleven environmental elements, and secondary environmental corridors are contiguous areas exhibiting one or two of the eleven elements. The primary and secondary environmental corridors of southeastern Wisconsin are shown on Map 10. The primary environmental corridors are found to occupy approximately 486 square miles of land and inland water area, or only about 18 percent of the total area of the Region. The primary environmental corridors, however, contain almost all of the remaining high-value wildlife habitat areas and woodlands within the Region in addition to most of the wetlands, lakes and streams, and associated undeveloped shorelands and floodlands. These corridors also contain many of the best remaining potential park sites. The primary environmental corridors are, in effect, a composite of the best of the individual elements of the natural resource base of southeastern Wisconsin. Development practices within southeastern Wisconsin have resulted in the encroachment of urban development into the primary environmental corridors. Unfortunately, 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 problems having costly areawide effects.

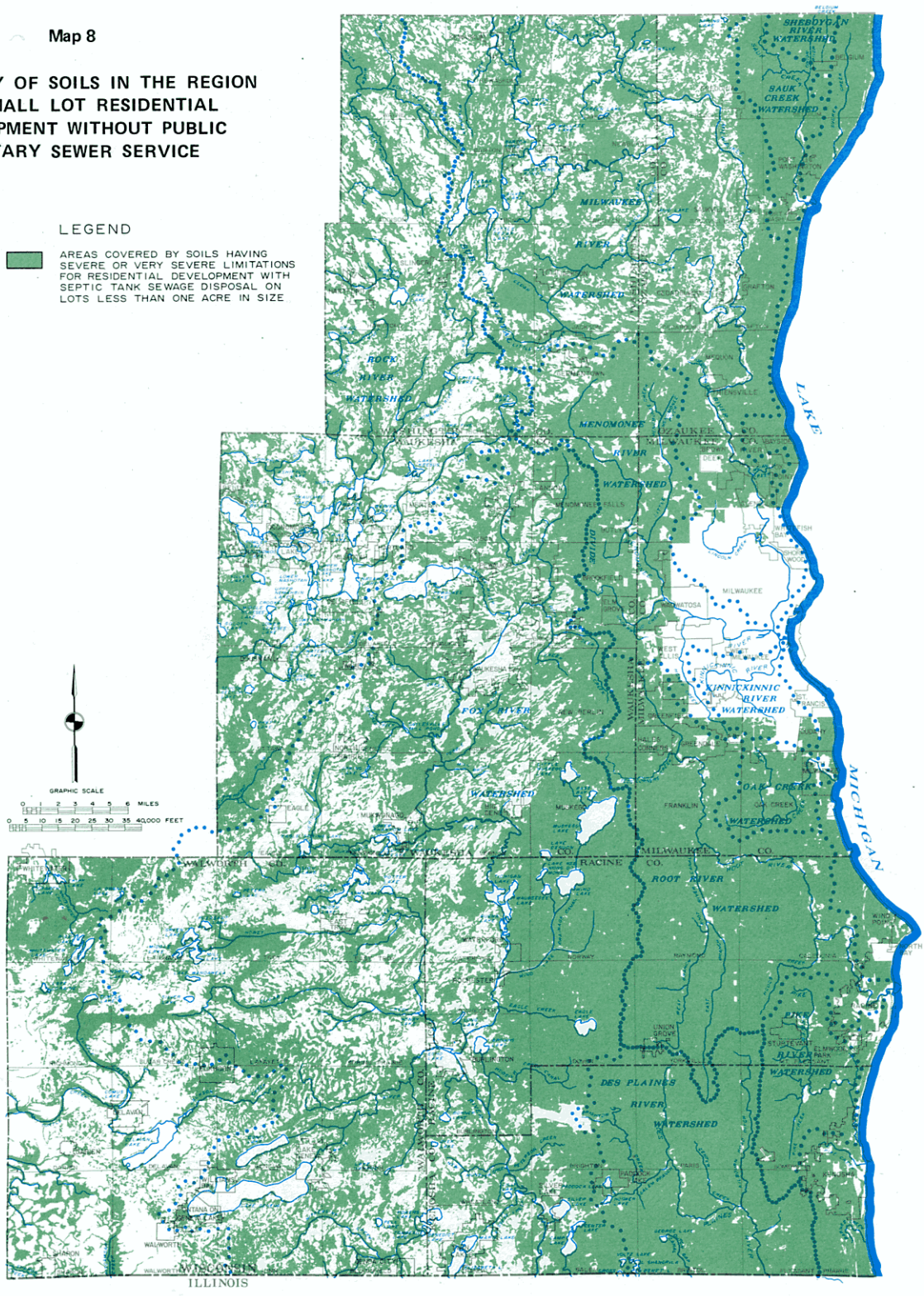
The protection of the primary environmental corridors from further intrusion by incompatible land uses and consequent degradation or destruction is one of the most important objectives of the adopted regional land use plan. These corridors should be considered inviolate; and their preservation in a natural state or in park and related open space uses, including limited agricultural and country estate type uses, will serve to maintain a high level of environmental quality in the Region and to protect the unique natural beauty of the Region. Secondary environmental corridors should be at least partially retained in open space by using these corridors as the basis for greenways, drainageways, and local park and open space sites in the developing areas of the planning Region.

LAND USE

The type and intensity of land use in a particular area determine to a considerable extent the feasibility of the location and character of new housing development and redevelopment. An inventory of existing land use is, therefore, essential to the sound selection of possible sites for housing development. Moreover, such an inventory,

Map 8

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

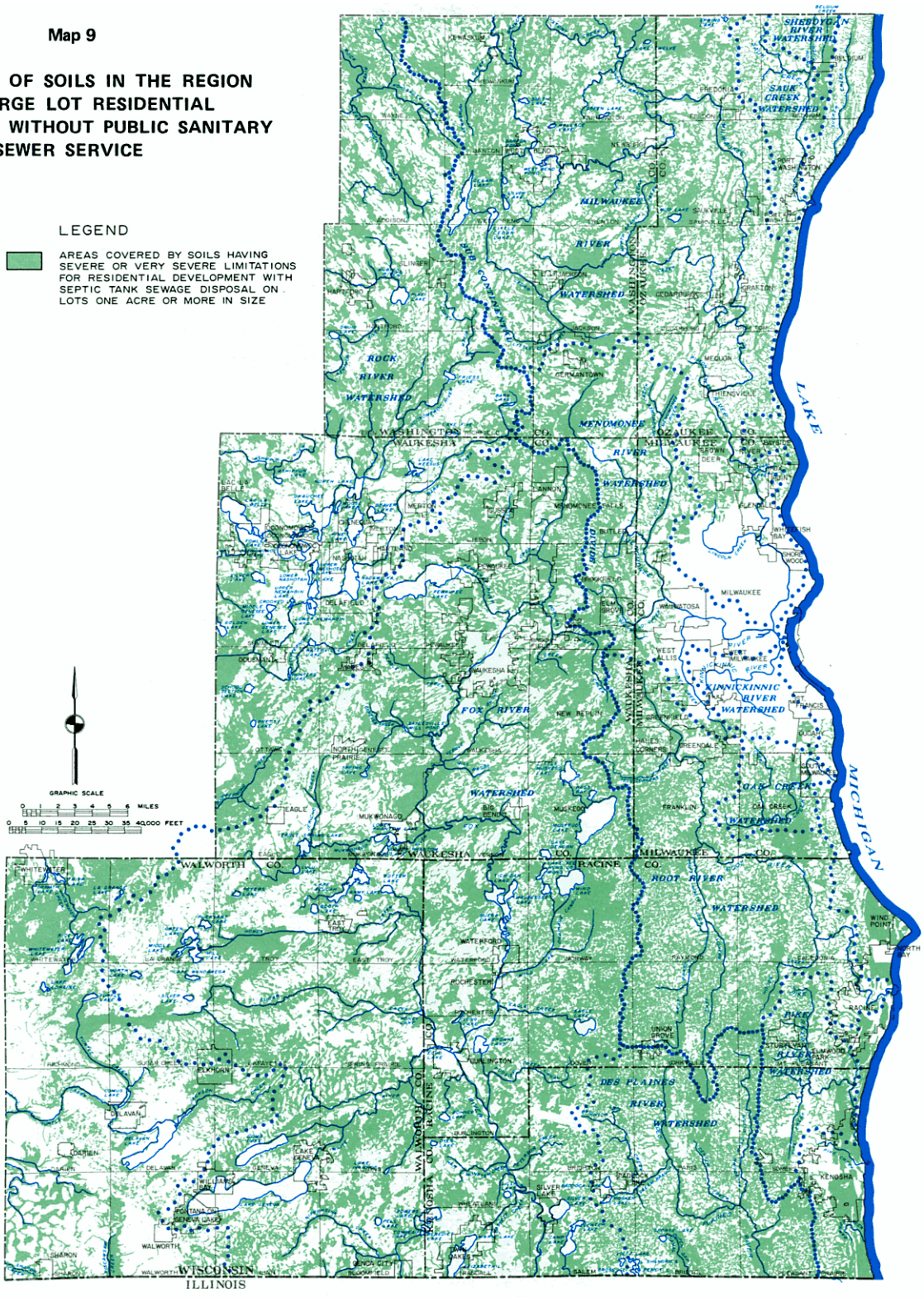


Approximately 1,637 square miles, or about 61 percent of the area of the Region, are covered by soils which are poorly suited for residential development on lots having an area smaller than one acre and not served by public sanitary sewerage facilities. Reliance on septic tank sewage disposal systems in these areas, which are covered by relatively impervious soils or are subject to seasonally high water tables, can only result in eventual malfunctioning of such systems and the consequent intensification of water pollution and public health problems in the Region.

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

Map 9

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

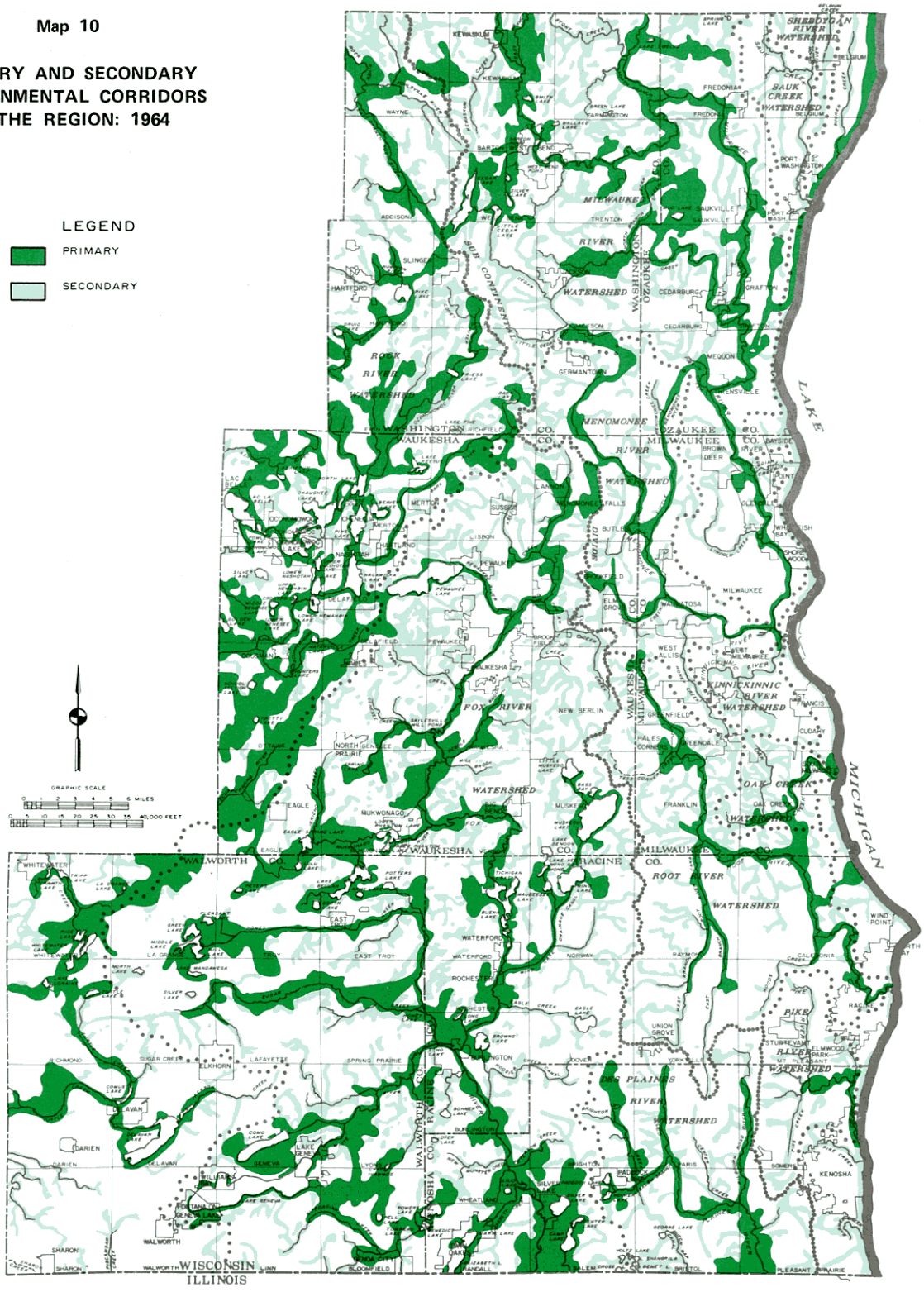


Approximately 1,181 square miles, or about 44 percent of the area of the Region, are covered by soils poorly suited for residential development on lots having an area of one acre or more and not served by public sanitary sewerage facilities. The inherent limitations of these soils for septic tank sewage disposal systems cannot be overcome simply by the provision of larger lots, and the use of such systems on these soils which cannot absorb the sewage effluent ultimately results in surface ponding and runoff of partially treated wastes into nearby watercourses.

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

Map 10

PRIMARY AND SECONDARY ENVIRONMENTAL CORRIDORS IN THE REGION: 1964



Approximately one-sixth of the Region lies within primary environmental corridors, which encompass almost all of the best remaining woodlands and wetlands, the best remaining wildlife habitat areas, almost all of the streams and lakes and associated undeveloped floodlands and shorelands, as well as many of the significant topographical, geological, and historical features remaining in the Region. The preservation of these corridors in compatible open uses is essential to maintaining the overall quality of the environment within the Region.

Source: SEWRPC.

when coupled with a knowledge of historical development patterns, provides a good basis for understanding urban development patterns. Thus, attention is focused herein upon historical, as well as existing, land use development and upon regionwide factors influencing land use.

Historical Growth Patterns

The first permanent European settlement in the Region was established in 1795 as a trading post on the east side of the Milwaukee River, just north of what is now Wisconsin Avenue in the City of Milwaukee. The origins of most of the other major cities and villages within the Region can be traced to the similar establishment of such trading posts or to the establishment of certain types of agricultural services, such as saw and grist mills. The location of these earliest urban activities was heavily influenced by water power and water transportation needs. The rapid settlement by Europeans of what is now the Southeastern Wisconsin Region had its beginning following the Indian cession of 1829 and 1833, which transferred to the federal government the ownership of all the lands that now compose the State of Wisconsin south of the Fox River and east of the Wisconsin River. Federal surveyors, after the close of the Blackhawk War of 1832, began to survey and subdivide the federal lands; and by 1836 the U. S. Public Land Surveys had been essentially completed in southeastern Wisconsin. Completion of the U. S. Public Land Survey in the Region and subsequent sale of the public lands brought many settlers from New England, Germany, Austria, and Scandinavia. Initial urban development occurred along the Lake Michigan shoreline at the ports of Milwaukee, Port Washington, Racine, and Southport (now Kenosha), as these settlements were more directly accessible to immigration from the East Coast through the Erie Canal-Great Lakes transportation route. By 1850 there were more than 113,000 people in the Region, and the accompanying historical development map indicates the many scattered urban developments which existed in the Region at the time (see Map 11).

The amount of land devoted to urban development within the Region has increased steadily since 1850. Over the 100-year period extending from 1850 to 1950, urban development within the Region occurred in relatively tight, concentric rings outward from the established urban centers of the Region, a pattern resembling the annual growth rings of a tree. A very dramatic change in the pattern of urban development within the Region, however, occurred in about 1950. From 1950 to 1963, while the regional population increased by about 30 percent, or a third of a million persons, the amount of land devoted to urban use increased by almost 150 percent, or by about 202 square miles. Urban development became discontinuous and highly diffused, the term "urban sprawl" being quite descriptive of this more recent pattern of urban development within the Region. This pattern continued from 1963 to 1970, during which an additional 96 square miles of land were committed to urban use within the Region, representing a rate of approximately 14 square miles per year. Of that 96 square miles, about 60 square miles were actually converted from rural to urban use, with about 36 square miles remaining in rural or open land uses but surrounded and encroached upon by urban uses to the extent that this area must be considered to have become effectively committed to urban development.

Under this type of diffused urbanization, the entire seven-county Region is becoming a single mixed rural-urban complex. Many once isolated and independent communities are growing together, and urban development outward from the Milwaukee area is spilling over the subcontinental divide which traverses the Region into the Illinois-Fox watershed.

The influence of the amenities afforded by certain elements of the natural resource base upon the pattern of urban development within the Region is clearly indicated on Map 11 by the pattern of development ringing the shorelines of the many inland lakes within the Region, as well as the urban development bordering the shoreline of Lake Michigan. Although much of this lake-related development originally consisted of summer residences, most of these have been converted to year-round residences; and new lake-oriented development has been almost entirely of a year-round residential nature. This lake-oriented urban development within the Region has created certain serious lake water quality problems and holds important implications for the provision of decent, safe, and sanitary housing.

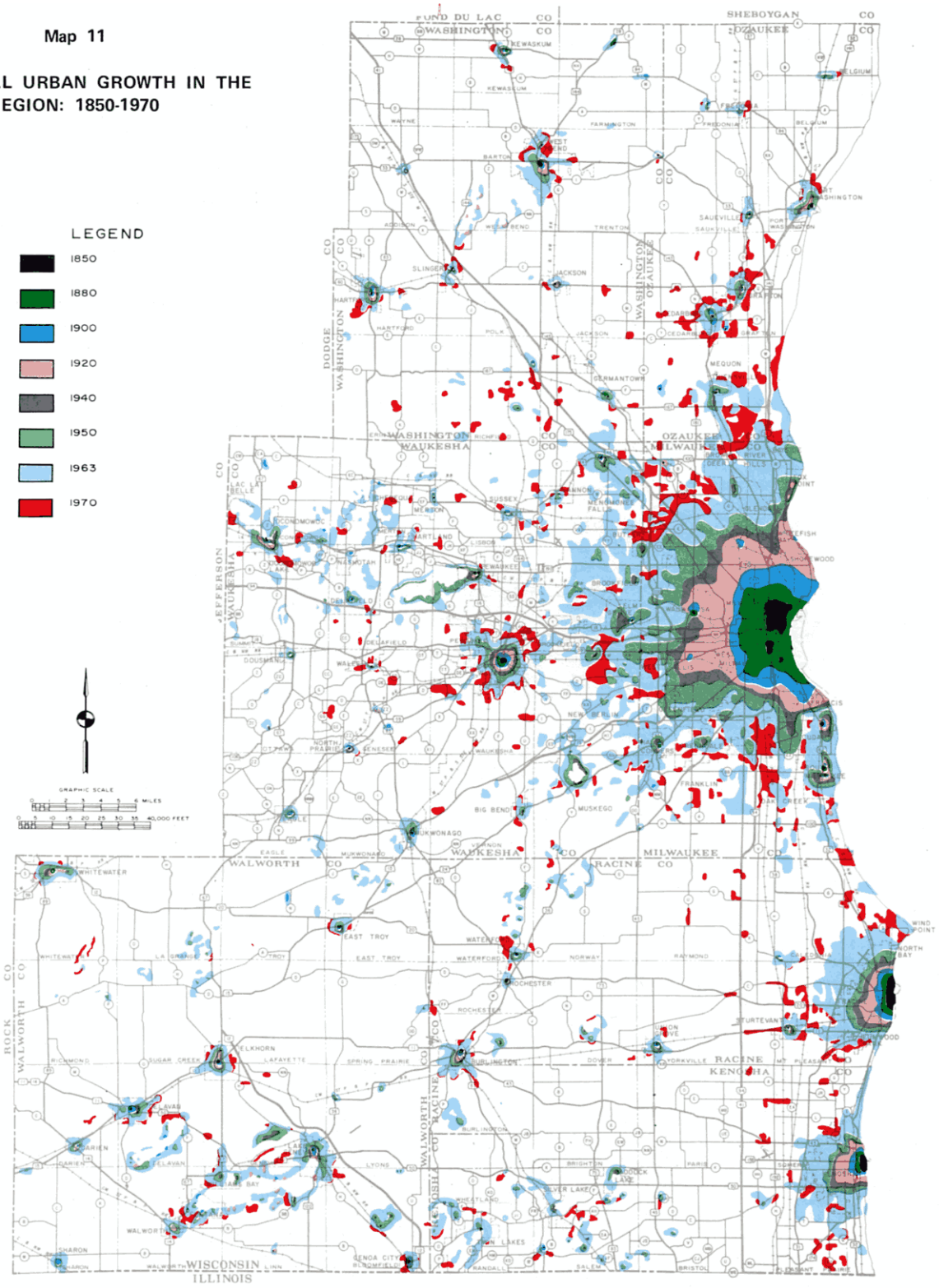
Historical Density Trends

The changes in population density within the Region from 1850 to 1970 are also shown in Table 32. During this 120-year period, the population of the Region increased nearly 15-fold, from 113,389 persons to 1,756,369 persons, while the amount of land devoted to urban use increased 100-fold, from 4 square miles to nearly 400 square miles. Overall population densities within the Region increased steadily from 42 persons per square mile in 1850 to 653 persons per square mile in 1970. Overall population densities within the developed urban area of the Region, however, have exhibited a quite different trend. Such population densities increased steadily from 7,156 persons per square mile in 1850 to a peak of 11,346 persons per square mile in 1920. Urban population densities then began a steady decline to a level of 8,544 persons per square mile in 1950. After 1950, urban population densities declined even more sharply to about 4,800 persons per square mile in 1963 and continued to decline to approximately 4,350 persons per square mile in 1970. This continued decline in urban population density has important implications for the provision of many urban facilities and services related to housing, including transportation, sewerage, and water supply.

These increases in population and urban area and decreases in population density were accompanied by significant changes in the way of life within the Region. Widespread urban development in the rural-urban fringe areas of the Region well beyond the historic central cities and their older suburbs is a fairly recent phenomenon. In this area residents can enjoy many of the amenities of rural life, yet also avail themselves of a wide variety of urban services, including employment in urban industries.

Map 11

HISTORICAL URBAN GROWTH IN THE REGION: 1850-1970



Urban development within the Region occurred in a fairly regular pattern until about 1950, forming concentric rings of relatively high-density urban development contiguous to, and outward from, the existing urban areas and long-established mass transit, utility, and community facility systems. Soon after World War II, however, the character of urban growth began to change to a much more diffused pattern of urban development, with relatively low densities and a high proliferation of clusters of noncontiguous development. Between 1963 and 1970, the sprawl pattern continued, with an additional 96 square miles of land committed to urban use within the Region, representing a rate of about 14 square miles per year.

Source: SEWRPC.

Table 32

CHANGES IN POPULATION DENSITY IN THE REGION: 1850-1970

	Population					Area (Square Miles)		Persons Per Square Mile	
	Urban		Rural						
Year	Number	Percent of Total	Number	Percent of Total	Total	Urban	Total	Urban	Total
1850	28,623	25.2	84,766	74.8	113,389	4	2,689	7,155.8	42.2
1880	139,509	50.3	137,610	49.7	277,119	18	2,689	7,750.5	103.1
1900	354,082	70.5	147,726	29.5	501,808	37	2,689	9,569.8	186.6
1920	635,376	81.0	148,305	19.0	783,681	56	2,689	11,346.0	291.4
1940*	996,535	93.3	76,164	6.7	1,067,699	90	2,689	11,072.6	397.1
1950*	1,179,084	95.0	61,534	5.0	1,240,618	138	2,689	8,544.1	461.4
1963*	1,634,200	97.6	40,100	2.4	1,674,300	340	2,689	4,806.5	619.2
1970*	1,728,949	98.4	27,420	1.6	1,756,369	397	2,689	4,355.0	653.2

The "rural-nonfarm" population is included in the urban total.

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

Such widespread urban development, however, serves to intensify certain long-standing—and to create certain new—environmental and developmental problems of an unprecedented complexity and scale.

Existing Land Use

The spatial distribution of land uses existing within the Region (April 1970) is shown graphically on Map 12. This map provides a striking picture of existing regional development at a given point in time, and its study can provide many valuable insights into an understanding of regional activity and development and of the areawide problems related thereto. The absolute and proportional areas presently devoted to each major land use category within the Region are summarized by county in Table 33.

Although southeastern Wisconsin is a highly urbanized Region, less than 20 percent of its total area is presently devoted to urban type land uses. The largest single land use category within the Region is still agriculture, which presently occupies about 60 percent of the total area. The next largest single land use category is the water and wetland group, which occupies about 10 percent of the total area, and open lands, which presently occupy about 10 percent of the total area of the Region. Therefore, more than 80 percent of the Region is presently devoted to agriculture, other open lands, or water or wetlands.

The "urban" type land use occupying the greatest area is residential, which presently accounts for about 9 percent of the total area of the Region. Residential use, however, accounts for about 47 percent of the urban type land uses. A close second is the use category of transportation, utilities, and communications, which accounts for about 6 percent of the total area of the Region, and about 33 percent of the urban type land uses. The very small amount and proportion of land presently devoted to the urban economic activities, which are so important to the support of regional growth and development, are both surprising and significant, with the total land area presently devoted to commercial, manufacturing, and wholesaling functions within the Region, exclusive of onsite parking, amounting to only 16,554 acres, or 1 percent of the total land area of the Region and about 2 percent of the urban type land uses.

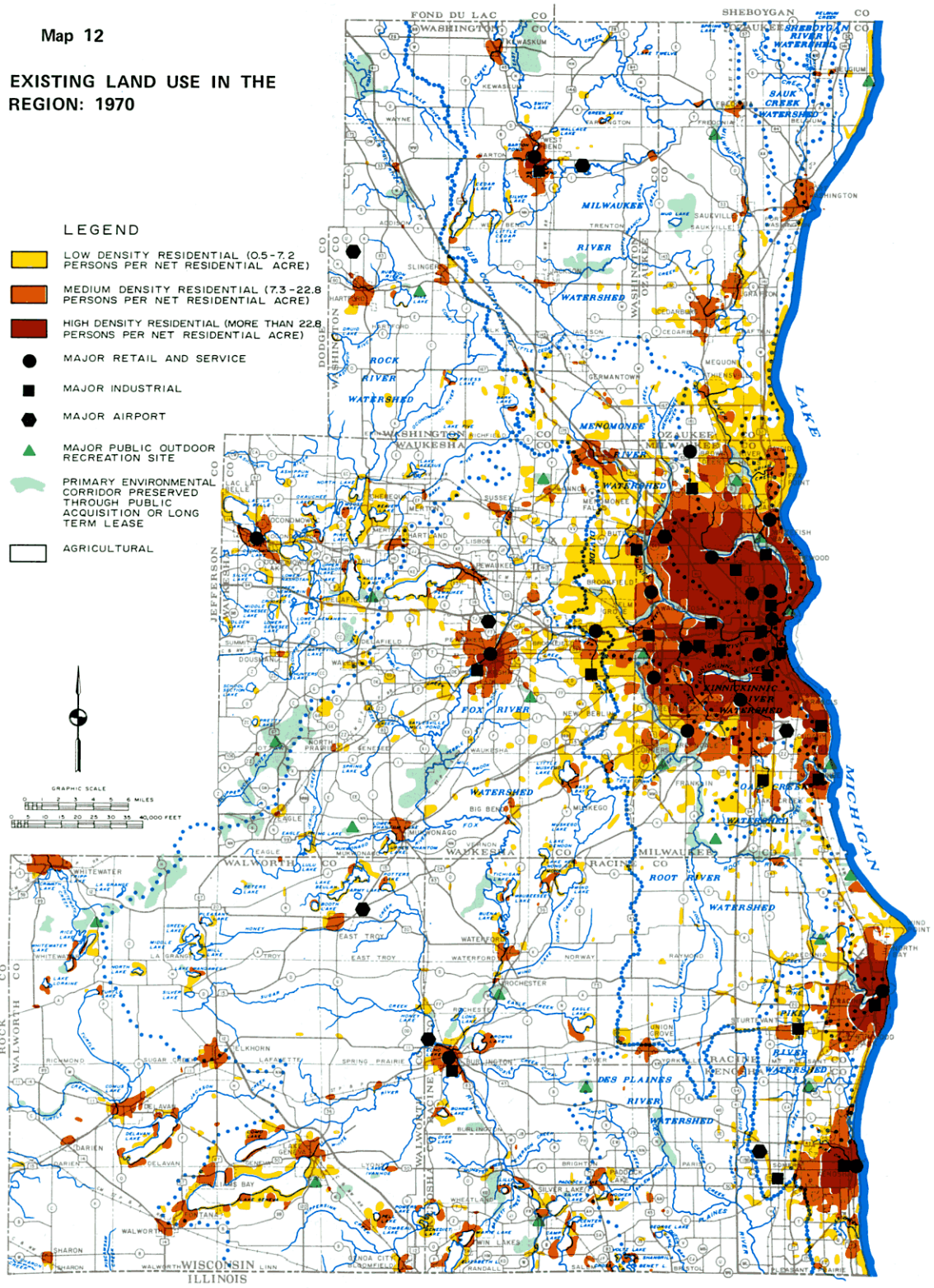
Residential: The residential land use category of the inventory included and identified both land actually occupied by a residence, and vacant land which was either under development for residential use or immediately available for such use. The latter category included vacant building sites between existing residences and improved but still vacant residential subdivisions.

At the time of the 1970 land use inventory, there were 156,281 acres of residential land in the Region, representing about 9 percent of the total area of the Region. Table 34 details the amounts and relative proportions of land devoted to the different types of residential use. The largest land consumer in this group is the single-family detached residence, which occupies about 78 percent of the total residential land area in the Region. Lands under residential development accounted for almost 16 percent of the total, while two-family residences accounted for about 4 percent of the total. Mobile homes and multi-family residences combined occupied about 2 percent of the total residential land in the Region.

Commercial: The commercial land use category includes all retail and service type commercial uses, including both local and regional shopping centers, highway-oriented commercial areas, and professional and executive offices, excluding, however, onsite parking of 10 or more spaces. There are presently 6,517 acres of land, or less than 1 percent of the regional total, devoted to this land use category.

Map 12

GENERALIZED EXISTING LAND USE IN THE REGION: 1970



This map summarizes the spatial distribution of land uses existing within the Region as of April 1970. Although southeastern Wisconsin is a highly urbanized Region, less than 20 percent of its total area is presently devoted to urban type land uses. Agriculture, while declining in economic importance within the Region, still occupies 60 percent of the total land use in the Region, with the remaining 20 percent occupied by water, woodlands, and wetlands.

Source: SEWRPC.

Table 33

DISTRIBUTION OF LAND USE IN THE REGION BY COUNTY: 1970

County	Land Use[a]								
	Residential[b]	Commercial	Industrial[c]	Transportation[d]	Governmental[e]	Water and Wetlands	Open Lands[f]	Agricultural	Total
Kenosha									
Acres. . .	13,477	504	811	8,927	4,287	19,325	16,834	113,935	178,100
Percent . .	7.6	0.3	0.5	5.0	2.4	10.8	9.4	64.0	100.0
Milwaukee									
Acres. . .	45,633	2,875	4,898	35,431	19,185	3,550	15,042	28,448	155,062
Percent . .	29.4	1.9	3.2	22.8	12.4	2.3	9.7	18.3	100.0
Ozaukee									
Acres. . .	12,321	330	444	8,054	2,802	14,865	10,717	100,480	150,013
Percent . .	8.2	0.2	0.3	5.4	1.9	9.9	7.1	67.0	100.0
Racine									
Acres. . .	16,625	575	1,099	12,442	4,605	17,683	17,391	147,142	217,562
Percent . .	7.7	0.3	0.5	5.7	2.1	8.1	8.0	67.6	100.0
Walworth									
Acres. . .	13,422	593	827	12,020	5,822	39,074	36,498	261,726	369,982
Percent . .	3.6	0.2	0.2	3.2	1.6	10.5	9.9	70.8	100.0
Washington									
Acres. . .	11,525	299	434	11,286	2,738	35,705	30,278	186,469	278,734
Percent . .	4.1	0.1	0.2	4.0	1.0	12.8	10.9	66.9	100.0
Waukesha									
Acres. . .	43,278	1,341	1,524	21,292	9,752	49,676	43,343	201,441	371,647
Percent . .	11.6	0.4	0.4	5.7	2.6	13.4	11.7	54.2	100.0
Region									
Acres. . .	156,281	6,517	10,037	109,452	49,191	179,878	170,103	1,039,641	1,721,100
Percent . .	9.1	0.4	0.6	6.4	2.8	10.4	9.9	60.4	100.0

[a] *The nine major land use categories as inventoried were: residential, retail and service, wholesale and storage, manufacturing, transportation, institutional and governmental, recreational, agricultural, and open land and water. These categories have been rearranged for presentation and analysis purposes.*

[b] *Includes residential areas developed and under development.*

[c] *Includes all manufacturing, wholesaling, and storage.*

[d] *Includes utilities, communication facilities, and off-street parking of over 10 spaces.*

[e] *Includes institutional and active recreational areas.*

[f] *Includes woodlands, open pits, and quarries.*

Source: SEWRPC.

Table 34

RESIDENTIAL LAND USE IN THE REGION BY TYPE: 1970

Type of Residential Use	Acres	Percent of Total
Single-family	122,521	78.4
Two-family	5,574	3.6
Multi-family (less than 4 stories) . . .	2,969	1.9
Multi-family (4 or more stories) . . .	118	0.1
Mobile Homes	515	0.3
Residential Land Under Development .	24,584	15.7
Total	156,281	100.0

Source: SEWRPC.

Industrial: This land use category includes all manufacturing activities, wholesaling offices, warehouses, and storage yards but excludes onsite parking of 10 or more spaces. There are presently 10,037 acres of land, or less than 1 percent of the regional total, devoted to this land use category.

As previously discussed in Chapter III of this report, a trend in the location of industrial activity within the Region has developed between 1963 and 1970, with industrial development occurring throughout the western areas of the Region. This pattern is consistent with the total job growth for the Region shown in Table 30, Chapter III, and again indicates the general decentralization pattern of economic activity within the Region (see Map 3).

Communication, Utility, and Transportation: The communication, utility, and transportation land use category includes all street and highway rights-of-way; railroad rights-of-way and yards; airport, rail, ship, bus, and truck terminals; communications facilities, such as radio or television stations and transmission towers; utility rights-of-way and plants, such as sewage disposal and water treatment and storage facilities; and all off-street parking areas containing more than 10 parking spaces. There are presently 109,452 acres of land, or about 6 percent of the regional total land area, devoted to this land use category. Of the total, 10,470 acres, or nearly 10 percent, are devoted to communication and utility facilities and rights-of-way. In addition, 19,248 acres, or about 18 percent, are devoted to all transportation uses, except streets, highways, expressways, and freeways. A total of 79,734 acres, or approximately 73 percent of all land comprising communications, utilities, and transportation land areas, are devoted to local land access, collector, and arterial streets and highway rights-of-way, as well as expressways and freeways rights-of-way. Of the total land area devoted to these transportation rights-of-way, 44,334 acres, or nearly 56 percent, are devoted to local and collector streets, the primary function of which is access and service to residential development.

Governmental, Institutional, and Recreational: The land areas devoted to governmental, institutional, and active recreational uses were classified in the land use inventory according to local or regional service orientation. If the service emphasis of a governmental or institutional use was oriented toward more than one community (minor civil division), it was classified as regional. If such service emphasis was oriented toward a single community or neighborhood, except for high schools in the City of Milwaukee, it was classified as local. Regional uses included universities and colleges, certain high schools, large central libraries, museums, zoological and botanical gardens, golf courses, bathing beaches, marinas, major athletic fields, hospitals, county courthouses, welfare agencies, and military installations. Local uses included elementary schools; certain high schools; churches; branch libraries; fire stations; all active park areas other than those classified as regional; and city, village, and town halls. All recreation facilities were further classified as public or nonpublic. There are presently 49,191 acres of land, or about 3 percent of the regional total, devoted to the governmental, institutional, and recreational land use category. Of the total, 22,231 acres, or about 45 percent, are oriented toward Region-serving activities. This is not surprising when the land-consuming nature of such uses as golf courses, cemeteries, and military installations is considered.

Woodlands and Open Lands: This land use category includes all land areas presently containing trees or heavy brush; lands which are not presently devoted to urban use, crops, or grazing; land areas presently devoted to such temporary uses as sites for solid waste disposal; and quarries either operating or nonoperating. There are presently 170,103 acres of land, or nearly 10 percent of the regional total, devoted to this land use category. Approximately 73 percent of this area is devoted to woodlands, and most of the remaining 23 percent is in the open lands category, including unused lands. Only 4 percent, or 6,844 acres, are classified as quarries or pits.

Water and Wetlands: The water and wetland use category includes all inland lakes; all streams, rivers, and canals more than 50 feet in width; and open lands which are intermittently covered with water or which are wet due to a high water table. Presently there are 179,878 acres of water and wetland areas in the Region, or about 10 percent of the regional total.

Agricultural: The agricultural land use category includes all croplands, pasturelands, orchards, nurseries, and fowl and fur farms. Farm dwelling sites were classified as residential land and assigned a site area of 20,000 square feet. All other farm buildings were included in the agricultural land use. Agriculture is the largest land use in the Region, and about 60 percent of the total area of the Region, or 1,039,641 acres, is devoted to this use.

Approximately 444,000 acres, or about 26 percent of the regional total, are classified as prime agricultural land. The extent and spatial distribution of these areas is shown on Map 13. It is important to note that, in addition to having soils particularly well suited for agricultural use, the delineation of these prime agricultural lands is based upon the size and extent of the area farmed; the historic capability of the area to consistently produce better than average crop yields; and the relationship of such lands to important high-value recreational, cultural, or scientific resource areas.

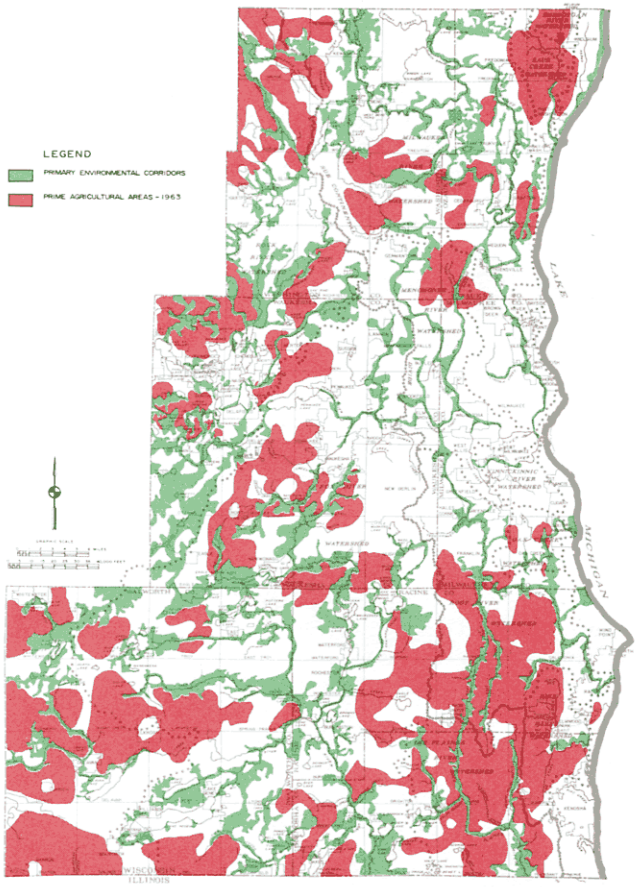
Land Subdivision Characteristics

Under its continuing regional land use-transportation study, the Commission conducted an inventory of historic residential land subdivision activity within the Region. The purpose of the inventory was to identify changing trends in subdivision size; development patterns; location, average lot sizes; and amounts of land devoted to lots, streets, or other dedicated areas. These changing land practices affect the amount, location, and character of new housing development and were, therefore, reviewed for the regional housing study. The documentation of subdivision characteristics is found in SEWRPC Technical Report No. 9, Residential Land Subdivision in Southeastern Wisconsin.

Three residential subdivision patterns were identified for the purposes of the platting study on the basis of the predominant street layout used in the subdivision. The first of these is the grid pattern, which is characterized by a predominance of straight streets intersecting at approximately right angles and generally laid out in the cardinal directions. This pattern also uses fairly uniform rectangular lots fronting on the gridiron streets, often with alleys providing a secondary means of access to the rear of each lot. The second pattern of development identified was the curvilinear pattern, which is characterized by a predominance of curved streets with locations adapted to the terrain. This development pattern fre-

Map 13

PRIME AGRICULTURAL AREAS IN THE REGION



Approximately 440,000 acres, or nearly 26 percent of the total area of the Region, have been identified in regional planning analyses as prime agricultural lands. The preservation of these lands in agricultural use will contribute significantly to the maintenance of a healthy ecological balance within the Region; provide for the production of certain food commodities within close proximity to the urban centers of the Region; provide open space to give form and structure to urban development; and contribute to the charm and beauty of the Region.

Source: SEWRPC.

quently contains a variety of lot sizes and shapes fronting on loops and cul-de-sacs, as well as on through, curvilinear streets. The cluster pattern, the third pattern of development, is characterized by generally wedge-shaped lots tightly grouped or clustered around loops, cul-de-sacs, or bulb streets, with the clustered group of lots separated from other similar groups by open space areas of varying sizes.

The 50-year period 1920 through 1969 witnessed the recordation within the Region of 4,907 residential subdivision plats encompassing 94,050 acres of land and accounted for the creation of 294,050 residential lots and the dedication of 20,639 acres of street rights-of-way, 656 acres of alley rights-of-way, 776 acres of park land, 408 acres of other recreational land, and 61 acres of land for school purposes. Since 1950 a trend toward larger lots has been evident; and, while the acreage of the average subdivision remained nearly constant over the 50-year period, after 1950 the number of lots per subdivision decreased while the typical lot size increased.

The grid-pattern design over the 50-year study period was used for 3,698 subdivisions, or over 75 percent of the total recorded plats; however, since 1950 the grid-pattern subdivision has accounted for less than one-half of the total acreage platted. The typical grid-pattern subdivision has also followed a trend in that the typical lot area has increased from approximately 5,000 square feet to approximately 12,000 square feet. The principal change affecting the lot area occurred in the typical lot frontage which increased from 40 feet to approximately 80 feet over the 50-year period. The curvilinear pattern was used for 1,203 subdivisions, or nearly 25 percent of the total recorded plats. During the 1960 through 1969 period, the curvilinear pattern accounted for nearly 39 percent of the recorded subdivisions. The cluster-pattern residential subdivision design was introduced into the Region in 1960. This design has been used, through 1969, for only six subdivisions, or less than 1 percent of the total recorded plats, and has had only a limited application in the Region.

In addition, as part of the platting study, a special effort was made to determine the amount of platting activity which had taken place outside established public sanitary sewerage service areas. Of the total number of recorded plats over the 1957 through 1969 period, it was revealed that 412 recorded plats, or 40 percent, required review and approval by the State Board of Health because no provisions were made for public sanitary sewerage service to the lots created. Moreover, of these 412 subdivisions, 240, or 58 percent, were located in quarter sections within which more than 50 percent of the area was covered by soils having severe or very severe limitations for such residential development; and, of the 240 subdivisions, 131, or well over one-half, were located in quarter sections wherein the entire land area was covered by soils having severe or very severe limitations for residential development requiring onsite sewage disposal.

Because one of the factors affecting the cost of improved building sites is the efficiency of the land subdivision design, a special effort was also made to compute and evaluate efficiency factors of the subdivision designs—that is, the ratio of actual lot yield to theoretical maximum lot yield—for subdivisions recorded over the 50-year period. The maximum possible yield for any given set of lot dimensions can be computed by geometrically analyzing a block of lots of the given dimensions, assuming the permissible street widths and maximum permissible block lengths. From the analysis, it was concluded that the efficiency of land subdivision designs underwent a marginal improvement over the 50-year period, from about 74 percent in 1920 to about 77 percent in 1969, but did not reach the level which studies elsewhere had indicated might be expected.

The findings of the historic platting study indicated that, over the past 50 years within southeastern Wisconsin, the degree of public control over the platting of residential land has increased and the quality of the land subdivision process has been improved with respect to surveying and monumenting, administration, and public health and safety conditions, but not necessarily with respect to design. Additionally, primarily because of increased frontage, residential lots are increasing in size. It should be noted, however, that even in recent years the availability of information which could greatly reduce the incidence of environmental problems in developing areas has not to date appreciably deterred inappropriate subdividing of land for use. Any housing planning effort must take into account these environmental problems and the importance of protecting the natural resource base of the Region, while at the same time properly relating to the man-made features of the Region, such as the existing land use pattern and the existing transportation and public utility networks.

TRANSPORTATION BASE

Surface Transportation

Transportation, like public utility, facilities, are an important determinant of both rural and urban development. Good transportation facilities are indeed essential to the social and economic welfare of the modern community, for without such facilities the present form of urban development would be impossible. In rural areas of the Region, town roads and county highways have traditionally provided access from the farm to the market place for the sale of farm products. These facilities have also provided the farm family with access to schools, shopping, church, and social and recreational pursuits as well as to the supporting goods and services required to sustain modern agricultural development. The major highway facilities in the rural areas, usually the state trunk highways, have provided intercommunity facilities for the movement of goods as well as for the movement of people. More recently, rural transportation routes have provided access to once remote rural areas for purposes of urban development. Such urban development, occurring in a scattered, highly diffused pattern, has required additional community services, such as additional school facilities, police protection, fire protection, solid waste collection and disposal, and snow removal; and the attendant increased cost of local government has made it more difficult to sustain the remaining agricultural enterprises. This relatively recent intrusion of scattered urban development into rural areas of the Region, while providing additional income to individual farm families through the sale of land, has thus created problems for the rural communities involved with respect to the provision of services to these remote rural development areas.

In the urban areas of the Region, surface transportation facilities are of four basic types: 1) land access and collector streets; 2) ordinary surface arterial streets and highways; 3) freeways and expressways; and 4) mass transit facilities. Land access and collector streets provide access to the individual neighborhoods of the urban area and to the individual building sites of these neighborhoods, and comprise the majority of the land area devoted to surface transportation use. These land access and collector streets also serve as rights-of-way for community utilities, such as sanitary sewers, water mains, storm drains, and gas and electric power lines. In addition, land access streets and collector streets assure the provision of light and air to the individual building sites comprising the urban area and provide the overland drainage system for that area.

Arterial streets and highways in an urban area serve to link the various neighborhoods comprising the community and, in a highly urbanizing area such as southeastern Wisconsin, also serve to link one community with another within the metropolitan region and the metropolitan region with other adjacent regions. Such facilities in an urban area have historically been developed to serve the movement of traffic from the neighborhood to the community, and provide the basic means of access to community and regional shopping areas, community and regional employment centers, and community and regional social and recreational service centers. Because of the dense settlement patterns of an urban area, the traffic on the arterial streets and highways generally consists of a mix of traffic having both long and short trip lengths and is generally slow moving, stop-and-go traffic. Consequently, high concentrations of noise and air pollution from the vehicles which travel on these facilities can be expected.

Expressway and freeway facilities are intended to remove the heavy volumes of traffic having relatively long trip lengths from the surface arterials, freeing the limited capacity of those arterials for use by more local traffic and by ordinary mass transit vehicles. Expressway and freeway facilities do not provide direct access to adjacent land uses. Freeway facilities are, in addition, fully grade separated at all intersections and can be entered or exited only at the interchanges designed for this purpose. These facilities, while initially expensive to build, provide much higher operating speeds for the movement of traffic, provide greater safety in the movement of traffic, and also provide for the movement of traffic with a minimum of emission of air pollutants. In addition, such freeway facilities can provide for the operation of a network of high-speed transit lines. Because of these factors, the freeway and expressway facilities in an urban area have come to provide relatively quick and safe access to employment, shopping, recreational and other activity centers and, consequently, carry very high proportions of the average daily traffic.

Mass transit may be defined as the transportation of persons by bus, rail, or other conveyance providing relatively frequent service to the general public over regularly scheduled or prescribed routes. Mass transit facilities include both the familiar public or private local bus service, as well as school bus facilities and rapid transit facilities providing rapid or express service over long distances. Such local transit facilities provide access from the neighborhood to employment, shopping, educational, social, and recreational pursuits, particularly for those members of the population who, for one reason or another, do not have access to other means of transportation. Since the decline and the termination of service in

1951 of the rail interurban and transit facility in southeastern Wisconsin, there have been no true rapid transit facilities available to the transit user, although plans have been prepared by the Commission for the development of such facilities within the Region.

Because of the importance of transportation to the social and economic welfare of a community or region, it is essential that all four types of the transportation facilities mentioned be maintained at the highest level of service practicable, resulting in a truly balanced transportation system. The impact of the various types of streets and highways on everyday life within an urban area, such as southeastern Wisconsin, is readily apparent. Housing development, for example, could not proceed without adequate transportation facilities and the many services that depend upon such facilities. Construction or reconstruction of transportation routes in an established community for the purposes of meeting the social and economic needs of that community is, however, a difficult and costly task; costly not only in terms of labor and materials but also in terms of disruption to individual families and businesses. Such disruption is not attendant only to construction of expressway and freeway facilities. Every street-widening for purposes of increasing the carrying capacity of the street in a developed urban area disrupts and, in many instances, dislocates homes and businesses near or adjacent to such reconstruction. In such cases, careful consideration must be given by all concerned to the various alternatives involved. Such consideration can best be given in the context of an adopted long-range transportation system plan. A brief discussion of each of the three major types of existing surface transportation facilities in southeastern Wisconsin follows.

Arterial Street and Highway Facilities: The accessibility provided by the urban transportation system will greatly influence the spatial location, intensity, and type of land use development. The extensively developed, all-weather highway system within the Southeastern Wisconsin Region has had a marked influence on the spatial location of urban development. This influence has, however, been significantly modified by the location within the Region of such natural resources as lakes, streams, woodlands, and fertile farmlands. The major transportation network within the Region, as shown on Map 14, consists of a radial pattern of state trunk and county trunk highways interconnecting the urban and rural areas of the Region. Most of the arterial highways presently (1972) carrying traffic volumes in excess of 4,000 vehicles per average weekday are major intercity routes carrying traffic to and from the three central cities of Milwaukee, Kenosha, and Racine in the Region.

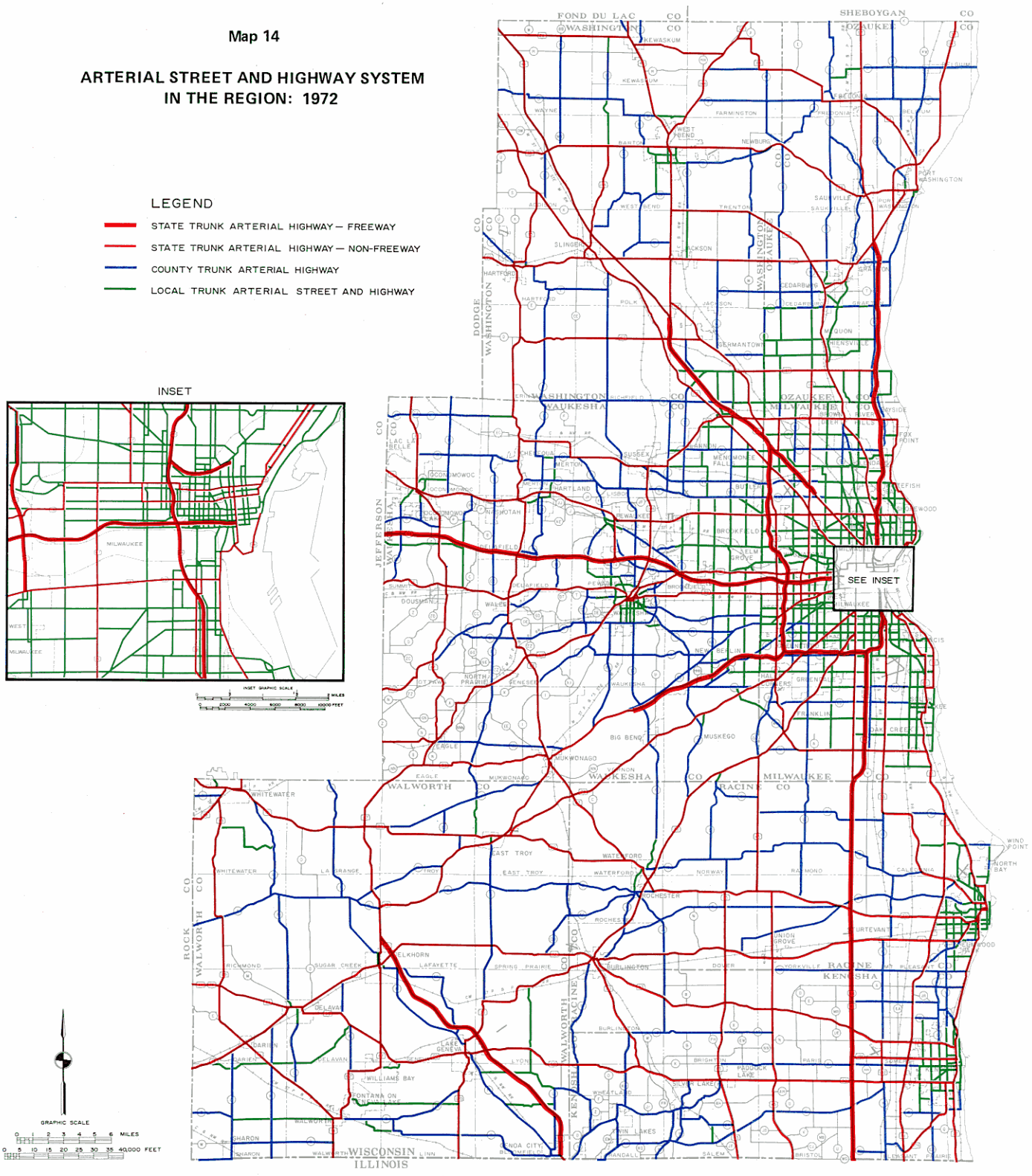
An inventory of highway facilities and service levels was conducted as part of the Commission's initial regional land use-transportation planning effort and is periodically updated under the Commission's continuing land use-transportation planning effort. Definitive data are collected to permit calculation of the capacity of each of the approximately 5,200 links or segments comprising the 3,100 mile arterial street and highway system as that system presently exists within the Region. Summaries of the arterial street and highway system mileage, vehicle miles of travel, and volume-to-capacity ratios are developed on a systemwide basis from the inventory data. Table 35 presents the total street and highway system mileage and arterial system mileage by facility type within each county of the Region for 1972. The table indicates that the total street and highway mileage within the Region was 9,819 miles in 1972, with arterial street and highway mileage comprising 3,119 miles, or about 32 percent of the total street and highway system. Arterial street and highway system utilization within the Region, as measured by vehicle miles of travel occurring on an average weekday, was about 20 million vehicle miles in 1972.

Freeways and Expressways: The data clearly indicate that the freeway system is the backbone of the regional arterial street and highway system. In 1963 freeways and expressways carried only slightly more than 11 percent of the total vehicle miles of arterial travel within the Region. By 1967, this percentage had increased to nearly 24 percent; by 1970, to nearly 32 percent; and by 1972, slightly over 33 percent of all arterial travel occurred on freeways. That freeways are not only highly efficient but heavily used carriers of arterial traffic is indicated by the fact that in 1972 the freeway system comprised only 10 percent of the total arterial street and highway system mileage and yet carried nearly one-third of the total vehicle miles of travel. The shift in travel patterns from surface arterial to freeway facilities has been the greatest in Milwaukee County, where total vehicle miles of travel carried by the freeway system have increased more than sevenfold, from about 531,000 in 1963 to nearly 4.0 million in 1972, while the total vehicle miles of travel carried by standard surface arterials in the county have actually decreased from about 6.8 million in 1963 to nearly 6.7 million in 1972. Thus, all of the growth in arterial travel in Milwaukee County has in effect been absorbed by the freeway system. At the same time, travel times and traffic congestion have been reduced on the standard surface arterials which serve local businesses and residential areas.

Transit Facilities: As previously noted, the provision of adequate transportation facilities is a major concern in planning for housing within the Region. Regional transportation planning, however, should take into account user needs; and, therefore, all modes of travel must be considered with particular emphasis on how such modes may interact to affect the best overall utilization of each mode. If a balanced regional transportation system is to be developed in which each mode of transportation is assigned that portion of the total travel demand which it is best able to carry, then careful attention must be given to both the public and private modes of transportation for the movement of persons. The principal emphasis at the regional level, however, must be focused on a determination of the major mass transit facilities which may be needed and must be designed as an integral part of the total regional transportation system. A complete inventory of the supply of public transportation service was completed as part of the Commission's initial

Map 14

ARTERIAL STREET AND HIGHWAY SYSTEM IN THE REGION: 1972



The availability of adequate transportation is an important consideration in planning for housing within the Region. A well developed arterial street and highway system within the Region provides households with access to jobs, shopping, and health and recreational facilities. As shown on this map, the major transportation network within the Region consists of a radial pattern of state trunk and county trunk highways interconnecting the urban and rural areas of the Region. Most of the arterial highways carrying traffic volumes in excess of 5,000 vehicles per average weekday in 1972 were major intercity routes carrying traffic to and from the three central cities of Milwaukee, Kenosha, and Racine.

Source: SEWRPC.

Table 35

DISTRIBUTION OF STREET AND HIGHWAY MILEAGE IN THE REGION BY COUNTY AND TYPE OF FACILITY: 1972

County	Mileage by Type of Facility—1972						
	Arterial						
	Freeway and Expressway	Freeway and Expressway Ramps	Other	Total	Collector and Minor Streets	Total[a]	Arterial Miles as Percent of Total
Kenosha	12.0[b]	7.4	267.7	287.1[c]	593.4	880.5	32.6
Milwaukee	64.5	61.5	669.7	795.7[d]	1,851.7	2,647.4	30.1
Ozaukee	13.0	3.2	237.3	253.5[d]	466.7	720.2	35.2
Racine	12.0[b]	6.0	337.4	355.4[d]	728.0	1,083.4	32.8
Walworth	19.1	3.8	389.1	412.0[d]	846.9	1,308.9	31.5
Washington	28.5	5.6	310.7	344.8[c]	821.1	1,165.9	29.6
Waukesha	46.4	21.7	602.1	670.2[d]	1,342.5	2,012.7	33.3
Region	195.5	109.2	2,814.0	3,118.7	6,700.3	9,819.0	31.8

[a] *Total street and highway mileage does not include private streets and roads or roads in public park and institution lands.*

[b] *The arterial link data cards from which arterial street and highway mileage is computed were recoded in 1970 to more precisely determine actual freeway mileage within Kenosha and Racine Counties by recoding 0.4 mile of freeway from Kenosha County to Racine County.*

[c] *Arterial system mileage subject to further refinement under the county jurisdictional highway planning program.*

[d] *Reflects refinement of the arterial system under the county jurisdictional highway planning program between 1967 and 1972.*

Source: SEWRPC.

regional land use-transportation study, and this inventory is maintained current under the Commission's continuing regional land use-transportation planning efforts.

For the purposes of the initial regional land use-transportation study, mass transit was defined as the transportation of persons by bus, rail, or other conveyance providing relatively frequent service to the general public on regular schedules over prescribed routes. In its most common form within the Region today, mass transit is provided by buses operating on urban streets. Some form of mass transit service is essential in any sizable urban area, not only to meet the needs of that segment of the population unable to command direct use of private personal transportation, but also to provide more efficient movement for certain types of trips within the urban area.

Rapid transit was defined as mass transit operating over exclusive grade-separated rights-of-way to provide high speed service. Presently, there is no true rapid transit service provided within the Region. It should be noted that the term mass transit includes rapid transit and that the latter is distinguished primarily by the high level of service offered. It should also be noted that a "modified" form of rapid transit service can be provided by buses operating on freeways, as long as the freeways utilized for such service continue to operate at or under design capacities and, therefore, at design speeds. Such "modified" rapid transit service is presently being provided in southeastern Wisconsin by the so-called "freeway flyer" lines of the Milwaukee and Suburban Transport Corporation.

Bus Service: Interurban and suburban bus service is presently provided within the Region by seven private companies which together operate about 600 route-miles of intercity or interregional bus lines. These companies are Badger Coaches, Inc.; Central-West Motor Stages, Inc.; Greyhound Lines-West; Peoria-Rockford Bus Company; Tri-State Coach Line, Inc.; Wisconsin Coach Lines, Inc.; and Wisconsin-Michigan Coaches, Inc.

The Commission has defined mass transit as regularly scheduled public transit service with headways of one hour or less throughout the weekday between the hours of 6 a.m. and 8 p.m. In 1963, such service was provided by individual private operations in the Milwaukee, Racine, Kenosha, and Waukesha areas. Significant changes have taken place in the local mass transit operations since 1963, including a reduction in service in the Waukesha area to the point where the transit service presently provided no longer meets the Commission criteria for definition as mass transit service. In addition, the transit systems in operation in the Racine and Kenosha areas in 1963 have been abandoned and replaced by entirely new and different systems. In Racine, the operation of the original transit system operated by Lakeshore Transit-Racine, Inc., utilizing conventionally sized buses, was terminated in 1968 and a new system, consisting of 10 routes radiating from the Racine central business district and operated with "mini-buses" has been established and is owned and operated by Flash City Transit. The basic adult fare is 40 cents plus a 10-cent charge for a transfer. The City of Racine, however, began subsidizing Flash City Transit in November 1972 after the company petitioned the Wisconsin Public Service Com-

mission for permission to abandon service. In Kenosha the 1963 transit operation of Lakeshore Transit-Kenosha, Inc., was replaced in 1969 by a privately owned system operated by Pathfinder City Transit that was subsidized by the City of Kenosha. This system was abandoned in February 1971 and subsequently replaced with a new system established in September 1971 and operated by the City of Kenosha Parking and Transit Commission. Six local city transit routes and six special routes which primarily serve schools are operated under this new transit system. The basic fare for all service is 25 cents, the lowest of any system in the Region. It should be noted that the system in the City of Kenosha is the only publicly operated system in the Region. Regularly scheduled city transit service in Milwaukee County is presently provided by the Milwaukee and Suburban Transport Corporation, which operates 52 local and express routes. The basic adult cash fare was recently increased from 40 cents to 50 cents on the local system and from 50 cents to 60 cents for the freeway flyer system. The cost of a weekly pass also increased, from $4.00 to $5.00. The five-cent-per-zone fare for rides to outlying areas was not increased. In addition to the service provided in Milwaukee County by the Transport Corporation, Wisconsin Coach Lines, Inc. provides service in the Milwaukee-Waukesha corridor, as well as local service over three routes in the City of Waukesha (see Map 15). The adult cash fare on the Milwaukee-Waukesha route varies with the distance traveled, with a minimum fare of 50 cents and a maximum fare of 85 cents. The adult cash fare within the City of Waukesha is 40 cents.

Rail Service: Intercity rail service in the Region presently (1972) is limited to freight hauling, except for scheduled passenger service from the City of Milwaukee and the Village of Sturtevant by the National Railroad Passenger Corporation (AMTRAK) operating over the trackage of the Chicago, Milwaukee, St. Paul, and Pacific Railroad (Milwaukee Road). Commuter service is provided by the Milwaukee Road from the Village of Walworth to the City of Chicago and from the City of Watertown to the City of Milwaukee;[5] and from the Cities of Kenosha and Lake Geneva to the City of Chicago by the Chicago and Northwestern Transportation Company.

Trends in Mass Transit Ridership: The general trend in mass transit utilization within the Region, as experienced from 1963 to 1972, consists of an annual decline in the number of transit revenue passengers carried. In 1963 the total number of transit revenue passengers carried was slightly over 94 million, and by 1964 this number had decreased to about 92 million. In 1965, the decline was stemmed when a small increase in the total revenue passengers occurred, and a reversal of the downtrend became possible when total revenue passengers increased by nearly one million to a total of 93 million passengers in 1966. Since that time, however, total mass transit revenue passenger ridership has continued to decline sharply. In 1967, the total passengers carried decreased to about 81 million. This trend in decreasing transit utilization was accentuated in 1969 when total ridership fell to under 74 million riders, or a decline of more than 7 percent from the 1968 level. By 1970, transit ridership had declined to slightly under 66 million revenue passengers, representing a loss of approximately 11 percent during the year. By the end of 1971, total ridership had declined to slightly over 59 million passengers, representing a further decrease during the year of nearly 7 million passengers, or about a 10 percent loss.

In 1972 the total revenue passengers carried had decreased to less than 54 million. Thus, transit ridership has decreased by about 40 million revenue passengers, or 57 percent, from 1963 to 1972. The marked major declines in transit use have been accompanied by increases in transit fares and a reduction in transit service. Other factors have also contributed to this trend, including strikes against transit operators, civil disorders, institution of a ready-fare system by the principal transit operator in the Region, and, not insignificantly, the increasing availability of the automobile. As automobile availability within the Region increases and transit service is reduced, transit rides on an absolute as well as on a per capita basis have declined.

As previously mentioned, transit service is provided in four basic areas of the Region: the Cities of Milwaukee, Kenosha, Racine, and Waukesha. Total transit ridership in these areas corresponded with the continued downward trend exhibited in the Region. In the City of Milwaukee during the period 1963 through 1972, ridership declined from about 88 million passengers in 1963 to about 52.1 million passengers in 1972.

In the City of Kenosha in 1963, there were about 1.8 million passengers. By 1968 this total had decreased to 1.1 million passengers. As previously discussed, the transit system was then abandoned in 1969 and was replaced by a privately owned system that was subsidized by the City of Kenosha and operated until February of 1971. In September 1971, transit service was again initiated in the city by the Kenosha Transit and Parking Commission with ridership on this system, which operated the last four months in 1971, totaling 130,000 revenue passengers. In 1972 the total ridership was approximately 503,000 revenue passengers.

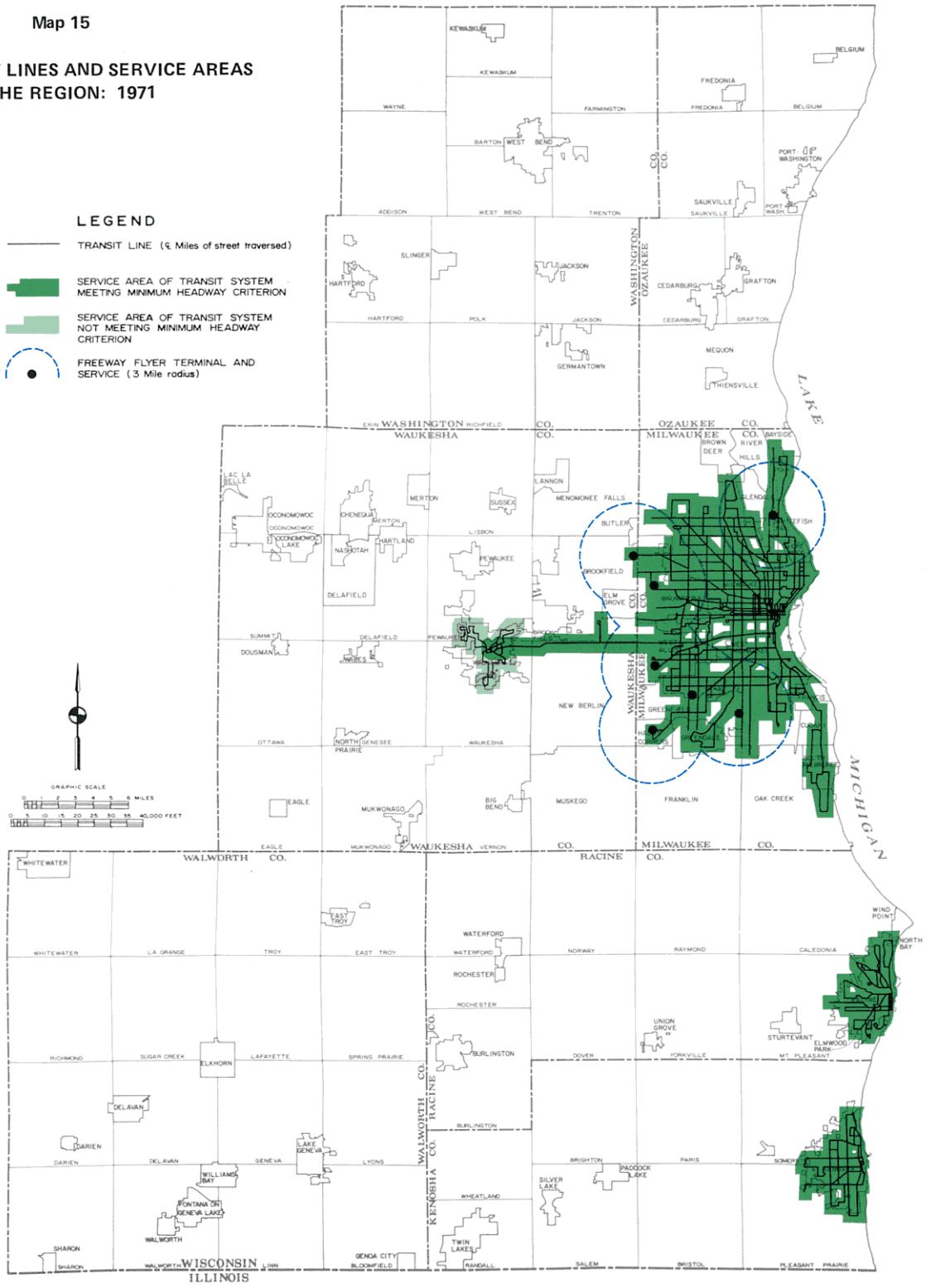
Transit ridership in the City of Racine declined from 2.9 million passengers in 1963 to 1.3 million in 1968 when service was terminated. In 1968, transit service was reinstated by Flash City Transit; however, the total of revenue passengers using the Flash City Transit system has continued to decline from about 760,000 passengers in 1970 to about 526,000 passengers in 1972, or about a 31 percent reduction.

In 1963 there were 450,972 revenue passengers in the City of Waukesha. This ridership steadily increased each year through 1966 when a total of 566,496 revenue passengers was recorded. In 1967, however, ridership declined to 565,095 passengers and in 1968 to 560,066 passengers. Ridership again increased in 1969 to a total of 580,680 revenue passengers and by 1970 had risen to 614,025.

[5] *Service was discontinued from Watertown to Milwaukee in July 1972.*

Map 15

MASS TRANSIT LINES AND SERVICE AREAS IN THE REGION: 1971



Mass transit service in the major urbanized areas of the Region is provided by three private companies—the Milwaukee and Suburban Transport Corporation, Flash City Transit, and Wisconsin Coach Lines, Inc.—and one public systems agency—the City of Kenosha Parking and Transit Commission. Together these agencies operate bus lines over 531 miles of public streets and highways, and in 1971 provided service to an area in which about 67 percent of the population of the Region resided. The importance of mass transit service varies among the subgroups of the regional population. In this regard, access to mass transit facilities is particularly important to the elderly and low-income population, who often have no alternative form of transportation.

Source: SEWRPC.

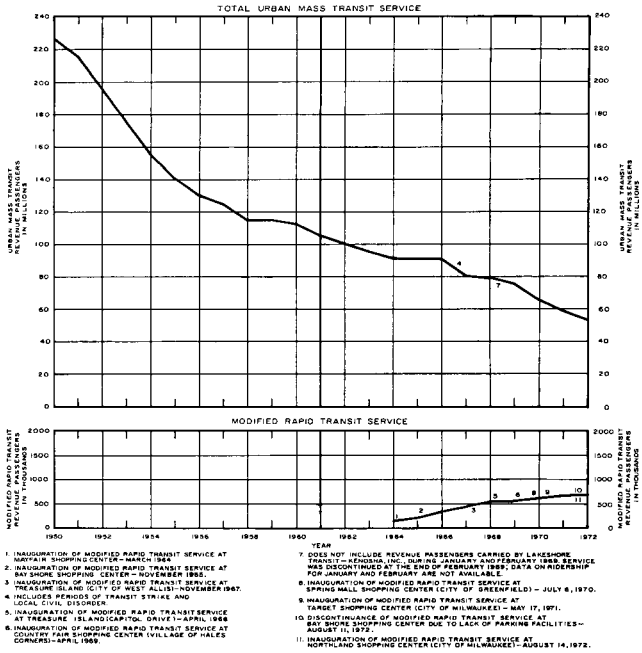
In 1971, however, transit ridership again decreased to 315,974 due to the elimination of a subsidy by the school district to school pupils living in the city and residing more than two miles from school. In 1972, total revenue passenger ridership further decreased to 277,163.

Standing in sharp contrast to the overall decline in mass transit utilization within the Region, however, is the continued increase in utilization of "freeway flyer" service provided in the Milwaukee metropolitan area by the Milwaukee and Suburban Transport Corporation. The freeway flyer service is a prototype of the rapid transit and modified rapid transit service recommended to be provided throughout the Milwaukee area in the adopted regional transportation plan. Freeway flyer service began in March 1964 with the establishment of an initial route between the Mayfair Shopping Center in the City of Wauwatosa and the Milwaukee central business district (CBD). A total of eight freeway flyer routes are now in operation, including Mayfair, Country Fair, Spring Mall, and Target shopping centers; Treasure Island at Brookfield and West Allis; and Northland and North Shore.

Selected characteristics pertaining to each freeway flyer route in the Region are shown in Table 36. Figure 23 illustrates that annual ridership on the freeway flyer service has increased steadily from about 81,000 revenue passengers in 1964 to approximately 705,000 revenue passengers in 1972. The actual increase in ridership in 1972 amounted to more than 31,000 revenue passengers. Special freeway flyer surveys conducted by the Commis-

Figure 23

REVENUE PASSENGERS CARRIED ON URBAN MASS TRANSIT AND ON MODIFIED RAPID TRANSIT IN THE REGION: 1950-1972



Source: Milwaukee and Suburban Transport Corporation; Flash City Transit; Wisconsin Coach Lines, Inc.; City of Kenosha Parking and Transit Commission; Wisconsin Public Service Commission; and SEWRPC.

Table 36

SELECTED CHARACTERISTICS OF MODIFIED RAPID TRANSIT (FREEWAY FLYER) ROUTES IN THE REGION: 1972

Name of Route	Date Route Established	Route Description		Length of Route (One-Way Miles)	Average Weekday Passenger Volume		
		From	To		Initial Year of Operation	Peak Year	1972
Mayfair	March 30, 1964	STH 100 and W. North Avenue, City of Wauwatosa	Milwaukee CBD	10.2	416	955	754
Bay Shore	November 29, 1965	N. Port Washington Road and Silver Spring Drive, City of Glendale	Milwaukee CBD	7.1	351	645	571[a]
Treasure Island–West Allis	November 6, 1967	STH 100 and Cleveland Avenue, City of West Allis	Milwaukee CBD	9.8	204	445	445
Treasure Island–Brookfield	April 22, 1968	STH 190 and N. 124th Street, City of Brookfield	Milwaukee CBD	12.5	142	206	206
Country Fair	April 14, 1969	STH 100 and W. Grange Avenue, Village of Hales Corners	Milwaukee CBD	14.6	200	302	302
Spring Mall	July 6, 1970	S. 76th Street and W. Cold Spring Road, City of Greenfield	Milwaukee CBD	12.0	178	346	346
Target	May 17, 1971	USH 41 and W. Layton Avenue, City of Greenfield	Milwaukee CBD	8.7	141	206	206
Northland	August 14, 1972	6200 Block of N. Teutonia Avenue, City of Milwaukee	Milwaukee CBD	9.0	418	418	418

[a] *Passenger volume is for January through August, inclusive. Service on the Bay Shore Freeway Flyer route was terminated after August 11, 1972, due to lack of adequate parking facilities at the Bay Shore Shopping Center.*

Source: SEWRPC.

sion in previous years have shown that about 41 percent of freeway flyer riders previously used other transit service, about 44 percent previously made the trip by automobile, and about 15 percent had not previously made the trip either to the Milwaukee CBD or to one of the outlying freeway flyer terminals.

The historical trends in utilization of each of the individual freeway flyer routes within the metropolitan area are shown in Figure 24. The Mayfair, Bay Shore, and Treasure Island-West Allis routes exhibit similar development patterns over the years of operation, and utilization appears to have leveled off. The decline in ridership from the peak year of 1968 on the Mayfair route may be attributed primarily to the opening of competitive routes from the Treasure Island Shopping Centers in the Cities of Brookfield and West Allis. Growth in ridership remains strong on the Country Fair, Spring Mall, and Target routes.

A pattern of seasonal variation in freeway flyer utilization is also beginning to appear. Most of the routes peak in daily ridership during the winter months and exhibit a decline in ridership to a low point during the summer months. This pattern probably can be attributed to weather, with people shifting from the automobile to the freeway flyer during the poor winter driving months; to the school year; and to vacation habits and patterns.

Although ridership on the freeway flyer service has continued to grow impressively despite fare increases, the decline in ridership on some of the older routes and the slackened growth on some of the newer routes tend to detract from the overall freeway flyer picture. It is important, however, to place the growth of the freeway flyer ridership in its proper perspective by comparing its gain of approximately 705,000 annual revenue passengers from 1964 to 1972 with the loss of approximately 37 million annual revenue passengers suffered by the Milwaukee and Suburban Transport Corporation on its regular transit system during the same period of time.

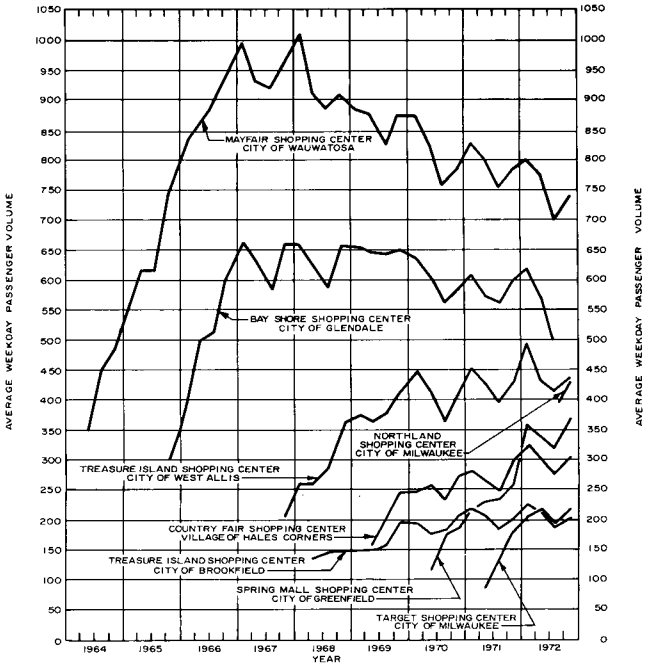
Air Transportation

The air transportation system as presently developed in the Southeastern Wisconsin Region comprises a complex network of airways and 46 publicly and privately owned airports or air bases as shown on Map 16. Basically, these airports fall into one of four major service categories—air carrier, general aviation, military, and special use categories. The former, of which there is only one in the Region—the publicly owned General Mitchell Field—is intended to accommodate primarily commercial airline service to the general public on a regularly scheduled basis. The air carrier airport in effect constitutes a major interregional transportation terminal handling relatively large volumes of passengers, mail, and cargo in large, high-performance aircraft.

The general aviation airports, consisting of both public and privately owned facilities, are intended to serve smaller training, business, charter, agricultural, recreational, pleasure, and air taxi aircraft. In addition to General Mitchell Field, which provides general aviation as well as commercial air carrier service, there are 43 other

Figure 24

REVENUE PASSENGERS CARRIED ON MODIFIED RAPID TRANSIT IN THE REGION BY ROUTE 1964-1972



Source: Milwaukee and Suburban Transport Corporation.

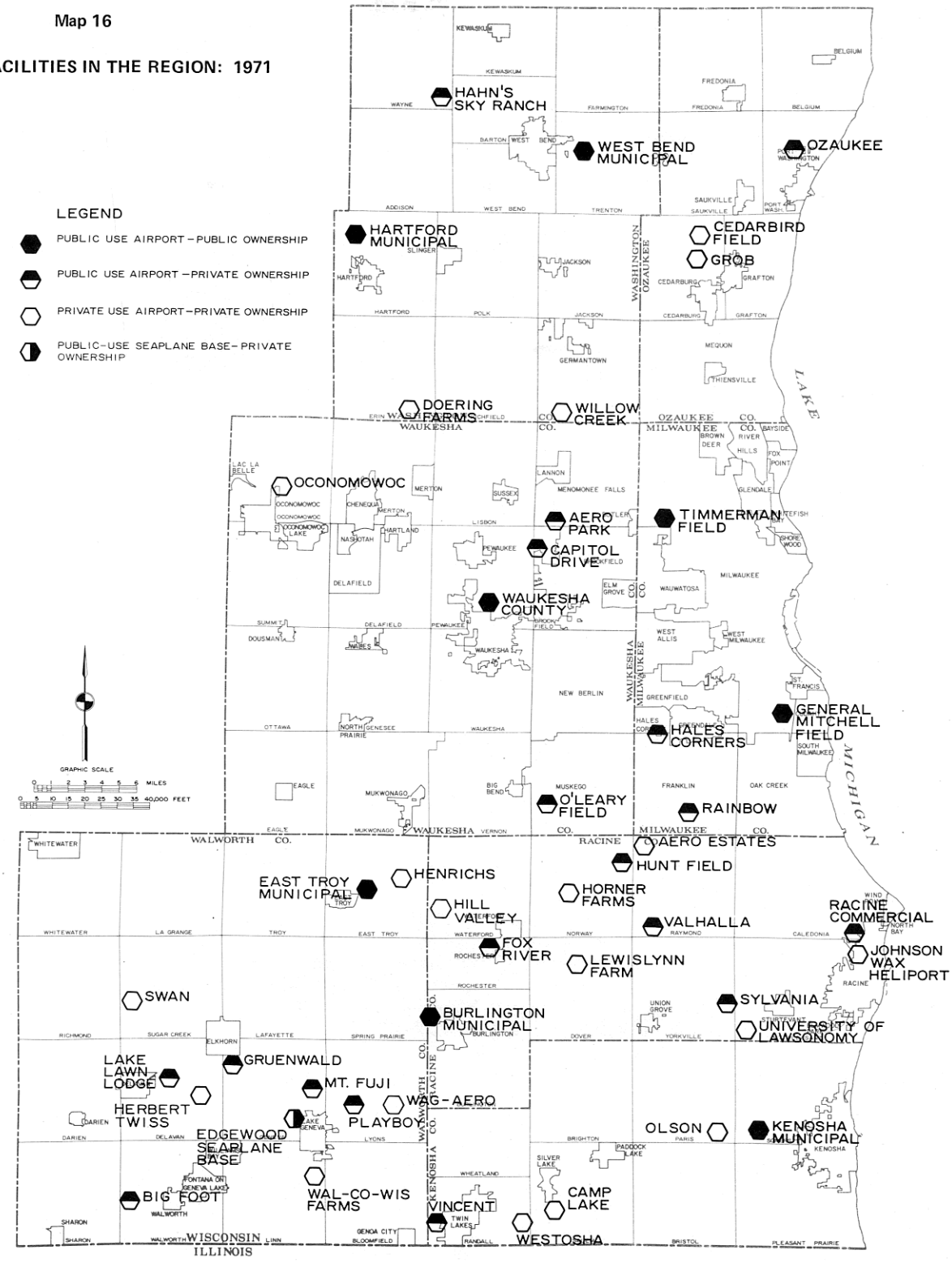
active airport facilities for primary use by general aviation located within the Region. All of these, however, are not open to unlimited public use, as some of the airports serve the personal requirements of the owners or cater strictly to specific aircraft types. The 25 general aviation public use airports, both publicly and privately owned, accommodate the majority of the business and pleasure aviation activity in the Region and thus are of primary interest in regional airport system planning. The 18 general aviation private, personal, or restricted use airports within the Region are of far less importance to the existing regional airport system, although they may affect the demand for and use of airspace and airports.

Presently there are no exclusive military use airports within the Region. Both General Mitchell Field in Milwaukee County and West Bend Municipal Airport in Washington County are joint use civil/military facilities providing military aviation service. There are two landing areas located within the Region that might well be considered within the special use category, that is, facilities restricted to certain aircraft types. These land areas include the Johnson Wax Heliport located about three miles southeast of Racine and the Edgewood Air Seaplane Base at Lake Geneva in Walworth County.

Airport facilities and the air traffic at such facilities may have a definite impact on housing in the vicinity of the airport. Careful attention must be given, therefore, to both the location, siting, and construction of housing in

Map 16

AIRPORT FACILITIES IN THE REGION: 1971



The growing importance of air travel in the Region has led to the establishment of a regional airport system planning program designed to prepare a long-range plan for the future development of airport facilities in the Region for 1990. An inventory of all existing airport facilities in the Region revealed, as shown on this map, that there are a total of 46 airports or air bases in the Region (1971), including one scheduled air carrier airport, 25 general aviation public use airports, one public use seaplane base, one private use heliport, and 18 general aviation private use airports. Of the 27 public use airports, eight are owned and operated by local units of government in the Region.

Source: SEWRPC.

the vicinity of such existing facilities, and the new location and development of such facilities with respect to existing housing development.

Water Transportation

Four cities in southeastern Wisconsin—Kenosha, Milwaukee, Port Washington, and Racine—have Lake Michigan harbors and harbor facilities. All four harbors are equipped to accommodate seagoing freight or scheduled passenger ships as well as private pleasure craft, although no scheduled passenger service ends or originates from these four ports. Some freight lines offer limited passenger accommodations. The Chesapeake & Ohio Railroad Company operates a seasonally scheduled rail and auto ferry between the Milwaukee harbor and the City of Ludington, Michigan. This ferry also has some accommodations for passengers.

PUBLIC UTILITY BASE

Public utility systems are one of the most important factors influencing urban growth and development. All urban development today, including housing development, is highly dependent upon the utility systems which serve the individual land uses with power, light, communication, heat, water, and sewerage. Water supply and sanitary sewerage utilities have a particularly important relationship to urban land use development in general and to housing development in particular. 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.

The majority of water and sewerage utilities in the Region are organized as water and sewer departments of incorporated municipalities and serve only those areas within the political boundaries of that municipality. Where sanitary districts have been organized, sewer and water service area limits may not be coterminous, although the individual service areas will often tend to approximate one another. Therefore, a general pattern of water and sewer service areas following political boundary lines rather than natural topographic boundaries, such as watershed boundaries, exists within the Region. The governing bodies of these existing utilities tend to be concerned primarily, if not solely, with the problems existing within the individual political subdivisions served, rather than with problems affecting the area as a whole and the individual political subdivisions in part. The artificial limitations thus placed on sewerage system planning and development at the local level make it extremely difficult to realize the benefits which may be available.

Sanitary Sewerage Utilities

Virtually all sanitary sewer service within the Region is provided by publicly owned agencies. These agencies generally take the form of commissions in the case of utilities providing areawide sewer service, a department in the case of utilities providing sewer service in an incorporated municipality, or a town sanitary or utility district in the case of a utility providing sewer service to an unincorporated area. Inventories conducted under the regional sanitary sewerage system planning program revealed there are a total of 91 centralized public sanitary sewerage systems presently operated by utilities within the Region. These 91 systems serve a total area of about 309 square miles, or about 11 percent of the total area of the Region, and a total population of about 1.5 million persons, or about 85 percent of the total population of the Region. A total of 64 sewage treatment facilities are currently operated by the utilities owning, operating, and maintaining the 91 public sanitary sewerage systems, with many of the utilities contracting with adjacent utilities for sewage treatment purposes. In addition, there are 59 privately owned sewage treatment plants presently in operation within the Region. These generally serve isolated land use enclaves, mainly for industrial, commercial, and recreational enterprises. In all, there are 123 sewage treatment facilities within the Region.

Septic Tank System Development: The construction of public sanitary sewerage facilities has not fully kept pace with the rapid urbanization of the Region, and this has been a contributing factor to the widespread use of onsite soil absorption sewage disposal systems. An estimated total of 268,000 persons in the Region, or about 15 percent of the total Region population, rely on such septic tank sewage disposal systems for domestic sewage disposal. About 27,000 of these persons live on farms. The remaining 241,000 persons constitute urban dwellers generally living in scattered fashion throughout the rural and rural-urban fringe areas of the Region. About 139,000 of the 241,000 urban dwellers live within urbanizing areas of the Region, however, and within potential service areas of centralized sanitary sewer systems. The area presently devoted to urban land uses within the Region but unserved by sanitary sewerage facilities is estimated to total from 61 to 85 square miles, or from 23 to 21 percent of the presently urbanized area of the Region, depending upon the definition of the term "urban development" used.

Water Utilities

Most of the water supply service within the Region is provided by public water utilities. As shown in Table 37, there are a total of 67 publicly owned water utilities within the Region. Of these 67 utilities, all but one—the North Shore Water Utility in Milwaukee County—provide retail water service to consumers. The North Shore Water Utility provides only wholesale water service to three other water utilities—the Glendale Water Utility, the Village of Whitefish Bay Water Utility, and the Water Utility of the Village of Fox Point. Together, these 67 publicly owned water utilities serve an area of about 259 square miles, or about 10 percent of the total area of the Region, and about 1.4 million persons, or about 8 percent of the total 1970 resident population of the Region. The population, service area, and consumption characteristics of the 67 public utilities in the Region are shown in Table 37. The existing (1970) service areas of these utilities are shown on Map 17.

In addition to the publicly owned water utilities, there are at least 59 privately or cooperatively owned water systems throughout the Region (see Table 38). Many

Table 37

PUBLIC WATER UTILITIES IN THE REGION: 1970

Public Water Utility		Area Served (Square Miles)	Estimated Population Served	Estimated Average Consumption (MGD)
Name	Location			
KENOSHA COUNTY				
Kenosha Water Utility[a,b]	City of Kenosha	15.20	78,810	11.85
Pleasant Park Utility Co., Inc.[c]	Town of Pleasant Prairie - Pleasant Homes Subdivision	0.28	420	0.04
Pleasant Prairie Water Works[c]	Unincorporated village of Pleasant Prairie	0.25	340	0.02
Sanitary District No. 1, Town of Somers[a]	Town of Somers	0.60	1,020	0.13
Town of Bristol Water Utility	Town of Bristol	0.11	370	0.02
Subtotal	--	16.44	80,960	12.06
MILWAUKEE COUNTY				
Brown Deer Public Water Utility[a]	Village of Brown Deer	3.68	12,620	1.11
City of Oak Creek Water and Sewer Utility	City of Oak Creek	5.00	5,700	0.88
Cudahy Water Department[a]	City of Cudahy	4.72	22,080	2.52
Glendale Water Utility[a]	City of Glendale	5.93	13,440	2.45
Milwaukee Water Works[a,d]	City of Milwaukee	107.66	750,390	131.65
North Shore Water Utility[a,e]	City of Glendale			
Village of Greendale Water and Sewer Utility[a]	Village of Greendale	3.49	15,090	1.06
Village of Whitefish Bay Water Utility[a]	Village of Whitefish Bay	2.12	17,390	1.81
Water Utility of the Village of Fox Point[a]	Village of Fox Point	2.87	7,940	0.94
Wauwatosa Water Works[a]	City of Wauwatosa	13.23	58,680	5.25
West Allis Water Utility[a]	City of West Allis	10.20	71,720	11.42
Shorewood Municipal Water Utility[a]	Village of Shorewood	1.58	15,580	1.62
South Milwaukee Water Utility[a]	City of South Milwaukee	4.68	23,300	4.20
Subtotal	--	165.16	1,013,390	164.91
OZAUKEE COUNTY				
Belgium Municipal Water Utility	Village of Belgium	0.23	800	0.06
Cedarburg Light and Water Commission	City of Cedarburg	2.19	7,700	1.32
Fredonia Municipal Water and Sewer Utility	Village of Fredonia	0.44	1,050	0.07
Grafton Sewer and Water Utility	Village of Grafton	1.47	6,000	0.77
Port Washington Municipal Water Utility[a]	City of Port Washington	2.23	8,750	0.93
Saukville Municipal Water and Sewer Utility	Village of Saukville	0.61	1,390	0.33
Subtotal	--	7.17	25,690	3.48
RACINE COUNTY				
Burlington Water Works	City of Burlington	2.33	7,480	1.36
Caddy Vista Sanitary District	Town of Caledonia	0.25	1,180	0.06
Crestview Sanitary District	Town of Caledonia	0.46	1,600	0.09
North Cape Sanitary District	Towns of Norway and Raymond	0.09	110	0.01
North Park Sanitary District[a,f]	Town of Caledonia	3.01	3,250	0.54
Racine Water Department[a,g]	City of Racine	13.40	95,160	18.73
South Lawn Sanitary District[a]	Town of Mt. Pleasant	0.40	2,040	0.13
Sturtevant Water and Sewer Utility[a]	Village of Sturtevant	0.81	3,380	0.16
Town of Caledonia Water Utility District No. 1[a]	Town of Caledonia	1.98	690	0.07
Union Grove Water Department	Village of Union Grove	0.65	2,700	0.33
Waterford Water Utility	Village of Waterford	0.57	1,920	0.15
Wind Point Municipal Water Utility[a]	Village of Wind Point	1.28	1,390	0.10
Subtotal	--	25.23	120,900	21.73

Table 37 (continued)

Public Water Utility		Area Served (Square Miles)	Estimated Population Served	Estimated Average Consumption (MGD)
Name	Location			
WALWORTH COUNTY				
Darien Municipal Water and Sewer Utility	Village of Darien	0.35	840	0.07
Delavan Water and Sewage Commission	City of Delavan	2.24	5,530	0.55
East Troy Municipal Water Utility	Village of East Troy	0.58	1,710	0.23
Elkhorn Light and Water Commission	Village of Elkhorn	1.50	3,990	0.42
Fontana Municipal Water Utility	Village of Fontana-on-Geneva Lake	0.95	1,460	0.20
Genoa City Municipal Water and Sewer Utility	Village of Genoa City	0.58	1,090	0.06
Lake Geneva Water Commission	City of Lake Geneva	1.54	4,890	0.72
Lyons Sanitary District No. 1	Town of Lyons	0.03	240	0.02
Sanitary District No. 1, Town of Troy	Town of Troy	0.04	140	0.01
Village of Sharon Water Works and Sewer System	Village of Sharon	0.49	1,220	0.06
Walworth Municipal Water and Sewer Utility	Village of Walworth	1.14	1,640	0.22
Whitewater Municipal Water Utility	City of Whitewater	2.04	12,040	1.03
Williams Bay Municipal Water Utility	Village of Williams Bay	1.19	1,550	0.19
Subtotal	--	12.67	36,340	3.78
WASHINGTON COUNTY				
Allenton Sanitary District No. 1	Town of Addison	0.27	610	0.03
City of Hartford Utilities Department	City of Hartford	1.57	6,500	1.05
City of West Bend Water Department	City of West Bend	4.33	16,560	2.50
Jackson Municipal Water Utility	Village of Jackson	0.31	560	0.05
Kewaskum Municipal Water Department	Village of Kewaskum	0.52	1,930	0.52
Slinger Utilities	Village of Slinger	0.40	1,020	0.19
Village of Germantown Water Utility	Village of Germantown	0.69	1,120	0.08
Subtotal	--	8.09	28,300	4.42
WAUKESHA COUNTY				
Butler Water Utility	Village of Butler	0.78	2,260	0.22
City of Brookfield Water Utility	City of Brookfield	1.39	3,830	0.37
City of Oconomowoc Electric and Water Departments	City of Oconomowoc	3.20	8,740	0.89
Hartland Municipal Water Department	Village of Hartland	2.35	2,760	0.21
Mukwonago Municipal Water Utility	Village of Mukwonago	0.72	2,370	0.16
New Berlin Water Utility	City of New Berlin	1.30	2,400	0.29
Pewaukee Water and Sewage Utility	Village of Pewaukee	0.92	3,270	0.32
Village of Eagle Water Utility	Village of Eagle	0.27	750	0.03
Village of Menomonee Falls Water Utility	Village of Menomonee Falls	4.01	17,200	1.67
Westbrooke Sanitary District No. 1	Town of Brookfield	0.35	560	0.03
Waukesha Water Utility	City of Waukesha	9.32	40,260	7.54
Subtotal	--	24.61	84,400	11.73
Region	--	259.37	1,390,520	222.11

[a] *These utilities utilize Lake Michigan as the sole source of water supply.*

[b] *The Kenosha Water Utility provides retail water service to portions of the Towns of Pleasant Prairie and Somers and wholesale water service to the Town of Somers Sanitary District No. 1. The data presented in this table for the Kenosha Water Utility include the communities served on a retail basis.*

[c] *The Pleasant Park Utility Company, Inc. and the Pleasant Prairie Water Works are not public water utilities since they are privately owned. Because, however, these utilities operate in the same fashion as a public water utility and because they are capable of ready expansion much the same as a public water utility, they have been classified for analysis purposes in this study as public water utilities.*

[d] *The Milwaukee Water Works provides retail water service to the Cities of Greenfield and St. Francis and the Village of West Milwaukee and provides wholesale water service to the Cities of Wauwatosa and West Allis and the Villages of Brown Deer, Greendale, and Shorewood. The data presented in this table for the Milwaukee Water Utility include the communities served on a retail basis.*

[e] *The North Shore Water Utility provides no retail water service and exists only to sell water on a wholesale basis to the City of Glendale and the Villages of Fox Point and Whitefish Bay.*

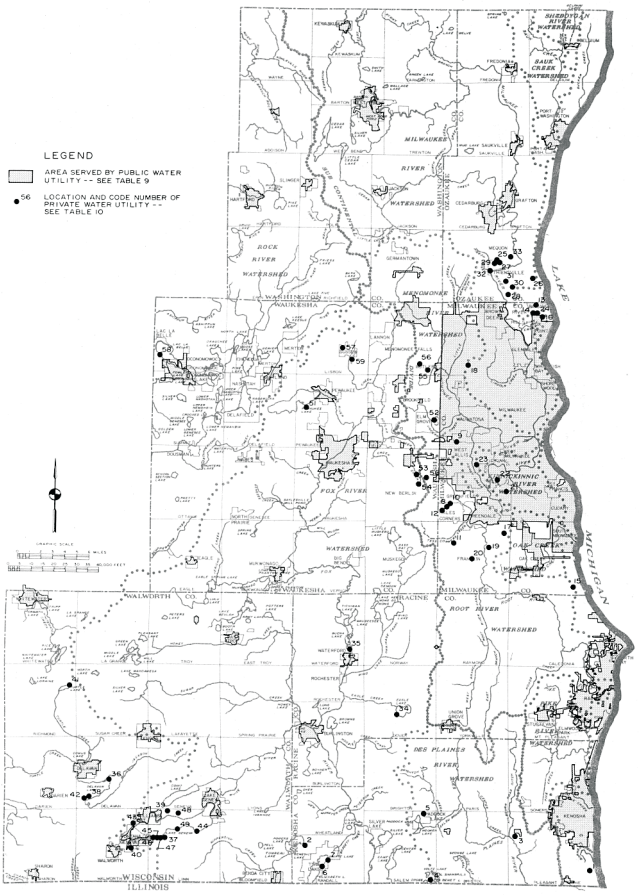
[f] *The North Park Water Utility provides water on a wholesale basis to the Wind Point Municipal Water Utility.*

[g] *The Racine Water Department provides retail water service to the Villages of North Bay and Elmwood Park and the Town of Mt. Pleasant and wholesale water service to the Village of Sturtevant, the North Park Sanitary District, the South Lawn Sanitary District, and the Town of Caledonia Utility District No. 1. The data presented in this table for the Racine Water utility include the communities served on a retail basis.*

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

Map 17

WATER UTILITIES IN THE REGION: 1970



Most of the water supply service in the Region is provided by 67 publicly owned water utilities. The service areas of these 67 utilities are shown on this map. In addition, there are at least 59 privately or cooperatively owned water supply systems in the Region which provide water service generally to individual subdivisions. The location of these private systems is also shown on this map. Lake Michigan is by far the most important source of water supply in the Region, with about 1.2 million persons, or 68 percent of the total Region population, currently being supplied from that source. An additional 190,000 persons, or 14 percent of the total Region population, are supplied by public utilities relying on groundwater.

Source: SEWRPC.

of these small water systems serve isolated residential enclaves, while some serve summer residents only and suspend operations during cold weather. Very few of these private systems have standby supply or storage facilities, and the great majority do not keep detailed records or file annual reports with state or regulatory bodies. It is anticipated that many of these systems will eventually be absorbed into publicly owned municipal water utilities.

Table 38

PRIVATE WATER UTILITIES IN THE REGION: 1970

Code Number on Map 17	Private Water Utility	
	Name	Civil Division
	KENOSHA COUNTY	
1	Carol Beach Water Co., Inc.	Town of Pleasant Prairie
2	Lake Knolls	Town of Randall
3	Oak Hi Subdivision	Town of Pleasant Prairie
4	Oakwood Knolls	Town of Salem
5	Paddock Lake Delles	Village of Paddock Lake
6	Twin Lakes Park Water Company	Village of Twin Lakes
7	Wy-wood Co-op	Village of Twin Lakes
	MILWAUKEE COUNTY	
8	Blossom Heath Water Trust	Village of Hales Corners
9	Colony Homes Co-op[a]	City of West Allis
10	Hales Happiness Homesites	Village of Hales Corners
11	Mission Hills	City of Franklin
12	Monaco Heights	Village of Hales Corners
13	North Shore East	Village of Bayside
14	Northway Water Co-op No. 2	Village of Bayside
15	Oakview No. 3	City of Oak Creek
16	Pelham Heath	Village of Bayside
17	Rawson Homes	City of Franklin
18	Robert William Park	City of Milwaukee
19	Root River Heights	City of Franklin
20	Security Acres	City of Franklin
21	Southgate Manor	City of Greenfield
22	Town View Water Co-op	City of Greenfield
23	Van Dyke Water Co-op	City of West Allis
24	Vista Del Mar	Village of Bayside
	OZAUKEE COUNTY	
25	Alberta Subdivision	Village of Thiensville
26	Bonnie Lynn Highlands	City of Mequon
27	Century Estates No. 1 and Additions	Village of Thiensville
28	Lac Du Cours	City of Mequon
29	Laurel Acres	Village of Thiensville
30	North Shore Estates	City of Mequon
31	North Shore Heights	City of Mequon
32	Village Heights Co-op	Village of Thiensville
33	Villa du Parc (Country Club Estates)	City of Mequon
	RACINE COUNTY	
34	Eagle Lake Manor	Town of Dover
35	Waterford Woods Association	Town of Waterford
	WALWORTH COUNTY	
36	Assembly Grounds Association	Town of Delavan
37	Camp Sybil	Town of Linn
38	Chicago Club	Town of Delavan
39	Cisco Beach Subdivision	Town of Linn
40	Country Club Estates	Village of Fontana
41	Crystal Bowl	Town of Raymond
42	Delavan Lake	Town of Delavan
43	Gardens Association	Town of Walworth
44	Lake Geneva Beach Subdivision	Town of Linn
45	Lake Geneva Club	Town of Linn
46	Oak Shores Association	Town of Linn
47	Shore Haven Association	Town of Linn
48	Sunset Hills Association, Inc.	Town of Linn
49	Woodale Subdivision	Town of Linn
	WASHINGTON COUNTY	
	None	--

Table 38 (continued)

Code Number on Map 17	Private Water Utility	
	Name	Civil Division
	WAUKESHA COUNTY	
50	Glendale Park	City of New Berlin
51	Highlands Co-op	Town of Pewaukee
52	Marion Heights	Village of Elm Grove
53	Monterey Park	City of New Berlin
54	Regal Manors	City of New Berlin
55	Riverview Manor Co-op	Village of Menomonee Falls
56	Silver Spring Terrace	Village of Menomonee Falls
57	Spring Green Heights	Village of Sussex
58	Sunnyfield Acres	Town of Oconomowoc
59	Sussex Estates	Village of Sussex

[a] *These private utilities were connected to the City of West Allis Public Water Utility system in 1971.*

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

All water supplied by the publicly owned water utilities is drawn either from Lake Michigan or from wells. The Region is not only rich in surface water resources but in groundwater resources, being underlain by two separate aquifers. Treated Lake Michigan water in an amount averaging 197 mgd (millions of gallons per day) was supplied in 1970 to an aggregate service area of about 199 square miles, or about 7 percent of the total area of the Region, and a population of about 1.2 million persons, or about 68 percent of the total population of the Region. Twenty-one of the 67 public utilities in the Region utilize Lake Michigan as a source of supply. Of these 21, seven own and operate water intake and treatment facilities, while 14 utilities purchase water on a wholesale basis. Generally, Lake Michigan offers an unusually good source of supply to those areas lying east of the subcontinental divide and within economic reach of this source of supply.

Well water in an amount averaging about 25 mgd was supplied in 1970 to an aggregate area of about 60 square miles, or about 2 percent of the total area of the Region, and a population of about 190,000 persons, or about 14 percent of the total resident population of the Region. Forty-six of the public utilities in the Region utilize the groundwater as a source of supply. In general, water service from a municipal utility is a matter of local policy furnished only to property within the municipal limits of that municipality. Only the Cities of Kenosha, Milwaukee, and Racine in the Region provide water service beyond their corporate limits in any substantial amounts.

Gas Utilities

Three gas utilities are authorized to operate within the Region and provide all public gas service therein. The Wisconsin Gas Company is authorized to operate in parts of Milwaukee, Ozaukee, Washington, and Waukesha Counties; the Wisconsin Natural Gas Company is authorized to operate in parts of Kenosha, Milwaukee, Racine, Walworth, and Waukesha Counties; and the Wisconsin Southern Gas Company is authorized to operate in parts of Kenosha, Racine, and Walworth Counties. Only in the Towns of Erin and Wayne, both in Washington County, is there no gas utility presently authorized to operate. Natural gas is supplied to the three gas utilities by the Michigan-Wisconsin Pipeline Company and the Natural Gas Pipeline Company of America. Gas service may be considered to be virtually ubiquitous and does not constitute a major constraint on the location and intensity of urban development in the Region.

Electric Utilities

Two major privately owned electric utilities are authorized within the Region and, together with five small municipal utilities, provide service to the entire Region. The Wisconsin Electric Power Company is authorized to operate throughout nearly the entire Region. The Wisconsin Power and Light Company is authorized to operate in parts of Kenosha and Walworth Counties. Municipal electric power utilities are operated by the Cities of Cedarburg, Elkhorn, Hartford, and Oconomowoc and the Village of Slinger. Generally, an adequate supply of electric power is available throughout the Region. Residential service is available on demand anywhere within the Region, and low voltage lines are in place along virtually every rural highway. Therefore, electric power service, like gas service, may be considered virtually ubiquitous and not a major constraint on the location and intensity of urban development in the Region.

SUMMARY

This chapter has presented a discussion of the natural resource base and man-made physical environment of the Southeastern Wisconsin Region as that base and environment relate to housing development within the Region. A summary of the more important and pertinent aspects of that discussion follows.

Weather conditions in the Region vary greatly depending on the seasons of the year, and include long periods of cold and snowy weather in the winter months, extended periods of rain during spring and autumn, and intermittent periods of hot, humid summer weather. These conditions significantly influence, either directly or indirectly, the type, style, quality, and cost of housing in the Region, and affect the design and cost of not only housing construction but also housing maintenance. Because of the relatively severe climatic conditions, houses must be provided with central heating facilities, full insulation, and full sets of storm doors and windows and door and window screens. Full basements are highly desirable, and central air conditioning is becoming increasingly popular. The design and siting of residences should consider the prevailing wind direction, available sun, and need to protect window areas and porches from the undesirable effects of weather while taking full advantage of the desirable effects. The rainfall and snowmelt patterns within the Region require that careful attention be given in the design and development of housing to drainage and to the provision of foundation drains and sump pumps in basements.

The 2,689 square mile Region was at one time subjected to several stages of continental glaciation, with the last stage, called the Wisconsin stage, ending about 11,000 years ago. This stage largely determined the physiographic and topographic features of the Region. The most dominant feature of the Region is the Kettle Moraine, an interlobate glacial deposit or moraine formed between the Green Bay and Lake Michigan lobes of the continental glacier. It should be noted that, even though some of the most attractive and interesting natural landscapes in southeastern Wisconsin are found in the Kettle Moraine, extensive urban development of this area would result in the destruction of these natural landscapes and would adversely affect the preservation of various natural resources which make up the Kettle Moraine.

Lakes, streams, and their floodlands, and groundwater, which comprise the water resources of southeastern Wisconsin, constitute the most important single natural resource category because of their multifaceted functions. Surface water resources are very vulnerable to man's activities because their quality can easily degenerate as a result of poor water use practices. The principal source of water supply for many industries in the Region, 14 percent of the population of the Region served by public water utilities, and 69 percent of the public water utilities in the Region is groundwater. Two major aquifers exist in the Region. These are the sand and gravel deposits in the glacial drift and shallow dolomite strata in the underlying bedrock which comprise the shallow aquifer; and the Cambrian and Ordovician period rock strata which comprise the deep aquifer.

Floodlands are comprised of three basic areas related to an intermittent or perennial stream: the channel area which contains the normal flow of the stream; the floodway which, in addition to the normal flow within the channel, also carries the flow of a small, frequent recurrence interval (5- to 10-year) flood or the main flow of a large, infrequent recurrence interval (50- to 100-year) flood; and the floodplain, which contains the slow-moving, generally shallower backwater of a large, infrequent recurrence interval flood. The floodplain of a river or stream should be considered as an integral part of a natural stream system; and the location of the floodplain of southeastern Wisconsin, therefore, is important to regional housing planning. Homes built in floodlands are subject to periodic basement flooding. Besides the obvious nuisance created by such flooding, severe and costly damage may be done to the foundations of the homes, to electrical and heating equipment, and to articles stored in the basement. Floodwaters entering the first floor of homes may cause heavy damage to furniture, walls, and floors, with attendant high monetary losses. However, the attendant intangible heartache and mental aggravation may be more severe forms of flood damage than the tangible monetary losses. Floodwaters may cause onsite sewage disposal facilities to become inoperative and may cause untreated sewage to back up into the home. Backup of sanitary sewer systems into homes creates public health hazards. A river or stream may be expected to occupy and flow on its floodplain on the average of approximately once every two years. In the interest of achieving economies in housing development and concomitant savings in public utilities and services and sanitary sewerage systems, floodplain development should be minimized and the lands maintained in open-space uses.

A wide variety of soil types have developed in southeastern Wisconsin because of the interaction over time of parent glacial deposits covering the Region, topography, climate, plants, and animals. These soil types were mapped as part of a detailed soil survey; their physical, chemical, and biological properties identified; and interpretations made for planning purposes for various urban and rural uses, including proper location and design of housing development. Soil survey data and interpretations reveal that approximately 716 square miles, or about 27 percent of the Region, are covered by soils which are poorly suited for residential development with public sanitary sewer service; approximately 1,637 square miles, or about 61 percent of the Region, are poorly suited for residential development without sanitary sewer service on lots smaller than one acre in size; and about 1,181 square miles, or about 44 percent of the Region, are poorly suited for residential development without public sanitary sewer service on lots one acre or larger in size.

The delineation on a map of those elements of the natural resource base which are essential to the maintenance of both the ecological balance and the natural beauty of the Region results in a pattern of essentially lineal corridors called environmental corridors. These elements of the natural resource base include lakes and streams and their associated floodlands; wetlands, woodlands, and associated wildlife habitat areas; high-relief topography; significant geological formations; and areas of wet or poorly drained soils.

The corridors which encompass three or more environmental elements have been termed primary environmental corridors. Such corridors occupy about 486 square miles, or about 18 percent of the Region. These primary environmental corridors contain almost all of the remaining high-value wildlife habitat and woodland areas within the Region, in addition to most of the wetlands, lakes, and streams and associated floodlands. These corridors also contain many of the best remaining potential park sites. The preservation of these corridors in a natural state or in park and related open-space uses, including limited agricultural and country estate residential use, is essential to maintaining a high level of environmental quality in the Region and to the protection of its natural beauty. Secondary environmental corridors should be at least partially retained in open space by using them as the basis for, or by integrating them into, greenways, drainageways, parks, and open spaces in developing areas of the planning Region.

Land within the Region has been undergoing a particularly rapid conversion from rural to urban use. Recent urban development within the Region has been discontinuous and highly diffused, consisting primarily of many scattered, low-density, isolated enclaves of residential development located away from established urban centers.

Urban population densities within the Region, which peaked in 1920 at a level of about 11,000 persons per square mile, have been steadily declining since then to a level of approximately 4,350 persons per square mile in 1970. The highly diffused nature of recent urban development and the sharp decline in urban population density have intensified many long-standing environmental problems within the Region and have created new environmental and developmental problems of an unprecedented scale and complexity. The concentration of urban development around the shorelines of many of the inland lakes within the Region has further intensified the need for proper housing planning in order to assure protection and preservation of the natural resource base and to provide much needed urban services efficiently and economically. If regional development trends continue as in the recent past, approximately 14 square miles of rural land per year may be expected to be converted to urban use within the Region.

The Southeastern Wisconsin Region is the most highly urbanized area within the state; yet less than 20 percent of its total area is presently devoted to urban type land uses. The largest single land use category within the Region is still agriculture, which presently occupies about 60 percent of the total area. The next largest single land use category is the water and wetland group, which occupies about 10 percent of the total area; and woodlands and open lands, which presently occupy another 10 percent of the total area of the Region. The "urban" type land use occupying the greatest area is residential, which presently accounts for about 9 percent of the total area of the Region.

The past 50 years have witnessed a dramatic change in urban land development within the Region. Historic platting study data revealed that the 50-year period 1920 through 1969 witnessed the recordation of 4,907 residential subdivision plats encompassing 94,050 acres of land and accounted for the creation of 294,050 residential lots and the dedication of 20,639 acres of street rights-of-way, 656 acres of alley rights-of-way, 776 acres of park land, 408 acres of other recreation land, and 61 acres of land for school purposes.

Surface transportation facilities in urban areas are of four basic types: land access and collector streets, ordinary surface arterial streets and highways, freeways and expressways, and mass transit facilities. Land access and collector streets provide access to the individual neighborhoods of the urban area and to the individual building sites of these neighborhoods, and comprise the majority of the land area devoted to surface transportation use. Arterial streets and highways in an urban area serve to link the various neighborhoods comprising the community and, in a highly urbanizing area such as southeastern Wisconsin, serve to link one community with another within the metropolitan region and the metropolitan region with other adjacent regions. Expressways and freeway facilities are intended to remove the heavy volumes of traffic having relatively long trip lengths from the surface arterials. This frees the limited capacity of those arterials for use by local traffic and by ordinary mass transit vehicles. There were a total of 9,819 miles of surface transportation facilities in the Region in 1972. Land access and collector streets accounted for 6,713 miles, or more than 68 percent of the total miles; ordinary surface arterial streets and highways accounted for 2,800 miles, or about 29 percent of the total miles; and freeways and expressways totaled about 304 miles, or about 3 percent of the total miles of surface transportation facilities in the Region. Freeways and expressways form the backbone of the regional arterial street and highway system. In 1963, freeways and expressways carried about 11 percent of the total vehicle miles of arterial travel within the Region; by 1970, this percentage had increased to nearly 32 percent. In other words, freeways and expressways, which comprised one-tenth of the total arterial street and highway system mileage in 1972, carried nearly one-third of the total vehicle miles of travel.

Mass transit in the Region today basically consists of buses operating on urban streets. The general trend in mass transit utilization within the Region during the past eight years has been an annual decline in the number of transit revenue passengers carried. In 1963, the total number of transit revenue passengers was a little over 94 million. In 1966, this number had decreased to about 93 million passengers, and by 1968, to just under 80 million. By the end of 1971, total ridership had declined to slighly over 59 million passengers and by the end of 1972 to less than 54 million. The major declines in transit use have been accompanied by increases in transit fares and reduction in transit service. The freeway flyer bus service within the Region stands in contrast to the decline in mass transit utilization. The service began in 1964, and today a total of eight freeway flyer routes are in operation. Annual ridership has increased steadily from about 81,000 revenue passengers in 1964 to about 705,000 revenue passengers in 1972. Because of the importance of transportation to the social and economic health of a community or region, it is essential that all four types of transportation facilities discussed be maintained at the highest level of service possible so that a balanced transportation system can result and so that housing development, which is dependent upon adequate transportation facilities and the services that require such facilities, can proceed.

The air transportation system, as presently developed in the Southeastern Wisconsin Region, comprises a complex network of airways and 46 publicly and privately owned airports or air bases which fall within the air service classifications of air carrier, general aviation, military, and special-use categories.

The majority of sanitary sewerage service and water supply service within the Region is provided by publicly owned agencies. There are a total of 91 centralized public sanitary sewerage systems presently operated by utilities within the Region. These 91 systems serve a total area of about 309 square miles, or about 11 percent of the total area of the Region, and a total population of about 1.5 million persons. Sixty-seven publicly owned water utilities are presently in operation within the Region and serve about 1.4 million persons. Gas and electric utilities can be considered to be virtually ubiquitous within the Southeastern Wisconsin Region and do not constitute a major constraint on the location or intensity of urban development.

Chapter V

EXISTING HOUSING STOCK INVENTORY

INTRODUCTION

Essential to the regional housing planning process is the provision of a data base concerning the quantity and quality of the existing stock of housing on a uniform, regionwide, timely, and comprehensive basis. The existing housing stock inventory provides this data base, which both facilitates an understanding of the current housing situation in the Region and serves as a base for the maintenance on a continuing basis of a file of relevant regionwide housing market information. In particular, data concerning the quantity and quality of housing in the Region collated as part of the existing housing stock inventory comprise a very important input into the analysis of housing supply and demand, namely, the determination of the extent to which the existing housing stock is able to satisfy the current housing requirements of the regional population. In addition, the existing housing stock inventory serves as an input into the formulation of regional housing objectives and standards, the forecast of the supply of housing, and the development of a regional housing market simulation model.

This chapter presents in summary form the findings of the existing housing stock inventory. Included is a short discussion of the history of housing development within the Region as it has evolved from the early period of European settlement to the present, including a brief description of the various ethnic groups that immigrated to the territory of Wisconsin and the types of housing they constructed. More importantly, however, this chapter presents data concerning the size of the existing housing stock as well as a description of the regional housing stock in terms of basic housing unit characteristics. Included is a discussion of the number and distribution of housing units and classification of housing units by year-round/seasonal status as well as by occupancy/vacancy status. Also included in the presentation of the characteristics of the housing stock are data concerning the structure size, plumbing and kitchen facilities, age, physical condition, and cost characteristics of year-round housing units in the Region.

The existing housing stock inventory was derived primarily from a collation of data from the first, second, third, and fourth count 1970 U. S. Census of Population and Housing Summary Tapes, as well as from various 1950, 1960, and 1970 census housing publications. Although much of the housing information collected in the U. S. Census in 1970 was obtained for all year-round housing units, a portion of the housing data was obtained on a sample basis, with the sample size ranging from 5 to 20 percent, as described in census documentation. In expanding sample results to represent all housing, the Census Bureau at times reported slightly different numbers for the same tabulation. Accordingly, the totals for various data items may differ slightly among the tables in this chapter. However, whenever data are available on both a complete count and sample basis, the complete count result is presented.

It should be noted that data with regard to one aspect of the quality of housing, namely, the physical condition of housing units, were not available from the 1970 census as they were from previous federal censuses. Knowledge of the physical condition of housing units is, however, essential for a complete understanding of the extent to which the existing housing stock is able to satisfy the current housing needs of the regional population. Because of the importance of quantifying the physical condition of housing units in a meaningful evaluation of the existing housing stock, the Commission undertook an exterior condition survey of housing units on a sample basis throughout the Region during 1972. The results of this survey are also presented in summary form in this chapter.

HISTORY OF HOUSING DEVELOPMENT IN THE REGION

The diversity in types and styles of housing units constructed in the State of Wisconsin and the Southeastern Wisconsin Region over the past 200 years, ranging from small one-room log cabins constructed in the 1700s to the large multiroom homes of wood frame construction common today, was influenced by the variation in ethnic background and in home-building skills of the immigrants who settled in the Region and by the variety of available raw materials which could be utilized for home construction purposes.

The Region today is inhabited by people of many different ethnic origins whose ancestors immigrated into the area, many before Wisconsin was recognized as a state. In some areas of the Region, distinct concentrations of ethnic groups still exist, while in other areas, a more typically "American" population resides. There were many influences affecting the growth in immigration into the state and the Region, including the cessation of Indian warfare, the expansion of the mining industry in the southwestern area of the state, the availability of timber, availability of lands particularly well suited for agricultural use, and the expansion of the railroads within the state.

The first Europeans to come to the Wisconsin area were French fur traders and missionaries in the 17th century. They were followed in the late 1700s and early 1800s by the English and then the Americans from the Ohio

Valley, Pennsylvania, Virginia, and New England. Other immigrants also came from England, Ireland, Norway, and Germany.

Log Cabin Construction

The first settlers built their homes as cabins of round or squared logs. Eventually, the log house became the universal architectural type of the frontier. The log house was introduced by Pennsylvania Germans and New England Yankees and was built of timber taken from the land as it was cleared for farming. As the walls were constructed, the chinks between the logs were filled with slats cut to fill the crevices. These were then covered with mortar or clay mixed with straw.

The earliest log houses were usually one story high with a loft which was commonly used as sleeping quarters for children. The houses contained one room which was used as a kitchen, sitting room, dining room, and parlor, with sleeping quarters in one corner partitioned by a blanket. The floors of these houses were usually bare ground but sometimes were covered with a layer of sand. While the log houses of the Yankees had fireplaces of stone, those of the European settlers, who were not familiar with the open-hearth fire, had iron stoves.

The log houses built by the Norwegians and Finns were constructed somewhat differently. The logs were cupped and fitted over each other to make a tight joint, and pieces of woolen cloth were inserted between the logs to fill the crevices. In addition, a building called a sauna was constructed as a workshop for meat preparation, soap and candle making, leather tanning, and related activities, as well as providing a place for bathing.

In the mid 1800s more German settlers came into Wisconsin, bringing with them their highly developed skills as carpenters, joiners, cabinetmakers, stonemasons, and blacksmiths. The type of housing these settlers constructed usually consisted of a half-timber half-masonry structure. These houses were located in the area of the Region that today is known as Washington and Ozaukee Counties, and were built of heavy timbers which were mortised, tenoned, and pegged together. The spaces between the timber walls were filled with nogging of either kiln-fire brick, air-dried brick, rubble masonry, or clay and straw on wood slats.[1] As economic prosperity began to develop, the average log cabin and half-timber houses began to grow into a larger, more accommodating place of residence. Dormers were often added to the upper story loft, and sometimes a full second story was built. Eventually, the mud and logs were replaced by clapboard.

The 1800s also witnessed the earliest forms of architectural influence on residential buildings in southeastern Wisconsin. New demands for residential construction and design development accompanied the Industrial Revolution, and architectural styles from Europe began to be studied and copied, first by drawings and sketches and then by the use of the camera. Intricate metal work from the south of the United States and stone ornamentation commonly used as decoration in Europe were brought to southeastern Wisconsin by the use of wooden replicas.

Frame Construction

Throughout the 19th century, the half-timber frame technique was used in the construction of most types of buildings in Wisconsin because of an abundant supply of lumber and brick. In about 1833, however, a new method of house building began to develop called "balloon frame" construction. In the past, the traditional method of framing a building had depended upon heavy timbers with mortised and tenoned joints held together with hardwood pegs, a slow method of construction. The balloon frame substituted light strips of sawn lumber standardized at two inches by four inches or two inches by six inches for the framing of the walls. These pieces, which were called "studs," extended the full height of the building and were held together by nails. A frame could be easily and rapidly nailed together on the ground and raised to an upright position by a few men. This method, together with the availability of sawn lumber and its widespread distribution by a rapidly expanding system of railroads, made possible the building of houses by the thousands in the fast-growing cities and new industrial centers.[2] However, in the rural areas of Wisconsin, the half-timber method of construction remained standard practice for most residential and commercial buildings until about 1870.

Brick Construction

One major building material readily available in the Region which was particularly suited to providing a good exterior finish to balloon frame construction—and which is still often used for siding in home construction today—was brick. Brick is one of the world's oldest manufactured building materials and, except for pottery, probably the most important product ever to be made from clay.[3] Brickmaking techniques used in Wisconsin as well as in the United States were patterned after those practiced in Europe. Air-dried mud brick was used occasionally with German half-timber work in southeastern Wisconsin during the early and middle part of the nineteenth century. Afterwards, burned brick was used in place of air-dried brick, and entire buildings were built without the use of the half-timber frame.

Deposits of clay and shale in Wisconsin provided a good, readily available supply of materials to make bricks. Most Wisconsin brick made during the early days was a clay rather than a shale product. Wisconsin clay made good

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[1] *Richard W. E. Perrin, Historic Wisconsin Buildings, A Survey of Pioneer Architecture, 1835-1870.*

[2] *Ibid.*

[3] *Ibid.*

brick, with the lighter cream and buff colors obtained from clay deposits along Lake Michigan and various shades of red and brown brick obtained from clays found elsewhere in the state. A cream colored brick was produced in the City of Milwaukee and earned for its home town the name "Cream City." The Milwaukee brick was used in and around the city virtually to the exclusion of practically all other materials for over 50 years.

Fieldstone Masonry Construction

Because glaciers played an important part in shaping the surface of southeastern Wisconsin, huge deposits of soil and rock were left behind. Before fields could be developed for farming, these rocks, or fieldstones, had to be removed. Many of the early German and Irish settlers were well acquainted with fieldstones since most of northern Europe also was glaciated land. The period of greatest popularity for the use of fieldstone in home construction was between 1850 and 1880.

One variant of fieldstone masonry was the cobblestone wall, which consisted of medium-sized, egg-shaped stones of glacial origin. This type of wall originated in central and northern New York State, and consequently many cobblestone houses in Wisconsin were constructed by settlers from those areas. Other types of stones used in the construction of homes in Wisconsin included limestone, sandstone, and granite used mostly by Cornish, Welsh, Irish, and German stonemasons.

Twentieth Century Housing

From about 1900 until the years immediately after World War I, housing which resembled Greek and Roman architectural styles was in vogue. Many of the homes constructed in this period provide adequate and decent housing for families today. During the 1920s, many Dutch colonial and bungalow-type houses were constructed on narrow lots with very small yards in the urbanizing areas of the Region. Alleys were often used for secondary access, and a lack of usable open space adjacent to the home was often commonplace. Moderate- and middle-income housing was usually constructed with deeper front yards and somewhat wider side yards to accommodate driveways. Through the 1940s and much of the 1950s, new housing was copied from the nation's early housing styles, and colonial style housing, popular in the East, was widely used in the Region.

Immediately following World War II, housing production reached record levels in order to satisfy the pent-up demand generated by the large number of returning servicemen and their growing families. Very small housing units of balloon frame construction were built to meet this intensive demand in a period also faced with scarcities of both materials and labor, and prefabricated, or manufactured, housing also began to appear.

Much of the middle-income housing built in almost every part of the Region between 1955 and 1965 consisted of the so-called ranch style house, which was originally popular in the West and gradually gained in popularity in this area. These houses are usually one story or bilevel in design, built with attached garages and located on large one-third to three-quarter acre lots with wide front yards to accommodate the wide front profile. This type of design and construction produced a significant change in the type of housing in the Region from two-or-more-story to one-story structures, as well as a change in lot size and in residential densities.

One particular type of housing which was constructed in the period from 1940 to 1950 and which appears in much of the Region is called the one and three-quarter house or the seven-quarter house.[4] The name of the house is derived from its form, which is somewhere between the typical one-and-a-half story and the two-story house. Unlike the one-and-a-half story house, the full second floor of the seven-quarter house is utilized, although the ceilings and roof are both sloped upward from the level of the outside wall. This form of housing apparently developed from an attempt to make the attic area more spacious and useful and is particularly evident in rural areas and small towns.

From the late 1960s up to the present time, larger, more expensive housing has become typical of much of the residential development in the Region. Most recently, the popularity of the two-story house has been revived, often in a colonial motif. Scarce and expensive mortgage money; high costs of land, labor, and materials; and rising property taxes have virtually excluded the low-income buyer from the new housing market.

EXISTING HOUSING STOCK

While the discussion of the history of housing development in the Region over the past 200 years is interesting and may provide some understanding of the manner in which the existing housing stock came into being, a quantitative analysis of the quality and quantity of that stock is essential to any analysis of the housing problems of the Region. The balance of this chapter will, therefore, be devoted to a detailed description of the current housing stock of the Region.

Number and Distribution of Housing Units

The U. S. Bureau of the Census classifies all structures which are occupied or intended for occupancy as living quarters as either housing units or group quarters. Housing units are defined as houses, apartments, groups of rooms, or single rooms which are occupied or intended for occupancy by households as separate living quarters and

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[4] *Richard M. Ballinger and Herman York, The Illustrated Guide to the Houses of America, Hawthorn Books, Inc., New York, 1971.*

which meet certain specific criteria.[5] A household is, in turn, defined as one or more related or unrelated individuals who occupy a housing unit. On the other hand, group quarters are living arrangements for other than ordinary household life such as homes for the elderly, college dormitories, prisons, mental hospitals, and military barracks. It should be noted that more than 41,000 persons occupied group quarters in the Region in 1970, representing about 2 percent of the total regional population. Approximately one-half of these persons lived in institutions such as homes for the elderly and mental or penal institutions, one-fourth of these persons lived in college dormitories, and the balance lived in other group quarters (see Table 25). Group quarters do not satisfy the Census Bureau's definition of a housing unit; and no housing information is provided for them by the Census Bureau. Accordingly, group quarters are not treated as part of the existing housing stock in this chapter.

The total housing stock in the Region consisted of 566,756 housing units in 1970, representing an increase of 189,364 units, or 50 percent, over the 1950 stock. As indicated in Table 39, growth in the regional housing stock occurred at a very rapid rate between 1950 and 1960 and at a somewhat slower rate from 1960 to 1970.

For the seven counties comprising the Region, the total housing stock in 1970 varied from less than 20,000 housing units in Ozaukee and Washington Counties to almost 350,000 housing units in Milwaukee County. As indicated in Table 40, however, growth in the housing stock has not been uniform among the counties in recent times. In particular, the highest rates of increase in the housing stock since 1950 occurred in certain outlying counties, notably Ozaukee and Waukesha, while the growth rates were comparatively low in Milwaukee and Walworth Counties.

These varying rates of growth in the housing stock for the counties of the Region since 1950 have resulted in significant distributional shifts of the regional housing stock among the seven counties. The most dramatic changes over this 20-year period have occurred in Milwaukee and Waukesha Counties. The Milwaukee County proportion of the total regional housing stock decreased by 5 percent due to the very slow relative growth rate in the housing stock in that county between 1950 and 1970. On the other hand, Waukesha County's proportion of the total regional housing stock increased by 4 percent between 1950 and 1970. The result of these changes in the distribution of the housing stock within the Region has been an areawide spread of residential development in outlying areas of the Region (see Map 18). A continuation of the existing trend of decentralization of residential development within the Region has significant implications for transportation and protection of the natural resource base, as well as for the fiscal capabilities of the communities involved and their ability to provide an adequate level of municipal services and, therefore, on the provision of suitable housing for the existing and future resident population of the Region.

It is important to note that the growth in the housing stock described previously is actually a net increase, or the total number of units constructed minus the total number of units demolished during the inventory period. The number of housing unit building and demolition permits authorized by local building inspectors for the period 1960 through 1969 for the seven counties in the Region is shown in Table 41. From analysis of this table, it is apparent that housing unit demolitions substantially reduced the net increase in the housing stock in Milwaukee County between 1960 and 1970. More than 20,000 housing unit demolitions were authorized in Milwaukee County, with 94 percent of these occurring in the City of Milwaukee alone.

The impact of the demolition of housing units is more fully understood when reasons for the demolitions are taken into account. Accordingly, an inventory to ascer-

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[5]*According to the 1970 census definition, a housing unit exists when the occupants live and eat separately from any other persons in the structure, and there is either direct access to the unit from the outside or through a common hall, or complete kitchen facilities for the occupants' exclusive use. Complete kitchen facilities include a sink with piped water, a range or cookstove (excluding portable cooking equipment), and a mechanical refrigerator. Any separate living quarters which meet the above criteria in rooming or boarding houses are classified as housing units, as are entire rooming or boarding houses where there are four or fewer roomers unrelated to the person in charge. Trailers, tents, boats,railroad cars, hotels, and motels occupied by usual residents which meet the definitional criteria constitute housing units. Vacant rooms or suites in hotels where 75 percent or more of the accommodations are occupied by usual residents are also classified as housing units.*

In 1960, the definition of a housing unit was identical except for a change in regard to the required kitchen facilities. In 1960, the requirement was that there be a kitchen or cooking equipment for the exclusive use of the occupants of the unit. A kitchen was defined as a room used primarily for cooking and the preparation of meals. Cooking equipment was defined as a range or stove, whether or not it is regularly used, or other equipment such as a hotplate or electrical appliance if it is used for the regular preparation of meals.

In 1950, the Census Bureau tabulated the number of dwelling units. The main definitional distinction between housing units and dwelling units is in the treatment of one-room quarters. In 1950, a single room occupied or intended for occupancy as separate quarters was considered a dwelling unit only if it had separate cooking equipment, it was located in a regular apartment house, or it constituted the only living quarters in the structure. It is likely that the count of housing units in 1960 and 1970 included certain one-room quarters which failed to qualify as dwelling units in 1950.

Table 39

HOUSING STOCK IN THE UNITED STATES, WISCONSIN, AND THE REGION: 1950, 1960, and 1970

Year	Number of Housing Units[a]			Region Housing Stock as Percent of United States Housing Stock	Region Housing Stock as Percent of Wisconsin Housing Stock
	United States	Wisconsin	Southeastern Wisconsin Region		
1950	45,983,398	1,055,843	377,392	0.8	35.7
1960	58,326,357	1,288,620	500,761	0.9	38.9
1970	68,679,030	1,472,466	566,756	0.8	38.5
Year	Percent Change				
1950-1960	26.8	22.0	32.7	--	--
1960-1970	17.8	14.3	13.2	--	--
1950-1970	49.4	39.5	50.2	--	--

[a] *The U. S. Bureau of the Census tabulated dwelling units in 1950 and housing units in 1960 and 1970. The data have not been adjusted for any changes in the definition of a housing unit (dwelling unit) over the past three censuses.*

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

Table 40

DISTRIBUTION OF HOUSING UNITS IN THE REGION BY COUNTY: 1950, 1960, and 1970

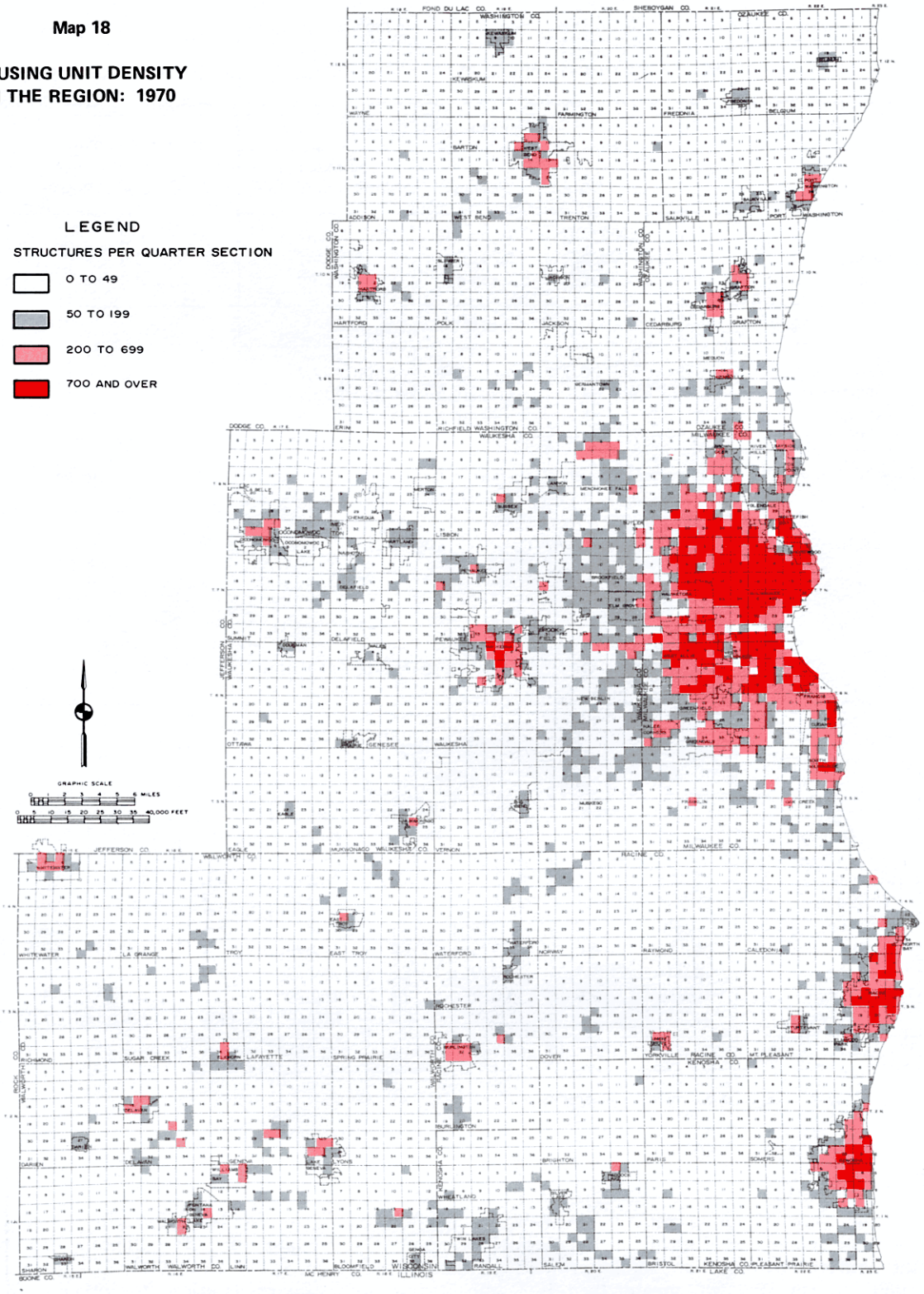
County	Housing Units									
	1950		1960		1970		Change			
							1960-1970		1950-1970	
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent	Number	Percent
Kenosha	25,413	6.7	33,643	6.7	39,110	6.9	5,467	16.3	13,697	53.9
Milwaukee	253,384	67.1	327,736	65.5	349,764	61.7	22,028	6.7	96,380	38.0
Ozaukee	7,046	1.9	11,128	2.2	15,339	2.7	4,211	37.8	8,293	117.7
Racine	34,112	9.0	43,895	8.8	52,829	9.3	8,934	20.4	18,717	54.9
Walworth	19,032	5.1	22,539	4.5	25,773	4.6	3,234	14.3	6,741	35.4
Washington	10,915	2.9	14,519	2.9	18,692	3.3	4,173	28.7	7,777	71.3
Waukesha	27,490	7.3	47,301	9.4	65,249	11.5	17,948	37.9	37,759	137.4
Region	377,392	100.0	500,761	100.0	566,756	100.0	65,995	13.2	189,364	50.2

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

tain the cause of housing unit demolitions was conducted for those minor civil divisions in the Region for which the number of residential demolitions during the period 1960 through 1969 was greater than 100, namely, the Cities of Kenosha, Milwaukee, Racine, Waukesha, Wauwatosa, and West Allis. The total of 20,769 housing unit demolitions in these six cities represents 97 percent of all residential demolitions in the Region during the inventory period. As indicated in Table 42, about 15,300 housing unit demolitions, or 74 percent of all housing unit demolitions in these six cities, were instigated by governmental action. Thus, freeway construction alone resulted in 5,700 housing unit demolitions, or about 28 percent of all housing unit demolitions in the six cities, while demolitions for other public activities comprised varying proportions of the total number of residential demolitions as follows: public housing—3 percent; code enforcement—14 percent; urban renewal—19 percent; and other public works—10 percent. As further indicated in Table 42, about 5,400 housing unit demolitions, or 26 percent of all residential demolitions in the six cities, were the result of activity in the private sector.

Map 18

HOUSING UNIT DENSITY IN THE REGION: 1970



Major concentrations of housing units occur in the Kenosha, Milwaukee, and Racine urban areas and in other long established outlying urban areas of the Region. Extensive housing development also exists in areas substantially removed from these existing concentrations, with much of this dispersed development situated along and around the rivers, lakes, and woodlands of the Region, which features provide an attractive setting for residential development. A continuation of the existing trend toward decentralization of residential development within the Region has significant implications for transportation, and for the preservation of the natural resource base, as well as for the fiscal capabilities of the communities involved and their ability to provide an adequate level of essential municipal services.

Source: SEWRPC.

Table 41

RESIDENTIAL BUILDING AND DEMOLITION PERMITS AUTHORIZED IN THE REGION BY COUNTY: 1960-1969

County	Building Permits (units) 1960-1969		Demolition Permits (units) 1960-1969		Net Change 1960-1969[a]
	Number	Percent of Total	Number	Percent of Total	
Kenosha	6,501	6.2	176	0.8	6,325
Milwaukee	56,273	53.3	20,305	94.7	35,968
Ozaukee	4,512	4.3	--[b]	--	4,512
Racine	11,041	10.4	570	2.7	10,471
Walworth	3,927	3.7	12	0.1	3,915
Washington	3,985	3.8	--[b]	--	3,985
Waukesha	19,352	18.3	375	1.7	18,977
Region	105,591	100.0	21,438	100.0	84,153

[a] *The number of building permits minus the number of demolition permits, or the net change, is substantially greater than the increase in the housing stock between 1960 and 1970 as reported by the U. S. Bureau of the Census, a phenomenon which results primarily from the fact that the issuance of a building permit does not necessarily imply that a housing unit was constructed. For example, lack of financing or other unforeseen circumstances may prohibit the construction of a structure for which a building permit has been issued. On the other hand, it is sometimes necessary for a builder to obtain a second building permit for a project whose construction was not undertaken before the expiration of the original building permit, thereby causing double counting. Thus, building permit authorizations are, at best, a symptomatic indicator of activity in the construction industry.*

[b] *The number is negligible.*

Source: Milwaukee Metropolitan Builders Association and SEWRPC.

Table 42

RESIDENTIAL DEMOLITION PERMITS IN THE CITIES OF KENOSHA, MILWAUKEE, RACINE, WAUKESHA, WAUWATOSA, AND WEST ALLIS: 1960-1969

Category	Demolition Permits (units) 1960-1969[a]	
	Number	Percent of Total
Public	15,320	73.8
Public Housing[b]	615	3.0
Code Enforcement	2,889	13.9
Urban Renewal[b]	3,968	19.1
Expressways	5,700	27.5
Other Public Works	2,148	10.3
Private	5,449	26.2
Total	20,769	100.0

[a] *An inventory was conducted to ascertain the cause of housing unit demolitions for minor civil divisions in the Region where the number of residential demolitions for the period 1960 through 1969 was greater than 100, namely, the Cities of Kenosha, Milwaukee, Racine, Waukesha, Wauwatosa, and West Allis. The total of 20,769 residential demolitions in these six cities represents 97 percent of all residential demolitions in the Region during the inventory period.*

[b] *For the City of Milwaukee only.*

Source: SEWRPC.

Whether the demolition of housing units ultimately enhances or diminishes the supply of housing in an area depends on the nature of the project for which the units were demolished. For example, because it involves a change in land use from residential to nonresidential purposes, the demolition of housing units for freeway construction and other public works, such as street widening or park or school expansion, decreases the supply of housing, both standard and substandard. On the other hand, because they often involve the replacement of substandard housing with standard housing, urban renewal projects generally enhance the supply of housing in the renewal area. Clearly, the demolition of housing units resulting from various types of proposed public and private development projects is an important consideration in the development of forecasts of the probable future supply of housing.

Year-Round/Seasonal Status

As indicated in Table 43, a basic categorization of the housing stock is the classification of housing units as year-round housing units and vacant seasonal housing units. The year-round housing stock consists of all occupied housing units and vacant year-round housing units, the latter being vacant units which were intended for occupancy at any time of the year even if intended only for occasional use throughout the year. Vacant seasonal housing units are vacant housing units intended for occupancy during only a season of the year. There were 556,586 year-round housing units in the Region in 1970, representing about 98 percent of the total regional housing stock. The balance of the total housing stock was comprised of vacant seasonal housing units. It should be noted that the count of vacant housing units intended for occupancy by migratory workers employed in farm work during the crop season is included in the number of vacant seasonal units in Table 43. Migratory housing units represented only about 1 percent of all vacant seasonal housing units in the Region in 1970 and less than 1 percent of the total housing stock.

Between 1960 and 1970, the year-round housing stock in the Region increased by 71,235 units, or 15 percent, while the vacant seasonal housing stock decreased by 5,240 units, or 34 percent. Although some of this decrease in the vacant seasonal housing stock may have been caused by the accidental or programmed demolition of such units, it is likely that most of the reduction in the count of housing units reported as vacant seasonal units in 1960 is due to the reclassification of such units as year-round housing units in 1970, regardless of whether this change was accompanied by a physical modification

Table 43

YEAR-ROUND/SEASONAL STATUS OF HOUSING UNITS IN THE REGION BY COUNTY: 1960 and 1970

County	Status	Housing Units					
		1960		1970		Change: 1960-1970	
		Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	Year-Round	30,789	91.5	37,144	95.0	6,355	20.6
	Vacant Seasonal	2,854	8.5	1,966	5.0	- 888	-31.1
	Total	33,643	100.0	39,110	100.0	5,467	16.3
Milwaukee	Year-Round	327,230	99.8	349,693	100.0	22,463	6.9
	Vacant Seasonal	506	0.2	71	--[a]	- 435	-86.0
	Total	327,736	100.0	349,764	100.0	22,028	6.7
Ozaukee	Year-Round	10,810	97.1	15,241	99.4	4,431	41.0
	Vacant Seasonal	318	2.9	98	0.6	- 220	-69.2
	Total	11,128	100.0	15,339	100.0	4,211	37.8
Racine	Year-Round	42,102	95.9	51,989	98.4	9,887	23.5
	Vacant Seasonal	1,793	4.1	840	1.6	- 953	-53.2
	Total	43,895	100.0	52,829	100.0	8,934	20.4
Walworth	Year-Round	16,641	73.8	20,997	81.5	4,356	26.2
	Vacant Seasonal	5,898	26.2	4,776	18.5	- 1,122	-19.0
	Total	22,539	100.0	25,773	100.0	3,234	14.3
Washington	Year-Round	13,309	91.7	17,868	95.6	4,559	34.3
	Vacant Seasonal	1,210	8.3	824	4.4	- 386	-31.9
	Total	14,519	100.0	18,692	100.0	4,173	28.7
Waukesha	Year-Round	44,470	94.0	63,654	97.6	19,184	43.1
	Vacant Seasonal	2,831	6.0	1,595	2.4	- 1,236	-43.7
	Total	47,301	100.0	65,249	100.0	17,948	37.9
Region	Year-Round	485,351	96.9	556,586	98.2	71,235	14.7
	Vacant Seasonal	15,410	3.1	10,170	1.8	- 5,240	-34.0
	Total	500,761	100.0	566,756	100.0	65,995	13.2

[a] *Less than one-tenth of 1 percent.*

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

of the unit or whether there was simply a change in regard to the intended use of the unit.[6] Estimates of the number of housing units which were reported as vacant seasonal units in 1960 and which were actually occupied on a year-round basis in 1970 are not available. However, conversion of many housing units from seasonal to year-round occupancy is likely in view of shifting centers of economic activity and new transportation facilities within the Region, which are causing many formerly isolated seasonal housing units to be more convenient locations for year-round living.

As further indicated in Table 43, the magnitude of the vacant seasonal housing stock varied from less than 100 units in Milwaukee and Ozaukee Counties to more than 4,700 units in Walworth County in 1970. Vacant seasonal housing units in 1970 comprised 5 percent or less of the total housing stock within each county except

[6] *It should be noted that the Census Bureau includes in the year-round housing stock a category of vacant units reported as "vacant year-round housing units held for occasional use," a category which includes vacant units for year-round occupancy which were held for weekend or other occasional use at any time of the year. It is possible that some housing units included in the vacant seasonal category should have been reported as vacant year-round units held for occasional use and vice versa. The number of vacant year-round housing units held for occasional use in the Region increased by 654 units between 1960 and 1970. It appears likely that some housing units which were reported as vacant seasonal housing units in 1960 were reported as vacant year-round housing units held for occasional use in 1970, even though there may have been no change in the intended use of the housing unit.*

Walworth County, where such units represented an unusually large proportion (nearly 19 percent) of all housing units. Between 1960 and 1970, significant decreases in the vacant seasonal housing stock occurred in each county of the Region, with the decreases ranging from 19 percent in Walworth County to 86 percent in Milwaukee County. In many instances the loss of vacant seasonal units is due to the conversion of such units to year-round use. Continuation of the conversion of seasonal housing units to year-round use could significantly increase the stock of year-round housing in certain outlying areas of the Region, particularly in the lake areas of Kenosha, Walworth, Washington, and Waukesha Counties.

Occupancy/Vacancy Status

As already noted, year-round housing units may be occupied or vacant units. A housing unit is considered occupied if it was the usual place of residence of the person(s) living in it at the time of the census enumeration. Included are housing units occupied by persons only temporarily absent (on vacation) and units occupied by persons with no usual place of residence (migratory workers). The count of occupied housing units is by definition the count of households. There were 536,486 occupied housing units in the Region in 1970, representing over 96 percent of all year-round housing units (see Table 44). Between 1960 and 1970, the occupied housing stock in the Region increased by 70,573 units, or about 15 percent. The fact that the increase in the number of occupied housing units in the Region between 1960 and 1970 is significantly greater than the observed increase of 65,995 units in the total housing stock during that time indicates a more intensive utilization of the housing stock in 1970 than in 1960.

Table 44

OCCUPANCY/VACANCY STATUS OF YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1960 and 1970

County	Status	Year-Round Housing Units					
		1960		1970		Change: 1960-1970	
		Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	Occupied . .	29,545	96.0	35,468	95.5	5,923	20.0
	Vacant . . .	1,244	4.0	1,676	4.5	432	34.7
	Total . . .	30,789	100.0	37,144	100.0	6,355	20.6
Milwaukee	Occupied . .	314,875	96.2	338,605	96.8	23,730	7.5
	Vacant . . .	12,355	3.8	11,088	3.2	- 1,267	-10.3
	Total . . .	327,230	100.0	349,693	100.0	22,463	6.9
Ozaukee	Occupied . .	10,417	96.4	14,753	96.8	4,336	41.6
	Vacant . . .	393	3.6	488	3.2	95	24.2
	Total . . .	10,810	100.0	15,241	100.0	4,431	41.0
Racine	Occupied . .	40,736	96.8	49,796	95.8	9,060	22.2
	Vacant . . .	1,366	3.2	2,193	4.2	827	60.5
	Total . . .	42,102	100.0	51,989	100.0	9,887	23.5
Walworth	Occupied . .	15,414	92.6	18,544	88.3	3,130	20.3
	Vacant . . .	1,227	7.4	2,453	11.7	1,226	99.9
	Total . . .	16,641	100.0	20,997	100.0	4,356	26.2
Washington	Occupied . .	12,532	94.2	17,385	97.3	4,853	38.7
	Vacant . . .	777	5.8	483	2.7	- 294	-37.8
	Total . . .	13,309	100.0	17,868	100.0	4,559	34.3
Waukesha	Occupied . .	42,394	95.3	61,935	97.3	19,541	46.1
	Vacant . . .	2,076	4.7	1,719	2.7	- 357	-17.2
	Total . . .	44,470	100.0	63,654	100.0	19,184	43.1
Region	Occupied . .	465,913	96.0	536,486	96.4	70,573	15.1
	Vacant . . .	19,438	4.0	20,100	3.6	662	3.4
	Total . . .	485,351	100.0	556,586	100.0	71,235	14.7

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

As further indicated in Table 44, the number of occupied housing units, or households, in 1970 varied in magnitude from less than 20,000 units in Ozaukee, Walworth, and Washington Counties to more than 338,000 units in Milwaukee County. More than 95 percent of the year-round housing stock in each county in the Region except Walworth County was reported as occupied in the 1970 Census. In Walworth County an unusually low proportion (88 percent) of all year-round units were reported as occupied. Between 1960 and 1970, the number of occupied housing units increased most rapidly in certain outlying counties, particularly in Ozaukee, Washington, and Waukesha Counties, and relatively more slowly in the urban counties of the Region, another indication of the decentralization of the population and of urban land uses currently taking place within the Region (see Chapter III).

Tenure Status

Of particular importance to any housing market analysis is the classification of the occupied housing stock by tenure status. A housing unit was reported as being owner-occupied in the census if it was reported as owned or being bought by someone in the household. Cooperative or condominium units are classified as part of the owner-occupied housing stock. All occupied housing units which were not classified as owner-occupied were classified as renter-occupied. In 1970, there were 205,147 renter-occupied housing units in the Region, representing about 38 percent of the total occupied housing stock (see Table 45). The relatively large portion of the occupied housing stock comprised of renter-occupied housing units can be attributed to the comparatively high proportion of rental units in Milwaukee County, which heavily influences the regional percentage. Thus, Table 45 indi-

Table 45

TENURE STATUS OF OCCUPIED HOUSING UNITS IN THE REGION BY COUNTY: 1960 and 1970

County	Status	Occupied Housing Units					
		1960		1970		Change: 1960-1970	
		Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	Renter Occupied	9,186	31.1	10,607	29.9	1,421	15.5
	Owner Occupied	20,359	68.9	24,861	70.1	4,502	22.1
	Total	29,545	100.0	35,468	100.0	5,923	20.0
Milwaukee	Renter Occupied	140,104	44.5	154,119	45.5	14,015	10.0
	Owner Occupied	174,771	55.5	184,486	54.5	9,715	5.6
	Total	314,875	100.0	338,605	100.0	23,730	7.5
Ozaukee	Renter Occupied	2,393	23.0	3,132	21.2	739	30.9
	Owner Occupied	8,024	77.0	11,621	78.8	3,597	44.8
	Total	10,417	100.0	14,753	100.0	4,336	41.6
Racine	Renter Occupied	12,444	30.5	15,139	30.4	2,695	21.7
	Owner Occupied	28,292	69.5	34,657	69.6	6,365	22.5
	Total	40,736	100.0	49,796	100.0	9,060	22.2
Walworth	Renter Occupied	4,614	29.9	5,550	29.9	936	20.3
	Owner Occupied	10,800	70.1	12,994	70.1	2,194	20.3
	Total	15,414	100.0	18,544	100.0	3,130	20.3
Washington	Renter Occupied	3,393	27.1	4,262	24.5	869	25.6
	Owner Occupied	9,139	72.9	13,123	75.5	3,984	43.6
	Total	12,532	100.0	17,385	100.0	4,853	38.7
Waukesha	Renter Occupied	9,072	21.4	12,338	19.9	3,266	36.0
	Owner Occupied	33,322	78.6	49,597	80.1	16,275	48.8
	Total	42,394	100.0	61,935	100.0	19,541	46.1
Region	Renter Occupied	181,206	38.9	205,147	38.2	23,941	13.2
	Owner Occupied	284,707	61.1	331,339	61.8	46,632	16.4
	Total	465,913	100.0	536,486	100.0	70,573	15.1

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

cates that renter-occupied housing units comprised about 30 percent or less of all occupied housing units in each of the six counties of the Region except Milwaukee, where renter-occupied units represented about 46 percent of the occupied housing stock.

From further analysis of Table 45, it can be seen that, although owner-occupied housing units increased at a slightly faster rate than renter-occupied housing units, no significant change has occurred in the tenure status of the occupied housing stock in the Region between 1960 and 1970. The percent of all occupied housing units comprised of rental units increased slightly in Milwaukee County and remained the same or decreased slightly for the other six counties.

Vacant Year-Round Housing Units

The vacant year-round housing stock in the Region consisted of 20,100 housing units in 1970 (see Table 46). Of these, 11,480 housing units, or 57 percent, were available vacant housing units in the sense that they were offered on the market at the time of the census enumeration. Thus, the vacant for sale housing stock, consisting of vacant year-round units offered for sale at the time of the census, numbered 2,379 housing units in 1970. The vacant for rent housing stock, comprised of vacant year-round housing units offered for rent at the time of the census, numbered 9,101 units. Other vacant year-round housing units in the Region in 1970 consisted of units which were rented or sold and awaiting occupancy (1,803 units); vacant units for year-round occupancy held for weekend or other occasional use (1,923 units); and vacant year-round housing units held vacant for other reasons, such as units held for caretakers or units which are vacated and awaiting repairs (4,894 units). Housing units reported in the census as other vacant year-round units are not considered a part of the available vacant year-round housing stock.

As further indicated in Table 46, the available vacant housing stock in the Region decreased by more than 1,400 housing units, or 11 percent, between 1960 and 1970. This decrease was the result of a decrease of 285 units, or 3 percent, in the vacant for rent housing stock as well as a decrease of 1,147 units, or about 33 percent, in the vacant for sale housing stock.

Among the seven counties, the number of available vacant housing units in 1970 ranged from less than 300 units in Ozaukee and Washington Counties to almost 8,000 units in Milwaukee County (see Table 47). Between 1960 and 1970, significant percentage decreases in the available vacant housing stock were observed in Milwaukee, Washington, and Waukesha Counties, while substantial increases in the available vacant housing stock were observed in Kenosha, Ozaukee, and Racine Counties. No significant change occurred in the size of the available vacant housing stock in Walworth County between 1960 and 1970.

Of more significance than the absolute number of available vacant housing units are vacancy rates. Three such rates are in use, namely: the rental vacancy rate, the homeowner vacancy rate, and the total vacancy rate. These indicate the percentage relationship between the magnitude of the vacant for rent, vacant for sale, and

Table 46

VACANCY STATUS OF VACANT YEAR-ROUND HOUSING UNITS IN THE REGION: 1960 and 1970

Status	Vacant Year-Round Housing Units			
			Change: 1960-1970	
	1960	1970	Number	Percent
Available Vacant				
Vacant for Rent	9,386	9,101	- 285	- 3.0
Vacant for Sale	3,526	2,379	-1,147	-32.5
Subtotal	12,912	11,480	-1,432	-11.1
Other Vacant Year-Round				
Rented or Sold, Awaiting Occupancy	1,702	1,803	101	5.9
Held for Occasional Use	1,269	1,923	654	51.5
Held Vacant for Other Reasons	3,555[a]	4,894	1,339	37.7
Subtotal	6,526	8,620	2,094	32.1
Total	19,438	20,100	662	3.4

[a] *In 1960, dilapidated vacant year-round housing units were excluded from the counts of vacant for rent, vacant for sale, and other vacant year-round housing units. These units, numbering 1,258, have been included in the count of year-round units held vacant for other reasons.*

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

Table 47

VACANT YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1960 and 1970

County	Status	Vacant Year-Round Housing Units			
				Change: 1960-1970	
		1960	1970	Number	Percent
Kenosha	Available Vacant	415	612	197	47.5
	For Rent	221	435	214	96.8
	For Sale	194	177	- 17	- 8.8
	Other Vacant[a]	829	1,064	235	28.3
	Total Vacant	1,244	1,676	432	34.7
Milwaukee	Available Vacant	9,262	7,932	-1,330	- 14.4
	For Rent	7,410	6,845	- 565	- 7.6
	For Sale	1,852	1,087	- 765	- 41.3
	Other Vacant[a]	3,093	3,156	63	2.0
	Total Vacant	12,355	11,088	-1,267	- 10.3
Ozaukee	Available Vacant	207	260	53	25.6
	For Rent	114	126	12	10.5
	For Sale	93	134	41	44.1
	Other Vacant[a]	186	228	42	22.6
	Total Vacant	393	488	95	24.2
Racine	Available Vacant	862	1,094	232	26.9
	For Rent	590	771	181	30.7
	For Sale	272	323	51	18.8
	Other Vacant[a]	504	1,099	595	118.1
	Total Vacant	1,366	2,193	827	60.5
Walworth	Available Vacant	459	489	30	6.5
	For Rent	303	282	- 21	- 6.9
	For Sale	156	207	51	32.7
	Other Vacant[a]	768	1,964	1,196	155.7
	Total Vacant	1,227	2,453	1,226	99.9
Washington	Available Vacant	438	224	- 214	- 48.9
	For Rent	287	124	- 163	- 56.8
	For Sale	151	100	- 51	- 33.8
	Other Vacant[a]	339	259	- 80	- 23.6
	Total Vacant	777	483	- 294	- 37.8
Waukesha	Available Vacant	1,269	869	- 400	- 31.5
	For Rent	461	518	57	12.4
	For Sale	808	351	- 457	- 56.6
	Other Vacant[a]	807	850	43	5.3
	Total Vacant	2,076	1,719	- 357	- 17.2
Region	Available Vacant	12,912	11,480	-1,432	- 11.1
	For Rent	9,386	9,101	- 285	- 3.0
	For Sale	3,526	2,379	-1,147	- 32.5
	Other Vacant[a]	6,526	8,620	2,094	32.1
	Total Vacant	19,438	20,100	662	3.4

[a] *In the 1960 census, dilapidated vacant year-round housing units were not classified as vacant for rent, vacant for sale, or other vacant year-round housing units. These units are, however, included as other vacant year-round housing units in this table.*

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

total available vacant housing stock, respectively, and appropriate portions of the year-round housing stock.[7] As indicated in Table 48, the total vacancy rate was 2 percent for the Region in 1970. Typically, the rental vacancy rate for an area is considerably higher than the homeowner vacancy rate. Indeed, for the Region in

Table 48

VACANCY RATES IN THE REGION BY COUNTY 1960 and 1970

County	Vacancy Rates (Percent)[a]					
	Rental		Homeowner		Total	
	1960	1970	1960	1970	1960	1970
Kenosha	2.35	3.94	0.94	0.71	1.39	1.70
Milwaukee	5.02	4.25	1.05	0.59	2.86	2.29
Ozaukee	4.55	3.87	1.15	1.14	1.95	1.73
Racine	4.53	4.85	0.95	0.92	2.07	2.15
Walworth	6.16	4.84	1.42	1.57	2.89	2.57
Washington	7.80	2.83	1.63	0.76	3.38	1.27
Waukesha	4.84	4.03	2.37	0.70	2.91	1.38
Region	4.92	4.25	1.22	0.71	2.70	2.10

[a] *The rental, homeowner, and total vacancy rates are calculated by dividing the number of vacant for rent units, vacant for sale units, and total vacant for rent and vacant for sale units, respectively, by the number of occupied units in each category plus the number of vacant units in each category.*

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

1970 the rental vacancy rate was about 4 percent, while the homeowner rate was less than 1 percent. The total vacancy rate for the Region decreased from 2.7 percent to 2.1 percent between 1960 and 1970, with decreases observed in both the rental and homeowner vacancy rates.

The total vacancy rate was quite uniform among the seven counties in the Region in 1970, ranging from 1.3 percent in Washington County to 2.6 percent in Walworth County. The lowest rental vacancy rate was observed in Washington County (nearly 3 percent), while the highest rental vacancy rate was found in Racine County (5 percent). The homeowner vacancy rate was less than 1 percent for each of the seven counties except Ozaukee and Walworth in 1970. Between 1960 and 1970, decreases in both the total vacancy rate and the rental vacancy rate were observed in each of the seven counties except Kenosha and Racine. The homeowner vacancy rate decreased slightly in each of the seven counties except Walworth between 1960 and 1970.

Vacancy rates are a much used indicator of the supply and demand conditions in a housing market at a given point in time. Determination of whether a vacancy rate

[7] *The rental, homeowner, and total vacancy rates are percentages obtained by dividing the number of vacant housing units in each category (vacant for rent, vacant for sale, and total available vacant, respectively) by the number of occupied housing units in each category plus the number of vacant housing units in each category.*

is sufficiently high to provide for the smooth operation of the housing market in an area is a matter of experienced judgment. In general, it may be assumed that higher vacancy rates are required for the efficient operation of the housing market in areas where the turnover of housing units is high. In particular, because of the more rapid turnover of rental units than homeowner units, the rental vacancy rate for an area should be considerably higher than the homeowner vacancy rate to ensure adequate choice of housing units within these respective markets.

Determination of the vacancy rate, which facilitates the smooth operation of the housing market in a given area, is complicated by several phenomena. One complicating factor is that a great number of housing turnovers occur without the housing units involved becoming vacant for any extended period of time. Thus, the vacancy rate is at best a symptomatic indicator of the availability of housing; that is, in quantifying the percentage of the housing stock which is vacant and available for sale or for rent, the vacancy rate may, but does not necessarily, accurately reflect the portion of the housing stock which was occupied but was offered for sale or for rent at the time of the census enumeration. Another complication which arises in evaluating a vacancy rate for a particular area is the fact that the housing units which are vacant and available for sale or rent may or may not provide a supply of standard housing units in the variety of types and in the price ranges which offer adequate choice to those seeking a residence in that area. Thus, there may be an acute shortage of housing in an area which has a high vacancy rate because the units which are vacant and available are in substandard condition, are priced too high, or are otherwise unable to satisfy the existing need. The general decline in the rental and homeowner vacancy rates for the Region as a whole and the majority of the seven counties almost certainly reflects a decrease in the availability of housing between 1960 and 1970.

CHARACTERISTICS OF THE EXISTING HOUSING STOCK

The total number of housing units classified according to year-round/seasonal status and occupancy/vacancy status as well as the spatial distribution of housing units throughout the Region are important considerations in any regional housing planning effort. Equally important, however, to the housing planning process, and in particular to the analysis of the supply of housing, is a description of the housing stock in terms of various basic physical and cost characteristics. Data relating to structural characteristics, size, plumbing and kitchen facilities, age, physical condition, value, and rent of the housing stock are considered most relevant and are, therefore, included in this section. Such data are essential to an understanding of the existing housing stock and to the determination of true housing need. It should be noted that, unless otherwise specified, data presented in this section apply only to the year-round housing stock. No housing data were compiled for vacant seasonal housing units.

Structural Characteristics

One of the most important sets of characteristics of the existing housing stock are structural characteristics, including the number of housing units in the structure, the number of stories in the structure, and the type of foundation. These data are summarized for the seven counties and the Region in Tables 49 through 51. As indicated in Table 49, there were 327,553 single-family housing units in the Region in 1970, representing almost 59 percent of the total year-round housing units. The balance of the year-round housing stock was comprised of units in multifamily structures. By far, the majority of single-family housing units were conventional detached units, with attached single-family housing units and mobile homes each comprising less than 1 percent of the year-round housing stock in the Region.[8] As further indicated in Table 49, more than half of the multifamily housing units were in structures containing two units, while one-fourth were in structures of three to nine units and the balance in structures of 10 units or more.

The structure type of housing units in Milwaukee County was markedly different from the structure type of housing units in the six other counties in the Region (see Table 49 and Figure 25). Multifamily housing units comprised more than half of the year-round housing units in Milwaukee County, compared to between 16 to 30 percent of the year-round housing stock in the other six counties. Housing units in two-unit structures were the most abundant type of multifamily unit within each county in the Region, comprising more than half of all multifamily housing units in each county except Waukesha County in 1970. Duplexes, or two-family units, have long been a popular form of housing in the Milwaukee area, and in 1970 duplex units represented 27 percent of the year-round housing units in Milwaukee County.

As further indicated in Table 49, conventional detached single-family housing units comprised the vast majority of all single-family housing units within each of the seven counties in 1970. Attached single-family housing units represented less than 1 percent of all year-round housing units in each of the seven counties, while the proportion of year-round housing units consisting of occupied mobile homes ranged from less than 1 percent in Milwaukee and Ozaukee Counties to 2 percent in Kenosha and Walworth Counties.

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[8] *Single-family attached housing units are one-unit structures which have one or more walls extending from ground to roof separating them from adjoining structures, as, for example, a row house. Single-family detached housing units are one-unit structures detached from any other house; i.e., with open space on four sides. Such structures are considered detached even if they have an adjoining garage or contain a business unit. Single-family detached housing units are further classified as conventional detached housing units and mobile homes. It should be noted that the Census Bureau includes in the total housing inventory only those mobile homes which are occupied.*

Table 49

STRUCTURE TYPE OF YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units by Structure Type[a]							
	Single-Family							
	Detached				Attached		Total	
	Conventional		Mobile Home					
	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]
Kenosha	26,042	70.1	904	2.4	191	0.5	27,137	73.0
Milwaukee	162,695	46.5	1,346	0.4	1,909	0.6	165,950	47.5
Ozaukee	12,525	82.0	62	0.4	91	0.6	12,678	83.0
Racine	36,196	69.5	253	0.5	127	0.3	36,576	70.3
Walworth	17,055	80.5	500	2.4	49	0.2	17,604	83.1
Washington	13,782	77.1	263	1.5	42	0.2	14,087	78.8
Waukesha	52,901	83.1	404	0.6	216	0.3	53,521	84.0
Region	321,196	57.7	3,732	0.7	2,625	0.5	327,553	58.9

County	Year-Round Housing Units by Structure Type[a]									
	Multifamily									
	2 Units		3 to 4 Units		5 to 9 Units		10 Units or More		Total	
	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]	Number	Percent[b]
Kenosha	6,173	16.6	1,902	5.1	657	1.8	1,295	3.5	10,027	27.0
Milwaukee	94,804	27.1	27,342	7.8	18,410	5.3	43,160	12.3	183,716	52.5
Ozaukee	1,551	10.1	408	2.7	372	2.4	271	1.8	2,602	17.0
Racine	9,185	17.6	2,388	4.6	1,093	2.1	2,824	5.4	15,490	29.7
Walworth	1,866	8.8	626	2.9	334	1.6	768	3.6	3,594	16.9
Washington	2,571	14.4	563	3.1	378	2.1	279	1.6	3,791	21.2
Waukesha	4,503	7.1	2,318	3.6	1,173	1.9	2,177	3.4	10,171	16.0
Region	120,653	21.6	35,547	6.4	22,417	4.0	50,774	9.1	229,391	41.1

[a] *The data are based on a sample of all year-round housing units in the Region. Because of the Census Bureau's sample expansion techniques, the indicated total number of year-round housing units varies slightly from the actual number presented in Table 43.*

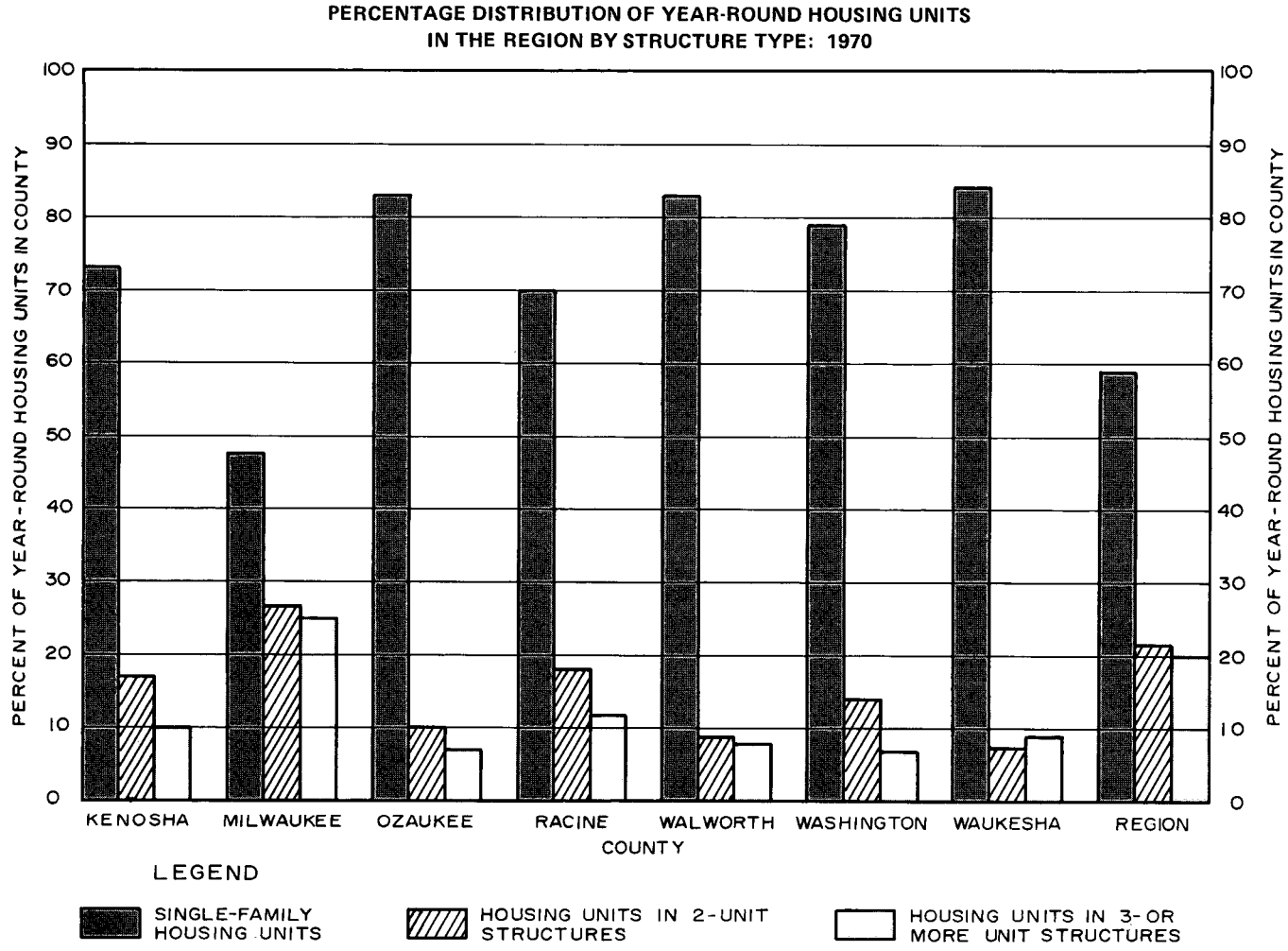
[b] *Percent of year-round housing units in county.*

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

Additional data pertaining to the structure type of the year-round housing units in the Region are presented in Table 50. Housing units located in low-rise structures of three stories or less comprised over 97 percent of all year-round housing units in the Region in 1970. Only 14,324 housing units, or 3 percent of the year-round housing stock, were located in high-rise structures of four stories or more. Housing units in structures of four to 12 stories represented 2 percent of all year-round housing units, while housing units in structures of 13 stories or more comprised less than 1 percent of the year-round housing stock. As indicated in Table 50, Milwaukee County heavily influenced this structure profile data for the Region. A total of 4 percent of all year-round housing units in Milwaukee County were located in high-rise structures in 1970, compared to less than 1 percent for each of the other six counties in the Region. More than 96 percent of all housing units in high-rise structures in the Region were located in Milwaukee County in 1970.

Data pertaining to the foundation type of year-round housing units in the Region are summarized in Table 51. In the 1970 census, housing units were classified as units located in a building with a basement; units in structures built on a concrete slab; and units built in another way,

Figure 25



Source: U. S. Bureau of the Census.

including occupied mobile homes as well as units built on piers or posts, on a continuous masonry foundation, or directly on the ground. The quantification of housing units according to the provision of a basement is of particular importance because of the extra space which a basement affords for a utility room, recreation room, extra storage space, and for other purposes such as a workshop. As indicated in Table 51, about 94 percent of all year-round housing units in the Region were located in structures having a basement. Housing units in structures built on a concrete slab comprised 3 percent of all year-round housing units, while nearly 3 percent of year-round units were built in another way. Provision of a basement in year-round housing units varied somewhat among the seven counties. Thus, housing units located in structures having a basement comprised only about 81 percent of the year-round housing units in Walworth County and about 86 percent in Kenosha County compared to more than 92 percent for each of the other counties in the Region.

Size

Data concerning the size of housing units provide further understanding of the existing housing stock as well as the extent to which this stock is able to meet the current housing needs of the regional population and, particularly, the housing needs of large households. The size of year-round housing units in the Region is measured by two census housing tabulations, namely, the number of rooms per housing unit and the number of bedrooms per unit. The number of rooms includes only whole rooms used for living purposes, such as living rooms, dining rooms, kitchens, bedrooms, and finished recreation rooms. Such areas as bathrooms, porches, balconies, foyers, halls, and half-rooms are not included in the number. Table 52 indicates that over 70 percent of the year-round housing units in the Region contained four, five, or six rooms; almost 18 percent contained seven or more rooms; and about 12 percent contained three rooms or less. There was a median of 5.1 rooms per unit for all housing units in the Region in 1970.

Table 50

STRUCTURE PROFILE OF YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units											
	Low-Rise Structures		High-Rise Structures								Total	
	1-3 Stories		4-6 Stories		7-12 Stories		13 Stories or More		Subtotal			
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	37,056	99.5	64	0.2	98	0.3	17	--[a]	179	0.5	37,235	100.0
Milwaukee	335,940	96.1	5,990	1.7	4,649	1.3	3,172	0.9	13,811	3.9	349,751	100.0
Ozaukee	15,282	100.0	0	0.0	0	0.0	0	0.0	0	0.0	15,282	100.0
Racine	52,014	99.6	213	0.4	0	0.0	0	0.0	213	0.4	52,227	100.0
Walworth	21,278	100.0	0	0.0	0	0.0	0	0.0	0	0.0	21,278	100.0
Washington	17,969	100.0	0	0.0	0	0.0	0	0.0	0	0.0	17,969	100.0
Waukesha	63,586	99.8	82	0.1	39	0.1	0	0.0	121	0.2	63,707	100.0
Region	543,125	97.4	6,349	1.1	4,786	0.9	3,189	0.6	14,324	2.6	557,449[b]	100.0

[a] *Less than one-tenth of 1 percent.*

[b] *The data are based on a sample of all year-round housing units in the Region. Because of the Census Bureau's sample expansion techniques, the indicated total number of year-round housing units varies slightly from the actual number presented in Table 43.*

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

Table 51

FOUNDATION TYPE OF YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units									
	With Basement		Without Basement						Total	
			Built on Concrete Slab		Built in Another Way		Subtotal			
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	32,053	86.3	2,016	5.4	3,075	8.3	5,091	13.7	37,144	100.0
Milwaukee	336,499	96.2	8,937	2.6	4,257	1.2	13,194	3.8	349,693	100.0
Ozaukee	14,472	95.0	389	2.5	380	2.5	769	5.0	15,241	100.0
Racine	47,951	92.2	2,299	4.4	1,739	3.4	4,038	7.8	51,989	100.0
Walworth	16,976	80.8	1,678	8.0	2,343	11.2	4,021	19.2	20,997	100.0
Washington	16,625	93.0	587	3.3	656	3.7	1,243	7.0	17,868	100.0
Waukesha	59,230	93.1	2,432	3.8	1,992	3.1	4,424	6.9	63,654	100.0
Region	523,806	94.1	18,338	3.3	14,442	2.6	32,780	5.9	556,586	100.0

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

The size of housing units measured in terms of the number of rooms per unit varied significantly among the seven counties (see Table 52 and Figure 26). In particular, larger housing units comprised relatively small portions of the year-round housing stock in the most highly urbanized counties of Kenosha, Milwaukee, and Racine. Thus, the proportion of year-round housing units containing seven or more rooms was about 13 percent in Kenosha, 14 percent in Milwaukee, and 18 percent in Racine, compared to 27 percent or more in each of the four other counties in the Region. The median number of rooms per housing unit for year-round housing units in Kenosha, Milwaukee, and Racine Counties were considerably lower than the medians observed in the other four counties. This variation in the size of housing units among the seven counties of the Region is consistent with the observed variation in residential structure types among the seven counties; that is, the lower distribution of housing units according to the number of rooms per unit is expected in the urban counties of the Region

Table 52

NUMBER OF ROOMS PER UNIT FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units by Number of Rooms Per Unit									
	1 Room		2 Rooms		3 Rooms		4 Rooms		5 Rooms	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total
Kenosha	502	1.4	687	1.9	2,797	7.5	8,747	23.5	12,921	34.8
Milwaukee	8,835	2.5	11,017	3.2	31,326	9.0	72,532	20.7	112,563	32.2
Ozaukee	133	0.9	104	0.7	447	2.9	1,924	12.6	3,674	24.1
Racine	509	1.0	941	1.8	3,365	6.5	9,471	18.2	16,992	32.7
Walworth	292	1.4	338	1.6	1,319	6.3	4,003	19.1	5,050	24.1
Washington	123	0.7	148	0.8	697	3.9	2,779	15.5	4,447	24.9
Waukesha	514	0.8	699	1.1	2,714	4.3	7,819	12.3	15,286	24.0
Region	10,908	2.0	13,934	2.5	42,665	7.7	107,275	19.3	170,933	30.7

County	Year-Round Housing Units by Number of Rooms Per Unit								Median Number of Rooms Per Unit
	6 Rooms		7 Rooms		8 Rooms or More		Total		
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent	
Kenosha	6,806	18.3	2,803	7.5	1,881	5.1	37,144	100.0	5.0
Milwaukee	66,139	18.9	27,610	7.9	19,671	5.6	349,693	100.0	5.0
Ozaukee	3,751	24.6	2,510	16.5	2,698	17.7	15,241	100.0	5.9
Racine	11,100	21.3	5,508	10.6	4,103	7.9	51,989	100.0	5.2
Walworth	4,290	20.4	2,903	13.8	2,802	13.3	20,997	100.0	5.4
Washington	4,283	24.0	2,731	15.3	2,660	14.9	17,868	100.0	5.7
Waukesha	16,362	25.7	10,924	17.1	9,336	14.7	63,654	100.0	5.8
Region	112,731	20.2	54,989	9.9	43,151	7.7	556,586	100.0	5.1

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

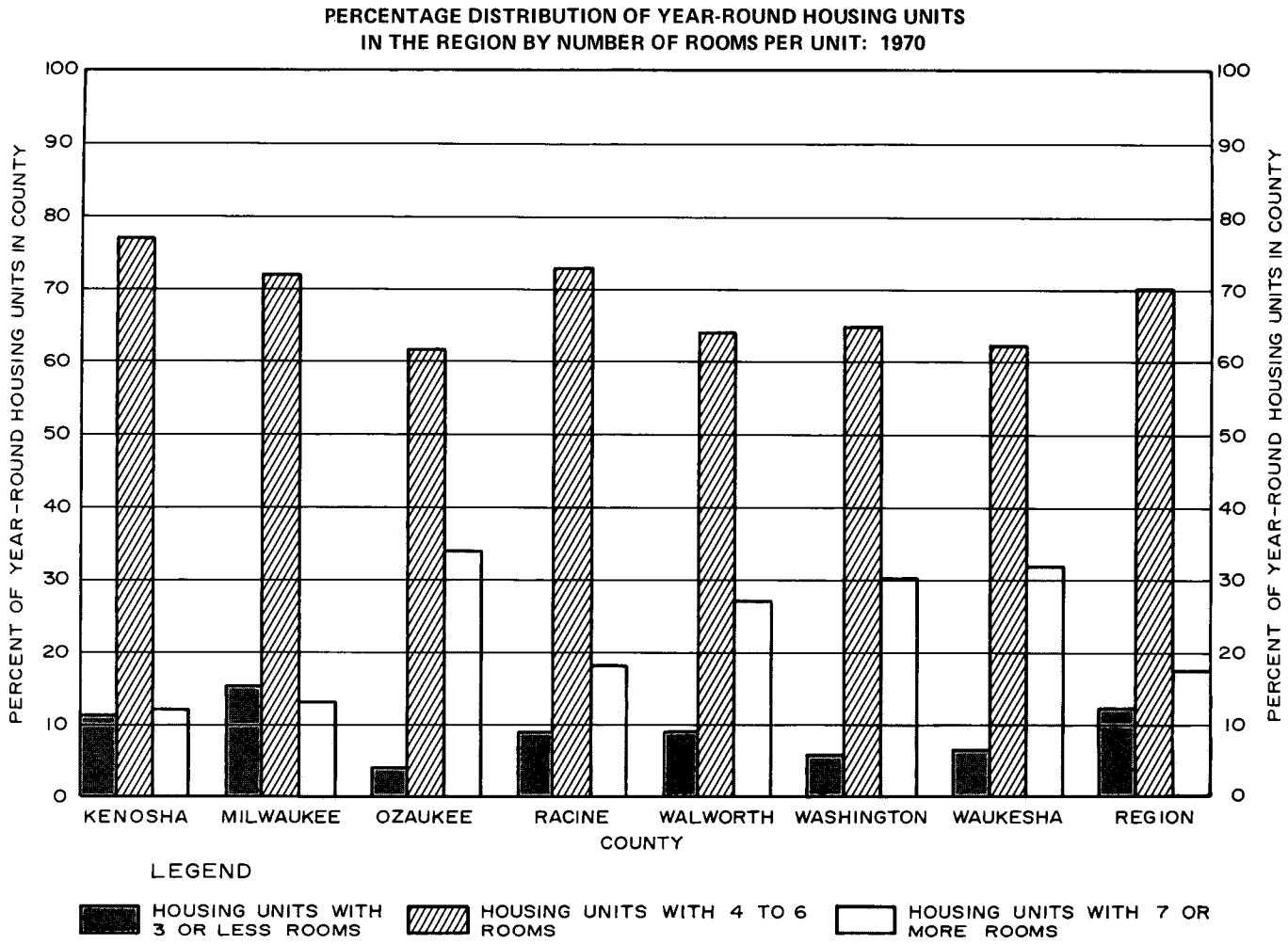
because the multifamily housing units comprised a relatively larger proportion of the year-round housing stock in such counties, and because multifamily housing units tend to be smaller in size than single-family units.

The tabulation of housing units according to the number of bedrooms per unit presented in Table 53 provides another measure of the size of housing units. Respondents to the 1970 census were to count as bedrooms rooms used primarily for sleeping, even if used for other purposes. Thus, dens, enclosed porches, and rooms reserved for sleeping, such as guest rooms, even though used infrequently, would be counted as bedrooms. Rooms used incidentally for sleeping, such as a living room with a hideaway bed, were not counted, thus explaining the fact that some efficiency type apartment units were reported as having no bedroom whatsoever. Table 53 indicates that about 33 percent of all year-round housing units contained two bedrooms; 38 percent, three bedrooms; 14 percent, four or more bedrooms; while the remaining 15 percent contained one bedroom or no bedroom at all. The median number of bedrooms per unit for year-round housing units in the Region in 1970 was 2.5.

As might be expected, variation in the size of housing units among the seven counties as measured by the number of bedrooms per unit in Table 53 is similar to that indicated by the tabulation of the total number of rooms per unit in Table 52. Housing units containing many bedrooms comprised a relatively small portion of the year-round housing stock in Kenosha, Milwaukee, and Racine Counties. Thus, the proportion of year-round housing units containing four or more bedrooms was only 12 percent in Kenosha, 11 percent in Milwaukee, and 14 percent in Racine, as compared to 19 percent or more of all year-round units in each of the four other counties of the Region. The median number of bedrooms per housing unit presented in Table 53 further summarizes the variation in the size of housing units among the seven counties, with the median number of bedrooms per housing unit ranging from 2.4 bedrooms in Milwaukee to 3.0 bedrooms in Ozaukee County.

Because the size of a unit is a major determinant of whether or not that unit can meet the housing needs of a specific household, examination of the vacant housing stock in terms of housing unit size can provide important insight into the availability of housing to households of varying sizes seeking a residence in a given area. Thus, although available vacant housing units, consisting of those vacant year-round units which were offered for sale or rent at the time of the census, are included in the year-round housing stock for which data are presented in Table 53, it is desirable to examine the available vacant housing stock separately in terms of the number of bed-

Figure 26



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

rooms per unit. Accordingly, data concerning the number of bedrooms per unit for available vacant housing units are presented for the seven counties and the Region in Table 54.

As indicated in Table 54, about 71 percent of the available vacant housing stock in the Region was reported in the 1970 census as having two bedrooms or less, while only about 10 percent of the available vacant housing stock was reported as having four bedrooms or more. This relatively low distribution of available vacant housing stock in terms of the number of bedrooms per unit is due primarily to the tenure mix of available vacant housing units. Thus, vacant for rent units, which on the average are considerably smaller than vacant for sale units, outnumber vacant for sale units in the Region by a factor of four. The low distribution of the available vacant housing stock in terms of the number of bedrooms per unit suggests a limited choice of housing for large households within the Region, particularly in those counties where large units of four bedrooms or more comprise a relatively small proportion of the available vacant housing stock, namely, Kenosha County, 3 percent; Milwaukee County, 7 percent; and Ozaukee County, 0 percent. The extent to which large households are unable to find housing units of sufficient size to meet their spatial requirements is analyzed in detail in the analysis of housing need in Chapter XIII of this report.

Plumbing and Kitchen Facilities

Another set of housing unit characteristics which comprise an important aspect of any inventory of the existing housing stock are data regarding two types of housing unit facilities, namely, plumbing facilities and kitchen facilities. Such data are useful in assessing the quality of the existing housing stock in the Region and are, therefore, presented in this section.

Plumbing Facilities: The U. S. Bureau of the Census tabulates data on plumbing relating to the provision of piped water, flush toilet, and bathing facilities for year-round housing units, as well as data relating to the source

Table 53

NUMBER OF BEDROOMS PER UNIT FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units by Number of Bedrooms Per Unit							
	No Bedroom		1 Bedroom		2 Bedrooms		3 Bedrooms	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total
Kenosha	617	1.7	4,119	11.1	13,541	36.4	14,487	38.9
Milwaukee	11,197	3.2	52,050	14.9	127,017	36.3	121,314	34.7
Ozaukee	202	1.3	733	4.8	3,315	21.7	7,033	46.0
Racine	586	1.1	5,552	10.6	16,934	32.4	21,848	41.9
Walworth	323	1.5	2,180	10.2	6,825	32.1	7,481	35.2
Washington	84	0.5	1,222	6.8	4,348	24.2	8,320	46.3
Waukesha	634	1.0	4,168	6.5	13,798	21.7	32,952	51.7
Region	13,643	2.4	70,024	12.6	185,778	33.3	213,435	38.3

County	Year-Round Housing Units by Number of Bedrooms Per Unit						Median Number of Bedrooms Per Unit
	4 Bedrooms		5 Bedrooms or More		Total		
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent	
Kenosha	3,558	9.5	913	2.4	37,235	100.0	2.5
Milwaukee	31,513	9.0	6,660	1.9	349,751	100.0	2.4
Ozaukee	3,147	20.6	852	5.6	15,282	100.0	3.0
Racine	6,013	11.5	1,294	2.5	52,227	100.0	2.6
Walworth	3,289	15.5	1,180	5.5	21,278	100.0	2.7
Washington	2,934	16.3	1,061	5.9	17,969	100.0	2.9
Waukesha	9,730	15.3	2,425	3.8	63,707	100.0	2.9
Region	60,184	10.8	14,385	2.6	557,449[a]	100.0	2.5

[a] *The data are based on a sample of all year-round housing units in the Region. Because of the Census Bureau's sample expansion techniques, the indicated total number of year-round housing units varies slightly from the actual number presented in Table 43.*

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

Table 54

NUMBER OF BEDROOMS PER UNIT FOR AVAILABLE VACANT HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Status	Housing Units by Number of Bedrooms Per Unit							
		No Bedroom		1 Bedroom		2 Bedrooms		3 Bedrooms	
		Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]
Kenosha	Available Vacant	39	5.8	176	26.2	258	38.3	180	26.7
	For Sale	--	--	--	--	101	53.4	88	46.6
	For Rent	39	8.1	176	36.4	157	32.4	92	19.0
Milwaukee	Available Vacant	692	8.8	2,256	28.5	2,964	37.5	1,434	18.1
	For Sale	--	--	45	4.1	305	27.6	458	41.5
	For Rent	692	10.2	2,211	32.5	2,659	39.1	976	14.3
Ozaukee	Available Vacant	26	10.2	41	16.0	109	42.6	80	31.2
	For Sale	--	--	26	24.8	26	24.8	53	50.4
	For Rent	26	17.2	15	9.9	83	55.0	27	17.9
Racine	Available Vacant	47	3.7	320	25.0	502	39.3	137	10.7
	For Sale	--	--	--	--	197	41.1	52	10.8
	For Rent	47	5.9	320	40.1	305	38.2	85	10.7

Table 54 (continued)

County	Status	Housing Units by Number of Bedrooms Per Unit							
		No Bedroom		1 Bedroom		2 Bedrooms		3 Bedrooms	
		Number	Percent[a]	Number	Percent[a]	Number	Percent[a]	Number	Percent[a]
Walworth	Available Vacant	--	--	149	26.4	179	31.7	116	20.6
	For Sale	--	--	15	7.5	34	17.0	81	40.5
	For Rent	--	--	134	36.8	145	39.8	35	9.6
Washington	Available Vacant	--	--	34	28.1	17	14.0	17	14.0
	For Sale[b]	--	--	--	--	--	--	--	--
	For Rent	--	--	34	28.1	17	14.0	17	14.0
Waukesha	Available Vacant	63	6.6	236	24.6	237	24.8	315	32.9
	For Sale	--	--	--	--	59	19.0	189	61.0
	For Rent	63	9.7	236	36.5	178	27.5	126	19.5
Region	Available Vacant	867	7.4	3,212	27.3	4,266	36.3	2,279	19.4
	For Sale	--	--	86	3.6	722	30.2	921	38.6
	For Rent	867	9.3	3,126	33.4	3,544	37.8	1,358	14.5

County	Status	Housing Units by Number of Bedrooms Per Unit						Median Number of Bedrooms Per Unit
		4 Bedrooms		5 Bedrooms or More		Total		
		Number	Percent[a]	Number	Percent[a]	Number	Percent	
Kenosha	Available Vacant	--	--	20	3.0	673	100.0	2.0
	For Sale	--	--	--	--	189	100.0	2.4
	For Rent	--	--	20	4.1	484	100.0	1.7
Milwaukee	Available Vacant	496	6.3	64	0.8	7,906	100.0	1.8
	For Sale	257	23.3	39	3.5	1,104	100.0	2.9
	For Rent	239	3.5	25	0.4	6,802	100.0	1.7
Ozaukee	Available Vacant	--	--	--	--	256	100.0	2.1
	For Sale	--	--	--	--	105	100.0	2.5
	For Rent	--	--	--	--	151	100.0	1.9
Racine	Available Vacant	272	21.3	--	--	1,278	100.0	2.0
	For Sale	231	48.1	--	--	480	100.0	3.3
	For Rent	41	5.1	--	--	798	100.0	1.6
Walworth	Available Vacant	104	18.5	16	2.8	564	100.0	2.2
	For Sale	70	35.0	--	--	200	100.0	3.1
	For Rent	34	9.4	16	4.4	364	100.0	1.8
Washington	Available Vacant	18	14.9	35	29.0	121	100.0	3.1
	For Sale	--	--	--	--	--	--	--
	For Rent	18	14.9	35	29.0	121	100.0	3.1
Waukesha	Available Vacant	106	11.1	--	--	957	100.0	2.3
	For Sale	62	20.0	--	--	310	100.0	3.0
	For Rent	44	6.8	--	--	647	100.0	1.6
Region	Available Vacant	996	8.5	135	1.1	11,755	100.0	1.9
	For Sale	620	26.0	39	1.6	2,388	100.0	2.9
	For Rent	376	4.0	96	1.0	9,367	100.0	1.7

[a] *Percent of specified type of vacant units within county.*

[b] *Data unavailable.*

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

of water supply and type of sewage disposal. These data are summarized for the seven counties and the Region in Tables 55 through 60.

In the 1970 census, year-round housing units were classified according to the provision of piped water as units with hot and cold piped water inside the structure, units with cold water only inside the structure, and units with no piped water inside the structure. According to the census definition, a housing unit was reported as having piped water even in situations where water was available to the occupant in the same building as his housing unit but not in his own housing unit. As indicated in Table 55, more than 4,500 housing units in the Region were reported as lacking hot or cold piped water in the 1970 census, representing less than 1 percent of all year-round housing units in the Region. Of these, 960 units, or less than 1 percent of the regional housing stock, had no

Table 55

PROVISION OF HOT AND COLD PIPED WATER FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units									
	With Hot and Cold Piped Water		Without Hot or Cold Piped Water						Total	
			Cold Piped Water Only		No Piped Water		Subtotal			
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	36,791	99.0	279	0.8	74	0.2	353	1.0	37,144	100.0
Milwaukee	348,020	99.5	1,587	0.5	86	--[a]	1,673	0.5	349,693	100.0
Ozaukee	15,048	98.7	114	0.8	79	0.5	193	1.3	15,241	100.0
Racine	51,412	98.9	427	0.8	150	0.3	577	1.1	51,989	100.0
Walworth	20,279	96.6	521	2.5	197	0.9	718	3.4	20,997	100.0
Washington	17,462	97.7	238	1.3	168	1.0	406	2.3	17,868	100.0
Waukesha	62,998	99.0	450	0.7	206	0.3	656	1.0	63,654	100.0
Region	552,010	99.2	3,616	0.6	960	0.2	4,576	0.8	556,586	100.0

[a] *Total is less than one-tenth of 1 percent.*

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

Table 56

PROVISION OF A FLUSH TOILET FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units									
	With Flush Toilet for This Household Only		Without Flush Toilet for this Household Only						Total	
			Flush Toilet Used by Another Household		No Flush Toilet		Subtotal			
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	36,454	98.1	546	1.5	144	0.4	690	1.9	37,144	100.0
Milwaukee	342,753	98.0	6,640	1.9	300	0.1	6,940	2.0	349,693	100.0
Ozaukee	14,975	98.2	117	0.8	149	1.0	266	1.8	15,241	100.0
Racine	51,045	98.2	596	1.1	348	0.7	944	1.8	51,989	100.0
Walworth	20,537	97.8	156	0.7	304	1.5	460	2.2	20,997	100.0
Washington	17,442	97.6	104	0.6	322	1.8	426	2.4	17,868	100.0
Waukesha	62,849	98.7	387	0.6	418	0.7	805	1.3	63,654	100.0
Region	546,055	98.1	8,546	1.5	1,985	0.4	10,531	1.9	556,586	100.0

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

piped water whatsoever. Among the seven counties, the smallest number of housing units (193) lacking hot or cold piped water was found in Ozaukee County, while the largest number of these units (1,673) was observed in Milwaukee County. On a percentage basis, however, the proportion of the year-round housing stock lacking hot or cold piped water was lowest in Milwaukee County (less than 1 percent) and highest in Walworth County (3 percent).

The classification of housing units in terms of the provision of toilet facilities is presented for the seven counties and the Region in Table 56. In the 1970 census, year-round housing units were classified according to the provision of toilet facilities as housing units with a flush toilet inside the structure for the exclusive use of the occupants of that unit; units with a flush toilet inside the structure which is also used by members of another household; and units with no flush toilet inside the structure. In the 1970 census, 10,531 housing units, or about 2 percent of the year-round housing stock in the Region, were reported as lacking a flush toilet for the occupants' exclusive use (see Table 56). Of these, 1,985 housing units, or less than 1 percent of the regional year-round housing stock, had no flush toilet at all. Among the seven counties, the number of housing units reported as lacking a flush toilet for the occupants' exclusive use was lowest in Ozaukee County (266 units) and highest in Milwaukee County (6,940 units). The exceptionally high total in Milwaukee County is due to the number of housing units in which the occupants shared a flush toilet with members of another household. On a percentage basis, the portion of the year-round housing stock reported as lacking a flush toilet for the occupants' exclusive use was fairly uniform among the seven counties, ranging from 1 percent in Waukesha County to more than 2 percent in Washington County.

The classification of year-round housing units according to the provision of bathing facilities is shown for the seven counties and the Region in Table 57. Similar to the classification of housing units in terms of the provision of toilet facilities, year-round housing units are classified according to the provision of bathing facilities as units with a bathtub or shower inside the structure for the exclusive use of the occupants of that housing unit; units having a bathtub or shower inside the structure which is also used by members of another household; and units with no bathtub or shower inside the structure. As shown in Table 57, more than 16,100 housing units in the Region were reported as lacking a bathtub or shower for the occupants' exclusive use in the 1970 census, representing about 3 percent of the year-round housing units in the Region. More than 7,200 of these units, or 1 percent of the year-round housing stock, had no bathtub or shower at all. The number of year-round housing units lacking bathing facilities for the occupants' exclusive use varied considerably among the seven counties, ranging from 385 units in Ozaukee County to over 10,000 units in Milwaukee County. In percentage terms, the proportion of the year-round housing stock reported as lacking a bathing facility for the occupants' exclusive use ranged from about 2 percent in Waukesha County to about 5 percent in Walworth County.

These data describing the provision of piped water, toilet facilities, and bathing facilities for the year-round housing stock are summarized for the seven counties and the Region in Table 58. The U. S. Bureau of the Census defines complete plumbing facilities as hot and cold piped water inside the structure and a flush toilet and bathtub or shower inside the structure for the occupants' exclusive use. A unit was reported as lacking one or more plumbing facilities if any one of these facilities was missing. It should be noted that, according to this definition,

Table 57

PROVISION OF BATHING FACILITIES FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units									
	With Bathtub or Shower for This Household Only		Without Bathtub or Shower for This Household Only						Total	
			Bathtub or Shower Used by Another Household		No Bathtub or Shower		Subtotal			
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	35,968	96.8	558	1.5	618	1.7	1,176	3.2	37,144	100.0
Milwaukee	339,245	97.0	6,839	2.0	3,609	1.0	10,448	3.0	349,693	100.0
Ozaukee	14,856	97.5	124	0.8	261	1.7	385	2.5	15,241	100.0
Racine	50,693	97.5	638	1.2	658	1.3	1,296	2.5	51,989	100.0
Walworth	19,980	95.2	156	0.7	861	4.1	1,017	4.8	20,997	100.0
Washington	17,250	96.5	115	0.7	503	2.8	618	3.5	17,868	100.0
Waukesha	62,463	98.1	420	0.7	771	1.2	1,191	1.9	63,654	100.0
Region	540,455	97.1	8,850	1.6	7,281	1.3	16,131	2.9	556,586	100.0

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

Table 58

PROVISION OF PLUMBING FACILITIES FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units					
	With All Plumbing Facilities[a]		Lacking One or More Plumbing Facilities		Total	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	35,759	96.3	1,385	3.7	37,144	100.0
Milwaukee	337,815	96.6	11,878	3.4	349,693	100.0
Ozaukee	14,782	97.0	459	3.0	15,241	100.0
Racine	50,395	96.9	1,594	3.1	51,989	100.0
Walworth	19,809	94.3	1,188	5.7	20,997	100.0
Washington	17,116	95.8	752	4.2	17,868	100.0
Waukesha	62,177	97.7	1,477	2.3	63,654	100.0
Region	537,853	96.6	18,733	3.4	556,586	100.0

[a]*Complete plumbing facilities include hot and cold piped water inside the structure as well as a flush toilet and a bathtub or shower inside the structure for the occupants' exclusive use.*

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

a unit was reported as lacking one or more plumbing facilities in situations where the toilet or the bathing facility was also used by members of another household. As indicated in Table 58, 18,733 housing units in the Region were reported as lacking one or more plumbing facilities in the 1970 census, representing 3 percent of the regional housing stock. From analysis of Tables 55 through 58, it can be seen that over 24 percent of these units lacked hot or cold piped water; about 56 percent lacked a flush toilet for the occupants' exclusive use; and about 86 percent lacked a bathtub or shower for the occupants' exclusive use. As further shown in Table 58, there was considerable variation among the seven counties in terms of the number of housing units reported as lacking one or more plumbing facilities, with 11,878 such units, or over 63 percent of the Region total, found in Milwaukee County alone. In percentage terms, the proportion of year-round housing units lacking complete plumbing facilities ranged from 2 percent in Waukesha County to nearly 6 percent in Walworth County.

It should be observed that the tabulation of housing units according to the provision of complete plumbing facilities is a much used indicator of the quality of the housing stock. In 1960, for example, a housing unit was defined as substandard by the U. S. Public Housing Administration[9] if it was reported in the 1960 census either as being dilapidated or as lacking complete plumbing facilities. In certain situations, however, an occupant may find his housing needs well satisfied when residing in a housing unit which lacks complete plumbing facilities. For example, an occupant in a rooming house or hotel room whose living quarters qualify as a housing unit according to the Census Bureau's definition may be well satisifed in a situation where he shares certain plumbing facilities with members of other households in the structure. Conversely, a nondilapidated housing unit with a full complement of plumbing facilities may not adequately satisfy the housing needs of its occupants; consequently, factors such as the size, age, and condition of the housing unit must be considered along with plumbing facilities in a consideration of the condition of the existing housing stock and the ability of that stock to meet the housing needs of its occupants. Clearly, detailed analysis on a small area basis is necessary for a meaningful interpretation of the significance of plumbing facilities data as an indicator of the quality of the housing stock.

In addition to data relating to the provision of specific plumbing facilities summarized above, a description of the housing stock in terms of the source of the water supply and type of sewage disposal is also provided in the 1970 census. Sanitary sewerage and water facilities are closely linked to the surface and ground water resources of the Region and may, therefore, greatly affect the overall quality of the regional environment. In particular, the provision of sanitary sewerage and public water supply services to most new and existing residential developments is necessary to prevent the further deterioration of the natural resource base and the development of serious public health problems resulting from the use of onsite sewage disposal facilities and private wells. Clearly, quantification of the extent to which housing units are served by public or private water and sewerage systems is an important element of the existing housing stock inventory.

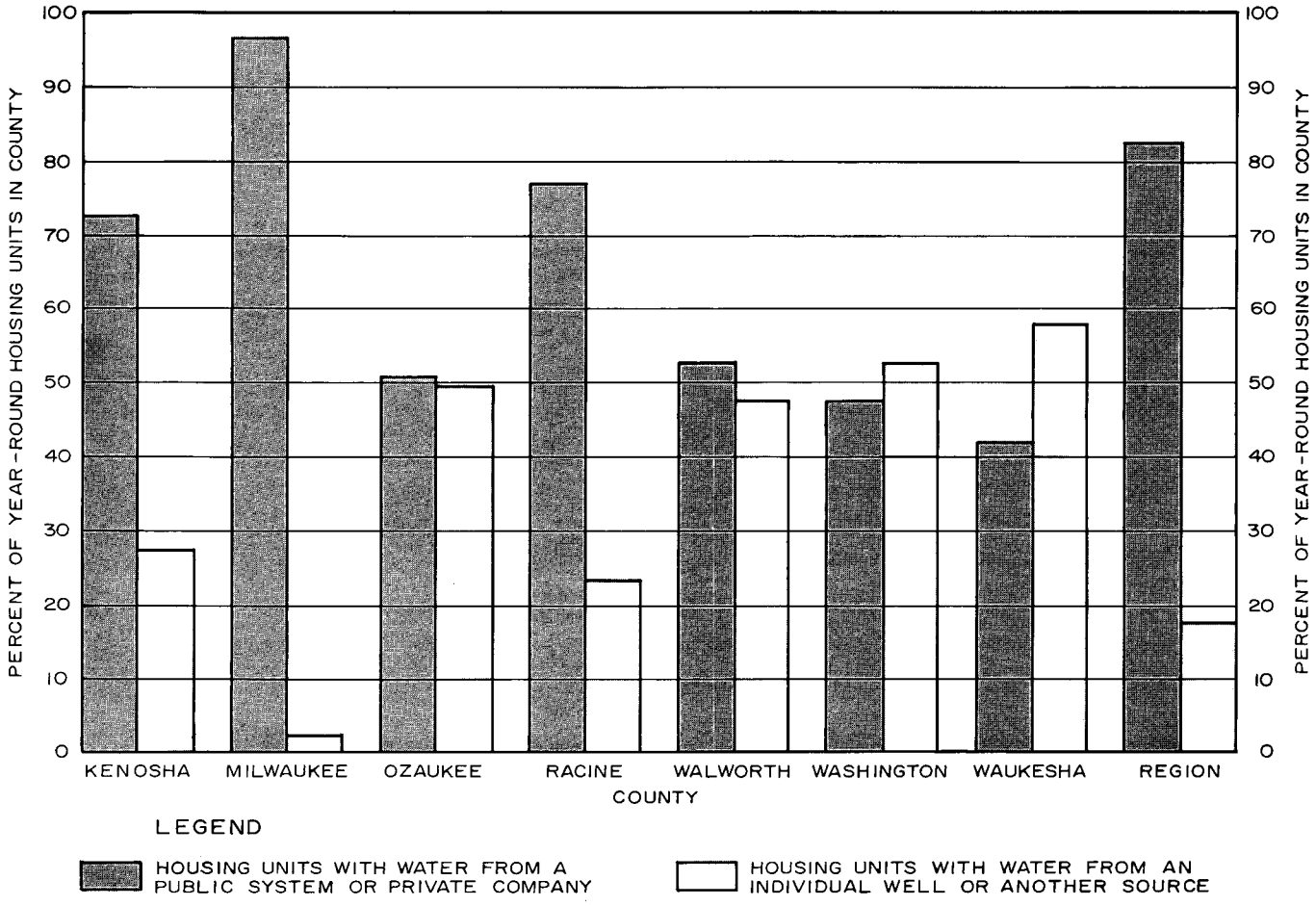
[9]*The U. S. Public Housing Administration was replaced by the Housing Assistance Administration of the U. S. Department of Housing and Urban Development in 1965.*

As indicated in Table 59 and as reported in the 1970 census, over 82 percent of the year-round housing units in the Region were supplied with water from centralized water supply systems, whereas about 18 percent of all year-round housing units were served by individual wells. The very small balance of the year-round housing stock received water from other sources such as springs, creeks, or rivers. As illustrated in Figure 27, relatively large portions of the year-round housing stock in the urbanized counties of Milwaukee, Racine, and Kenosha were supplied with water from centralized public water systems, with over 96 percent of all year-round housing units in Milwaukee County being so served. At the other extreme, in Waukesha County, almost 58 percent of all year-round housing units obtained water from individual wells, the highest such percentage among the seven counties.

The classification of year-round housing units in the Region according to the type of sewage disposal system is presented in Table 60. Almost 85 percent of the year-round housing stock in the Region was served by public sanitary waste treatment and sewage disposal facilities in 1970, while almost 15 percent of all year-round housing units were serviced by onsite soil absorption sewerage systems or cesspools. The very small balance of the year-round housing stock includes housing units with other types of sewage disposal systems, including units with a sewer line running to a creek, lake, or swamp; units with a privy; and units with other sewage disposal arrangements. Much variation was observed as to the type of sewage disposal for year-round housing units among the seven counties. As shown in Figure 28, relatively high proportions of the year-round housing stock were served by public sanitary waste treatment and sewer facilities in urban Kenosha County (77 percent), Milwaukee County (97 percent), and Racine County (80 percent), compared to only about half of all year-round housing units in the more rural, but urbanizing, Walworth, Washington, and Waukesha Counties and two-thirds of all year-round housing units in Ozaukee County.

Figure 27

PERCENTAGE DISTRIBUTION OF YEAR-ROUND HOUSING UNITS IN THE REGION BY SOURCE OF WATER SUPPLY: 1970



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

Table 59

SOURCE OF WATER SUPPLY FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units by Source of Water Supply							
	Public System or Private Company		Individual Well		Other[a]		Total	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	26,903	72.5	10,113	27.2	122	0.3	37,138	100.0
Milwaukee	337,347	96.5	12,064	3.4	181	0.1	349,592	100.0
Ozaukee	7,733	50.6	7,494	49.0	53	0.4	15,280	100.0
Racine	39,994	76.9	11,917	22.9	102	0.2	52,013	100.0
Walworth	11,116	52.6	9,876	46.7	147	0.7	21,139	100.0
Washington	8,479	47.4	9,312	52.1	87	0.5	17,878	100.0
Waukesha	26,753	42.0	36,770	57.7	159	0.3	63,682	100.0
Region	458,325	82.3	97,546	17.5	851	0.2	556,722[b]	100.0

[a] *Includes water coming directly from springs, creeks, rivers, and all other sources.*

[b] *The data are based on a sample of all year-round housing units in the Region. Because of the Census Bureau's sample expansion techniques, the indicated total number of year-round housing units varies slightly from the actual number presented in Table 43.*

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

Table 60

TYPE OF SEWAGE DISPOSAL FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

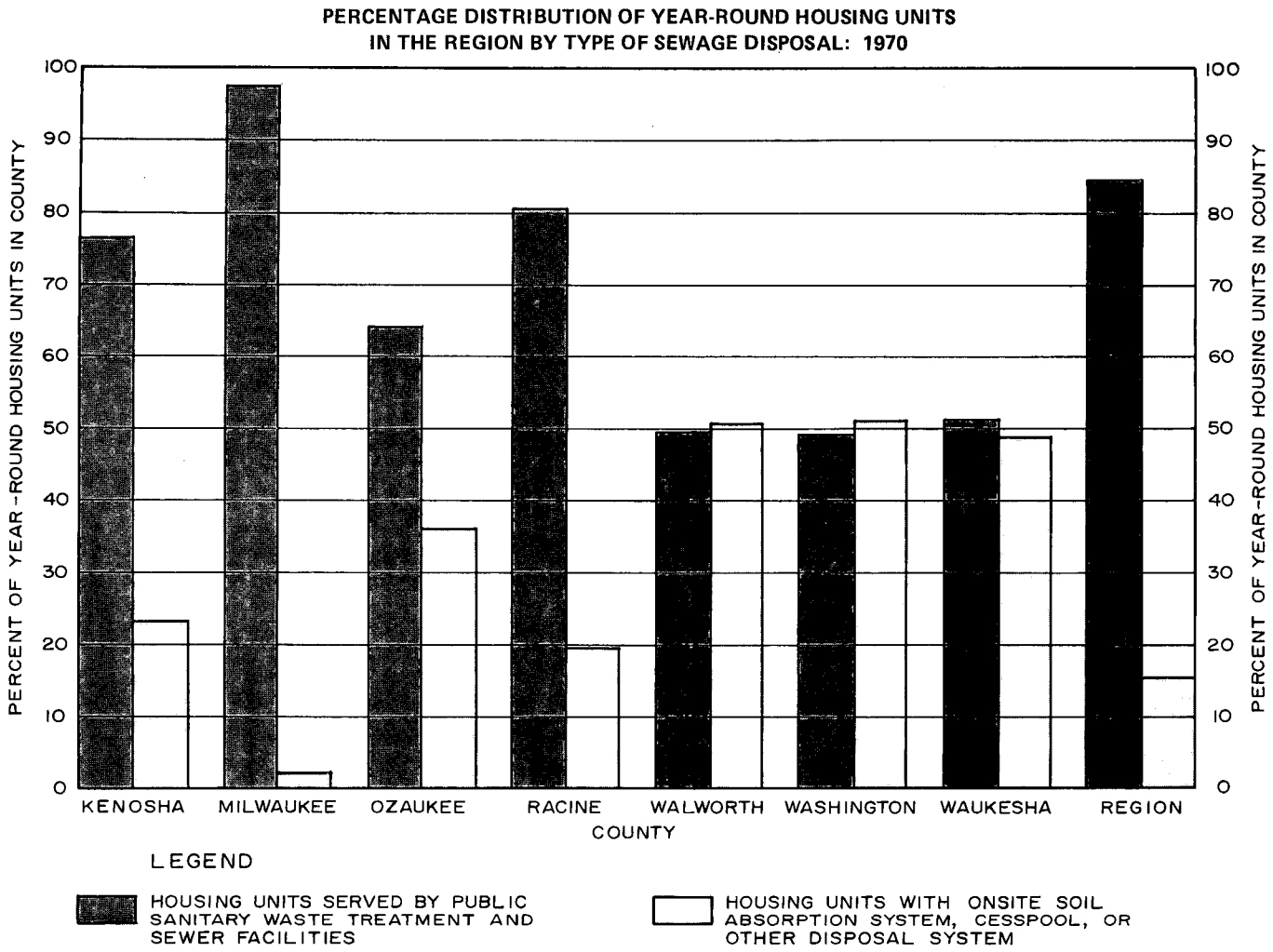
County	Year-Round Housing Units by Type of Sewage Disposal							
	Public Sanitary Waste Treatment and Sewer Facilities		Onsite Soil Absorption Sewage System or Cesspool		Other[a]		Total	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	28,506	76.7	8,424	22.7	208	0.6	37,138	100.0
Milwaukee	340,569	97.4	8,378	2.4	645	0.2	349,592	100.0
Ozaukee	9,779	64.0	5,304	34.7	197	1.3	15,280	100.0
Racine	41,809	80.4	9,856	18.9	348	0.7	52,013	100.0
Walworth	10,431	49.3	10,391	49.2	317	1.5	21,139	100.0
Washington	8,768	49.0	8,805	49.3	305	1.7	17,878	100.0
Waukesha	32,536	51.1	30,582	48.0	564	0.9	63,682	100.0
Region	472,398	84.8	81,740	14.7	2,584	0.5	556,722[b]	100.0

[a] *Includes housing units on an individual sewer line running to a creek, lake, swamp, etc.; units with a privy; and other arrangements.*

[b] *The data are based on a sample of all year-round housing units in the Region. Because of the Census Bureau's sample expansion techniques, the indicated total number of year-round housing units varies slightly from the actual number presented in Table 43.*

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

Figure 28



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

Kitchen Facilities: Year-round housing units in the Region may also be classified according to the provision of complete kitchen facilities. According to the U. S. Bureau of Census definition, complete kitchen facilities include a sink with piped water, a range or cookstove, and a mechanical refrigerator. These facilities must be located in the same building as the housing unit, but need not all be in the same room. As indicated in Table 61, approximately 98 percent of all year-round housing units in the Region contained complete kitchen facilities in 1970. For a very small fraction of these units, the complete kitchen facilities were used or intended for use by occupants of another household as well. Only about 8,400 housing units in the Region were reported as lacking one or more of the specified kitchen utilities. There was little variation among the seven counties in regard to the proportion of the year-round housing stock which was without complete kitchen facilities.

It should be noted that the absence of complete kitchen facilities in a housing unit does not necessarily imply that the unit provides inadequate housing for its occupants. Thus, for example, occupants of living quarters in a hotel or rooming house which are classified as housing units but which are without complete kitchen facilities may find their housing requirements adequately met in their present light housekeeping situation. Conversely, a unit with complete kitchen facilities may not adequately meet the housing requirements of its occupants; consequently, factors such as the size, age, and condition of the housing unit must be considered along with kitchen facilities in a consideration of the condition of the existing housing stock and the ability of that stock to meet the housing needs of its occupants. As is the case with data concerning the provision of complete plumbing facilities, data regarding kitchen facilities are most meaningfully interpreted when the significance of these facilities is evaluated on a small area basis.

Age

The relationship between the age of housing units and the quality of housing which they provide is very difficult to specify. Well-constructed and well-maintained housing units will provide sound housing to occupants over very

Table 61

PROVISION OF KITCHEN FACILITIES FOR YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units									
	With Complete Kitchen Facilities[a]						Without Complete Kitchen Facilities		Total	
	For This Household Only		Also Used by Another Household		Subtotal					
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	36,519	98.3	81	0.2	36,600	98.5	544	1.5	37,144	100.0
Milwaukee	343,664	98.3	775	0.2	344,439	98.5	5,254	1.5	349,693	100.0
Ozaukee	14,982	98.3	33	0.2	15,015	98.5	226	1.5	15,241	100.0
Racine	51,199	98.5	94	0.2	51,293	98.7	696	1.3	51,989	100.0
Walworth	20,416	97.2	18	0.1	20,434	97.3	563	2.7	20,997	100.0
Washington	17,498	97.9	8	0.1	17,506	98.0	362	2.0	17,868	100.0
Waukesha	62,868	98.8	48	0.1	62,916	98.9	738	1.1	63,654	100.0
Region	547,146	98.3	1,057	0.2	548,203	98.5	8,383	1.5	556,586	100.0

[a]*Complete kitchen facilities include a sink with piped water, a range or cookstove (excluding portable cooking equipment), and a mechanical refrigerator.*

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

long periods of time. Poorly constructed or poorly maintained housing units may deteriorate over a short period of time to the point where they become substandard living quarters. Nevertheless, data concerning the age of housing units, when evaluated along with other housing characteristics, can provide further understanding of the degree to which the existing housing stock is able to satisfy the current housing needs of the regional population. Accordingly, data concerning the age of housing units in the Region are presented in this section.

The classification of year-round housing units in the Region according to the year in which the structure was built is presented in Table 62. Housing units are classified by the year of the original construction of the structure in which they are located, not by the date of any later remodeling, addition, or conversion. At the time of the census enumeration in 1970, over 46 percent of all year-round housing units in the Region were located in structures built before 1940; over 33 percent of all year-round housing units were located in structures built between 1940 and 1959; and the balance of all year-round housing units were in structures built during the past decade.

There is considerable variation in the age of housing units among the seven counties (see Figure 29). New housing units built between 1960 and 1970 comprised a large proportion of the year-round housing stock in Ozaukee County (32 percent) and Waukesha County (33 percent) and a relatively small proportion in Milwaukee County (17 percent) and Walworth County (18 percent). For the seven counties, the percentage of year-round housing units built before 1940 ranged from a low of about 28 percent in Waukesha County to a high of about 57 percent in Walworth County. These variations in the age of housing units are generally consistent with the observed variation in the growth rates in the housing stock between 1960 and 1970 among the seven counties.

It should be noted that the usefulness of the data concerning the age of housing units as presented in the 1970 census is limited by the fact that almost half of the year-round housing stock in the Region falls into the terminal category of the reported age distribution, i.e., built before 1940. The physical and economic life of a well-constructed and well-maintained housing unit may extend far beyond the 30-year period for which data are provided. Because the process of housing deterioration, both physical and economic, is certainly more likely to affect older housing units than newer units, it is desirable to have a more detailed age breakdown of housing units included in the terminal age category of the 1970 census. Accordingly, an estimate of the number of existing housing units which were built prior to 1930 was prepared, utilizing the 1960 and 1970 census data concerning the age of housing units as well as data concerning housing unit demolitions.

It is estimated that for the Region in 1970, approximately 212,300 housing units, or 38 percent of the year-round housing stock, were located in structures constructed prior to 1930. For the seven counties, the 1970 estimates of the number and percent of year-round housing units located in structures which were built before 1930 are as follows: Kenosha County—14,975 units, or 40 percent; Milwaukee County—141,258 units, or 40 percent; Ozaukee County—4,436 units, or 29 percent; Racine County—20,179 units, or 39 percent; Walworth County—

Table 62

AGE OF YEAR-ROUND HOUSING UNITS IN THE REGION BY COUNTY: 1970

County	Year-Round Housing Units by Year Structure Was Built[a]					
	Before 1940		1940-1949		1950-1959	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total
Kenosha	17,774	47.8	4,121	11.1	7,565	20.4
Milwaukee	172,329	49.3	40,511	11.6	77,580	22.2
Ozaukee	5,161	33.8	1,238	8.1	3,985	26.1
Racine	24,291	46.6	5,655	10.9	10,148	19.5
Walworth	12,002	56.6	2,303	10.9	3,095	14.6
Washington	8,051	45.0	1,438	8.0	3,421	19.1
Waukesha	18,024	28.3	5,434	8.5	19,017	29.9
Region	257,632	46.3	60,700	10.9	124,811	22.4

County	Year-Round Housing Units by Year Structure Was Built[a]							
	1960-1964		1965-1968		1969-1970		Total	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent
Kenosha	4,871	13.1	2,293	6.2	540	1.4	37,164	100.0
Milwaukee	29,296	8.4	23,855	6.8	6,095	1.7	349,666	100.0
Ozaukee	1,671	10.9	2,343	15.3	882	5.8	15,280	100.0
Racine	5,857	11.2	5,252	10.1	863	1.7	52,066	100.0
Walworth	1,717	8.1	1,497	7.1	584	2.7	21,198	100.0
Washington	1,796	10.1	2,449	13.7	723	4.1	17,878	100.0
Waukesha	10,138	15.9	8,627	13.5	2,452	3.9	63,692	100.0
Region	55,346	9.9	46,316	8.3	12,139	2.2	556,944[b]	100.0

[a] *Housing units are classified by the year the structure in which they are located was completed, not the date of any later remodeling, addition, or conversion.*

[b] *The data are based on a sample of all year-round housing units in the Region. Because of the Census Bureau's sample expansion techniques, the indicated total number of year-round housing units varies slightly from the actual number presented in Table 43.*

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

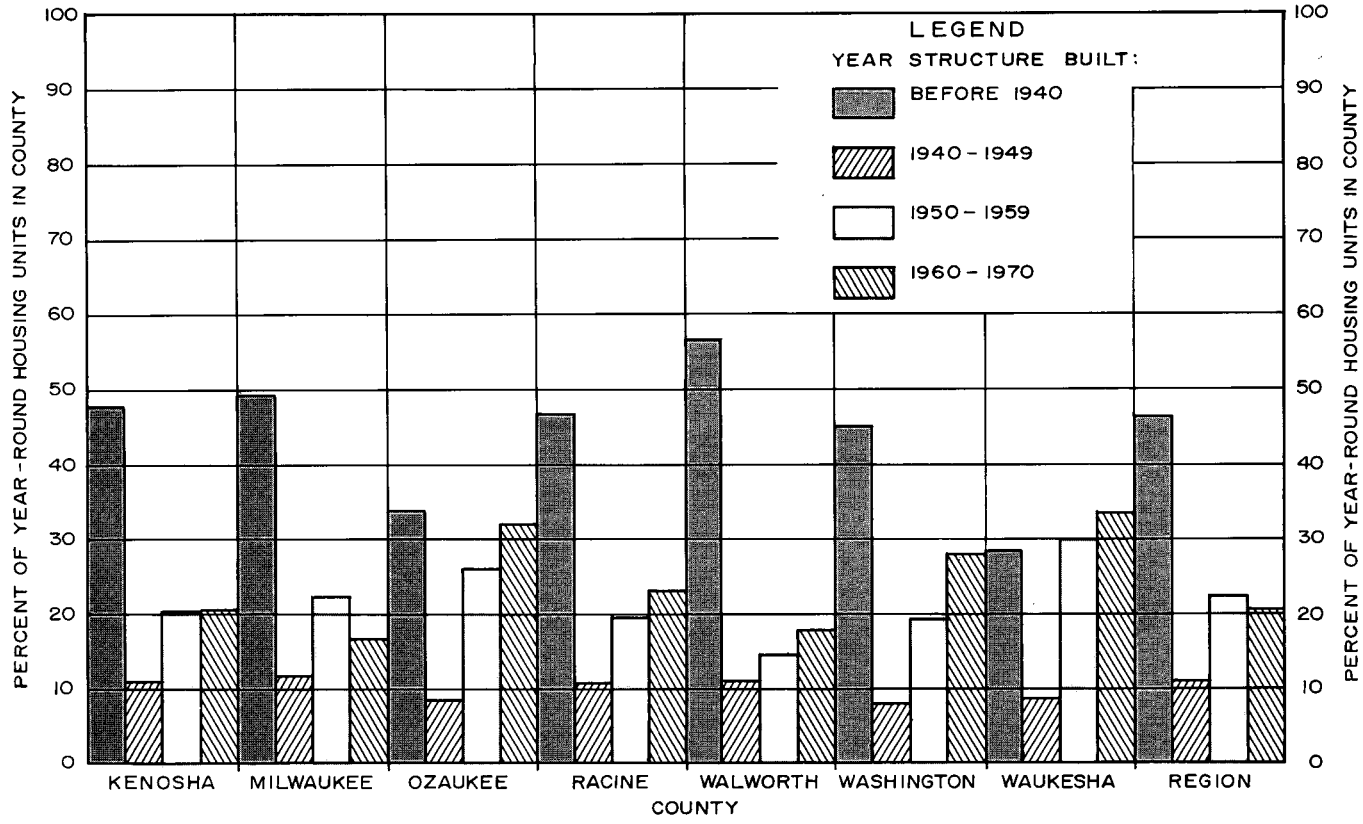
9,941 units, or 47 percent; Washington County—6,913 units, or 39 percent; and Waukesha County—14,598 units, or 23 percent.

Physical Condition

As previously noted, the U. S. Bureau of the Census in 1970 did not tabulate data related to the physical condition of housing units within the Southeastern Wisconsin Region as was done in 1950 and 1960. The Commission, therefore, in an effort to provide further insight into the physical condition of housing units, conducted an exterior condition survey of housing units throughout the Region during 1972 on a sample basis. Although an exterior housing condition survey does not include direct consideration of the interior condition of the surveyed housing, housing condition surveys which included interior and exterior rating elements have been conducted by local planning agencies within the Region, with the resultant finding that there appears to be a strong positive correlation between interior and exterior conditions. Housing units surveyed included all units originally selected for household interviews as part of the Commission's 1972 origin and destination (O & D) travel survey plus additional units as required in specific counties to obtain the necessary statistical reliability. By including in this survey those housing units occupied by households interviewed as part of the Commission's O & D survey, specific information relating to the housing unit and occupant was made available which was not available from the census data, information which will assist in the determination of true housing needs within the Region. In all, more than 15,000 units were included in the exterior condition survey. Each housing unit in the sample was observed and the exterior condition of the unit rated on an "Exterior Housing Condition Survey" rating form. A sample rating form is included in Appendix B.

Figure 29

PERCENTAGE DISTRIBUTION OF YEAR-ROUND HOUSING UNITS IN THE REGION BY AGE OF UNIT: 1970



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

The structure was classified by the rater as being a single-family, two-family, multifamily, mobile home, or a mixed use dwelling. Also classified were the number of units in the structure, the number of stories, and whether the construction type was wood frame, metal, concrete, structural masonry, or other. The form identified the major and minor structural components of each unit, and the components were then observed in detail on an individual basis and the extent of observable defects noted on the rating form. Major components included foundation, exterior walls, and roof and were rated 0, 4, 8, 12, or 16 defect points, while minor components included chimney, gutter and down spouts, eaves and facia, siding, windows and doors, porch, and painting and were rated 0, 1, 2, 3, or 4 defect points. The numeric value of the assigned defect points was based upon the observable extent which a defect appeared to comprise as a percent of the total area of the component item being rated. For example, if three sides of a housing unit were observed and it appeared that the windows and doors on one side required paint, one-third of the windows and doors would be defective regarding painting and one defect point would, therefore, be assigned to the minor component item "Painting—windows and doors—."

Outbuildings and the immediate neighborhood were observed where possible and subjectively rated when applicable as either good or poor.

It should be emphasized that the data collected as part of this inventory were based upon the observation and rating of noticeable defects to the exterior of occupied housing units. The data related to the findings of the exterior housing condition survey, therefore, are not directly comparable to figures related to the quality of the housing stock as determined by the U. S. Bureau of the Census in previous decennial censuses.

Table 63 indicates the results of the exterior housing condition survey as expanded to the estimated 577,139

Table 63

EXTERIOR HOUSING CONDITION BY SELECTED RANGES OF DEFECT POINTS IN THE REGION BY COUNTY: 1972

County	Range of Defect Points				Total
	0-6[a]	7-13[b]	14-19[c]	20 or More[d]	
Kenosha					
Year-Round Housing Units. . . .	30,439	5,400	1,444	1,127	38,410
Percent of County Total	79.2	14.1	3.8	2.9	100.0
Milwaukee					
Year-Round Housing Units. . . .	303,233	33,976	12,994	7,900	358,103
Percent of County Total	84.7	9.5	3.6	2.2	100.0
Ozaukee					
Year-Round Housing Units. . . .	14,400	1,626	445	264	16,735
Percent of County Total	86.0	9.7	2.7	1.6	100.0
Racine					
Year-Round Housing Units. . . .	48,210	3,881	833	771	53,695
Percent of County Total	89.8	7.2	1.6	1.4	100.0
Walworth					
Year-Round Housing Units. . . .	16,660	3,869	1,035	657	22,221
Percent of County Total	74.9	17.4	4.7	3.0	100.0
Washington					
Year-Round Housing Units. . . .	17,214	1,934	743	214	20,105
Percent of County Total	85.6	9.6	3.7	1.1	100.0
Waukesha					
Year-Round Housing Units. . . .	56,028	8,385	2,384	1,073	67,870
Percent of County Total	82.5	12.4	3.5	1.6	100.0
Region					
Year-Round Housing Units	486,184	59,071	19,878	12,006	577,139
Percent of Total	84.2	10.3	3.4	2.1	100.0

[a] *Housing with 0-6 defect points was in excellent physical condition.*

[b] *Housing with 7-13 defect points was in good physical condition.*

[c] *Housing with 14-19 defect points was in fair physical condition.*

[d] *Housing with 20 or more defect points was in poor physical condition.*

Source: SEWRPC.

year-round housing units within the Region in 1972. Generally, the greater the number of defect points, the greater the extent of repairs or maintenance required on the unit.

The exterior housing condition rating data were arranged in categories coinciding with the City of Milwaukee exterior housing condition categories for two important reasons. First, because the Department of City Development of the City of Milwaukee had extensive experience with the conduct of exterior housing condition surveys, it was possible to develop this exterior condition survey with the benefit of their experience. Second, it would be possible to augment this condition survey with comparable results of 100 percent exterior condition survey data for selected parts of the largest city in the Region. The exterior housing condition categories are defined as follows:

1. Housing with six or less defect points. Housing in this category was generally in excellent physical

condition and required little or no maintenance or repairs. This housing was basically considered to be in standard condition.

2. Housing with seven through 13 defect points. Housing in this category was in generally good physical condition but did require routine maintenance or minor repairs. This housing was considered to have minor deficiencies.

3. Housing with 14 through 19 defect points. Housing in this category was in fair physical condition, had no observable structural defects which would impair livability, but exhibited definite signs indicating that deterioration was imminent or that deterioration requiring considerable repairs had already begun. This housing was considered to have major deficiencies.

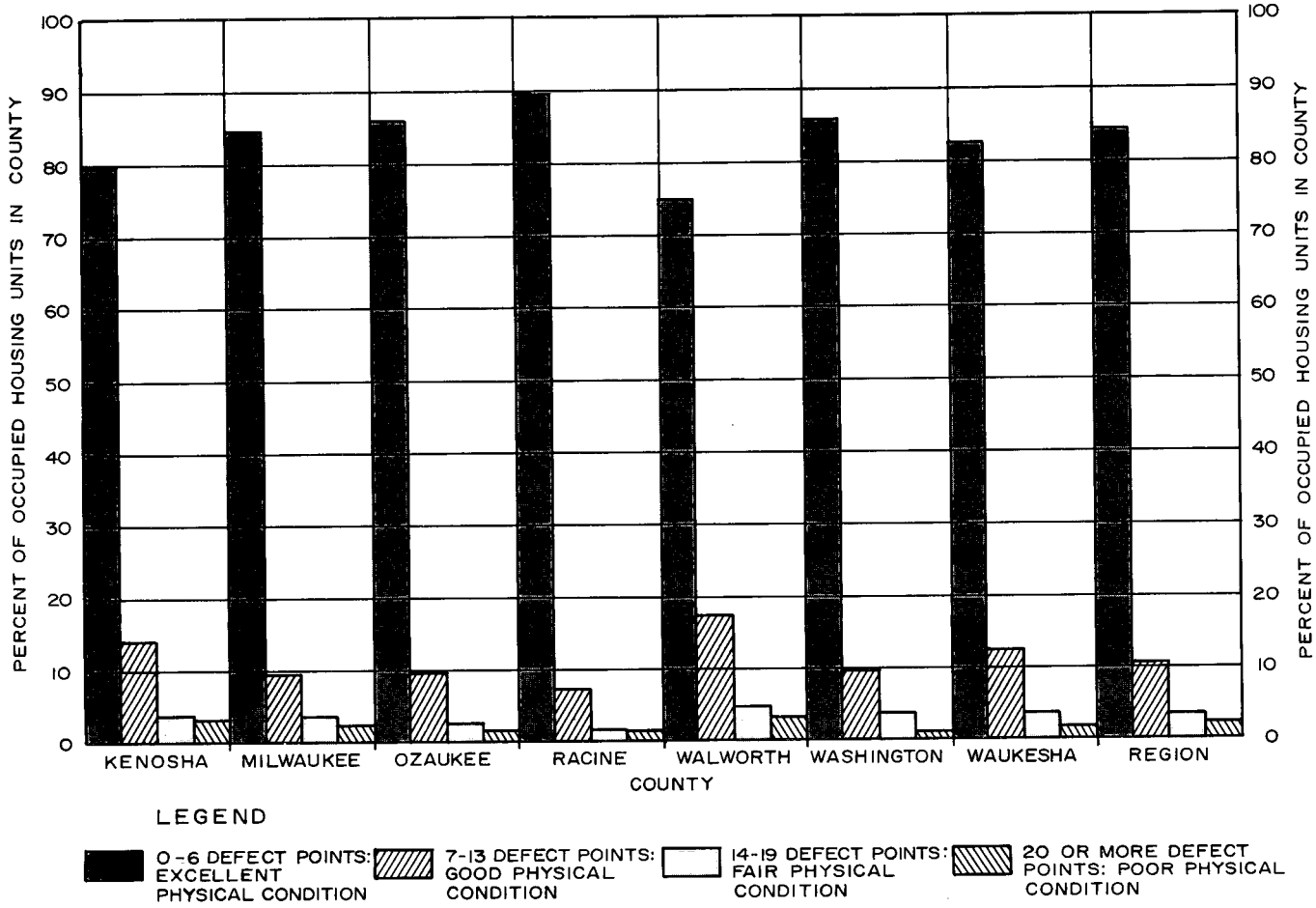
4. Housing with 20 or more defect points. Housing in this category was generally in poor physical condition, either having observable physical defects which could render the housing unit unsafe or exhibiting substantial physical deterioration; either case would require extensive repairs and rehabilitation or, in an extreme situation, demolition of the unit. This housing was considered to be in substandard condition.

According to the findings of the exterior housing condition survey, almost 95 percent of all year-round housing units in the Region merited ratings of less than 14 defect points in 1972, indicating that, at most, routine maintenance or minor repairs were required (see Table 63). At the other extreme, 2 percent of the year-round housing stock in the Region merited a rating of 20 defect points or more, suggesting that extensive repair work or, perhaps, demolition, was required. The balance of the year-round housing stock in the Region (3 percent) received a rating of between 14 and 19 defect points, indicating that deterioration was imminent or that deterioration requiring considerable repairs had already begun.

As indicated in Figure 30, noticeable variations as to the condition of year-round housing units were found to exist among the seven counties of the Region. Thus,

Figure 30

PERCENTAGE DISTRIBUTION OF OCCUPIED HOUSING UNITS IN THE REGION BY SELECTED RANGES OF DEFECT POINTS: 1972



Source: SEWRPC.

97 percent of the year-round housing units in Racine County merited a rating of less than 14 defect points, compared to only about 92 percent of all year-round housing units in Walworth County. The proportion of occupied housing units which merited a rating of 20 defect points or more ranged from a low of only slightly more than 1 percent in Washington County to a high of 3 percent in Walworth County.

Cost

While the foregoing data concerning the physical characteristics of the housing stock are important inputs to the determination of the extent to which the existing housing stock may be able to satisfy the total housing demand within the Region, data concerning the sales or rental value of the housing stock are an important input into the determination of the extent to which the housing demand can be economically satisfied. Accordingly, data concerning the value and rent of housing units in the Region are presented in this section.

Value: Value data is presented for single-family owner-occupied housing units which are located on a site of less than 10 acres in size and which have no business establishment or professional offices on the property. Cooperatives, condominiums, and mobile homes were excluded from the value tabulations. Accordingly, value was tabulated for approximately 270,000 housing units in the Region, representing about 82 percent of the owner-occupied housing stock. It should be noted that the value tabulated for the single-family owner-occupied housing units specified above is the census respondent's estimate of the value of the house and site if placed on the private real estate market. The value of the site would comprise a varying fraction of the total value depending on the lot size, location, improvements, and other physical features.

The median value of single-family owner-occupied housing units for which value was tabulated increased by $4,600, or 29 percent, between 1960 and 1970 (see Table 64). This is a result of a decrease in the number of housing units with values less than $20,000 and an increase in the number of housing units with values greater than $20,000. In fact, the number of housing units with values greater than $20,000 increased over 2.7 times in the 10-year period.

A major cause of this rise in residential market values is the increase in the value of many housing units which were built before 1960. As suggested by the 28 percent increase in the overall consumer price index[10] during the last decade, many residential units which were built before 1960 increased in value simply as a result of inflation. Other housing units which were built before 1960 experienced real appreciation in value during the last decade for various reasons, including physical improvements to the house or lot, the development of other properties in the neighborhood, the installation or upgrading of public improvements, the development of supporting neighborhood services, and general neighborhood maturation which may enhance the desirability of the area as a place to live. In addition to the increase in the value of many housing units built before 1960, another major cause of the observed increase in residential market values is the volume of new, higher value construction which has taken place in the Region during the past 10 years.

Much variation was observed in the value of housing units among the seven counties (see Table 65). In Ozaukee and Waukesha Counties, more than half of the single-family housing units for which value was tabulated were valued at $25,000 or more, while in Kenosha County only about 13 percent of the housing units were valued at that price. At the other extreme, housing units with values of less than $15,000 comprised a relatively large proportion of the single-family owner-occupied housing stock in Racine County (about 32 percent), Kenosha County (about 37 percent), and Walworth County (40 percent), compared to less than 10 percent in Ozaukee and Waukesha Counties. This variation in housing unit values among the seven counties is summarized by the median values presented for each county in Table 65. As might be expected from the above discussion, relatively low median values of less than $18,000 were observed in Kenosha, Racine, and Walworth Counties, while relatively high median values of more than $25,000 were found in

Table 64

VALUE OF SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS FOR WHICH VALUE WAS TABULATED IN THE REGION: 1960 and 1970

Value Range	Single-Family Owner-Occupied Housing Units for Which Value Was Tabulated[a]			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
Less Than $5,000	2,516	1.1	1,368	0.5
$ 5,000 - 9,999	26,244	11.6	13,168	4.9
10,000 - 14,999	72,371	31.9	42,822	15.9
15,000 - 19,999	73,697	32.5	72,767	26.9
20,000 - 24,999	28,231	12.5	60,585	22.4
25,000 - 34,999	15,916	7.0	51,437	19.0
35,000 or More	7,678	3.4	28,179	10.4
Total	226,653	100.0	270,326	100.0
Median	$15,800		$20,400	

[a] *Value is presented only for single-family owner-occupied housing units located on a site of less than 10 acres which have no business establishment or medical office on the property.*

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

[10] *The change in the cost of living is the change in the City of Milwaukee Consumer Price Index prepared by the U. S. Bureau of Labor Statistics.*

Table 65

VALUE OF SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS FOR WHICH VALUE WAS TABULATED IN THE REGION BY COUNTY: 1970

County	Single-Family Owner-Occupied Housing Units for Which Value was Tabulated by Value Range[a]									
	Less Than $5,000		$5,000 - 9,999		$10,000 - 14,999		$15,000 - 19,999		$20,000 - 24,999	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total
Kenosha	86	0.4	1,553	7.5	5,944	28.8	7,125	34.5	3,237	15.7
Milwaukee	808	0.6	6,815	4.7	21,450	14.8	42,108	29.0	36,134	24.9
Ozaukee	19	0.2	155	1.6	676	6.8	1,669	16.9	2,179	22.0
Racine	170	0.6	2,062	7.0	7,100	24.0	9,355	31.6	5,008	16.9
Walworth	155	1.5	1,324	13.2	2,544	25.4	2,465	24.6	1,580	15.8
Washington	64	0.7	472	4.7	1,664	16.7	2,452	24.6	2,207	22.2
Waukesha	66	0.2	787	1.7	3,444	7.6	7,593	16.8	10,240	22.7
Region	1,368	0.5	13,168	4.9	42,822	15.8	72,767	26.9	60,585	22.4

County	Single-Family Owner-Occupied Housing Units for Which Value was Tabulated by Value Range[a]								
	$25,000 - 34,999		$35,000 - 49,999		$50,000 or More		Total		
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent	Median Value
Kenosha	1,931	9.3	604	2.9	179	0.9	20,659	100.0	$16,900
Milwaukee	25,353	17.5	8,783	6.0	3,619	2.5	145,070	100.0	20,200
Ozaukee	3,006	30.4	1,526	15.4	662	6.7	9,892	100.0	25,800
Racine	3,815	12.9	1,446	4.9	641	2.1	29,597	100.0	17,900
Walworth	1,242	12.4	513	5.1	201	2.0	10,024	100.0	17,000
Washington	2,289	23.0	648	6.5	158	1.6	9,954	100.0	20,700
Waukesha	13,801	30.6	6,696	14.8	2,503	5.6	45,130	100.0	25,300
Region	51,437	19.0	20,216	7.5	7,963	3.0	270,326	100.0	$20,400

[a] *Value is presented only for single-family owner-occupied housing units located on a site of less than 10 acres and which have no business establishment or medical office on the property.*

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

Ozaukee and Waukesha Counties. The moderate median values in Milwaukee and Washington Counties approximate the median value for the Region as a whole.

Stratification of the housing value data by both the age of housing units and the size of housing units provides further understanding of the existing housing stock in the Region. The single-family owner-occupied housing units for which values were tabulated are classified by value and year in which the structure was built (see Table 66). Variation in the value of housing units according to their age is summarized by the median values of housing units built within several time periods. Clearly, there is a marked overall increase in the median value as the age of the housing units decreases. There are two basic reasons for this trend. First, while many well-constructed and well-maintained housing units appreciate in value over time, many other housing units, suffering from a lack of regular maintenance, deteriorate by varying degrees over time and, therefore, depreciate in value. In addition, other housing units, though properly maintained, depreciate because they are situated in a deteriorating neighborhood. Secondly, rising land, land development, construction, and finance costs are increasing the price of new housing (see Chapter VII). Accordingly, housing units with high values comprise a large portion of all single-family housing units constructed in the Region in the recent past (see Figure 31). Thus, of the single-family owner-occupied housing units in the Region reported in the census as being constructed from January 1, 1969, to the time of the census in 1970, over 80 percent were valued at $25,000 or more and almost 40 percent were valued at $35,000 or more in 1970. The large proportion of new housing construction comprised of high-value units has significant implications for the provision of sound housing to all segments of the regional population, and in particular to low- and moderate-income households.

As shown in Table 67 and Figure 32, and as might be expected, the value of housing units also varies considerably with the size of the housing unit when the number of bedrooms is used as an indicator of housing unit size. The median values calculated for housing units of a given number of bedrooms increased considerably as the number of bedrooms increased. Of special significance, however, is the value distribution of large housing units. In 1970, over 61 percent of all single-family owner-occupied housing units containing five or more bedrooms were valued at $20,000 or more and over 34 percent

Table 66

VALUE AND YEAR BUILT FOR SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS FOR WHICH VALUE WAS TABULATED IN THE REGION: 1970

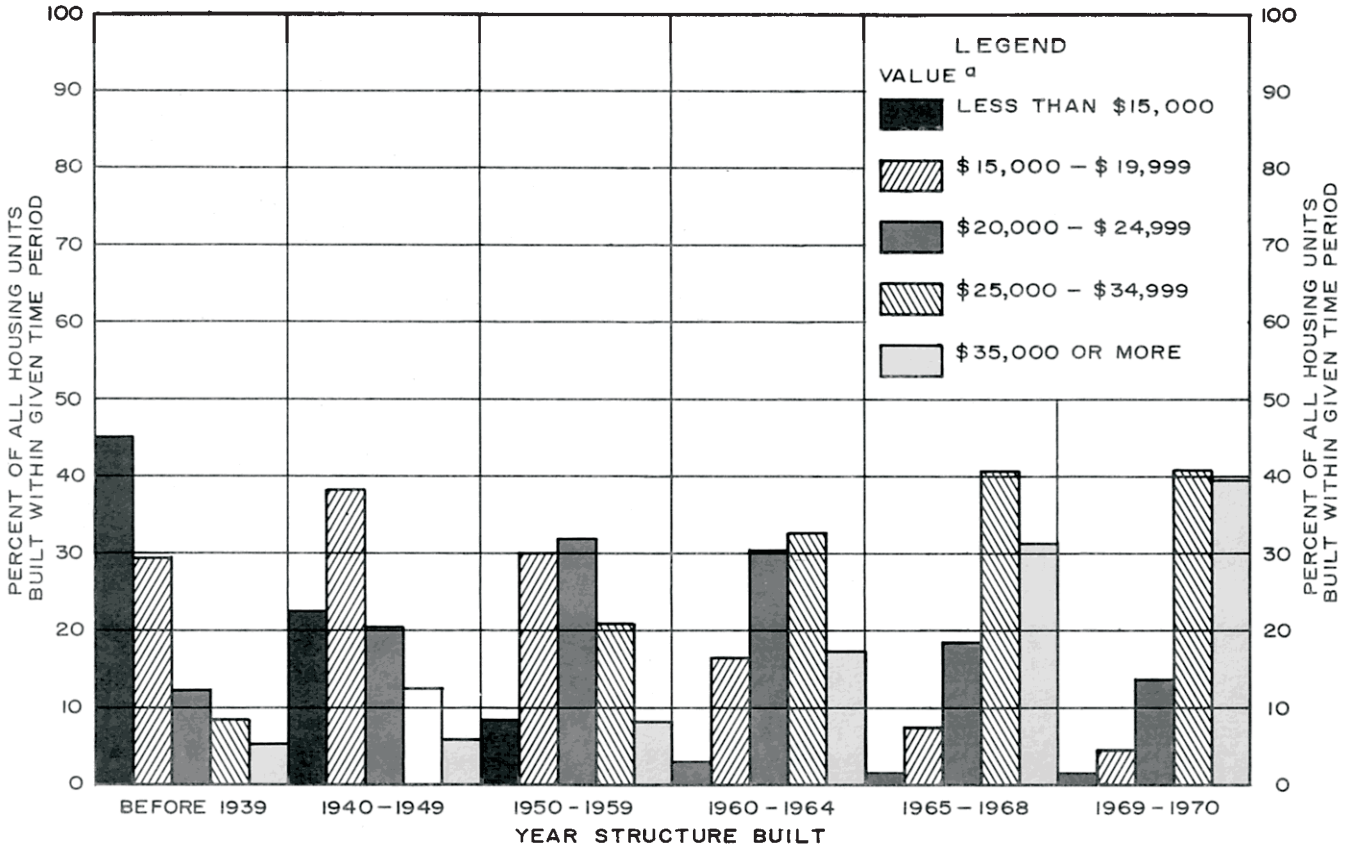
Value Range	Single-Family Owner-Occupied Housing Units for Which Value Was Tabulated by Year Structure was Built[a]					
	Before 1939	1940-1949	1950-1959	1960-1964	1965-1968	1969-1970
Less Than $5,000. . .	1,134	97	74	21	10	5
$ 5,000 - 9,999 . . .	10,260	1,284	785	95	34	33
10,000 - 14,999 . . .	28,060	6,280	6,777	812	261	18
15,000 - 19,999 . . .	25,780	12,869	26,785	5,323	1,626	190
20,000 - 24,999 . . .	10,502	6,857	28,593	9,652	3,976	574
25,000 - 34,999 . . .	7,369	4,271	18,852	10,527	8,733	1,743
35,000 or More . . .	4,598	2,004	7,456	5,589	6,681	1,690
Median Value	$15,900	$18,600	$21,800	$25,100	$30,400	$32,500

[a] *Value is presented only for single-family owner-occupied housing units located on a site of less than 10 acres and which have no business establishment or medical office on the property.*

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

Figure 31

PERCENTAGE DISTRIBUTION BY VALUE OF SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS BUILT WITHIN SELECTED TIME PERIODS IN THE REGION: 1970



[a] VALUE IS PRESENTED FOR SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS WHICH ARE LOCATED ON A SITE OF LESS THAN 10 ACRES AND WHICH HAVE NO BUSINESS NOR MEDICAL OFFICE ON THE PROPERTY.

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

Table 67

VALUE AND NUMBER OF BEDROOMS FOR SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS FOR WHICH VALUE WAS TABULATED IN THE REGION: 1970

Value Range	Single-Family Owner-Occupied Housing Units for Which Value Was Tabulated by Number of Bedrooms[a]				
	0-1 Bedroom	2 Bedrooms	3 Bedrooms	4 Bedrooms	5 or More Bedrooms
Less Than $5,000	127	587	254	52	53
$ 5,000 - 9,999	1,266	4,661	4,227	2,012	501
10,000 - 14,999	1,391	16,281	16,727	6,156	1,547
15,000 - 19,999	873	21,635	38,821	10,462	1,546
20,000 - 24,999	416	10,195	39,632	7,330	1,198
25,000 - 34,999	166	4,874	35,781	9,198	1,298
35,000 or More	131	1,542	13,314	10,487	3,239
Median Value	$12,800	$16,900	$21,800	$22,800	$24,400

[a] *Value is presented only for single-family owner-occupied housing units located on a site of less than 10 acres and which have no business establishment or medical office on the property.*

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

were valued at $35,000 or more. The relatively high value distribution of large housing units in the Region has important implications for the provision of adequate housing to large low-income families in the Region. Accordingly, these findings were investigated in more detail in the analyses of housing need and are reported in Chapter XIII of this report.

In addition to the foregoing data concerning the value of single-family owner-occupied housing units, the U. S. Bureau of the Census also tabulates the asking price of single-family vacant for sale housing units. Such data concerning the asking price of the vacant for sale housing stock in a given area facilitate an understanding of the extent to which vacant for sale housing units are within the economic means of households seeking to purchase a home in that area. When analyzed in light of other characteristics of the vacant housing stock, data concerning the asking price of vacant for sale housing units represent an important indicator of the adequacy of the vacant housing stock in terms of providing a free choice of housing in a given housing market. Accordingly, the distribution of vacant for sale housing units by asking price at the time of the 1970 census is presented for the seven counties and the Region in Table 68.

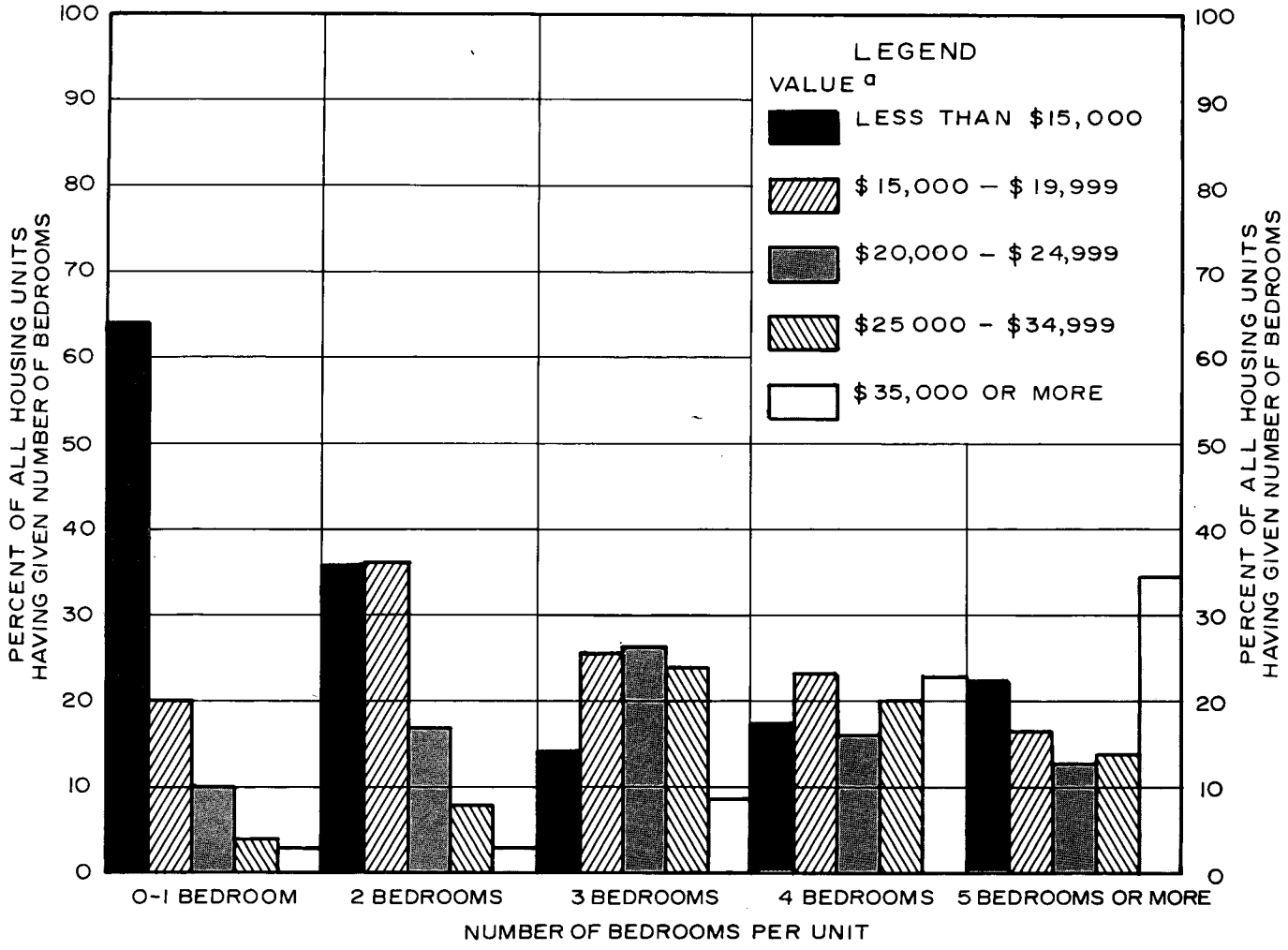
It should be noted that the Census Bureau tabulates the asking price of single-family vacant for sale housing units which are located on a site of less than 10 acres and which have no business establishment or professional office on the property. Therefore, the asking price was tabulated for approximately 1,700 single-family vacant for sale housing units, representing about 72 percent of the vacant for sale housing stock in the Region in 1970. As indicated in Table 68, an asking price of less than $15,000 was reported for 29 percent of all single-family vacant for sale housing units for which data were tabulated in the Region in 1970; an asking price of $15,000-$24,999 was reported for 32 percent of the regional vacant for sale housing stock; and a price of $25,000 or more was reported for the balance of vacant for sale housing units in the Region. The median asking price for all single-family vacant for sale housing units for which data were tabulated in the Region was $21,300 in 1970, slightly higher than the observed median value of $20,400 for single-family owner-occupied units.

It should be noted that although vacant for sale housing units with a low asking price of less than $10,000 comprised a relatively large portion (13 percent) of the vacant for sale housing stock in the Region in 1970, it is probable that many of these units failed to provide decent, safe, and sanitary housing. In particular, it was found that more than half of the vacant for sale housing units in the Region with a reported asking price of less than $10,000 had been vacant for more than six months at the time of the 1970 census enumeration. Such an extended vacancy suggests that a portion of these units were vacant because they were in poor physical condition, lacked certain facilities, or in some other way failed to meet the existing need.

Variation in the distribution of vacant for sale housing units according to asking price among the seven counties is similar to the observed variation in the distribution of owner-occupied housing units according to value (see Table 65 and Table 68). The median asking price of vacant for sale housing units ranged from less

Figure 32

PERCENTAGE DISTRIBUTION BY VALUE OF SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS OF SELECTED SIZES IN THE REGION: 1970



[a] VALUE IS PRESENTED FOR SINGLE-FAMILY OWNER-OCCUPIED HOUSING UNITS WHICH ARE LOCATED ON A SITE OF LESS THAN 10 ACRES AND WHICH HAVE NO BUSINESS OR MEDICAL OFFICE ON THE PROPERTY.

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

than $16,000 in Kenosha, Racine, and Walworth Counties to an unusually high $32,700 in Waukesha County. Of special interest, however, is the absolute number of moderately priced vacant for sale units among the counties of the Region. In particular, the number of vacant for sale units with a reported asking price of less than $20,000 was very low in the outlying Counties of Ozaukee (13 units), Washington (21 units), and Waukesha (50 units). While it must be remembered that the asking price was tabulated for only 72 percent of all vacant for sale units in the Region, the scarcity of low-priced vacant units for which the asking price was reported suggests a limited choice of housing for low- and moderate-income households seeking to purchase a home in those counties.

Rent: Monthly gross rent was tabulated by the U. S. Bureau of the Census for renter-occupied housing units rented for cash, excluding single-family housing units located on a site of 10 acres or more. Accordingly, monthly gross rent was recorded for 194,748 renter-occupied housing units in the Region in 1970, representing almost 95 percent of the renter-occupied housing stock. It should be noted that monthly gross rent repre-

Table 68

ASKING PRICE OF SINGLE-FAMILY VACANT FOR SALE HOUSING UNITS FOR WHICH ASKING PRICE WAS TABULATED IN THE REGION BY COUNTY: 1970

County	Single-Family Vacant For Sale Housing Units by Asking Price[a]									
	Less Than $5,000		$5,000-9,999		$10,000-14,999		$15,000-19,999		$20,000-24,999	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total
Kenosha	9	6.4	24	17.0	38	26.9	31	22.0	14	9.9
Milwaukee	9	1.4	71	10.8	124	18.8	142	21.5	99	15.0
Ozaukee	1	0.9	1	0.9	5	4.2	6	5.1	45	38.1
Racine	5	2.3	46	20.7	53	23.9	46	20.7	28	12.6
Walworth	11	7.1	26	16.9	36	23.4	27	17.5	19	12.3
Washington	0	0.0	6	7.4	6	7.4	9	11.1	16	19.8
Waukesha	3	0.9	9	2.7	17	5.1	21	6.4	44	13.3
Region	38	2.2	183	10.7	279	16.4	282	16.5	265	15.5

County	Single-Family Vacant For Sale Housing Units by Asking Price[a]								Median Asking Price
	$25,000-34,999		$35,000-49,999		$50,000 or More		Total		
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent	
Kenosha	18	12.8	6	4.3	1	0.7	141	100.0	$15,000
Milwaukee	134	20.3	59	8.9	22	3.3	660	100.0	19,400
Ozaukee	17	14.4	21	17.8	22	18.6	118	100.0	25,600
Racine	22	9.9	18	8.1	4	1.8	222	100.0	15,800
Walworth	25	16.2	9	5.9	1	0.7	154	100.0	15,700
Washington	34	42.0	10	12.3	0	0.0	81	100.0	26,200
Waukesha	92	27.9	90	27.3	54	16.4	330	100.0	32,700
Region	342	20.1	213	12.5	104	6.1	1,706	100.0	$21,300

[a] *The asking price was tabulated only for single-family vacant for sale housing units located on a site of less than 10 acres and which have no business establishment or professional offices on the property.*

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

sents the contract rent, or the agreed-upon monthly payment, plus the average monthly cost of utilities and fuel to the extent that these are paid for by the renter in addition to the rent. The gross rent thus eliminates differentials which result from varying practices with respect to the inclusion of utilities and fuel in the contract rent.

An analysis of Table 69 indicates that between 1960 and 1970 the median monthly gross rent of renter-occupied housing units for which rent was tabulated in the Region increased by $33, or 38 percent, a significantly faster rate of increase than the 28 percent increase in the overall cost of living over this same time period.[11] The proportion of renter-occupied housing units with a gross rent of less than $100 decreased from about 69 percent in 1960 to about 29 percent in 1970. On the other hand, the proportion of renter-occupied units with a gross monthly rent of $120 or more increased from about 12 percent to over 50 percent during this period. The general rise in the gross monthly rent during the past decade is due to the increase in the gross rent of many rental units built prior to 1960, as well as the volume of units with relatively high rents constructed in the Region since 1960.

Variation in the monthly gross rent of rental housing units for the seven counties in the Region is similar to the variation in the value of owner-occupied units described above (see Table 70). The distribution of renter-occupied housing units by monthly gross rent indicates relatively high monthly gross rents in Ozaukee

[11] *Ibid.*

Table 69

MONTHLY GROSS RENT OF RENTER-OCCUPIED HOUSING UNITS FOR WHICH GROSS RENT WAS TABULATED IN THE REGION: 1960 and 1970

Gross Rent	Renter-Occupied Housing Units For Which Gross Rent Was Tabulated[a]			
	1960		1970	
	Number	Percent of Total	Number	Percent of Total
Less Than $40	7,698	4.4	1,479	0.8
$ 40 - 59	18,864	10.9	8,715	4.5
60 - 79	41,368	23.9	15,945	8.2
80 - 99	51,488	29.7	30,884	15.8
100 - 119	32,408	18.7	39,623	20.3
120 or More	21,473	12.4	98,102	50.4
Total	173,299	100.0	194,748	100.0
Median Gross Rent	$87		$120	

[a] *Gross rent is presented for renter-occupied housing units rented for cash rent excluding single-family housing units on sites of 10 acres or more. Gross rent represents the contract rent, or the agreed-on monthly payment, plus the average monthly cost of fuels to the extent that these are paid for by the renter in addition to the contract rent.*

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

and Waukesha Counties. Thus, rental units with gross rents of $150 or more comprised about 33 percent of the renter-occupied housing units in Ozaukee County and 40 percent in Waukesha County, compared to only about 25 percent for the Region as a whole. At the other extreme, the proportion of renter-occupied housing units with a monthly gross rent of less than $100 ranged from an unusually low 18 percent in Waukesha County to 36 percent in Kenosha County. This variation in the monthly rent for rental units among the seven counties is summarized by the median monthly gross rent presented for each county in Table 70. As would be expected from the above discussion, relatively high median rents of $130 and $139 were observed in Ozaukee and Waukesha Counties, respectively. The variation in the median rent among the remaining five counties in the Region was slight, with the median rents ranging from $113 in Kenosha County to $120 in Milwaukee County.

As is true for data relating to the value of owner-occupied housing units, data relating to the gross rent of renter-occupied housing units become more meaningful when related to the age and size of rental units. The renter-occupied housing units for which rent was tabulated are classified by monthly gross rent and year in which the structure was built in Table 71 and Figure 33. The median gross rents calculated for rental units built during the specified time periods indicate a general increase in gross rent as the age of the housing units decreases. Especially noteworthy, however, is the proportion of high-rent units constructed in the Region in the recent past. For example, of the renter-occupied housing units reported in the census as being constructed from January 1, 1969, to the time of the census in 1970, almost 80 percent had a monthly gross rent of $150 or more, while 33 percent had gross rents of $200 or more. The extent to which the high rents of many newly constructed rental units restrict the occupancy of new rental units by middle- and upper-income households is investigated in more detail in the analyses of housing need described in Chapter XIII of this report.

Like the value of owner-occupied housing units, the gross rent of rental housing units varies considerably with the size of the unit (see Table 72 and Figure 34). The median gross rents calculated for renter-occupied units having a specific number of bedrooms suggest a general increase in rent as the size of the unit increases. Especially significant, however, is the distribution of large rental housing units according to the monthly gross rent. In 1970, about 88 percent of all renter-occupied housing units containing three or more bedrooms had a monthly gross rent of $100 or more, while 44 percent had a monthly rent of $150 or more. These findings have important implications for the provision of suitable rental housing to large low-income families and are more fully evaluated in the analysis of housing supply and demand.

In addition to the foregoing data concerning the gross monthly rent of renter-occupied housing units, the U. S. Bureau of the Census also tabulates the asking rent of vacant for rent housing units. Data concerning the asking rent of vacant for rent housing units, when examined in light of other characteristics of the vacant rental housing stock, are an important indicator of the extent to which the vacant rental housing stock in an area provides an adequate choice of housing to those households which are seeking to rent a home in that area. Accordingly, the distribution of vacant for rent housing units by monthly asking rent is presented for the seven counties and the Region in Table 73.

As indicated in Table 73, an asking rent of less than $100 per month was reported for 54 percent of all vacant rental housing units for which asking rent was tabulated in the Region in 1970; an asking rent of $100-$149 was reported for 23 percent of the regional vacant rental housing stock; and an asking rent of $150 or more was reported for the balance of vacant for rent housing units in the Region. The median asking rent for all vacant for rent housing units for which data were tabulated in the Region was $96 per month in 1970.

Although vacant for rent housing units with a low asking rent comprise a large portion of the vacant rental housing stock in the Region and are accordingly within the economic means of many low- and moderate-income facilities, it is certain that many of these units with a low asking rent are very small in size and are, therefore, unable to satisfy the spatial requirements of large, low-income households. For example, it was found that of

Table 70

MONTHLY GROSS RENT OF RENTER-OCCUPIED HOUSING UNITS FOR WHICH GROSS RENT WAS TABULATED IN THE REGION BY COUNTY: 1970

County	Renter-Occupied Housing Units For Which Monthly Gross Rent Was Tabulated by Monthly Rent Range[a]									
	Less Than $60		$60-79		$80-99		$100-119		$120-149	
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total
Kenosha	538	5.6	978	10.2	1,945	20.2	2,106	21.9	2,306	24.0
Milwaukee	8,345	5.6	11,914	7.9	23,808	15.9	30,900	20.6	37,554	25.1
Ozaukee	125	4.7	216	8.2	325	12.3	419	15.9	678	25.7
Racine	548	3.9	1,239	8.8	2,617	18.7	2,994	21.4	3,851	27.5
Walworth	227	5.3	447	10.4	634	14.7	916	21.3	1,182	27.5
Washington	142	4.0	483	13.5	1,539	15.0	780	21.8	930	26.0
Waukesha	269	2.5	668	6.2	1,016	9.4	1,508	14.0	3,021	28.0
Region	10,194	5.2	15,945	8.2	30,884	15.9	39,623	20.3	49,522	25.4

County	Renter-Occupied Housing Units For Which Monthly Gross Rent Was Tabulated by Monthly Rent Range[a]								Median Monthly Gross Rent
	$150-199		$200-249		$250 or More		Total		
	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent	
Kenosha	1,390	14.4	291	3.0	67	0.7	9,621	100.0	$113
Milwaukee	29,090	19.4	5,932	4.0	2,249	1.5	149,792	100.0	120
Ozaukee	532	20.2	224	8.5	120	4.5	2,639	100.0	130
Racine	2,279	16.2	403	2.9	83	0.6	14,014	100.0	117
Walworth	775	18.0	96	2.2	25	0.6	4,302	100.0	118
Washington	553	15.4	117	3.3	38	1.0	3,582	100.0	116
Waukesha	2,957	27.4	880	8.1	479	4.4	10,798	100.0	139
Region	37,576	19.3	7,943	4.1	3,061	1.6	194,748	100.0	$120

[a] *Gross rent is presented for renter-occupied housing units rented for cash rent, excluding single-family housing units on sites of 10 acres or more.*

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

Table 71

MONTHLY GROSS RENT AND YEAR STRUCTURE BUILT FOR RENTER-OCCUPIED HOUSING UNITS FOR WHICH GROSS RENT WAS TABULATED IN THE REGION: 1970

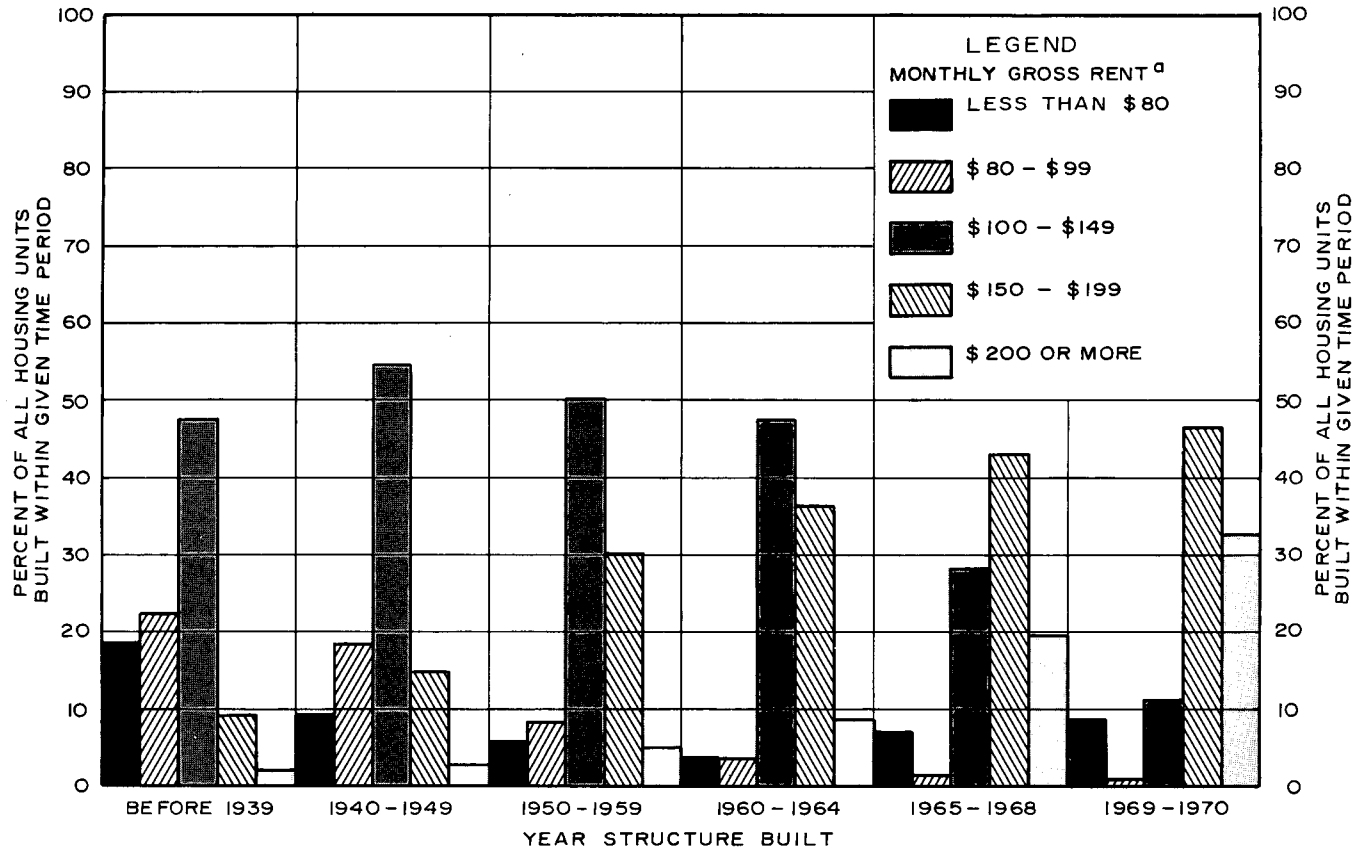
Monthly Gross Rent	Renter-Occupied Housing Units For Which Gross Rent Was Tabulated by Year Structure Was Built[a]					
	Before 1940	1940-1949	1950-1959	1960-1964	1965-1968	1969-1970
Less Than $40	1,262	57	58	22	37	43
$ 40 - 59	5,484	589	736	423	1,170	313
60 - 79	13,515	1,176	716	245	256	37
80 - 99	24,334	3,503	2,014	626	363	44
100 - 149	51,569	10,594	12,236	8,537	5,690	519
150 - 199	9,827	2,900	7,423	6,561	8,680	2,185
200 or More	2,248	539	1,217	1,573	3,893	1,534
Median Gross Rent	$109	$121	$135	$145	$165	$182

[a] *Gross rent is presented for renter-occupied housing units rented for cash rent, excluding single-family housing units on sites of 10 acres or more.*

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

Figure 33

PERCENTAGE DISTRIBUTION BY MONTHLY GROSS RENT OF RENTER-OCCUPIED HOUSING UNITS BUILT WITHIN SELECTED TIME PERIODS IN THE REGION: 1970



[a]MONTHLY GROSS RENT IS PRESENTED FOR RENTER-OCCUPIED HOUSING UNITS RENTED FOR CASH RENT, EXCLUDING SINGLE-FAMILY HOUSING UNITS ON SITES OF 10 ACRES OR MORE.

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

Table 72

MONTHLY GROSS RENT AND NUMBER OF BEDROOMS FOR RENTER-OCCUPIED HOUSING UNITS FOR WHICH GROSS RENT WAS TABULATED IN THE REGION: 1970

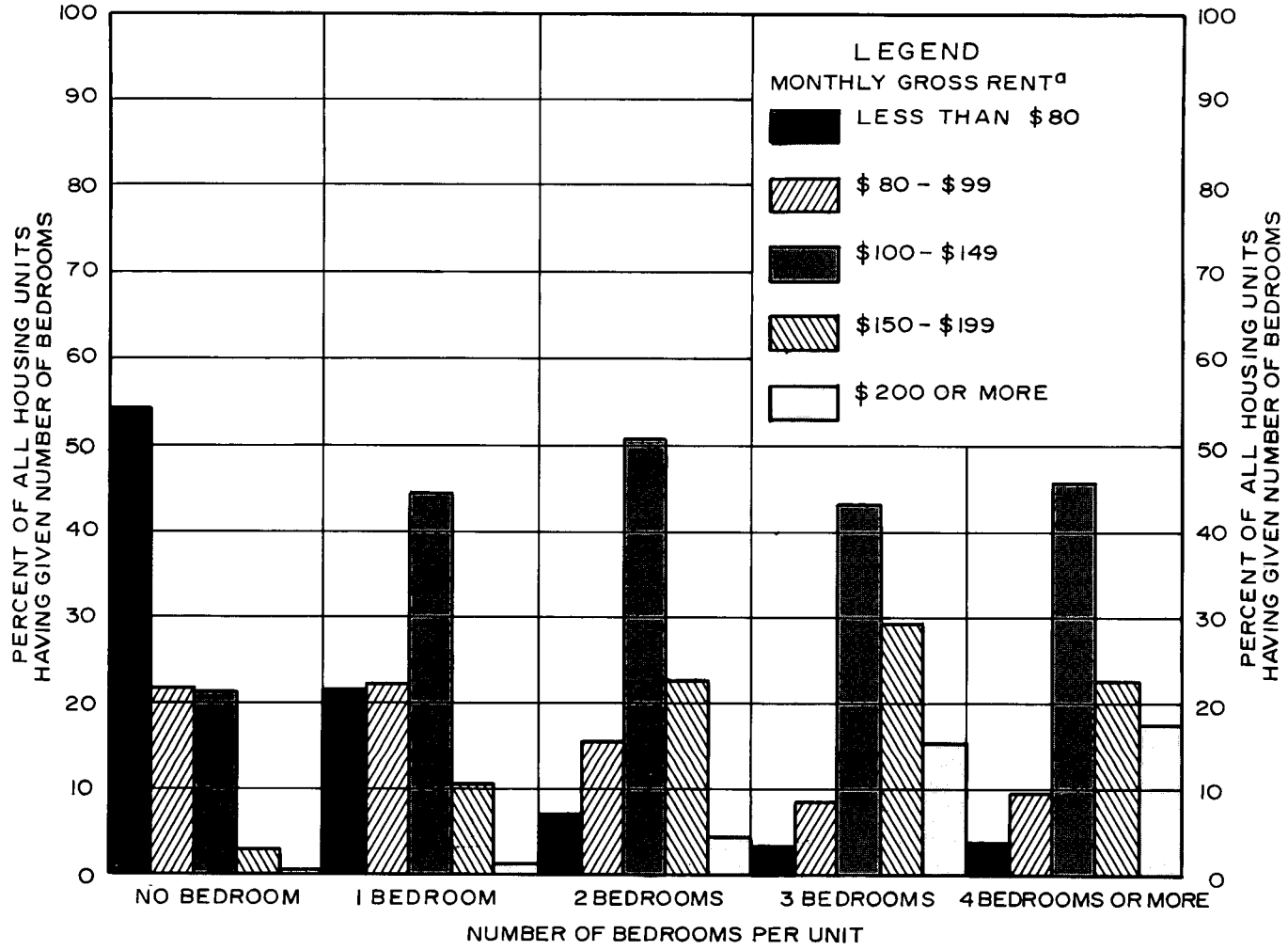
Monthly Gross Rent	Renter-Occupied Housing Units For Which Gross Rent Was Tabulated by Number of Bedrooms[a]				
	No Bedroom	1 Bedroom	2 Bedrooms	3 Bedrooms	4 or More Bedrooms
Less Than $40	803	400	253	0	0
$ 40 - 59	2,597	4,469	1,633	333	27
60 - 79	3,048	6,871	4,111	1,028	239
80 - 99	2,616	11,954	13,307	3,174	640
100 - 149	2,551	24,086	43,090	15,871	3,058
150 - 199	329	5,863	19,225	10,735	1,531
200 or More	19	591	3,633	5,659	1,174
Median Gross Rent	$77	$107	$127	$144	$140

[a] *Gross rent is presented for renter-occupied housing units rented for cash rent, excluding single-family housing units on sites of 10 acres or more.*

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

Figure 34

PERCENTAGE DISTRIBUTION OF RENTER-OCCUPIED HOUSING UNITS OF SELECTED SIZES IN THE REGION BY MONTHLY GROSS RENT: 1970



[a]MONTHLY GROSS RENT IS PRESENTED FOR RENTER-OCCUPIED HOUSING UNITS RENTED FOR CASH RENT, EXCLUDING SINGLE-FAMILY UNITS ON SITES OF 10 ACRES OR MORE.

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

the vacant rental units with a reported asking rent of less than $100, 82 percent had two or less bedrooms and 47 percent had one bedroom or no bedroom whatsoever. In addition to these spatial considerations, it is likely that many low-rent vacant units fail to provide adequate housing because they are in poor physical condition, lack essential facilities, or in some other way fail to satisfy basic housing needs.

Because of varying practices with respect to the inclusion of the cost of utilities in the asking rent of vacant rental housing units, the asking rent is also presented separately for units for which the asking rent includes the cost of all utilities and units for which the asking rent excludes the cost of some or all utilities. For any given unit, the asking rent which includes the cost of all utilities is conceptually the same as the monthly gross rent presented for renter-occupied housing units above, and could be expected to be higher than the asking rent which excludes the cost of some or all utilities for an otherwise comparable unit. Somewhat surprisingly, it was found that for the Region in 1970 the distribution by asking rent of vacant rental units for which the cost of all utilities was included (median $83 per month) was lower than the distribution by asking rent of vacant rental units for which the asking rent excludes the cost of some or all utilities (median $102 per month).

Table 73

ASKING RENT FOR VACANT FOR RENT HOUSING UNITS FOR WHICH ASKING RENT WAS TABULATED IN THE REGION BY COUNTY: 1970

County	Inclusion of Utilities	Vacant For Rent Housing Units by Asking Rent (Monthly)[a]							
		Less Than $60		$60-79		$80-99		$100-119	
		Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total	Number	Percent of County Total
Kenosha	Vacant For Rent	78	17.1	99	21.8	114	25.0	95	20.9
	All Utilities	46	19.4	46	19.4	57	24.1	55	23.2
	Some or No Utilities	32	14.7	53	24.3	57	26.1	40	18.4
Milwaukee	Vacant For Rent	915	13.3	1,455	21.2	1,371	20.0	672	9.8
	All Utilities	501	28.2	402	22.7	342	19.3	176	9.9
	Some or No Utilities	414	8.2	1,053	20.7	1,029	20.2	496	9.8
Ozaukee	Vacant For Rent	3	2.2	19	13.9	24	17.5	18	13.1
	All Utilities	0	0.0	6	66.7	0	0.0	0	0.0
	Some or No Utilities	3	2.3	13	10.2	24	18.7	18	14.1
Racine	Vacant For Rent	128	16.2	178	22.5	221	27.9	124	15.7
	All Utilities	73	32.7	39	17.5	69	31.0	24	10.8
	Some or No Utilities	55	9.7	139	24.5	152	26.7	100	17.6
Walworth	Vacant For Rent	32	11.2	59	20.6	84	29.4	28	9.8
	All Utilities	0	0.0	19	28.3	9	13.4	18	26.9
	Some or No Utilities	32	14.6	40	18.3	75	34.2	10	4.6
Washington	Vacant For Rent	9	6.4	14	9.9	43	30.5	13	9.2
	All Utilities	9	30.0	0	0.0	3	10.0	9	30.0
	Some or No Utilities	0	0.0	14	12.6	40	36.1	4	3.6
Waukesha	Vacant For Rent	29	5.0	37	6.4	62	10.7	73	12.6
	All Utilities	15	9.2	11	6.7	13	8.0	19	11.7
	Some or No Utilities	14	3.4	26	6.2	49	11.8	54	13.0
Region	Vacant For Rent	1,194	12.9	1,861	20.1	1,919	20.7	1,023	11.1
	All Utilities	644	25.8	523	20.9	493	19.7	301	12.0
	Some or No Utilities	550	8.2	1,338	19.8	1,426	21.1	722	10.7

County	Inclusion of Utilities	Vacant For Rent Housing Units by Asking Rent (Monthly)[a]						Median Asking Price
		$120-149		$150 or More		Total		
		Number	Percent of County Total	Number	Percent of County Total	Number	Percent	
Kenosha	Vacant For Rent	60	13.2	9	2.0	455	100.0	$ 89
	All Utilities	29	12.2	4	1.7	237	100.0	89
	Some or No Utilities	31	14.2	5	2.3	218	100.0	88
Milwaukee	Vacant For Rent	843	12.3	1,603	23.4	6,859	100.0	$ 95
	All Utilities	145	8.2	208	11.7	1,774	100.0	79
	Some or No Utilities	698	13.7	1,395	27.4	5,085	100.0	102
Ozaukee	Vacant For Rent	16	11.7	57	41.6	137	100.0	$129
	All Utilities	3	33.3	0	0.0	9	100.0	--
	Some or No Utilities	13	10.2	57	44.5	128	100.0	134

Table 73 (continued)

County	Inclusion of Utilities	Vacant For Rent Housing Units by Asking Rent (Monthly)[a]						Median Asking Price
		$120-149		$150 or More		Total		
		Number	Percent of County Total	Number	Percent of County Total	Number	Percent	
Racine . .	Vacant For Rent . . .	67	8.5	73	9.2	791	100.0	$ 88
	All Utilities. . . .	9	4.0	9	4.0	223	100.0	80
	Some or No Utilities.	58	10.2	64	11.3	568	100.0	92
Walworth	Vacant For Rent . . .	43	15.0	40	14.0	286	100.0	$ 92
	All Utilities. . . .	16	23.9	5	7.5	67	100.0	107
	Some or No Utilities.	27	12.3	35	16.0	219	100.0	90
Washington	Vacant For Rent . . .	24	17.0	38	27.0	141	100.0	$108
	All Utilities. . . .	6	20.0	3	10.0	30	100.0	107
	Some or No Utilities.	18	16.2	35	31.5	111	100.0	110
Waukesha	Vacant For Rent . . .	94	16.2	284	49.1	579	100.0	$148
	All Utilities. . . .	23	14.1	82	50.3	163	100.0	150+
	Some or No Utilities.	71	17.1	202	48.5	416	100.0	147
Region	Vacant For Rent . . .	1,147	12.4	2,104	22.8	9,248	100.0	$ 96
	All Utilities. . . .	231	9.2	311	12.4	2,503	100.0	83
	Some or No Utilities.	916	13.6	1,793	26.6	6,745	100.0	102

[a] *Asking rent was tabulated for vacant for rent housing units which are located on a site of less than 10 acres.*

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

SUMMARY

This chapter has presented data both collected and collated as part of the existing housing stock inventory pertaining to the size and quality of the regional housing stock. A number of findings which are of particular significance to other elements of the housing planning program and, in particular, to an analysis of the supply of housing are summarized herein.

The total housing stock in the Region consisted of 566,756 housing units in 1970, representing an increase of 65,995 housing units, or about 13 percent over 1960. The most rapid growth rates in the housing stock during the past decade occurred in certain outlying counties of the Region, notably Ozaukee and Waukesha, while the housing stock in Milwaukee County increased at a relatively slower rate.

Of the total number of housing units in the Region in 1970, 556,586 units, or over 98 percent, were intended for occupancy throughout the year, while the small balance of the total housing stock was comprised of seasonal units intended for occupancy during only one season of the year. The year-round housing stock in the Region increased by 71,235 units, or by about 15 percent, between 1960 and 1970. Conversion of many housing units from seasonal to year-round use hastened the expansion of the year-round housing stock in certain outlying areas of the Region.

Of the total number of year-round housing units in the Region in 1970, 536,486 units, or over 96 percent, were occupied. Between 1960 and 1970, the number of occupied housing units, or households, in the Region increased by 70,573, or about 15 percent. The fact that the increase in the number of occupied housing units in the Region is greater than the increase in the total number of housing units between 1960 and 1970 indicates a more intensive utilization of the regional housing stock in 1970 than in 1960.

Concerning the tenure status of the occupied housing stock, renter-occupied housing units comprised about 38 percent of all occupied housing units in the Region in 1970; the balance of the occupied housing stock consisted of owner-occupied housing units. There was little change in the tenure status of housing units in the Region between 1960 and 1970.

The vacant portion of the year-round housing stock consisted of 20,100 housing units in 1970, with about 57 percent of these units actually being offered for sale or for rent at the time of the census enumeration.

Between 1960 and 1970, the count of vacant year-round housing units offered for sale or for rent on the day of the census decreased by about 11 percent. Of more significance, however, than the absolute number of vacant year-round housing units are three vacancy rates, namely, the rental vacancy rate, the homeowner vacancy rate, and the total vacancy rate, which indicate the percentage relationship between the vacant for rent, vacant for sale, and total available vacant housing stock, respectively, and appropriate portions of the year-round housing stock. The total vacancy rate in the Region was 2 percent in April 1970. The rental vacancy rate for a given area is typically much higher than the homeowner vacancy rate. Indeed, in April 1970, the rental vacancy rate for the Region was 4 percent, while the homeowner rate was less than 1 percent. Between 1960 and 1970, the total vacancy rate decreased from 2.7 to 2.1 percent. Decreases in both the rental and the homeowner vacancy rate also occurred during the last decade.

The total number of housing units classified by year-round/seasonal status and occupancy/vacancy status are important considerations in the regional housing planning program. Of equal importance to the housing planning process, however, is a description of the housing stock in terms of basic housing unit characteristics, with the most significant of these being summarized below.

One of the most important sets of characteristics of the housing stock are structural characteristics and, in particular, data relating to the number of units per residential structure. Single-family housing units represented about 59 percent of all year-round housing units in the Region in 1970, while the balance of the year-round housing stock consisted of multifamily housing units. By far, the majority of single-family housing units were conventional detached units. Conventional attached housing units and mobile homes each represented less than 1 percent of the year-round housing stock in 1970. On the other hand, more than half of the multifamily housing units in the Region were located in two-unit structures, while one-fourth were located in structures of three to nine units and the balance in structures of 10 units or more.

Data concerning the number of rooms per housing unit provide an indicator of the size of housing units in the Region. In 1970, over 70 percent of all year-round housing units in the Region contained four, five, or six rooms; almost 18 percent contained seven or more rooms; and the balance of the year-round housing stock contained three rooms or less. There was a median of 5.1 rooms per unit for year-round housing units in the Region in 1970.

Assessment of the quality of housing in the Region is facilitated by data concerning the provision of plumbing and kitchen facilities in year-round housing units. The U. S. Census defines complete plumbing facilities as hot and cold piped water inside the structure and a flush toilet and bathtub or shower inside the structure for the occupants' exclusive use. In the 1970 census, 18,733 housing units, or 3 percent of the year-round housing stock, were reported as lacking one or more plumbing facilities. Of these, about 24 percent lacked hot or cold piped water; 56 percent lacked a flush toilet for the occupants' exclusive use; and 86 percent lacked a bathtub or shower for the occupants' exclusive use. In addition to plumbing data relating to the provision of specific plumbing facilities inside the structure, the U. S. Census provided data concerning the source of water and type of sewage disposal for year-round housing units in the Region. In the 1970 census, 82 percent of all year-round housing units were reported as obtaining water from a public system or private company; the balance of the year-round housing stock obtained water from an individual well or from another source. Concerning sewage disposal, about 85 percent of all year-round housing units in the Region were reported as being served by public sanitary waste treatment and sewage disposal facilities; the remainder of the year-round housing stock utilized onsite soil absorption sewage disposal systems or other sewage disposal arrangements.

According to the census definition, complete kitchen facilities consist of a sink with piped water, a range or cookstove, and a mechanical refrigerator. In the 1970 census, 8,383 housing units in the Region, representing less than 2 percent of the year-round housing stock, were reported as being without complete kitchen facilities because they lacked one of the specified items. In addition, 1,057 other housing units in the Region had complete kitchen facilities which were also used or intended for use by occupants of another household.

A description of the housing stock in terms of the age of housing units provides further insight into the quality of housing in the Region. At the time of the census enumeration in 1970, about 46 percent of all year-round housing units in the Region were located in structures which were more than 30 years old; 33 percent were located in structures built between 1940 and 1959; and the balance of all year-round housing units were built during the past decade.

The exterior condition of occupied housing in the Region described in terms of selected ranges of defect points rated for major and minor components of the housing structure indicate that almost 95 percent, or 545,255 housing units, of all year-round housing in the Region was in generally good physical condition in 1972. Only 3 percent, or 19,878 housing units, of the year-round housing was rated in fair physical condition; and only 2 percent, or 12,006 housing units, of the Region's year-round housing was rated in poor condition. Housing units rated in either fair or poor condition are most likely to include units which would not meet regional standards for decent, safe, and sanitary housing.

While the findings concerning the housing stock summarized above provide input for the determination of the extent to which the existing housing stock is able to satisfy the current housing demand, data concerning the value and rent of housing units in the Region are required to determine the extent to which the regional population may be economically able to satisfy its housing needs.

In 1970, the median value of single-family owner-occupied housing units for which value was tabulated in the Region stood at $20,400, an increase of $4,600, or about 29 percent, over 1960. The median monthly gross rent of renter-occupied housing units for which rent was tabulated increased by $33, or about 38 percent, during the last decade. This rapid increase in market value and rent resulted in part from increases in the value and rent of many housing units built before 1960, which reflect both inflation as well as real appreciation in value. Certainly, however, the volume of new, higher value construction which took place in the Region after 1960 also contributed to the increase in the value and rent of the regional housing stock during the last decade. These data concerning market values and monthly rents, when related to other housing unit characteristics and, particularly, housing unit size, have significant implications for the provision of suitable housing to all segments of the regional population, especially to large, low-income families. Accordingly, these findings are investigated in more detail in the analysis of housing need as reported in Chapter XIII of this report.

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Chapter VI

TAX STRUCTURE INVENTORY

INTRODUCTION

The general property tax historically has been a major source of state and local public financial resources in Wisconsin. At one time it was the main source of income for both the state and local units of government. However, with the initiation of a gross receipts tax on railroads in 1854 and on various other utilities in the 1890s, and with the adoption of the inheritance tax and the income tax in the early 1900s, the state's reliance on the general property tax greatly decreased. The only general property tax still levied by the state is a forestation tax, which comprised less than 1 percent of all general property taxes levied in the state in 1971. The general property tax remains as a locally administered tax levied almost entirely to finance the operation of city, village, town, and county governments, school districts, and other special-purpose local taxing districts.

Because the amount of revenue raised through the property tax is directly related to the value of property within a city, village, or town, the development and maintenance of a favorable property tax base is a major concern in the local planning process. Under the existing property tax structure, decisions relating to land use, and residential development in particular, are much influenced by tax base considerations. As a result, the property tax structure affects the supply of housing in a given area. Under the existing property tax structure, communities seek land use development which enhances the community tax base and, at the same time, demands a relatively low level of municipal services. Thus, many communities invite industrial or commercial development but discourage the provision of housing for the moderate-income workers employed at such developments. Through various kinds of land controls, communities may allow only that type of residential development which generates enough tax revenue to pay for the wide range of public services which must be provided to the development. Decisions in the private sector which affect the supply of housing are also influenced by property tax considerations. For example, it is often argued that the rehabilitation of deteriorated housing is hindered by the increase in the tax levied against the property when the improvement is made. The increase in the property tax resulting from the improvement coupled with the initial cost of the improvement may make such rehabilitation financially infeasible for the owner occupant or unprofitable for the landlord.

Because the property tax effectively increases the cost of owning or renting a home, the property tax structure also influences the demand for housing in an area. Intercommunity differences in tax rates are significant. For example, the property tax levied on a $25,000 house in the City of Milwaukee was $1,121 in 1971, while the property tax on a $25,000 house in the Town of Waukesha was $447.[1] Of course, there is a difference in the types and levels of services provided in the two communities; however, lower tax rates, combined with shifting centers of employment and commercial services and other changing social and economic conditions, are making many rural and rural-suburban communities an attractive alternative to urban communities with their generally higher tax rates.

Clearly, property tax considerations are an important element in the analysis of the supply of, and demand for, housing in southeastern Wisconsin. This chapter presents the data collected and collated as part of the tax structure inventory under the regional housing study, which will be a useful input in the conduct of such an analysis. In particular, in the next sections of this report, data are presented concerning the state equalized value of general property in southeastern Wisconsin; the total property tax levy as well as the distribution of the total tax levy for state, county, local, and school purposes; the net property tax rate; and state shared revenues, including state aids, state shared taxes, and property tax relief. In addition, in order to provide insight into the extent to which low- and moderate-income housing may constitute a burden on the local fiscal structure, the costs and revenues associated with a moderately priced housing unit are presented in the final section of this chapter.

In Wisconsin the property tax is administered on a local basis, with each city, village, and town being responsible for the assessment of taxable property and the actual collection of taxes levied on the property within its boundaries.[2] Typically, property is assessed at fractions of full, or market, value which varies among communities. If property taxes were used only to finance the operation of city, village, and town governments, assessment at less than full value would not in itself constitute a problem, so long as there is uniform assessment of individual parcels. Property taxes collected by a minor civil division, however, generally include property tax payments to the state, the county, the school districts, and possibly to other taxing districts which may contain more than one minor civil division.

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[1] *The tax on a $25,000 home was calculated on the basis of the effective real estate full value tax rate published for cities, villages, and towns in the state by the Wisconsin Department of Revenue in Bulletins No. 171, 271, and 371 combined.*

[2] *A county assessment system may be established in any county by a two-thirds vote of the county board. At the present time, Kenosha County is the only county in the Region to adopt such a county assessment system.*

Clearly, the apportionment of taxes to several minor civil divisions within a larger taxing district cannot be fairly accomplished on the basis of locally assessed valuations. Therefore, each year the Wisconsin Department of Revenue through the Office of the Supervisor of Assessments conducts an independent valuation of property within each civil division. By means of various sampling procedures, trend analysis, and other techniques, an estimate of the full, or market, value of the property within a civil division is obtained, not on a parcel by parcel basis, but on an aggregate basis for each category of real and personal property. Thus, just as the local assessor must attempt to uniformly assess individual parcels within a community, the supervisor of assessments is concerned with assuring that the same standards of value and classification exist between civil divisions. In addition to the apportionment of taxes to civil divisions within larger taxing districts, this state equalized or full value of property is also used to calculate full value tax rates, to calculate state aids to school districts, to determine property tax relief credits, and for a wide range of other uses. Furthermore, the state equalized value of property is an indicator of the economic development and taxing ability of an area.

The state statutes specify in detail what property is to be taxed and how such property is classified. General property, or that property which is subject to the general property tax, is classified as real or personal property. Real property, which includes land as well as buildings and improvements to the land, is further classified according to use as residential, mercantile, manufacturing, agricultural, swamp and waste, or timber. On the other hand, personal property is classified according to 13 categories, including merchants stock; manufacturers stock; three classifications of livestock; machinery, tools and patterns; and others.

Many specific types of property are exempted from the general property tax according to state statute. Some of the major types of property so exempted include property owned by the state or by a county, city, village, town, school district, or sanitary sewerage district; property owned by railroads, pipelines, and light, heat, and power companies which is used in the provision of their services and which is subject to a state levied utility tax; and many specific items including household furnishings, personal apparel, automobiles, and intangibles such as money, bonds, and stocks.

State Equalized Value of General Property

The trend between 1961 and 1971 in the state equalized value of general property is shown for the Region in Table 74. The total state equalized value of general property in the Region in 1971 stood at $15.3 billion, an increase of $6.4 billion, or 71 percent, over 1961. The major cause of this growth in property values is a real increase of general property within the Region. However, the fact that the Consumer Price Index[3] increased by 32 percent from 1961 to 1971 suggests that a substantial portion of the increase in property values over this period is due to inflation.

[3] *Refers to the Consumer Price Index for the City of Milwaukee prepared by the U. S. Bureau of Labor Statistics.*

Table 74

STATE EQUALIZED VALUE OF GENERAL PROPERTY IN THE REGION 1961-1971

Year	State Equalized Value of General Property		
	Real Property	Personal Property	Total
1961	$ 7,718,962,200	$1,241,468,910	$ 8,960,431,110
1962	7,964,759,830	1,328,929,740	9,293,689,570
1963	8,182,084,230	1,373,933,995	9,556,018,225
1964	8,492,152,170	1,446,630,925	9,938,783,095
1965	8,814,846,100	1,569,472,015	10,384,318,115
1966	9,243,047,900	1,745,746,055	10,988,793,955
1967	9,823,318,600	1,941,440,670	11,764,759,270
1968	10,402,436,400	2,041,213,780	12,443,650,180
1969	11,220,919,200	2,130,222,100	13,351,141,300
1970	12,289,968,800	2,350,516,300	14,640,485,100
1971	12,942,475,600	2,382,618,600	15,325,094,200
Change: 1961-1971			
Amount	$ 5,223,513,400	$1,141,149,690	$ 6,364,663,090
Percent	67.7	91.9	71.0

Source: Wisconsin Department of Revenue.

Between 1961 and 1971 the equalized value of general property in the state increased by 89 percent. Because of a somewhat lower growth rate in property values between 1961 and 1971, the Region's share of all general property in the state decreased from nearly 46 percent in 1961 to 41 percent in 1971.

Personal property comprised nearly 16 percent of all general property in the Region in 1971, while the balance was comprised of real property. As indicated in Table 74, personal property values increased at a faster rate than real property values between 1961 and 1971. Consequently, the proportion of all general property value which personal property comprised increased slightly over this 10-year period.

There was considerable variation in the growth in property values among the seven counties between 1961 and 1971. As shown in Table 75, Milwaukee County had the highest absolute increase ($2.9 billion) but the lowest percentage increase (nearly 50 percent) in property values among the seven counties between 1961 and 1971. The most rapid growth in property values among the seven counties during this period occurred in the outlying Counties of Ozaukee, Washington, and Waukesha, another reflection of the decentralization of urban development currently taking place in the Region.

This variation in the growth rates of property values among the counties in the Region has caused significant distributional shifts of property values among the seven counties. The most significant changes are the decrease of 8 percent in the Milwaukee County proportion and

Table 75

STATE EQUALIZED VALUE OF GENERAL PROPERTY IN THE REGION BY COUNTY: 1961 AND 1971

County	State Equalized Value of General Property					
	1961		1971		Change: 1961-1971	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
Kenosha . . .	$ 538,810,450	6.0	$ 914,844,000	6.0	$ 376,033,550	69.8
Milwaukee . .	5,885,077,700	65.7	8,812,616,000	57.5	2,927,538,300	49.8
Ozaukee . . .	241,854,250	2.7	596,812,000	3.9	354,957,750	146.8
Racine . . .	758,179,150	8.5	1,344,083,000	8.8	585,903,850	77.3
Walworth . .	341,241,190	3.8	732,680,700	4.7	391,439,510	114.7
Washington . .	243,275,820	2.7	629,169,100	4.1	385,893,280	158.6
Waukesha . .	951,992,550	10.6	2,294,889,400	15.0	1,342,896,850	141.1
Region	$8,960,431,110	100.0	$15,325,094,200	100.0	$6,364,663,090	71.0

Source: Wisconsin Department of Revenue.

the increase of 4 percent in the Waukesha County proportion between 1961 and 1971. The proportion of the Region's equalized property value remained constant in Kenosha and increased slightly in the four other counties in the Region.

The equalized value of general property in 1971 and the percent change in the equalized value between 1961 and 1971 are presented for cities, villages, and towns in the Region on Maps 19 and 20, respectively, with the actual data presented in Appendix C. As indicated on Map 19, the equalized value of general property in the Region is heavily concentrated in the larger urban centers of the Region. In fact, over one half of the equalized value of property in the Region is contained in the five largest cities: Milwaukee, Wauwatosa, West Allis, Racine, and Kenosha.

As shown on Map 20, however, growth rates in property values between 1961 and 1971 were very low in the large urban centers of the Region. The increases in property values of 35 percent in the City of Milwaukee and 36 percent in the City of Racine were the lowest increases of all cities, villages, and towns in the Region. Relatively slow growth in property values of less than 75 percent also occurred in the City of Kenosha, in 11 suburbs of the City of Milwaukee in Milwaukee County, and in several villages in the southern portion of the Region. On the other hand, property values increased at a relatively rapid rate in many outlying communities in the Region between 1961 and 1971. Thus, the equalized value of property more than tripled in 15 cities, villages, and towns in the Region, with a concentration of these communities being observed in Washington County.

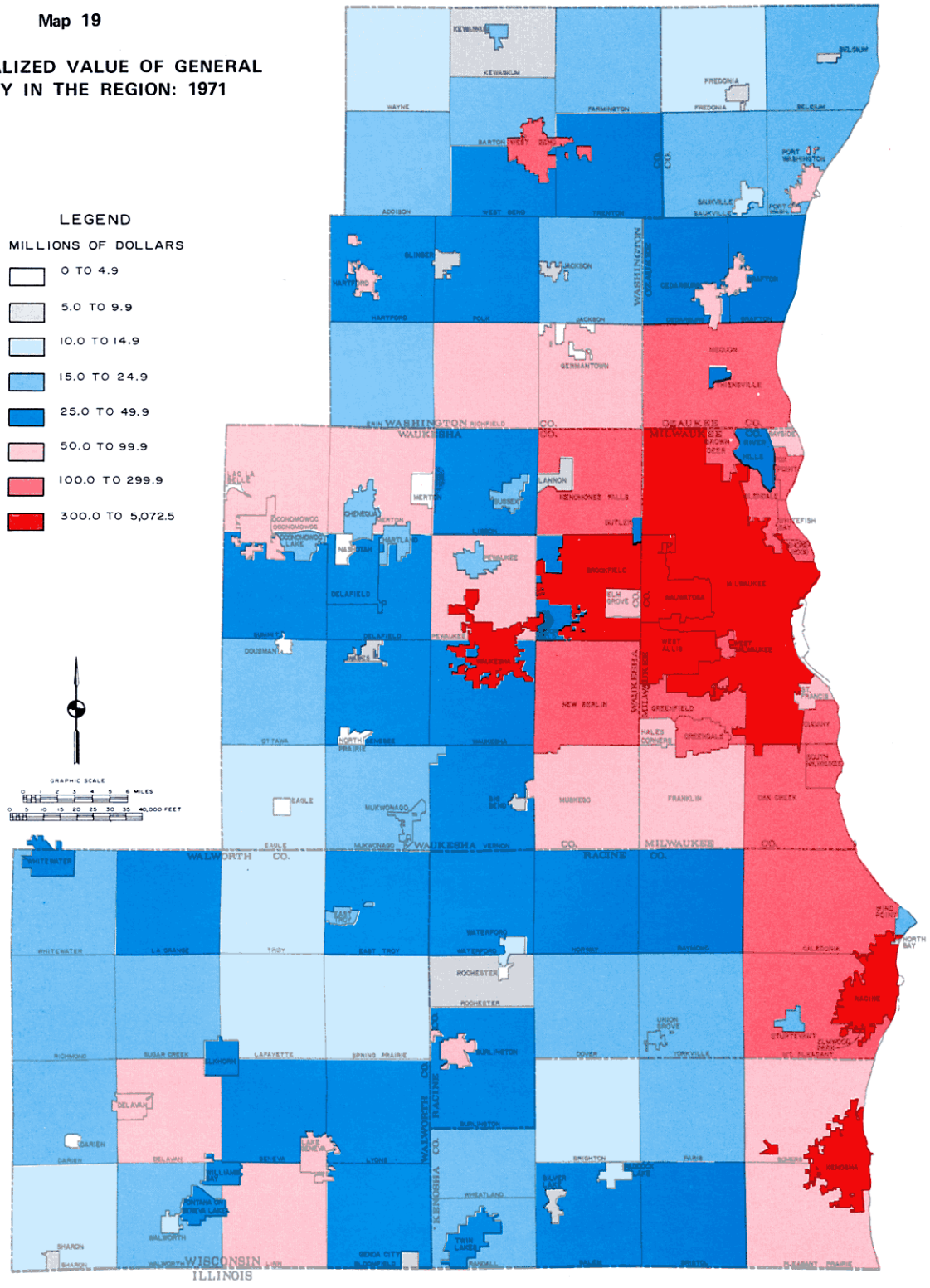
A good indicator of the wealth and tax base of a community is the average per household equalized value of general property, obtained by dividing the total equalized value in the community by the number of households in the community. As indicated on Map 21, the equalized value of property per household was very low (less than $25,000) in the three largest cities of the Region—Kenosha, Milwaukee, and Racine—as well as in certain outlying small municipalities in the southern half of the Region. The lowest per household equalized value of property of all cities, villages, and towns in the Region was the unusually low $14,300 in the Village of Sharon (see Appendix C). At the other extreme, the equalized value of property per household was $50,000 or more in 21 cities, villages, and towns throughout the Region. The most favorable property tax bases in terms of the equalized value of property per household were observed for the Village of West Milwaukee ($110,300), the Town of Linn ($98,500), and the Village of Oconomowoc Lake ($92,600).

This variation in the equalized valuation of property per household is the result of several phenomena. One primary determinant of the equalized value of property per household is the proportion of the total equalized value in the community which is comprised of nonresidential property. Thus, in the Village of West Milwaukee the combined equalized value of real manufacturing property and manufacturing stock (one of thirteen classifications of personal property) comprised about 76 percent of the equalized value of all general property in the village in 1971, while residential property comprised less than 10 percent of all equalized value. Consequently, the equalized value of property per household was unusually high in the Village of West Milwaukee, despite the fact that about 61 percent of the single-family owner-occupied housing units in the village were valued at less than $20,000 in 1970.[4] On the other hand, a high equalized

[4]*Data concerning the value of single-family owner-occupied housing units were extracted from the 1970 census. Census respondents were to include value of both the house and lot in their value estimates.*

Map 19

STATE EQUALIZED VALUE OF GENERAL PROPERTY IN THE REGION: 1971

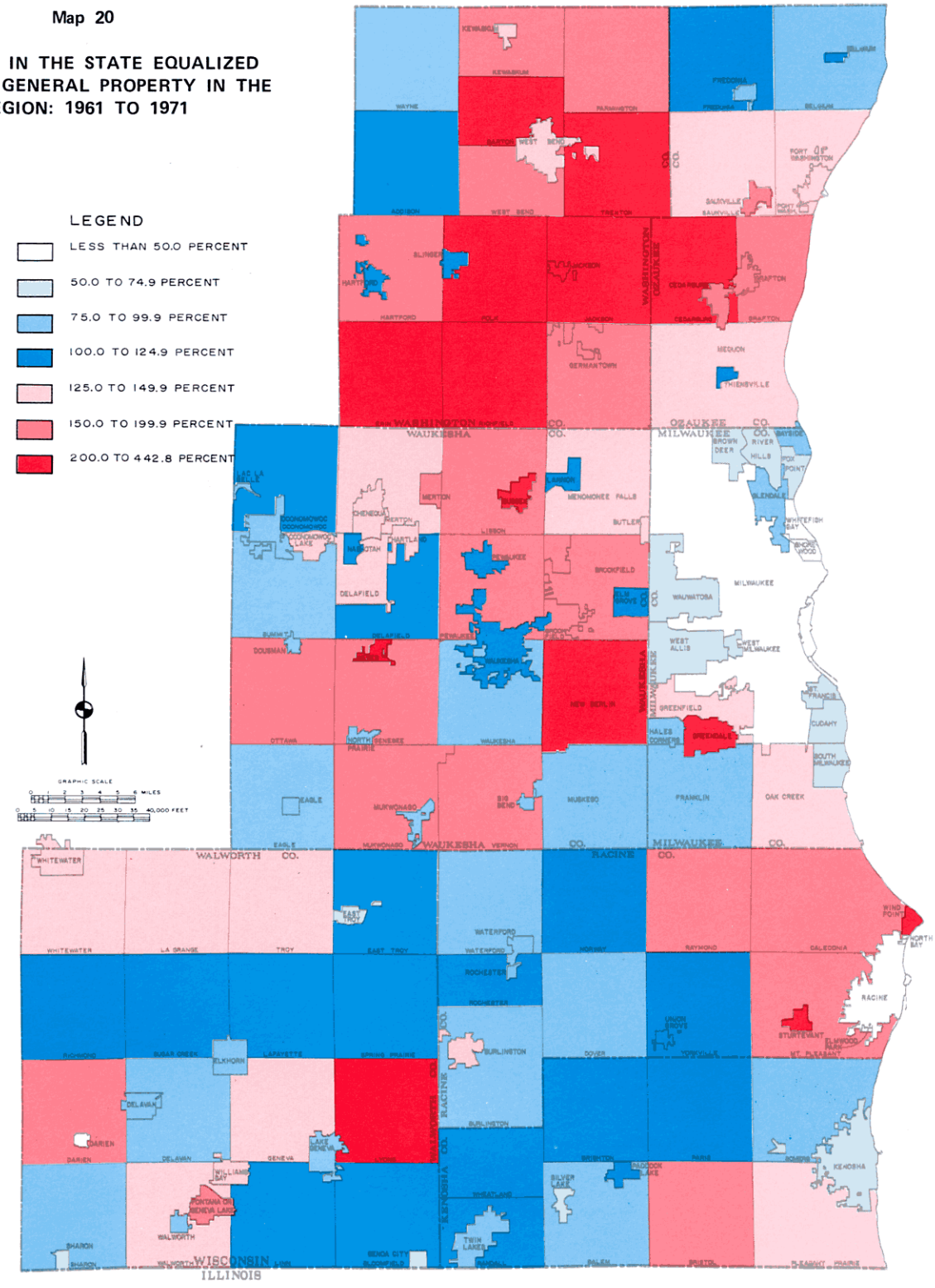


The equalized value of property is an estimate of the full, or market, value of taxable property provided on an annual basis by the Wisconsin Department of Revenue. Within the Region, equalized property values are heavily concentrated in the large urbanized areas, with over half of the equalized value of property in the Region concentrated in the five largest cities: Kenosha, Milwaukee, Racine, Wauwatosa, and West Allis.

Source: Wisconsin Department of Revenue.

Map 20

INCREASE IN THE STATE EQUALIZED VALUE OF GENERAL PROPERTY IN THE REGION: 1961 TO 1971

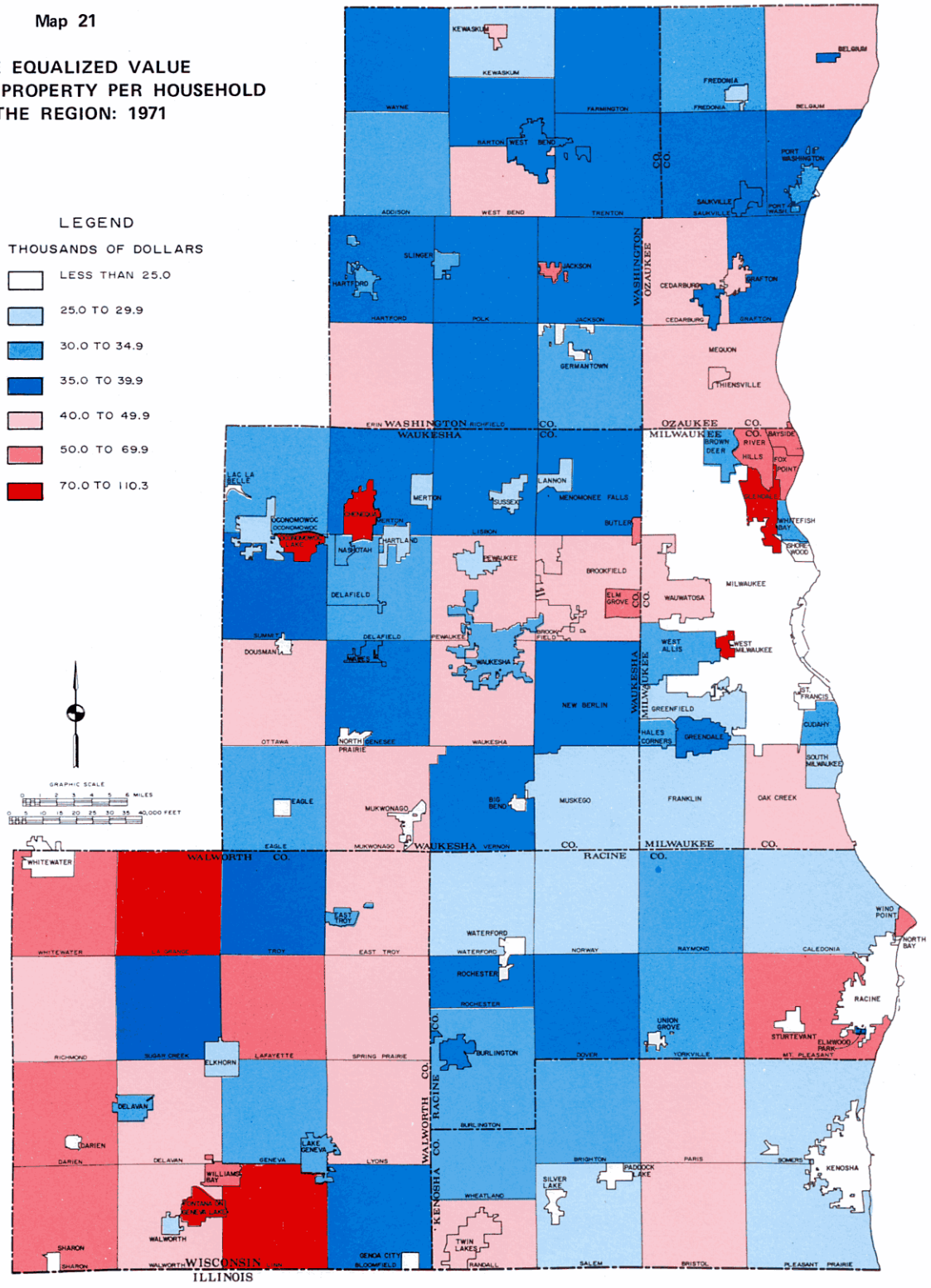


The trend in equalized property values provides one indicator of the economic growth and development of an area. Growth in equalized property values occurred at a relatively slow rate in the large urban centers of the Region between 1961 and 1971, while more rapid rates of growth occurred in many of the Region's outlying communities.

Source: Wisconsin Department of Revenue.

Map 21

STATE EQUALIZED VALUE OF GENERAL PROPERTY PER HOUSEHOLD IN THE REGION: 1971



A measure of the relative strength of the tax base within a community is the average per household equalized value of taxable property, obtained by dividing the total equalized value by the number of households in the community. A substantial variation exists in the equalized value of property per household among the communities of the Region, ranging from a low of $14,300 in the Village of Darien in Walworth County to a high of $110,300 in the Village of West Milwaukee.

Source: Wisconsin Department of Revenue, U. S. Bureau of the Census, and SEWRPC.

value per household may result from high-valued residential properties in a community. For example, in the Village of Chenequa about 94 percent of the total equalized value was comprised of residential property in 1971. Almost three-fourths of the single-family owner occupied housing units in the Village of Chenequa were valued at $50,000 or more in the 1970 census, causing the equalized value of property to be high. It should be noted that, in addition to the equalized value of general property per household, a more general indicator of the wealth and taxing capabilities of a municipality are data concerning household income (see Chapter III). By relating household income and the property tax levy, it is possible to determine the extent to which the property tax may represent a burden on individual households within a community as well as the general ability of individual households to absorb increases in the property tax.

State Equalized Value of Real Property

As noted, the equalized value of general (real and personal) property in the Region is comprised almost entirely of real property, consisting of land as well as the buildings and improvements thereon. Thus, in 1971, the equalized value of real property in the Region stood at $12.9 billion, or about 84 percent of all general property. As indicated in Table 76, the major classifications of real property for the Region in 1971 were: residential (64 percent); mercantile (18 percent); manufacturing (13 percent); and agricultural (5 percent). The combined equalized value of the two other real estate classifications, namely swamp and wasteland and timberland, comprised less than 1 percent of all real property in the Region.

Because of varying rates of growth among the several real estate classifications, the distribution of real property according to the real estate classifications changed somewhat between 1961 and 1971. The most significant changes are the increase of 3 percent in the proportion of mercantile property and the decrease of more than 2 percent in the proportion of residential property. One factor contributing to this shift is the growth in the number of apartment structures of eight units or more, which are classified as mercantile rather than as residential property.

The equalized value of real property and the distribution of real property according to four real estate classifications are shown for the counties in the Region in Table 77 and Figure 35, respectively. It should be noted that Washington County is the only county in the Region in which the combined equalized value of swamp and wasteland and timberland represented more than 1 percent of all real property in 1971; while in 1961, such lands comprised less than 1 percent of all real property for each county. Consequently, these two real estate classifications are omitted from Figure 35.

As shown in Figure 35, there is much variation among the counties in terms of the proportion of real property comprised by each real estate classification. Thus, the highest proportion of residential property was observed in Waukesha County (76 percent), while the lowest proportion of residential property was found in Walworth and Washington Counties (59 percent). Milwaukee County had the highest proportion of mercantile property (23 percent) and manufacturing property (16 percent), Washington County had the lowest proportion of mercantile property (9 percent), and Walworth County had the lowest proportion of manufacturing property (3 percent). Finally, the proportion of agricultural property ranged from less than 1 percent in Milwaukee County to 24 percent in Walworth County.

Table 76

DISTRIBUTION OF THE STATE EQUALIZED VALUE OF REAL PROPERTY IN THE REGION ACCORDING TO SIX REAL ESTATE CLASSIFICATIONS: 1961 AND 1971

Real Estate Classification	State Equalized Value of Real Property					
	1961		1971		Change: 1961-1971	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
Residential	$5,116,111,900	66.3	$ 8,261,094,700	63.8	$3,144,982,800	61.5
Mercantile	1,178,871,000	15.3	2,368,441,200	18.3	1,189,570,200	100.9
Manufacturing	1,050,707,500	13.6	1,627,609,200	12.6	576,901,700	54.9
Agricultural	369,178,800	4.8	667,252,400	5.2	298,073,600	80.7
Swamp and Waste	1,386,550	0.0	3,790,800	0.0	2,404,250	173.4
Timber	2,706,450	0.0	14,287,300	0.1	11,580,850	427.9
Total	$7,718,962,200	100.0	$12,942,475,600	100.0	$5,223,513,400	67.7

Source: Wisconsin Department of Revenue.

Table 77

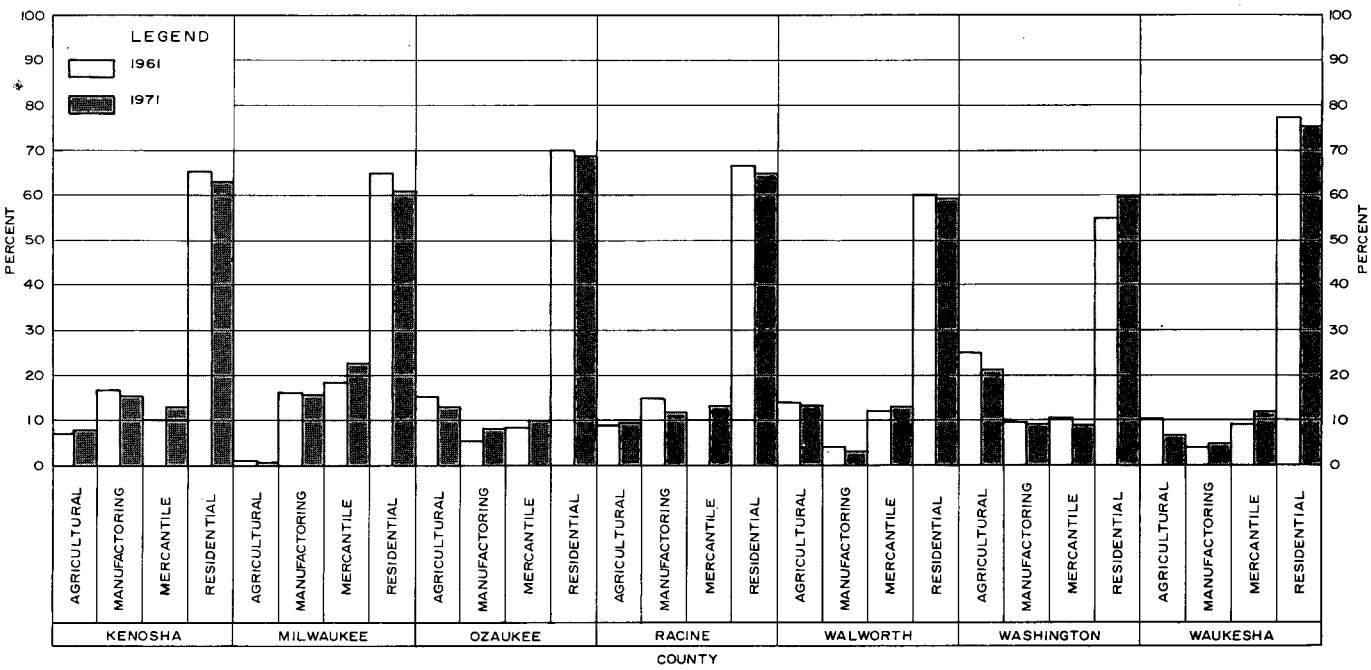
STATE EQUALIZED VALUE OF REAL PROPERTY IN THE REGION BY COUNTY: 1961 AND 1971

County	State Equalized Value of Real Property				Real Property as Percent of All General Property	
			Change: 1961-1971			
	1961	1971	Amount	Percent	1961	1971
Kenosha . . .	$ 484,333,200	$ 821,470,000	$ 337,136,800	69.6	89.9	89.8
Milwaukee . .	4,981,285,200	7,237,330,000	2,256,044,800	45.3	84.6	82.1
Ozaukee . . .	214,319,750	519,375,000	305,055,250	142.3	88.6	87.0
Racine . . .	660,323,850	1,143,369,000	483,045,150	73.2	87.1	85.1
Walworth . .	307,427,300	656,172,100	348,744,800	113.4	90.1	89.6
Washington . .	205,378,700	534,073,500	328,694,800	160.0	84.4	84.9
Waukesha . .	865,894,200	2,030,686,000	1,164,791,800	134.5	91.0	88.5
Region	$7,718,962,200	$12,942,475,600	$5,223,513,400	67.7	86.1	84.4

Source: Wisconsin Department of Revenue.

Figure 35

PERCENTAGE DISTRIBUTION OF THE STATE EQUALIZED VALUE OF REAL PROPERTY ACCORDING TO FOUR REAL ESTATE CLASSIFICATIONS IN THE REGION BY COUNTY: 1961 and 1971



Source: Wisconsin Department of Revenue.

Within any minor civil division, the distribution of the equalized value of real property according to the various real estate classifications can provide insight into the ability of that community to raise revenue through the general property tax. For example, it is generally assumed that manufacturing property is a boon to a community because of the low level of services demanded by such property relative to the amount of revenue derived from such property. On the other hand, communities in which a high percent of all real property is comprised of residential property are often in a less favorable position because of the high cost of the public services which

must be provided to residential neighborhoods, with the cost of education being of greatest concern. Of course, the ability of a residential development to "pay its own way" depends on many factors, including the value of the residential property, the size of the school age population which the development generates, and the level of services other than education which are required in the development. The costs and revenues associated with residential development are discussed in the final section of this chapter.

PROPERTY TAX LEVY

Total Property Tax Levy

In 1971, the total amount of property taxes levied by all cities, villages, and towns in the Region was $609.2 million, an increase of $354.1 million, or about 139 percent, over 1961.[5] Property tax relief granted by the state[6] offset $84.3 million, or about 14 percent of the total levy, reducing the net property tax levy in the Region to $524.9 million (see Table 78). The net property tax levy, based on tax dollars levied on real and personal property for payment by the property owner, increased by $269.8 million, or 106 percent, between 1961 and 1971, a growth rate which is considerably higher than the growth rate in property values during this period.

The total gross property tax levy (before property tax relief) for the year 1971 and the percent change in the property tax levy between 1961 and 1971 are presented on Maps 22 and 23, respectively, for cities, villages, and towns in the Region, with the actual data presented in Appendix C. As indicated on Map 22, the highest tax levies are found in communities in the Milwaukee and Racine metropolitan areas and the City of Kenosha. In fact, the property tax levies in the Cities of Kenosha, Milwaukee, and Racine combined comprised almost 50 percent of all property taxes levied in the Region in 1971. From analysis of Map 23, however, it is evident that the growth rate in the property tax levy between 1961 and 1971 was relatively low in these most intensely urbanized areas of the Region and relatively high in many outlying communities. Thus, between 1961 and 1971, the total property tax levy increased by a factor of four in 23 cities, villages, and towns in the Region, with 18 of these located in Ozaukee, Washington, and Waukesha County.

On the other hand, the total property tax levy increased by a factor of two in the City of Milwaukee during this period. It should be noted that growth in the property tax levy within a civil division is most meaningfully evaluated when related to growth in the property tax base. From a comparison of Maps 20 and 23, it is apparent that the relatively slow growth in the property tax levy in the largest cities of the Region was accompanied by relatively slow growth in the property tax base. Conversely, the rapid increase in the total property tax levy in many outlying communities of the Region was often accompanied by a rapid increase in property values.

Tax Levy for State, County, Local, and School Purposes

The property taxes which comprise the total property tax levy for a community include taxes levied for state, county, local, and school purposes. The tax levy for state purposes is a forestation tax imposed on all general property in the state at the rate of $0.20 per $1,000 of equalized value and used for the development and preservation of state forests. The property tax levy for

Table 78

PROPERTY TAX LEVIES IN THE REGION: 1961-1971

Year	Gross Property Tax Levy	Property Tax Relief[a]	Net Property Tax Levy
1961	$255,143,074	$ -- [b]	$255,143,074
1962	275,763,275	40,066,900	235,696,375
1963	289,993,691	41,542,010	248,451,681
1964	311,569,250	40,248,908	271,320,342
1965	328,997,398	44,862,073	284,135,325
1966	353,831,760	49,715,199	304,116,561
1967	402,825,562	55,284,919	347,540,643
1968	463,817,207	58,189,369	405,627,838
1969	504,175,708	63,411,673	440,764,035
1970	561,848,823	67,156,081	494,692,742
1971	609,226,767	84,310,748	524,916,019
Change: 1961-1971			
Amount	$354,083,693	$84,310,748	$269,772,945
Percent	138.8	--	105.7

[a] *This category includes property tax relief on real property and personal property other than stocks, as well as property tax relief on stocks.*

[b] *Property tax relief was first granted by the state to cities, villages, and towns as an offset to taxes levied in 1962.*

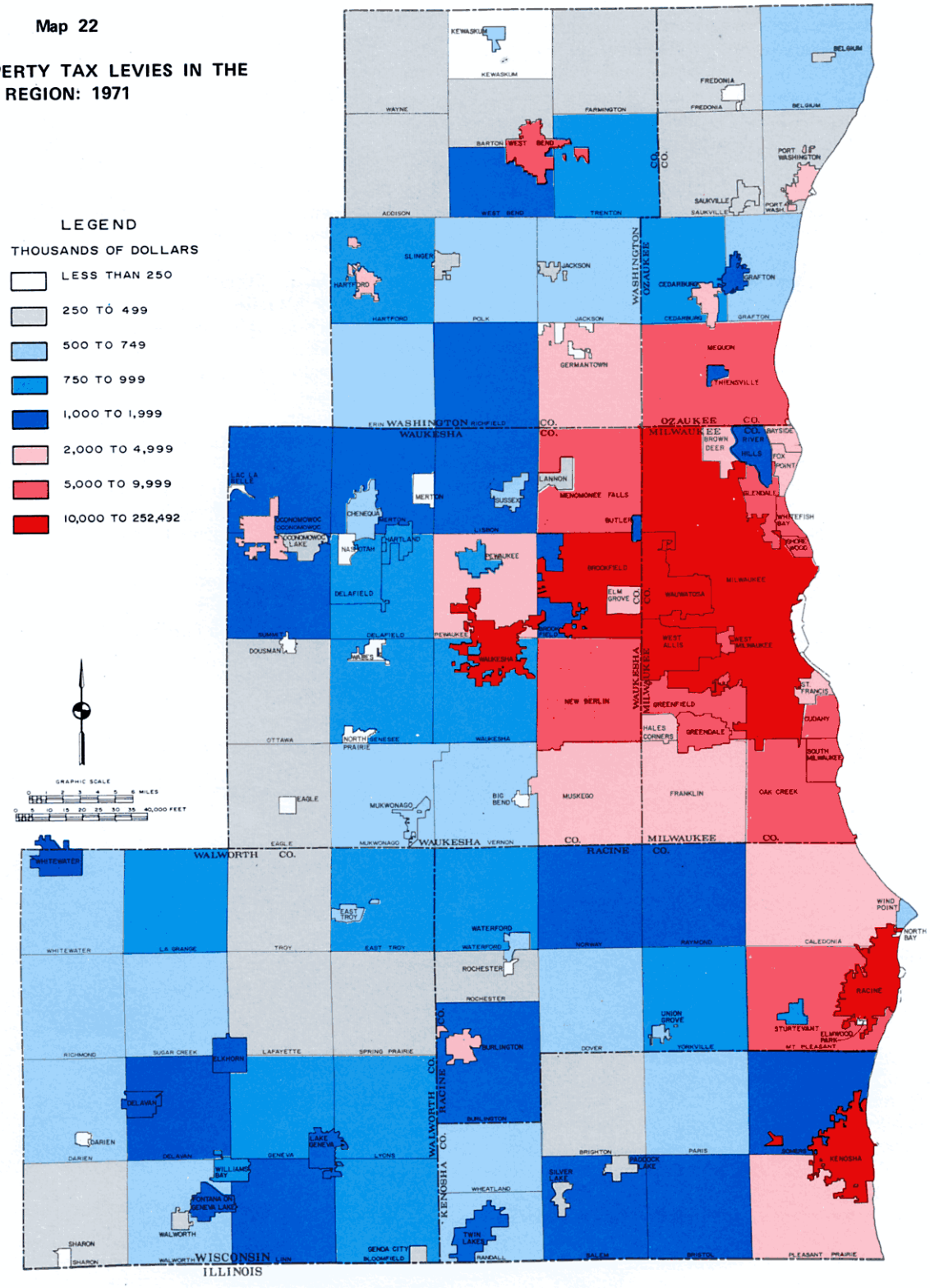
Source: Wisconsin Department of Revenue.

[5] *The 1971 property tax levy is the property tax levied in 1971 for payment in 1972.*

[6] *In 1961, the State Legislature enacted legislation granting property tax relief on an annual basis to taxpayers as an offset to taxes levied on real property and personal property excluding stocks (i.e., manufacturer's stock, merchant's stock, and livestock) in minor civil divisions where the three-year average full value tax rate was $14.00 per thousand dollars of equalized value or greater. The first state funds appropriated for this purpose were paid to minor civil divisions in 1963 as an offset to taxes levied in 1962. The total amount of money appropriated for such tax relief is apportioned to minor civil divisions according to statutory formula. In 1971, the minimum full value property tax rate necessary to qualify for such property tax relief was increased to $17.00 per thousand dollars of equalized value. In addition, the 1961 legislation also granted a 50 percent tax credit to taxpayers on manufacturer's stock, merchant's stock, and livestock. This tax credit on stocks was increased to 55 percent in 1966, to 60 percent in 1967, and to 65 percent in 1973.*

Map 22

GROSS PROPERTY TAX LEVIES IN THE REGION: 1971

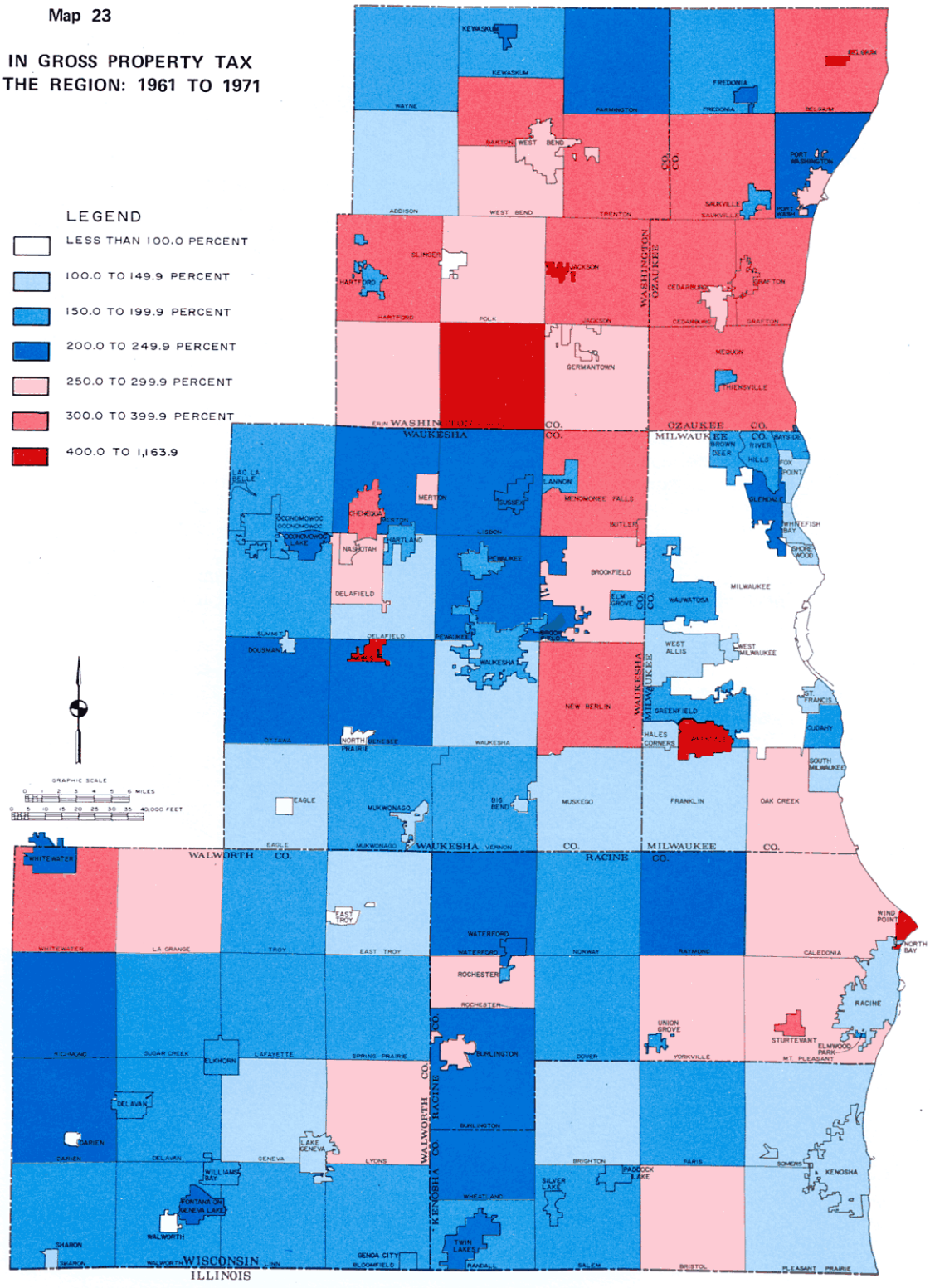


The gross property tax levy within a community is the total property tax levy for state, county, local, and school purposes before the application of property tax relief credits. The total amount of property taxes levied by all cities, villages, and towns in the Region stood at $609 million in 1971, with the highest tax levies in the Kenosha, Milwaukee, and Racine metropolitan areas.

Source: Wisconsin Department of Revenue.

Map 23

INCREASE IN GROSS PROPERTY TAX LEVIES IN THE REGION: 1961 TO 1971



The total amount of property taxes levied by all cities, villages, and towns in the Region increased by $354 million, or 139 percent, between 1961 and 1971, reflecting both an increase in the level of services provided as well as inflationary forces. It is apparent from this map that the growth rate was relatively low in the older urban areas of the Region and relatively high in many of the Region's outlying communities.

Source: Wisconsin Department of Revenue.

county purposes is the portion of the total property tax levy which is used to finance part of the budget for each county. Each year, every city, village, and town in a county must pay a share of the county property tax levy which is determined by its proportion of the equalized value in the county. The tax levy for local purposes is the portion of the total property tax levy used to finance the balance of the costs of local government which are not met by other sources of income. The property tax levy for school purposes is the portion of the total property tax levy which is used to meet the cost of education. The tax levy for school purposes includes the amounts levied by school authorities against a city, village, or town, as well as levies for vocational school tuition and city taxes in cities where public schools are administered by a board of education.

The trend between 1961 and 1971 in the distribution of the gross property tax levy (before property tax relief) according to use for state, county, local, and school purposes is shown for the Region in Table 79. The tax levy for school purposes comprises the largest and fastest growing component of the total property tax levy. The total tax levy for school purposes for all cities, villages, and towns in the Region stood at $329 million in 1971, an increase of nearly $206 million, or 167 percent, over 1961. This rapid growth rate has caused the school proportion of the total property tax levy to increase from 48 percent in 1961 to 54 percent in 1971. As further indicated in Table 79, both the county proportion and the local proportion of the total property tax levy decreased slightly between 1961 and 1971. In 1971, 23 percent of all property taxes levied in the Region was levied for county purposes, while 22 percent was levied for local purposes. The property tax levy for state purposes stood at $3.1 million and represented less than 1 percent of all property taxes levied in the Region in 1971.

The distribution of the total property tax levy according to use for state, county, local, and school purposes provides additional insight into the financial structure within a city, village, or town. For example, in many communities a very large proportion of the total property tax levy is comprised of taxes for school purposes. In many of these communities, and in particular in the outlying towns, a major cause of this distribution pattern is the low level of local services provided. In other communities, a high proportion of the total tax levy may be comprised of tax levies for school purposes because revenue sources other than the property tax, including state shared revenues, were used to pay all or part of the taxes levied by the state and county governments and the cost of local services.

The proportion of the gross property tax levy which was levied for local, county, and school purposes is presented for each city, village, and town in the Region on Maps 24, 25, and 26, respectively. The proportion of the property tax levy comprised of the state forestation tax is not included because the magnitude of this levy is so small. Thus, in 1971, the property tax levy for state purposes comprised less than 1 percent of the total property tax levy within each city, village, and town in the Region except for the Town of Waukesha in Waukesha County.

As indicated on Map 24, the property tax for local purposes comprised a relatively large proportion (more than 25 percent) of the total property tax levy in the Cities of Kenosha, Milwaukee, Racine, and Waukesha, as well as

Table 79

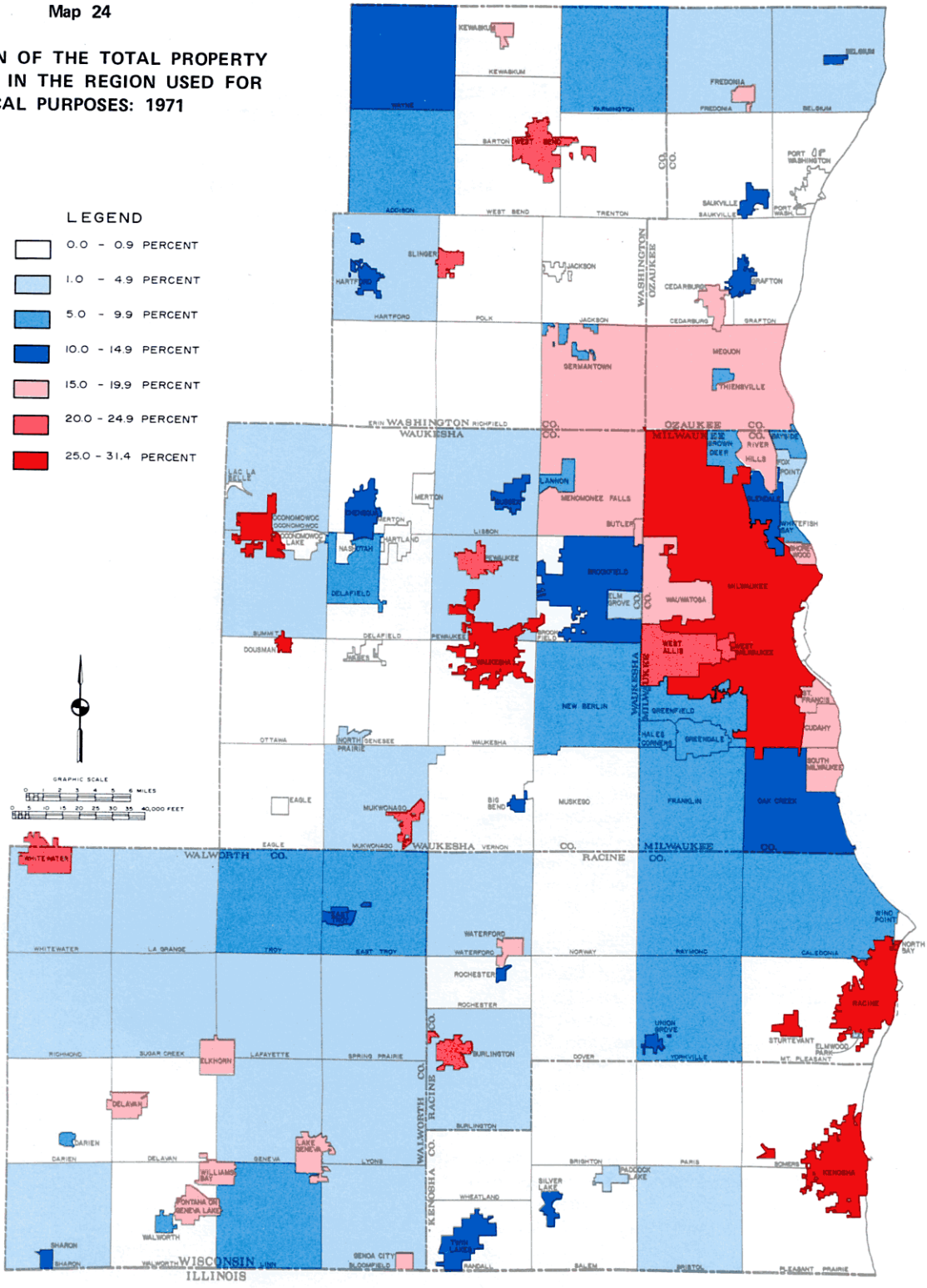
DISTRIBUTION OF THE GROSS PROPERTY TAX LEVY ACCORDING TO USE FOR STATE, COUNTY, LOCAL, OR SCHOOL PURPOSES IN THE REGION: SELECTED YEARS 1961-1971

Year	Gross Property Tax Levy									
	State Purposes		County Purposes		Local Purposes		School Purposes		Total	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
1961	$1,776,198	0.7	$ 67,782,955	26.6	$ 62,501,602	24.5	$123,082,321	48.2	$255,143,074	100,0
1963	1,886,702	0.7	73,419,727	25.3	74,634,052	25.7	140,053,210	48.3	289,993,691	100.0
1965	2,052,316	0.6	80,851,704	24.6	78,693,843	23.9	167,399,554	50.9	328,997,398	100.0
1967	2,309,416	0.6	94,655,624	23.5	89,190,134	22.1	216,670,383	53.8	402,825,562	100.0
1969	2,655,404	0.5	117,077,088	23.2	109,167,587	21.7	275,275,426	54.6	504,175,708	100.0
1971	3,055,896	0.5	143,050,438	23.5	134,128,898	22.0	328,991,336	54.0	609,226,767	100.0
Change: 1961-1971										
Amount	$1,279,698	--	$ 75,267,483	--	$ 71,627,483	--	$205,909,015	--	$354,083,693	--
Percent	72.0	--	111.0	--	114.6	--	167.3	--	138.8	--

Source: Wisconsin Department of Revenue.

Map 24

PROPORTION OF THE TOTAL PROPERTY TAX LEVY IN THE REGION USED FOR LOCAL PURPOSES: 1971



The tax levy for local purposes is the portion of the total property tax levy which is used to finance the costs of local government, including administrative expenses as well as the cost of providing police and fire protection and other local services. Approximately $134 million, or 22 percent of all property taxes levied in the Region in 1971, was levied for local purposes. The proportion of the property tax which is levied for local purposes is generally highest in the Region's large urban centers, where a relatively high level of municipal services is provided.

Source: Wisconsin Department of Revenues.

several other municipalities throughout the Region. The local proportion of the total property tax levy in the City of Milwaukee (31 percent) was the largest of all cities, villages, and towns in the Region in 1971. At the other extreme, no property tax was levied for local purposes in four villages and seven towns in the Region. In general, the local proportion of the total property tax levy was larger in cities and villages than in towns. Thus, the property tax levy for local purposes comprised 10 percent or more of the total property tax levy in more than three-fourths of all cities in the Region and more than half of all villages, compared to only one of 65 towns. The relatively small tax levy for local purposes in towns is expected in view of the lower level of services generally provided in the more rural areas of the Region.

The proportion of the total property tax levy consisting of taxes levied for county purposes was relatively large for cities, villages, and towns in Kenosha, Milwaukee, and Racine Counties (see Map 25). The county proportion of the total property tax levy was especially large for eight suburbs of the City of Milwaukee, where the county levy comprised more than 32 percent of the total tax levy. On the other hand, the county proportion of the total property tax levy was relatively small—less than 16 percent—for all minor civil divisions in Ozaukee County as well as many communities in Washington and Waukesha Counties. It should be noted that large expenditures for health and social services are a major cause of the relatively large property tax levy for county purposes for communities in Milwaukee County and, to a lesser degree, in Kenosha and Racine Counties. At the present time, state and federal aids significantly reduce the cost of health and social services provided by counties in the state. Complete assumption of responsibility by the state and federal governments for certain health and welfare programs as proposed in pending state and federal legislation could substantially reduce the property tax levy for county purposes, especially in the more urbanized counties of the Region.

As indicated on Map 26, school taxes comprised less than 60 percent of the total property tax levy in only 13 municipalities in Milwaukee County, in the Cities of Kenosha, Racine, and Waukesha, and in six other cities and villages within the Region. School taxes comprised less than half of the total property tax levy in only five minor civil divisions in the Region in 1971: the Cities of Milwaukee, Wauwatosa, West Allis, and Racine as well as the Village of West Milwaukee. At the other extreme, as shown on Map 26, the school tax represented at least 75 percent of the total tax levy in many outlying minor civil divisions in the Region, including two-thirds of the Region's towns.

NET PROPERTY TAX RATE

Individual property tax bills are calculated by multiplying the locally assessed value of property by the local property tax rate. The local tax rate indicates the amount of tax to be paid on a given amount of locally assessed value, often expressed as dollars of tax per thousand dollars of assessed value. Because the local assessment of property is generally accomplished at fractions of full market value which vary among civil divisions, however, the local property tax rates, which are based on the locally assessed value of property, are not comparable among civil divisions. Instead, the gross full value property tax rate is utilized for such purposes. This full value property tax rate is calculated by dividing the gross property tax levy (before property tax relief) for the city, village, or town by the equalized value of general property in the civil division. By relating the property tax levy to the equalized value of property in this manner, the gross full value property tax rate provides a measure of tax effort which is comparable among civil divisions. It is important to note that the full value property tax rate for a city, village, or town is an average rate, since the minor civil division may be part of more than one county or school district and since tax rates vary among counties and school districts.

The net full value property tax rate presented in this section is the gross full value property tax rate, as defined above, adjusted downward to reflect tax relief on real property and personal property other than stocks.[7] No attempt is made to estimate the net full value tax rate on stocks. The purpose of including only the property tax relief on real property and personal property other than stocks in calculating this net rate is to estimate the actual tax burden on such property, which constitutes a very high proportion of all taxable property in the Region.

The net full value property tax rate for 1971[8] is presented for cities, villages, and towns in the Region on Map 27, with the actual data presented in Appendix C. The tax rates presented in this chapter are expressed as the amount of tax dollars levied per thousand dollars of full value. As shown on Map 27, the property tax was levied at a high rate of $36.00 or more in nine cities and villages in the Milwaukee metropolitan area, in the cities of Racine and Kenosha, and in six other minor civil divisions throughout the Region. The net tax rate of $44.83 in the City of Milwaukee was the highest of all cities, villages, and towns in the Region in 1971. On the other hand, about one-third of all minor civil divisions in the Region had a net property tax rate of less than $27.00, most of these being communities in outlying areas of the Region. The unusually low net tax rate of $17.88 in the Town of Waukesha was the lowest tax rate of all cities, villages, and towns in the Region in 1971. In

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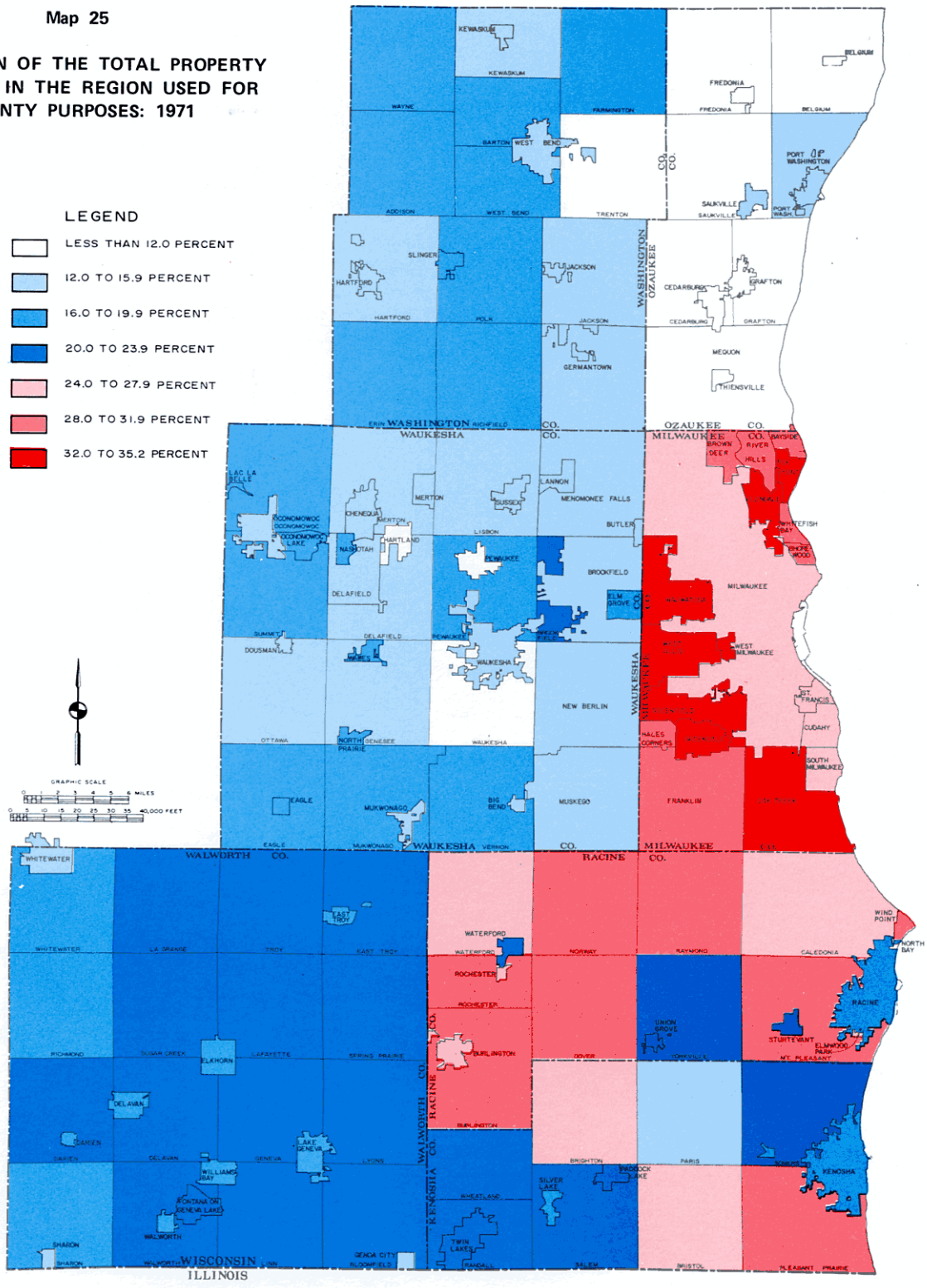
[7] *The net property tax rate is the full value property tax rate as defined in the text minus a rate determined by dividing the amount of property tax relief on real and personal property, other than stocks, by the state equalized value of such property. This is the "Effective Real Estate Full Value Rate" calculated by the Wisconsin Department of Revenue and presented in Bulletins No. 171, 271, and 371 combined.*

[8] *The 1971 net property tax rate is the rate at which taxes were levied in 1971 for payment in 1972.*

Map 25

PROPORTION OF THE TOTAL PROPERTY TAX LEVY IN THE REGION USED FOR COUNTY PURPOSES: 1971

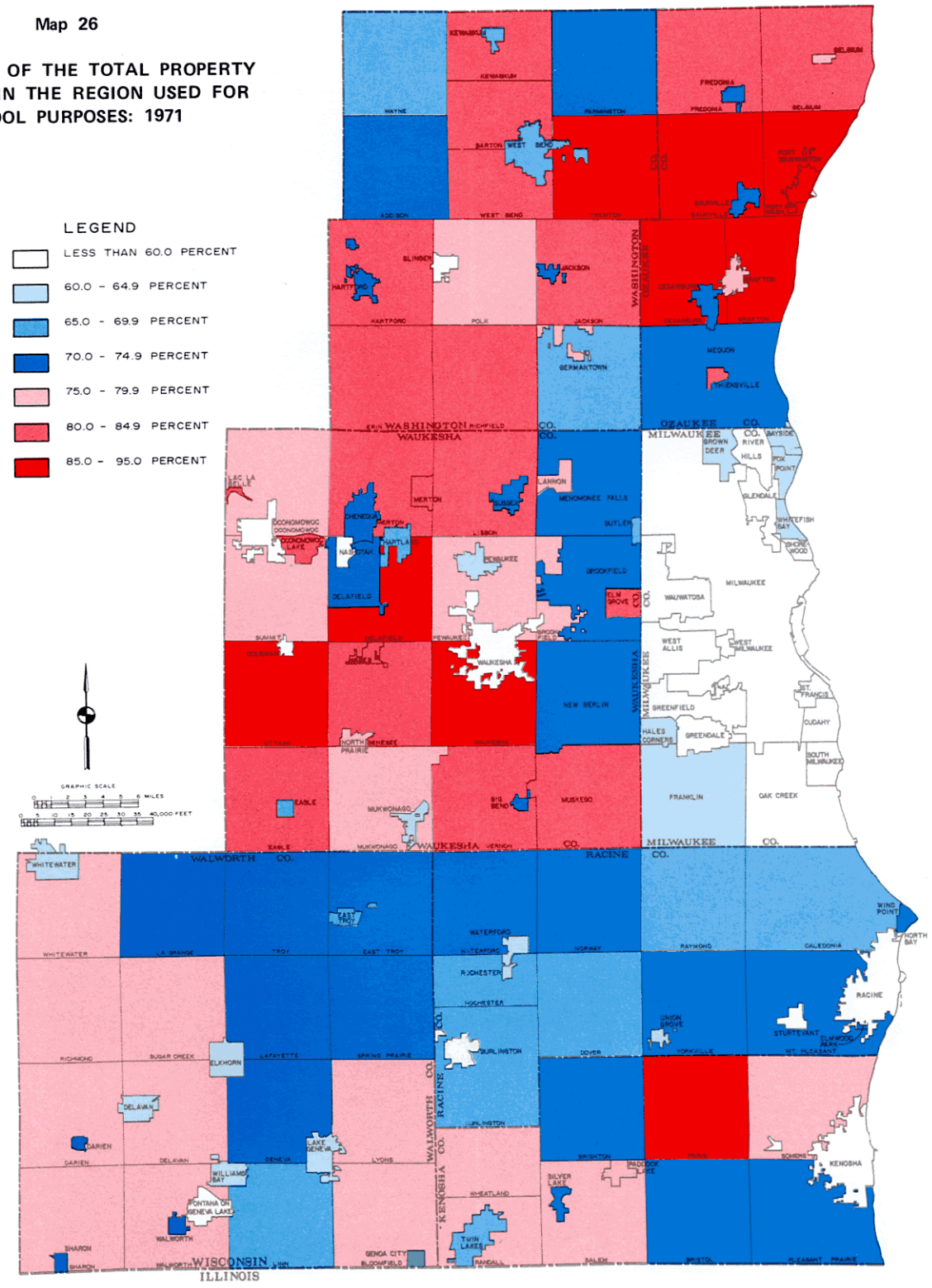


County government meets a portion of its expenses through a property tax levy which is collected by minor civil divisions within the county. Each year every city, village, and town in a county must pay a share of the county tax levy, which is determined by its proportion of the equalized value in the county. In 1971, approximately $143 million, or 23 percent of all property taxes in the Region, was levied for county purposes. The proportion of the total property tax levy consisting of taxes for county purposes was relatively large for minor civil divisions in Kenosha, Milwaukee, and Racine Counties.

Source: Wisconsin Department of Revenue.

Map 26

PROPORTION OF THE TOTAL PROPERTY TAX LEVY IN THE REGION USED FOR SCHOOL PURPOSES: 1971

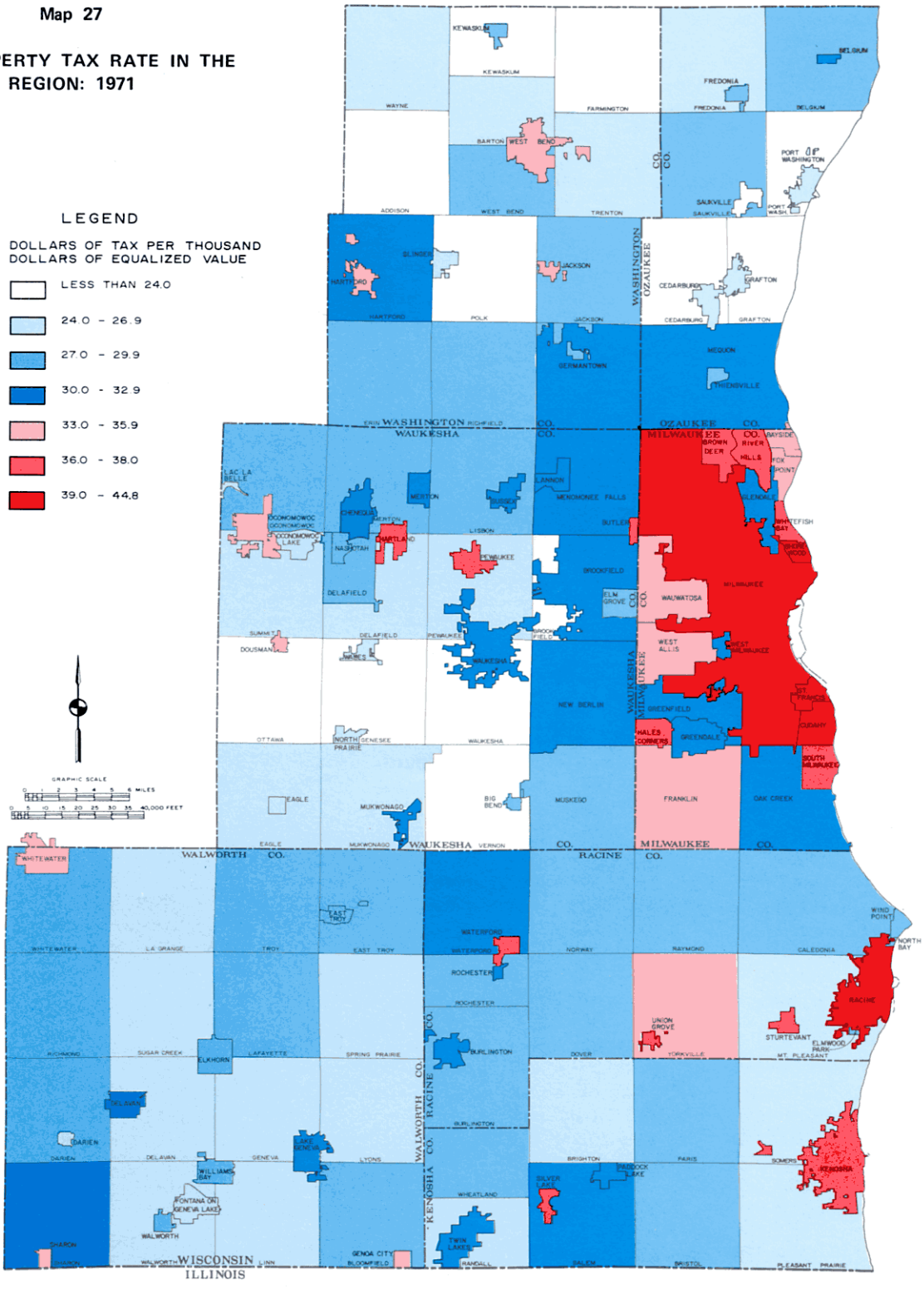


The tax levy for school purposes consists of amounts levied by school authorities against local units of government to meet the costs of education. In 1971, approximately $329 million, representing 54 percent of all property taxes in the Region, was levied for school purposes. The school tax represented more than 75 percent of the total property tax levy in many outlying communities of the Region, including two-thirds of the Region's towns.

Source: Wisconsin Department of Revenue.

Map 27

NET PROPERTY TAX RATE IN THE REGION: 1971



The property tax rate expresses the amount of property taxes paid per thousand dollars of equalized property value within a community and, accordingly, represents a good measure of the relative tax efforts of the communities within the Region. It should be noted that the net property tax rate presented above has been adjusted to reflect state property tax relief granted on real property and personal property other than farmers' livestock, merchants' inventories, and manufacturers' materials and finished products. Among the communities in the Region in 1971, this net property tax rate ranged from $17.88 in the Town of Waukesha to $44.83 in the City of Milwaukee.

Source: Wisconsin Department of Revenue.

general, the net property tax rates were lower in towns than in villages or cities. Thus, the median net property tax rate for all towns in the Region was $26.44, while the median net property tax rates for cities and villages were $32.29 and $30.47, respectively.

The change in the net full value property tax rate between 1961 and 1971 is shown for cities, villages, and towns in the Region on Map 28, with the actual data presented in Appendix C. It should be noted that no property tax relief was paid by the state to local units of government for taxes levied in 1961; consequently, there is no distinction between the gross property tax rate and the net property tax rate for that year as there is for each succeeding year.

As indicated on Map 28, relatively high increases of $10.00 or more occurred in the net property tax rate for the City of Milwaukee and eight of its suburbs in Milwaukee County, the Cities of Kenosha and Racine, and 22 other cities, villages, and towns throughout the Region. Increases of greater than $15.00 were observed for the Village of Belgium in Ozaukee County ($19.46), the Villages of North Bay ($22.30) and Wind Point ($18.06) in Racine County, and the Village of Chenequa in Waukesha County ($15.75). Growth in the property tax levy far outstripped growth in the equalized value of property, causing the large increases in the net property tax rate in these communities. On the other hand, slow growth in the gross property tax levy relative to growth in the property tax base, combined with offsets to the gross property tax levy provided by state property tax relief, resulted in decreases in the net property tax rate for 18 cities, villages, and towns in the Region, with unusually large decreases being observed in the Villages of Sussex ($6.59) and Slinger ($6.48).

It should be emphasized that the data presented on Map 28 show the overall change in the net property tax rate between 1961 and 1971. Although for many minor civil divisions this change was distributed rather uniformly over the 10-year period, this is not necessarily always the case. In smaller communities in particular the property tax rate is subject to substantial change from year to year. Such a change may be the result of a change in the tax levy for local, county, or school purposes, or may be the result of changes in the amounts of nontax revenue available to the minor civil division, including the amount of state shared revenues. In particular, a complete revision of the formula for the distribution of state shared taxes enacted by the State Legislature in 1971 is partially responsible for the decreases in the net property tax rate which occurred in 64 cities, villages, and towns in the Region between 1970 and 1971. Because they constitute a significant determinant of the tax levies and rates required within a civil division, state shared revenues are discussed in detail in the next section of this chapter.

STATE SHARED REVENUES

Under a system of state shared revenues in Wisconsin, significant amounts of state collected revenues are made available for use by local units of government. There are three basic types of state shared revenues in Wisconsin, namely, state aids, state shared taxes, and property tax relief. The first type—state aids—are state payments to local units of government, including school districts, to assist in financing the provision of specific services which are generally of statewide concern. The major types of aids are those granted for education, transportation, and welfare purposes.

The second major type of state shared revenue is the state shared taxes. Through the system of state shared taxes, a portion of many state collected revenues, including the individual income tax, the corporate income and franchise tax, the state utility tax, and the liquor tax, is returned to local units of government in the state for whatever purposes are deemed appropriate. It should be noted that a major revision of the formulas for the distribution of these shared taxes by the state legislature in October of 1971 has caused significant changes in the financial structure of many communities throughout the state.

The third major type of state shared revenue—property tax relief—provides a reduction in the property tax bill for individuals paying property taxes on real property and personal property other than merchant's and manufacturer's stocks and livestock in minor civil divisions where the three-year average full value tax rate is $17.00 per thousand dollars of full value or greater, as well as a 65 percent credit against property taxes levied on stocks.

As indicated in Table 80, state payments to local units of government in the Region in the form of state aids, state shared taxes, and property tax relief totaled $377.6 mil-

Table 80

STATE PAYMENTS TO LOCAL UNITS OF GOVERNMENT IN THE REGION CALENDAR YEARS 1969, 1970, AND 1971

Year	Total State Payments to Local Units of Government[a]	Total State Revenues[b]	State Payments as a Percent of State Revenues
1969	$316,418,581	$527,028,504	60.0
1970	350,317,815	604,362,544	58.0
1971	377,562,771	633,469,518	59.6

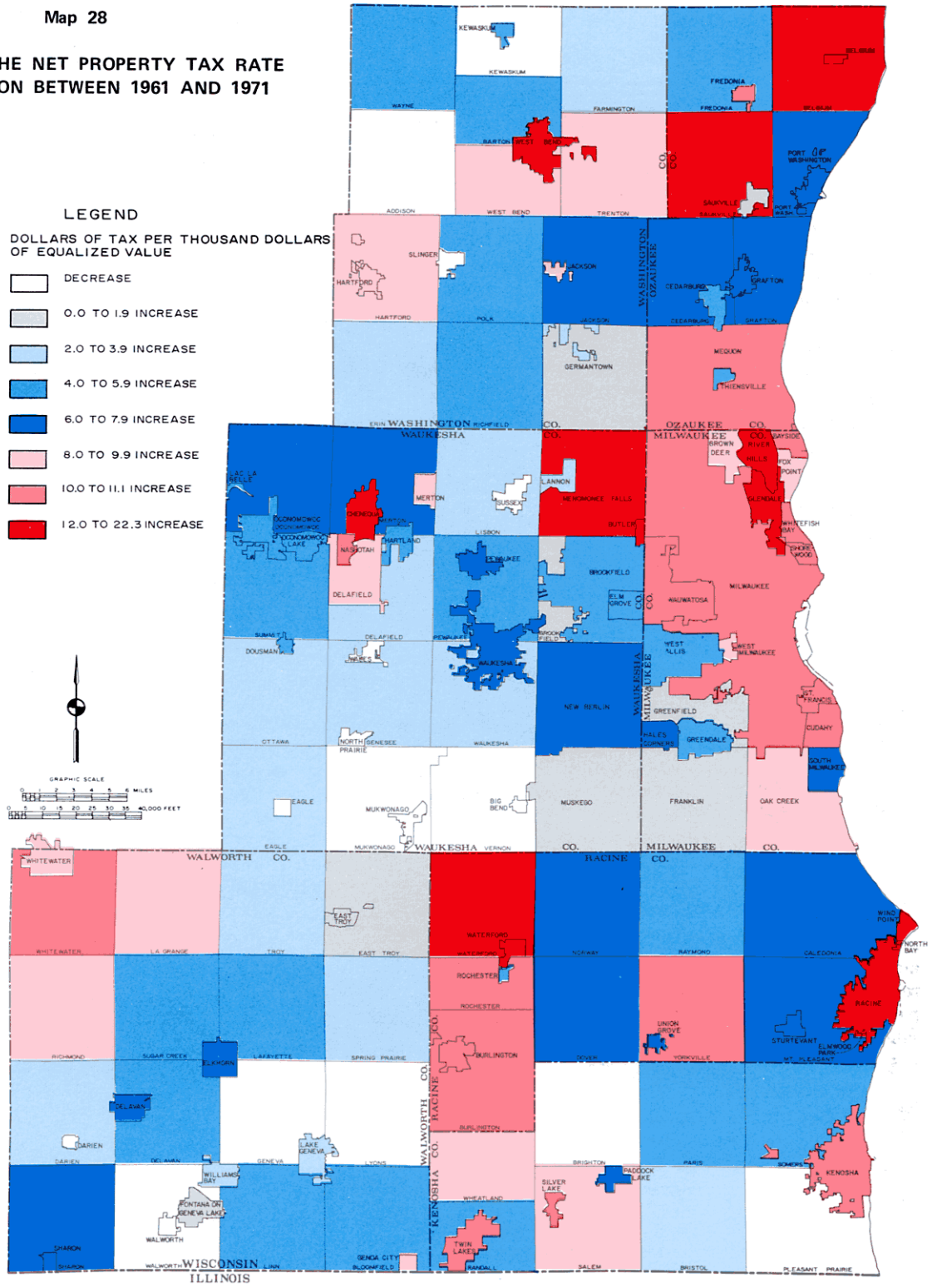
[a] *Total state payments to local units of government include state aids and state shared taxes paid by the state to cities, villages, towns, and counties in the Region; educational aids to school districts in the Region; and property tax relief. Total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b] *Total revenues paid to the state by individuals and businesses in the Region include the following: individual income taxes, corporation franchise and income taxes, sales and use taxes, excise taxes, utility taxes, motor vehicle taxes and fees, and conservation taxes and fees.*

Source: Wisconsin Department of Revenue.

Map 28

CHANGE IN THE NET PROPERTY TAX RATE IN THE REGION BETWEEN 1961 AND 1971



Growth in the property tax rate was relatively high—more than $10 per $1,000 of equalized valuation—for 33 communities in the Region between 1961 and 1971, indicating that growth in the property tax levy exceeded growth in property values within these communities. Conversely, slow growth in the property tax levy relative to growth in the property tax base, combined with offsets to the property tax levy provided by state property tax relief, resulted in decreases in the net property tax levy for 18 minor civil divisions in the Region between 1961 and 1971.

Source: Wisconsin Department of Revenue.

Table 81

STATE PAYMENTS TO LOCAL UNITS OF GOVERNMENT IN THE REGION: 1969, 1970, AND 1971

Unit of Government	State Payments to Local Units of Government					
	1969		1970		1971	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
State Aids						
City, Village, Town . .	$ 11,405,187	3.6	$ 17,181,559	4.9	$ 17,285,974	4.6
County	45,909,047	14.5	53,466,185	15.3	65,947,915	17.5
School District . . .	79,344,435	25.1	93,759,113	26.8	104,539,335	27.7
Subtotal	136,658,669	43.2	164,406,857	46.9	187,773,224	49.7
State Shared Taxes[a]						
City, Village, Town . .	101,940,128	32.2	102,641,793	29.3	102,821,194	27.2
County	19,630,406,	6.2	19,857,485	5.7	19,812,265	5.2
Subtotal	121,570,534	38.4	122,499,278	35.0	122,633,459	32.5
Property Tax Relief . . .	58,189,378	18.4	63,411,680	18.1	67,156,088	17.8
Total	$316,418,581	100.0	$350,317,815	100.0	$377,562,771	100.0

[a]*State shared tax payments do not reflect the change in the shared tax distribution formula enacted by the Legislature in October, 1971. The new shared tax distribution formula first affected shared tax payments made in calendar year 1972.*

Source: Wisconsin Department of Revenue.

lion for the calendar year 1971.[9] On the other hand, the total revenue paid to the state by individuals and business enterprises in the Region stood at $633.5 million.[10] Thus, nearly 60 percent of the state revenues derived from the Region were returned to local units of government in the Region as state aids, state shared taxes, or property tax relief in 1971.

Of the total amount of state payments to local units of government in the Region in 1971, almost one-half was comprised of state aids. State aids to school districts alone comprised about 28 percent of all state shared revenues in the Region (see Table 81). State shared taxes paid to city, village, town, and county governments represented 32 percent of all state payments, while property tax relief comprised the remaining 18 percent.

Examination of the variation among cities, villages, and towns in the Region in terms of the amounts of state shared revenues received can provide insight into the variation of property tax levies and rates among these civil divisions. The total amount of state shared revenues including state aids, state shared taxes, and property tax relief paid to each city, village, and town in the Region is presented for the years 1969-1971 in Tables 82 through 88. It should be noted that educational aids to school districts as well as aids and shared taxes which are paid to counties are included in the total state payments to cities, villages, and towns.[11]

Also in Tables 82 through 88, a comparison is made between the amount of state shared revenue received by a community and the total amount of revenue which its citizens and business enterprises pay to the state. To accomplish this comparison, the percent obtained by dividing the total amount of shared revenues paid by the state to a community by the total amount of state revenue derived from the community is presented for

[9]*Total state payments to local units of government presented in Tables 80 through 88 do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[10]*Total revenues paid to the state include individual income taxes, corporation franchise and income taxes, sales and use taxes, excise taxes, utility taxes, motor vehicle taxes and fees, and conservation taxes and fees.*

[11]*State aid and shared tax payments to counties and state aid payments to school districts are allocated to the minor civil divisions comprising each county and school district on the basis of the minor civil division's proportion of the equalized value in the county or school district by the Wisconsin Department of Revenue in Taxes, Aids, and Shared Taxes in Wisconsin Municipalities for 1969, 1970, and 1971. The rationale behind this allocation of school aids and state payments to counties is that it is likely that similar amounts of revenue would have to be raised by each minor civil division if these state payments to counties and school districts did not exist.*

Table 82

STATE PAYMENTS TO MINOR CIVIL DIVISIONS IN KENOSHA COUNTY: 1969, 1970, AND 1971

Minor Civil Division	Total State Payments to Minor Civil Divisions[a]					
	1969		1970		1971	
	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]
Cities						
Kenosha	$11,951,932	56.0	$13,585,157	54.4	$15,635,610	56.2
Villages						
Paddock Lake	$ 158,771	70.5	$ 188,542	65.5	$ 196,519	60.6
Silver Lake	144,562	53.6	170,968	49.1	177,370	51.0
Twin Lakes	321,396	70.1	385,699	69.0	661,511	100.1
Towns						
Brighton	$ 127,624	62.1	$ 145,653	53.7	$ 160,245	56.8
Bristol	422,193	45.3	521,271	41.5	568,359	36.8
Paris	255,718	73.6	308,985	66.9	337,618	66.2
Pleasant Prairie	1,325,742	56.6	1,614,908	54.6	1,909,684	58.1
Randall	211,581	58.8	251,479	60.0	273,230	55.6
Salem	560,245	49.4	816,628	57.1	744,739	45.4
Somers	816,925	49.3	1,013,737	53.0	1,237,641	58.2
Wheatland	230,251	60.1	280,840	60.2	316,885	59.0

[a]*Total state payments to minor civil divisions include the following: state aids, shared taxes, and property tax relief payments to the city, village, or town; a portion of the state aid and shared tax payments to the county based on the minor civil division's proportion of the total equalized value in the county; and a portion of the educational aids paid to the school district(s) determined by the minor civil division's proportion of the total equalized value of the school district. The total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b]*Total state payments to the community as a percent of the total amount of revenue paid by individuals and business enterprises in the community to the state.*

Source: Wisconsin Department of Revenue.

each city, village, and town in the Region for the years 1969-1971.[12] On the basis of this index, the degree to which the amount of state shared revenues paid to a community is greater or less than the amount which individuals and businesses in the community paid in taxes to the state is readily apparent. Clearly, the higher the percent, the more favorable is the community's position in the state revenue sharing system.

From analysis of the data presented in Tables 82 through 88, it was found that in 1971, 54 cities, villages, and towns in the Region received a return in state shared revenues which was less than 50 percent of the amount paid in taxes by those communities to the state; 75 cities, villages, and towns received a return of between 50 and 75 percent; and 17 cities, villages, and towns received a return of 75 percent or more. Only in four municipalities in the Region was the amount of state shared revenues paid to the community larger than the amount of community taxes paid to the state: the Village of Twin Lakes in Kenosha County (100 percent), the Village of Butler in Waukesha County (102 percent), and the Village of West Milwaukee (119 percent) and the City of Oak Creek (138 percent) in Milwaukee County.

The total amount of state shared revenues to be paid to a given municipality is determined by the application of statutory formulas regarding the distribution of state aids, shared taxes, and property tax relief. Both the formulas for the distribution of the various types of state aid and the formula for the distribution of property tax relief tend to allocate more money to areas with a relatively

[12]*This method of comparing the total amount of state shared revenues paid to a minor civil division with the total amount of revenue paid to the state by individuals and businesses in the minor civil division is that of the Wisconsin Department of Revenue presented in Taxes, Aids, and Shared Taxes in Wisconsin Municipalities. The various revenues paid to the state by individuals and businesses within a minor civil division are allocated to the minor civil division according to procedures described in this bulletin.*

Table 83

STATE PAYMENTS TO MINOR CIVIL DIVISIONS IN MILWAUKEE COUNTY: 1969, 1970, AND 1971

Minor Civil Division	Total State Payments to Minor Civil Divisions[a]					
	1969		1970		1971	
	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]
Cities						
Cudahy	$ 3,909,206	59.7	$ 4,561,678	60.0	$ 5,051,088	61.5
Franklin	2,926,990	98.8	3,356,921	94.6	4,026,498	99.1
Glendale	4,732,710	73.4	4,706,340	63.8	5,367,100	73.9
Greenfield	4,609,590	77.0	5,854,575	77.8	5,762,710	66.5
Milwaukee (Part)	127,356,994	61.8	134,998,490	57.8	144,214,558	61.1
Oak Creek	6,530,218	133.1	6,707,736	129.1	7,228,247	137.5
St. Francis	1,863,808	82.9	2,155,642	78.1	2,332,535	81.9
South Milwaukee	4,173,749	65.2	4,580,312	59.8	5,296,909	69.4
Wauwatosa	12,135,642	52.2	13,640,357	51.7	15,059,392	56.6
West Allis	13,572,666	62.9	14,785,440	61.6	15,827,966	60.6
Villages						
Bayside (Part)	$ 1,081,615	37.9	$ 1,229,439	43.5	$ 1,265,188	38.7
Brown Deer	2,762,043	80.3	2,963,769	70.0	3,112,467	68.2
Fox Point	2,258,072	35.7	2,428,424	39.8	2,522,031	34.7
Greendale	3,066,013	82.3	3,595,575	74.2	4,165,819	74.9
Hales Corners	1,549,901	57.8	1,817,707	58.3	1,987,737	58.5
River Hills	831,773	41.4	758,462	38.5	776,172	35.2
Shorewood	3,096,996	47.3	3,329,658	49.2	3,126,322	42.2
West Milwaukee	3,390,270	102.1	3,976,453	126.9	4,164,424	118,7
Whitefish Bay	4,363,415	51.2	4,331,120	47.0	4,522,920	45.5
Total City of Milwaukee	$127,357,455	61.8	$134,998,974	57.8	$144,215,384	61.1
Total Village of Bayside	1,109,199	38.0	1,255,710	43.7	1,289,391	38.1

[a] *Total state payments to minor civil divisions include the following: state aids, shared taxes, and property tax relief payments to the city, village, or town; a portion of the state aid and shared tax payments to the county based on the minor civil division's proportion of the total equalized value in the county; and a portion of the educational aids paid to the school district(s) determined by the minor civil division's proportion of the total equalized value of the school district. The total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b] *Total state payments to the community as a percent of the total amount of revenue paid by individuals and business enterprises in the community to the state.*

Source: Wisconsin Department of Revenue.

low property tax base and income. Thus, for example, statutory formula specifies the distribution of most school aids in such a way as to help defray operating costs in school districts having a low full valuation per pupil. Similarly, the formula for the distribution of property tax relief provides the greatest relief to communities with the heaviest property tax burden.

Through calendar year 1971, the major portion of the third basic type of state shared revenue—state shared taxes—was returned to communities from which the taxes were derived, and not necessarily on the basis of fiscal need. As previously noted, however, the State Legislature completely revised the formula for the distribution of state shared taxes in October 1971. According to the revision, the portions of the individual income tax, the corporate income and franchise taxes, the liquor tax, utility taxes, and motor vehicle fees which are available for tax sharing are placed in the "Municipal and County Shared Tax Account." Payments are made from this shared tax account to cities, villages, towns, and counties in the state as follows:

Table 84

STATE PAYMENTS TO MINOR CIVIL DIVISIONS IN OZAUKEE COUNTY: 1969, 1970, AND 1971

Minor Civil Division	Total State Payments to Minor Civil Divisions[a]					
	1969		1970		1971	
	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]
Cities						
Cedarburg	$1,264,323	55.9	$1,472,101	53.7	$1,678,234	54.2
Mequon	1,986,455	43.7	3,004,318	56.5	2,576,908	42.0
Port Washington	1,984,228	68.4	2,347,884	74.3	2,486,108	81.1
Villages						
Bayside (Part)	$ 27,584	43.5	$ 26,271	50.6	$ 24,203	20.9
Belgium	148,817	45.8	156,672	42.2	185,130	49.2
Fredonia	118,262	43.6	153,454	44.7	177,636	44.9
Grafton	1,058,807	52.5	1,207,691	49.7	1,457,944	58.0
Saukville	183,474	44.6	241,035	44.0	289,351	51.1
Thiensville	472,275	41.6	527,840	38.5	573,242	37.3
Towns						
Belgium	$ 258,992	64.0	$ 313,084	65.3	$ 344,223	66.7
Cedarburg	550,422	54.1	637,246	53.1	756,056	56.4
Fredonia	231,769	61.9	280,641	62.4	305,816	60.5
Grafton	414,260	47.7	423,249	44.6	497,705	47.4
Port Washington	201,628	54.0	257,983	56.4	279,117	56.5
Saukville	206,886	58.8	266,346	64.6	282,616	57.6

[a]*Total state payments to minor civil divisions include the following: state aids, shared taxes, and property tax relief payments to the city, village, or town; a portion of the state aid and shared tax payments to the county based on the minor civil division's proportion of the total equalized value in the county; and a portion of the educational aids paid to the school district(s) determined by the minor civil division's proportion of the total equalized value of the school district. The total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b]*Total state payments to the community as a percent of the total amount of revenue paid by individuals and business enterprises in the community to the state.*

Source: Wisconsin Department of Revenue.

1. Property tax relief supplement: A specific amount was appropriated from the shared tax account to supplement the existing appropriation for property tax relief in 1972. After 1972, in addition to this basic amount, all growth in the shared tax account will be appropriated for this purpose.

2. Thirty-five dollars per capita: A payment of $35 per person is to be made annually to each city, village, and town, with the county receiving 16.25 percent of this payment.

3. Special utility payment: A payment is made annually to communities based on 11 mills times the value of the electric generating facilities and dams, electric utility office buildings, warehouses and garages, and pipelines. School districts are to receive four-elevenths of this payment. The county also receives a payment based on 6 mills times the value of the specified property. There is an upper limit on this utility payment to the city, village, or town, but none on the payment to the county.

4. Balance of shared tax account: The balance of the shared tax account in 1972 and 1973 was paid to municipalities having an average full value tax rate over the three preceding years of $17.00 per thousand. Counties are to receive 16.25 percent of this payment. This payment will stop after 1973 unless reenacted by the Legislature.

Table 85

STATE PAYMENTS TO MINOR CIVIL DIVISIONS IN RACINE COUNTY: 1969, 1970, AND 1971

Minor Civil Division	Total State Payments To Minor Civil Divisions[a]					
	1969		1970		1971	
	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]
Cities						
Burlington	$ 1,348,685	44.9	$ 1,545,506	41.9	$ 1,780,569	54.3
Racine	16,653,432	58.6	18,614,828	57.9	20,143,151	63.2
Villages						
Elmwood Park	$ 100,520	49.2	$ 122,020	52.6	$ 130,925	50.7
North Bay	165,047	32.1	197,220	47.6	168,730	36.1
Rochester	42,732	38.1	85,126	60.6	104,806	72.7
Sturtevant	333,667	43.7	408,334	43.0	474,143	44.5
Union Grove	337,524	45.8	469,204	52.4	505,531	50.2
Waterford	240,316	43.0	472,346	67.2	322,799	41.8
Wind Point	358,064	37.1	464,470	47.4	507,110	46.7
Towns						
Burlington	$ 573,143	50.7	$ 679,020	42.2	$ 815,746	54.1
Caledonia	1,910,925	49.5	2,287,627	48.2	2,818,065	53.6
Dover	270,747	47.5	337,999	46.3	383,048	47.1
Mt. Pleasant	3,303,476	63.1	4,199,661	70.1	4,883,295	81.5
Norway	700,928	74.8	858,640	76.3	925,728	72.6
Raymond	399,732	47.1	575,930	54.9	644,047	57.7
Rochester	123,318	55.4	177,573	68.0	173,979	55.1
Waterford	353,648	52.2	502,941	62.9	548,163	59.9
Yorkville	368,982	57.0	537,562	70.6	607,966	73.6

[a] *Total state payments to minor civil divisions include the following: state aids, shared taxes, and property tax relief payments to the city, village, or town; a portion of the state aid and shared tax payments to the county based on the minor civil division's proportion of the total equalized value in the county; and a portion of the educational aids paid to the school district(s) determined by the minor civil division's proportion of the total equalized value of the school district. The total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b] *Total state payments to the community as a percent of the total amount of revenue paid by individuals and business enterprises in the community to the state.*

Source: Wisconsin Department of Revenue.

5. Ninety percent guarantee payment: In order to ease the transition, the revised formula ensures that no city, village, or town should receive less than 90 percent of the amount of shared taxes and property tax relief received in 1971. For the following years, each city, village, and town is guaranteed an amount which is at least 90 percent of the previous year.

The new shared tax distribution formula appears to allocate more funds to areas of fiscal need than the preceding formula. Certainly the change in the distribution formula was partially responsible for the reduction in the net property tax rate for 64 cities, villages, and towns in the Region in 1971.[13] However, since the impact of the revision of the shared tax formula is meaningfully evaluated only within the larger framework of all state

[13] *As previously noted, the revision of the shared tax distribution formula by the State Legislature in October 1971 affected state shared tax payments to local units of government in calendar year 1972 and after. The impact of the change in the shared tax distribution formula, however, is reflected in the property taxes levied in 1971 for payment in 1972 and, therefore, in the property tax rates for 1971, since local officials were able to anticipate the extent to which changes in state shared tax payments would change the required property tax revenues in 1972.*

Table 86

STATE PAYMENTS TO MINOR CIVIL DIVISIONS IN WALWORTH COUNTY: 1969, 1970, AND 1971

Minor Civil Division	Total State Payments to Minor Civil Divisions[a]					
	1969		1970		1971	
	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]
Cities						
Delavan	$821,866	44.9	$873,023	42.1	$918,645	45.4
Elkhorn	574,014	41.1	624,124	38.7	669,543	39.3
Lake Geneva	773,490	48.3	818,148	42.8	879,378	45.5
Whitewater (Part)	836,057	45.8	892,948	40.3	939,618	40.0
Villages						
Darien	$ 72,730	34.4	$ 77,853	28.5	$204,225	77.2
East Troy	301,372	52.7	350,282	51.3	377,938	54.1
Fontana	303,047	70.6	335,082	63.3	382,001	63.7
Genoa City	100,064	37.2	103,174	32.5	111,450	30.0
Sharon	100,624	39.9	118,273	39.0	122,562	35.5
Walworth	232,882	47.2	243,384	42.7	248,828	40.8
Williams Bay	294,252	66.0	360,611	69.1	336,062	58.6
Towns						
Bloomfield	$364,587	72.5	$403,758	69.3	$443,896	67.4
Darien	273,173	82.1	301,897	81.8	309,654	71.0
Delavan	517,523	55.6	595,346	56.4	627,307	51.3
East Troy	370,124	60.6	427,774	59.8	468,266	56.4
Geneva	328,554	55.8	346,160	48.2	389,498	46.9
La Fayette	156,469	62.3	170,759	57.5	191,889	56.5
LaGrange	274,239	93.3	299,422	89.4	327,668	82.2
Linn	430,020	79.1	489,859	77.8	566,053	81.8
Lyons	265,250	53.7	335,544	54.6	382,035	55.2
Richmond	205,885	75.2	227,425	78.4	243,702	78.6
Sharon	184,470	98.1	214,044	96.6	221,769	90.4
Spring Prairie	165,016	65.1	186,603	61.9	201,956	55.6
Sugar Creek	204,614	54.9	227,074	49.5	251,165	48.3
Troy	172,325	63.4	198,411	62.4	218,679	57.6
Walworth	209,039	74.8	227,819	68.1	263,823	71.5
Whitewater	221,805	86.2	239,729	74.1	270,844	76.5

[a] *Total state payments to minor civil divisions include the following: state aids, shared taxes, and property tax relief payments to the city, village, or town; a portion of the state aid and shared tax payments to the county based on the minor civil division's proportion of the total equalized value in the county; and a portion of the educational aids paid to the school district(s) determined by the minor civil division's proportion of the total equalized value of the school district. The total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b] *Total state payments to the community as a percent of the total amount of revenue paid by individuals and business enterprises in the community to the state.*

Source: Wisconsin Department of Revenue.

shared revenues, including state aids, and since data concerning the amount of state aids paid to local units of government for calendar year 1972 are not yet available, detailed analysis of the revision of the shared tax payments cannot be undertaken in this report.

COST OF LOCAL SERVICES

Because the amount of revenue raised through the property tax is directly related to the value of property within a community, the development and maintenance of

Table 87

STATE PAYMENTS TO MINOR CIVIL DIVISIONS IN WASHINGTON COUNTY: 1969, 1970, AND 1971

Minor Civil Division	Total State Payments to Minor Civil Divisions[a]					
	1969		1970		1971	
	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]
Cities						
Hartford	$1,037,396	55.4	$1,165,205	51.6	$1,290,494	54.7
Milwaukee (Part)	461	62.7	484	177.9	826	298.2
West Bend	2,829,821	49.6	3,275,922	48.4	3,441,390	51.4
Villages						
Germantown	$1,586,675	98.8	$1,891,316	97.0	$1,793,301	81.1
Jackson	106,738	51.9	125,405	51.9	138,052	38.8
Kewaskum	446,220	57.1	519,571	55.6	625,824	77.7
Slinger	158,716	39.5	210,721	46.9	203,177	43.5
Towns						
Addison	$ 285,004	57.1	$ 380,369	61.0	$ 385,113	57.1
Barton	205,973	52.4	240,916	53.0	259,576	56.2
Erin	198,620	48.0	237,344	47.3	254,027	44.3
Farmington	230,641	65.5	278,310	63.7	295,765	65.4
Germantown	77,509	43.8	84,977	44.5	77,873	41.1
Hartford	314,998	50.1	385,952	52.4	421,767	51.1
Jackson	377,249	60.9	461,737	63.3	480,121	60.5
Kewaskum	133,844	50.3	162,665	51.6	170,697	49.9
Polk	366,901	55.2	497,709	62.9	542,916	60.4
Richfield	716,075	52.3	905,723	53.6	967,225	49.3
Trenton	351,032	45.8	398,771	44.1	441,618	42.2
Wayne	162,597	70.0	197,744	72.0	202,350	67.4
West Bend	403,141	52.1	512,043	58.6	542,070	57.4

[a]*Total state payments to minor civil divisions include the following: state aids, shared taxes, and property tax relief payments to the city, village, or town; a portion of the state aid and shared tax payments to the county based on the minor civil division's proportion of the total equalized value in the county; and a portion of the educational aids paid to the school district(s) determined by the minor civil division's proportion of the total equalized value of the school district. The total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b]*Total state payments to the community as a percent of the total amount of revenue paid by individuals and business enterprises in the community to the state.*

Source: Wisconsin Department of Revenue.

a favorable property tax base is a major consideration in the local planning process. To preserve or enhance the local tax base, communities generally seek land use development which generates an amount of property tax revenue equal to or greater than the cost of local services which must be provided to the development. Local opposition to certain types of residential development, and in particular to low- and moderate-income housing, arises to a great extent from the belief that such development does not "pay its own way." It is often argued that the cost of providing local services to such housing units, and in particular the cost of education, is substantially greater than the property tax levy against such units because of their relatively low assessed value.

As part of the tax structure inventory, an estimate of the per household cost of providing local services was prepared for selected municipalities within the Region for 1971. A comparison was then made between this estimated cost and the property tax revenue generated from a house valued at $25,000, a figure which is slightly higher than the maximum allowable cost of a house and lot

Table 88

STATE PAYMENTS TO MINOR CIVIL DIVISIONS IN WAUKESHA COUNTY: 1969, 1970, AND 1971

Minor Civil Division	Total State Payments to Minor Civil Divisions[a]					
	1969		1970		1971	
	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]	Amount	Percent of State Revenue[b]
Cities						
Brookfield	$6,379,788	52.9	$6,985,561	49.5	$7,198,165	47.0
Delafield	507,429	56.6	524,819	49.1	610,256	49.5
Muskego	2,307,996	86.2	3,426,353	105.6	3,483,583	95.2
New Berlin	4,896,760	65.6	5,786,583	63.1	6,049,752	59.5
Oconomowoc	1,464,348	49.6	1,464,031	43.0	1,463,534	40.5
Waukesha	6,371,454	51.4	7,092,868	50.6	7,040,087	48.7
Villages						
Big Bend	$ 93,280	33.6	$ 142,783	42.8	$ 149,110	38.6
Butler	968,347	97.6	955,588	92.3	1,061,145	101.9
Chenequa	278,747	40.7	234,664	30.6	265,378	31.0
Dousman	79,592	38.4	73,244	24.4	90,527	28.3
Eagle	58,550	35.1	97,672	47.2	100,227	43.8
Elm Grove	1,817,563	43.0	1,907,938	37.6	2,385,593	42.6
Hartland	310,945	36.7	399,512	37.1	442,819	34.8
Lac La Belle	44,262	61.5	45,813	64.5	45,665	53.4
Lannon	206,656	66.6	203,823	58.0	241,926	63.2
Menomonee Falls	5,636,634	63.7	6,634,312	63.8	7,224,214	64.4
Merton	59,414	36.8	80,293	41.7	89,294	41.6
Mukwonago	247,568	39.2	337,858	42.3	356,852	41.6
Nashotah	61,799	34.2	66,713	29.4	81,701	33.0
North Prairie	62,261	37.5	82,487	41.5	86,512	32.6
Oconomowoc Lake	210,857	43.1	296,145	54.0	330,215	52.2
Pewaukee	682,836	64.2	651,056	53.4	607,980	45.7
Sussex	423,994	53.8	433,736	44.7	495,251	45.1
Wales	98,726	39.1	107,153	36.0	144,368	40.5
Towns						
Brookfield	$ 498,146	42.0	$ 574,775	40.2	$ 603,151	41.1
Delafield	467,789	56.3	508,480	51.2	541,066	47.9
Eagle	136,499	53.1	173,381	54.2	207,695	60.6
Genesse	441,815	55.4	490,745	51.7	573,782	55.3
Lisbon	700,495	70.3	792,134	61.3	989,279	66.9
Merton	468,234	43.6	599,511	45.1	646,531	43.2
Mukwonago	251,283	56.7	351,631	65.1	370,087	56.0
Oconomowoc	916,995	60.8	895,503	51.3	997,142	50.8
Ottawa	278,615	61.2	296,443	60.5	354,093	61.0
Pewaukee	1,078,613	53.6	1,213,469	50.6	1,294,272	50.0
Summit	661,505	67.4	616,358	52.7	696,684	55.2
Vernon	365,783	66.8	508,043	73.2	535,141	67.7
Waukesha	708,222	50.6	731,140	44.8	725,474	43.5

[a] *Total state payments to minor civil divisions include the following: state aids, shared taxes, and property tax relief payments to the city, village, or town; a portion of the state aid and shared tax payments to the county based on the minor civil division's proportion of the total equalized value in the county; and a portion of the educational aids paid to the school district(s) determined by the minor civil division's proportion of the total equalized value of the school district. The total state payments to local units of government do not reflect the change in the formula for the distribution of state shared taxes which first affected state shared tax payments made in calendar year 1972.*

[b] *Total state payments to the community as a percent of the total amount of revenue paid by individuals and business enterprises in the community to the state.*

Source: Wisconsin Department of Revenue.

eligible for subsidy under Section 235 of the National Housing Act. These findings, which are summarized below, should facilitate an understanding of the extent to which low- and moderate-income housing constitutes a burden on the local fiscal structure.

Because low- and moderate-income housing should generally be located only in areas presently served by a sanitary sewerage system or in areas to which such service can easily be extended, only those municipalities in which a significant portion of residential development is presently served by sanitary sewerage systems were included in this cost-revenue analysis (see Map 29). Furthermore, it was found that, in general, the per household expenditure for various local services was higher for civil divisions with sewerage systems than for other civil divisions in the Region and, in particular, higher than for towns, indicating that the more complete range of municipal services desirable for low- and moderate-income housing is provided in the former types of communities. Thus, the decision to include only civil divisions in which a significant proportion of the residential development is served by sanitary sewerage facilities tends to limit this cost-revenue analysis to civil divisions which provide a relatively complete range of municipal services.

A total of 74 civil divisions were included in this cost-revenue analysis, including 70 cities and villages and four towns. These civil divisions contained approximately 490,000 households, or about 91 percent of all households in the Region in 1970. As indicated on Map 29, these civil divisions are classified as urban, suburban, and other according to similarities relative to some or all of the following characteristics: population density; population growth; distance from large urban centers; property values; household characteristics, such as household size and income; land availability; and other characteristics. The results of the cost-revenue analysis are presented in terms of average costs and revenues for urban, suburban, and other municipalities separately as well as an average cost and revenue for all municipalities included in the study. The costs and revenues as related to municipal services and as related to education are presented separately below.

It is important to note at the outset that the cost data presented in this report are intended to represent typical annual operation and maintenance costs attendant to the provision of local services. As such, these costs exclude any major outlays for capital improvements and debt retirement. The exclusion of such major capital outlays with respect to housing cost analyses may be justified by the fact that in most municipalities, the major portion of initial major onsite public improvement costs for residential land subdivisions are paid for by the developer and, ultimately, by the homeowner. Major offsite public improvements that might be attendant to new residential development are frequently financed, in part at least, with state or federal assistance. Other major capital outlays for local public improvements, although financed through local revenues, were omitted from the cost data because they were generally unusual and nonrecurring in nature. Minor capital outlays of a generally recurring nature, however, were included in the cost data.

It should further be noted that, whereas the cost of local services presented in this report excludes major outlays for capital improvements and debt retirement, because of the nature of the data, the tax levy on a moderately priced housing unit of necessity includes taxes levied for both annual operational expenses and capital outlays. Consequently, the findings of the cost-revenue study overestimate somewhat the extent to which housing pays for the cost of the services provided.

Municipal Services

The cost of such municipal services as police, fire, and health protection, solid waste disposal, street maintenance, and others were obtained from the Report of Receipts and Disbursements for each community for calendar year 1971.[14] As noted above, care was taken in conducting this inventory to obtain typical recurring annual operation and maintenance expenditures and attendant normal capital improvement costs and to exclude unusual, nonrecurring outlays such as those for major capital improvements and debt retirement.[15] Furthermore, it is obvious that, within a community, land uses other than residential—in particular, commercial and industrial—also benefit from the provision of municipal services. In order to estimate the portion of the total annual expense for a particular local service which accrues to residential development alone, the total expense was multiplied by the ratio of the equalized value of the residential property to the sum of the equalized value of residential, commercial, and manufacturing property. This expense for a particular service which accrues to residential development was then divided by the 1970 census count of households to obtain the per household expense for that service.

The median per household expenditures for various municipal services are presented for urban, suburban, and other communities in Table 89.[16] The sum of the median per household costs for the various municipal services, also presented in Table 89, provides an estimate of the

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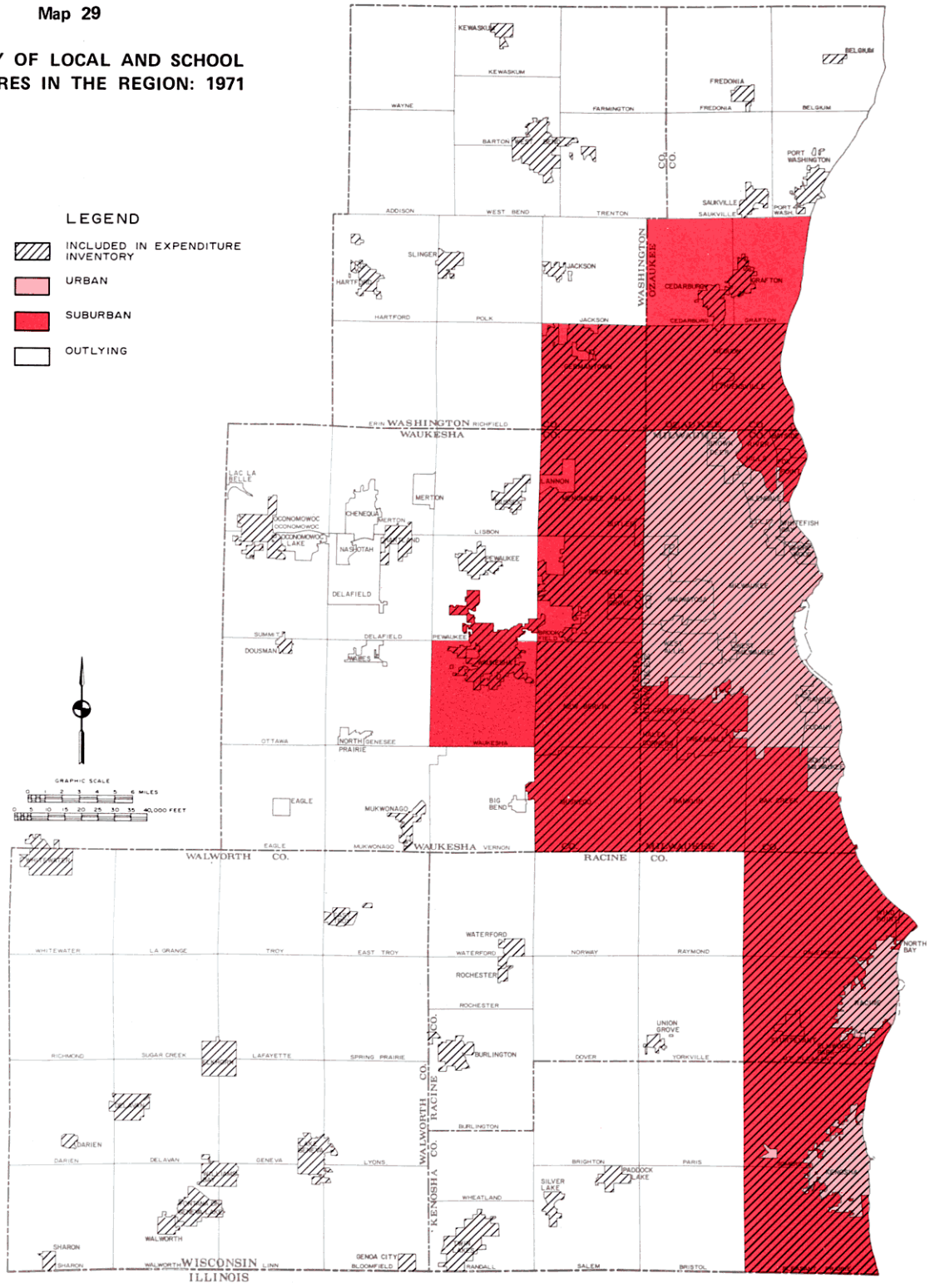
[14] *Cities, villages, and towns in the state are required to file the Report of Receipts and Disbursements annually with the Bureau of Municipal Audit of the Wisconsin Department of Revenue.*

[15] *Because of the difficulty of obtaining typical annual operating and maintenance expenditures for sanitary sewerage systems from the Report of Receipts and Disbursements, such costs were obtained from a separate inventory conducted as part of the regional sanitary sewerage system study.*

[16] *The median per household expenditure is the amount which divides the distribution of municipalities in half, one half having a greater per household expenditure for that service and one half having a lesser per household expenditure. It should be noted that whenever a community had no expenditure for a particular service, it was excluded from the determination of the median per household expenditure for that service.*

Map 29

INVENTORY OF LOCAL AND SCHOOL EXPENDITURES IN THE REGION: 1971



For the purposes of the cost-revenue analysis, cities, villages, and towns within the Region were classified as urban, suburban, and other based on their similarity in terms of population density, population growth, property values, household characteristics, and other criteria. The 74 minor civil divisions which were included in the cost-revenue analysis contained approximately 490,000 households, or about 91 percent of all households in the Region in 1970.

Source: SEWRPC.

Table 89

MEDIAN PER HOUSEHOLD OPERATION AND MAINTENANCE EXPENSE FOR MUNICIPAL SERVICES FOR URBAN, SUBURBAN, AND OTHER MUNICIPALITIES IN THE REGION: 1971

Service Classification	Median Per Household Operation and Maintenance Expense							
	Urban		Suburban		Other		All Municipalities	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
General Government	$ 70	25.9	$ 67	22.8	$ 62	23.7	$ 68	24.4
Police Protection	53	19.6	59	20.1	42	16.0	52	18.6
Fire Protection	44	16.3	22	7.5	19	7.2	24	8.6
Inspection	3	1.1	4	1.4	2	0.8	3	1.1
Health	6	2.2	7	2.4	1	0.4	6	2.2
Solid Waste Collection and Disposal	21	7.8	18	6.1	17	6.5	17	6.1
Municipal Dump	2	0.7	2	0.7	4	1.5	3	1.1
Street Maintenance	36	13.3	65	22.1	58	22.1	57	20.4
Library	11	4.1	9	3.1	10	3.8	10	3.6
Recreation	7	2.6	11	3.7	13	5.0	11	3.9
Development	1	0.4	3	1.0	2	0.8	2	0.7
Sanitary Sewerage	10	3.7	24	8.2	26	9.9	21	7.5
Other Services	6	2.2	3	1.0	6	2.3	5	1.8
Total	$270	100.0	$294	100.0	$262	100.0	$279	100.0

Source: Bureau of Municipal Audit of the Wisconsin Department of Revenue and SEWRPC.

average cost of providing a full range of municipal services to a household. As indicated in this table, the per household cost of providing a full range of municipal services, obtained by adding the median per household cost for each service, was $279 in 1971. The per household cost for a full range of municipal services was highest in the suburban municipalities ($294) and lowest in the "other" municipalities ($262). Among the various municipal services, the highest median per household expenses for all communities analyzed are general government ($68), street maintenance ($57), police protection ($52), and fire protection ($24). In fact, the expenditures for these four services comprised large portions of the total per household expenditures for each type of community as follows: urban, 75 percent; suburban, 72 percent; and other, 69 percent.

In view of the fact that some of the municipalities analyzed provide less than the full range of municipal services, it is apparent that, in addition to an understanding of what it might cost to provide a full range of municipal services to a household, another important consideration in the local fiscal structure is the degree to which the property tax revenue generated from residential development and, in particular, low- and moderate-income housing, offsets the cost of whatever services are actually provided to housing units in a community. In order to facilitate this comparison of costs and revenues, the median cost per household of the municipal services actually provided was determined for urban, suburban, and other municipalities in the Region, with the results presented in Table 90.[17] It will be noted that the median per household cost of municipal services actually provided is very similar to the estimated cost of providing a full range of services in the urban, suburban, and other areas of the Region, as presented in Table 89. This similarity is to be expected because the majority of municipalities included in this analysis do indeed provide a full range of local services.

Because each municipality receives state aid and state shared tax payments which can be utilized to meet a portion of the cost of municipal services, a net per household cost of municipal services has been calculated which is the per household cost of providing services reduced by the

[17] *An estimate of the total per household cost of providing municipal services was obtained for each municipality by multiplying the total operating and maintenance cost of providing municipal services by the ratio of the equalized value of residential property to the sum of the equalized value of residential, mercantile, and manufacturing property, and dividing this product by the number of households in the municipality.*

Table 90

COMPARISON OF THE MEDIAN PER HOUSEHOLD OPERATION AND MAINTENANCE COST OF MUNICIPAL SERVICES AND THE MEDIAN PROPERTY TAX LEVY FOR MUNICIPAL PURPOSES ON A $25,000 HOUSE FOR URBAN, SUBURBAN, AND OTHER MUNICIPALITIES IN THE REGION: 1971

Type of Municipality	Median Per Household Cost of Municipal Services Actually Provided: Gross[a]	Median State Shared Revenue Payment Per Household[b]	Median Per Household Cost of Municipal Services Actually Provided: Net[c]	Median Property Tax Levy for Municipal Services on a $25,000 House[d]	Median Property Tax Levy Minus Net Cost of Municipal Services Per Household
Urban . . .	$283	$151	$132	$157	$ 25
Suburban . .	292	203	89	56	-33
Other. . . .	266	149	117	132	15
All Municipalities	$272	$156	$116	$108	$ - 8

[a]*An estimate of the per household cost of providing municipal services was obtained for each municipality by multiplying the total operating and maintenance cost of providing municipal services by the ratio of the equalized value of residential property to the sum of the equalized value of residential, mercantile, and manufacturing property within the municipality, and dividing this product by the number of households in the municipality. The gross median cost is the cost before state shared revenue payments.*

[b]*State shared revenues here include certain state aids and shared taxes, but exclude property tax relief. Only state transportation aids and other minor aids were included; natural resource aids were not included because these aids are not generally used to offset operation and maintenance costs. The specific shared taxes included are as follows: individual income taxes, corporate income and franchise taxes, the utility tax, the highway privilege tax, and the liquor tax. For each municipality the total shared revenue payment was multiplied by the ratio of the equalized value of residential property to the sum of the equalized value of residential, mercantile, and manufacturing property. This product was then divided by the number of households in the municipality to obtain the shared revenue payment per household.*

[c]*The median net cost is the median gross cost minus the median shared revenue payment per household.*

[d]*Based on the equalized property tax rate for municipal purposes levied in 1970 for payment in 1971.*

Source: Wisconsin Department of Revenue and SEWRPC.

application of these state shared revenues.[18] This net operating cost of municipal services and the property tax levy for municipal services on a $25,000 house are compared in Table 90.

The findings of this cost-revenue study suggest that the property tax levy for municipal purposes on a moderately priced house can offset most of the net operating cost of municipal services provided to its occupants. Thus, the median property tax for local services levied on a $25,000 house was only $8 less than the median cost of municipal services when reduced by the application of state shared revenues. Among the three types of communities for which data are presented, the median net per household cost of municipal services was greater than the median property tax levy for municipal purposes on a $25,000 house only in the suburban communities. The tax levy for municipal purposes on a $25,000 house was actually slightly larger than the net per household cost of municipal services in the urban communities as well as the communities in the outlying areas of the Region. Again, it should be stressed that this comparison of typical annual operational costs with revenues for both operating costs and capital outlays overestimates the extent to which moderately priced housing pays for the provision of municipal services.

Several qualifications are necessary for a complete understanding of the data presented in Tables 89 and 90. First, for each municipality the per household state aid and shared tax payment was derived from the total state aid and shared tax payment to the municipality according to the same procedure by which the per household cost of municipal services was obtained from the total cost

[18]*The state shared revenues included in the state shared revenue payment per household consist of certain state aids and state shared taxes; property tax relief was not included. Only state transportation aids and other minor aids to municipalities were included in the state shared revenue payment per household. Natural resource aids were not included because these aids are not generally used to offset operation and maintenance costs. The specific shared taxes included in the per household shared revenue payment are the following: the individual income tax, corporate income and franchise taxes, the utility tax, the highway privilege tax, and the liquor tax.*

of municipal services for the community.[19] The median net cost of municipal services per household was then obtained by subtracting the median per household state aid and shared tax payment from the gross cost of municipal services per household.

Second, as noted previously, the cost data presented above include only annual operation and maintenance expenses and exclude outlays for capital improvements and debt retirement, while the tax rate used to calculate the property tax levy for municipal services on a $25,000 house reflects revenues for both expenses and outlays.[20] The exclusion of major outlays for capital improvements and debt retirement from the per household cost of municipal services results in an overestimation of the degree to which residential units pay for the total cost of services which are provided.

Third, in conducting this analysis, it was assumed that the cost of providing municipal services is the same for all households within a minor civil division. Certainly, the cost of providing services to individual households within a municipality varies depending on many factors, including the type of structure in which the housing unit is located, the age and condition of the housing unit and, therefore, its susceptibility to such disasters as fire, the density at which the neighborhood has been developed, the occurrence of crime in the neighborhood, and other related factors. Such differences among individual households within a municipality relative to the cost of providing municipal services, however, were not considered in this study; rather, the average cost of providing municipal services for all households within each community was used as the basis for determining the extent to which low- and moderate-income housing pays for the cost of municipal services.

Fourth, while there may be considerable variation with respect to the value of housing units within a city, village, or town and, therefore, with respect to the property taxes generated from individual units, in conducting this analysis the per household cost of municipal services was compared to the property tax revenue for local purposes generated from a new subsidized housing unit authorized under Section 235 of the National Housing Act in order to determine the impact of a typical major type of moderate-income housing on the local fiscal structure. The comparison of costs and revenues as presented in this report is valid, however, for any housing unit, either single-family or multifamily, with a value of $25,000.

Finally, it should be observed that the cost of water supply is not included in the expenditure data presented in Tables 89 and 90. In many municipalities, the cost of supplying water is offset by monthly water bills so that no municipal expense is required. On the other hand, for communities for which an expense was entered for the water utility in 1971, examination of previous years indicated that such entries were not typical annual expenditures. Accordingly, the cost of water supply was excluded from the per household cost of municipal services in this study.

Education

Of greater concern to local officials than the cost of providing municipal services to residential development is the cost of education associated with residential development and, in particular, with low- and moderate-income housing. Local officials argue that the educational costs related to such housing are substantially greater than the property tax for school purposes which is generated from moderately priced properties. In order to facilitate an understanding of the extent to which the educational costs which accrue to low- and moderate-income housing constitute a burden on the local fiscal structure, the operational costs per pupil for the school year 1970-1971 are compared to the property tax levy for school purposes on a $25,000 house below.

The operating cost per pupil presented in this section is the net operating cost, consisting of operational expenditures minus operational receipts.[21] Outlays for capital improvements and debt retirement as well as the cost of community services have been excluded. Because of these adjustments, the net operating cost per pupil is considerably less than the total annual cost per pupil for the various school districts. The net operating cost per pupil after the application of state educational aids provides an estimate of the operational cost of education which, in most cases, must be met by property tax revenues.

For all municipalities included in the study, the median net operating cost per pupil before the application of state educational aids was $824 for the 1970-1971 school

[19] *The per household state aid and shared tax payment was obtained by multiplying the sum of state aid (excluding natural resource aids) and shared tax payments to the municipality by the ratio of the equalized value of residential property to the sum of the equalized value of residential, commercial, and manufacturing property. This product was then divided by the number of households in the municipality to obtain the state aid and shared tax payment per household.*

[20] *The property tax rate for municipal purposes is calculated by the Wisconsin Department of Revenue as the ratio of the property tax levy which is used to meet expenses for municipal services which were not met by other sources of income to the equalized value of property in the municipality.*

[21] *The net operating cost is utilized by the State of Wisconsin Department of Public Instruction in determining equalization aids to school districts. Operational receipts have been subtracted from operational expenditures to determine the net operating costs. Operational receipts include such receipts as state educational aids for the handicapped, state transportation aids for education, state tuition payments, payments to school districts from the common school fund, state driver education aids, and others.*

Table 91

COMPARISON OF SCHOOL TAX REVENUE ON A $25,000 HOUSE AND THE NET SCHOOL OPERATING COSTS FOR HOUSEHOLDS WITH A SELECTED NUMBER OF CHILDREN ATTENDING PUBLIC ELEMENTARY OR SECONDARY SCHOOLS FOR URBAN, SUBURBAN, AND OTHER MUNICIPALITIES IN THE REGION: 1970-1971 SCHOOL YEAR

Type of Municipality	Median Net Operating Costs Per Pupil[a]: 1970-1971		Median School Tax on $25,000 House[c]	Revenue Minus Cost (After Aids) for Households with a Selected Number of Children Attending Public Elementary or Secondary Schools			
	Before State Aids[b]	After State Aids[b]		1 Student	2 Students	3 Students	4 Students
Urban . . .	$824	$643	$523	$- 120	$-763	$-1,406	$-2,049
Suburban . .	837	533	569	36	-497	-1,030	-1,563
Other . . .	810	670	612	- 58	-728	-1,398	-2,068
All Municipalities	$824	$611	$569	$- 42	$-653	$-1,264	$-1,875

[a]*Included in the net operating costs per pupil are current operational expenditures minus operational receipts; capital outlays and debt retirement are excluded. A weighted average operating cost per pupil was calculated to estimate the cost of education in municipalities containing more than one school district.*

[b]*Includes state flat and equalization aids.*

[c]*The tax on a $25,000 house was calculated for each municipality on the basis of the equalized property tax rate for school purposes as determined by the Wisconsin Department of Revenue. It should be noted that, for many municipalities, this tax rate for school purposes is an average rate, since it is calculated as the ratio of the total amount of property taxes levied against the municipality by all school districts in the municipality to the equalized value of property in the municipality. It should further be noted that taxes levied for capital outlays and debt retirement and taxes levied for vocational school tuition as well as taxes levied for operational expenses are included in the calculation of this tax rate for school purposes.*

Source: Wisconsin Department of Public Instruction, Wisconsin Department of Revenue, and SEWRPC.

year (see Table 91).[22] Among the three types of municipalities for which data are presented, the median operating cost per pupil was highest in the suburban communities ($837) and lowest in the other communities ($810). After the application of state flat and equalization aids, the median net operating cost for all municipalities analyzed is reduced to $611 per pupil. Substantial reductions in the median net operating cost per pupil were observed for urban, suburban, and other municipalities upon application of the flat and equalization aids.

The property tax on a $25,000 house was based on the equalized tax rate for school purposes as determined by the State of Wisconsin Department of Revenue. It is important to note that this tax rate includes payments to school districts for all purposes, including outlays for capital improvements and debt retirement in addition to operational costs. Furthermore, the rate includes a relatively small payment for vocational school tuition. Accordingly, the tax levy on a $25,000 house which is based on this rate overestimates the extent to which residential units pay for educational operating costs. Nevertheless, the comparison of the net operating costs per pupil and the tax levy on a $25,000 house provides an indicator of the impact of educational costs on the local fiscal structure.

[22]*Weighted averages were used to estimate the net operating cost per pupil in municipalities which contain more than one school district.*

As shown in Table 91, the median property tax for school purposes on a $25,000 house for all municipalities included in the study was $569, or $42 less than the median net operating cost per pupil after the application of educational aids for the 1970-1971 school year. Furthermore, the deficit per household increases substantially as the number of children attending public elementary and secondary schools increases. On the average, for a family living in a $25,000 house with four children attending public schools, educational operating costs are greater by $1,875 than the property tax for school purposes derived from the unit. Similar deficits were observed for urban, suburban, and other municipalities.

It is apparent from the foregoing discussion that educational costs associated with low- and moderate-income housing units may represent a burden on the local tax base, depending on the school age population which they generate. From an analysis of applications for subsidized housing in the Region through May of 1971, authorized under Section 235 of the National Housing Act, it was found that there was an average of 2.2 public school students per household for households living in new housing units and 2.7 public school students per household for households in existing units. Assuming these averages regarding public school enrollment and a housing unit value of $25,000, it was found that, on the average, the property tax for school purposes is $775 less than the net operating school costs associated with a new housing unit purchased under Section 235, and $1,081

less than the net operating school costs associated with an existing unit purchased under Section 235. It should be noted that because many existing units purchased under Section 235 are valued at substantially less than $25,000, the deficit is actually greater for existing units.

Although no regionwide data concerning the number of public school students generated from various types of residential development are available, data concerning the overall household size associated with different types of residential development can be utilized as an indicator of the variation among types of residential development in terms of the extent to which they increase school enrollment. Accordingly, the median number of persons per unit is presented for selected types of residential development in Table 92. From an examination of these medians, it is clear that, on the average, households occupying multifamily housing units, either rental or homeowner, are considerably smaller than households living in single-family units, suggesting that, on the average, a household living in a multifamily unit increases school enrollment to a lesser extent than a household occupying a single-family structure.

Table 92

MEDIAN NUMBER OF PERSONS PER UNIT FOR SELECTED HOUSING UNITS IN THE REGION: 1970

Type of Housing Unit	Median Number of Persons per Unit[a]
Subsidized Under Section 235	
New	5.6
Existing	6.4
Owner Occupied	
Single-Family	3.4
Structure of 2 or More Units	2.3
Renter Occupied	
Single-Family	3.3
Structure of 2 Units	2.7
Structure of 3-4 Units	2.1
Structure of 5-19 Units	1.7
Structure of 20 or More Units	1.4

a*The median household size for owner and renter occupied housing units was based on census data collected in April 1970. The median household size for housing units subsidized under Section 235 of the National Housing Act was determined from applications for such housing processed through May 1971.*

Source: U. S. Bureau of the Census, U. S. Department of Housing and Urban Development, and SEWRPC.

In particular, the very low median household size for households renting multifamily housing units which are located in a structure of five units or more suggests that, on the average, the number of public school students per household generated from such housing is very low. It should be observed that, in terms of overall density, the number of students generated per acre of land for a multifamily residential development may be the same as, or larger than, the number of students generated per acre of land for a single-family development. However, it is apparent that multifamily development for which a low student population per unit is accompanied by a high assessed value per unit may not adversely affect the local property tax base.

It is interesting to note the effect of an increase in the value of housing units on the educational cost-revenue situation. As shown in Table 93, it was found that, on the average, for all municipalities included in the study, a house and lot with a relatively high value of almost $55,000 is necessary to generate school property tax revenue which is sufficient to meet the school operational cost of two students. As the number of students per household increases, a very substantial increase in value is required in order to avoid a deficit of school costs over school revenues. In particular, it was found that, on the average, the school property tax revenue generated on a property valued as high as $75,000 is insufficient to meet the school operating cost of three or more students (see Table 93). Certainly, however, the deficit of school costs over school property tax revenues is reduced as the value of the residential units increases. It is clear that the number of public school students generated per housing unit is a more important consideration than the value of individual housing units in the determination of the extent to which school costs for a given type of residential development comprise a burden on the local fiscal structure.

Throughout this analysis, it has been assumed that school operational costs increase directly in proportion to the number of additional public school students generated from a given residential development. Thus, because it was found that, on the average, for all the municipalities analyzed the net operating cost after the application of state educational aids was $611 per student, it was assumed that each additional public school student generated from a given development would increase the necessary operational expenditure by that amount. In a school system where educational resources, either physical or human, are underutilized, it is possible that additional students could be enrolled without a substantial increase either in operational expenses, as considered in this report, or in outlays for the expansion of physical facilities. Certainly, the cost of education associated with low- and moderate-income housing would be less detrimental to the local fiscal structure in municipalities where the marginal cost of educating an additional student is less because of an underutilization of educational resources.

It is apparent that if a large school age population is generated from a moderately priced residential development, which is located in a community in which educational resources are utilized at or beyond capacity, the attendant costs of education far outweigh the school tax levied on the property. Under the existing system of educational finance, communities must seek development which lessens the burden which educational costs con-

Table 93

COMPARISON OF THE SCHOOL TAX REVENUE ON HOUSING UNITS OF SELECTED VALUE AND THE NET OPERATING COSTS FOR HOUSEHOLDS WITH A SELECTED NUMBER OF CHILDREN ATTENDING PUBLIC ELEMENTARY OR SECONDARY SCHOOLS FOR URBAN, SUBURBAN, AND OTHER MUNICIPALITIES IN THE REGION: 1970-1971 SCHOOL YEAR

Type of Municipality	Housing Unit Value	Median School Tax Revenue[a] Minus Median School Costs[b] (After Aids) for Households with a Selected Number of Children Attending Public Elementary or Secondary Schools			
		1 Student	2 Students	3 Students	4 Students
Urban	$25,000	$ - 120	$ - 763	$ - 1,406	$ - 2,049
	35,000	89	- 554	- 1,197	- 1,840
	45,000	298	- 345	- 988	- 1,631
	55,000	508	- 135	- 778	- 1,421
	65,000	717	74	- 569	- 1,212
	75,000	926	283	- 360	- 1,003
Suburban	$25,000	$ 36	$ - 497	$ - 1,030	$ - 1,563
	35,000	264	- 269	- 802	- 1,335
	45,000	492	- 41	- 574	- 1,107
	55,000	719	186	- 347	- 880
	65,000	947	414	- 119	- 652
	75,000	1175	642	109	- 424
Other	$25,000	$ - 58	$ - 728	$ - 1,398	$ - 2,068
	35,000	186	- 484	- 1,154	- 1,824
	45,000	431	- 239	- 909	- 1,579
	55,000	676	6	- 664	- 1,334
	65,000	921	251	- 419	- 1,089
	75,000	1165	495	- 175	- 845
All Municipalities	$25,000	$ - 42	$ - 653	$ - 1,264	$ - 1,875
	35,000	186	- 425	- 1,036	- 1,647
	45,000	414	- 197	- 808	- 1,419
	55,000	641	30	- 581	- 1,192
	65,000	869	258	- 353	- 964
	75,000	1097	486	- 125	- 736

[a] *The school tax revenues generated from the various property values were obtained for each type of municipality by multiplying each selected property value by the median equalized property tax rate for school purposes for each type of municipality.*

[b] *The school costs for each type of municipality are based on the median net operating cost per pupil after the application of state flat and equalization aids for each type of municipality, presented in Table 91.*

Source: Wisconsin Department of Public Instruction, Wisconsin Department of Revenue, and SEWRPC.

stitute in the local fiscal structure. For example, through its zoning ordinance, subdivision regulations, and building codes, a community can ensure that new housing which is expected to generate a large school age population is of sufficient value so that the property tax derived from the development will meet a substantial portion of school costs. Furthermore, a community can lessen the burden of educational costs by seeking a diversified property tax base. For instance, although commercial and industrial land uses require a variety of municipal services, these land uses enhance the local tax base because they contribute to the tax revenue for school purposes without increasing educational costs.

Local planning which is thus oriented to the development of a favorable property tax base represents a constraint on the supply of housing to low- and moderate-income families in many communities. Local officials, cognizant of the burden which school costs work on the property tax base, are reluctant to allow the construction of low and moderately priced housing in their communities because of the high cost of education relative to the low property tax revenue associated with such development. The development of a favorable tax base will be a major consideration in the local planning process as long as the property tax is used to finance a major portion of the cost of education.

SUMMARY

The property tax structure is an important consideration in the housing planning process since the property tax affects both the supply of, and demand for, housing within any given municipality. This chapter has presented data collected and collated as part of the tax structure inventory conducted under the regional housing study and considered to be relevant to housing planning. The most significant findings are summarized below.

The total state equalized value of general property in the Region against which the property tax is levied was $15.3 billion in 1971, representing an increase of $6.4 billion, or 71 percent, over 1961. Because the growth rate in property values for the state as a whole was somewhat higher than for the Region, the regional proportion of the equalized value of property in the state decreased from nearly 46 percent in 1961 to 41 percent in 1971.

Growth in property values in the recent past has occurred at varying rates among the counties of the Region. The most rapid growth in property values—more than 140 percent between 1961 and 1971—occurred in the outlying counties of Ozaukee, Washington, and Waukesha, while property values grew by only 50 percent in Milwaukee County during this period. These varying rates of growth have caused significant change in the distribution of property values among the seven counties. The most significant change is the decrease of 8 percent in the Milwaukee County proportion of the Region total and the increase of 4 percent in the Waukesha County proportion between 1961 and 1971.

One measure of the wealth and taxing power of a community is the average per household equalized value of general property in the community. Clearly, the higher the equalized value of property per household, the more favorable is the tax base within any given community. Much variation was observed in the equalized value of property per household among cities, villages, and towns in the Region, with the highest figure of $110,300 found in the Village of West Milwaukee and the lowest figure of $14,300 found in the Village of Darien. Such variation in the equalized value of property per household is due to both variation among communities in the value of residential property as well as variation among communities in the proportion of all general property which is comprised of residential property.

The total amount of property taxes levied by all cities, villages, and towns in the Region stood at $609.2 million in 1971, representing an increase of $354.1 million, or 139 percent, over 1961. Property tax relief granted by the state offset $84.3 million, or 14 percent, of the total levy in 1971, reducing the net property tax levy in the Region to $524.9 million. The net property tax levy (after property tax relief) increased by $269.8 million, or 106 percent, between 1961 and 1971, a growth rate which is considerably faster than the growth rate in property values during this period.

The total property tax levy actually consists of tax levies for state, county, local, and school purposes. The tax levy for school purposes is the largest and has been the most rapidly increasing component of the total property tax levy. Thus, the school proportion of the total property tax levy in the Region increased from 48 percent in 1961 to 54 percent in 1971. In 1971, taxes levied for county purposes represented 23 percent of all property taxes levied in the Region, while taxes levied for local purposes represented 22 percent. The state component of the total property tax levy is a forestation tax, which comprised less than 1 percent of the total property taxes levied in the Region in 1971. There was much variation among cities, villages, and towns in the Region as to the distribution of the property tax levy for state, local, county, or school purposes.

Perhaps the best measure of tax effort among communities is the net full value property tax rate, which indicates the dollars of tax levied (after property tax relief) per thousand dollars of equalized property value. The net full value property tax rate varies significantly among cities, villages, and towns in the Region, ranging from $17.88 per thousand dollars of equalized value in the Town of Waukesha to $44.83 in the City of Milwaukee in 1971. In general, the net property tax rate is lower in towns than in villages or cities. Thus, in 1971 the median net full value property tax rate for all towns in the Region was $26.44, compared to a median rate of $30.47 for villages and $32.29 for cities.

Under a system of state shared revenues in Wisconsin, large amounts of state levied revenues are annually made available to local units of government for spending. The total amount of state shared revenues paid by the state to cities, villages, towns, counties, and school districts in the form of state aids, state shared taxes, and property tax relief was $377.6 million during calendar year 1971. On the other hand, the total amount of revenue paid to the state by individuals and business enterprises in the Region stood at $633.5 million in 1971. Thus, 60 percent of the state revenues derived from the Region were returned to local units of government in the Region as state aids, state shared taxes, or property tax relief in 1971. Variation among cities, villages, and towns in the Region in terms of the shared revenue payments reeeived from the state is partially responsible for the variation of property tax levies and rates among minor civil divisions.

In general, the statutory formula for the distribution of most state aids as well as property tax relief allocates more money to areas of fiscal need as measured by local tax effort. Until 1971, however, the major portion of the third basic type of state shared revenue, namely state shared taxes, was returned to the communities from which the taxes were generated, rather than on the basis of need. This arrangement was completely revised by the State Legislature in October 1971. Payments from the shared tax account for calendar year 1972 and after are made according to a distribution formula which gives greater consideration to fiscal need, with one of the most important features being a payment of $35 per person to

each minor civil division. This change in the formula for the distribution of state shared taxes is at least partially responsible for the decrease in the net full value property tax rates for 64 cities, villages, and towns in the Region between 1970 and 1971.

Of great concern in the local planning process is the development and maintenance of a favorable property tax base. Communities seek development which generates an amount of property tax revenue which is equal to or greater than the cost of local services which are provided. It is often argued that low- and moderate-income housing is a detriment to the local fiscal structure because of the high cost of services and, in particular, the cost of education which must be provided to such development.

According to the findings of a cost-revenue study conducted as part of the tax structure inventory, for all communities analyzed the per household cost of providing a full range of municipal services approximated $279 in 1971. The cost of municipal services per household was highest in the suburban municipalities ($294) and lowest in municipalities in the outlying areas of the Region ($262). Among the various municipal services, the highest median per household expenses for all communities analyzed are general government ($68), street maintenance ($57), police protection ($52), and fire protection ($24). In fact, the expenditure for these four services comprised large portions of the total per household expenditure for each type of community as follows: urban, 75 percent; suburban, 72 percent; and other, 69 percent.

The results of the cost-revenue study suggest that the property tax for municipal purposes generated from a moderately priced housing unit can offset most of the net operating and maintenance costs of providing municipal services. Thus, on the average for all civil divisions included in the study, the tax levy for municipal purposes on a $25,000 house was only $8 less than the per household cost of providing municipal services when reduced by the application of state shared revenues. The tax levy for municipal purposes on a $25,000 house was $33 less than the net operating cost of a full range of municipal services in the suburban communities of the Region, and actually slightly greater than the net cost of municipal services in the urban communities as well as communities in the outlying areas of the Region. It must be emphasized, however, that the methodology utilized in the cost-revenue study tends to overestimate the extent to which moderately priced housing pays for the cost of municipal services, since the costs exclude major capital outlays but the revenues include such outlays.

The findings of the cost-revenue study further indicated that educational costs associated with moderately priced housing may constitute a burden on the local fiscal structure, depending on the size of the school age population generated by such housing. Thus, on the average for all civil divisions analyzed, the net school operating cost for a single pupil when reduced by the application of state aids is $42 greater than the property tax levy for school purposes levied on a $25,000 house in 1971. The deficit per household increases substantially as the number of children attending public schools increases.

In particular, based on an estimate of 2.2 public school students per household, the per household deficit of school operating costs over school property tax revenues for new housing units subsidized under Section 235 of the national Housing Act was $775 for the 1970-71 school year. Because of a higher public school enrollment per household and because of lower housing unit values, the deficit of school operating costs over school property tax revenues for existing units subsidized under Section 235 was somewhat greater. Whereas the school property tax generated from a higher valued housing unit is not necessarily sufficient to meet the school operating cost for a similar number of students, the deficit of educational costs over revenues may be reduced for a higher valued unit. It is clear that moderately priced housing which generates a larger number of public school students represents a burden on the local tax base. Educational costs will continue to precipitate opposition to low- and moderate-income housing as long as the property tax comprises a major source of revenue for education.

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Chapter VII

COST TRENDS OF BUYING AND OCCUPYING NEW HOUSING

INTRODUCTION

The trends in the cost of buying and occupying new housing are important considerations in any planning efforts relating to housing. New households formed as a result of a growing and changing population require housing at prices which they can afford. If the costs of buying and occupying new housing increase at a rate faster than the increase in the cost of living, it is probable that some low- and moderate-income households, particularly newly formed households and elderly households, will be confronted with housing problems. These households might have to pay more than a reasonable amount of their incomes for decent, safe, and sanitary housing, be it either for new housing or suitable existing housing whose prices also tend to rise relative to the cost trends of new housing. Households which are unable to find available suitable existing housing or are unable or unwilling to pay the increased costs required to reside in such housing, assuming it were available, might find their only other housing alternatives to be lower cost overcrowded and/or substandard housing units.

A study of the cost trends of buying and occupying new housing will assist in the determination of the extent to which families with low and moderate incomes have been and may be excluded from the housing market for new decent, safe, and sanitary housing within the Region because of rising housing costs. The housing cost trends data will also assist in forecasting factors related to future housing demand and supply and the determination of future housing need. These data will also serve as the base for the establishment of a regional housing market information file designed to provide housing production and occupancy cost data on a continuing basis.

This chapter presents a discussion of data collected and collated under the regional housing study primarily for the 10-year period extending from 1960 through 1969. In addition, in order to provide a more timely indication of recent trends in the costs of housing, available construction and occupancy cost data for the year 1972 are presented in Appendix D and referenced wherever appropriate within the chapter. These data are intended to emphasize housing costs to the ultimate housing consumer and, as such, include trends in two specific areas: the costs of buying new, single-family, conventionally constructed[1] housing, including attendant costs of land, land development, and the housing unit itself; and the monthly cost of occupying selected new single-family and multifamily conventionally constructed housing units. Multifamily housing construction cost trends were not included in the inventory based on a number of important considerations. First, the wide variances in types, styles, sizes, and designs and the wide variety of fixtures and appurtenances provided in the various multifamily structures precluded the efficient collection and analysis of multifamily construction cost data on a uniform, areawide basis. Second, and more importantly, since, as previously mentioned, the emphasis of this chapter is to provide meaningful data on housing cost and occupancy trends specifically as they relate to the consumer, and since any increases in construction costs related to multifamily units would generally be reflected in the rental price for such units, data on rental trends in multifamily units which are presented in this chapter should adequately reflect trends in multifamily construction costs. Review of the available data sources, however, clearly indicated that trends in multifamily housing construction costs generally paralleled those of single-family detached housing.

To facilitate an understanding of the trends in the cost of buying and occupying new housing in the Region, specific changes in the various housing component costs were compared to an established price index. Of the two most generally accepted consumer price indices utilized in the Region—the City of Milwaukee Consumer Price Index (CPI)[2] and the U. S. Consumer Price Index—the City of Milwaukee CPI was determined to be more appropriate, since it was found to more closely reflect consumer prices within the Region than the U. S. CPI. Therefore, where appropriate, comparisons of changes in housing cost data were made to the City of Milwaukee CPI.

COSTS OF BUYING NEW HOUSING

The construction of new housing involves a complex package of cost inputs which, when combined, equal the total cost to the house buyer. Comprehensive information has not been available in the Region in the past regarding the elements comprising the total cost, the cost relationships of the various components, and the trends of these costs.

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[1] *Conventionally constructed (sometimes called "stick-built") single-family detached housing involves the building of the house frame at the residential lot site from standard sized lumber of various lengths, fastening other structural components to the frame, and usually utilizing skilled building tradesmen.*

[2] *The Consumer Price Index is the official price index provided by the Bureau of Labor Statistics, U. S. Department of Commerce (1957-1959 = 100). Beginning in 1964, the index structure was revised to reflect the buying patterns of urban wage earners and clerical workers living alone, as well as families of two or more persons. Indices of prior years apply only to families of two persons or more.*

The two major elements of the cost of the production of new housing are the cost of land, including site improvements which are necessary for a parcel of land to be utilized for housing; and the cost of the residential structure, including labor, materials, and other costs such as general overhead, profit, construction financing, and marketing costs. It should be noted that construction financing involves only those costs necessary for such things as interest on money paid out by a lender to the contractor and/or subcontractors for labor and materials during the period while the house is under construction and the lender's administration of these payments. It should be further noted that the financing of land is not considered part of construction financing costs because land is usually owned by borrowers and used as collateral for construction loans. The financing costs related to long-term mortgages generally used to finance home ownership are presented in the section of this chapter entitled "Costs of Occupying New Single-Family Housing." Cost trends in these two basic cost elements—land and structure costs—are presented separately in this section. Also, and more importantly, included in this section are comparative costs to the housing consumer of purchasing a complete new housing "package," i.e., lot, house, and associated costs, for various areas within the Southeastern Wisconsin Region.

Land Costs

All housing, with the exception of such exotic dwellings as houseboats, regardless of where it is produced, must eventually be placed on land, thus making land costs an important part of the total cost of producing single-family residences. Cost data for three types of land were inventoried and utilized to determine land cost trends within the Region. They are cost data for unimproved land,[3] partially improved lots,[4] and fully improved lots.[5]

Land cost data were primarily obtained from the Wisconsin district offices of the Office of the Supervisor of Assessments,[6] Wisconsin Department of Revenue. These cost data are based on recorded "arm's-length"[7] sales transactions which occurred from 1960 through 1969. The cost data presented in this discussion, therefore, represent actual selling prices. These selling prices do not include the necessary or frequently required additional land acquisition costs, such as lawyers' fees for legal services and abstract opinions, development consultants' fees, title insurance premiums, fees for land surveys and soil tests, finance charges, real estate appraisers' fees, and deed recording fees. These additional acquisition costs vary depending on the circumstances and concerns of the parties to the transaction, but usually do not exceed 5 percent of the cost of a typical residential lot.

Factors Influencing Land Prices: Prior to a discussion of single-family residential land cost trends, and to facilitate an understanding of the uniqueness of land relative to other consumer goods, it is important to consider the many and varied factors which may influence land prices. Land, unlike many other consumer goods, cannot be moved from one location to another; each parcel is virtually unique, differing from all other parcels; and, with the exception of the creation of a very limited amount of new land through the filling of lakes or streams, the total quantity or acreage of land in the Region is essentially fixed. In addition to these land characteristics, man-made improvements and natural physical features further contribute to the unique aspects of every parcel of land. Sale prices of land for residential land uses are, therefore, affected by a combination of land characteristics and related amenities and limitations which include, but are not limited to, soil conditions; slope; existing stands of trees; elevation; scenic views; proximity to streams, rivers, and lakes; flood hazards; adjacent properties and land uses; and differences in levels of quality of land improvements.

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[3] *Unimproved land, or raw land, for purposes of this report is defined as land having no buildings on it; having no centralized sanitary sewerage service facilities immediately available for use; being at least six acres in size; and not a part of an existing platted land subdivision.*

[4] *Partially improved lots for purposes of this report are defined as those lots having no buildings on them; having no centralized sanitary sewerage service facilities immediately available for use; being five acres or less in size; and identified as being single-family residential lots.*

[5] *Fully improved lots for purposes of this report are defined as those lots having no buildings on them; having centralized sanitary sewerage service facilities immediately available for use; and identified as being single-family residential lots.*

[6] *Supervisor of Assessments offices, which maintain data for counties within the Region, are located in the City of Fond du Lac, which maintains data for Washington County; the City of Madison, which maintains data for Walworth County; and the City of Milwaukee, which maintains data for Kenosha, Milwaukee, Ozaukee, Racine, and Waukesha Counties.*

[7] *An "arm's-length" real estate transaction is defined as a transaction which is consummated between buyer and seller under cash or cash equivalent terms of sale. The transaction is willingly entered into by buyers and sellers being under no duress, who are equally knowledgeable about all of the rights inherent in the property, and who utilize objective and impersonal bargaining.*

Amenities and limitations may also exist which are less directly related to the physical aspects of the land parcel itself but still influence the sale price of land. These factors may be related to the community or geographic area in which the land parcel is located and include such things as quality of school system, quantity and quality of public services, linkages to public and private sources of goods and services, and existing zoning and subdivision controls. Land sales prices are also influenced by exogenous factors which are basically economic in nature, such as the trends of the local and national economy, the availability and cost of money, and changes in housing construction costs. These exogenous factors are particularly important to land sales price trends because of the length of time involved—three years or more—for land to be developed and sold for residential use and because of the large amount of capital investment which must precede the conversion of unimproved land into partially or fully improved lots that are ready for sale. This conversion of unimproved land into partially or fully improved lots, called residential land development, is discussed more fully in a following section entitled "Land Development Costs" because such costs represent a significant proportion of an improved residential lot price. All of the previously discussed factors either individually or in concert may cause land sales within the Region to fluctuate from year to year both in the number of transactions and in price ranges for land intended for specific uses.

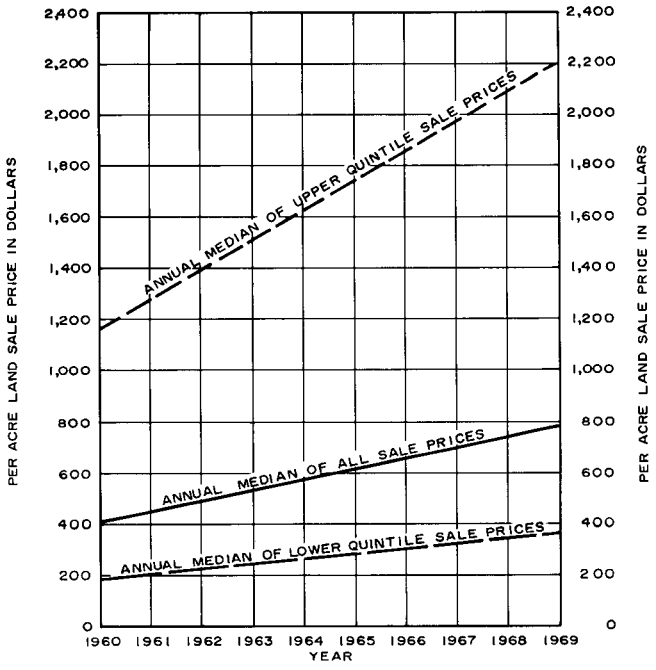
To facilitate the presentation of land cost trend data for unimproved land, partially improved lots, and fully improved lots, the land cost data presented in this section are grouped into three geographic areas: "urban," "suburban," and "other," as shown on Map 29. These classifications permit a more precise description of the trends in land costs than a presentation of overall regional data could provide because of similarities among civil divisions in these areas relative to some or all of the following characteristics: population density, population growth, income of households, distance from large urban centers, property values, lot sizes, availability of public sanitary sewerage service, and land availability.

Unimproved Land Costs: Large tracts of unimproved land are usually purchased by land developers with the intention of someday converting such unimproved land into a higher urban use such as the salable product of residential lots. Land sales data for unimproved land which was ready for immediate residential development in the urban areas of the Region were not available from the Wisconsin District Office of the Supervisor of Assessments due to lack of sufficient transactions, and were, therefore, obtained from the Annual Land Value Report prepared by the Milwaukee Chapter of the Society of Real Estate Appraisers and from engineering and land development firms which had knowledge of unimproved land prices in urban areas of the Region. Generally, these sources indicated that unimproved land in urban areas sold for about $2,500 per acre in 1960 and about $3,500 per acre in 1969, an increase of 40 percent during this period. Unimproved land sales transaction data in the suburban and other areas of the Region were obtained from the Wisconsin District Office of the Supervisor of Assessments, and as indicated in Figures 36 and 37, unimproved land prices in these areas have also increased substantially from 1960 through 1969. Compared with the 1960-1969 21 percent increase in the City of Milwaukee Consumer Price Index, unimproved land prices in the suburban and other areas of the Region advanced nearly 93 percent and 105 percent, respectively.

It should be noted that the upper and lower quintile sales price data for various categories of land presented in this chapter are useful in establishing a range of land sale prices within which the overall median priced land parcels would be found. Further, the wide range in selling prices indicated herein for unimproved land and later for partially and fully improved lots is a manifestation of the truly unique aspects of each parcel of actually developed or potentially developable residential land. From the three trend lines of sales data presented in Figures 36 and 37, it is apparent that suburban area unimproved land was about twice the cost per acre than the cost of unimproved land in the other areas of the Region. For example, based on the 1960-1969 trend of the annual medians of all

Figure 36

PER ACRE LAND SALE PRICE TRENDS[a] FOR UNIMPROVED LAND[b] IN THE SUBURBAN AREAS[c] OF THE REGION 1960-1969

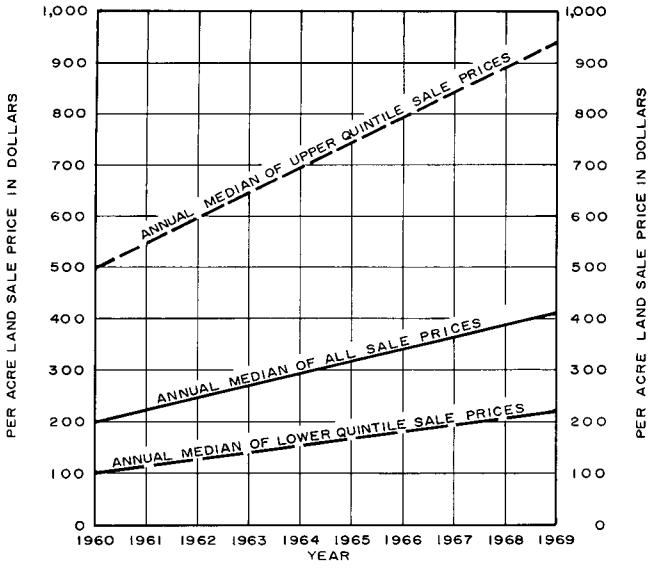


[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN SALE PRICE DATA.
[b] LAND ON WHICH NO IMPROVEMENTS EXIST AND WHICH IS SIX ACRES OR MORE IN SIZE.
[c] SEE MAP 29 FOR DELINEATION OF SUBURBAN AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

Figure 37

PER ACRE LAND SALE PRICE TRENDS[a] FOR UNIMPROVED LAND[b] IN THE OTHER AREAS[c] OF THE REGION 1960-1969



[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN SALE PRICE DATA.

[b] LAND ON WHICH NO IMPROVEMENTS EXIST AND WHICH IS SIX ACRES OR MORE.

[c] SEE MAP 29 FOR DELINEATION OF OTHER AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

unimproved land sales transaction data, an acre of unimproved land in a suburban location in 1969 cost $790 per acre, which is almost twice the $410 per acre of a similar acre of land in the other, or outlying, area of the Region. Generally, however, the cost of land in the other area increased at a faster rate during this period, and could be indicative of a growing demand for developable residential land in those portions of the Region which are more rural in character.

Unimproved land costs are indeed important to, and play a significant role in, determining the prices of improved residential lots ultimately paid by the housing consumer. Before the costs of improved land are examined, however, a review of the process and costs involved in transforming unimproved land into improved residential lots is in order. This process, commonly known as the land development process, will be discussed in the next section.

Land Development Costs: Residential land development—the process of transforming unimproved land into improved residential lots—is a complicated and costly but necessary process generally required before residential housing units can be constructed on land. Because the development process is very costly, it requires capital for expenses which include but are not limited to purchase, financing, and carrying costs of the land; engineering and design; grading and earth work; street utility and drainage improvements; posting of community fees or bonds; and marketing costs. Although the land development process applies generally to all residential subdivisions, every subdivision has unique features or is influenced by unique outside forces which affect this process and subsequently affect the costs involved. For instance, precise subdivision engineering surveys and designs must be developed for every individual subdivision, and costs for these surveys and designs will vary depending on the topography of the land, the required improvements, and the type of subdivision design desired. The financial aspects of the development process also vary among subdivisions, since the equity position, income tax status, and business objectives of various developers are not uniform, nor are these factors necessarily stable over time for the same developer who might have undertaken a number of different residential subdivision development projects. In addition, developers' financial arrangements are influenced by other considerations, such as the cash flow requirements of the landowner, the specific improvements to land required by the local community subdivision development ordinance, and by the marketing strategy applicable at the time of the development. Subdivision costs also are not very comparable because the yield ratio of the lots per gross subdivision acre is directly affected by minimum lot size as stated in zoning ordinances, street right-of-way width requirements, amount of dedicated land necessary for park or school purposes, the existence of out-lots which cannot be lotted due to the shape of the parcel, soil conditions, and topography.

In order to present a meaningful breakdown of land development costs which would be applicable to a typical residential subdivision, data were collated from previous Commission inventories and collected from a recent staff survey of developers and professional engineers of local communities and consultant firms. These data were then utilized to prepare an estimate of the per lot land development cost related to a hypothetical 23-acre subdivision of 75' x 125' lots having a full complement of improvements and being located in the urban area of the Region. Table 94 shows the breakdown of the cost elements for an urban type subdivision and the changes in development costs between 1960 and 1969.

It is apparent from Table 94 that the estimated cost for lots in an urban subdivision increased slightly more than 50 percent, from $5,750 in 1960 to $8,650 in 1969.

Marketing costs, including sales commissions, advertising, and other costs of $1,150 in 1960 and $2,080 in 1969, represented a significant portion of the total development costs in these years. The $930 increase in marketing costs also represented the most significant dollar amount increase and percent increase for a specific development cost element in the 1960-1969 time period. Other significant land development cost elements are raw land and lot improvement costs. Raw land and lot improvements together totaled $2,850, or about 50 percent of the total development costs, in 1960, and $3,935, or 45 percent of the total development costs, in 1969.

Table 94

ESTIMATED PER LOT LAND DEVELOPMENT COSTS FOR A HYPOTHETICAL FULLY IMPROVED RESIDENTIAL SUBDIVISION IN THE URBAN AREA OF THE REGION[a]: 1960-1969

Cost Element	Land Development Cost				Percent Change (1960-1969)
	1960		1969		
	Dollars Per Lot	Percent of Total	Dollars Per Lot	Percent of Total	
Raw Land	810	14.1	1,155	13.4	42.6
Land Carrying and Financing[b]	790	13.7	1,025	11.9	29.8
Engineering and Design[c]	260	4.5	345	4.0	32.7
Grading, Fill, Earth Removal, and Landscaping and Terracing[d]	85	1.5	115	1.3	35.3
Lot Improvement					
Hard Surface Street (Bituminous Pavement)	445	7.8	600	6.9	34.8
Concrete Curb and Gutter	195	3.4	290	3.3	48.7
Concrete Sidewalk	185	3.2	230	2.7	24.3
Sanitary Sewer Main[e]	440	7.7	600	6.9	36.4
Storm Sewer Main	405	7.0	575	6.7	42.0
Water Main[e]	370	6.4	485	5.6	31.1
Subtotal	2,040	35.5	2,780	32.1	36.3
Community Fees and Bonds	40	0.7	55	0.6	37.5
School Fees and/or Park Fees or Value of Dedicated Land	--	--	230	2.7	--
Marketing					
Sales Commissions	460	8.0	865	10.0	88.0
Advertising	115	2.0	175	2.0	52.2
Other[f]	575	10.0	1,040	12.0	80.9
Subtotal	1,150	20.0	2,080	24.0	80.9
Profit	575	10.0	865	10.0	50.4
Total Development Costs Per Lot	5,750	100.0	8,650	100.0	50.4
City of Milwaukee Consumer Price Index Annual Average Index Numbers	--	--	--	--	21.4

[a]*Subdivision is approximately 23 acres in size, consisting of lots having a typical width of 75 feet and a typical depth of 125 feet.*

[b]*Includes costs of purchase options, predevelopment financing, and real estate taxes less any miscellaneous income.*

[c]*Includes any necessary costs of soil tests, surveying for location of streets and lot and building lines, topographic maps, working drawings for establishment of grades, earthworks, street improvements, and utility lines.*

[d]*Includes any necessary costs for demolition of existing structures and clearing of trees.*

[e]*Excludes cost of laterals from lot line to structure.*

[f]*Includes office overhead and salaries, legal fees, title policy fees, accounting expense, corporate income taxes, and title insurance fees.*

Source: SEWRPC.

Since raw land and lot improvements are directly related to lot size, the prices of improved lots could be reduced through more intensive utilization of land, particularly by permitting lots of narrow width which would reduce the unit cost of lot improvements. Reducing lot costs would make it possible for more households, especially households with low or moderate income, to afford improved lot prices. It is interesting to note that school fees and/or park fees or the value of such fees in the form of dedicated land were generally not required of the developer in 1960, but by 1969 were required more frequently and amounted to $230, or about 3 percent of the total cost of a lot.

Finally, it is apparent from Table 94 that the percentage increases in land development cost elements in all cases are substantially above the 21 percent increase in the City of Milwaukee Consumer Price Index for the same time period.

Improved Land Costs: Trends in the cost of unimproved land and in the cost of land development ultimately are reflected in the cost of improved residential lots. This section dealing with cost trends of improved residential lots, therefore, is a very important consideration of the regional housing study, since it represents costs of land paid directly by the consumers of housing. Information from this section will be combined with data from a later section dealing with housing construction cost trends in an effort to present the costs of a complete housing package to the consumer.

Discussion of improved land cost trend data is divided into two categories, namely, partially improved lots and fully improved lots. As previously indicated, partially improved lots usually require an onsite well for water and an individual septic system for disposal of sewage, and have minimal surface street improvements. Fully improved lots include at least centralized public water and sewer service and include hard surface streets with curb, gutter, and sidewalk. It is important to note that the level of improvements required by communities for partially improved and fully improved lots has become more stringent since 1960. For example, in 1960, many community subdivision control regulations accepted gravel roads as permanent streets, but by 1969 most community subdivision control regulations required a hard surface street of concrete or bituminous pavement. Cost trend data for partially and fully improved lots, therefore, not only reflect the increased costs of unimproved land and land development, but also the increase in the quality and quantity of improvements for such lots as required by local community ordinances.

Partially Improved Lot Costs: Cost trend data for partially improved lots were obtained from the Wisconsin District Offices of the State Supervisor of Assessments and, as previously noted, are based upon recorded "arms-length" sales transactions which occurred throughout the Region during the time period 1960-1969.

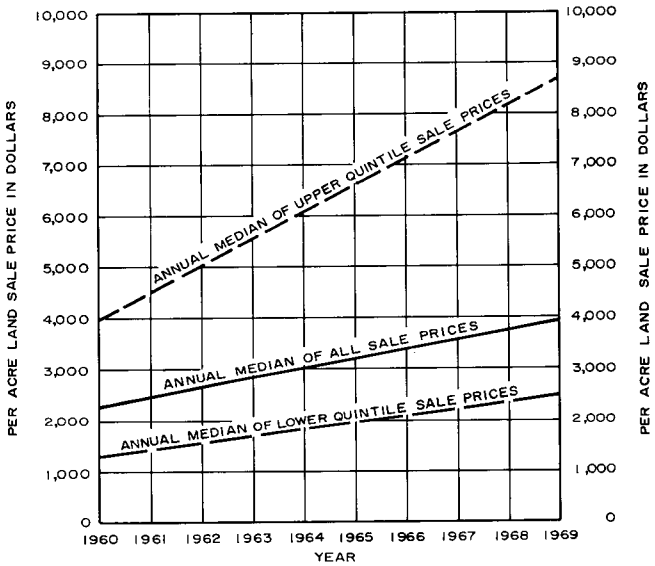
It should be noted that, due to the limited number of land sales transactions involving partially improved lots in the urban area, cost trend data for partially improved lots will only be presented for suburban and other areas of the Region (see Map 29). Data soucres indicate that few partially improved lots were sold during the 1960 through 1969 period in the urban area because the majority of this area is served by public sanitary sewerage facilities, and land sales transactions generated in the urban areas would, therefore, relate to fully improved lots.

Partially improved lots are more attractive to some housing consumers than fully improved lots because they are usually larger in size, and are generally less costly to purchase even after considering the additional costs required for the installation of a private well and septic system. There are primarily two reasons for the generally lower cost of partially improved lots compared to fully improved lots. First, usually a lower level of street improvements is required by communities which permit partially improved lots, and second, as previously indicated, a lower per acre cost for unimproved land in the suburban area compared to comparable land in the urban area permits developers to sell partially improved lots of relatively large size at prices below those for fully improved lots.

Supply and demand factors ultimately determine the prices for partially improved residential lots, and basically caused the price trends to increase at the rates shown in Figures 38 and 39. The median price for all partially

Figure 38

LOT SALE PRICE TRENDS[a] FOR PARTIALLY IMPROVED LOTS[b] IN THE SUBURBAN AREAS[c] OF THE REGION 1960-1969

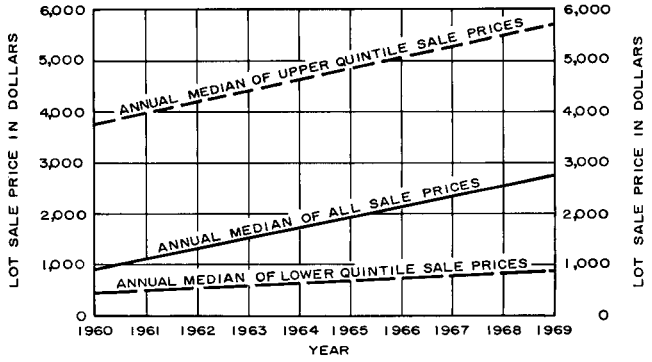


[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN SALE PRICE DATA.
[b] LOTS SERVED BY ONSITE SEPTIC SYSTEMS.
[c] SEE MAP 29 FOR DELINEATION OF SUBURBAN AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

Figure 39

LOT SALE PRICE TRENDS[a] FOR PARTIALLY IMPROVED LOTS[b] IN THE OTHER AREAS[c] OF THE REGION 1960-1969

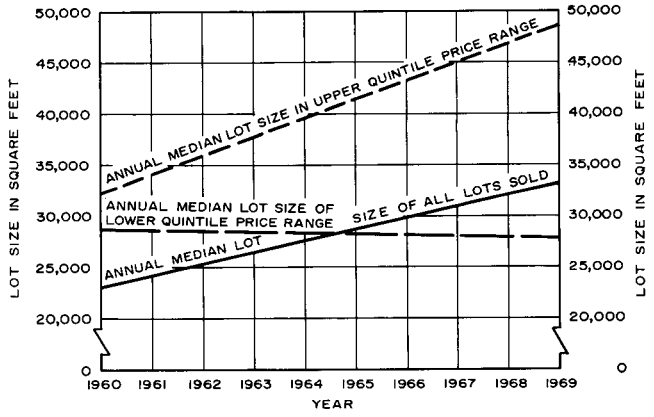


[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN SALE PRICE DATA.
[b] LOTS SERVED BY ONSITE SEPTIC SYSTEMS.
[c] SEE MAP 29 FOR DELINEATION OF OTHER AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

Figure 40

LOT SIZE TRENDS[a] FOR PARTIALLY IMPROVED LOTS[b] IN THE SUBURBAN AREAS[c] OF THE REGION 1960-1969



[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN LOT SIZE DATA.
[b] LOTS SERVED BY ONSITE SEPTIC SYSTEMS.
[c] SEE MAP 29 FOR DELINEATION OF SUBURBAN AREAS.

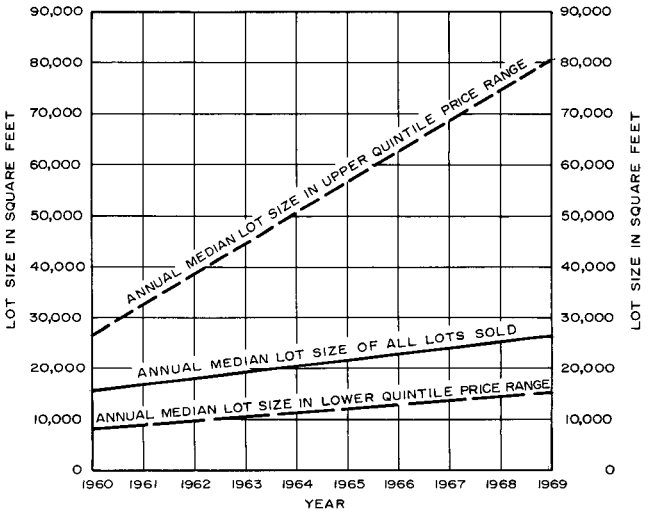
Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

improved lots in the suburban area increased from $2,320 in 1960 to $3,990 in 1969, or by about 72 percent over the time period, while the other area experienced an increase of over 203 percent, from $910 in 1960 to $2,760 in 1969. It should be noted, however, that some portion of the increase in prices is attributable to changes in the cost of street improvements due to higher community standards for residential street improvements, and was also influenced by the increase in the size of these lots. In 1960, as indicated in Figures 40 and 41, the median size of partially improved lots for all lots sold was about 23,000 square feet for suburban area lots and 15,800 square feet for other area lots. By 1969, the median size of all partially improved suburban area lots was slightly larger than 33,000 square feet, an increase of about 40 percent since 1960, whereas the median size of all partially improved lots in the other area of the Region was over 26,300 square feet, an increase of more than 66 percent. Prices for lots in the lower quintile in the suburban area of the Region were not influenced by changes in lot size, however, since lots in these areas were, on the average, actually slightly smaller in 1969 than in 1960. The wide range of lot prices and sizes within each geographic area, as depicted in Figures 38 through 41, again tends to support the unique aspects of every residential lot. Figures 38 and 39 indicate that increases in partially improved lot prices have far surpassed the 21 percent increase in the Milwaukee CPI over the same period.

Fully Improved Lot Costs: As in the case of partially improved lots, cost trend data for fully improved lots were also obtained from the Wisconsin District Offices of

Figure 41

LOT SIZE TRENDS[a] FOR PARTIALLY IMPROVED LOTS[b] IN THE OTHER AREAS[c] OF THE REGION 1960-1969



[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN LOT SIZE DATA.
[b] LOTS SERVED BY ONSITE SEPTIC SYSTEMS.
[c] SEE MAP 29 FOR DELINEATION OF OTHER AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

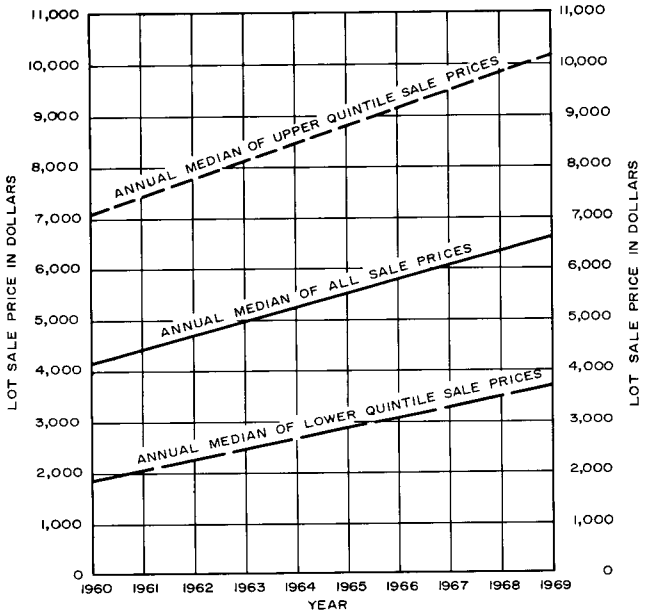
the State Supervisor of Assessments, and are based upon recorded "arm's-length" transactions which occurred throughout the Region from 1960 through 1969.

Like partially improved lots, fully improved lots also possess certain characteristics which make them more desirable to some housing consumers. One reason fully improved lots are preferred over partially improved lots by housing consumers is because of the general availability of centralized public water supply and sanitary sewage treatment facilities. Also of some importance is the generally smaller lot size of the fully improved lot relative to partially improved lots, tending to require less care in terms of time and cost of upkeep. Like partially improved lots, the cost trend for fully improved lots was also influenced by more stringent community requirements for street improvements.

A comparison of lot price and lot size trends for fully improved lots in the three geographic areas—urban, suburban, and other—is presented in Figures 42 through 47. It is interesting to note based on the observed relative changes for each quintile, that, except for the high-priced lots in the suburban area, the low-priced lots rose at faster rates than did the overall or upper quintile median lot prices within each geographic area. The median priced fully improved lot in the urban area in 1960 cost over $4,100 for a 7,660 square foot lot compared to a cost of slightly more than $6,500 in 1969 for an 8,180 square foot lot, an increase of 59 percent on a lot basis. On a square foot basis, the median price for all lots in the urban area increased nearly 49 percent between 1960 and 1969. In the suburban area, the median priced fully improved lot sold for approximately $3,800 in 1960 and about $7,200 in 1969, an increase of 88 percent. During this time period, the median lot size rose slightly (4 percent) from 11,960 to 12,460 square feet. On a square foot basis, the median price for median sized lots in the suburban area increased nearly 82 percent during the decade. In the other area of the Region, while fully improved lot prices increased 50 percent, from about $2,300 to $3,500, the median lot size also rose from 10,910 to 11,570 square feet, which represents nearly a 44 percent increase in cost on a square foot basis.

Figure 42

LOT SALE PRICE TRENDS[a] FOR FULLY IMPROVED LOTS[b] IN THE URBAN AREAS[c] OF THE REGION 1960-1969

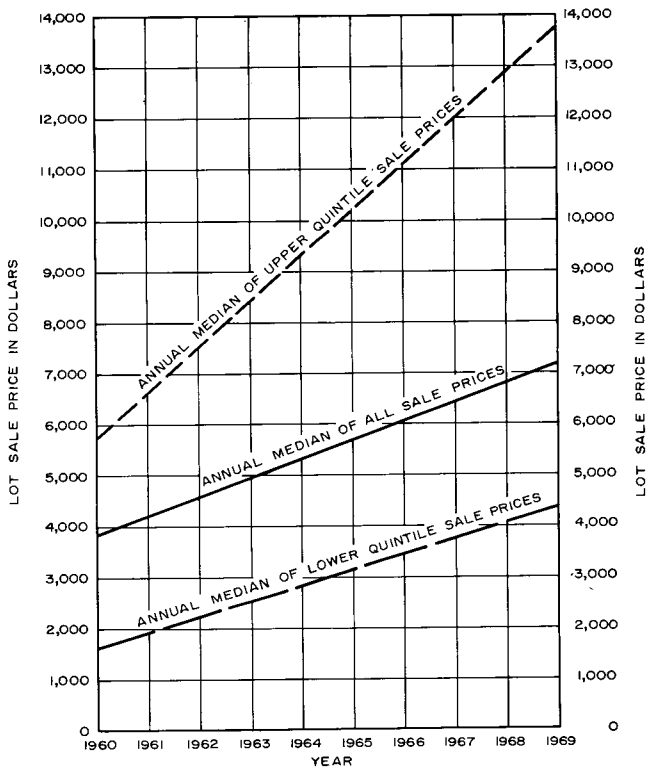


[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN SALE PRICE DATA.
[b] LOTS SERVED BY CENTRALIZED PUBLIC OR PRIVATE SANITARY SEWERAGE SERVICE FACILITIES.
[c] SEE MAP 29 FOR DELINEATION OF URBAN AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

Figure 43

LOT SALE PRICE TRENDS[a] FOR FULLY IMPROVED LOTS[b] IN THE SUBURBAN AREAS[c] OF THE REGION 1960-1969

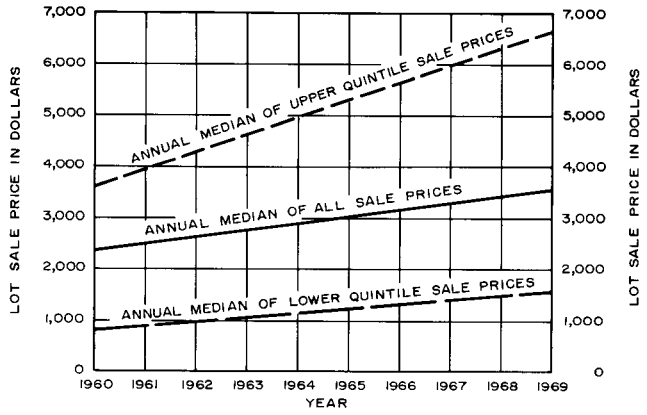


[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN SALE PRICE DATA.
[b] LOTS SERVED BY CENTRALIZED PUBLIC OR PRIVATE SANITARY SEWERAGE SERVICE FACILITIES.
[c] SEE MAP 29 FOR DELINEATION OF SUBURBAN AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

Figure 44

LOT SALE PRICE TRENDS[a] FOR FULLY IMPROVED LOTS[b] IN THE OTHER AREAS[c] OF THE REGION 1960-1969

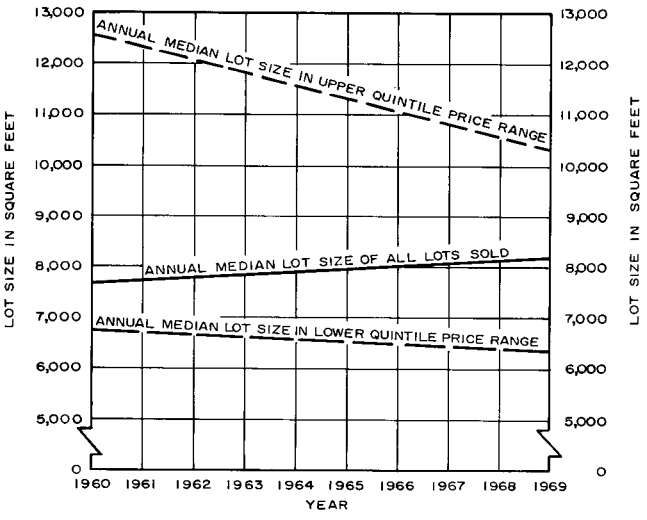


[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN SALE PRICE DATA.
[b] LOTS SERVED BY CENTRALIZED PUBLIC OR PRIVATE SANITARY SEWERAGE SERVICE FACILITIES.
[c] SEE MAP 29 FOR DELINEATION OF OTHER AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

Figure 45

LOT SIZE TRENDS[a] FOR FULLY IMPROVED LOTS[b] IN THE URBAN AREAS[c] OF THE REGION 1960-1969

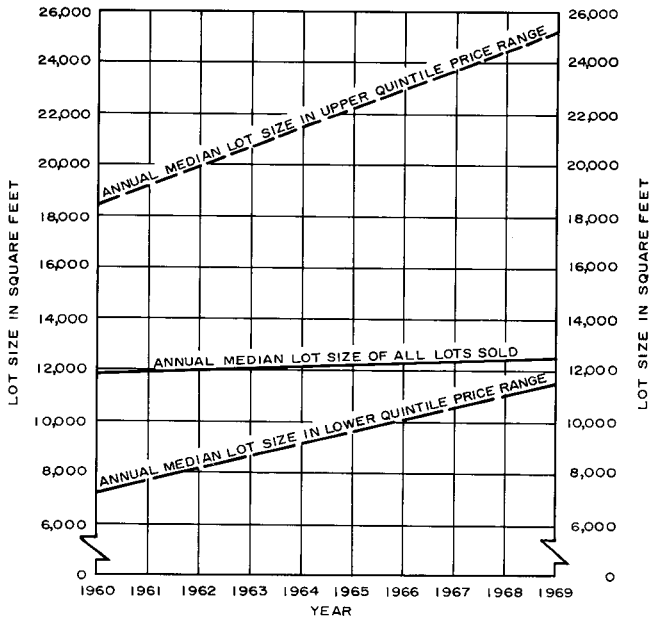


[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN LOT SIZE DATA.
[b] LOTS SERVED BY CENTRALIZED PUBLIC OR PRIVATE SANITARY SEWERAGE SERVICE FACILITIES.
[c] SEE MAP 29 FOR DELINEATION OF URBAN AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

Figure 46

LOT SIZE TRENDS[a] FOR FULLY IMPROVED LOTS[b] IN THE SUBURBAN AREAS[c] OF THE REGION 1960-1969



[a] THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN LOT SIZE DATA.
[b] LOTS SERVED BY CENTRALIZED PUBLIC OR PRIVATE SANITARY SEWERAGE SERVICE FACILITIES.
[c] SEE MAP 29 FOR DELINEATION OF SUBURBAN AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

As in the case of partially improved lots, a review of Figures 42 through 44 clearly indicates that fully improved lot prices have far surpassed the 21 percent increase in the City of Milwaukee CPI for the same period. If trends in both partially and fully improved lot prices continue as they have in the 1960-1969 time period, more and more households may be expected to be priced out of the market for new single-family homes.

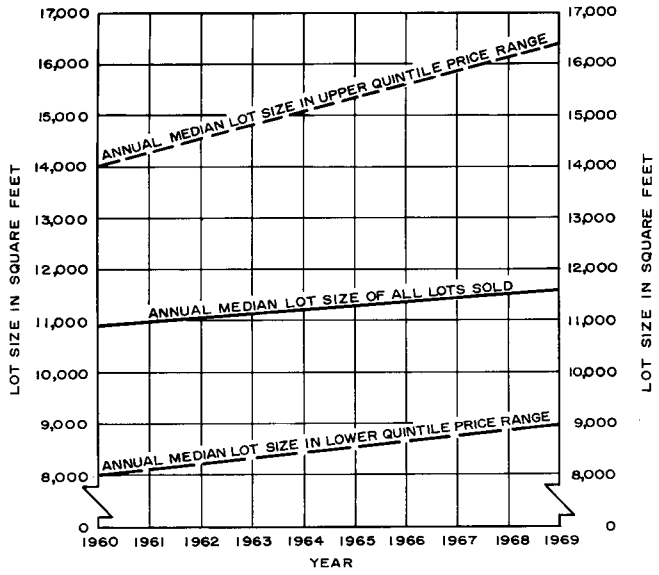
Construction Costs

This section presents those construction costs typically related to conventionally constructed single-family housing. It should be noted that builders of conventionally constructed single-family housing in the Region do not themselves directly hire all of the necessary labor or directly purchase all of the required materials; rather, builders generally subcontract[8] for specific construction components of housing such as plumbing, heating, and carpentry. Subcontractors are then paid on an individual

[8] *Subcontractors are independent businesses, hired by the builder, which submit bills for services and materials rendered to the builder for payment.*

Figure 47

LOT SIZE TRENDS[a] FOR FULLY IMPROVED LOTS[b] IN THE OTHER AREAS[c] OF THE REGION 1960-1969



[a]THE METHOD OF LEAST SQUARES WAS USED TO DERIVE A STRAIGHT LINE FIT TO ANNUAL MEDIAN LOT SIZE DATA.
[b]LOTS SERVED BY CENTRALIZED PUBLIC OR PRIVATE SANITARY SEWERAGE SERVICE FACILITIES.
[c]SEE MAP 29 FOR DELINEATION OF OTHER AREAS.

Source: Wisconsin Department of Revenue, Office of the Supervisor of Assessments; and SEWRPC.

basis for their work and materials provided. Since precise dollar figures categorized by labor, materials, overhead, or profit for specific subcontracted housing components are not available on a uniform, areawide basis, it is very difficult to establish precise dollar figures for the proportion of total housing construction costs over time by separate labor and material component items. Specific data concerning trends for various labor wage rates and materials related to the construction of single-family houses, however, are available over time, and such data will be presented in the following section to provide the reader with an understanding of the relative cost increases experienced for labor and materials. Also, more importantly, in an effort to evaluate the relative increases in the cost of a new single-family house to the housing consumer, the cost trends of a selected single-family house by specific construction and related cost components will be presented in this section.

Factors Influencing Construction Costs: Besides the obvious direct effect of changing labor and material prices, housing construction costs, like the costs of residential land, are influenced by a variety of factors which are relatively unique to the provision of single-family housing as opposed to other types of construction. Single-family housing, because of its individual design and generally "stick-built" construction process, does not lend itself as readily to the repetitions or continuous type of construction which may be applicable to large multi-family housing projects.

Housing construction costs are also affected by local building codes which often cause overall costs to vary from community to community, since materials and methods of construction required by the local building codes are not uniform. Recent changes in state and local building codes have permitted the use of new, cost-cutting materials such as plastic drain pipe and plastic covered electrical wire, but even though code provisions are changed to permit such materials and methods, accompanying cost savings are not always quickly realized either because the new materials are not utilized by subcontractor tradesmen or the cost savings are not passed on to the consumer.

Although the construction season has been extended with the development of portable heaters and the use of temporary plastic windscreens, weather and climate still have an important influence on housing construction. Most builders utilize a construction contract document which permits them to pass price increases in labor and materials to the consumer when such increases occur as a result of a lengthened building period caused by inclement weather conditions.

Finally, mortgage credit requirements, down payment ratios, and interest rates fluctuate with the national monetary situation, often irrespective of local residential construction financing needs, and also directly affect the quantity and cost of housing construction.

Construction Labor Compensation Rates: The cost of labor primarily utilized at the site in the construction of conventionally built housing represents a significant portion of the total cost of housing.[9] The kinds of labor skills necessary in the construction of conventionally built single-family housing determine the cost of labor; therefore, the hourly compensation rates of 10 of the most utilized types of tradesmen were inventoried based on the jurisdiction of each local union involved. Compensation data are presented for four distinct geographic areas: Kenosha County; Milwaukee, Ozaukee, Washington, and Waukesha Counties; Racine County; and Walworth County.

The hourly compensation rates of the 10 selected building trades were obtained for the period from 1960 through 1969, for which data were available.[10] It was found that

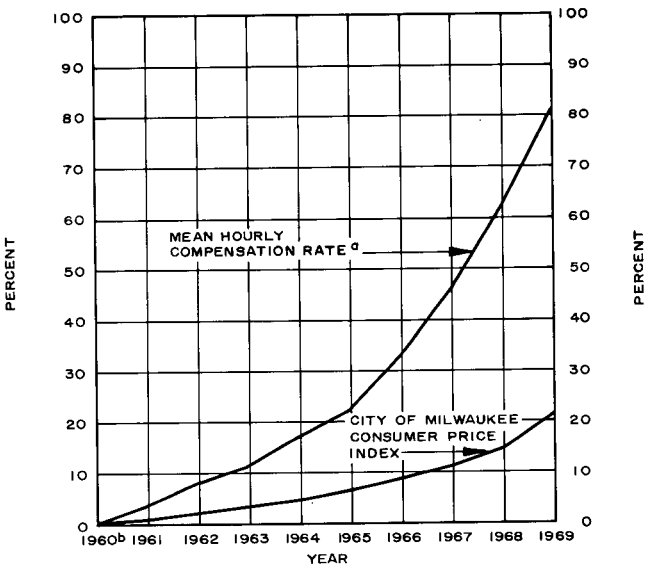
[9] *From data obtained from the Metropolitan Builders' Association of Greater Milwaukee, it was estimated that in 1969, 25 percent, or $8,700, of the average package price of a $34,800 new house and lot was attributable to onsite labor.*

[10] *The compensation rates were collated from the series of publications of the Wisconsin Department of Industry, Labor, and Human Relations entitled Collectively Bargained Wage Rates in Wisconsin Building Construction.*

the hourly rates were generally higher for Milwaukee, Ozaukee, Washington, and Waukesha Counties, the counties that comprise the Milwaukee Standard Metropolitan Statistical Area (SMSA), than for the remaining counties in the Region (see Tables 95 through 98). A comparison of the hourly rate increases from 1965 to 1969, as shown in Tables 95 through 98, indicates that of the 10 selected trades, the mean hourly rates for Racine County increased the most, from $4.36 per hour in 1965 to $6.83 per hour in 1969, or an increase of nearly 57 percent. Walworth County mean hourly rates increased the least, from $4.20 in 1965 to $6.39 in 1969, or 52 percent. The rate increases for each trade varied more widely during this time period than the mean hourly rates by county. The largest increase, 70 percent, was attributed to the plumbers in Walworth County, whose hourly rate increased from $4.18 per hour in 1965 to $7.10 in 1969. The roofers in Walworth County had the smallest percentage increase in pay, with a salary including benefits, of $5.40 per hour in 1969, up 29 percent from their 1965 hourly rate of $4.20. The hourly rates in 1969 ranged from a high of $7.96 for plumbers in Kenosha County to a low of $5.40 received by roofers in Walworth County. As indicated in Tables 95 through 98, the City of Milwaukee CPI increased far less than the hourly rate of most of these trades. For example, between 1960 and 1970, while the City of Milwaukee CPI increased more than 21 percent, the building trade in the Milwaukee SMSA with the smallest hourly rate increase received a pay increase of slightly over 75 percent. The mean hourly rate for the 10 selected trades in the Milwaukee SMSA, however, increased 91 percent during this period.

Figure 48

COMPARISON OF PERCENTAGE INCREASES IN THE AVERAGE (MEAN) HOURLY COMPENSATION RATE OF THE BUILDING TRADES IN THE REGION WITH THE CITY OF MILWAUKEE CONSUMER PRICE INDEX 1960-1969



[a]INCLUDES ALL BENEFITS SUCH AS HEALTH AND WELFARE, VACATION, RETIREMENT FUND, AND OTHER CONTRIBUTIONS, BUT NOT EMPLOYER'S COSTS FOR SOCIAL SECURITY, UNEMPLOYMENT COMPENSATION, AND WORKMEN'S COMPENSATION INSURANCE.

[b]IN THE PERIOD 1960 THROUGH 1963, THE PERCENTAGE INCREASE REPRESENTS MILWAUKEE SMSA ONLY, SINCE DATA FOR OTHER AREAS WERE NOT AVAILABLE.

Source: Wisconsin Department of Industry, Labor, and Human Relations; Milwaukee Building and Construction Trades Council; U. S. Bureau of Labor Statistics; and SEWRPC.

Figure 48 illustrates the trend in the building trade hourly compensation from Tables 95 through 98 compared to the trend in the City of Milwaukee Consumer Price Index. It is apparent that the 81 percent increase in mean hourly rates of the building trades throughout the Region has far surpassed the 21 percent increase in the Milwaukee CPI for the same period. As indicated in Table D-1 of Appendix D, hourly compensation rates have continued to increase. This increase has approximated 21 percent for the period 1969 through 1972, compared with an approximately 13 percent increase in the City of Milwaukee CPI for this same period. If trends in these compensation rates continue, it will become increasingly difficult for households, especially lower income households, to afford new housing unless the increase in compensation rates is offset by increases in productivity.

It should be noted that nonunion wages were not included in this inventory because most of the residential construction within the Region utilizes union labor, and because nonunion labor hourly rate data were not obtainable on a uniform, areawide basis.

Construction Material: The cost of materials required to construct single-family housing also represents a significant portion of the total cost of housing construction.[11] The most useful source of comparable price change data for construction materials was found to be the Construction Materials Wholesale Price Index,[12] published by the U. S. Bureau of Labor Statistics. This index provides average annual index numbers which tend to smooth the relatively extreme intrayear price fluctuations of construction materials which plague the housing construction industry.

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[11] *From data obtained from the Metropolitan Builders' Association of Greater Milwaukee, it was estimated that in 1969, 36 percent, or $12,600, of the average package price of a $34,800 new house and lot was attributable to materials.*

[12] *The Construction Materials Wholesale Price Index is the official index published by the U. S. Department of Labor, Bureau of Labor Statistics, and is designed to measure average price changes of all commodities sold in primary markets of the United States, whether manufactured here or imported.*

Table 95

HOURLY COMPENSATION RATES OF SELECTED BUILDING TRADES IN MILWAUKEE, OZAUKEE, WASHINGTON, AND WAUKESHA COUNTIES: 1960, 1965, AND 1969

Trade	Hourly Compensation Rate[a]			Percent Change		
	1960	1965	1969	1960-1965	1965-1969	1960-1969
Bricklayer	$4.12	$4.96	$7.84	20.4	58.1	90.3
Building Laborer	3.09	3.93	6.40	27.2	62.8	107.1
Carpenter	3.87	4.71	7.25	21.7	53.9	87.3
Cement Mason	3.60	4.44	6.99	23.3	57.4	94.2
Electrician	4.02	5.05	7.28	16.7	55.2	81.1
Painter (Brush)	3.62	4.48	7.08	23.8	58.0	95.6
Plumber	3.98	5.21	7.83	30.9	50.3	96.7
Roofer	3.68	4.52	7.06	22.8	56.2	91.8
Sheet Metal Worker	3.89	4.79	7.54	23.1	57.4	93.8
Tile Setter	3.87	4.71[b]	6.80	21.7	44.4	75.7
Mean Hourly Rate	$3.77	$4.68	$7.21	24.1	54.1	91.2

	CPI			Percent Change		
	1960	1965	1969	1960-1965	1965-1969	1960-1969
City of Milwaukee Consumer Price Index (CPI)[c]	101.8	108.2	123.6	6.3	14.2	21.4

[a] *The figures shown include all benefits, health and welfare fund contributions, vacation, pension, and other benefits, but not employer's costs for social security, unemployment compensation, and workmen's compensation insurance.*

[b] *In 1965, the rate shown did not apply in the northern portions of Ozaukee and Washington Counties because these areas were under the jurisdiction of a local union located outside the Region.*

[c] *Based on the annual average index number for each applicable year.*

Source: Wisconsin Department of Industry, Labor, and Human Relations; Milwaukee Building and Construction Trades Council; U. S. Bureau of Labor Statistics; and SEWRPC.

It is apparent from Table 99 that, except for 1961 and 1962, during which time the index showed a decline in material prices while the Milwaukee CPI prices increased, both indices moved upward every year during the decade. A comparison of the annual percentage changes in index number of these two indices, however, indicates that the indices' annual percent changes are never exactly the same. Although the annual percent changes in the Construction Materials Wholesale Price Index fluctuated more than the percent changes in the City of Milwaukee CPI, construction material wholesale prices increased by 17 percent from 1960 through 1969 compared to a 21 percent increase in the cost of living over this period. It is important to note the significant increases in the annual rates of change for both indices which initially occurred in 1968 and continued in 1969 as compared with the annual rate of change of previous years.

Further increases occurred in the Construction Materials Wholesale Price Index (CMWPI) from 1969 through 1972 as indicated in Table D-2 of Appendix D. During this period, the CMWPI advanced 14 percent, which was slightly greater than the 13 percent rise in the City of Milwaukee CPI.

Total Construction Costs of Single-Family House: The cost trends presented in the two previous sections provide data dealing with specific construction compensation rates and construction materials. The trends in these individual costs are important and directly affect the cost of housing, but of particular interest and importance to the housing consumer are trends in the total cost of the completed housing structure, since the structure generally accounts for a greater percentage of the cost of a total housing package.

Table 96

HOURLY COMPENSATION RATES OF SELECTED BUILDING TRADES IN KENOSHA COUNTY
1963, 1965, AND 1969

Trade	Hourly Compensation Rate[a]			Percent Change		
	1963	1965	1969	1963-1965	1965-1969	1963-1969
Bricklayer	$4.45	$4.85	$7.80	9.0	60.8	75.3
Building Laborer	3.50	3.70	5.80	5.7	56.8	65.7
Carpenter	4.15	4.50	7.25	8.4	61.1	74.7
Cement Mason	4.00	4.35	6.80	8.8	56.3	70.0
Electrician	4.39	4.55	7.17	3.6	57.6	63.3
Painter (Brush)	3.70	4.15	5.70	12.2	37.3	54.1
Plumber	4.38	4.88	7.96	11.4	63.1	81.7
Roofer	4.00	4.33	6.38	8.3	47.3	59.5
Sheet Metal Worker	4.13	4.33	6.78	4.8	56.6	64.2
Tile Setter	4.23[b]	4.67	6.63	10.4	42.0	56.7
Mean Hourly Rate	$4.09	$4.43	$6.83	8.3	54.2	67.0

	CPI			Percent Change		
	1963	1965	1969	1963-1965	1965-1969	1963-1969
City of Milwaukee Consumer Price Index (CPI)[c]	104.9	108.2	123.6	3.2	14.2	17.8

[a] *The figures shown include all benefits, health and welfare fund contributions, vacation, pension, and other benefits, but not employer's costs for social security, unemployment compensation, and workmen's compensation insurance.*

[b] *In 1963 some tile setters in Kenosha County were members of the union local based in Milwaukee County and others were members of the union local based in Racine.*

[c] *Based on the annual average index number for each applicable year.*

Source: Wisconsin Department of Industry, Labor, and Human Relations; U. S. Bureau of Labor Statistics; Selected Kenosha County tile contractors; and SEWRPC.

Table 100 presents a cost comparison of specific construction components for a selected single-family house for the period 1960 to 1969. The table indicates the relative changes in fees, specific labor costs, and material costs; combined labor-material costs for subcontracted components; and builder's overhead and profit. It should be noted that the housing consumer generally pays all these costs indirectly through the builder, but he can reduce or eliminate some of them if he furnished his labor and materials for a particular component, such as painting, which many purchasers of new housing are able to do themselves. It should be noted that the 1960-1969 increase of 67 percent in the cost of carpentry labor, the only specific labor component shown in Table 100, is somewhat lower than the 87 percent increase in carpentry labor rates shown in Tables 95 through 98. This difference may be accounted for by increases in productivity of onsite carpentry labor and/or by shifts from higher cost onsite labor to lower cost offsite labor, which would tend to increase the cost of materials since offsite labor costs are included in the cost of materials. It is clearly indicated in Table 100 that a house is a very complex consumer product, involving more than 25 separate component cost items which incurred widely differing price changes during 1960-1969 time period. At the extreme ends of these price change differences are the cost of the building permit, which increased almost 119 percent, and the cost of the call-back and cleanup, which decreased almost 11 percent. The 34 percent overall average increase in component costs for this housing model was still considerably greater than the 21 percent increase in the City of Milwaukee Consumer Price Index for the same period.

Table 97

HOURLY COMPENSATION RATES OF SELECTED BUILDING TRADES IN RACINE COUNTY
1963, 1965, AND 1969

Trade	Hourly Compensation Rate[a]			Percent Change		
	1963	1965	1969	1963-1965	1965-1969	1963-1969
Bricklayer	$4.35	$4.70	$7.80	8.0	66.0	79.3
Building Laborer	3.40	3.68	6.13	8.2	66.6	80.3
Carpenter[b]	4.12	4.42	7.22	7.3	63.3	75.2
Cement Mason	3.75	4.33	6.68	15.5	54.3	78.1
Electrician	4.39	4.55	6.97	3.6	53.2	58.8
Painter (Brush)	3.70	4.00	5.70	8.1	42.5	54.1
Plumber	4.25	4.60	7.75	8.2	68.5	82.4
Roofer	4.00	4.33	6.38	8.3	47.3	59.5
Sheet Metal Worker	4.13	4.33	6.78	4.8	56.6	64.2
Tile Setter	4.23	4.70	6.85	11.1	45.7	61.9
Mean Hourly Rate	$4.03	$4.36	$6.83	8.2	56.7	69.5

	CPI			Percent Change		
	1963	1965	1969	1963-1965	1965-1969	1963-1969
City of Milwaukee Consumer Price Index (CPI)[c]	104.9	108.2	123.6	3.2	14.2	17.8

[a] *The figures shown include all benefits, health and welfare fund contributions, vacation, pension, and other benefits, but not employer's costs for social security, unemployment compensation, and workmen's compensation insurance.*

[b] *Walworth County rates apply to that portion of Racine County which is west of IH 94.*

[c] *Based on the annual average index number for each applicable year.*

Source: Wisconsin Department of Industry, Labor, and Human Relations; U. S. Bureau of Labor Statistics; Selected Racine County tile contractors; and SEWRPC.

It should be noted that Table D-3 of Appendix D shows an even greater disparity between the increase in the component costs for this housing model and the City of Milwaukee CPI. During the 1969-1972 period, the housing model cost increased over 27 percent, while the City of Milwaukee CPI increased less than 13 percent.

Cost of the Total Housing Package to the Consumer

Cost trend data for unimproved land, and development costs as well as trends in construction labor compensation rates and materials as they affect the cost of a new conventionally constructed single-family house, are documented in Figures 36 and 37 and Tables 94 through 100. The final section of this portion of the chapter will combine the cost trend data related to partially and fully improved residential lots in urban, suburban, and other areas of the Region with the cost trend data related to a new, conventionally constructed single-family house in an attempt to provide the reader with an indication of cost trends to the consumer for a total housing package.

In addition to the housing package costs of land and the housing structure itself, certain additional costs required in the purchase of the housing package will also be presented in this section. These additional costs can be grouped into two general categories: costs related to construction financing of the housing unit, and costs related to the provision of necessary water and sewerage service facilities directly to the housing unit. Because of the usually large sum of money required for the purchase of a new single-family house and lot, most households must secure financing. Financing costs for a conventionally constructed single-family home generally include, but are not limited to, loan application fees, credit check,

Table 98

HOURLY COMPENSATION RATES OF SELECTED BUILDING TRADES IN WALWORTH COUNTY 1963, 1965, AND 1969

Trade	Hourly Compensation Rate[a]			Percent Change		
	1963	1965	1969	1963-1965	1965-1969	1963-1969
Bricklayer	$4.18	$4.58	$7.15	9.6	56.1	71.1
Building Laborer	3.12	3.44	5.67	10.3	64.8	81.7
Carpenter	3.81	4.25	6.05	11.5	42.4	58.8
Cement Mason	4.18	4.58	6.50	9.6	41.9	55.5
Electrician	3.96	4.16	6.63	5.1	59.4	67.4
Painter (Brush)	3.38	3.66	5.51	8.3	50.5	63.0
Plumber	3.88	4.18	7.10	7.7	69.9	83.0
Roofer	3.90	4.20	5.40	7.7	28.6	38.5
Sheet Metal Worker	4.13	4.33	6.78	4.8	56.6	64.2
Tile Setter	4.27[b]	4.58	7.15	7.3	56.1	67.4
Mean Hourly Rate	$3.88	$4.20	$6.39	8.2	52.1	64.7

	CPI			Percent Change		
	1963	1965	1969	1963-1965	1965-1969	1963-1969
City of Milwaukee Consumer Price Index (CPI)[c]	104.9	108.2	123.6	3.2	14.2	17.8

[a] *The figures shown include all benefits, health and welfare fund contributions, vacation, pension, and other benefits, but not employer's costs for social security, unemployment compensation, and workmen's compensation insurance.*

[b] *This rate applied primarily to the City of Elkhorn area. The rate that prevailed in the eastern part of the county was based on the Racine County union scale.*

[c] *Based on the annual average index number for each applicable year.*

Source: Wisconsin Department of Industry, Labor, and Human Relations; U. S. Bureau of Labor Statistics; Selected Walworth County tile contractors; and SEWRPC.

survey, appraisal fee, title policy, construction draw administration fees, interest on funds loaned during the construction period, and any additional closing cost fee charged by the lending institution.

Also essential to the occupancy of a newly constructed home, but not generally part of the housing structure costs, are the costs of service laterals for public sanitary sewerage and water supply facilities for fully improved lots or the provision of individual wells and onsite sewage disposal systems for partially improved lots. Both the construction financing costs and water and sewerage service facilities costs are additional expenses which are usually borne by the housing consumer and can be considered as part of the total housing package price of a new single-family lot and house. The total package costs, i.e., lot, house, and other costs, for a new housing unit located on a fully improved lot in the urban, suburban, or other areas of the Region or on a partially improved lot in the suburban or other areas of the Region for the years 1960 and 1969 are presented in Table 101.

Inasmuch as the same housing unit costs and house service lateral costs were assumed within each area, variation in the cost of the total housing package is due solely to variations in lot costs and construction financing costs among the areas. As indicated in Table 101, in both 1960 and 1969 the cost of the total housing package on a fully improved lot was significantly higher in the urban and suburban areas of the Region than in the other area of the Region. Thus, in 1969 the average cost of the total housing package to the consumer in the three areas of the Region was as follows: urban, $27,550; suburban, $28,270; and other, $24,540. From further examination of Table 101, it is clear that the higher package price in the Region's urban and suburban areas is, for the most

Table 99

COMPARISON OF CHANGES IN THE CONSTRUCTION MATERIALS WHOLESALE PRICE INDEX FOR THE UNITED STATES WITH CHANGES IN THE CITY OF MILWAUKEE CONSUMER PRICE INDEX: 1960-1969

Year	Construction Materials Wholesale Price Index		City of Milwaukee Consumer Price Index[a]	
	Average	Annual Percent Change	Average	Annual Percent Change
1960	100.5	--	101.8	--
1961	98.6	- 1.9	102.5	0.7
1962	98.3	- 0.3	103.9	1.4
1963	98.5	0.2	104.9	1.0
1964	99.6	1.1	106.0	1.0
1965	100.8	1.2	108.2	2.1
1966	103.9	3.1	110.6	2.2
1967	105.2	1.3	112.9	2.1
1968	111.1	5.6	116.8	3.5
1969	117.7	5.9	123.6	5.8
1960-1969	--	17.1	--	21.4

[a]*Based upon annual average index numbers.*

Source: U. S. Bureau of Labor Statistics and SEWRPC.

part, a result of higher lot prices in those areas. In fact, in 1969 the median price of a fully improved lot in the urban and suburban areas of the Region was approximately twice as high as the price of a fully improved lot in the other areas of the Region.

As further indicated in Table 101, the increase between 1960 and 1969 in the total package price of a housing unit located on a fully improved lot was relatively high in the suburban area of the Region (47 percent) compared to increases observed in the Region's urban area (41 percent) and other outlying area (39 percent). While the cost of the housing unit increased by 35 percent between 1960 and 1969, the more rapid increases in the cost of construction financing, the cost of house service laterals, and, more importantly, the cost of a fully improved lot resulted in a somewhat higher percentage increase in the total package price to the consumer in each area. In particular, the unusually high increase of almost 90 percent in the cost of a fully improved lot in the suburban area caused the total package price in that area to increase at a faster rate than in the urban and other areas of the Region.

The total package price of a housing unit located on a partially improved lot is also presented for suburban and other areas of the Region for 1960 and 1969 in Table 101. Although the same housing unit costs and generally the same construction financing costs were assumed throughout Table 101, within each area the package price for a housing unit located on a fully improved lot differs from the package price for a housing unit located on a partially improved lot because of varying lot costs and varying costs related to the provision of water and sewerage facilities.

As shown in Table 101, in the suburban areas of the Region, because the cost of a partially improved lot is substantially less than the cost of a fully improved lot, the total package price of a housing unit located on a partially improved lot ($26,430) was significantly lower than the package price of a housing unit on a fully improved lot ($28,270) in 1969, despite the additional cost of installing a well and onsite sewage disposal system on the partially improved lot. In the other area of the Region, however, the package price of a housing unit located on a fully improved lot was actually less than the package price for a unit located on a partially improved lot because the savings derived from the purchase of a partially improved lot was surpassed by the extra expenditure required for a well and an onsite sewage disposal system.

Clearly, the data in Table 101 indicate that the costs of purchasing a complete new housing package have increased significantly during the 1960-1969 period. In addition, new housing package costs were found to have increased at even faster rates from 1969 through 1972, with new housing in urban areas increasing over 27 percent while housing in suburban areas increased over 29 percent. These rapid increases in the costs of new housing packages were more than twice the 13 percent increase in the City of Milwaukee CPI for this same period (see Table D-4 of Appendix D). The costs related to the lot, the house, construction financing, and the provision of necessary sewerage and water facilities have all increased faster than the increase in the City of Milwaukee Consumer Price Index, making it increasingly more difficult for households, especially low- and moderate-income households, to acquire adequate decent, safe, and sanitary housing.

COSTS OF OCCUPYING NEW HOUSING

While the preceding section of this chapter dealt with the trends in those cost elements which are part of the total cost involved in the production of single-family housing for the consumer, it is the intent of this portion of the chapter to emphasize the cost of occupying new housing, and to identify and present cost trends for the principal cost elements which comprise monthly occupancy costs. Since it is generally understood that most purchasers of new single-family housing obtain mortgage loans and consequently incur an obligation to make monthly payments, and since the only alternative to obtaining new housing would be to rent housing and thereby also incur an obligation to make monthly rental payments, trends in the monthly costs pertaining to the occupancy of new single-family housing and multifamily housing are included herein. The principal occupancy costs included for single-family housing are mortgage financing, property taxes, utility services, prorated costs of maintenance and repair, opportunity cost of money, and property insurance

Table 100

COMPARISON OF COMPONENT COST ITEMS OF THE STRUCTURE PRICE FOR A SELECTED HOUSING MODEL[a] IN THE REGION: 1960 AND 1969

Component Item	Cost		Percent Change 1960-1969
	1960	1969	
Survey	$ 45	$ 60	33.3
Permit	32	70	118.8
Excavate, Grade, Backfill	215	275	27.9
Masonry and Cement	1,695	2,100	23.9
Iron Work	101	125	23.8
Carpenter Labor	1,405	2,350	67.3
Lumber	2,025	2,500	23.5
Millwork	1,265	1,500	18.6
Cabinets	345	430	24.6
Counter Top Finish	125	165	32.0
Aluminum Storms and Screens	245	285	16.3
Floor Sanding and Finishing	101	125	23.8
Hardware—Rough, Finish, and Medicine Cabinet	125	150	20.0
Roofing—Labor and Material	205	265	29.3
Plumbing	1,365	1,825	33.7
Heating and Sheet Metal	595	740	24.4
Electrical Wiring	505	710	40.6
Electrical Fixtures	75	100	33.3
Insulation	165	185	12.1
Dry Wall	850	1,105	30.0
Weather Stripping	28	50	78.6
Tile Work-Ceramic	80	130	62.5
Linoleum and Floor Tile	180	225	25.0
Painting	690	940	36.2
Call-Back Service and Cleanup	140	125	- 10.7
Plans and Specifications	115	125	8.7
Builder's Overhead and Profit[b]	1,910	2,999	50.7
Total	$14,627	$19,659	34.4
City of Milwaukee Consumer Price Index[c]	--	--	21.4

[a]*One and one-half story Cape Cod style house, conventional frame construction, 1,560 square feet, with full basement, living room, kitchen, four bedrooms, one and one-half bathrooms, and no garage.*

[b]*Includes builder's profit, employer's social security contribution, overhead, workmen's compensation insurance, real estate sales commissions, advertising, and miscellaneous expenses.*

[c]*Based upon annual average index numbers.*

Source: Milwaukee Chapter of the Society of Real Estate Appraisers and SEWRPC.

costs. The principal occupancy costs which concern the consumer of new multifamily housing, however, include only three elements: rent, utility service, and personal property insurance. The rent portion provides revenue to the property owner, who is obligated to pay those costs not paid for directly by tenants, namely mortgage financing, property taxes, utilities, maintenance, and insurance. The occupancy cost elements for single-family and multifamily housing are presented in the next two sections, entitled "Costs of Occupying New Single-Family Housing" and "Costs of Occupying New Multifamily Housing."

Costs of Occupying New Single-Family Housing

As previously indicated, six principal cost elements comprise the total monthly cost of occupying new single-family housing. In order to assist in the presentation of trends in the monthly occupancy costs of new single-family housing, the occupancy cost figures were compiled for the alternative new housing package as indicated in Table 101 of this chapter. These alternative housing packages consist of a new house on a fully improved lot in the urban, suburban, or other outlying areas of the Region, and a new house on a partially improved lot in

Table 101

COMPARISON OF MAJOR COST ELEMENTS OF PURCHASING A COMPLETE NEW HOUSING PACKAGE BY GEOGRAPHIC AREA IN THE REGION: 1960 AND 1969

Cost Elements of Housing Package On Fully Improved Lot	Geographic Area								
	Urban[a]			Suburban[a]			Other[a]		
	1960	1969	Percent Change 1960-1969	1960	1969	Percent Change 1960-1969	1960	1969	Percent Change 1960-1969
Lot[b]	$ 4,100	$ 6,500	58.5	$ 3,800	$ 7,200	89.5	$ 2,300	$ 3,500	52.2
House[c]	14,600	19,700	34.9	14,600	19,700	34.9	14,600	19,700	34.9
Other									
Construction Financing[d]	420	750	78.6	420	770	83.3	400	740	85.0
House Service Laterals[e]	400	600	50.0	400	600	50.0	400	600	50.0
Total	$19,520	$27,550	41.1	$19,220	$28,270	47.1	$17,700	$24,540	38.6

Cost Elements of Housing Package On Partially Improved Lot	Geographic Area					
	Suburban[a]			Other[a]		
	1960	1969	Percent Change 1960-1969	1960	1969	Percent Change 1960-1969
Lot[f]	$ 2,300	$ 4,000	73.9	$ 900	$ 2,800	211.1
House[c]	14,600	19,700	34.9	14,600	19,700	34.9
Other						
Construction Financing[d]	410	730	78.0	390	710	82.1
Well and Onsite Sewage Disposal System	1,100	2,000	81.8	1,100	2,000	81.8
Total	$18,410	$26,430	43.6	$16,990	$25,210	48.4
City of Milwaukee Consumer Price Index[g]	Percent Change—1960-1969: 21.4					

[a] *Based upon geographic area delineated on Map 29.*

[b] *Based on overall median lot price for fully improved lots as indicated in Figures 42-44.*

[c] *Based on price for Cape Cod style model house as indicated in Table 100.*

[d] *Includes service charge; interest on construction loan; and closing costs, which include such items as appraisal fees, survey fees, title insurance, attorney fee, recording fees, and loan application and credit check fees.*

[e] *Includes water and sewer service laterals.*

[f] *Based on overall median lot price for partially improved lots as indicated in Figures 38 and 39.*

[g] *Based on average annual index numbers.*

Source: Milwaukee Chapter of the Society of Real Estate Appraisers; The Journal Company; U. S. Bureau of Labor Statistics; and SEWRPC.

the suburban or other outlying areas within the Region. The 1960-1969 trends in the monthly occupancy cost of mortgage financing, property taxes, utilities, maintenance, opportunity cost of money, and property insurance compiled for the five alternative housing packages are presented in Table 102 and will be individually discussed in the following sections.

Finance Costs: Housing finance costs are important not only in the production of new housing but also with regard to the ability of most consumers to purchase new or existing housing. Unlike any other area of consumer expenditure, people generally borrow money to buy or build housing, primarily because of the high cost of housing relative to the costs of other necessary goods and

services. The cost of money, such as interest rates and other charges levied on borrowers, and the supply of money are, therefore, extremely important to the residential construction industry.

Local housing demand is strongly influenced by the level of the national demand for credit for all purposes, such as consumer loans for automobiles, appliances, and furniture; commercial loans for new plant and equipment and accounts receivable financing; and borrowing by the various levels of government for such items as military hardware, roads and streets, sewage treatment plants, and schools. When national demand for credit for all purposes increases, the long-term cost of purchasing housing increases in terms of higher levels of monthly payments resulting from higher interest rates. The real estate industry, therefore, must compete for available financial resources that flow into other segments of the national economy which can better afford the higher costs of money. This latter economic phenomenon, which may cause an extreme shortage of money for mortgage loans, particularly for lower income persons with low down payments, is beyond the control of mortgage lenders and state and local governments, and often cannot be controlled by the federal government.[13]

Mortgage loans are available for new housing from a variety of sources, such as savings and loan associations, commercial banks, mortgage banking firms, life insurance companies, and individual lenders. Repayment costs of mortgage loans vary considerably, and can be affected by many factors, including, but not limited to, the prevailing interest rate, the amount of the down payment, and the length of time of loan repayment. Repayment costs of mortgage loans which are insured by the Federal Housing Administration, guaranteed by the Veterans Administration, or privately insured by mortgage insurance companies for the benefit of lenders are also affected, since an insurance premium required as part of the mortgage must be paid by the borrower. It is apparent that many mortgage financing alternatives are available to borrowers seeking mortgage loans, but for purposes of compiling the monthly mortgage finance costs in this report, it was assumed that the new house buyer would provide a 20 percent down payment for a conventional uninsured mortgage loan from a savings and loan association, since these mortgage terms were the most widely used in the Region during the 1960-1969 period. (Appendix E provides mortgage financing information concerning 1960 -1969 trends in the rates of interest, down payment requirements, term of loan, closing costs, and discount rates for the three major types of mortgage lenders.) For a more detailed presentation of the impact various financing terms have on the monthly mortgage payment, see Chapter VIII, "Financing Housing."

In 1960, the prevailing mortgage terms from a savings and loan association were a 6.50 percent interest rate for a 25-year mortgage with a 20 percent down payment. From the same type of lender in 1969, however, the interest rate was conservatively estimated to be 8.25 percent for a 25-year mortgage with a 20 percent down payment. The interest rate, therefore, advanced almost 27 percent. It should be noted that for purposes of compiling monthly finance costs for this report, the length of occupancy and, therefore, actual duration of the mortgage loan were assumed to be seven years, which is the average length of time that conventional mortgages are outstanding. In addition, since interest paid on a mortgage is deductible from the mortgagor's adjusted gross income for personal income tax purposes, a 20 percent savings was assumed on the interest amount. The interest data shown in this chapter as an occupancy cost, therefore, are less this income tax savings.

Given a rise in interest rates in conjunction with the increased housing package cost between 1960 and 1969, Table 102 clearly shows substantial increases in the amount of interest payment and slight increases in the amount of principal payment required to purchase the same model house in 1969 as in 1960. While interest payments for the various housing packages in 1960 ranged from about $55 to $63 per month, these costs increased by between 78 and 91 percent in the time period, so that by 1969, interest payments ranged from $102 to $118 per month. Principal payment increases over the same time period ranged from 12 percent, or from $23.87 to $26.72 per month, to almost 20 percent, or from $22.92 to $27.44 per month. This means that of the larger monthly payments of principal and interest in 1969, proportionately less was going toward the repayment of the loan. The occupant would, therefore, accumulate less equity in his house during a seven-year occupancy period under the terms of the 1969 mortgage than under the terms of the 1960 mortgage. A change in the rate of interest for mortgage loans, therefore, has a significant impact on the level of the monthly mortgage payment, and often is the deciding factor behind potential home buyers' ability to obtain mortgage financing. That is, lenders will not make loans if the monthly payment exceeds a selected percent of a family's gross income.

It should be noted that this percentage is established by the individual lenders and is adjusted to meet varying levels of availability of money for lending and different credit risks associated with particular types of residences and varying amounts of down payment. The impact of an additional 1 percent in the interest rate is shown in the following example. For a $20,000 mortgage loan at 6½ percent interest for a 25-year term, the mortgage payment for principal and interest would be $135.05 per month. Assuming lenders required that the monthly mortgage payment not exceed 25 percent of family income after income taxes, a family would have to earn $540 after income tax deductions in order to obtain this loan. Given these same loan terms and lending criteria but an interest rate of 7½ percent, the mortgage payment would be $147.80 per month, and the necessary family income, after taxes, would have to be about $592 per month, or nearly 10 percent greater than the $540 figure. It is apparent, then, that an additional 1 percent increase in

[13] *Sherman J. Maisal, "Money and Housing," Urban Land, Volume 30, No. 10, November 1971.*

Table 102

COMPARISON OF MONTHLY OCCUPANCY COSTS FOR NEW SINGLE-FAMILY HOUSING BY GEOGRAPHIC AREA IN THE REGION: 1960 AND 1969

Monthly Occupancy Costs	Housing on a Fully Improved Lot[a]									Housing on a Partially Improved Lot[b]					
	Geographic Area									Geographic Area					
	Urban			Suburban			Other			Suburban			Other		
	1960	1969	Percent Change 1960-1969	1960	1969	Percent Change 1960-1969	1960	1969	Percent Change 1960-1969	1960	1969	Percent Change 1960-1969	1960	1969	Percent Change 1960-1969
Financing[c]															
Principal	$ 26.34	$ 30.00	13.9	$ 25.93	$ 30.78	18.7	$ 23.87	$ 26.72	11.9	$ 24.82	$ 28.77	15.9	$ 22.92	$ 27.44	19.7
Interest[d]	63.30	115.03	81.7	62.33	118.04	89.4	57.40	102.46	78.5	59.70	110.36	84.9	55.10	105.26	91.0
Property Taxes[d,e]	34.51	63.66	84.5	31.09	55.24	77.7	29.17	51.50	76.6	26.51	48.63	83.3	23.71	43.92	85.2
Utilities[f]	23.09	27.48	19.0	23.09	27.48	19.0	23.09	27.48	19.0	23.09	27.48	19.0	23.09	27.48	19.0
Maintenance and Repair[g]	12.17	16.42	34.9	12.17	16.42	34.9	12.17	16.42	34.9	12.17	16.42	34.9	12.17	16.42	34.9
Opportunity Cost of Money[h]	13.17	23.19	76.1	12.97	23.78	83.3	11.97	20.69	72.8	12.43	22.28	79.2	11.50	21.28	85.0
Property Insurance[i]	2.51	5.31	111.6	2.51	5.31	111.6	2.51	5.31	111.6	3.41	7.22	111.7	3.41	7.22	111.7
Total	$175.09	$281.09	60.5	$170.09	$277.05	62.9	$160.18	$250.58	56.4	$162.13	$261.16	61.1	$151.90	$249.02	63.9
Cost of Housing Package[j]	$19,520	$27,550	41.1	$19,220	$28,270	47.1	$17,700	$24,540	38.6	$18,410	$26,430	43.6	$16,990	$25,210	48.4
City of Milwaukee Consumer Price Index[k]	Percent Change—1960-1969: 21.4														

[a] *This type of lot is served by a centralized public or private sewage treatment facility, usually includes hard-surfaced street with curb and gutter, and often includes sidewalks and street lighting.*

[b] *This type of lot requires an onsite soil absorption sewage treatment system and usually includes a hard-surfaced street only.*

[c] *Assumes a 20 percent down payment, a 6.50 percent interest rate, and 25-year term in 1960; an 8.25 percent interest rate and 25-year term in 1969; and an average ownership period of seven years.*

[d] *Property taxes and interest payments are deductible from adjusted gross income for income tax purposes. These items were, therefore, reduced by an assumed 20 percent income tax savings. Lower income families may realize smaller savings from the deduction of interest and property taxes than would higher income families.*

[e] *Based on median tax rates of communities for the alternatives presented.*

[f] *Includes natural gas and electric service based on average household consumption in 1960 and 1969.*

[g] *Based on assumed annual cost of 1 percent of the value of the housing structure only.*

[h] *Based on fact that down payment is lost for alternative investments. In computing the figures, a safe investment return of 4 percent in 1960 and 5 percent in 1969 was assumed.*

[i] *Based on appropriate fire rating in given geographic area and on Homeowners' Form II Policy.*

[j] *Cost for Cape Cod style house in the specified geographic area on the type of lot specified (see Table 101).*

[k] *Based on average annual index numbers.*

Source: U. S. Bureau of Labor Statistics and SEWRPC.

the interest rate, from 6½ to 7½ percent, requires almost a 10 percent increase in a family's income after taxes in order for them to obtain mortgage financing.

Real Property Taxes: Real property taxes are levied directly on property owners based upon the assessed value of their property, which is equal to, or a fractional part of, the market value of the property. Municipal and state government, school boards, and other authorized governmental agencies utilize the real property tax, which is one of the largest revenue sources within the state. (For a comprehensive presentation of real property tax data, see Chapter VI of this report.) It can be seen from Table 102 that property taxes represent the second most important occupancy cost after the interest payment of the house mortgage and are, therefore, of great importance to the housing consumer. This is particularly significant because property taxes vary by local taxing district and may affect the locational choice of purchasers of new housing. It should be noted that the monthly property tax amounts shown in Table 102 were based on the median local property tax rate of the communities in the urban, suburban, and other outlying areas of the Region for housing units on partially or fully improved lots. For both 1960 and 1969 it is apparent that property tax payments were the most costly for housing on a fully improved lot in the urban area ($34.51 and $63.66 respectively), and the least costly for housing on a partially improved lot in the other area of the Region ($23.71 and $43.92 respectively).

The wise house buyer will realize, however, that with the generally lower property taxes which accompany a housing unit on a partially improved lot there is usually a concomitant reduction in the quantity and/or quality of municipal services. As in the case of interest costs, property tax costs were reduced by 20 percent to reflect the income tax savings accrued to homeowners as a result of allowing real property taxes as a deductible item from adjusted gross income on individual income tax returns. Even considering this favorable income tax treatment, monthly property tax costs increased substantially in the 1960-1969 period,

ranging from a low rate of increase of about 77 percent, from $29.17 to $51.50 for housing on a fully improved lot in the other area of the Region, to a high rate of increase of over 85 percent, from $23.71 to $43.92 for housing on a partially improved lot in the other area of the Region. These increases are due not only to increased property tax rates, but also to the increased value of the housing packages themselves.

Utility Costs: Utility services are necessary costs of occupying housing in order to provide heat and light. For purposes of this report, utility services include electric service and the provision of natural gas. Although other forms of energy, such as oil and coal, are utilized to some extent, and a small percentage of housing units have no electric service, electric and gas services are utilized in almost all new housing. Although electric power costs per kilowatt hour of residential use declined 6 percent between 1960 and 1969 according to utility company sources, from $0.02224 to $0.02089 per kilowatt hour, average residential use increased more than 49 percent in the same period, from 4,010 kilowatt hours per year to 5,984 kilowatt hours per year. Utility company sources indicated that natural gas prices also decreased during this period by about 2 percent, while average residential use increased 11 percent, from 1,693 therms[14] in 1960 to 1,878 therms in 1969. Natural gas cost $0.111 and $0.109 per 100,000 Btu's in 1960 and 1969, respectively. These data were converted to monthly per household usage costs and are shown in Table 102. Because an average household consumption rate for gas and electric power was utilized, the cost of utility services increased 19 percent in all instances, regardless of geographic area, from $23.09 in 1960 to $27.48 in 1969.

Maintenance and Repair Costs: The cost of maintaining and repairing new housing is probably not considered to be very important by the average new housing buyer. Yet such costs become very real over time and, as such, must be considered when buying new housing. For example, some exterior and interior repainting must be done at various yearly intervals to keep a house in the best of condition. Also, depending on neighborhood standards and the homeowner's inclination to meet these standards, some degree of yard maintenance would be required on a yearly basis. Maintenance and repair costs are typically expressed as a percent of the value of the housing structure, since these costs are primarily a function of the value, size, and type of materials and construction of the housing structure itself. It was found that a generally accepted rule for maintenance and repair was 1 percent of the value of the structure. Data sources indicated this percentage remained quite stable during the 1960-1969 period. As indicated in Table 102, the cost of maintenance and repair increased from $12.17 per month in 1960 to $16.42 per month in 1969. This increase occurred solely as a result of the increase in value of the structure from $14,600 in 1960 to $19,700 in 1969 (see Table 101).

[14] *One therm equals 100,000 Btu's of heat.*

Opportunity Cost of Money: Of all the costs of owning new housing, the opportunity cost of money is most likely the least understood, and in many cases it is never even considered to be an occupancy cost element. Opportunity cost of money is, however, a real but hidden cost of owning housing or any other form of property. It is based upon the economic concept that money committed to a specific investment and therefore unavailable on demand is unavailable for higher earning investment alternatives. In the case of housing, the buyer's down payment yields no return and is unavailable for alternative investments. This results in the loss of at least that amount of earnings which the down payment could earn if it were invested in the safest forms of investment, such as federally insured savings accounts. The opportunity costs of money shown in Table 102 were computed in each instance by deriving the 20 percent down payment amount and then determining the amount of monthly interest it could earn. The interest rates applicable to passbook savings of savings and loans were approximately 4 percent in 1960 and 5 percent in 1969. The opportunity cost of money considered herein represents a conservative estimate, since the buyer's principal, which would accumulate each month under the usual mortgage arrangement, was not included in the estimated opportunity costs of money. The opportunity costs of money in 1960 ranged from $11.50 to $13.17. These costs increased between 73 and 85 percent by 1969, so that in 1969 the costs ranged from $20.69 to $23.78 per month. This increase was due to the larger down payment required as a result of increased housing package costs, and to the additional 1 percent interest paid on savings in 1969 compared to 1960.

Property Insurance: The last, but an important, cost of occupancy presented herein is property insurance. A wise property owner will carry property insurance to protect against perils such as fire, windstorm damage, and glass breakage. Property insurance costs for a Homeowner Form II policy with a $50 deductible clause, which insures against specific perils as defined by the State of Wisconsin Insurance Commissioner, were estimated at $2.06 per thousand in 1960 and $3.25 per thousand in 1969 for housing in a place having fire hydrants and a full-time fire department staff, and $2.80 per thousand in 1960 and $4.40 per thousand in 1969 in a place having no fire hydrants and a volunteer fire department staff. For purposes of this report, it was assumed that the insurance rates related to housing in areas having fire hydrants and a full-time fire department staff would apply to housing on fully improved lots, and rates related to housing with no fire hydrants and a volunteer fire department staff would apply to housing on partially improved lots. While it is apparent that homeowner property insurance rates increased about 57 percent in the time period 1960-1969, the monthly dollar costs of insurance to the homeowner, as indicated in Table 102, increased uniformly, approximately 112 percent, during the same period, due to the substantial increase in the value of the housing structure in this period.

Total Monthly Cost of Occupancy: The monthly occupancy costs of financing; property taxes, utilities, and maintenance and repair; opportunity cost of money; and

property insurance together represent the total dollar amount generally required of households in the Region to reside in new single-family housing. These total monthly occupancy costs for the alternative new housing packages are also shown in Table 102. In 1960 the total monthly occupancy costs for new single-family housing ranged from a low of about $152 for a house on a partially improved lot in the other outlying area of the Region to $175 for a house on a fully improved lot in the urban area of the Region. By 1969, although the occupancy costs for the house on a partially improved lot in the other area of the Region increased almost 64 percent, to $249, it still remained the least expensive of the housing occupancy cost packages presented. The occupancy cost of a house on a fully improved lot in the urban area, which increased 60 percent, to $281, between 1960 and 1969, remained the most costly.

It is also apparent form Table 102 that the total monthly occupancy costs in all cases were more than double the 21 percent increase in the City of Milwaukee Consumer Price Index for the same period. Interest and property taxes, even after income tax savings consideration, were the two most significant monthly cost elements, and with the exception of the cost of property insurance, these costs generally increased at a much faster rate than most of the other monthly occupancy costs. The rates of increase in monthly interest costs exceeded all other cost increases except for property insurance. Monthly interest cost increases during this period ranged from a low of 78 percent to a high of 91 percent. While monthly interest costs averaged approximately 36 percent of the total monthly occupancy cost in all instances in 1960, these costs accounted for an overall average of 42 percent of the total monthly occupancy cost in 1969. Monthly interest costs in 1969 ranged from 102.46 for a fully improved lot in the other area of the Region to 118.04 per month for a fully improved lot in the urban area of the Region. Occupancy costs for the period 1969 through 1972 increased even more dramatically than from 1960 to 1969. Table D-5 of Appendix D reveals that occupancy costs for new single-family housing from 1969 through 1972 increased over 26 percent in urban areas and almost 28 percent in suburban areas, while the City of Milwaukee CPI for the same period increased only about 13 percent.

From the levels of total monthly occupancy costs indicated for new housing, it is quite clear that low- and moderate-income families are being almost totally priced out of the marketplace for new single-family housing. An alternative to the ownership of new single-family housing, however, is the rental of a unit in a multifamily housing structure, which is discussed in the following section.

Costs of Occupying New Multifamily Housing

New housing is not only available through the purchase of single-family housing, but is also available through rental of units in a multifamily structure. Rental housing is an important type of new housing for many families and individuals who do not desire the upkeep required by homeownership, do not have the necessary income or down payment for ownership, or otherwise prefer to rent. As previously indicated, occupancy costs of rental units are comprised of three principal cost elements—rent, utility services, and personal property insurance. Each of these costs is described in the following sections.

Rental Costs: The preceding sections of this report provided comparative data for a single-family house in different locations in the Region. But for the purpose of determining the trend in rental occupancy costs, only one location—Milwaukee County—was considered. A two-bedroom apartment in Milwaukee County was selected for cost trend purposes because two-bedroom apartments were predominant in 1960 and 1969 in Milwaukee County and the Region, and Milwaukee County accounted for over 75 percent of all renter-occupied housing units in the Region in 1970 as reported by the U. S. Bureau of the Census.

The monthly rental payment was the most significant cost of occupying new multifamily housing, as shown in Table 103. Between 1960 and 1969, the monthly rent for a typical new two-bedroom nonluxury apartment increased 50 percent, from $100 to $150. This rent included heat, hot water, and outside parking, but did not include electric service. It is important to note that in 1960, most new apartments were basic living units offering few special amenities. It was found that by 1969, however, many new apartments were offering such amenities as wall-to-wall carpeting, swimming pool privileges, air conditioning, and heated parking. The rental cost reflected these new amenities, and averaged about $175 per month in 1969 for a typical luxury two-bedroom unit.

Utility Service: As previously noted, electricity was the only utility service for which the renter of a two-bedroom unit was directly responsible. As was the case with the monthly cost of occupying single-family housing, the average household usage of electricity served as the basis for computing the monthly cost of electricity. For purposes of this report, it was assumed that the average renter household usage of electricity was 80 percent of

Table 103

MONTHLY OCCUPANCY COSTS FOR MULTIFAMILY HOUSING IN MILWAUKEE COUNTY: 1960 AND 1969

Monthly Occupancy Cost	1960	1969	Percent Change 1960-1969
Rent[a]	$100.00	$150.00	50.0
Utilities[b]	5.95	8.33	40.0
Personal Property Insurance[c]	0.83	1.77	113.3
Total	$106.78	$160.10	49.9
City of Milwaukee Consumer Price Index[d]	--	--	21.4

[a] *Includes heat, hot water, and outside parking space.*

[b] *Includes 80 percent of average residential use of electricity.*

[c] *Includes insurance covering personal property only.*

[d] *Based on annual average index numbers.*

Source: U. S. Bureau of Labor Statistics and SEWRPC.

the usage indicated by utility sources for the average single-family household generally, because some portion of electricity for multifamily unit structures, such as lighting for parking lots and entryways and hallways, and electricity required to operate a heating system, is borne by the owner of the apartment building. A review of Table 103 indicates that monthly utility costs increased from $5.95 in 1960 to $8.33 in 1970, or 40 percent.

Personal Property Insurance: A renter does not insure against loss from fire or other perils which cause damage to the building, but does desire protection for the personal property in his apartment, including furniture, nonfurnished appliances, clothing, jewelry, and other goods and valuables. The cost of this type of protection on a monthly basis was $0.83 in 1960 and $1.77 in 1969, an increase of 113 percent.

Total Monthly Cost of Occupancy: By summing rent, utility service costs, and personal property insurance costs, it is apparent that the total monthly cost of occupying a new multifamily housing unit was about $107 in 1960. This total increased by about 50 percent, to approximately $160, by 1969 (see Table 103). During the same period, the City of Milwaukee Consumer Price Index increased only 21 percent. In the period 1969-1972, the City of Milwaukee Consumer Price Index increased 13 percent, while the total monthly cost of occupying a new multifamily unit increased over 30 percent (see Table D-6 of Appendix D). It is evident that, as in the case of single-family housing, low- and moderate-income families would also find it increasingly difficult to afford new rental housing.

SUMMARY

The trends in the cost of buying new single-family housing and occupying new single-family and multifamily housing are important considerations in the conduct of a regional housing study. These data will be particularly important in determining the extent to which low- and moderate-income families are now, and in the future may be, priced out of the new housing market.

This chapter has presented data collected and collated as part of the housing cost trends inventory for the period 1960 through 1969. The findings summarized below provide information related to three different types of housing cost trends, namely: 1) trends in the principal cost elements of purchasing new single-family housing; 2) trends in the principal monthly occupancy cost elements involved in the ownership of new single-family housing; and 3) trends in the principal monthly occupancy cost elements associated with the rental of new multifamily housing.

For purposes of this report, costs related to the purchase and occupancy of a single-family house were compiled for housing on two specific types of residential lots: 1) partially improved lots, or lots having individual wells and onsite soil absorption sewage treatment facilities and minimal street improvements; and 2) fully improved lots, or lots served by a centralized public or private water and sewage treatment facility and including a variety of street improvements. Purchase and occupancy cost data for new single-family housing were also related to three general geographic areas within the Region: "urban," "suburban," and "other" outlying areas of the Region.

The purchase of a new housing package includes the costs of land and the housing structure itself, and additional costs related to construction financing and the provision of necessary water and sewerage service facilities directly to the housing unit. As could be expected, the house itself accounted for the single most costly item of the total housing package, and the specific housing model used in this analysis cost $14,600 in 1960 and $19,700 in 1969, an increase of 34 percent. The next most costly item of the total housing package was the lot. Here, location was of extreme importance, as indicated by the existing lot cost range in 1960. A partially improved lot, including individual well and onsite sewage disposal system, cost $2,000 in the other outlying areas of the Region, while a fully improved lot, including house service laterals, cost $4,500 in the urban areas of the Region. By 1969, a fully improved lot in the suburban area had increased the most in price, almost 90 percent, from $3,800 to $7,200, and was more costly than lots in the urban or other outlying areas of the Region. The lowest cost fully improved lot in 1969 was located in the other outlying area of the Region, having a price of $3,500 compared to the 1960 price of $2,300. Construction financing costs, which generally include, but are not limited to, loan application fees, credit check, survey, appraisal fee, title policy, construction draw administration fees, and interest on funds loaned during the construction period, varied depending on the total housing package price, but averaged about $400 in 1960 and $740 in 1969, increase of 85 percent during this period.

In 1960, total housing package cost, i.e., house, lot, and other related costs, ranged from $16,990 for a house on a partially improved lot in the other outlying area of the Region to a housing package of $19,520 for a house on a fully improved lot in the urban area of the Region. By 1969, housing on a fully improved lot in the suburban area had become the most costly, increasing more than 47 percent, to $28,270, over its 1960 price of $19,220. Housing on a fully improved lot in the other outlying area cost the least, $24,540, a 39 percent increase over its 1960 cost of $17,700. Changes in other housing package costs in different geographic areas of the Region for the period 1960-1969 were: increases of 41 percent, from $19,520 to $27,550, for a house on a fully improved lot in the urban area; an increase of 44 percent, from $18,410 to $26,430, for a house on a partially improved lot in the suburban area; and an increase of 48 percent, from $16,990 to $25,210, for a house on a partially improved lot in the other outlying area of the Region.

New single-family housing occupancy costs are, in many instances, as important to the purchasers of new housing as the total housing package cost. These occupancy costs, that is, the monthly costs related to living in a new single-

family home, consist of financing costs, including principal and interest payments, local property taxes, utility service costs, costs of maintenance and repair, opportunity cost of money, and property insurance costs. Of these cost elements, the interest payment and local property tax levies were the two most significant costs, accounting for over 62 percent of the total monthly occupancy cost in 1969 in all geographic areas of the Region for both fully improved and partially improved lots. Trends in the other occupancy cost elements varied significantly in the 1960-1969 period. The amount contributed by the owner toward repayment of his loan actually declined, whereas the cost of property insurance increased about 112 percent.

The total monthly cost of occupying new single-family housing rose sharply between 1960 and 1969. Housing occupancy costs rose fastest, about 64 percent, for housing on partially improved lots in the other outlying areas of the Region, from approximately $152 in 1960 to $249 per month in 1969. The largest housing occupancy costs both in 1960 and 1969 related to housing on fully improved lots in the urban area of the Region. Such costs were $175 in 1960 and $281 in 1969, an increase of approximately 60 percent. Changes in monthly occupancy costs for various other housing packages in different geographic areas of the Region during the 1960-1969 period were: an increase of about 63 percent, from $170 to $277, for housing on a fully improved lot in the suburban area, an increase of more than 56 percent, from $160 to $251, for housing on a fully improved lot in other outlying areas of the Region; and an increase of about 61 percent, from $162 to $261, for housing on a partially improved lot in the suburban areas of the Region.

The rental of new multifamily housing offers an alternative to the housing consumer who wants new housing but is either unable or unwilling to purchase new single-family housing. Trends in the occupancy costs of new rental housing were based upon a standard two-bedroom apartment located in Milwaukee County. This specific size unit and geographic area were chosen because two-bedroom units represented 43 percent of all occupied rental housing in the Region in 1970, and because approximately 75 percent of all rental units were located in Milwaukee County in 1970. Occupancy costs for rental housing include rent, utility services, and personal property insurance. Rent for a basic nonluxury two-bedroom apartment, including heat, hot water, and outside parking, was $100 in 1960, but increased 50 percent to $150 in 1969. The cost of utilities and insurance together increased about 49 percent, from less than $7.00 in 1960 to more than $10.00 in 1969. Total rental occupancy costs for this period, therefore, increased about 50 percent, from $107 in 1960 to $160 in 1969.

It is apparent, therefore, that the 1960-1969 trends in the cost of purchasing a complete new single-family housing package for a given lot and geographic location increased 39 percent to 48 percent; that trends in the total monthly occupancy costs of a new single-family house for a given lot and geographic location increased 56 percent to 64 percent; and that trends in the occupancy costs of rental housing, which increased 50 percent, have all far surpassed the 21 percent increase in the City of Milwaukee Consumer Price Index for the same period, and have made it increasingly difficult, if not impossible, for families with low and moderate incomes to reside in new, decent, safe, and sanitary housing within the Southeastern Wisconsin Region.

CHAPTER VIII

FINANCING HOUSING

INTRODUCTION

Unlike typical cash expenditures for necessities of life such as food and clothing, most households, because they lack sufficient capital, must borrow money to finance the purchase of new or used housing over a relatively long period of time. The process involved in borrowing money and the factors affecting the cost of such money are probably the least understood aspects of purchasing both new and used housing. To obtain the housing financing best suited to a given household's particular needs, knowledge is required of the various types of financial institutions dealing in residential mortgage loans and of the various features of mortgage loans which may significantly affect the household's costs of the loan. These factors are important since, as indicated in Table 102, the monthly financing costs represented more than 50 percent of the total monthly occupancy costs of a new single-family home in the Region in 1969.

In an effort to provide a comprehensive understanding of the financing involved in purchasing single-family housing and the effect that various financing arrangements may have on the monthly occupancy cost for such housing, this chapter will identify and define the salient features of mortgage loans, discuss these features as they pertain to conventional and government backed mortgage loans, and indicate the relative significance of specific mortgage features as they relate to current monthly finance costs of single-family homes. A detailed description of annual changes in mortgage interest rates and other mortgage features for the period 1960 through 1969 is presented in Appendix E.

FEATURES OF MORTGAGE LOANS

Simply defined, a mortgage is an instrument by which the owner of certain property pledges the property as security for a loan. Mortgages may be very simple or very complex. Most mortgages, however, include certain features which directly or indirectly affect the amount the borrower is required to pay, usually on a monthly basis, to retire the debt. The features of mortgage loans which will be discussed separately in this section include the interest rate, down payment, term of repayment, closing costs, prepayment penalty, escalator clause, and escrow requirements.

Interest Rate

The most basic mortgage loan feature affecting the cost of housing is the interest rate. The interest rate, in effect, pays the lender for the use of the money lent. Interest rates on mortgages are generally lower than interest rates for other types of personal and commercial loans, primarily because of the basic value of real estate used as collateral for the loan. Because real property which is in sound condition and in what may be considered a good location by the lender will usually appreciate in value, such property constitutes a more desirable form of collateral than such forms of consumer loan collateral as automobiles or furniture, which depreciate in value quite rapidly.

Down Payment

Except for some types of government insured or guaranteed loans, most mortgage loans require a cash down payment by the borrower. The down payment amount required will vary with the type of loan to be made. The amount is important to the borrower for two reasons: 1) the down payment is directly related to the amount of the mortgage, hence the larger the down payment, the smaller the amount of the mortgage and, therefore, the lower the amount of the interest and the smaller the amount of the monthly payment to repay the mortgage loan; and 2) the down payment is related directly to the interest rate charged, with lenders charging a slightly lower rate of interest if the borrower has a large down payment. It can be seen, then, that interest rates as well as down payment requirements affect the ability of households to finance housing. It is particularly significant to low- and moderate-income families because when down payment requirements are increased, the probability that these households will have a sufficient down payment decreases, and the effect of an increase in the interest rate, assuming the lender accepts a minimal down payment, may still cause such families, which are already on tight budgets, to be priced out of the market for housing which they might have been able to purchase given more favorable requirements.

Term of Repayment

The term of a mortgage loan relates to the length of time over which the mortgage contract is to be in effect; that is, the time provided for repayment of the loan. Mortgages generally have terms of 20, 25, or 30 years. Although the term does not affect the interest rate, as does the down payment, it does directly affect the amount of monthly payment and the total amount of interest paid. A longer term will generally mean lower monthly payments because the amount borrowed is being repaid over a longer period of time. It should be noted, however, that few mortgage loans are carried for the full term. Because of household mobility and family life cycle factors, such as divorces, births, and deaths, the average length of time that a conventional mortgage is outstanding in the Region is approximately seven to eight years.

Closing Costs

Closing costs represent another direct cost of borrowing money, and are sometimes underestimated or overlooked

by the potential borrower. The closing costs include direct, explicit costs for such things as lot survey, property appraisal, title insurance, legal fees, and loan application. Closing costs may also include service charges levied by the lender, commonly termed "sweeteners," which effectively increase the profitability of loaning money. Closing costs are assessed during the mortgage loan application period and are usually required to be paid, in cash, before or at the time the mortgage loan agreement is consummated. Such costs act as an additional constraint to households, especially low- and moderate-income households, seeking financing because they represent additional cash outlays above and beyond the aforementioned down payment requirement.

Prepayment Penalty

The prepayment penalty, which is often embodied in a mortgage loan contract, is often overlooked by the borrower until he wishes to pay off his mortgage in advance of the end of the mortgage term. For example, a party may borrow money for a home on a 25-year mortgage and find that, after the fifth year, he must for some reason sell the property. At this time, the mortgagor may find a prepayment penalty in his mortgage contract which involves a set charge of perhaps 1 percent on the outstanding balance of the mortgage loan in order for the loan to be paid off ahead of time. This poses yet another financial burden for the homeowner.

Escalator Clause

The escalator clause has recently gained wide use in mortgage lending within the Region due to the generally rising trend in interest rates. This mortgage loan clause permits the lender to change the interest rate stated in a mortgage. As a result, should interest rates generally rise in the marketplace, requiring lenders to pay out more interest on money deposited in the institution, the interest rate paid on individual mortgage loans may also be raised. This feature is very important to the home buyer, especially the low- or moderate-income home buyer who, because of a limited budget, may find that an increase in monthly mortgage payment due to a higher interest rate will cause financial hardship.

Escrow Accounts

Escrow accounts are special accounts established for each borrower at the time the mortgage loan is made, and are utilized to segregate funds and to assure that money payable to third parties in the future will be available. Sometimes escrow accounts are used for property insurance premiums, but such accounts are most widely used for property taxes. Payments are made for these accounts as part of the total monthly payment. It should be noted that some controversy exists over the fact that lenders are not required to pay interest on monies deposited by borrowers in escrow accounts. In response to this criticism, lending institutions have indicated that should interest be required on escrow accounts, the cost would have to be transferred and incorporated into the rate of interest charged the borrower at the time the loan is made, since the escrow account is a form of profit for the lending institution and is taken into consideration in its overall profit picture.

While all of the aforementioned features are not incorporated into all mortgage loan agreements, they are features which are important and which the potential home buyer should be cognizant of when shopping for the best mortgage loan package to suit his needs.

TYPES OF MORTGAGE LOANS

There are generally two types of mortgage loans utilized in the Southeastern Wisconsin Region: 1) conventional mortgage loans, and 2) government insured or guaranteed mortgage loans. A conventional mortgage loan is a loan whereby the lender assumes the risk in the event of nonpayment of the mortgage. In a government insured or guaranteed loan, agencies of the federal government, namely the Federal Housing Administration and the Veterans Administration, assume the risk of buyer nonpayment of the mortgage. The overwhelming majority of all mortgage loans in the Southeastern Wisconsin Region are of the conventional type.

Conventional Mortgage Loans

Within the Region, savings and loan associations, commercial banks, some credit unions, and a few mortgage bankers or brokers will make conventional mortgage loans. Savings and loan associations, however, account for the majority of conventional single-family housing mortgage loans.

Conventional mortgage loans may also be utilized in conjunction with private mortgage insurance. This usually occurs when the buyer lacks a sufficient down payment but has the income necessary to make the monthly payments required to pay interest and retire the debt. In a typical conventional mortgage loan with mortgage insurance, the loan is made to the buyer, who secures private mortgage insurance which assumes part of the lender's risk. For this insurance the borrower pays an insurance premium which generally approximates one-half of 1 percent of the outstanding mortgage for the first year, and one-quarter of 1 percent on the balance of the mortgage until such time that the buyer accumulates 20 to 25 percent equity in the mortgaged housing unit.

In July 1973 within the Region, interest rates on conventional loans ranged from 8¼ percent to 9 percent, with the lower interest rate being charged borrowers with prime real estate and having a down payment of one-third or more.

There is presently a slight variation in the length of mortgage term permitted on conventional loans. A term of 30 years is usually permitted for housing 12 years old or newer, while a 25-year term is generally utilized for housing which is 13 years old or older. The closing costs tend to average around $150, but most financial institutions require a service charge of 1½ percent of the amount borrowed for existing housing and 2 percent of the amount borrowed for new housing. In addition, if there is a private mortgage insurance, there is usually an additional service charge of $50 in each case. For conventional loans, many lenders require a prepayment penalty which lasts the life of the loan and, in most cases, an

escalator clause is required. It should be noted that banks generally require slightly higher down payments than savings and loan associations; however, the interest rates at banks tend to be slightly lower than those of savings and loan associations. Generally, banks do not require service charges, and the closing costs may be slightly lower than those required by savings and loan associations. Also, it should be noted that utilization of conventional mortgage loans with private mortgage insurance is almost exclusively accomplished by savings and loan associations, with banks dealing primarily in conventional mortgage loans without private mortgage insurance. Savings and loan associations and commercial banks are the predominant lenders for single-family housing in the Region, while insurance companies, credit unions, and mortgage bankers and brokers make only a relatively small number of conventional mortgage loans.

FHA Insured and VA Guaranteed Mortgage Loans

The Federal Housing Administration (FHA) provides mortgage insurance primarily to assist buyers with low down payments to obtain financing. This is done by alleviating part of the risk to the lender for a one-half of 1 percent charge to the mortgagor over the life of the loan. The Veterans Administration (VA) provides a similar service, but only to veterans. In contrast to the FHA, however, the VA charges no annual fee for its guarantee and assumes less of the lender's risk than does the FHA. The maximum interest rates on FHA insured and VA guaranteed loans are set by federal legislation, and are usually at least one-half of 1 percent lower than those available on conventional mortgage loans. These maximum interest rates cause lenders to charge a surcharge—termed "points" or "discount"—which has the effect of increasing the stated interest rate up to or beyond the level of the conventional rates. For example, if at the time the prevailing market interest rate was 8 percent and the maximum permitted rate on government backed mortgages was 7 percent, the lender would probably require an 8½ point or percent surcharge to bring the government backed mortgage rate up to the prevailing market interest rate. Although government regulations prohibit the buyer from paying the surcharge, the buyer often pays indirectly in the price of the house, particularly in a seller's market where the demand for housing exceeds the supply. The seller, in this case assuming a home valued at $25,000 and a buyer with a 3 percent down payment, would have to raise the selling price of the home to $27,061.25 to cover the cost of the lender surcharge.

Because the rates are set by federal legislation, the maximum interest rates allowed on VA guaranteed mortgages and FHA insured mortgages are the same at banks, savings and loan associations, and mortgage companies. The maximum interest rate, excluding the cost of the insurance on FHA insured mortgages, is usually identical to the VA rate.

The advantage to the buyer who finances his house through a government insured or guaranteed mortgage is that a loan can be obtained with a lower down payment than required for a conventional mortgage. Also, these types of mortgages do not permit escalator clauses. In July 1973, the minimum down payment permitted by FHA was 3 percent of the first $15,000 of property value for conventional FHA loans. The VA, however, guarantees mortgages for buyers without a down payment.

The maximum term to maturity for FHA and VA backed mortgage loans made by savings and loan associations and mortgage companies is generally 30 years. Banks allow a maximum term to maturity of 30 years on FHA insured mortgages, but only a 25-year maximum term on VA guaranteed mortgages because of the lesser risk assumed by the VA. Closing costs required by all three types of lenders utilizing VA and FHA backed mortgages made directly with the mortgagor are at the allowed maximum of 1 percent.

MORTGAGE FEATURES AND MONTHLY MORTGAGE PAYMENTS

Variations in interest rates, down payments, and loan terms have significance with respect to the provision of low- and moderate-income housing because together these features determine the amount of the monthly mortgage payment. The effect of these features can be shown by presenting comparisons of monthly payments resulting from selected combinations of these specific mortgage features, as well as by relating some of these combinations of features to changes in the cost of the housing itself. The latter analysis will also indicate which housing features and/or cost elements might be most important in effectively reducing monthly mortgage payments.

In order to provide a more comprehensive understanding of the comparisons of mortgage features relative to selected housing package costs, monthly mortgage payments have been computed and are presented for various combinations of mortgage features in terms of both gross and net payments. The gross monthly mortgage payment consists of an amount for the repayment of the principal borrowed and an amount for the payment of the interest on the outstanding loan. The gross monthly mortgage payment is made by the borrower to the lender under the contractual agreement specified in the mortgage loan agreement and, for purposes of comparison, excludes any escrow account or mortgage insurance premiums which are sometimes included in the monthly payment. The net monthly payment reflects the fact that interest is deductible from personal adjusted gross income for income tax purposes, thereby decreasing the real cost of borrowing, and the fact that the down payment is lost to alternative investment opportunities, called the opportunity cost of money, which increases the actual monthly cost of borrowing. The net monthly mortgage payment, then, is the gross monthly mortgage payment adjusted for these two factors.

An analysis of the various combinations of mortgage features related to selected housing package costs, including interest rates, amount of down payment, and length of mortgage term, as shown in Table 104, indicates that a reduction in the interest rate will result in the most significant reduction in the monthly mortgage payments given any selected combination of housing package costs, mortgage terms, and down payment requirements. When compared to the 9 percent interest rate, the percentage reductions in net monthly payments based on the lower interest rates are slightly greater than the percentage

Table 104

COMPARISON OF COST OF BORROWING FOR HOUSING PURCHASES BASED ON SIGNIFICANT MORTGAGE LOAN FEATURES AND SELECTED HOUSING PACKAGE COSTS

Mortgage Payment			9 Percent Interest Rate						
			Housing Package Cost[a]						
			$30,000						
				30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]		20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross		270	241	10.6	231	14.4	228	15.6
	Net		216	193	10.6	185	14.4	182	15.6
5.0	Gross		256	229	10.6	220	14.4	216	15.6
	Net		214	192	10.3	185	13.6	182	15.0
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	5.0	5.0	--	5.0	--	5.0	--
		Net	--	--	--	--	--	--	--
10.0	Gross		243	217	10.6	208	14.4	205	15.6
	Net		212	191	9.9	184	13.2	182	14.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	10.0	10.0	--	10.0	--	10.0	--
		Net	1.9	1.0	--	--	--	--	--
20.0	Gross		216	193	10.6	185	14.4	182	15.6
	Net		208	189	9.1	183	12.0	181	13.0
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	20.0	20.0	--	20.0	--	20.0	--
		Net	3.7	2.1	--	1.1	--	--	--
30.0	Gross		189	169	10.6	162	14.4	159	15.6
	Net		204	187	8.3	182	10.8	180	11.8
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	30.0	30.0	--	30.0	--	30.0	--
		Net	5.6	3.1	--	1.6	--	1.1	--

Mortgage Payment			9 Percent Interest Rate						
			Housing Package Cost[a]						
			$25,000						
				30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]		20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross		225	201	10.6	193	14.4	190	15.6
	Net		180	161	10.6	154	14.4	152	15.6
5.0	Gross		214	191	10.6	183	14.4	180	15.6
	Net		178	160	10.1	154	13.5	151	15.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	5.0	5.0	--	5.0	--	5.0	--
		Net	1.1	--	--	--	--	--	--
10.0	Gross		202	181	10.6	174	14.4	171	15.6
	Net		176	159	9.7	154	12.5	151	14.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	10.0	10.0	--	10.0	--	10.0	--
		Net	2.2	1.2	--	--	--	--	--
20.0	Gross		180	161	10.6	154	14.4	152	15.6
	Net		173	158	8.7	152	12.1	151	12.7
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	20.0	20.0	--	20.0	--	20.0	--
		Net	3.9	1.9	--	1.3	--	--	--
30.0	Gross		157	141	10.6	135	14.4	133	15.6
	Net		169	156	7.7	152	10.1	150	11.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	30.0	30.0	--	30.0	--	30.0	--
		Net	6.1	3.1	--	1.3	--	1.3	--

Table 104 (continued)

Mortgage Payment		9 Percent Interest Rate						
		Housing Package Cost[a]						
		$20,000						
			30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]	20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross	180	161	10.6	154	14.4	152	15.6
	Net	144	129	10.6	124	14.4	122	15.6
5.0	Gross	171	153	10.6	147	14.4	144	15.6
	Net	143	128	10.5	123	14.0	121	15.4
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	--	--	--	--	--	--	--
10.0	Gross	162	145	10.6	139	14.4	137	15.6
	Net	141	128	9.2	123	12.8	121	14.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	2.1	--	--	--	--	--	--
20.0	Gross	144	129	10.6	123	14.4	121	15.6
	Net	139	127	8.6	122	12.2	120	13.7
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	3.5	1.6	--	1.6	--	1.6	--
30.0	Gross	126	113	10.6	108	14.4	106	15.6
	Net	136	125	8.1	121	11.0	120	11.8
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	5.6	3.1	--	2.4	--	1.6	--

Mortgage Payment		8 Percent Interest Rate						
		Housing Package Cost[a]						
		$30,000						
			30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]	20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross	251	220	12.3	209	16.9	204	18.8
	Net	201	176	12.3	167	16.9	163	18.8
5.0	Gross	238	209	12.3	198	16.9	194	18.8
	Net	198	175	11.6	166	16.2	163	17.7
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	1.5	--	--	--	--	--	--
10.0	Gross	226	198	12.3	188	16.9	183	18.8
	Net	196	173	11.7	165	15.8	161	17.9
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	2.5	1.7	--	1.2	--	1.2	--
20.0	Gross	201	176	12.3	167	16.9	163	18.8
	Net	191	171	10.5	164	14.1	160	16.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	5.0	2.8	--	1.8	--	1.8	--
30.0	Gross	176	154	12.3	146	16.9	143	18.8
	Net	186	168	9.7	162	12.9	159	14.5
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	7.5	4.5	--	3.0	--	2.5	--

Table 104 (continued)

Mortgage Payment			8 Percent Interest Rate						
			Housing Package Cost[a]						
			$25,000						
				30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]		20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross		209	183	12.3	174	16.9	170	18.8
	Net		167	146	12.3	139	16.9	136	18.8
5.0	Gross		199	174	12.3	165	16.9	161	18.8
	Net		165	145	12.1	138	16.4	135	18.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	5.0	5.0	--	5.0	--	5.0	--
		Net	1.2	--	--	--	--	--	--
10.0	Gross		188	165	12.3	156	16.9	153	18.8
	Net		163	145	11.0	138	15.3	135	17.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	10.0	10.0	--	10.0	--	10.0	--
		Net	2.4	--	--	--	--	--	--
20.0	Gross		167	147	12.3	139	16.9	136	18.8
	Net		159	143	10.1	136	14.5	134	15.7
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	20.0	20.0	--	20.0	--	20.0	--
		Net	4.8	2.1	--	2.2	--	1.5	--
30.0	Gross		146	128	12.3	122	16.9	119	18.8
	Net		154	140	9.1	135	12.3	133	13.6
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	30.0	30.0	--	30.0	--	30.0	--
		Net	7.8	4.1	--	2.9	--	2.2	--

Mortgage Payment			8 Percent Interest Rate										
			Housing Package Cost[a]										
			$20,000							Percentage Less Than Monthly Mortgage Cost at 9 Percent Interest Rate			
				30-Year Term		40-Year Term		50-Year Term					
Percent Down	Gross or Net[b,c]		20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	20-Year Term	30-Year Term	40-Year Term	50-Year Term
0.0	Gross		157	147	12.3	139	16.9	135	18.8	7.0	8.9	9.9	10.5
	Net		134	118	12.3	111	16.9	109	18.8	7.0	8.9	9.9	10.5
5.0	Gross		159	139	12.3	132	16.9	129	18.8	7.0	8.9	9.9	10.5
	Net		132	116	12.1	111	15.9	108	18.2	7.5	9.2	10.2	10.6
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	5.0	5.0	--	5.0	--	5.0	--	--	--	--	--
		Net	1.5	1.7	--	--	--	--	--	--	--	--	--
10.0	Gross		151	132	12.3	125	16.9	122	18.8	7.0	8.9	9.9	10.5
	Net		131	116	11.5	110	16.0	108	17.6	7.3	9.2	10.6	10.9
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	10.0	10.0	--	10.0	--	10.0	--	--	--	--	--
		Net	2.2	1.7	--	--	--	--	--	--	--	--	--
20.0	Gross		134	117	12.3	111	16.9	109	18.8	7.0	8.9	9.9	10.5
	Net		127	114	10.2	109	14.2	107	15.7	8.3	9.7	10.5	11.2
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	20.0	20.0	--	20.0	--	20.0	--	--	--	--	--
		Net	5.2	3.4	--	1.8	--	1.8	--	--	--	--	--
30.0	Gross		117	103	12.3	97	16.9	95	18.8	7.0	8.9	9.9	10.5
	Net		124	112	9.7	108	12.9	106	14.5	8.8	10.3	10.9	11.6
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment	Gross	30.0	30.0	--	30.0	--	30.0	--	--	--	--	--
		Net	7.5	7.5	--	2.8	--	2.8	--	--	--	--	--

Table 104 (continued)

Mortgage Payment		7 Percent Interest Rate						
		Housing Package Cost[a]						
		$30,000						
		20-Year Term	30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]	(Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross	233	200	14.0	186	19.9	181	22.5
	Net	186	160	14.0	149	19.9	145	22.5
5.0	Gross	221	190	14.0	177	19.9	171	22.5
	Net	183	158	13.7	148	19.1	143	21.7
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	1.6	1.3	--	1.0	--	1.4	--
10.0	Gross	209	180	14.0	168	19.9	162	22.5
	Net	180	157	12.8	147	18.3	142	21.1
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	3.2	1.9	--	1.3	--	2.1	--
20.0	Gross	186	160	14.0	149	19.9	144	22.5
	Net	174	153	12.1	144	17.2	140	19.5
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	6.5	4.4	--	3.4	--	3.4	--
30.0	Gross	163	140	14.0	131	19.9	126	22.5
	Net	168	150	10.7	142	15.5	138	17.9
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	9.7	6.3	--	4.7	--	4.8	--

Mortgage Payment		7 Percent Interest Rate						
		Housing Package Cost[a]						
		$25,000						
		20-Year Term	30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]	(Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross	194	166	14.2	155	19.9	150	22.6
	Net	155	133	14.2	124	19.9	120	22.6
5.0	Gross	184	158	14.2	148	19.9	143	22.6
	Net	152	132	13.2	124	18.4	120	21.1
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	1.9	--	--	--	--	--	--
10.0	Gross	174	150	14.2	140	19.9	135	22.6
	Net	150	130	13.3	122	18.7	118	21.3
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	3.2	2.3	--	1.7	--	1.7	--
20.0	Gross	155	133	14.2	124	19.9	120	22.6
	Net	145	127	12.4	120	17.2	117	19.3
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	6.5	4.5	--	3.2	--	2.5	--
30.0	Gross	136	116	14.2	109	19.9	105	22.6
	Net	140	124	11.4	118	15.7	115	17.9
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	9.7	6.8	--	4.8	--	4.2	--

Table 104 (continued)

Mortgage Payment		7 Percent Interest Rate										
		Housing Package Cost[a]							Percentage Less Than Monthly Mortgage Cost at 9 Percent Interest Rate			
		$20,000										
			30-Year Term		40-Year Term		50-Year Term					
Percent Down	Gross or Net[b,c]	20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	20-Year Term	30-Year Term	40-Year Term	50-Year Term
0.0	Gross	155	133	14.4	124	20.1	120	22.7	13.8	17.4	19.5	20.8
	Net	124	106	14.4	99	20.1	96	22.7	13.8	17.4	19.5	20.8
5.0	Gross	147	126	14.4	118	20.1	114	22.7	18.8	17.4	19.5	20.8
	Net	122	105	13.9	99	18.9	96	21.3	14.6	17.7	19.7	20.9
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	1.6	--	--	--	--	--	--	--	--	--	--
10.0	Gross	140	120	14.4	112	20.1	108	22.7	13.8	17.4	19.5	20.8
	Net	120	104	13.3	98	18.3	95	20.8	14.9	18.3	20.4	21.8
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	3.2	1.9	--	1.0	--	1.0	--	--	--	--	--
20.0	Gross	124	106	14.4	99	20.1	96	22.7	13.8	17.4	19.5	20.8
	Net	116	101	12.9	96	17.2	93	19.8	16.3	19.7	21.2	22.6
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	6.5	4.7	--	3.0	--	3.0	--	--	--	--	--
30.0	Gross	109	93	14.4	87	20.1	84	22.7	13.8	17.4	19.5	20.8
	Net	112	99	11.6	95	15.2	92	17.9	17.5	20.4	22.0	23.3
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	9.7	6.6	--	4.2	--	4.2	--	--	--	--	--

Mortgage Payment		6 Percent Interest Rate					
		Housing Package Cost[a]					
		$30,000					
			30-Year Term		40-Year Term		50-Year Term
Percent Down	Gross or Net[b,c]	20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross	215	180	16.2	165	23.1	158	26.4
	Net	172	144	16.2	132	23.1	126	26.4
5.0	Gross	204	171	16.2	157	23.1	150	26.4
	Net	168	142	15.5	131	22.0	125	25.6
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	2.3	1.4	--	--	--	--	--
10.0	Gross	193	162	16.2	149	23.1	142	26.4
	Net	164	140	14.6	129	21.3	124	24.4
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	4.7	2.8	--	2.3	--	1.6	--
20.0	Gross	172	144	16.2	132	23.1	126	26.4
	Net	158	135	14.6	126	20.3	121	23.4
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	8.1	6.3	--	4.5	--	4.0	--
30.0	Gross	150	126	16.2	116	23.1	111	26.4
	Net	150	131	12.7	123	18.0	119	20.7
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	12.8	9.0	--	6.8	--	5.6	--

Table 104 (continued)

Mortgage Payment		6 Percent Interest Rate						
		Housing Package Cost[a]						
		$25,000						
			30-Year Term		40-Year Term		50-Year Term	
Percent Down	Gross or Net[b,c]	20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term
0.0	Gross	179	150	16.2	138	23.1	132	26.4
	Net	143	120	16.2	110	23.1	106	26.4
5.0	Gross	170	142	16.2	131	23.1	125	26.4
	Net	140	118	15.7	109	22.1	105	25.0
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	2.1	1.7	--	--	--	--	--
10.0	Gross	161	135	16.2	124	23.1	118	26.4
	Net	137	116	15.3	107	21.2	104	24.1
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	4.2	3.3	--	2.7	--	1.9	--
20.0	Gross	143	120	16.2	110	23.1	105	26.4
	Net	131	113	13.7	105	19.8	102	22.1
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	8.4	5.8	--	4.5	--	3.8	--
30.0	Gross	125	105	16.2	96	23.1	92	26.4
	Net	125	109	12.8	102	18.4	99	20.8
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	12.6	9.2	--	7.3	--	6.6	--

Mortgage Payment		6 Percent Interest Rate										
		Housing Package Cost[a]										
		$20,000							Percentage Less Than Monthly Mortgage Cost at 9 Percent Interest Rate			
			30-Year Term		40-Year Term		50-Year Term					
Percent Down	Gross or Net[b,c]	20-Year Term (Dollars)	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	Dollars	Percentage Less Than Monthly Cost for 20-Year Term	20-Year Term	30-Year Term	40-Year Term	50-Year Term
0.0	Gross	143	120	16.2	110	23.1	105	26.4	20.5	25.5	28.6	30.7
	Net	114	96	16.2	88	23.1	84	26.4	20.5	25.5	28.6	30.7
5.0	Gross	136	114	16.2	105	23.1	100	26.4	20.5	25.5	28.6	30.7
	Net	112	95	15.2	85	22.3	84	25.0	21.5	26.0	29.8	30.8
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	5.0	5.0	--	5.0	--	5.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	1.8	1.0	--	1.0	--	---	--	--	--	--	--
10.0	Gross	129	108	16.2	99	23.1	95	26.4	20.5	25.5	28.6	30.7
	Net	110	93	15.5	86	21.8	83	24.5	22.3	27.0	30.2	31.5
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	10.0	10.0	--	10.0	--	10.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	3.5	3.1	--	2.3	--	1.2	--	--	--	--	--
20.0	Gross	115	96	16.2	88	23.1	84	26.4	20.5	25.5	28.6	30.7
	Net	105	90	14.3	84	20.0	81	22.9	24.3	28.7	31.0	32.7
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	20.0	20.0	--	20.0	--	20.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	7.9	6.3	--	4.5	--	3.6	--	--	--	--	--
30.0	Gross	100	84	16.2	77	23.1	74	26.4	20.5	25.5	28.6	30.7
	Net	100	87	13.0	82	18.0	79	21.0	26.3	30.1	32.5	34.0
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Gross	30.0	30.0	--	30.0	--	30.0	--	--	--	--	--
	Percentage Less Than Monthly Mortgage at 0.0 Percent Down Payment — Net	12.3	9.4	--	6.8	--	6.0	--	--	--	--	--

[a] Housing package includes the housing unit and residential lot with sewer and water laterals. Necessary acquisition costs, such as title insurance, closing costs, and lender service charges, are not included.

[b] The gross monthly mortgage payment is that amount of principal and interest payable monthly to the lender by the borrower as stated in the mortgage loan contract.

[c] The net monthly payment is the gross monthly mortgage payment reduced to account for the fact that interest is deductible from adjusted gross income. A 20 percent tax savings was assumed. The monthly cost was increased by the amount of interest loan on the down payment from alternative investments and opportunity cost of money, based on interest rates 2 percent below the stated mortgage loan rates.

Source: SEWRPC.

reductions in gross monthly mortgage payments in every instance. This is due to the effect of the relatively lower interest rates paid on savings utilized to compute the opportunity cost of money. The decline in the net monthly mortgage payment, which most closely represents the true cost of borrowing on a monthly basis, ranged from a low of 7 percent to a high of nearly 12 percent, based upon a reduction in the interest rate from 9 percent to 8 percent, and from a low of 20 percent to a high of 34 percent, based on reductions in the interest rate from 9 percent to 6 percent. Table 104 indicates that the extent of the reduction in the net monthly mortgage payment is always proportionally greater as larger down payments are considered. It is apparent that a reduction in the interest rate can significantly affect the ability of a low- or moderate-income family to purchase housing. For example, assuming a $25,000 housing package and a 30-year mortgage with no down payment requirement, the gross and net monthly mortgage payments at 9 percent interest would be $201 and $161, respectively, whereas at 6 percent interest, they would be $150 and $120, respectively, or a reduction of over 25 percent.

The length of mortgage term also has a significant effect on the size of the mortgage payment. Table 104 indicates that as the length of term is increased, the amount of both the gross and net monthly mortgage payments declines. Generally, extending the term of the mortgage has a greater impact on reducing the gross rather than the net monthly mortgage payment. As was the case with interest rate reductions, low- and moderate-income families could benefit from the existence of mortgages having longer terms of repayment. For example, a lower income family could possibly afford a gross monthly mortgage payment of $150 for a $25,000 housing package assuming a 7 percent interest rate, no down payment requirement, and a 50-year term. However, given this same set of factors except for a reduction in the term from 50 to 20 years, the required gross monthly payment becomes $194.

The third mortgage feature considered in this section is the required percent of down payment. The percentage reduction in the gross monthly mortgage payment is exactly proportional to the size of the down payment such that a 30 percent down payment reduces the gross monthly mortgage payment by 30 percent over a no down payment situation. A 30 percent down payment, however, only reduces the net monthly mortgage payment from less than 1 percent to almost 13 percent. This variation is the direct consequence of the opportunity cost of money which, as previously explained, effectively increases the actual economic monthly payment amount. Although increases in down payments reduce the level of monthly payments, low- or moderate-income families can seldom benefit from these reductions because they usually have insufficient capital for large down payments, in addition to having limited incomes.

The housing package cost, although not a mortgage feature, obviously exerts major influence on the amount of the monthly mortgage payment, since more costly housing packages usually require the borrowing of larger amounts of money. It follows, therefore, assuming no change in the percent of down payment, that monthly payments would be larger. Although not explicitly shown in Table 104, the result of a $5,000 reduction in the housing package cost may be easily derived. For example, the net monthly payment for a $30,000 housing package with a loan having a 9 percent interest rate, a 10 percent down payment, and a 30-year term is $191 per month. If, in this example, the housing package cost only were reduced to $25,000, the net monthly payment would decline by about 17 percent to $159 per month. Reductions in any of the components which comprise the housing package cost, consequently, could lower the required monthly mortgage payment and thereby possibly assist low- and moderate-income families in their quest for ownership of decent, safe, and sanitary housing.

It is apparent from a review of the data in Table 104 that changes in the various individual mortgage loan features, as well as in the housing package cost itself, can significantly affect a household's gross and net monthly mortgage costs. The effect of a combination of changes, however, is even greater. For example, the gross and net monthly mortgage payments for a $30,000 housing package with no down payment, a 9 percent interest rate, and 20-year term are $270 and $216, respectively. The monthly payments for the same $30,000 housing package with a 20 percent down payment, a 6 percent interest rate, and a 40-year term would be $132 for the gross mortgage payment and $126 for the net mortgage payment, or reductions of 51 percent and 43 percent, respectively. If it were possible to also lower the total housing package cost, even greater savings in monthly mortgage costs could be realized. Clearly, variations in mortgage terms as well as total housing package costs are important determinants of the number of households which would qualify as eligible homeowners. Based upon recent changes in mortgage financing, the trend is all too clear that more and more households, especially low- and moderate-income households, are being priced out of the market for new or used homes.

SUMMARY

Because most households usually lack sufficient capital to purchase housing outright, they must obtain a mortgage loan to finance the purchase of their housing over a long period of time. Knowledge concerning the types of mortgage lenders and the various features included in the typical residential mortgage loan, therefore, is quite important to potential home buyers. Most mortgage loans may contain many terms which a typical buyer should be cognizant of, including interest rate, down payment, term of repayment, closing costs, prepayment penalty, escalator clause, and escrow requirements. Those features typically included in a mortgage contract which most directly affect the level of monthly payments, however, are the interest rate, length of term of repayment, and the amount of down payment. While a reduction in any one of the aforementioned features will reduce the required monthly payment—and, therefore, the ability of a household to afford to purchase housing—the effect of a combination of such reductions is even more significant. Even greater saving in monthly mortgage costs could be realized if the total housing package cost could also be reduced. This would bring house ownership within the financial reach of more families. Conversely, increasing mortgage financing costs, combined with increasing housing package costs, will continue to price more and more households out of the market for decent, safe, and sanitary housing.

Chapter IX

TECHNOLOGY IN THE HOUSING INDUSTRY

INTRODUCTION

The housing industry in the past has not been a high technology industry. This may be attributed to a number of reasons, including the fact that specialized producers within the industry are widely scattered throughout the country, making it more difficult to organize and mount research efforts on a large scale; that the industry is subject to several external constraints, such as the need to comply with a multiplicity of widely differing local building codes, builder resistance to utilizing new techniques, and buyer resistance to, or rejection of, products involving new technology; and that the industry in the past has failed to attract a large share of engineering and managerial talent. In addition, it is often difficult to statistically document advances in technology within the housing industry because many innovations which may have a significant effect on the industry are often categorized as occurring in other industries. For example, the use of plastics in housing has been made possible by research recorded as occurring in the chemical industry. Similarly, advances in kitchen appliances or lighting systems are noted as occurring in the electrical industry, even though these innovations affect housing. For these reasons, there is generally little agreement among those in the housing industry on what constitutes housing technology.

In any attempt, therefore, to define what constitutes a technological innovation in housing, a number of factors could be taken into consideration, such as certain peculiarities inherent in the provision of housing wherein the site and its location, public facilities and services, financing and maintenance, as well as the actual construction of the unit may be significant aspects and wherein the housing consumer might benefit in some manner from improvements in any of these aspects. For example, technological innovations in building materials and components; construction methods, design, and tools; production management; and transportation may allow quality housing units to be constructed more quickly and efficiently, while at the same time reducing the overall housing construction costs and thereby enabling more homeowners and renters to obtain decent, safe, and sanitary housing within the private market. For the purposes of the regional housing study, however, the Commission viewed technology in the housing industry as it has traditionally been viewed by housing consumers and as presently defined by Webster, namely, the "application of scientific techniques in housing; the improvement in technical processes that increase productivity of machines and eliminate manual operation." Technology for the purposes of this study, therefore, relates to any existing or potentially marketable aspect of the entire system, employed to produce and assemble housing components, prepare sites for housing, construct housing, prepare housing for delivery, and transport housing to its permanent site, which has increased or could increase productivity in the provision of housing in the Region so as to make housing less costly to the consumer.

To better understand existing and probable future significant technological changes in housing and their effects on the provision of new housing and on the maintenance of existing housing stock within the Region, the Commission, as part of its regional housing study, undertook an inventory designed to collect and collate information concerning technology as it relates to housing within the Region and the United States. Data were collected relating to the technological innovations in tools and equipment utilized in the construction of housing units and new developments related to construction materials and products. Information was also gathered concerning the technological innovations in housing building systems which eventually led to factory-built housing as we know it today.

This chapter provides a summary of the data collected in the housing technology inventory. It includes a brief presentation of the types of technological innovations in tools and equipment and products and materials utilized in the construction of housing units within the Southeastern Wisconsin Region. More importantly, however, this chapter discusses the significant innovations in factory-built housing during the twentieth century, including a discussion of cost comparisons between factory-built and conventional housing units presently available within the Region. These data will be analyzed in order to determine the extent to which technological innovations in the housing industry have been or could be applied within the Region to lower the cost of housing, thus making housing more easily accessible for low- and moderate-income families.

TECHNOLOGICAL INNOVATIONS IN HOUSING CONSTRUCTION TOOLS AND EQUIPMENT

Modern tools and equipment utilized in the construction of today's housing units exist not only as a result of recent technological innovations, but also as a result of gradual evolution and sophistication in the housing construction industry over many generations. This combination of gradual evolution and rapid technological advances has enabled housing units to be constructed more rapidly and, in many cases, better than was possible with ordinary hand tools. For example, carpenters are now able to complete their work more quickly and precisely with such power tools as power routers, which eliminate hand chiseling for the installation of door hardware; wall jacks, which permit the construction of walls on the flat subfloor surface and eliminate use of ladders;

power nailers and staplers, which are used in place of ordinary hammers; portable power saws; portable electric miter boxes, which are used in the installation of interior wood trim; portable electric torque controlled drills; and power planers. Other building tradesmen have also been able to increase their productivity with the use of new tools and equipment. Painters use paint rollers and sprayers instead of brushes; concrete finishers use power trowelers rather than smoothing large areas of poured concrete by hand; and brick layers can alter their work levels with adjustable scaffolding.

Materials handling equipment has become common for unloading such things as lumber, concrete block, drywall (rocklath for interior walls), plumbing fixtures, and roofing materials from trucks onto the ground or into the structure under construction.

TECHNOLOGICAL INNOVATIONS IN HOUSING CONSTRUCTION PRODUCTS AND MATERIALS

Like the innovations in tools and equipment, the advances in housing construction products and materials have occurred both as a result of recent technological innovations as well as the gradual evolution of building products and materials over many generations. Because the cost of building materials has an important effect on the cost of housing, the efficiency of the industries that manufacture and distribute building materials is an important determinant of housing cost. Manufacturers of building materials and products, therefore, in an effort to increase efficiency and decrease costs, have been and are among the major sources of technological innovations within the housing industry. Discussion concerning innovation in housing construction products and materials will be presented under the following three topics: structural components; electrical, plumbing, and heating components; and premanufactured components.

Structural Components

Many of the technological innovations in products and materials are related to the use of new structural components consisting of wood, concrete, or metal. For example, builders of many of the homes which are constructed within the Region today utilize large plywood sheets for roofing and subflooring instead of the individual roofing and floor boards which were so extensively used in previous years.

Structural components comprised of concrete and metal have also been developed and are utilized in housing construction today. Prefabricated brick wall sections are produced in factories and transported to building sites. Wood, and occasionally aluminum or metal, roof trusses are being utilized in place of conventional rafters. These roof trusses have an advantage over conventional rafters because they are stronger, and because they replace conventional rafter framing procedures of fastening individual rafter boards together at the construction site, thus enabling the housing unit to be roofed or "closed in" more rapidly than under conventional techniques, and reducing potentially expensive delays caused by inclement weather.

Another new development which improves the productivity of housing and which is applicable at the building site is the bonding of cement blocks without placing mortar between each block. This technique utilizes a surface bonding adhesive which is troweled over the exterior surface of dry, stacked cement blocks. An advantage of this method is its simplicity of application. Furthermore, since the adhesive surface of the block is waterproof, no additional coating is needed to keep basement walls dry, thus reducing installation time at the building site.

Electrical, Plumbing, and Heating Components

New technologies have also been introduced and are being used by the housing industry in the electrical, plumbing, and heating systems of housing. Plastic has become popular and practical for electrical conduits. New plumbing systems are making use of plastic pipe for water supply, removal of waste, and vent systems. Some heating systems are using metal chimneys in place of brick, and fiberglass in place of sheet metal ductways.

Premanufactured Components

Premanufactured components which decrease construction time are being utilized extensively within the housing industry. Such products as prefabricated cabinets, preassembled windows, prefinished wood trim, prefinished exterior siding, prehung doors, and prefabricated stairs are constructed off the site and transported to the housing unit ready for installation, thus eliminating construction labor that in the past was completed at the site.

Another relatively new product utilized today is drywall gypsum board sheets for interior walls. These sheets have virtually replaced wall plastering in construction by eliminating the more costly onsite labor and wood or metal lathing underlayment required for the application of plaster.

It is apparent from the foregoing discussion that many new technologies related both to tools and equipment and products and materials have been incorporated into the residential building process. While many innovations in housing construction tools and equipment and products and materials have occurred which have increased the efficiency and productivity of the housing building industry, quantifiable data which would enable the determination of the extent to which such innovations have affected the price of housing units are not available. The next section of this chapter, however, which presents information concerning factory-built housing, does include a discussion of cost comparisons between factory-built and conventionally constructed housing units. The extent to which potential cost saving innovations are incorporated in the housing construction process should be reflected in the ultimate price of the completed units.

FACTORY-BUILT HOUSING

Factory-built housing as we know it today is generally based upon variations of two types of building systems: the panel building system and module building system. The panel system of housing construction utilizes panels

in varying degrees of completeness, usually composed of wood or concrete, to build floors, roofs, and walls. These panels are generally built in a factory and shipped to the construction location for onsite assembly, and in some systems include utility lines and finishing materials. Wall panels, for example, usually encompass framing, sheathing, installation of windows, and application of exterior siding. The system may also utilize a utility core which contains all necessary plumbing, heating, and electrical facilities required in the housing unit.

The module system of housing construction utilizes various box-like or three-dimensional rectangular sections, easily distinguished by their appearance, which contain a complete room or rooms, and many of which include all utilities and finishing details. When fit together, these sections comprise an entire housing unit. The sections are built in factories designed specifically for this purpose and are transported to the building site when complete. The module system itself is conducive to the construction of different types and styles of housing and is often referred to as a building block or stack box. The building or dwelling unit utilizing modules may, for example, take the form of a one-story single-family unit, a two-story townhouse, or a garden apartment.

It should be noted that both the panel and module building systems differ from conventional "stick-built" housing construction methods. Under conventional housing construction methods, individual materials such as wall studs, ceiling and floor joists, roof and floor boards, wall sheathing, windows and doors, and heating, plumbing, and electrical supplies are shipped to the building site, where they are assembled by skilled tradesmen.

This portion of the chapter will present information related to factory-built housing, including discussions of the history of factory-built housing, indicating some of its failures and successes; current attempts at factory-built housing; and costs of factory-built versus conventionally constructed housing.

History of Factory-Built Housing

As early as 1624, settlers who immigrated to this country from England developed a type of panelized house constructed from wood which could be disassembled, moved, and reassembled for use by their fishing fleet. Although this housing was not "built in a factory," it did exhibit the most important characteristic of factory-built housing: it was built in one location and was designed to be transportable to another location for use.

Factory-built housing in the United States did not gain prominence until the start of World War II, during which many factory-built housing units were erected for the armed forces, both on military bases and in the vicinity of war plants. This housing was developed to provide basic shelter needs, and consequently was not very attractive.

With the strong demand for permanent, private, single-family housing at the end of World War II, the factory-built housing industry, desiring to supply a portion of this demand, had to overcome the public's general concept of a "prefab" home as a poorly constructed structure which was inferior to the more common "stick-built" home. Several firms, therefore, in an effort to capitalize on this pent-up demand and to dispel the public's concept of prefab housing, attempted to manufacture factory-built houses made from unconventional materials, such as metal or aluminum. Five firms in the United States used steel as the basic construction material for the houses they produced. These were U. S. Steel, Ferro Corporation, Rheem Manufacturing, Armco Steel Corporation, and Lustron Corporation.

U. S. Steel experimented with, and constructed several types of, steel houses, but never mass produced its product. Similarly, the Ferro Corporation built an experimental all-steel house using large, porcelain-enameled wall and roof panels, but also never mass produced its product. The Rheem Corporation, on the other hand, not only developed but also attempted to market a steel house in the early 1960s. The house introduced a structural system used successfully for schools, factories, and other commercial structures. However, because of builder resistance to adopt new, unfamiliar construction methods, as well as buyer resistance to accept a new contemporary housing design, only seven of these houses were built. The Armco Steel Corporation, through its wholly-owned subsidiary, Tech-Built Products, Incorporated, also introduced an all-steel house in 1962, utilizing numerous small pieces of material rather than large pieces. It was found that this type of house was too expensive for the average homeowner to build, and in many areas local building codes did not permit this new type of construction. Consequently, this building system also failed to gain acceptance in the general housing market.

One of the most notable achievements in factory-built housing in the United States was the development and production in 1949 of the Lustron House, an all-steel single-family housing unit. The initial goal of the Lustron Corporation was the manufacture of 100 houses a day at a selling price of $7,000 each plus land. A series of short-term loans from the Federal Reconstruction Finance Corporation was used to finance Lustron's initial operation. Because of new and unusual construction techniques, however, the first Lustron houses proved difficult and expensive to erect, and this, combined with certain other difficulties, eventually forced the sale price to between $10,000 and $12,000. Even so, production of the Lustron house gradually increased to 20 houses a day, with orders for units coming from both the U. S. Army and Navy and the City of Cleveland. The Lustron house was not readily accepted in all areas of the U. S., however, because its innovative building system often did not comply with local building codes. The City of Detroit, for example, never permitted construction of the Lustron units.

While the Lustron Corporation experienced some difficulty with building code compliance, labor union problems were avoided completely. National agreements were signed with the American Federation of Labor Craftsmen to man the Lustron plant and to ensure labor peace in cities where Lustron homes were sold. In 1950,

Lustron Corporation ceased its home building operations, long before the goal of producing 100 homes a day was realized, because the Reconstruction Finance Corporation called in Lustron's short-term loans, totaling $37.5 million, despite a previous promise that they could be consolidated into one long-term loan.

In addition to the development and experimentation of various all-steel housing systems, an aluminum house was introduced in 1962 by Alside Homes. The home was originally designed to sell for $12,000 plus land, but a series of cost increases forced the price slightly higher than that of conventional houses of the same size. The building system consisted of a steel frame enclosed with low-maintenance, high-thermal resistant aluminum wall and roof panels. In 1963, after an investment of nearly $10 million, Alside ceased production of the house because of high costs, builder rejection of a contemporary design and unfamiliar construction materials, and a lack of sufficient capital to meet slow market acceptance.

The type of aluminum housing system introduced by Alside Homes was further developed by Alcoa and the Koppers Company. This system utilized a panel type of construction with aluminum skins and a polystyrene core called a "Dylite" panel. After some time, Alcoa apparently lost interest in attempting to further refine the Dylite panel, leaving the Koppers Company to continue experimentation. The company invested a reported $18 million in its Dylite panel, including the opening of a new plant in Detroit to manufacture the panels. Although about 800 houses were built utilizing these panels, this system was not widely accepted for housing construction. Local governments often required the panels to be individually tested and approved by building code officials before being approved for use locally. Because initial sales of the panels were not high enough to effect efficient mass production, the Koppers Company discontinued production and withdrew its panel system from the housing market in 1963.

A number of other manufacturers of housing, in addition to those previously discussed, have also developed various types of panels of different materials to be used with conventionally constructed housing, including the Johns-Manville Corporation, which experimented with tempered hardboard panels; Alcoa, which experimented with aluminum-faced panels; and U. S. Gypsum Company and National Gypsum Company, which experimented with interior partition panels.

Use of the tempered hardboard panels developed by Johns-Manville caused several problems in the construction field. The joints had to be strengthened with adhesives; the seams on the interior faces of the panels had to be filled by an epoxy process; and cutting and finishing of the panels was time consuming, even though the panels were more or less conventionally framed and wiring could be pulled through them. Consequently, the Johns-Manville Corporation built a few test houses using the panels but never actually put them on the market.

The aluminum-faced panels developed by Alcoa presented too many fastening problems during construction. Aluminum cannot be nailed; it must be riveted or splined and the joints must be sealed with plastic. With edges formed for splining, it was impossible to cut the panels in the field. These panels were introduced to builders in 1972, but because of the difficulties mentioned in housing application, Alcoa is still experimenting with these panels.

The U. S. Gypsum Company and National Gypsum Company jointly developed and experimented with interior partition panels. These were also rejected in the industry by both builders and buyers. Builders did not like the panels because they were difficult to set up and join, and ceiling and floor rails had to be installed precisely. Furthermore, electric wiring could not be easily run inside the panels, but had to be run through baseboard raceways. This placed outlets at low levels and created problems in carrying wires past door openings. Buyers did not like the panels because they resulted in thin wall construction and were poor sound barriers.

It is apparent from the foregoing discussion that many of the past innovations in factory-built housing have failed to gain widespread acceptance, due mainly to builder resistance due to unfamiliarity with construction techniques; buyer resistance due to unfamiliarity with housing unit design or prohibitive costs; community resistance due to structure nonconformance with local building codes; or lack of sufficient working capital by the housing innovators themselves.

"Operation Breakthrough" Program

In an effort to overcome some of the aforementioned constraints and enable the housing industry to reach the efficiency necessary to satisfy national housing needs, particularly for households at the low- and moderate-income level, the federal government, under the direction of the U. S. Department of Housing and Urban Development, in May 1969 mounted an experimental housing program called "Operation Breakthrough." It was hoped that with federal revenue sources behind it, the housing industry would be able to develop a national market for manufactured housing. It was also hoped that the inclusion of large amounts of federal dollars would, for the first time, provide the housing industry greater latitude in housing experimentation, which would ultimately lead to greater efficiency in the design, production, transfer, and operation of housing units affordable by low- and moderate-income families.

Basically, Operation Breakthrough was designed to involve larger industries in housing, particularly in the development and implementation of housing technological innovations, by developing, testing, and promoting the best in technologically advanced systems for producing housing. It was aimed at developing an approach to help meet the nation's housing needs by improving the entire process of supplying new residential housing through the creation of a working partnership of federal, state, and local gov-

ernments; labor; industry; the financial community; home builders; and consumers. Operation Breakthrough also aimed, through the use of a more efficient means of production, to increase employment opportunities for less skilled labor, to provide year-round employment for those presently subject to seasonal fluctuations, and to stimulate an interest in housing production on the part of the private sector.

To help achieve these goals, HUD offered $15 million in research grants, based on competitive housing development proposals, to 22 selected system or factory producers of housing—later reduced to 21—for the construction of over 2,000 prototype housing units, and selected 11 demonstration sites—later reduced to nine—located throughout the United States. Larger producers of factory-built housing were selected to participate in the program because it was felt that there may be disagreement within the industry as to the quality or marketability of some building systems, and that long-term trends in the marketplace would tend to yield greater advantages to firms working on a comparatively large scale.

The Operation Breakthrough program itself was designed to be conducted in three phases: Phase 1, Design and Development; Phase 2, Prototype Demonstration; and Phase 3, Volume Production and Marketing. Most of the housing systems selected for Operation Breakthrough varied widely in the degree to which they had been developed or utilized. Some systems were modifications of housing products currently in use, and others were barely off the drawing board but showed great promise in design or materials. None of the systems, however, was ready for immediate production under the Breakthrough program. All required a period of additional design, development, testing, and evaluation, and therefore the first phase of the program was devoted to the design and development of these systems.

Because building codes are enacted by individual communities to provide for public health and safety by ensuring sound, sanitary, and durable construction depending upon the needs of the particular community, very few codes are precisely alike. This situation is a significant constraint for the volume producer of a housing product to be marketed over a wide area and in many communities. Therefore, in order to demonstrate the housing systems designed and developed in Phase 1 of the Operation Breakthrough program and to provide for evaluation of these systems in their technical and user oriented aspects, it was necessary in Phase 2 to select prototype demonstration sites free from the constraints of local building codes and other factors which would inhibit or prohibit entirely the utilization of these housing systems.

Phase 3 of the Operation Breakthrough program consisted of volume production and marketing of the housing systems developed and tested in Phases 1 and 2. By early 1973, Phase 3 had underway 30 projects comprising a total of 9,000 units either completed or under construction. In addition, more than 23,500 units in 130 projects were either in the planning or development stages. Also, more than 6,000 units under HUD programs were under construction or in the development stage using advanced housing construction techniques. Of the 21 original participators in the Operation Breakthrough program, 18 were involved in these Phase 3 activities.

An example of a project completed under the Operation Breakthrough program is the New Horizon Village located on 33.8 acres of land in Kalamazoo, Michigan. The village is comprised of 245 units built by seven housing producers selected to participate in the program, including National Homes Corporation; Hercoform Marketing, Inc.; Republic Steel Corporation; Levitt Building Systems, Inc.; Inland Scholz Housing Systems; Material Systems; and FCE-Dillon, Inc.

The types of units constructed include townhouses, garden apartments, and single-family houses. The building materials used in construction included wood, brick, steel, and plastic. All of the units offer air conditioning, sound proofing, wall-to-wall carpeting, and safety devices such as smoke detectors. Modern kitchens are equipped with major appliances and garbage disposals. The surrounding area of the village features a community center, outdoor swimming pool, baseball field, multipurpose sports area, and two playgrounds.

All of the housing units constructed in the village were sold under the Section 233 Experimental Housing Program pursuant to the Section 236 program where applicable (see Chapter XI, "Government Activity in Housing," for a description of the Section 233 and 236 programs).

The full impact of Operation Breakthrough will not be known until Phase 3 of the program is completed. Only then can an assessment be made of the extent to which the program achieved its original objectives. Of the utmost importance in the evaluation of the program's success or failure will be answers to such questions as: Will firms be able to profitably produce and market housing units once federal support is withdrawn? Will the technological innovations utilized in the design, production, and operation of the housing units enable them to be constructed more economically than conventionally built units? and, most importantly, Will such units be affordable by households of low and moderate income without massive subsidies?

Factory-Built Housing Costs in the Region

While data are presently not available concerning the cost saving, if any, of factory-built housing in the "Operation Breakthrough" program, certain data are available regarding the cost of factory-built housing currently available in the Region. This section will present construction as well as occupancy costs for four types of factory-built housing in comparison with a similar sized conventionally constructed housing unit. These cost data will be useful in judging the relative merits of factory-built versus conventional housing, and in judging whether factory-built housing will be able, in the foreseeable future, to significantly contribute to alleviating the Region's housing need by providing decent, safe, and sanitary housing at costs significantly lower than conventionally priced units.

Costs of Conventionally Constructed and Factory-Built Housing: Table 105 shows the cost of a typical conventional "stick-built" housing unit compared with the costs of four different factory-built housing units presently available in the Region. The conventional housing unit is a one-story, ranch style unit of frame construction with four bedrooms, one and a half baths, kitchen, living room, full basement, and 1,200 square feet of living area. The factory-built housing units presented for comparison consist of two panelized units and two modular units. Panelized unit A and modular unit A are comparable in almost every respect to the conventionally constructed unit, with basically the same number and types of rooms, amount of living area, and similar construction materials. The primary difference, of course, is that they are constructed in a factory. Panelized unit B and modular unit B, however, are somewhat different from the conventionally constructed unit. Panelized unit B, while offering the same number of rooms and living area as the conventionally constructed unit, utilizes a stressed skin construction technique[1] with 2" x 4" floor joists and roof rafters. Also, the interior door and window

[1] *Stressed skin construction involves the bonding of interior support members to exterior sheet material of floor, roof, or wall panels, usually, in the case of wood products, with special adhesives. The bonding process effectively causes the entire panel to have a weight bearing capacity far greater than provided by the interior framing material only.*

Table 105

COMPARISON OF SINGLE-FAMILY HOUSING COSTS IN THE REGION BY METHOD OF CONSTRUCTION: AUGUST 1973

Item	Site Built	Factory Built							
		Panelized Construction[b]				Modular Construction[c]			
	Conventional Construction[a]	Type A[d]	Percentage Difference Compared to Conventional	Type B[e]	Percentage Difference Compared to Conventional	Type A[d]	Percentage Difference Compared to Conventional	Type B[f]	Percentage Difference Compared to Conventional
Housing Unit Without Lot (Selling Price)	$19,770.00	$19,930.00	0.8	$17,710.00	- 10.4	$20,270.00	2.5	$17,197.00	- 13.0
Housing Unit With Lot (Including Acquisition)[g]									
House and Lot[h]	27,770.00	27,930.00	0.6	25,710.00	- 7.4	28,270.00	1.8	25,197.00	- 9.3
Private Mortgage Insurance[i]	124.97	125.69	0.6	115.70	- 7.4	127.22	1.8	113.39	- 9.3
Closing Costs[j]	200.00	200.00	0.0	200.00	0.0	200.00	1.8	200.00	0.0
Service Charge[k]	499.86	377.06	- 24.6	347.09	- 30.6	381.65	- 23.6	340.16	- 31.9
Construction Financing	218.67	17.60	- 92.0	20.03	- 90.8	17.21	- 92.3	20.56	- 90.6
Total	$28,813.50	$28,650.35	- 0.6	$26,372.82	- 8.5	$28,996.08	0.6	$25,871.11	- 10.2

[a] *Conventional construction utilizes standard dimension lumber delivered to the site for assembly by skilled tradesmen from working drawings or blueprints.*

[b] *Panelized construction consists of the manufacture of completed or partially finished wall, floor, and roof panels in a factory to be transported to the site for placement on a previously prepared foundation.*

[c] *Modular construction consists of the manufacture in a factory of completed or partially finished three-dimensional room arrangements to be transported to the site for placement on a previously prepared foundation.*

[d] *Type A utilizes construction materials very similar to those of conventional construction.*

[e] *Type B utilizes stressed skin construction with wooden 2 x 4s for joists in floors and roof rafters.*

[f] *Type B, a double-wide mobile home, utilizes stressed skin construction on interior walls, aluminum sheeting on exterior walls, lengthwise floor joists, and a steel basic support frame to which permanent axles are fastened.*

[g] *A 10 percent down payment is utilized in each case.*

[h] *For purposes of comparison, a fully improved lot, including sewer and water laterals and other necessary costs, was estimated to cost $8,000.*

[i] *A 1/2 percent insurance premium paid in advance is required by most lenders for low down payment loans requiring private mortgage insurance.*

[j] *Closing costs include such out-of-pocket expenses as costs for title insurance, appraisal, survey, credit rating report, and document recording.*

[k] *Service charges are utilized by savings and loan associations generally to enhance their profits from mortgage lending and partially for the costs involved in administering construction loan payments to the contractor, subcontractors, and material suppliers.*

Source: SEWRPC.

wood trim, interior paneling, and chimney materials are less expensive than those normally found in a conventionally constructed housing unit. Like panelized unit B, modular unit B offers the same number of rooms and living area as the conventionally constructed housing unit, but being a double-wide mobile home unit, it is the only unit presented in the table which does not meet FHA minimum property standards. Like many mobile homes, it differs from conventional construction in that it has aluminum sheeting on the exterior walls, utilizes generally smaller windows and doors, and incorporates less expensive hardware, plumbing and heating components, and generally lower quality interior wood trim and paneling.

It should be noted that, in an effort to assure greater compatibility of the units discussed, certain basic cost adjustments were made to arrive at the cost figures presented in Table 105. For example, the costs related to the hardwood floors in the bedrooms of the conventional unit were subtracted from the total cost of the conventional unit to make it more comparable to the factory-built units. Conversely, the costs related to provision of a full basement; transportation and setup; basement stairs; and sewer, water, and electrical hookup were added to the total cost of factory-built units, where appropriate, to make these units more comparable to the conventional units, which included these costs in the selling price. No attempt was made, however, to adjust for all of the potential differences in quality of materials and equipment utilized in the factory-built versus conventional unit.

From a review of the data presented in Table 105, it is apparent that panelized unit A and modular unit A, the factory-built units which were most similar to conventionally constructed housing in terms of construction materials and quality of interior hardware and fixtures, offered no cost savings and, in fact, cost slightly more than the conventionally built units. The cost of the conventionally constructed site-built unit was $19,770 compared with $19,930 for panelized unit A and $20,270 for modular unit A. Panelized unit B and modular unit B offered cost savings of about 10 and 13 percent, respectively, but whether this is a true representation of actual savings is questionable because of the apparent lesser quality of some materials and equipment utilized in these factory-built units.

When the cost of the total housing package, i.e., house, lot, and various financing charges, is considered, the variation in costs of conventionally constructed and factory-built housing is further minimized. To arrive at the total housing package costs, each housing unit was assumed to be placed on a fully improved residential lot, including sewer and water laterals, valued at $8,000. The necessary costs of acquisition by housing consumers were also considered and itemized, including the costs of private mortgage insurance, out-of-pocket closing costs for such items as title insurance and appraisal reports, prevailing savings and loan service charges, and the applicable construction financing costs. For purposes of estimating various finance charges, it was assumed that buyers of each unit would have a 10 percent down payment requiring private mortgage insurance, which results in the consideration of an advance payment of 1/2 percent of the mortgage loan amount for the first-year insurance premium. Closing costs represent actual costs incurred by the lender for services related to the mortgage loan, including credit report fee, survey fee, and document recording fees.

The prevailing service charge of 1 1/2 percent for existing construction was assumed for the factory-built housing, since the lender has very limited construction administration costs because such housing is erected and made ready for occupancy in just two or three days. Construction loan administration is more involved where housing is built at the site over a three-month period, hence a 2 percent service charge. These differing construction periods are also reflected in construction financing costs. Only the basement may have to be financed during the construction phase, in the case of factory-built housing, whereas for conventional construction, the house itself must be paid for in stages as the work is completed, resulting in the considerably larger expense for construction financing for this unit.

From a review of total housing package costs of conventionally constructed versus factory-built housing units, it is apparent that there again is no consequential cost difference between the conventional unit and panelized unit A or modular unit A, the package cost of the conventional unit being $28,813 while the factory units are $28,650 and $28,996, respectively. The costs of panelized unit B and modular unit B were $26,372 and $25,871, respectively, which represented cost savings of from 8 percent to 10 percent over the conventional unit. However, because of the variation in quality of materials and equipment utilized in these factory-built units, it cannot be said with full certainty that these are true savings. A true test of the extent to which such savings are realized can only be determined after a long period of time, in which comparisons can be made relating the livability, quality, and durability of conventionally constructed units to factory-built units.

Monthly Occupancy Costs of Conventionally Constructed and Factory-Built Housing Units: While the cost of acquiring new housing is quite important to housing consumers, ultimately most consumers must consider the monthly costs of occupying such housing. While the preceding section provided a comparison of the relative costs of acquiring new conventional and factory-built housing and revealed maximum probable savings for some factory-built units of from 8 to 10 percent over conventionally built units, this section will present a comparison of the costs of occupying conventional and factory-built units.

The relevant costs of occupying new single-family housing as they relate to conventional and factory-built housing units include financing, property taxes, utilities, maintenance and repair, opportunity cost of money, and property insurance, as shown in Table 106. The financing, property tax, maintenance and repair, and property insur-

Table 106

COMPARISON OF SINGLE-FAMILY HOUSING OCCUPANCY COSTS IN THE REGION BY METHOD OF CONSTRUCTION: AUGUST 1973

Housing Occupancy Costs	Site-Built		Factory Built					
			Panelized Construction					
	Conventional Construction							
	Cost	Percent of Total	Cost (Type A)	Percent of Total	Percentage Difference Compared to Conventional	Cost (Type B)	Percent of Total	Percentage Difference Compared to Conventional
Cost of Housing Package	$28,813.50	--	$28,650.35	--	- 0.6	$26,372.82	--	- 8.5
Monthly Occupancy Costs								
Financing[b]	$ --	56.1	$ --	56.6	--	$ --	56.0	--
Principal	19.77	--	19.87	--	0.5	18.29	--	- 7.5
Interest[c]	141.50	--	142.32	--	0.6	131.01	--	- 7.4
Private Mortgage Insurance Premium	5.10	--	5.13	--	0.6	4.73	--	- 7.3
Property Taxes[c,d]	49.83	16.8	50.12	16.9	0.6	46.13	16.8	- 7.4
Utilities[e]	38.38	13.0	38.38	13.0	0.0	38.38	14.0	0.0
Maintenance and Repair[f]	16.48	5.6	16.61	5.6	0.8	14.76	5.4	- 10.4
Opportunity Cost of Money[g]	19.10	6.5	17.57	5.9	- 8.0	16.17	5.9	- 15.3
Property Insurance[h]	5.93	2.0	5.98	2.0	0.8	5.31	1.9	- 10.5
Total	$ 296.09	100.0	$ 295.98	100.0	0.0	$ 274.78	100.0	- 7.2

Housing Occupancy Costs	Factory-Built					
	Modular Construction					
	Cost (Type A)	Percent of Total	Percentage Difference Compared to Conventional	Cost (Type B)	Percent of Total	Percentage Difference Compared to Conventional
Cost of Housing Package	$28,996.08	--	40.6	$25,871.11	--	- 10.2
Monthly Occupancy Costs						
Financing[b]	$ --	56.7	--	$ --	63.0	--
Principal	20.11	--	1.7	84.15	--	325.6
Interest[c]	144.06	--	1.8	114.00	--	- 19.4
Private Mortgage Insurance Premium	5.20	--	2.0	4.18	--	- 18.0
Property Taxes[c,d]	50.73	17.0	1.8	45.22	14.0	- 9.3
Utilities[e]	38.38	12.8	0.0	38.38	11.9	0.0
Maintenance and Repair[f]	16.89	5.6	2.3	14.33	4.5	- 13.0
Opportunity Cost of Money[g]	17.77	5.9	- 7.0	15.97	5.0	- 16.4
Property Insurance[h]	6.08	2.0	2.5	5.16	1.6	- 13.0
Total	$ 299.22	100.0	1.1	$ 321.39	100.0	8.5

[a] *Includes 1,200-square-foot house with fully improved lot and accompanying acquisition costs (see Table 105).*

[b] *Assumes a 10 percent down payment, an 8 3/4 percent interest rate, a 30-year term, and an average ownership period of 7 years, except for the Type B modular constructed unit for which a 15-year term was utilized in keeping with general mortgage lending practices involving mobile home type structures.*

[c] *Property taxes and interest payments are deductible from adjusted gross income for income tax purposes. These items were, therefore, reduced by an assumed annual 20 percent income tax savings.*

[d] *Based on the current tax rate for a typical suburban community in the Region.*

[e] *Includes natural gas and electricity based on average household consumption related to the housing size specified.*

[f] *Based on assumed annual cost of 1 percent of the value of the housing structure only.*

[g] *Based on the fact that down payment and acquisition costs are lost for alternative investments; assumed safe investment return of 6 percent.*

[h] *Based on appropriate fire rating in given geographic area on Homeowner's Form II Policy.*

Source: SEWRPC.

ance costs are directly related to the value of the housing structure and/or total housing package. Utility costs are based upon average household consumption of electricity and gas related to a house of 1,200 square feet. Opportunity cost of money is the monetary cost to the buyer which occurs as a result of his required cash expenditure for the housing unit down payment, interest on the construction loan, title insurance, lender service charge, and closing costs, thereby making such sums of money unavailable for alternative investments.

Of the total monthly occupancy costs, financing represents the single largest monthly cost item—at least 56 percent in all cases—followed by property taxes and utility costs, which ranged from 14 to 17 percent and 12 to 14 percent, respectively. There was no significant occupancy cost difference between the conventionally constructed unit and panelized unit A and modular unit A. Panelized unit B, however, which realized an 8 percent saving in total construction package costs over the conventional unit, realized only a 7 percent saving in monthly occupancy cost, with the occupancy cost being approximately $275 compared to $296 for the conventional unit. Modular unit B, which realized a 10 percent saving in total construction package costs compared to the conventional unit, was actually 8 percent more expensive to live in on a monthly basis than the conventional unit, the monthly costs being more than $321 for the modular unit B compared to $296 for the conventional unit.

The reason for the startling shift in modular unit B from an apparent saving on the total construction package to a deficit in occupancy cost when related to a conventional unit is primarily due to the financing arrangement of this modular unit. Whereas the conventional unit and panelized units A and B as well as modular unit A can be financed over a 30-year period, most lenders would only be willing to finance modular unit B for a period of 15 years because it is a mobile home. This results in higher monthly finance payments, hence the great increase in monthly occupancy costs.

On the basis of the data for the four factory-built units, panelized unit B, with its $21, or 7 percent, saving in monthly occupancy cost over the conventional unit, offered the greatest probable savings to housing consumers. It is interesting to note that similar savings in monthly occupancy costs could be realized through a reduction in the interest rate from 8 3/4 to 7 1/2 percent.

From the comparison of total package costs and occupancy costs of conventional versus factory-built housing which is presently available within the Southeastern Wisconsin Region, there is little evidence to indicate that factory-built housing will, at least in the near future, meet the housing needs of low- and moderate-income households. While there has been progress made in the development of new technologies related to housing, as evidenced by the utilization of panelized and modular building systems, these systems to date have not been able to make decent, safe, and sanitary housing available to residents of the Region at prices which could be considered significantly lower than conventionally constructed housing. This experience within the Region is not dissimilar to the national experience to date.

SUMMARY

This chapter has presented a summary of technological innovations in the housing industry related to housing construction tools and equipment and products and materials. It has also presented a comparison of construction and occupancy costs of conventionally constructed versus factory-built housing units.

The term "housing technology," for purposes of this report, is defined as any existing or potentially marketable aspect of the entire system, employed to produce and assemble housing components, prepare sites for housing, construct housing, prepare housing for delivery, and transport housing to its permanent site, which has increased or could increase productivity in the provision of housing in the Region so as to make housing less costly to the consumer.

Technological innovations in housing construction tools and equipment as well as products and materials have been implemented in the housing building process over many years. While such innovations have no doubt increased the efficiency and productivity of the housing building industry, quantifiable data do not exist which enable the determination of the extent to which such innovations have affected the price of housing.

Factory-built housing has gained prominence in the United States since World War II, but to date has failed to gain widespread acceptance because of builder resistance due to unfamiliarity with construction techniques, buyer resistance due to unfamiliarity with housing unit design or prohibitive costs, community resistance due to structure nonconformance with local building codes, or lack of sufficient working capital by the housing innovator.

Attempts to meet the nation's housing needs through the use of new technological innovations in the federal government's "Operation Breakthrough" program are underway, but the full impact of this program will not be known until all phases are completed. Only then can a proper assessment be made of whether the innovations which develop as part of the program can economically provide housing units for low- and moderate-income households.

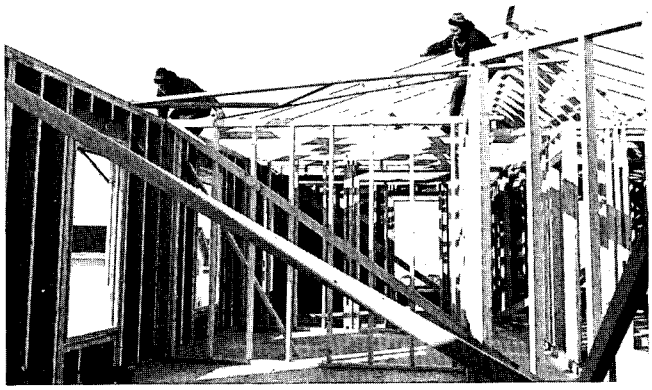
In order to judge the relative merits of factory-built versus conventionally constructed housing units presently available within the Southeastern Wisconsin Region, and to determine the cost savings, if any, of factory-built over conventional units, data were gathered concerning construction and occupancy costs of four types of factory-built housing (two panelized and two modular type units) and compared with the construction and occupancy costs of a comparable conventionally built unit. Analysis of the data revealed that for two of the factory-built units there were no savings in the construc-

tion or occupancy costs when compared to a comparable conventional unit. In comparison with the conventional unit, the remaining two factory-built units, however, realized construction savings of approximately 8 percent and 10 percent. Maximum savings in occupancy costs of factory-built versus conventional construction, however, were 7 percent for one factory-built unit, while the data indicated the remaining factory-built unit was actually 8 percent more costly to occupy than a conventionally built unit.

While, on the basis of the data presented, there is little evidence to indicate that factory-built housing which is currently available within the Region can, at least in the foreseeable future, economically meet the housing needs of low- and moderate-income households, factory-built housing can, in many cases, offer certain advantages over stick-built housing, such as better quality based on more rigorous quality control and the utilization of top-grade kiln-dried lumber in the assembly process, controlled climatic conditions due to manufacture inside a factory, stronger component parts necessary to withstand shipping and erection, and savings of time and money due to the relatively short onsite construction period. Also, it is probable that the combination of continued incentives to produce factory-built units, coupled with the removal of some of the constraints to factory-built housing, would enable volume production and greater economies of scale, thereby eventually resulting in lower housing costs to the consumer.

Figure 49

CONVENTIONAL SYSTEM OF HOUSING CONSTRUCTION



SEWRPC Photo.

Figure 50

PANEL SYSTEM OF HOUSING CONSTRUCTION

SEWRPC Photo.

Figure 51

MODULE SYSTEM OF HOUSING CONSTRUCTION

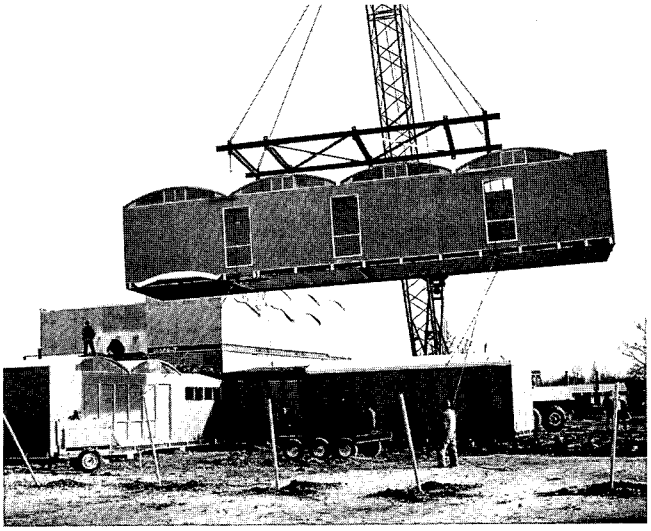


Photo Courtesy of Professional Builder magazine.

The photographs shown in Figures 49, 50, and 51 illustrate three methods of building construction. The conventional, or stick-built, system shown in Figure 49 is a step-by-step process of construction in which individual materials are shipped to the building site, where they are assembled by skilled tradesmen. The panel building system shown in Figure 50 usually uses panels of wood or concrete manufactured in factories in varying degrees of completeness to build floors, walls, and roofs. The module system of housing construction, shown in Figure 51, utilizes box-like or rectangular sections, such as the one shown in the photograph, containing a complete room or rooms, and often including all utilities and finishing details. When fit together, these rectangular sections comprise an entire housing unit.

Chapter X

LAND USE CONTROLS

INTRODUCTION

The natural and man-made physical features of the Region; community tax structure; levels of municipal services; and land development, construction, and financing costs, as discussed in previous chapters of this report, are all influential in directing and shaping housing development patterns within the Southeastern Wisconsin Region. Among the more important influences in the Region, however, are the land use regulatory powers exercised by the 153 individual counties and minor civil divisions which comprise the Region. Such powers, conferred through state enabling legislation, provide counties and local communities with many land use control mechanisms which have a profound impact on future development, especially residential housing development, within the Region. Because land use controls can substantially determine the characteristics of housing development within a community, including the quality, quantity, location, size, type, cost, and even to some extent the characteristics of prospective occupants of the housing units themselves, a consideration of land use controls, and more specifically, a consideration of such controls as they facilitate or constrain the availability of housing within the Region, is essential to the regional housing study.

The principal land use control mechanisms which are utilized by local communities in regulating and controlling development, especially residential development, include land use plans at the community and neighborhood levels, zoning ordinances, subdivision control ordinances, architectural control ordinances, and building and housing codes. The zoning regulations are especially influential in this respect, and to a large extent determine the overall residential character of individual communities in the Region.

A proper assessment of the potential impact of local land use controls on the housing stock of the Region requires an understanding of the scope of the land use powers conferred by state law on the various levels of local government and of the extent to which those powers have been refined by judicial review. Detailed descriptions and evaluations of the various physical planning and plan implementation powers available to the federal, state, regional, and local levels of government in southeastern Wisconsin designed to aid in the attainment of such an understanding are presented in the Southeastern Wisconsin Regional Planning Commission's Technical Report No. 6, Planning Law in Southeastern Wisconsin; Planning Guide No. 1, Land Development; Planning Guide No. 2, Official Mapping; Planning Guide No. 3, Zoning; Planning Guide No. 4, Organization of Planning Agencies; Planning Guide No. 5, Floodland and Shoreland Development; and Planning Guide No. 6, Soils Development.

There is considerable diversity among the 153 general-purpose local units of government in southeastern Wisconsin as to the particular combination of land use controls adopted and enforced by local officials. The extent and direction of regulation varies considerably from community to community. Within the framework of the powers conferred by state statute on counties, cities, villages, and towns, individual communities formulate the plans, ordinances, and codes each deems most suitable to condition the nature of housing development within the local governmental boundaries. Consequently, the development of certain housing types may be encouraged in some communities while discouraged or even prohibited in other communities. The resulting housing patterns have distinct and far-reaching ramifications with respect to the tax base, social structure, and overall character of each community. Taken in aggregate, moreover, the independent land use control decisions of the local municipalities determine, in large measure, the quality, quantity, and distribution of housing development opportunities to be found within the Region.

This chapter presents a 1971 inventory and descriptive analysis of the land use planning and control devices then utilized within each community in the Region which most directly affect the location, size, type, and quantity of housing. The land use controls inventory is intended to contribute to the analysis of housing and housing-related problems within southeastern Wisconsin by:

1. Providing uniform, areawide information concerning the existence of land use controls which affect the placement and timing of housing development;

2. Assisting in the identification and evaluation of institutional controls which, directly or indirectly, facilitate or constrain the supply of various types of housing; and

3. Promoting a better understanding of the interdependent nature of local governmental land use plans and controls as they affect housing patterns within the Region, and thereby assist in the formulation of recommendations regarding the manner in which these plans and controls might better be utilized to achieve legitimate regional as well as local housing objectives.

LAND USE CONTROLS—INVENTORY FINDINGS

An inventory of land use controls was conducted by the Commission as part of the regional housing study in 1971. As previously noted, this inventory was intended to provide definitive data on those land use control measures which most directly affect residential land development and housing within the Region, including

land use plans at the community and neighborhood level; zoning ordinances; subdivision control ordinances; architectural control ordinances; and building and housing codes. The pertinent data were collected by means of personal visits to all local governmental units within the Region. A responsible local official, usually the municipal clerk, was personally interviewed by a Commission staff member and an inventory form completed at the official's direction. Wherever possible, planning and regulatory documents and maps were also collected from each civil division. Especially important in this respect were the community zoning maps which were collected from each community. To facilitate the zoning analysis, the zoning categories indicated on individual community zoning maps were converted to a standard regional zoning classification system consisting of 27 categories (see Appendix F), and then remapped on a 1" = 2000' scale county base map.

Land Use Plans

The case for planned land development as opposed to haphazard, unplanned development and for a comprehensive public policy concerning land use development is well-documented and convincing. Land use plans and controls are imperative if a wide range of essential public services are to be provided at minimum cost, if land is to be utilized in the most beneficial manner, if the community tax base is to be preserved and enhanced, if the underlying and sustaining natural resource base is to be protected, and if the aesthetic features and amenities which contribute to the overall quality of life are to be enhanced and preserved—in short, if the public health, safety, and general welfare are to be promoted. Because of the developmental and environmental problems which are created by urban development which transcends the boundaries of a single municipality or even a single county, land use plans should initially be formulated at the regional level, and be refined, detailed, and converted into implementation programs at the county and local levels. Indeed, it is only within the context and framework of a regional land use plan and its accompanying set of objectives, principles, and standards that orderly growth and development, and specifically the provision of decent, safe, and sanitary housing within a suitable living environment, can be provided in an efficient and economical manner within an urbanizing region.

Regional Land Use Plan: A detailed description of the adopted regional land use plan is presented in the Southeastern Wisconsin Regional Planning Commission's Planning Report No. 7, Volume III, Recommended Regional Land Use and Transportation Plans—1990. This plan seeks to modify historical growth trends within the Region by guiding intensive urban development, especially residential development, into those areas of the Region both covered by soils suitable for such development and readily provided with essential municipal services, particularly sanitary sewer service and public water supply. Prime agricultural lands would be preserved, and the floodways and floodplains as well as the best remaining woodlands, wetlands, fish and game habitat, and park and related open space sites would be protected from development and would form the basic framework for an integrated system of park and open space areas within the Region. In addition, the plan and its accompanying set of objectives, principles, and standards set forth specific guidelines for the proper development of housing within a suitable physical environment—the planned neighborhood unit.

The regional land use plan as constituted forms a sound basis within which local communities can formulate sound local development plans. Within the Region, a total of 31 civil divisions, or about 20 percent of the 146 general-purpose local units of government, have adopted the regional land use plan. These communities encompass an area of almost 600 square miles, or more than 22 percent of the total area of the Region (see Map 30). In addition, six of the seven counties in the Region have adopted the Commission's land use plan.

Master Plans or Land Use Elements of Master Plans

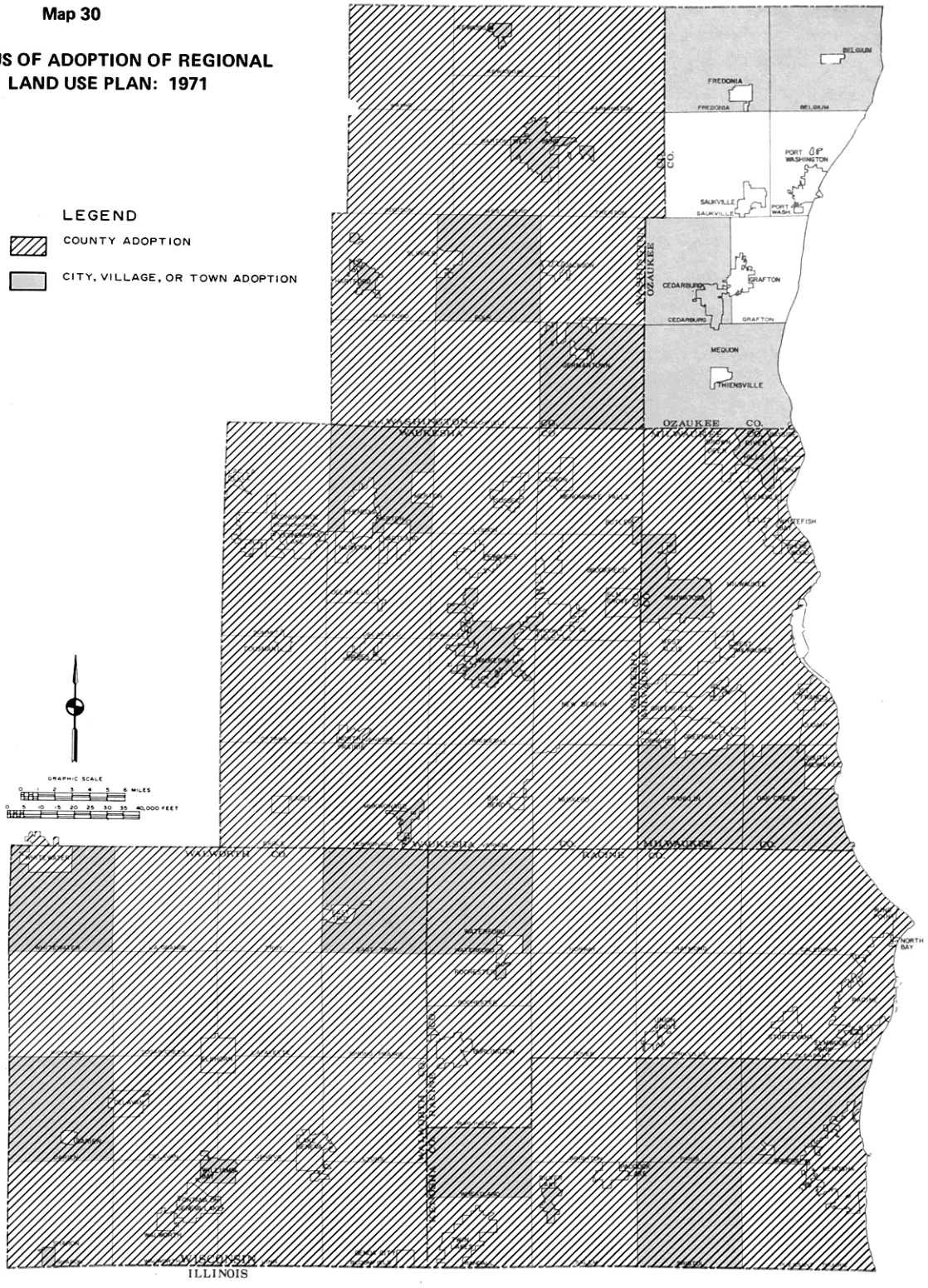
Communities have a valid and well-founded interest in proper land use development. The various kinds of land use development must not only be properly located with respect to supporting public facilities and sewers, special hazards such as flooding, and with respect to each other; but the rate of land use development, especially residential development, must be properly staged over time. Poor placement and staging of land use development are not only uneconomical, but will result in an inefficient and aesthetically, unattractive land use problem which can be altered only with great difficulty.

The formulation of local comprehensive, or master, plans, or the land use elements of such plans, should be properly undertaken only within the context of a regional land use plan. A community master plan should set forth recommendations for all aspects of municipal development, including the general location, character, and extent of streets and highways, street grades, roadways, walks, bridges, viaducts, parking areas, tunnels, public places and areas, parks, parkways, playgrounds, sites for public buildings and structures, airports, pier head and bulkhead lines, waterways, and routes for railroads and buses; the general location and extent of sewers, water conduits, and other public utilities, whether privately or publicly owned; the location, character, and extent of community centers and neighborhood units; the general character, extent, and layout of the replanning of slum and blighted areas; and the comprehensive zoning plan. As indicated on Map 31, 10 communities within the Region have adopted master plans or land use elements of such plans, while 35 communities have prepared such plans but have not yet adopted them. In total, 45 communities, or about 31 percent of all communities in the Region, have either adopted or prepared master plans or land use elements of such plans. These communities have an area of almost 610 square miles, or about 23 percent of the total area of the Region.

Precise Neighborhood Development Plans: The preparation of precise neighborhood unit development plans constitutes an important and necessary refinement of regional and community land use plans. A discussion of neighborhood unit development plans as they relate to

Map 30

STATUS OF ADOPTION OF REGIONAL LAND USE PLAN: 1971

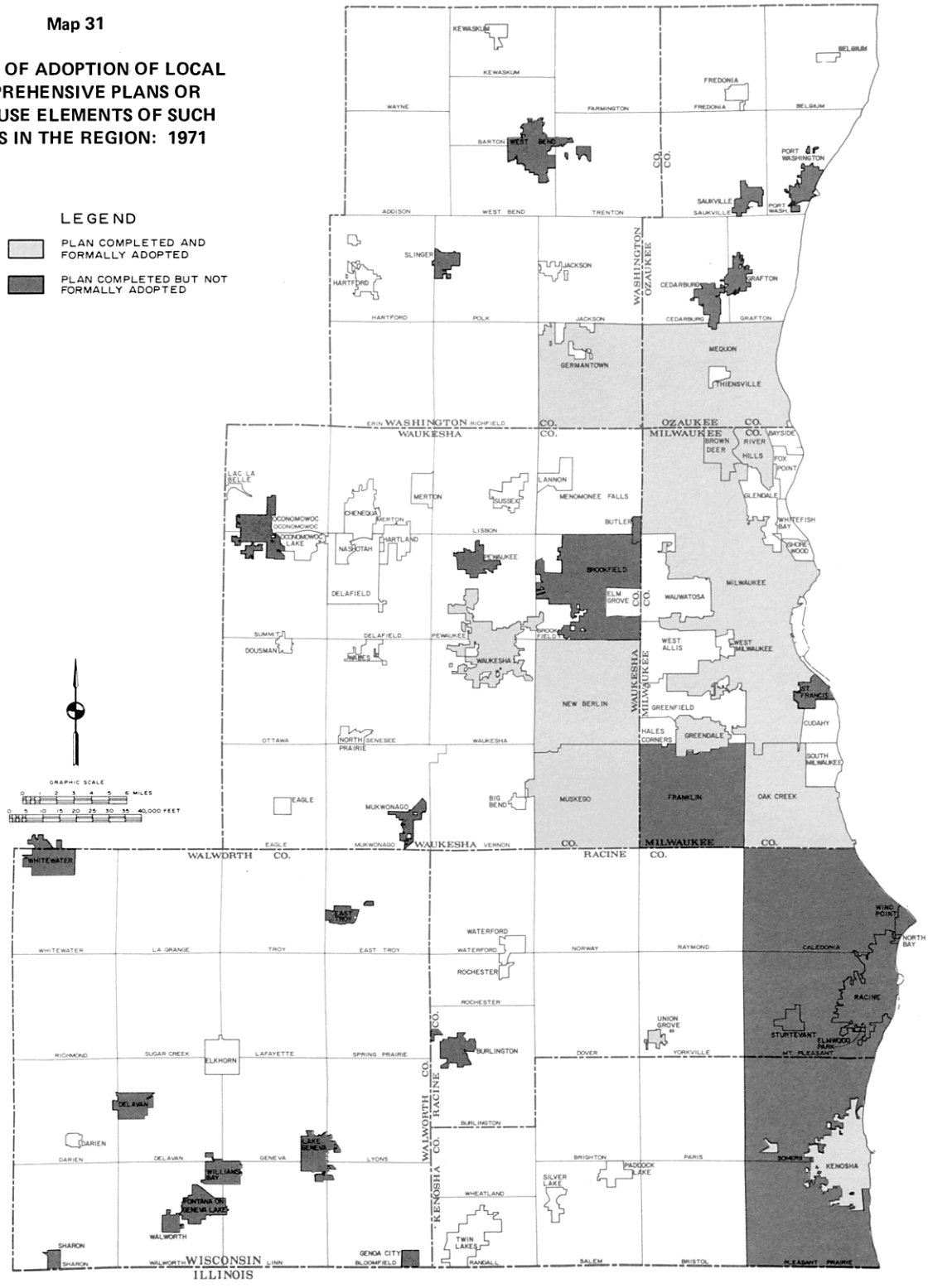


Six of the seven counties in the Region encompassing an area of nearly 2,455 square miles or 91 percent of the total area of the Region have adopted the regional land use plan. In addition, a total of 31 civil divisions, or about 20 percent of the 146 general-purpose local units of government in the Region, have adopted the Commission's regional land use plan. These communities encompass an area of almost 600 square miles, or more than 22 percent of the total area of the Region.

Source: SEWRPC.

Map 31

STATUS OF ADOPTION OF LOCAL COMPREHENSIVE PLANS OR LAND USE ELEMENTS OF SUCH PLANS IN THE REGION: 1971



A total of 10 communities within the Region have adopted comprehensive or "master" plans or land use elements of such plans, while 35 communities have prepared such plans but have not yet adopted them. These 45 communities, which encompass an area of almost 610 square miles, represent about 31 percent of all communities in the Region and about 23 percent of the total area of the Region.

Source: SEWRPC.

the southeastern Wisconsin regional land use plan is contained in the Commission's Planning Report No. 7, Volume III, Appendix D. Precise neighborhood unit development plans delineate desirable collector and land access street patterns, and locate the commercial and recreational facilities required to support residential development. Importantly, such plans specify the amount, types, and location of the various kinds of residential land uses. Precise neighborhood unit development plans are especially important to housing planning, for it is through the sound design and implementation of neighborhood unit plans that a full range of housing types, styles, and costs can be provided. As indicated on Map 32, only four communities in the Region have adopted or have under preparation precise neighborhood unit development plans. Together these communities total 104 square miles in area, and represent less than 4 percent of the total area of the Region.

The extent to which communities have adopted the regional land use plan, community master plans, or land use elements of such plans, or are involved in precise neighborhood development planning, is significant to regional housing planning efforts, for the land use plans, whether they be at the regional, community, or neighborhood level, provide the framework within which housing, planning, and development must be accomplished. It is these land use plans, and the complementary land use planning devices such as zoning ordinances, subdivision control ordinances, architectural control ordinances, and building and housing codes which can be utilized to implement such plans, that can facilitate or constrain the availability of housing within the Region.

Each of the aforementioned implementing devices will be discussed and analyzed separately in following sections of this chapter, and an effort made to determine the extent to which each device may facilitate or constrain the availability of housing within the Region.

Comprehensive Zoning Ordinances

The primary function of zoning should be to implement the community's land use plan. This does not mean, however, that the zoning ordinance and zoning district map should directly reflect the land use plan. The land use plan is a long-range proposal for the future use of land within the community. Immediate zoning for long-term future uses, although indicated on the land use plan, may not be required for many years, and can create serious land use problems. The function of the zoning ordinance and map in relation to the land use plan should be twofold: the zoning ordinance and district map should protect desirable existing development until any given area of the community is ripe for development or redevelopment. At such time the zoning district map should be amended to permit the text of the zoning ordinance to direct such development or redevelopment into desirable new patterns and relationships in accordance with the long-range land use plan (see Figure 52). Zoning, then, should be a tool to place development in time as well as space. Zoning changes from "holding zones" such as agricultural districts (A-1), as shown in the existing zoning configuration in Figure 52, to future residential districts (R-1) also shown in Figure 52, should occur on an incremental basis, and only after it is determined that necessary public utilities can readily be extended and analyses are completed which substantiate the demand for such development.

The extreme application of zoning to either directly reflect the long-range land use plan or to strictly maintain the existing land use pattern, and thereby freeze development exactly as it exists, should both be avoided. The former extreme may lead to overzoning and consequent unstable development, mixed land uses, lowering of property values, deterioration of environmental conditions, and creation of blight. The latter extreme may lead to underzoning, restriction of private renewal and redevelopment activities, and deterioration of the environment, and may tend to perpetuate many undesirable existing conditions.

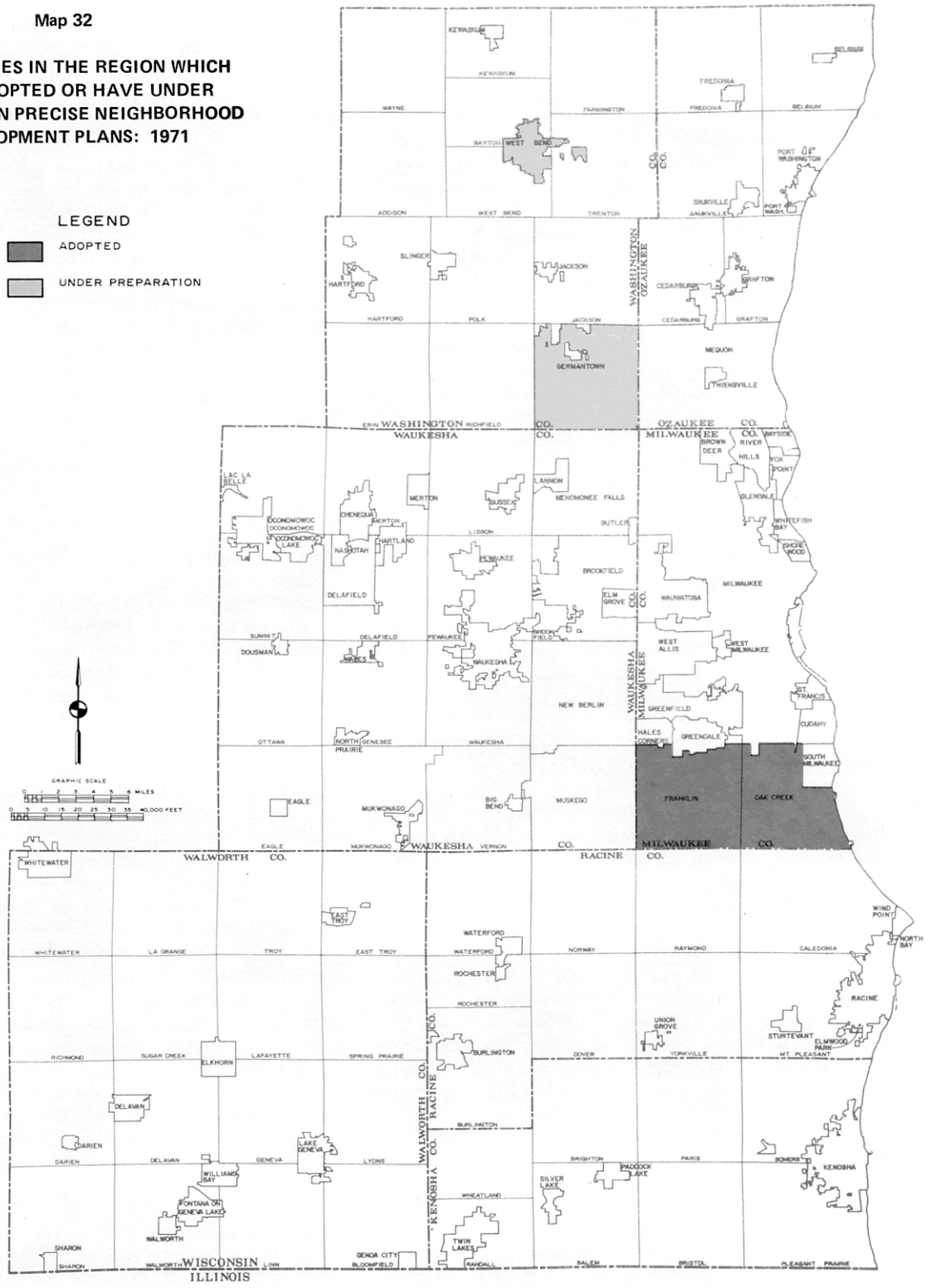
Comprehensive zoning is the most powerful and potentially effective mechanism for implementation of the land use plan and achievement of its development objectives, however expressed. Local zoning ordinances have a particularly important impact on housing development, determining where housing may be built, the type and occasionally the size of construction, and the relationship to other land uses. Discussion of the zoning ordinances enacted by the civil divisions comprising the Southeastern Wisconsin Region must, therefore, necessarily constitute a major part of any analysis of the overall effect of land use controls on the housing and housing related problems of the Region.

Most simply described, a zoning ordinance seeks to divide a community into districts or zones within which certain compatible and appropriate land uses are permitted and from which conflicting and inappropriate uses are excluded. Ideally, at least, all land uses are consigned to the district or districts to which each is best suited, thereby encouraging the best use of land throughout the community. Moreover, within most zoning districts the erection, construction, alteration, or use of buildings and structures, as well as land, is regulated through the imposition of minimum or maximum standards on height, bulk, number of stories, floor space, lot size, setback, and other related requirements. Zoning ordinances are required by statute to attempt to separate conflicting uses, to exclude public nuisances and hazardous activities from densely populated areas, to reduce fire hazard and other threats to public safety, to forestall the overcrowding and congestion of land and utility systems, and to maximize, in general, the utility and value of all private and public real estate. By conditioning the use and shape of various land parcels and regulating the structure type and densities permitted on those parcels, zoning ordinances have become a highly influential factor not only in the protection of existing development, but in the direction of potential new development as well.

Zoning ordinances by their very nature, then, discriminate, segregate, and exclude, but are intended in principle to do so only with respect to land uses. That is, zoning ordinances allow specific uses or structures in some areas

Map 32

COMMUNITIES IN THE REGION WHICH HAVE ADOPTED OR HAVE UNDER PREPARATION PRECISE NEIGHBORHOOD DEVELOPMENT PLANS: 1971



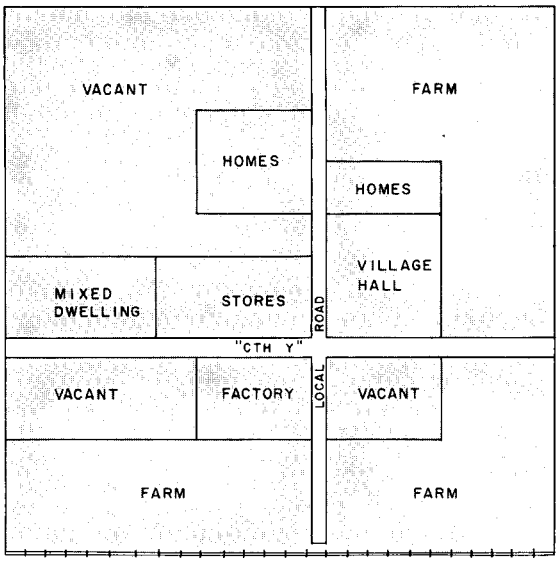
As shown on this map, only four communities in the Region have adopted or have under preparation precise neighborhood unit development plans. Together these communities total 104 square miles, less than 4 percent of the total area of the Region. The Cities of Oak Creek and Franklin in Milwaukee County have adopted precise neighborhood development plans, while the City of West Bend and the Village of Germantown in Washington County have such plans under preparation.

Source: SEWRPC.

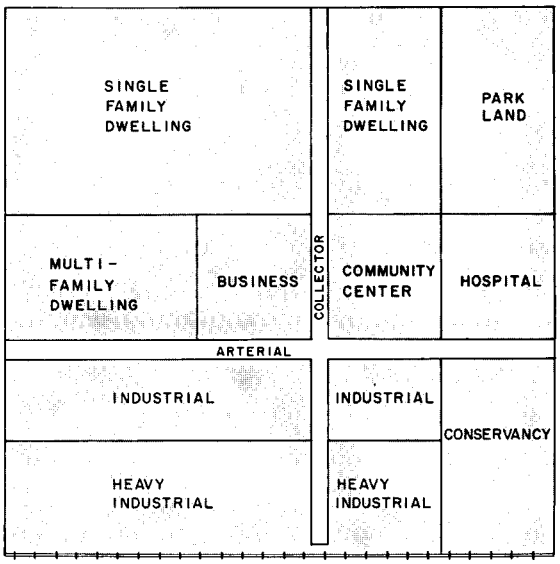
Figure 52

RELATIONSHIP OF ZONING MAP TO LAND USE PLAN

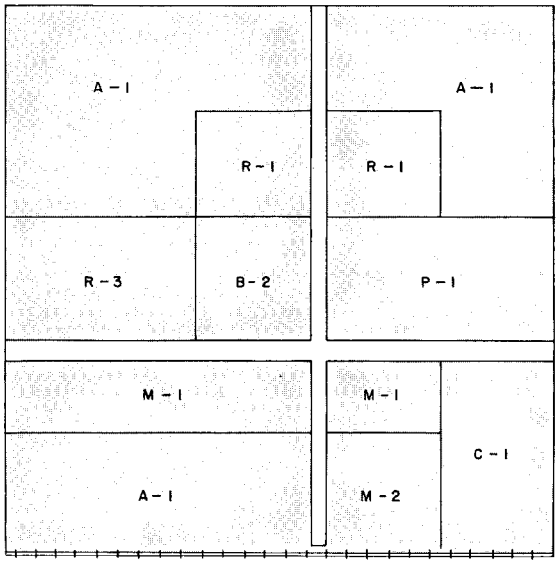
EXISTING LAND USE



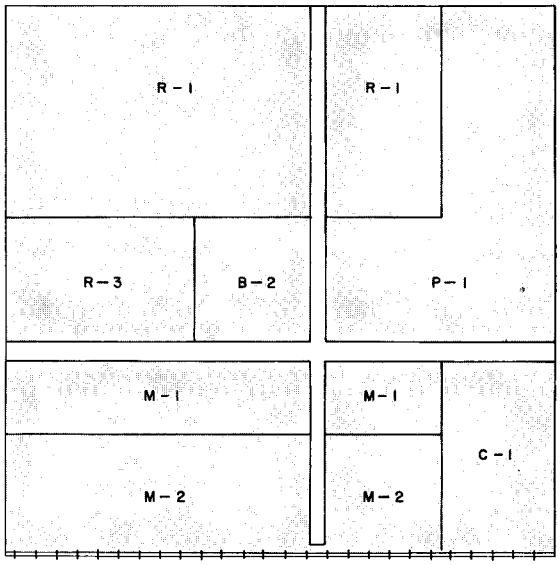
LAND USE PLAN



EXISTING ZONING MAP



FUTURE ZONING MAP



Source: SEWRPC.

and prohibit the same uses or structures in other areas, thus grouping like or compatible uses. Indeed, such ordinances must out of necessity discriminate or exclude if they are to successfully perform their intended function and achieve their intended objectives. The question of importance to the land use controls inventory of the housing study, then, is not whether zoning ordinances are discriminatory, for indeed with respect to land uses they must be, but whether or not such ordinances do, in fact, implement the residential development objectives of the regional and local land use plans, and do so in a manner which would not be considered unduly restrictive with respect to excluding certain housing sizes, types, and styles.

The emphasis of this section will be to analyze the residential zoning patterns of communities in the Region to determine the amount and spatial distribution of zoned residential land and assess whether such zoning facilitates implementation and meets the residential development objectives of the regional and local land use plans, and to determine if such residential zoning could be considered unduly restrictive in that it significantly constrains the locational choice of households seeking various types and sizes of housing.

To facilitate the analysis of residential zoning patterns, the communities within the Region were grouped into two categories: urban and rural (see Map 33). This grouping was used because the regional land use development objectives as well as the objectives of the regional housing study emphasize that urban development should occur only in those areas where essential public services can be efficiently provided, that is, in and adjacent to established urban centers. It follows that if intensive residential development should be encouraged only in or adjacent to existing urban centers, an analysis of the restrictive nature of zoning should differentiate between rural areas, in which intensive residential development should be discouraged, and urban areas, in which such development should be encouraged. As indicated on Map 33, there are 87 urban communities—largely incorporated cities and villages—in the Region with an aggregate land area of 772 square miles, or about 29 percent of the total area of the Region. The remaining 59 rural communities total 1,917 square miles, or about 71 percent of the total area of the Region.

Zoning Patterns—Density: The inventory of land use controls revealed that all of the land area in the Region is subject to some zoning regulation—city, village, town, or county. Of special interest to the housing study, however, is the status of residential zoning. Areas zoned for residential development within the Region are shown on Map 34 and in Table 107 by density classification and by urban and rural classification. Appendix G provides similar zoning data for individual communities within the Region.

As indicated in Table 107, over 445,000 acres, or about one-quarter of the total land area in the Region, were zoned for residential use in 1971. The amount of land zoned for residential use within urban communities totaled more than 262,000 acres, or more than 50 per-

Table 107

RESIDENTIALLY ZONED LAND IN THE REGION BY DENSITY CLASSIFICATION: 1971

Type of Community	Total Area (Acres)	Residentially Zoned Land							
		Total		Low Density[a]		Medium Density[b]		High Density[c]	
		Acres	Percent of Community Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area
Urban . . .	494,380	262,878	53	102,018	39	96,798	37	64,062	24
Rural . . .	1,226,720	182,499	15	136,803	75	44,988	25	708	--[d]
Region	1,721,100	445,377	26	238,821	54	141,786	32	64,770	14

[a] *Low-density residential development consists of 0.2-2.2 dwelling units per net residential acre, or residential lots ranging from 20,000 square feet to five acres per dwelling unit.*

[b] *Medium-density residential development consists of 2.3-6.9 dwelling units per residential acre, or residential lots ranging from 6,000 square feet to 19,999 square feet per dwelling unit.*

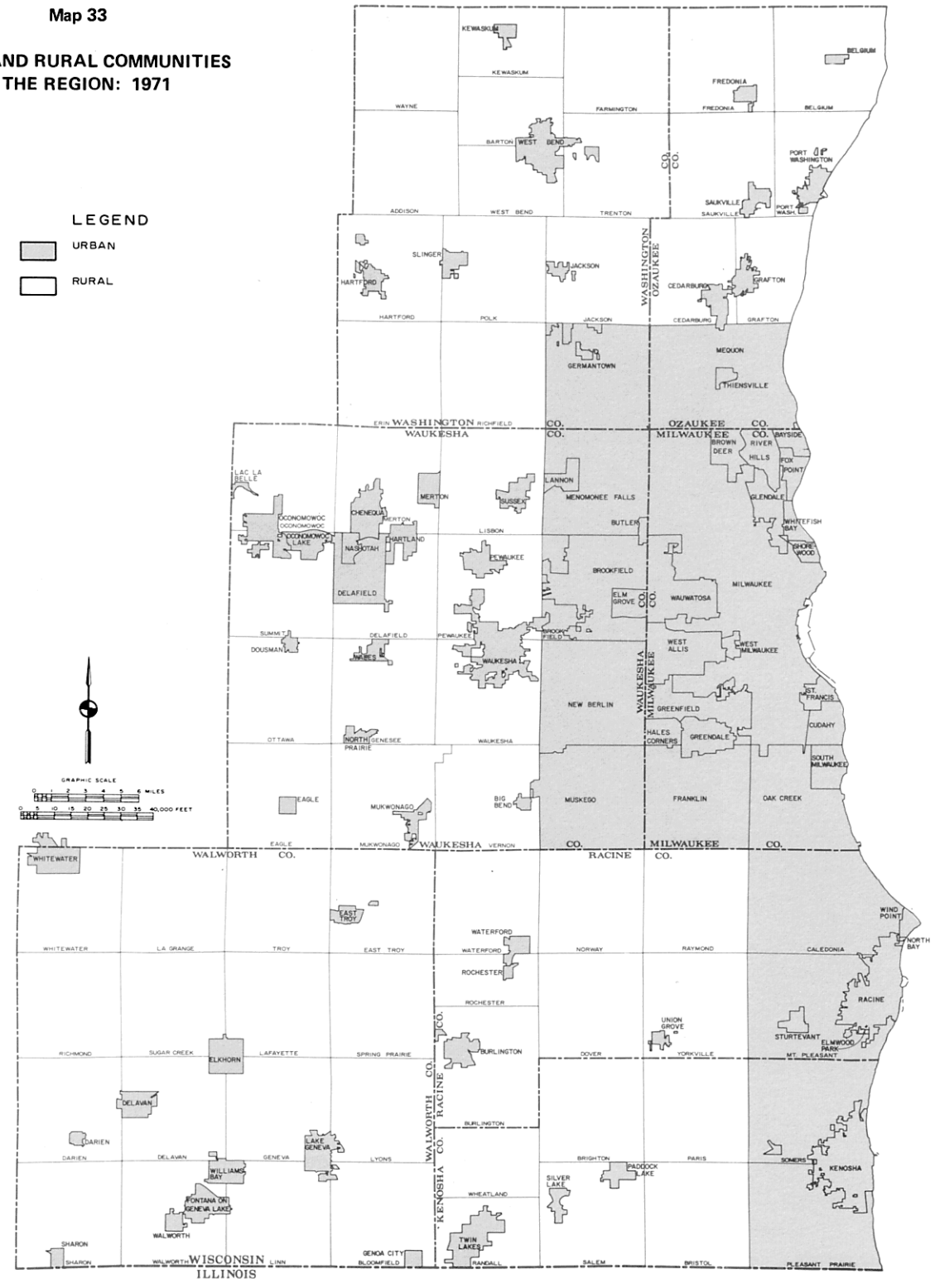
[c] *High-density residential development consists of 7.0-17.9 dwelling units per residential acre, or residential lots ranging from 1,000 to 5,999 square feet per dwelling unit.*

[d] *Less than 1 percent.*

Source: SEWRPC.

Map 33

URBAN AND RURAL COMMUNITIES IN THE REGION: 1971

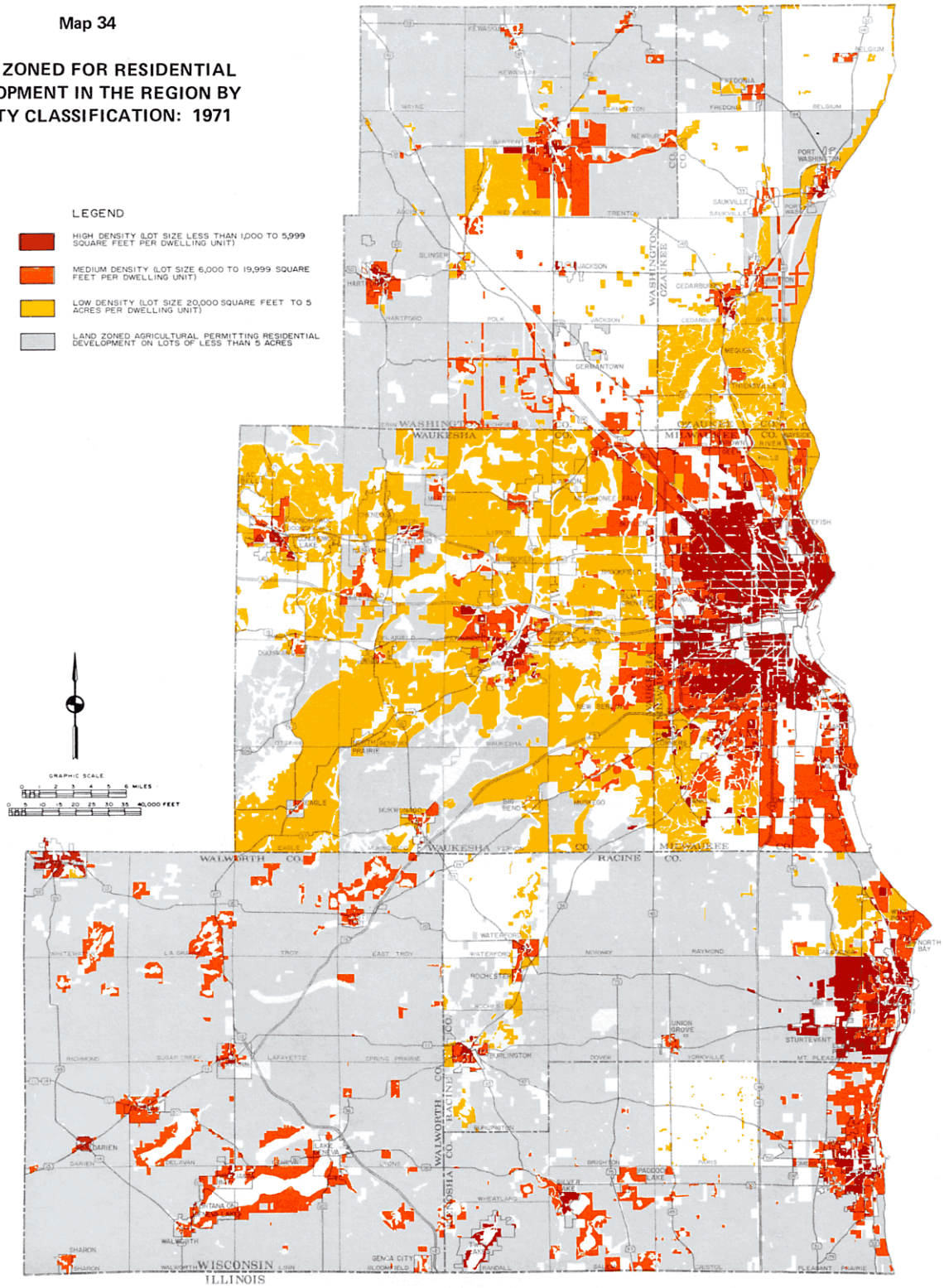


A total of 87 of the 146 general-purpose municipal units of government in the Region—primarily incorporated cities and villages—are classified as urban communities because of the essential public services which can be provided. These urban communities have an aggregate land area of 772 square miles, or about 29 percent of the total area of the Region. The remaining 59 general-purpose rural municipal units of government—towns—have a total area of 1,917 square miles, or about 71 percent of the total area of the Region.

Source: SEWRPC.

Map 34

AREAS ZONED FOR RESIDENTIAL DEVELOPMENT IN THE REGION BY DENSITY CLASSIFICATION: 1971



More than 445,000 acres, or about 25 percent of the total land area in the Region, were zoned for residential use in 1971. Land zoned for residential use totaled over 262,000 acres in urban communities, or more than half of the total area of such communities, and over 182,000 acres in rural communities, or nearly 15 percent of the total area of rural communities. The majority of land zoned for low density residential use is located in Waukesha County and the southern portion of Ozaukee County, while the majority of land zoned for medium and high density residential use is located in Milwaukee County and the Cities of Kenosha and Racine. In addition over 847,000 acres of land zoned for agricultural use permit residential development.

Source: SEWRPC.

Table 108

DEVELOPABLE RESIDENTIALLY ZONED LAND IN THE REGION BY DENSITY AND ACREAGE ZONED FOR MODEST-SIZED LOTS: 1971

County	Total Residentially Zoned Land	Developable[a] Residentially Zoned Land											
		Low Density[b]		Medium Density[c]		High Density[d]		Total			Zoned for Lot Sizes of 10,000 Square Feet or Less		
		Acres	Percent of Developable Residentially Zoned Land in County	Acres	Percent of Developable Residentially Zoned Land in County	Acres	Percent of Developable Residentially Zoned Land in County	Acres	Percent of all Residentially Zoned Land in County	Potential Housing Units Accommodated[e]	Acres	Percent of all Developable Residentially Zoned Land in County	Potential Housing Units Accommodated[f]
Kenosha	21,193	--	0.0	1,306	86.8	198	13.2	1,504	7.1	7,992	1,504	100.0	8,906
Milwaukee	103,622	862	13.7	4,826	76.6	609	9.7	6,297	6.1	29,094	4,251	67.5	25,518
Ozaukee	39,895	1,933	77.6	527	21.1	32	1.3	2,492	6.2	4,970	353	14.2	1,989
Racine	28,937	954	27.2	1,149	32.7	1,405	40.1	3,508	12.1	22,945	2,476	70.6	22,215
Walworth	29,843	--	0.0	856	62.3	517	37.7	1,373	4.6	9,885	1,164	84.8	9,439
Washington	33,220	47	8.4	415	74.7	94	16.9	556	1.7	2,969	392	70.5	2,618
Waukesha	188,667	1,785	48.6	1,517	41.3	373	10.1	3,675	1.9	13,141	1,062	28.9	7,921
Region	445,377	5,581	28.8	10,596	54.6	3,228	16.6	19,405	4.3	90,996	11,202	57.7	78,606

[a] *Includes all residentially zoned, vacant land parcels greater than two acres in size which can readily be provided with public sanitary sewerage and water supply facilities, and which are not located in areas designated as primary environmental corridors or as prime agricultural land, or on soils having severe or very severe limitations for residential development utilizing public sanitary sewerage facilities.*

[b] *Low-density residential development consists of 0.2-2.2 dwelling units per residential acre, or residential lots ranging from 20,000 square feet to five acres per dwelling unit.*

[c] *Medium-density residential development consists of 2.3-6.9 dwelling units per residential acre, or residential lots ranging from 6,000 square feet to 19,999 square feet per dwelling unit.*

[d] *High-density residential development consists of 7.0-17.9 dwelling units per residential acre, or residential lots ranging from less than 1,000 square feet to 5,999 square feet per dwelling unit.*

[e] *Potential housing units accommodated is based upon an average density of 1.2 dwelling units per zoned low-density residential acre, 4.3 dwelling units per zoned medium-density residential acre, and 12.0 dwelling units per zoned high-density residential acre.*

[f] *Potential housing units accommodated on residential land zoned for lots 10,000 square feet or less in area are based upon an average density of 5.0 dwelling units per acre for areas zoned to accommodate residential lots ranging from 6,000 square feet to 10,000 square feet per dwelling unit, and 12.0 dwelling units per acre for areas zoned to accommodate residential lots ranging from 1,000 square feet to 5,999 square feet per dwelling unit.*

Source: SEWRPC.

cent of the total area of the urban communities in the Region. Land zoned for residential use within the rural communities of the Region totaled more than 182,000 acres, or nearly 15 percent of the total area of the rural communities in the Region. Within the residential category, low-density zoned land totaled almost 239,000 acres, or over half of all residentially zoned land in the Region. The majority of such low-density residential zoning—over 136,000 acres—was located in rural communities. Medium-density and high-density zoned land, with approximately 142,000 and 65,000 acres, respectively, was located primarily in the urban areas of the Region.

It should be noted that in addition to the 445,000 acres of residentially zoned land indicated in Table 107, there were over 847,000[1] acres of land zoned for agricultural use which also permitted residential development. It should also be noted that of these 847,000 acres, about 753,000, or 89 percent, are located in rural communities, and 94,500, or 11 percent, are located in urban communities of the Region (see Map 34).

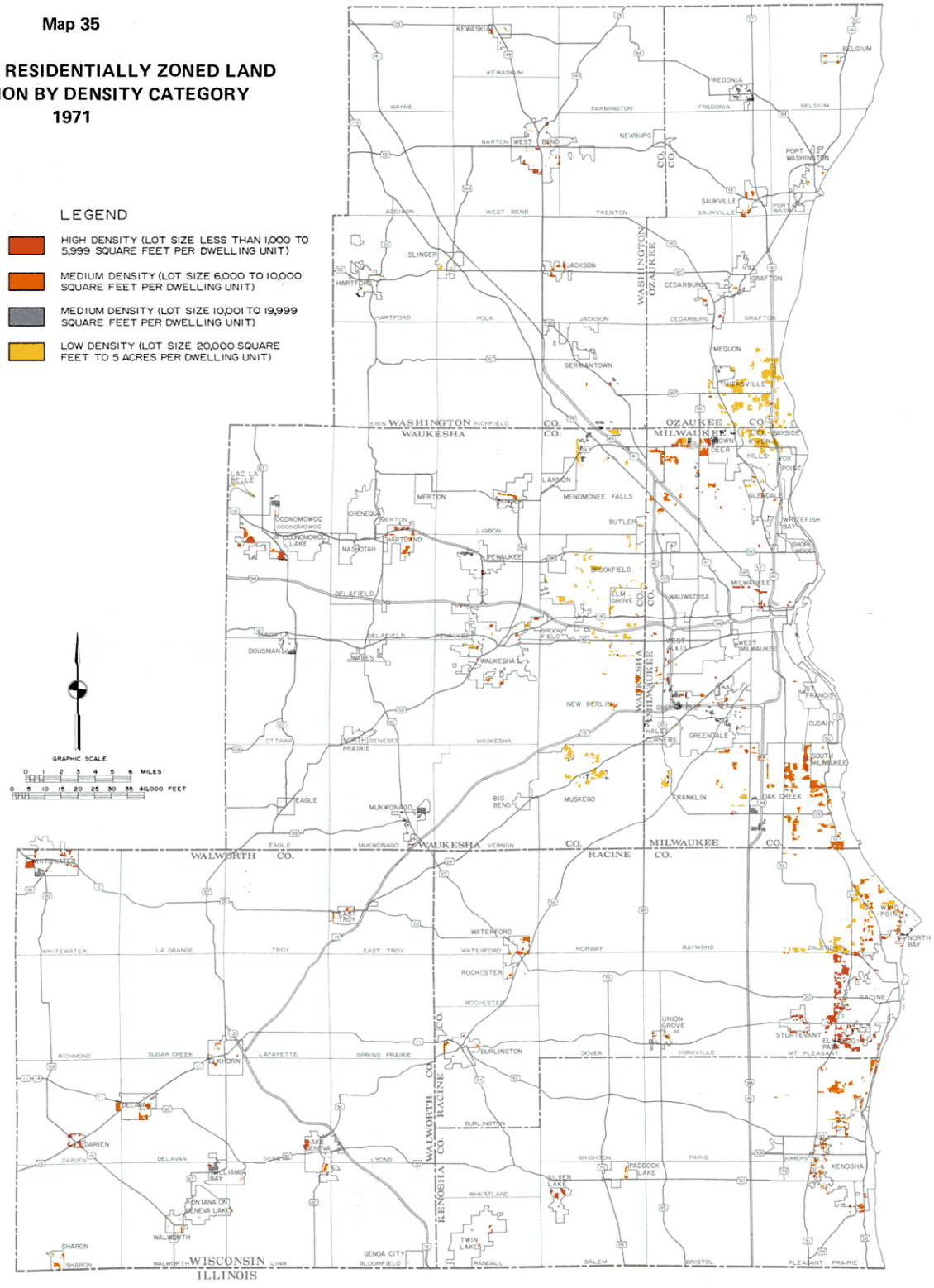
[1] *Includes only those agriculturally zoned lands which permit residential development on lot sizes of less than five acres per housing unit.*

More important than a mere tabulation of lands which are zoned for residential use is the determination of the proportion of residentially zoned lands which can be considered suitable for new residential development. For purposes of this report, land which is considered suitable for new residential development has been termed developable land, and includes all residentially zoned, vacant land parcels greater than two acres in size which can readily be provided with public sanitary sewerage and water supply facilities and which are not located in areas designated as primary environmental corridors or as prime agricultural land, or on soils having severe or very severe limitations for residential development utilizing public sanitary sewerage facilities.

As indicated in Table 108 and on Map 35, approximately 19,400 acres, or about 4 percent of the 445,000 acres of residentially zoned land in the Region can be considered developable land based upon the aforementioned criteria. Table 108 also indicates that approximately 10,600 acres, or about 55 percent of all developable residentially zoned land, are zoned for medium-density residential use; 5,600 acres, or about 29 percent, are zoned for low-density residential use; and the remaining 3,200 acres, or 17 percent, are zoned for high-density residential use.

Map 35

DEVELOPABLE RESIDENTIALLY ZONED LAND IN THE REGION BY DENSITY CATEGORY 1971



Approximately 19,400 acres, or about 4 percent of the 445,000 acres of residentially zoned land in the Region, can be considered developable based on criteria of suitability for the immediate construction of new residential development and could accommodate over 90,000 new housing units. Over 11.000 acres of developable residential land are zoned for lot sizes of 10,000 square feet or less in area; such lands could accommodate over 78,000 additional households.

Source: SEWRPC.

A large number of housing units could be accommodated on the available developable land. For example, assuming an average density of 1.2 dwelling units per zoned low-density developable acre, 4.3 dwelling units per zoned medium-density developable acre, and 12.0 dwelling units per zoned high-density developable acre, more than 90,000 new housing units could be accommodated on the 19,400 acres of developable land. This represents more housing units than would be required to house the forecast increase—69,000—in total households within the Region between 1970 and 1980 (see Chapter XV, "Housing Forecasts"). It should also be noted that the developable residentially zoned lands in the Region are located in urban communities, and as previously mentioned, would therefore facilitate attainment of regional land use and housing development objectives, for it is in urban areas that necessary community services can best be provided.

Admittedly, while the spatial distribution of developable land within various density classifications is not uniformly located within the Region, and while there are no assurances that all developable land in the Region would be "for sale" at any one point in time, there still appear to be sufficient quantities of developable residential land within the various density classifications to provide sufficient locational choice for households seeking residential lots.

Zoning Patterns—Minimum Lot Size Requirements: The effect of minimum lot size requirements upon the feasibility of constructing low- and moderate-income housing on developable land in the Region is important to the analysis of land use controls. The large minimum lot size requirement of lower density zoning districts within the designated developable land configuration shown on Map 35 may add to the total package price of constructing new housing by adding to the cost of the raw land required for the housing unit as well as to the cost of improvements to that land.

For purposes of the land use control analysis, zoned lots 10,000 square feet or less (approximately 1/4 acre) in size within the developable land configuration shown on Map 35 were assumed to facilitate the provision of low- and moderate-income housing. Zoned lot sizes greater than 10,000 square feet in these areas were considered, for the purposes of this analysis, to be unnecessarily large, and because of the additional raw land and improvement costs associated with such lots, were considered unduly restrictive to the provision of low- and moderate-income housing.

As indicated in Table 108, there are over 11,000 acres of developable residential land zoned to accommodate modest-sized lots—10,000 square feet or less—representing over 57 percent of all developable zoned residential land in the Region. Large lot zoning, however, does not appear to represent a significant constraint to the provision of low- and moderate-income housing, since over 78,000 housing units can still be provided on the developable residential land zoned to accommodate lot sizes of 10,000 square feet or less. The potential number of housing units accommodated ranged from a low of about 2,000 units in Ozaukee County to over 25,000 units in Milwaukee County.

Zoning Patterns—Structure Type and Size: Another important consideration in the analysis of land use controls inventory data was that of the structure type—single-family, two-family, multifamily—and minimum floor area requirements of residential zoning ordinances in effect within the Region. Minimum floor area requirements may affect the feasibility of constructing low- and moderate-income housing within a zoning district. It may be exceedingly difficult, if not impossible, to construct the large homes often required by local community zoning ordinances at a cost which low- and moderate-income households can afford. For instance, based upon a 1973 survey of residential building costs in the Milwaukee metropolitan area, the construction costs for a typical ranch type home averaged $18.60 per square foot. On the basis of this average, a new ranch type home constructed in an area with a minimum floor area requirement of 1,000 square feet would cost $18,600. The cost of a ranch type home constructed in an area with a minimum floor area requirement of 1,500 square feet, however, would be $27,900. Excessive minimum floor area requirements, therefore, can act as a severe constraint on the availability of low- and moderate-income housing within specific communities.

This is not to say, however, that minimum floor area requirements should not be included in zoning ordinances. There are, in fact, valid community development objectives to be served by minimum floor area requirements. For instance, the attainment of decent housing requires a minimum floor area standard for residential dwellings which serves to minimize potentially inadequate living space and overcrowding. In addition, minimum floor area requirements can assist in achieving the legitimate zoning objective of stabilizing and protecting property values. It is apparent, however, that minimum floor area standards may be enacted arbitrarily to exclude certain types of housing from a community. While it is not possible from the inventory data to determine the intended effect of each restriction, it is possible to determine the degree to which minimum floor area requirements exclude modest-sized housing, which is appropriate to low- and moderate-income households, from entire communities within the Region.

The Commission recognizes that certain minimum total improved floor area and sleeping area standards are required for decent household living accommodations. Such standards were, therefore, developed by the Commission with the assistance of the Technical and Citizen Advisory Committee on Regional Housing Studies and are outlined in Table 148 of Chapter XII, "Regional Housing Objectives, Principles, and Standards," of this report. The standards for decent household living accommodations specify the total minimum square feet of improved floor area required for dwelling units with from zero to five bedrooms, and are summarized in Table 109.

Also shown in Table 109 are the minimum floor area standards adjusted upward by 20 percent to allow for a range of what might reasonably be considered modest-sized housing.

In order to assist in the determination of the extent to which minimum floor area requirements within the Region may act as a constraint on low- and moderate-income housing location, the minimum floor area requirements specified in the community zoning ordinances were compared to both the minimum floor area standards and to the minimum standards as adjusted. Those communities whose minimum floor area requirement exceeded the minimum standard were assumed, in effect, to restrict the provision of modest-sized housing. Those communities whose minimum floor area requirements exceeded the minimum standard adjusted upward by 20 percent were considered to severely restrict the provision of modest-sized housing. It should be noted that the floor area requirements of each zoning ordinance were liberally construed, that is, the smallest, least stringent floor area specification, dependent upon the number of bedrooms, was compared with the standards for modest-sized housing. Moreover, each civil division was determined to permit modest-sized housing even if just one of its residential zoning districts permitted such housing.

The application of the aforementioned standards to identify those communities which restrict or severely restrict the provision of modest-sized housing was a difficult task, since the minimum floor area requirements specified in the zoning ordinances of the 146 civil divisions within the Region varied widely. Some jurisdictions had no minimum floor area restrictions, while others had such restrictions for only certain structure types. Some jurisdictions specified minimum floor area requirements only on the basis of total area, while others differentiated further on the basis of the number of floors or the number of bedrooms per dwelling unit.

Table 109

FLOOR AREA STANDARDS FOR MODEST-SIZED HOUSING IN THE REGION

Number of Bedrooms	Maximum Number of Persons	Minimum Floor Area Standards[a] (Square Feet)	Minimum Floor Area Standards Adjusted Upward by 20 Percent (Square Feet)
0	1	250	300
1	2	420	500
2	4	700	840
3	6	980	1,180
4	8	1,230	1,480
5	10	1,430	1,720

[a] *The standards were developed by SEWRPC with the assistance of the Technical and Citizen Advisory Committee on Regional Housing Studies, and include total usable floor area including bathrooms and hallways within the living unit and closets, but excluding basements and attics except those portions of same which are improved and could be utilized as year-round living space.*

Source: SEWRPC.

The results of the application of the standards for modest-sized housing to the minimum floor area requirements specified in the individual community zoning ordinances are summarized on Maps 36 and 37, 38 and 39, and 40 and 41 by structure type and number of bedrooms. While mapped data are presented for all communities in the Region, because of the importance and ability of urban communities in providing households with the community service facilities required for a suitable living environment, emphasis was placed in the analysis on the extent to which the urban communities of the Region restrict the provision of modest-sized housing. Appendix H lists the minimum floor area requirements for single-family, two-family, and multifamily structures within all communities in the Region.

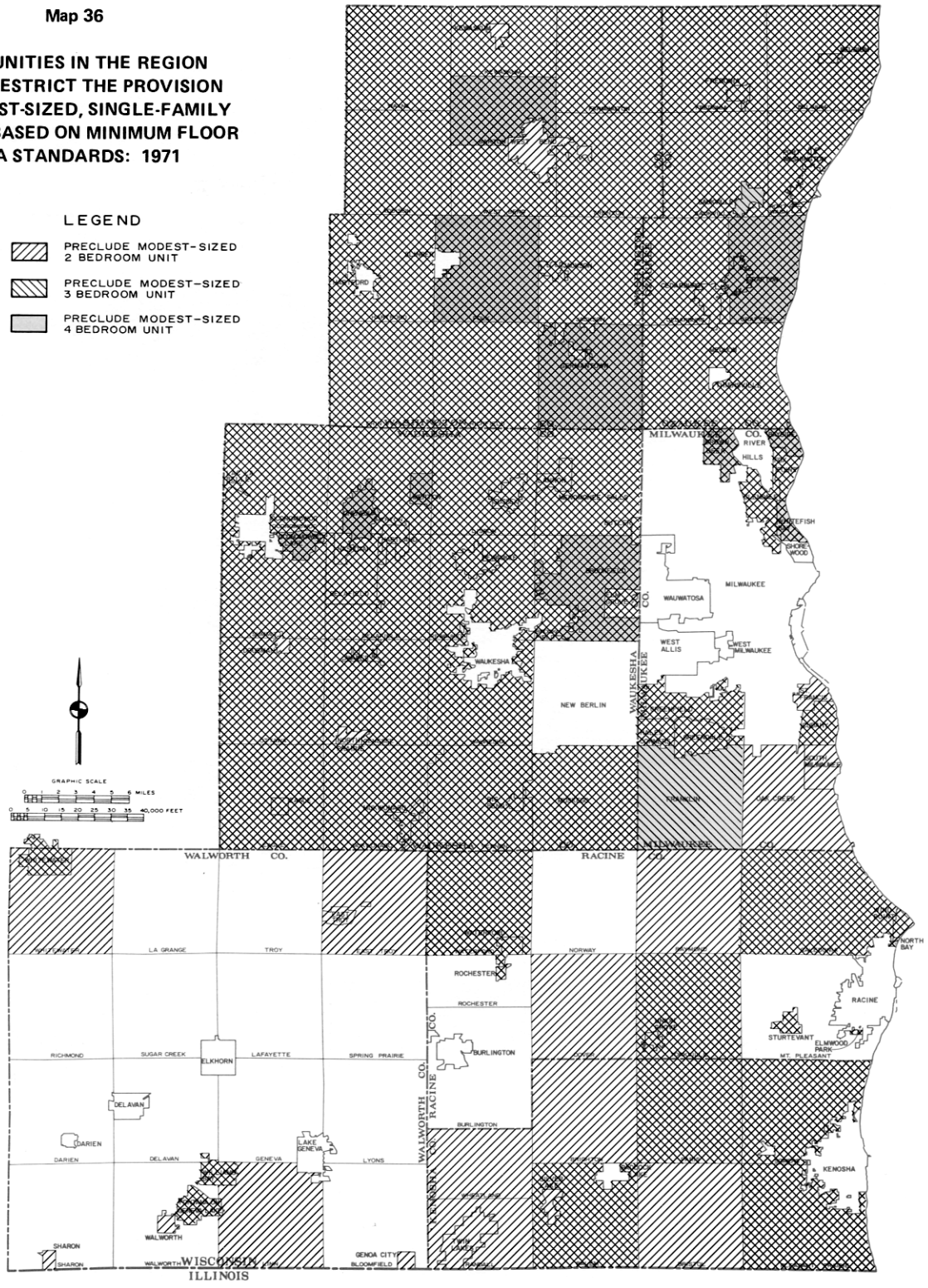
Single-Family Housing: Map 36 shows those communities whose zoning ordinances restrict the provision of modest-sized single-family housing. While all communities within the Region allow single-family units, many communities are restrictive in the allowed size of such units. Community minimum floor area requirements vary widely, ranging from no minimum in some communities to a maximum of 1,700 feet in other communities. On the basis of the adopted minimum floor area standards, of the 87 urban communities within the Region, 64, or about 75 percent, effectively preclude modest-sized two-bedroom units; 53, or about 60 percent, preclude modest-sized three-bedroom units; and 12, or about 14 percent, preclude modest-sized four-bedroom units.

As shown on Map 37, even when the minimum floor area standard is adjusted upward 20 percent to allow for a range of what might be considered modest-sized housing, 56 of the 87 urban communities, or about 65 percent, still effectively preclude modest-sized two-bedroom units; 21 communities, or about 25 percent, preclude modest-sized three-bedroom units; and eight communities, or about 10 percent, preclude modest-sized four-bedroom units.

Two-Family Housing: Map 38 shows those communities whose zoning ordinances preclude modest-sized two-family housing. It should be noted that 17 of the 146 communities in the Region, and 12 of 87 urban communities, have no two-family residentially zoned land, and were, therefore, assumed to preclude two-family housing altogether. Including the 12 urban communities which preclude two-family housing, and on the basis of the adopted minimum floor area standards, 65 communities, or about 75 percent of the urban communities in the Region, preclude modest-sized one-bedroom units; 63 communities, or 72 percent, preclude modest-sized two-bedroom units; and 41 communities, or about 50 percent, preclude modest-sized three-bedroom units.

Map 36

COMMUNITIES IN THE REGION WHICH RESTRICT THE PROVISION OF MODEST-SIZED, SINGLE-FAMILY HOUSING BASED ON MINIMUM FLOOR AREA STANDARDS: 1971

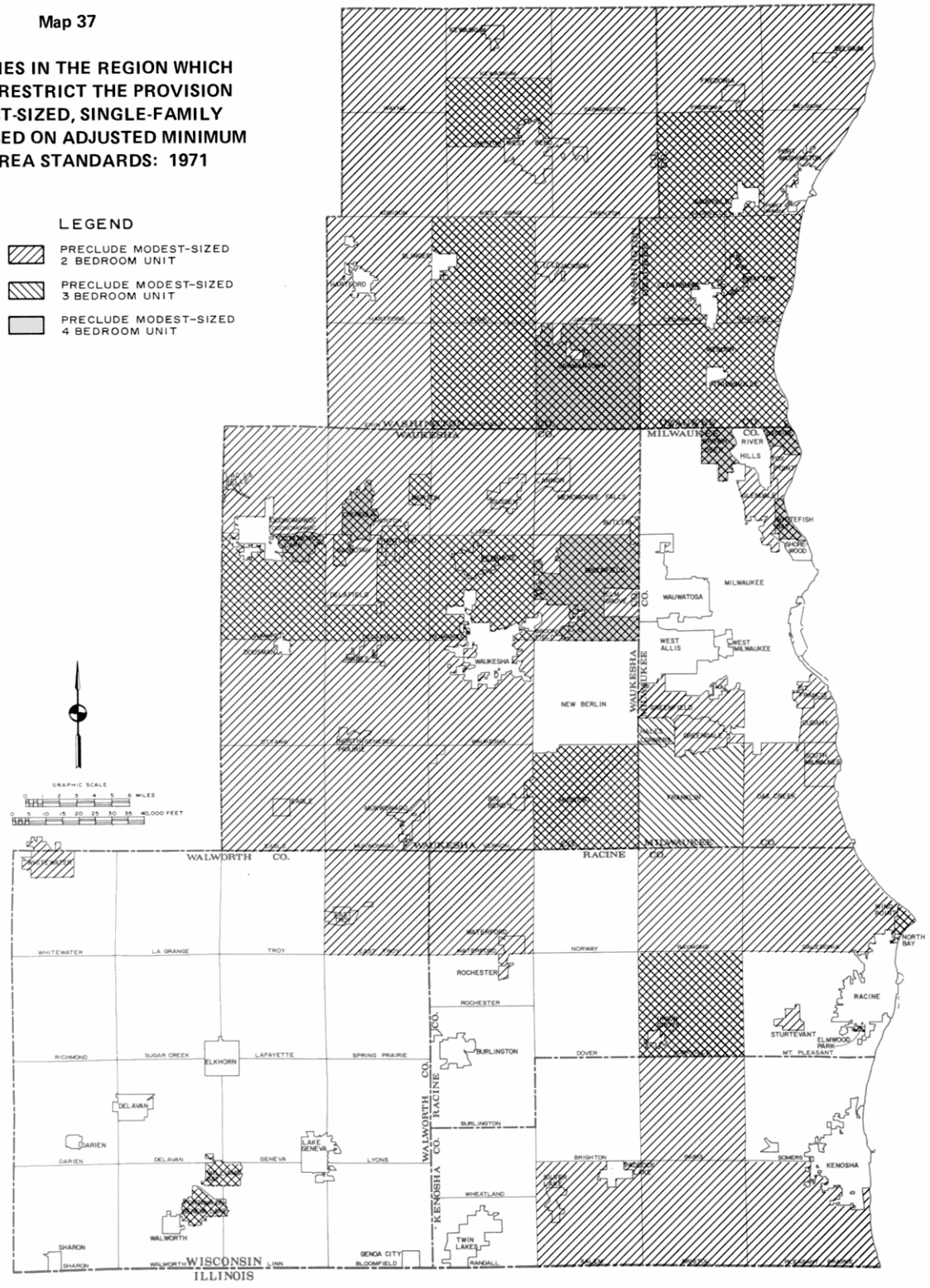


Modest-sized, two-bedroom single-family units are precluded in 64 of the 87 urban communities in the Region, based on adopted minimum floor area standards. Communities which are considered to restrict provision of modest-sized two-bedroom units are concentrated in Waukesha County, where 22 of 25 urban communities, or 88 percent, exceed recommended minimum floor area standards; and Ozaukee County, where six of eight urban communities, or 75 percent, exceed the standard. Provision of modest-sized three- and four-bedroom units is restricted by floor area requirements most often in these same two counties.

Source: SEWRPC.

Map 37

COMMUNITIES IN THE REGION WHICH SEVERELY RESTRICT THE PROVISION OF MODEST-SIZED, SINGLE-FAMILY HOUSING BASED ON ADJUSTED MINIMUM FLOOR AREA STANDARDS: 1971

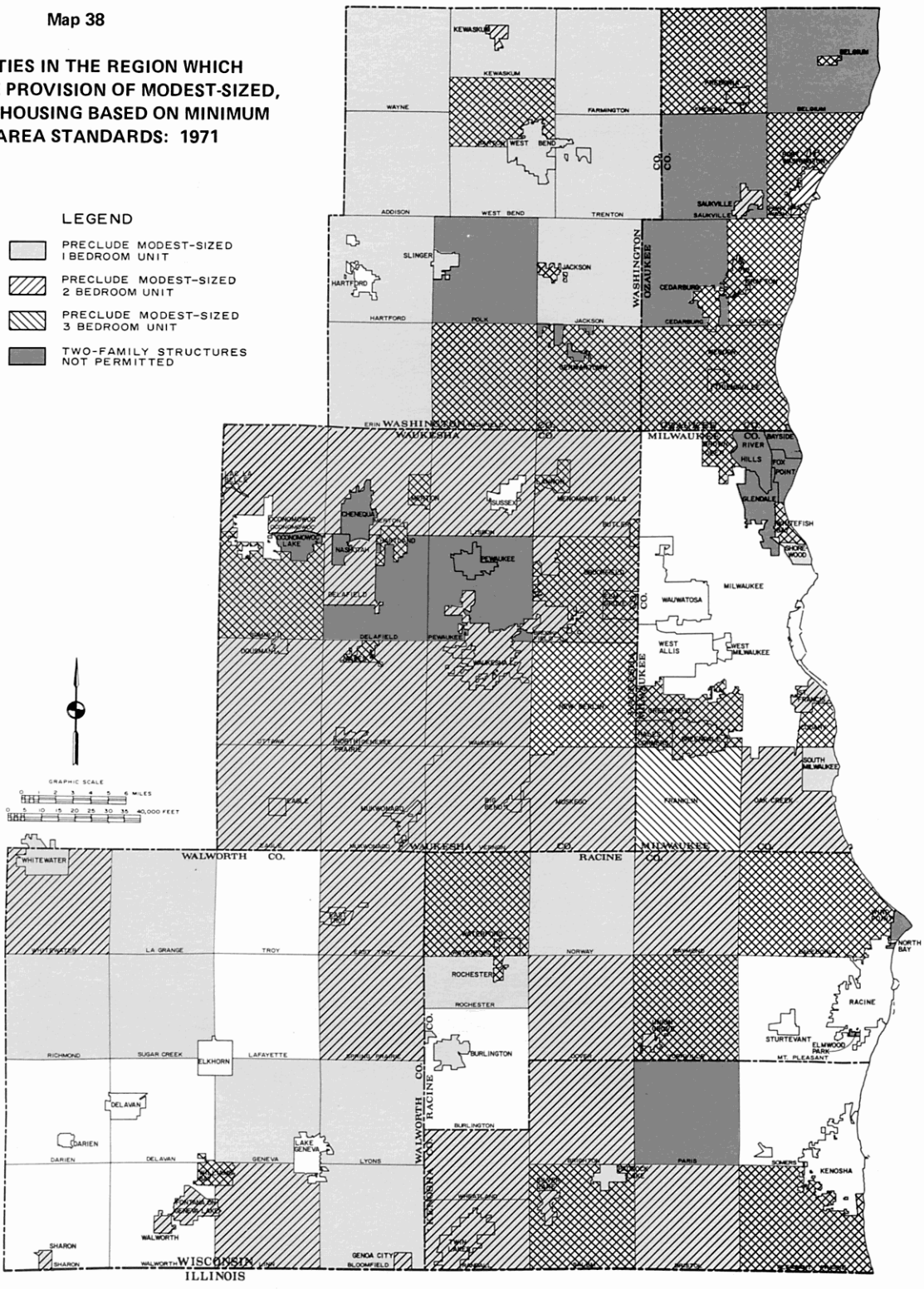


Even when the minimum floor area standard is adjusted upward 20 percent to allow for a range of what might be considered modest-sized housing, 56 of the 87 urban communities in the Region, or about 65 percent, still preclude modest-sized two-bedroom units. Communities which severely restrict provision of two-, three-, and four-bedroom units are located in Milwaukee, Racine, Washington, and Waukesha Counties.

Source: SEWRPC.

Map 38

COMMUNITIES IN THE REGION WHICH RESTRICT THE PROVISION OF MODEST-SIZED, TWO-FAMILY HOUSING BASED ON MINIMUM FLOOR AREA STANDARDS: 1971



Of the 87 urban communities in the Region, 12 have no two-family residentially zoned land, and effectively preclude two-family housing altogether. Minimum floor area requirements which exceed recommended minimum standards were found to preclude modest-sized one-bedroom units in 65 urban communities; two-bedroom units in 63 urban communities, including the 12 which preclude all two-family housing; and three-bedroom units in 41 communities. Modest-sized one-bedroom units are precluded in 22 of the 25 urban communities in Waukesha County, six of the seven urban communities in Washington County, 13 of the 19 urban communities in Milwaukee County, and six of the eight urban communities in Ozaukee County.

Source: SEWRPC.

Applying the adjusted minimum floor area standard shown on Map 39, 63 of the 87 urban communities, or over 70 percent, still preclude modest-sized one-bedroom units; 48 communities, or over 50 percent, preclude modest-sized two-bedroom units; and 22 communities, or about 25 percent, preclude modest-sized three-bedroom units.

Multifamily Housing: Map 40 shows those communities whose zoning ordinance precludes modest-sized multifamily housing. It should be noted that 22 of the 146 communities in the Region and 16 of the 87 urban communities have no multifamily residential zoned land, and were, therefore, assumed to preclude multifamily housing altogether. Including the 16 urban communities which preclude multifamily housing, and on the basis of the adopted minimum standards, 65 communities, or about 75 percent of the urban communities in the Region, preclude modest-sized efficiency units; 63 communities, or about 72 percent, preclude modest-sized one-bedroom units; 59 communities, or almost 70 percent, preclude modest-sized two-bedroom units; and 42 communities, or about 50 percent, preclude modest-sized three-bedroom units.

On the basis of the application of the adjusted minimum floor area standard, as shown on Map 41, 59 of the 87 urban communities, or 70 percent, still preclude modest-sized efficiency units; 56 communities, or about 65 percent, preclude modest-sized one-bedroom units; 42 communities, or about 50 percent, preclude modest-sized two-bedroom units; and 26 communities, or about 30 percent, preclude modest-sized three-bedroom units.

Several conclusions can thus be reached concerning the restrictions to the provision of modest-sized housing resulting from community structure type and minimum floor area requirements within urban communities in the Region. First, it is apparent that structure type and size requirements are least restrictive to the provision of modest-sized housing in and around the central cities of Milwaukee, Racine, and Kenosha and in urban portions of Walworth County. Second, more urban communities permit modest-sized two-family housing units than modest-sized one-family units, and more urban communities permit modest-sized multifamily housing units than modest-sized two-family units. Finally, within applicable structure types—single-family, two-family, and multifamily—fewer urban communities permit modest-sized zero-, one-, and two-bedroom units than three- or four-bedroom units, thereby constraining the locational choice of the elderly or other small family households. Clearly, however, community structure type and size requirements significantly affect the provision of modest-sized homes, and thus constrains the locational choice of low- and moderate-income households seeking such living units.

Thus far the analysis of zoning in the Region has examined in detail the effect of residential density patterns, particularly on the quantity and location of modest-sized lots suitable for residential development, and the effect of community structure type and size requirements, particularly on the provision of modest-sized housing units. While both the lot size restrictions and the structure type and size restrictions individually can constrain the locational choice of low- and moderate-income households, such restrictions may also work in concert and further intensify the housing location problems of low- and moderate-income households. For example, communities may have sufficient quantities of developable land zoned to accommodate a modest-sized lot—10,000 square feet or less in area—but such land may be zoned only for large housing units, namely, housing units which exceed the minimum adjusted standard of 300 square feet for an efficiency unit, 500 square feet for a one-bedroom unit, 840 square feet for a two-bedroom unit, 1,180 square feet for a three-bedroom unit, and 1,480 square feet for a four-bedroom unit.

This concluding section of the analysis of zoning patterns in the Region evaluates the composite effect of community minimum lot size, structure type, and floor area requirements on the locational choice of low- and moderate-income households. Table 110 indicates the amount of developable residentially zoned land which is

Table 110

DEVELOPABLE RESIDENTIALLY ZONED LAND ZONED TO ACCOMMODATE MODEST-SIZED LOTS AND STRUCTURES: 1971

County	Developable Residentially Zoned Land (Acres)	Developable Land Zoned for Modest-Sized Lot[a]		Developable Land Zoned to Accommodate Modest-Sized Housing by Structure Type[b]																	
				Single Family						Two Family				Multifamily							
				2 Bedroom		3 Bedroom		4 Bedroom		1 Bedroom		2 Bedroom		3 Bedroom		0 Bedroom		1 Bedroom		2 Bedroom		3 Bedroom	
		Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land	Acres	Percent of Developable Residentially Zoned Land
Kenosha	1,504	1,504	100.0	1,324	88.0	1,504	100.0	1,504	100.0	901	59.9	922	61.3	1,000	66.5	44	2.9	44	2.9	44	2.9	47	3.1
Milwaukee	6,297	4,251	67.5	1,388	22.0	3,865	61.4	4,224	67.1	239	3.8	239	3.8	759	12.1	348	5.5	375	6.0	412	6.5	400	6.4
Ozaukee	2,492	353	14.2	105	4.2	304	12.2	353	14.2	35	1.4	35	1.4	91	3.7	0	0.0	35	1.4	35	1.4	91	3.7
Racine	3,508	2,476	70.6	1,325	37.8	2,476	70.6	2,476	70.6	1,280	36.5	1,384	39.5	1,884	53.7	120	3.4	224	6.4	339	9.7	614	17.5
Walworth	1,373	1,164	84.8	766	55.8	1,145	83.4	1,164	84.8	398	29.0	754	54.9	849	61.8	130	9.5	488	35.5	488	35.5	496	36.1
Washington	556	392	70.5	45	8.1	368	66.2	368	66.2	5	0.9	55	9.9	126	22.7	5	0.9	53	9.5	55	9.9	105	18.9
Waukesha	3,675	1,062	28.9	716	19.5	806	21.9	1,062	28.9	328	8.9	438	11.9	655	17.8	642	17.5	649	17.7	645	17.6	652	17.7
Region	19,405	11,202	57.7	5,669	29.2	10,468	53.9	11,151	57.5	3,186	16.4	3,827	19.7	5,364	27.6	1,289	6.6	1,868	9.6	2,018	10.4	2,405	12.4

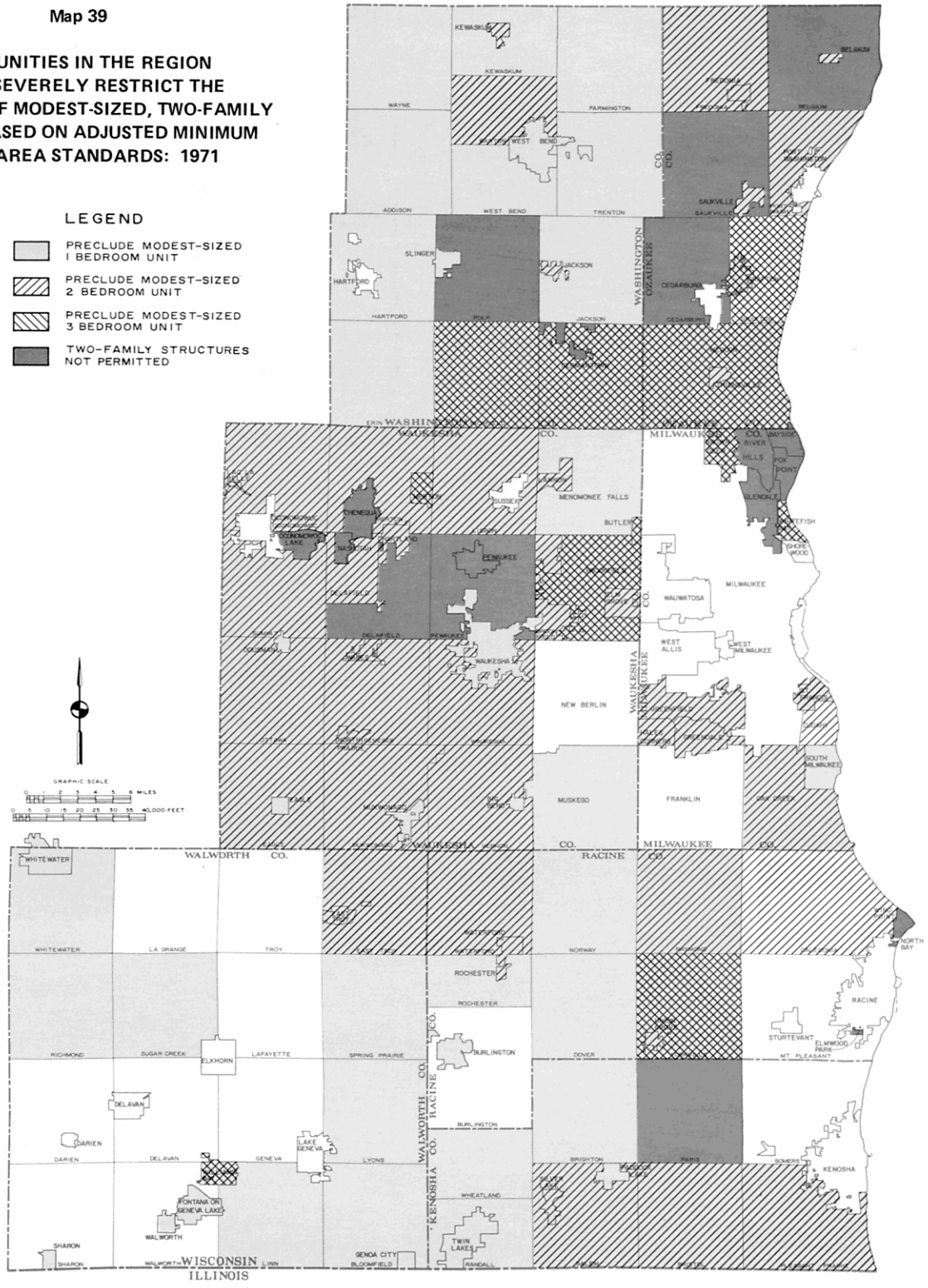
[a] *A modest lot is considered to be 10,000 square feet or less in size per dwelling unit.*

[b] *Developable land zoned to accommodate modest-sized housing includes all developable land for which applicable minimum lot size zoning regulations do not exceed 10,000 square feet per dwelling unit, and minimum structure size regulations do not exceed 300 square feet for a zero-bedroom or efficiency unit, 500 square feet for a one-bedroom unit, 840 square feet for a two-bedroom unit, 1,180 square feet for a three-bedroom unit, 1,480 square feet for a four-bedroom unit, and 1,720 square feet for a five-bedroom unit.*

Source: SEWRPC.

Map 39

COMMUNITIES IN THE REGION WHICH SEVERELY RESTRICT THE PROVISION OF MODEST-SIZED, TWO-FAMILY HOUSING BASED ON ADJUSTED MINIMUM FLOOR AREA STANDARDS: 1971

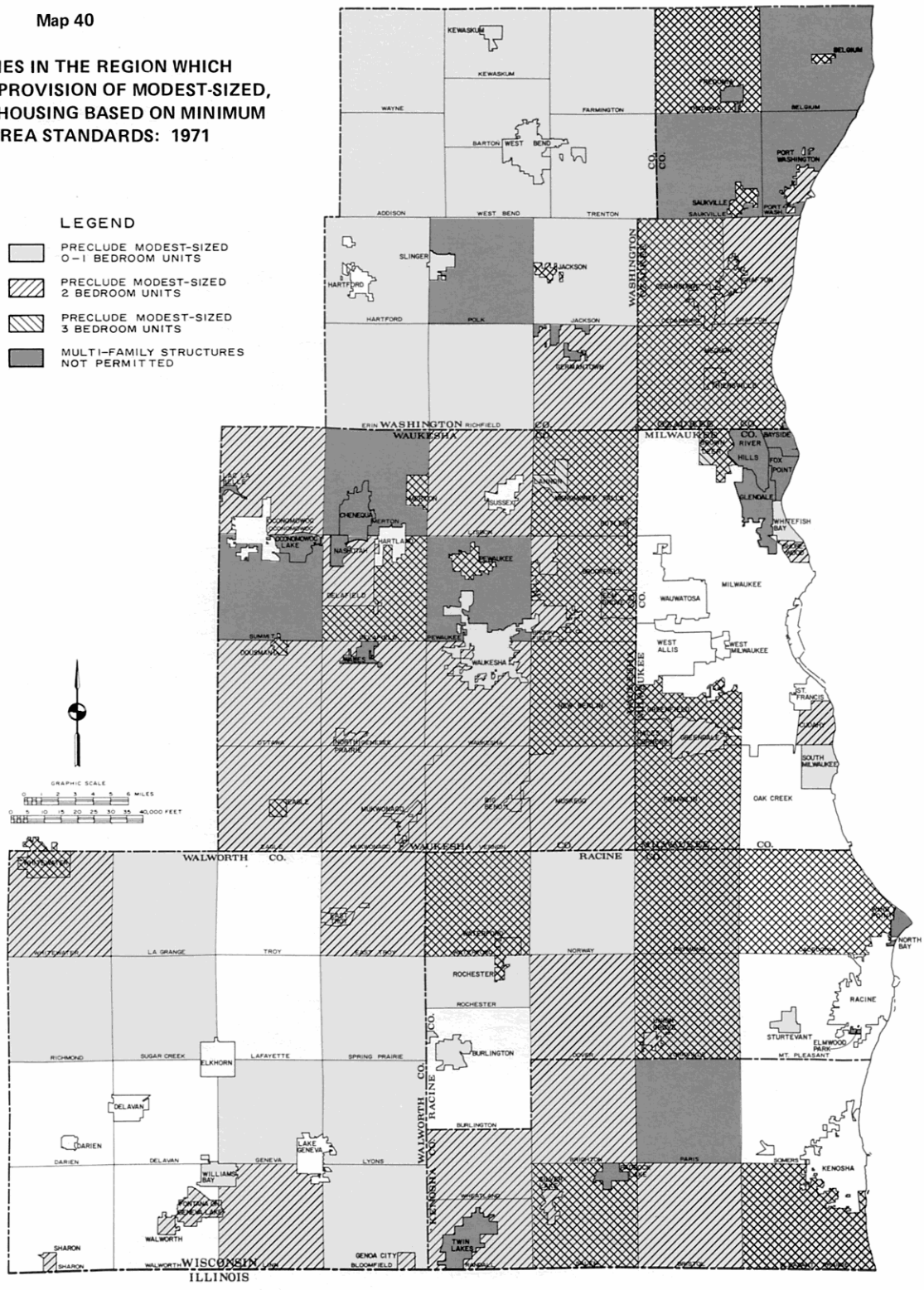


Minimum floor area requirements which exceed the recommended minimum floor area standard adjusted upward by 20 percent severely restrict modest-sized, one-bedroom units in 63, or over 70 percent, of the urban communities; two-bedroom units in 48, or over 50 percent, of the urban communities; and three-bedroom units in 22, or about 25 percent, of the urban communities. Floor area requirements preclude modest-sized one-bedroom units in 21 of the 25 urban communities in Waukesha County, in six of the seven urban communities in Washington County, in six of eight of the urban communities in Ozaukee County, and in 12 of the 19 urban communities in Milwaukee County.

Source: SEWRPC.

Map 40

COMMUNITIES IN THE REGION WHICH RESTRICT THE PROVISION OF MODEST-SIZED, MULTIFAMILY HOUSING BASED ON MINIMUM FLOOR AREA STANDARDS: 1971

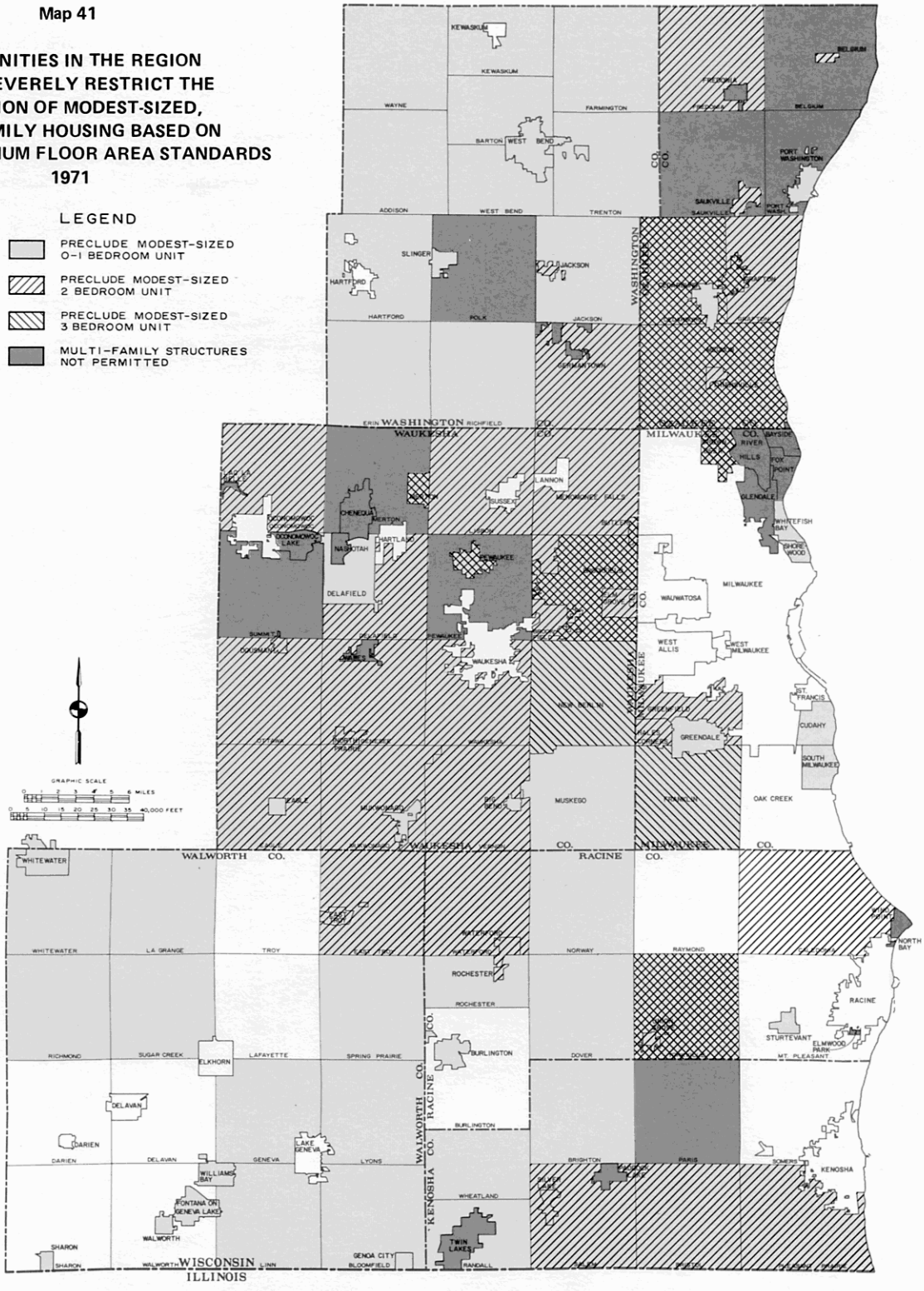


A total of 16 of the 87 urban communities in the Region have no multifamily residential zoned land, and therefore effectively preclude multifamily housing altogether. On the basis of the recommended minimum floor area standards, 65 communities, or about 75 percent of the 87 urban communities in the Region, preclude modest-sized efficiency units; 63 communities, or about 72 percent, preclude modest-sized one-bedroom units; 59 communities, or almost 70 percent, preclude modest-sized two-bedroom units; and 42 communities, or about 50 percent, preclude modest-sized three-bedroom units.

Source: SEWRPC.

Map 41

COMMUNITIES IN THE REGION WHICH SEVERELY RESTRICT THE PROVISION OF MODEST-SIZED, MULTIFAMILY HOUSING BASED ON ADJUSTED MINIMUM FLOOR AREA STANDARDS 1971



Provision of modest-sized, multifamily housing is considered to be severely restricted by floor area requirements which exceed adjusted standards in 59 of the 87 urban communities in the Region for efficiency units, in 56 communities for one-bedroom units, in 42 communities for two-bedroom units, and in 26 communities for three-bedroom units. A total of 16 of the 87 urban communities preclude multifamily housing altogether. Modest-sized efficiency or one-bedroom units are precluded in seven of eight urban communities in Ozaukee County, in eight of 11 urban communities in Racine County, and in 18 of 25 urban communities in Waukesha County.

Source: SEWRPC.

zoned to accommodate both modest-sized lots—10,000 or less square feet in area—and modest-sized structures—those which meet the aforementioned minimum adjusted floor area standards. As indicated in Table 110, while over 11,000 acres, or nearly 58 percent of the 19,000 acres of developable residentially zoned land in the Region, will accommodate modest-sized lots, significantly smaller proportions of such land are zoned to accommodate modest-sized housing units as well. In this respect, about 5,500 acres, or less than 30 percent of developable residentially zoned land, will accommodate modest-sized two-bedroom single-family units or modest-sized three-bedroom two-family units; less than 4,000 acres, or 20 percent of developable residentially zoned land, will accommodate modest-sized one- or two-bedroom two-family units; and less than 2,500 acres, or 15 percent of developable residentially zoned land, will accommodate any modest-sized multifamily units. The effect of community structure and lot size restriction evident at the regional level is also readily apparent at the county level. In Ozaukee and Washington Counties, the amount of developable residential land which is feasible for the provision of modest-sized two-family or multi-family housing units totals a maximum of 91 and 126 acres, respectively.

Table 111 indicates the potential number of housing units which could be provided on developable land zoned to accommodate modest-sized housing. Data presented relate to the potential number of housing units which could be accommodated assuming modest-sized efficiency, one-, or two-bedroom units were built, or if modest-sized three- or four-bedroom units were built. On a regional basis, there are more than 11,000 acres of developable land zoned to accommodate modest-sized three- or four-bedroom units. More than 78,000 such units could be constructed on this land, substantially more than required to house the forecast increase in households in the Region between 1970 and 1980. There are over 6,500 acres of developable land zoned to accommodate modest-sized efficiency, one-, or two-bedroom units. Almost 53,000 such units could be constructed on this land, or about 75 percent of the number of units required to house the forecast net increase in households in the Region between 1970 and 1980.

It is apparent, then, that sufficient quantities of developable land zoned to accommodate modest-sized housing exists within the Region. It might even be argued that on the basis of sound zoning procedures, the Region has "over-zoned" developable residential land. Sound zoning

Table 111

POTENTIAL NUMBER OF HOUSING UNITS WHICH COULD BE PROVIDED ON DEVELOPABLE LAND ZONED TO ACCOMMODATE MODEST-SIZED HOUSING

County	Developable Land[a]				Forecast Net Increase in Households 1970-1980
	Zoned to Accommodate Modest-Sized Efficiency, One- or Two-Bedroom Units		Zoned to Accommodate Modest-Sized Three- or Four-Bedroom Units		
	Acres	Potential Housing Units Accommodated[b]	Acres	Potential Housing Units Accommodated[b]	
Kenosha	1,324	7,217	1,504	8,906	7,300
Milwaukee	1,588	11,839	4,224	25,194	20,300
Ozaukee	105	707	353	1,989	6,400
Racine	1,440	16,202	2,476	22,215	5,300
Walworth	1,050	8,869	1,164	9,439	3,500
Washington	93	850	392	2,618	7,900
Waukesha	940	7,164	1,062	7,921	18,300
Region	6,540	52,902	11,175	78,282	69,000

[a] *Developable land zoned to accommodate modest-sized housing includes all developable residentially zoned land for which applicable minimum lot size zoning regulations do not exceed 10,000 square feet per dwelling unit, and minimum structure size zoning regulations do not exceed 300 square feet for an efficiency unit, 500 square feet for a one-bedroom unit, 840 square feet for a two-bedroom unit, 1,180 square feet for a three-bedroom unit, and 1,480 square feet for a four-bedroom unit.*

[b] *Potential dwelling units accommodated is based upon an average density of 5.0 dwelling units per acre for areas zoned to accommodate residential lots ranging from 6,000 to 10,000 square feet per dwelling unit, and 12.0 dwelling units per acre for areas zoned to accommodate residential lots ranging from 1,000 to 5,999 square feet per dwelling unit.*

Source: SEWRPC.

procedures dictate that sufficient quantities of developable residentially zoned land should exist to meet the communities' immediate needs. Overzoning of such lands, however, may lead to unstable development, mixed land uses, lower property values, deterioration of environmental conditions, blight, and the inefficient and costly extension of necessary public utilities.

In summary, the analysis of land use controls presented in this section indicates that there are sufficient quantities of developable land zoned to accommodate modest-sized housing units. These lands, however, are not evenly distributed throughout the Region. The singularly most important aspect of the inventory, however, was the analysis of community zoning ordinances to determine if provisions of such ordinances facilitated or constrained the locational choice of low- and moderate-income households. In this respect, it was determined that community structure type and size requirements posed a significant constraint to low- and moderate-income households seeking efficiency, one-, and two-bedroom housing units.

Subdivision Control Ordinances and Regulations

Subdivision control regulations are closely related to zoning regulations in that both are preventive measures intended to avert unnecessary public expenditures and possible community blight or deterioration which may result from unplanned, unrestricted development. Zoning relates to the type of land use and building construction which can occur within specific zoning districts throughout the community, while subdivision control relates to the manner in which raw land is subdivided and prepared for development.

Subdivision control ordinances and regulations are important to the land use controls inventory of the regional housing study primarily because of the manner in which such regulations affect the cost of land development and, ultimately, the cost of an improved residential lot. Chapter VII of this report, "Cost Trends of Buying and Occupying New Housing," indicated that development costs for a fully improved lot in an urban area of the Region in 1969, excluding raw land and marketing costs, amounted to over $4,500, or more than 52 percent of the cost of the lot to the consumer. Of the $4,500 in development costs, over $3,000, or 68 percent, were directly attributable to community subdivision regulations.

There are two schools of thought regarding subdivision control regulations and their effect on improved lot costs. The first suggests that complete lot improvements, such as hard surfaced street, curb and gutter, sanitary sewer, storm sewer, and water mains, as well as dedicated land or fees in lieu of dedicated land for school or park purposes, should be provided as part of the initial development process. In this way, even though the cost of the lot may be considerably greater than a similar lot with fewer improvements, the buyer may be better off because he not only has use of such improvements from the time of his initial purchase of the lot, but he can incorporate the cost of such improvements in the cost of his total housing package, and with the aid of a mortgage, finance the improvements over a 25 or 30 year period.

The second school of thought suggests that minimum lot improvements at the time of initial development would enable more households to afford such lots because of the reduced price; and if and when full improvements are desired or required, the buyer would probably be in a better financial position to afford them. In either situation, however, with the exception of those communities which may prorate the cost of improvements over all property owners through a bonding or budgeting mechanism which is ultimately reflected in the property tax, the individual property owners who purchase the residential lots ultimately must bear the financial burden associated with improvements to those lots. All communities in the Region, either through official adoption of local or county subdivision control ordinances or through specific requirements related to land development noted in the land use controls inventory, do regulate land development activity in the Region to varying degrees.

Public regulations related to land development as these affect the cost of building sites may be grouped into the following six general categories: public improvement, land dedication, land reservation, improvement guarantee, fee, and land suitability requirements.

Public Improvement Requirements: This category of land development regulations relates to those site improvements which are required to transform raw land into improved residential building sites. These improvements include, but are not limited to, public sanitary sewer, public water supply and storm water drainage facilities, the grading and surfacing of collector and land access streets within the subdivision, and such miscellaneous improvements as street signs, street lights, and street trees. The topography and soil characteristics of the development tract, the kind and intensity of existing and proposed development in areas both within and adjacent to the subdivision, and the desired character of the neighborhood are important factors which must be considered in the determination of the specific site improvements required.

Land Dedication Requirements: Community land dedication requirements, usually for park or school sites and to a lesser extent for street and highway rights-of-way, may be expressed either as a percentage of the development acreage or as a monetary contribution for each individual lot or housing unit. Not uncommonly, the limited size of a subdivision may make the land area dedicated for public use too small to be of practical value. In other cases, the location of the development within the community or its topography may make the parcel proposed for dedication inappropriate for a reasonable public use. In such instances, the municipality may require a site fee, based on the assessed value of the development or on the number of new units, in lieu of actual dedication of land.

Land Reservation Requirements: In addition to land dedication or site equalization fees in lieu of dedication, communities often include requirements that the developer reserve, for public acceptance, portions of the plat which the local community determines may be required

for public facilities or open spaces. These reserved areas are portions of the plat not required for dedication or areas which exceed the dedication requirements of the ordinance, and as such, warrant compensation to the developer at a fair market value.

Improvement Guarantee Requirements: Improvement guarantees are financial arrangements between the developer and the municipality to ensure that the subdivider will provide and install, within a reasonable time, the public improvements and land dedications required by the municipality. The guarantee may take the form of the developer's cash deposit held by the municipality, a surety bond executed by the developer, a letter of credit issued on behalf of the developer by a reputable financial institution and held by the municipality, or any combination of the three forms.

Fee Requirements: Subdivision regulations may impose fees on the developer at various stages in the plat review and approval process in keeping with the theory that costs directly attributable to the development should be borne by the developer. Such fees include filing, improvement review, inspection, legal, and miscellaneous administrative fees, and are levied to reflect the costs incurred by the municipality in evaluating and regulating the land division through the survey, preliminary plat, and final plat approval stages of the project's development.

Land Suitability Requirements: In keeping with the police power of the community to safeguard the public health, safety, and welfare and to avoid the unnecessary public and private expense generated by intensive development on unsuitable lands, local communities may enact land suitability requirements. The specific provisions of such regulations vary considerably from community to community in accordance with the topography of the district and the intensity of its development.

Land suitability restrictions are usually designed to forestall contamination of surface water or groundwater supplies in areas not served by public sanitary sewers where high groundwater tables, limited depth to bedrock, excessive slopes, or otherwise unsuitable soils make use of onsite sewage disposal systems unfeasible. Other objectives of land suitability requirements include the prevention of drainage, erosion, and flooding problems.

A summary of the extent to which the six aforementioned land development requirements are included as part of urban and rural community subdivision control regulation is presented in Table 112.

As indicated in Table 112, high proportions of both the urban and rural communities within the Region imposed land dedication, land reservation, improvement guarantee, fee, and land suitability requirements. As might be expected, however, there was considerable diversity in community requirements for various public improvements. For instance, the subdivision control ordinances of more than 50 percent of the urban communities in the Region required public sewer and water supply facilities for all building sites, while none of the rural communities had such a requirement. Also, higher percentages of urban communities required paved streets and street lighting than did rural communities. Thus, due in part to the greater extent of improvements required by subdivision control ordinances in urban communities, residential lot prices in urban communities are generally higher than similar lots in rural areas.

While it may be argued, then, that public improvement requirements in urban communities act as a constraint on the availability of suitable lots in that they represent additional financial burdens, especially for low- and moderate-income households, it can also be argued, and more persuasively so, that urban improvements, especially paved streets, public sanitary sewer, water supply, and storm water drainage facilities, are a necessary part of "sanitary housing" and a "suitable living environment," and as such, far outweigh any cost constraints which may be associated with the provision of such improvements.

Architectural Control Ordinances

Architectural control ordinances provide for community review of exterior architectural appearance and the functional plan of proposed structures. The purpose of an architectural control ordinance is not to impose a pattern of regimental conformity to any specific architectural style or taste, but rather to extend the purposes of zoning. These purposes include, among others, the maintenance of standards for compatible development, aesthetics, and stability of property values. Specific provisions often found in architectural control ordinances include the following:

1. No building shall be permitted of which the design or exterior appearance is of such unorthodox or abnormal character in relation to its surroundings so as to be unsightly or offensive to generally accepted tastes.

2. No building shall be permitted of which the design is so identical as to create excessive monotony or drabness.

3. No building shall be permitted to be sited on the property in a manner which would unnecessarily destroy or substantially damage the natural beauty of the area, adversely affecting values incident to ownership of land in that area, or which would unreasonably and adversely affect the beauty and general enjoyment of existing residences on adjoining properties.

While most architectural control ordinances have a similar purpose and provisions, they vary widely in their administration. At one extreme are communities which require an architectural review or building board to examine all plans for new construction or moving, alteration, or repair of existing structures before any building permit is issued. At the other extreme are communities which rely on the discretion of the building inspector to determine what might be considered in conflict with the provisions of the ordinance.

Table 112

LAND DEVELOPMENT REQUIREMENTS FOR URBAN AND RURAL COMMUNITIES: 1971

Land Development Requirement	Communities					
	Urban[a]		Rural[a]		Total	
	Number	Percent of Urban Communities	Number	Percent of Rural Communities	Number	Percent of Total Urban and Rural Communities
Public Improvements						
Utilities						
Public Sewer	47	54.0	0	--	47	32.1
Storm Water Drainage	40	45.9	32	54.2	72	49.3
Public Water Supply	44	50.5	0	--	44	30.8
Streets and Roads						
Concrete	12	13.7	0	--	12	8.2
Bituminous Concrete	54	62.0	35	59.3	89	60.9
Bituminous Macadam	24	27.5	10	16.9	34	23.2
Gravel	21	24.1	22	37.2	43	29.4
Other Improvements						
Lights	43	49.4	2	3.3	45	30.8
Signs	65	74.7	39	66.1	104	71.2
Landscaping	45	51.7	28	47.4	73	50.0
Land Dedication						
Streets, Highways, and Drainageways	82	94.2	57	96.6	139	95.2
Recreation, Schools, and Open Space	57	65.5	41	69.4	98	67.1
Site Fee in Lieu of Dedication	30	34.4	11	18.6	41	28.0
Land Reservation						
Streets, Highways, and Drainageways	73	83.9	52	88.1	125	85.6
Recreation, Schools, and Open Space	51	58.6	39	66.1	90	61.6
Improvement Guarantees	73	83.9	51	86.4	124	84.9
Fees	62	71.2	46	77.9	108	73.9
Land Suitability	59	67.8	57	96.6	116	79.4

[a]*See Map 33 for identification of urban and rural communities.*

Source: SEWRPC.

However administered, it would appear that architectural control ordinances can only be subjectively interpreted. The determination of what may be considered "unorthodox," "abnormal," or "monotonous," or what would cause "substantial" damage to adjacent property values, is dependent upon the individual subjective judgment of the building inspector and/or collective subjective judgments of the architectural review board. Clearly, while communities have a justifiable interest in preventing monotony of structure type which can occur in endless residential tract developments, or in preventing avant-garde structures in a neighborhood of traditional homes, it is equally clear that the subjective powers associated with architectural control ordinances, if used improperly, could provide a means of discrimination against certain housing types in the Region.

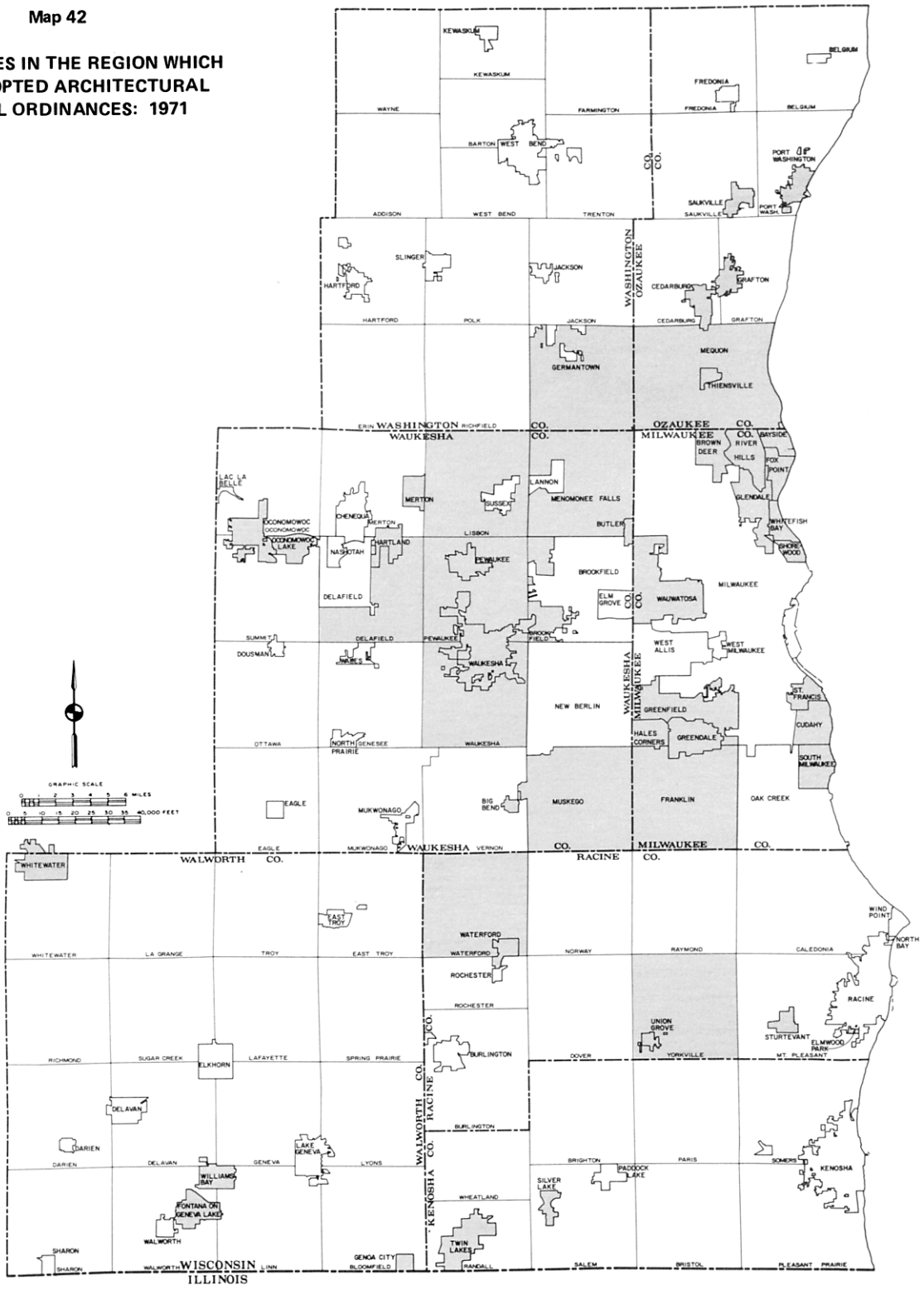
The land use controls inventory revealed that 49 communities, or 34 percent of all communities within the Region, have architectural control ordinances. Those communities encompass an area of almost 510 square miles, or about 19 percent of the total area of the Region. It can be seen from Map 42 that most of the communities which have adopted architectural control ordinances within the Region are concentrated in urban areas. Only six of the 49 communities would be considered as rural communities (see Map 33).

Building Codes

Building codes are regulations enacted by communities to govern the materials, equipment, and actual construction of buildings within the community. The purpose of such

Map 42

COMMUNITIES IN THE REGION WHICH HAVE ADOPTED ARCHITECTURAL CONTROL ORDINANCES: 1971



A total of 49 communities, or 34 percent of all communities in the Region, have adopted architectural control ordinances, which provide for community review of exterior architectural appearance and the functional plan of proposed structures. Of the 49 communities which have adopted these ordinances, 43 are concentrated in urban areas.

Source: SEWRPC.

codes is to protect the occupants from injury due to faulty construction or inferior materials, as well as to minimize potential unhealthy or unsanitary conditions and prevent accelerated deterioration and blight. Building codes, then, facilitate the attainment of regional housing objectives which seek to provide decent, safe, and sanitary housing to all households in the Region.

Building codes operate progressively through the various stages of the construction process. Before construction begins, the builder must show that the proposed unit meets the community's zoning regulations. Once construction begins, a building inspector must approve each stage of construction before the next stage may begin.

Map 43 shows those communities which have adopted building codes. A total of 138, or over 95 percent of the 146 communities in the Region, have adopted such codes. These communities encompass an area of 2,442 square miles, or over 90 percent of the total area of the Region.

Despite the valid purpose of protecting citizens, local building codes have been criticized as hindering more rapid increases in housing supply. It is true that the stage-by-stage inspection process slows the construction process. In addition to the myriad of restrictions within a given code, building codes may vary, in different degrees, from community to community. Materials and methods of construction which are acceptable in one community may not be acceptable in a neighboring community. In many instances, even where local regulations of adjoining communities are similar, discrepancies in ordinance wording or code enforcement may result in nonuniform interpretation. An important attempt, however, has been made to remove or mitigate the effects of nonuniform local building construction regulations within the Region.

In 1967, the Southeastern Wisconsin Uniform Building Code[2] was prepared by the Milwaukee Metropolitan Uniform Building Code Commission. As of 1974, this uniform one- and two-family building code had also been adopted by 59 communities, or 40 percent of the communities in the Southeastern Wisconsin Region. These communities encompass an area of 926 square miles, or about 34 percent of the total area of the Region (see Map 43).

Recently, attempts have been made to enact legislation for uniform construction and inspection of off-site factory-built housing units. It has been suggested that enactment of legislation for a uniform building and factory-built housing code may be the catalyst required to enable manufacturers of factory-built housing, in the long run, to expand their operations, develop new markets, and through increased production and new technological advances, possibly provide additional cost saving to prospective housing consumers. It is doubtful, however, based upon the current state of the art in housing technology, that substantial cost savings would accrue to housing consumers in the near future if such legislation were enacted. This is true for two reasons. First, a 1972 study of local building codes by Wisconsin's largest manufacturer of factory-built, panelized housing units revealed that in the 18 southeast Wisconsin communities to which their firm had provided units, additional costs imposed on the manufacture of such units due to requirements of local building codes averaged $130 per unit, and ranged from a low of about $10 to a high of $320 per unit. The $130 average additional costs imposed by local building codes represented less than 1 percent of the cost of the house.

Secondly, based upon the current state of the art in factory-built housing, the cost savings which could accrue to housing consumers, if factory-built housing were available, varied from less than 1 percent to about 8 percent when compared to the cost of a comparable conventionally constructed unit. While any saving in housing construction cost is desirable, even the 8 percent saving resulting from the construction of a factory-built unit would reduce the monthly occupancy cost of such housing from $296 per month to $275 per month, far less than would be required to make such housing readily available to low- or moderate-income families.

It is apparent, then, that while local building codes presently are nonuniform, and as such cause inconveniences to factory-built housing producers, they do not in and of themselves significantly increase the cost nor restrict the availability of such housing within the Southeastern Wisconsin Region.

Housing Codes

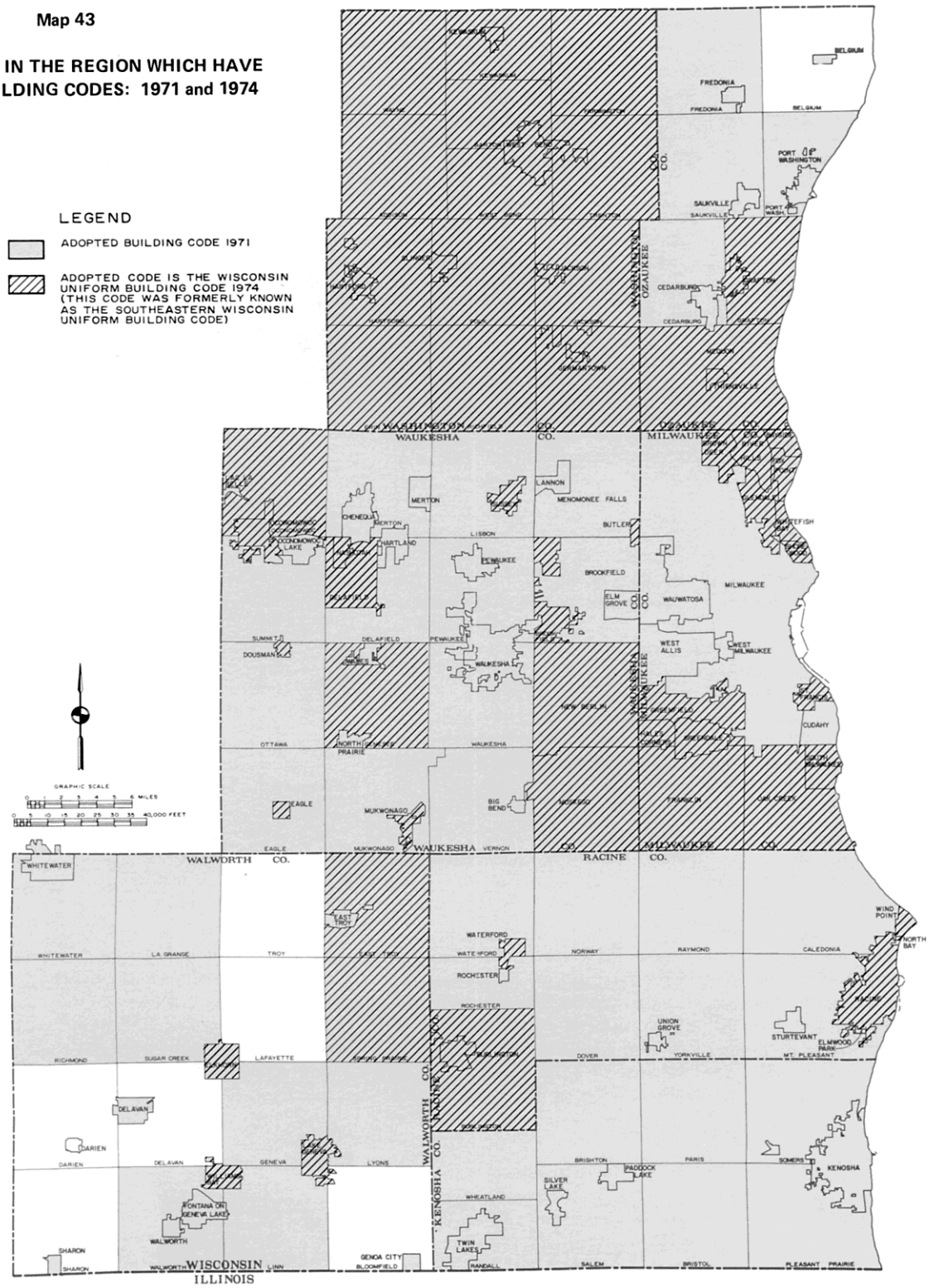
Housing codes are regulations enacted by communities to govern the condition, occupancy, and maintenance of residential structures, and establish reasonable minimum standards for the provision of utilities and facilities within the structure so as to enhance the safety, health, and welfare of the occupants. Like building codes, housing codes facilitate the attainment of regional housing objectives which seek to provide decent, safe, and sanitary housing for all households in the Region. Unlike building codes, which pertain primarily to new construction, housing codes pertain to all existing housing units. Housing codes, in addition to facilitating the objective of decent, safe, and sanitary housing, also do much toward conserving and preserving the existing housing stock. This is an important consideration in housing planning, since it is the existing housing stock, with its lower housing values and rents when compared to new housing, that can most economically meet the housing needs of low- and moderate-income households.

As indicated on Map 44, 13 communities, or about 9 percent of the 146 communities in the Region, have

[2] *In 1973, the name of this code was changed to the Wisconsin Uniform Building Code.*

Map 43

COMMUNITIES IN THE REGION WHICH HAVE ADOPTED BUILDING CODES: 1971 and 1974

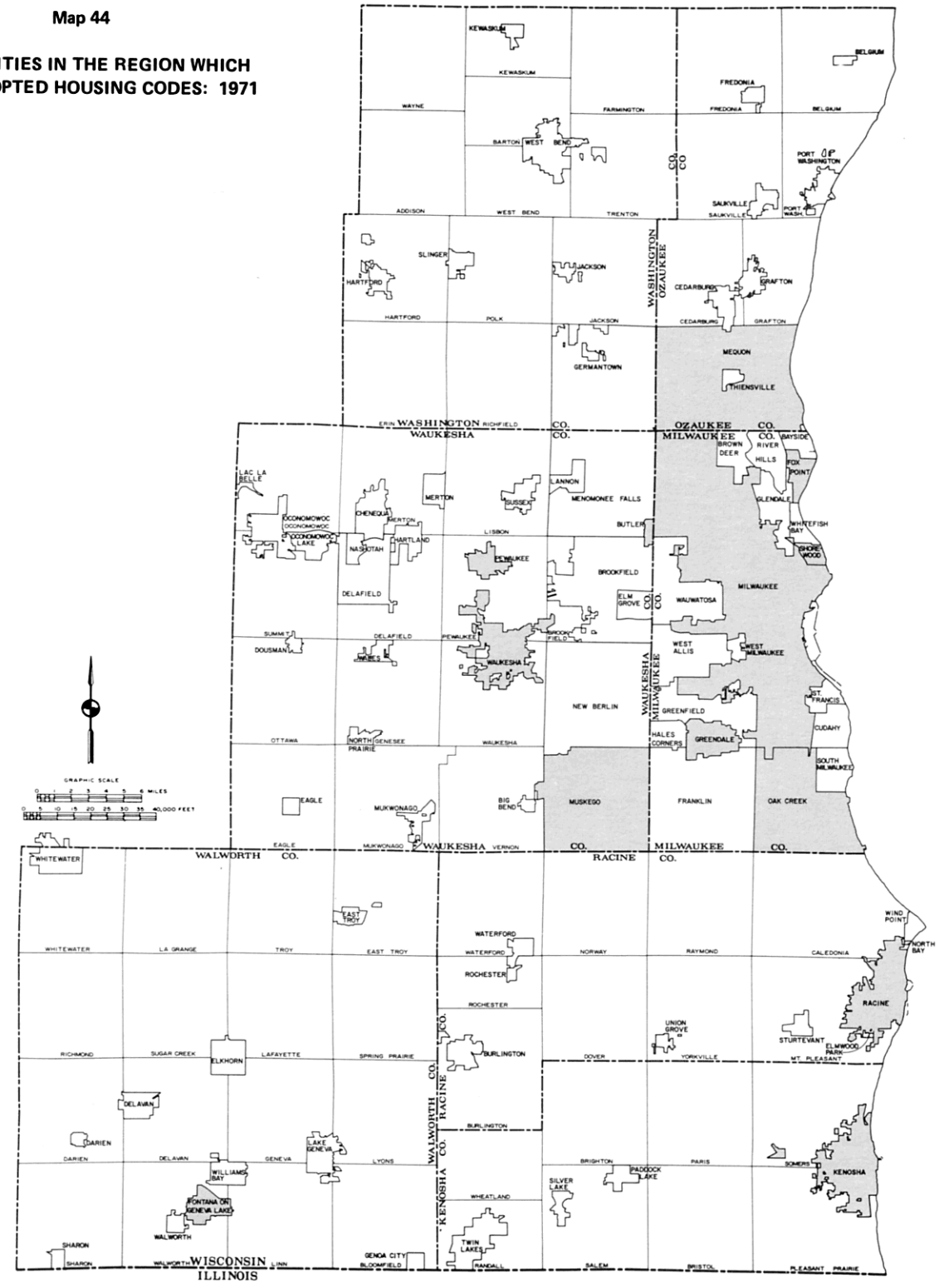


Within the Region, 139 communities, or 95 percent of the 146 communities in the Region, have adopted building codes. For 59 communities, or 40 percent of the total, encompassing about 34 percent of the total area of the Region, the adopted code is the Wisconsin Uniform Building Code.

Source: Building Inspectors Association of Southeastern Wisconsin and SEWRPC.

Map 44

COMMUNITIES IN THE REGION WHICH HAVE ADOPTED HOUSING CODES: 1971



Housing codes, which pertain primarily to the condition, occupancy, and maintenance of existing residential structures, have been adopted by 13 communities, or 9 percent of the 146 communities in the Region. These 13 communities, which are all located in urban areas, encompass about 265 square miles, or almost 10 percent of the total area of the Region.

Source: SEWRPC.

adopted housing codes. Those communities encompass 265 square miles, or almost 10 percent of the total area of the Region.

SUMMARY

Land use control powers conferred through state enabling legislation provide counties and local communities with many land use control mechanisms which have a profound impact on existing and proposed land use development, especially residential development, within the Region. Land use controls can substantially determine the overall characteristics of housing development, including the quality, quantity, location, size, type, cost, and to some extent the characteristics of the prospective occupants, of housing units themselves. The principal land use control mechanisms utilized by local communities in regulating and controlling development, especially residential development, include land use plans, zoning ordinances, subdivision control ordinances, architectural control ordinances, and building and housing codes.

Because of the developmental and environmental problems which are created by urban development which transcends the boundaries of a single municipality or even a single county, land use plans should initially be formulated at the regional level and refined, detailed, and converted into implementation programs at the county or local level.

Few communities to date have adopted land use plans, and even fewer communities have adopted precise neighborhood development plans. A total of 31 communities, or about 20 percent of the 146 general-purpose local units of government, have adopted the regional land use plan; 45 communities, or about 31 percent, have adopted or prepared local land use plans; and four communities, or about 4 percent, have adopted or have underway precise neighborhood development plans. Tools which can assist in the implementation of such plans, especially in residential development, include zoning ordinances, subdivision control ordinances, architectural control ordinances, and building and housing codes.

While zoning ordinances are not, or at least ought not to be, a substitute for a community land use plan, in most communities throughout the Region the zoning ordinance represents the best available expression, at least in the short run, of local development objectives. Zoning ordinances in a land use context by definition are discriminatory and exclusionary; they allow specific uses or structures in some areas and prohibit the same uses or structures from other areas. Of importance to the housing study, however, is whether such ordinances could be considered unduly restrictive in that they significantly constrain locational choice of households seeking various types and sizes of housing.

Analysis of residential zoning patterns revealed that over 455,000 acres, or 26 percent of the total 1,721,000 acres of land in the Region, were zoned for residential use. An additional 847,000 acres of land were zoned agricultural, but permitted residential use. Of the 445,000 acres zoned for residential use, approximately 19,400 acres could be considered "developable" in that they meet land use and housing development standards for a suitable living environment. Developable lands are located in urban areas of the Region, and as such, facilitate attainment of regional land use and housing development objectives. While such lands may not be uniformly distributed by density classification within the Region, there are sufficient quantities of developable land to provide housing sites for over 90,000 additional households. Over 11,000 acres, or about 57 percent of the 19,400 acres of developable land, are zoned to allow modest-sized residential lots—10,000 square feet or less—in area, and could accommodate over 78,000 housing units. Zoning density patterns on a regional basis, therefore, do not appear to act as a significant constraint on the locational choice of households seeking housing.

Community zoning related to structure type and minimum square footage restriction indicated quite a different pattern. Community minimum square footage requirements especially affect low- and moderate-income households, which may find it exceedingly difficult to construct or reside in the size homes often required by local community zoning ordinances. While all communities within the Region allow single-family units, many communities are restrictive in the allowed size of the single-family unit. There is great variance in community minimum floor area requirements, ranging from no minimum in some communities to 1,700 square feet in other communities.

On the basis of a comparison of the modest-sized housing standard to the floor area requirements specified in individual community zoning ordinances, it was found that 56 urban communities, or about 65 percent of the 87 urban communities within the Region, preclude modest-sized two-bedroom units; 21 communities, or about 25 percent, preclude modest-sized three-bedroom units; and eight communities, or about 10 percent, preclude modest-sized four-bedroom units. The restrictive pattern is also evident for modest-sized two-family and multifamily housing. A total of 17 of the 146 communities in the Region and 12 of the 87 urban communities preclude two-family housing altogether. Including the 12 urban communities which preclude two-family housing, 63 communities, or 70 percent of the urban communities in the Region, preclude modest-sized one-bedroom units; 48 communities, or over 50 percent, preclude modest-sized two-bedroom units; and 22 communities, or about 25 percent, preclude modest-sized three-bedroom units.

A total of 22 of the 146 communities in the Region and 16 of the 87 urban communities preclude multifamily housing types altogether. Including the 16 urban communities which preclude multifamily housing, 59 communities, or 70 percent of the urban communities in the Region, preclude modest-sized efficiency units; 56 communities, or about 65 percent, preclude modest-sized

one-bedroom units; 42 communities, or about 50 percent, preclude modest-sized two-bedroom units; and 26 communities, or about 30 percent, preclude modest-sized three-bedroom units. The provisions of community zoning ordinances related to structure type and size requirements represent the singularly most important constraining influence on the locational choice of low- and moderate-income households.

Subdivision control regulations, which include provisions related to public improvements, land dedication, land reservation, improvement guarantee, fees, and land suitability requirements, are important to the land use controls inventory primarily because of the manner in which such regulations affect the cost of land development and ultimately the cost of an improved residential lot. The provisions of subdivision control ordinances or regulations, however, are also important in that they assist in attaining a basic housing objective of sanitary housing within a suitable living environment. The benefits associated with a suitable living environment far outweigh the "cost constraints" which may result from the required ordinance provisions.

Architectural control ordinances, which provide for the review of exterior architectural appearance and the functional plan of residential structures, are present in 49 communities, or 34 percent of all communities in the Region. The extent to which such ordinances restrict the locational choice of households within the Region is, however, undetermined. Architectural control ordinances can, however, because of their subjective interpretation, exclude certain housing types and sizes from various communities of the Region.

Building codes are regulations enacted by communities to govern material, equipment, and the actual construction of buildings within the Region, and facilitate the attainment of regional housing objectives which seek to provide decent, safe, and sanitary housing for all households. It has been suggested, however, that the nonuniformity and stringent inspection requirements of local building codes have precluded greater utilization of factory-built housing, which housing was thought to produce substantial cost savings to prospective housing consumers. An analysis of building code and factory-built housing data, however, revealed that local building codes had a negligible effect on the cost and provision of factory-built housing in the Region. While local building codes are not uniform, and caused inconveniences to factory-built housing producers, they did not and of themselves significantly increase the cost—less than $130 additional costs were attributable to local building codes—or significantly restrict the availability of housing within the Region.

Housing codes, like building codes, facilitate the attainment of regional housing objectives which seek to provide decent, safe, and sanitary housing. Housing codes also seek to conserve and preserve the existing stock of housing, and as such provide additional means of economically meeting the housing needs of low- and moderate-income households.

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Chapter XI

GOVERNMENT ACTIVITY IN HOUSING

INTRODUCTION

One of the specific objectives of the regional housing planning process is the formulation of recommendations concerning the role of government and the private sector in meeting housing needs within the Region. In order to better understand and assess the function that government has had in housing in the past, and thereby to provide a basis for considering the possible future function of government in meeting true housing need within the Region, it was necessary to collect information related to the activities of federal, state, and local units of government in the housing field. As part of the regional housing study, therefore, an inventory of government sponsored housing and housing-related programs was conducted. The inventory data collected and collated were intended to permit the evaluation of past housing programs sponsored by the public sector, as well as to provide a base upon which both the public and private sector can draw to assist in the formulation and effectuation of future housing and housing-related programs and policies.

This chapter presents a summary of the findings of the government sponsored housing programs inventory. Included is a short discussion of the early involvement of government in housing within the Southeastern Wisconsin Region, as well as a brief review of the history of housing legislation as it has evolved from the time of the industrial revolution to the present. More importantly, however, this chapter presents data concerning the utilization of various federal, state, and local housing and housing-related programs within the Region. Because of the large number of housing programs administered by various federal, state, and local agencies, however, this chapter will describe only those programs which are, or have been, utilized within southeastern Wisconsin, and whose primary purpose has been to provide housing to households which, because of insufficient economic means, were unable to provide decent, safe, and sanitary housing for themselves.

Particular emphasis was placed on the collection and descriptive analysis of data related to the "Section 235" homeownership program and the "Section 236" rental and "Section 221(d)(3)" rent supplement programs, all administered pursuant to federal housing legislation by the U. S. Department of Housing and Urban Development; the "Section 502" homeownership program administered pursuant to federal rural development legislation by the U. S. Department of Agriculture, Farmers Home Administration; and on the public housing programs administered by the U. S. Department of Housing and Urban Development, in conjunction with local housing authorities. These programs are referred to collectively as housing subsidy programs because they enable low- and moderate-income households to reside in decent, safe, and sanitary housing, either through interest reduction payments for privately owned single-family and multifamily housing units or through the federal subsidization of publicly owned and operated housing units.

It should be noted that while these programs are termed "housing subsidy" programs, the actual dollar amount of the subsidy is directly related to, and dependent upon, the household residing in a given unit. It is not the housing unit which is subsidized, but rather the household residing in the unit. While it has been common to think of housing subsidy programs in terms of the number of subsidized housing units, it is more appropriate to consider such programs in terms of subsidized households. The term "subsidized housing unit," however, is used in this chapter in a narrower sense; namely, as a descriptive term to indicate the number of housing units constructed or insured under various housing subsidy programs.

It should also be noted that when the government-sponsored housing programs inventory was conducted in 1972, all of the federal housing subsidy programs described were funded and fully operating. The main intent of this chapter was to document utilization of these programs within the Region. Subsequently, significant changes have occurred in the housing field, some of which have far-reaching implications for the housing situation within the Region that are not as yet fully known.

Probably the most critical change to occur in the housing field was the placement of a moratorium early in January 1973 on federally subsidized housing programs. The Administration indicated that, due to serious problems in the existing subsidy programs which rendered them "deficient in many respects," a moratorium was being placed on them. A 100-member national review team was created to analyze them for a six-month period from February 1973 to October 1973. This review team indicated at the conclusion of its study that the Section 235 and 236 and rent supplement programs had up to that date cost the country $65 billion to $85 billion, yet had served only one family in 15 eligible under the law. The team further indicated that the programs have produced a high level of defaults which could result in a foreclosure rate of 20 percent for Section 235 or 236 units in the next decade. It was estimated that it would cost $34 billion annually to adequately house eligible families under the present subsidy programs, and it was indicated that the provision of decent housing for all low- and moderate-income families could be achieved utilizing other approaches for a quarter to a third of this expenditure.

For whatever reasons, however, the effect of the moratorium was a suspension for a time of funding for the future construction of housing units under all federally subsidized programs—including Section 235 homeownership, Section 236 rental, Section 221(d)(3) rent supplement, and Section 502 homeownership—and under all federally supported public housing development programs. Since the enactment of the moratorium, some exceptions have been made, including in Wisconsin those Sections 236 and 221(d)(3) units related to urban renewal and other HUD commitments, Section 502 housing, and Section 23 leased housing.

The future of such subsidized housing programs, therefore, is still unknown. Legislation is pending which could have an impact on the provision of decent, safe, and sanitary housing for low- and moderate-income households. One piece of legislation is the Administration's "Better Communities Act," which attempts to establish a single fund for all major current categorical programs that deal with the physical development of urban communities. Such programs include urban renewal, model cities, water and sewer utility construction, open space acquisition, and code enforcement. The Better Communities Act, a form of revenue sharing, would give state and local elected officials direct control over the use of federal funds provided, and would permit these officials to determine priority expenditures of these funds. The funds would be allocated by a formula based upon need, and would consider population, overcrowded housing, and poverty.

A second piece of proposed legislation is the Responsive Governments Act, which would reorganize the present 701 Comprehensive Planning Program. The HUD 701 program is the principal source of federal funds for states and localities for land use planning, and is also used for comprehensive social and economic planning and management assistance. The proposed Act would change the focus of the 701 program to assist local governments in improving their planning and management capabilities. HUD would be given the option to fund recipients directly or through the states, and would not require matching or other expenditures from grant recipients for housing planning.

Other legislation dealing directly with housing subsidy programs has been proposed by the U. S. Senate, the U. S. House of Representatives, and the Administration. Under the Senate proposal, all of the former HUD-FHA housing insurance and subsidy programs would be consolidated under four basic sections: Section 401—insured, nonsubsidized homeownership; Section 402—insured and subsidized homeownership; Section 501—insured multifamily; and Section 502—insured and subsidized multifamily. This legislative proposal would also allocate 60 percent of the 402 and 502 funds to Standard Metropolitan Statistical Areas pursuant to a formula considering population, poverty, and overcrowded housing. This is the only bill of the three providing for a continuation of public housing.

Under the House proposal, all three existing housing programs—Section 235, 236, and public housing—would be eliminated and housing block grants substituted. A total of $2,200,000,000 in housing block grants would be provided over an initial three-year period, divided between metropolitan and nonmetropolitan areas on a 75-25 percent basis, respectively, using a formula considering population, poverty, and overcrowded housing. Communities would apply based on a thorough survey of housing needs. Although new public housing unit construction would not be funded, $45 million of contract authority would be made available for modernization and renovation of existing public housing units.

Under the Administration proposal, Sections 236 and 221(d)(3) would be continued temporarily to meet certain urban renewal and other HUD-related commitments. The Section 23 leasing program would be expanded and its administration modified, and a new type of leasing program would be introduced whereby HUD would deal directly with developers. Long-term, production-oriented programs would be ended and replaced by a modified housing allowance, provided the present experimental programs indicate the potential for success.

Because there are many unanswered questions concerning the current status of federal housing legislation, this chapter, after a short discussion of early government involvement in housing in the Region and a brief review of housing legislation, will analyze recent government subsidy programs which have been utilized in the Region. This analysis will provide an indication of the number and distribution of housing units provided under various housing subsidy programs within the Region, as well as a more detailed analysis of the salient characteristics of households utilizing the various subsidy programs.

EARLY GOVERNMENT HOUSING ACTIVITY IN THE REGION

Government housing activity in the Region is not new. As early as 1921, the City of Milwaukee appointed a City Housing Commission to take action on the housing shortage after World War I. This commission sponsored the Garden Homes project located at N. 25th Street and W. Congress Avenue in the City of Milwaukee. The project consisted of 105 single- and two-family residences, and was cooperatively funded by the City and County of Milwaukee, each of which invested $100,000 in the project. During the Depression, the City of Milwaukee participated in the construction of 518 units of federally subsidized housing under the Works Project Administration Parklawn project at N. Sherman Blvd. and W. Hope Avenue. The Milwaukee Housing Authority later assumed ownership of this project, which today still provides decent, safe, and sanitary living accommodations for low-income families.

Direct federal involvement in providing housing in the Region outside the City of Milwaukee occurred as a result

of a federal experiment in planning and developing "greenbelt" towns. Development of the Village of Greendale was initiated under this "greenbelt" program during the 1930s. The Resettlement Administration of the U. S. Department of Agriculture was charged in this experiment with resettling part of the Milwaukee urban labor force in a satellite community located outside the central city, where good low-cost housing and subsistence garden plots could be provided to low- and middle-income families.

The federal government purchased a 3,400-acre tract in the Towns of Greenfield and Franklin, located approximately 8 1/2 miles southwest of what was then the central business district of the City of Milwaukee. Of the 3,400 acres, only 5 percent was planned for use as the actual town site, with the remaining acreage being used as an agricultural greenbelt, thus limiting the growth of the town, preventing encroachment of expanding unplanned communities, and providing a country setting. The plan for Greendale was completed in December 1935. Construction began in 1936, and by July 1937, 360 residential buildings were ready for occupancy. Rents were low, and by 1938 all residential units were rented by the federal government. In 1938, Greendale was incorporated as a village, but since the federal government owned the entire area, the village government was supported by negotiated federal payments in lieu of taxes. In 1952, the federal government decided to end its ownership of the village due to lack of interest in the greenbelt experiment and to criticism of the planned community as a socialistic venture. It was decided to sell existing houses to individual purchasers, giving first option to current tenants.

In reaction to the prospect of remaining land going to national real estate speculators, three large Milwaukee corporations formed the Milwaukee Community Development Corporation (MCDC) and purchased the vacant greenbelt land, the shopping center, and the community buildings in 1953. The intention of this corporation (MCDC), formed by the Allis-Chalmers Manufacturing Company, the Kearney and Trecker Corporation, and the Boston Store, was to continue the planned development of the community as close to the original design as the economics of private enterprise would permit. The original plan has been altered, however, to allow more land for commercial and light industry uses and to supplant the greenbelt with county parkland along the southern and western boundaries of the village. In the early 1960s, the Greendale Land Company, formed by A. L. Grootemaat real estate developers, purchased the remaining property and presently, in cooperation with the Greendale Planning Commission, directs the further development of Greendale.

County and local governments were involved in providing housing in the mid-1940s when servicemen returning from World War II found available housing units in short supply. To meet this immediate need, the Milwaukee County Board of Supervisors chose to provide temporary housing, using house trailers or mobile homes and prefabricated types of housing. The Milwaukee County Park Commission was delegated to implement the program, and the Red Cross was to select and certify veterans for tenancy. In order to give the Planning Department time to complete technical plans, the first trailer sites were temporarily located in parks which operated swimming pools because of the availability of toilet and shower facilities. Within 90 days after the first order for 407 trailers was placed, all units were occupied. In 1948, 902 trailers were moved to five more permanent sites at Greenfield Trailer Park, Town of Greenfield; Lapham Park and Hampton Trailer Parks, City of Milwaukee; Lincoln Park Trailer Camp, Town of Milwaukee; and Harbor View Trailer Park, Town of Lake. Prefabricated Goodyear Wingfoot homes were located at the Eaton Housing Site, City of Cudahy; Eckle Park Site, City of West Allis; Rawson Park Housing Site, City of South Milwaukee; and the Glendale, Manitoba, and Wilson Park Housing Sites in the City of Milwaukee. In all, Milwaukee County provided 1,663 housing units which were used by 5,000 families in a four-year period. As more permanent housing became available in the early 1950s, the temporary housing units were gradually phased out of use. Some of the permanent prefabricated housing units built for servicemen in this four-year period, however, are still in existence.

The City of Kenosha, like the City of Milwaukee, also provided housing during and after World War II. In 1943 the City of Kenosha constructed Bonne Hame Housing project, which provided 260 family units for immigrants working on wartime aircraft construction at the nearby Nash (now American Motors Corporation) plant. The project was a complex of barracks-like buildings located at 30th Avenue and 52nd Street, and was sponsored by the City Council and the Kenosha Housing Authority. After the war, the complex provided veterans' housing and gradually became general low-cost housing. The project was maintained by the federal government until June 1953, when it was leased to the city for three years with the option to renew the lease for another eight years. The Bonne Hame project was finally razed in 1965 because of increasing problems with upkeep and fire hazards.

HISTORY OF HOUSING LEGISLATION

Government recognition of a housing problem in the United States dates back to 1892, the era of the industrial revolution. Urban areas were developing at a rapid rate, and while jobs were readily available to those who came to the cities, adequate housing often was not. The housing demand often far exceeded the supply, and many families lived much of their lives in a single tenement room. In 1892, however, the U. S. Congress allocated $20,000 to investigate slum areas in American cities with populations of more than 200,000. Since that time, various levels of government have invested considerable time and money in both the investigation and resolution of housing problems. State action in housing was initially taken in New York with the passage in 1901 of a Tenement Housing Law, which set construction standards for new buildings and maintenance of proper standards in

existing buildings. Shortly thereafter, such states as Minnesota, Iowa, and Michigan also enacted housing standards. On the municipal level, the establishment of the Philadelphia Housing Association in 1909 set a precedent for the formation of local housing associations to encourage the adoption and enforcement of housing codes and the improvement in the private housing sector of the city's housing supply. Education and assistance were also provided to those who lived in the slums by other organizations oriented toward social work.

Housing Law—1930s

By the 1930s, the existence of slum areas and related housing problems in the United States was exposed not only as a local problem but also as a national problem that required federal assistance for its resolution. In addition to the severe slum area housing problems, a period of economic depression existed in the country during which confidence in real estate as a mortgage security was lost, and the mortgage market was frozen in almost total inactivity. In an effort to loosen up mortgage money and promote recovery by stimulating home building, the federal government enacted the first major housing legislation—the National Housing Act of 1934. This Act created the Federal Housing Administration (FHA), whose primary function was to insure loans made by private lending institutions for housing construction, rehabilitation, and purchase. Operating on a self-supporting basis with income from insurance premiums and investments, FHA has made the low down payment, long-term mortgage universally accepted as a feasible and economical way for a great number of families to own homes.

The second major piece of legislation in the housing field was the United States Housing Act of 1937. This created the United States Housing Authority and the public housing program, the first significant subsidy program to lower rents. This program was intended not only to assist low-income families to obtain adequate housing, but also to be used as a vehicle for slum clearance, and required that a new residential unit be built for every slum unit demolished. An important feature of the public housing program was that the development, ownership, and management of public housing projects were made the responsibility of local governmental bodies called housing authorities. At the present time, the U. S. Department of Housing and Urban Development is responsible for handling federal relations with local housing authorities. A more detailed discussion of the public housing program and the function of the local housing authority is presented in a later section of this chapter.

Housing Law—1940s

In 1944, a housing program similar to the mortgage insurance programs administered by the Federal Housing Administration was developed. This was the veterans guarantee program, which is administered by the Veterans Administration, a part of the U. S. Department of Veterans Benefits. The "G. I. Loan," as this program became known, provided mortgage guarantees on low down payment mortgage loans issued by private lenders, instead of insuring mortgages as FHA did. This technique enabled veterans who qualified for a loan to borrow up to 100 percent of the cost of a house.

The Housing Act of 1949 was one of the most significant federal acts in the area of housing. The federal government recognized that the public housing program which had been in effect since 1937 was not as successful a vehicle for slum clearance as originally intended. Consequently, the 1949 Act created an urban redevelopment program to aid in financing urban slum clearance programs. The urban redevelopment program used temporary loans and grants to finance land acquisition in order to reduce the costs of clearing built-up urban areas, including nonresidential areas, so that cleared land could be made available for sale or lease to private or public residential developers at a price consistent with its reuse value. The concept of this program eventually evolved into the present urban renewal program.

Another important element of the Housing Act of 1949 was recognition of a public responsibility for relocating families displaced by public action under the redevelopment program. Although the relocation procedures established at that time have been significantly expanded and refined, they have served as a basis for relocation standards for many public programs.

The best known provision of the Housing Act of 1949 was its pronouncement of the attainment of "a decent home and a suitable living environment for every American family" as a national objective. The Act also included statements that private enterprise should be encouraged to serve the total housing market and that, where feasible, government assistance would be available to assist private enterprise in this endeavor.

Housing Law—1950s

The major housing legislation enacted during the 1950s was the Housing Act of 1954. Although the Act made few major changes in the housing programs established previously, it did add a slum prevention program to expand the slum clearance and urban redevelopment programs established by the 1949 Housing Act. It also enabled land which was cleared under these programs to be utilized for nonresidential purposes, a significant change from the first slum clearance legislation, which permitted only residential slum areas to be cleared and reused only for residential purposes. The Act also initiated a workable program for community development, which required evidence that a local community was making active progress in improving its physical, social, and economic development in order to apply for federal redevelopment assistance.

In the late 1950s, a major change in the development and operation of subsidized housing programs came about with the creation of the Section 202 housing program under the Housing Act of 1959. This program authorized direct loans from the federal government to nonprofit private sponsors of rental projects for the elderly and the handicapped. The significance of this program was twofold: it not only removed the restriction on the development of these types of units by public owners, but also recognized for the first time the need for a rental subsidy to assist in the provision of decent housing for persons whose incomes were only marginally above those required for eligibility in public housing. The Section 202 program is discussed in a later section of this chapter.

Housing Law—1960s

The 1960s witnessed further federal legislation to assist in the provision of decent, safe, and sanitary housing. One of the most significant pieces of legislation was the Housing Act of 1961. Under this program, the Section 221(d)(3) below market interest rate program was established, whereby profit-motivated private organizations could, for the first time, develop housing under a subsidy program.

The Housing Act of 1965 directed more attention to the use of subsidies in privately owned buildings with the creation of the rent supplement program and the Section 23 leased housing program. The rent supplement program was designed to provide the difference between the tenant's monthly rental payment and the market rental fee, but could not exceed 70 percent of the market rental. The Section 23 leased housing program enabled local public housing authorities to subsidize rents in existing rental units. This Act also created the U. S. Department of Housing and Urban Development, to succeed the Housing and Home Finance Agency.

Perhaps the strongest movement toward the use of subsidy payments for occupancy in private dwellings came with the creation of the Section 235 homeownership and Section 236 rental housing programs under the U. S. Housing and Urban Development Act of 1968. These programs provided subsidies to enable lower income families whose incomes exceeded the income levels for public housing occupancy to purchase new or existing housing or to rent such housing. A detailed discussion of the utilization of these programs in the Region is presented in following sections of this chapter.

One other major piece of legislation related indirectly to housing was the Demonstration and Model Cities Development Act of 1966, which established the Model Cities program. The purpose of this program was to alleviate physical and social problems within a defined neighborhood, and some of the programs initiated as part of the Model Cities program had effects on housing conditions.

HOUSING SUBSIDY PROGRAMS ADMINISTERED BY THE U. S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

The U. S. Department of Housing and Urban Development administers a large number of complex housing and housing-related programs. Only those programs whose primary purpose is the provision of housing for households without sufficient economic means to reside in decent, safe, and sanitary housing without undue economic hardship are described here. Housing programs administered by the U. S. Department of Housing and Urban Development discussed in this section include the Section 235 homeownership program, the Section 221(d)(3) below market interest rate rental program, the Section 221(d)(3) rent supplement program, the Section 236 rental program, and the Section 202 elderly rental program. The public housing program, which is administered by HUD in conjunction with local housing authorities, is discussed in a later section of this chapter entitled "Housing Subsidy Programs Administered by Local Units of Government."

Section 235 Homeownership Program for Low- and Moderate-Income Households

The Section 235 homeownership program was created with the passage of the U. S. Housing and Urban Development Act of 1968, which authorized the U. S. Department of Housing and Urban Development (HUD), through the Federal Housing Administration (FHA), to insure home loans for families with low and moderate incomes. More importantly, the legislation enabled the FHA to assist such families in purchasing a home through the use of interest subsidy payments. The interest subsidy payment had the effect of reducing the effective interest rate on a home loan to as low as 1 percent. The loans were made through conventional lending institutions, and required a down payment of $200.

The Section 235 homeownership program could be utilized in the construction and purchase of new units or the purchase, and when necessary the rehabilitation, of existing housing units. Besides assisting low- and moderate-income families to obtain housing, the program was designed and administered to promote involvement of the private sector in the housing field to the fullest extent possible, and at the same time to promote the development of a housing industry to assist in achieving the national objective of a decent, safe, and sanitary home for every American (see Figure 53).

Figure 53

SECTION 235 CONDOMINIUM UNITS IN THE CITY OF WAUKESHA, WAUKESHA COUNTY

SEWRPC Photo.

Condominium units such as these located in the City of Waukesha could be purchased under the provisions of Section 235 of the Federal Housing Act, which provides federal subsidies for the purchase of new as well as "used" single-family dwellings, two-family dwellings, or units in a multifamily structure. The average sale price for a Section 235 new housing unit purchased in southeastern Wisconsin was $22,255. The average monthly mortgage payment was $223, including an average of $139 as the buyer's payment and an average of $84 as the federal assistance payment.

The Section 235 program was extensively utilized in Wisconsin as well as the Region in the late 1960s, when high interest rates on home loans made homeownership financially unfeasible for a large segment of the population, particularly large, low-income families. The Section 235 program, using interest subsidy payments to lower the interest rates on loans, eliminated this constraint and subsequently made homeownership a reality for many households previously priced out of this market. The Section 235 program came into existence just prior to the "tight money" years of 1969 and 1970, an extremely difficult period for home builders in the private market because of the high interest rates and the scarcity of mortgage loan money. This program not only assisted potential home buyers, but also assisted builders by enabling them to continue their business when conventional nonsubsidized home building activity was at an all time low.

Data on the number and distribution of units insured under this subsidy program within the Region, as well as related household and housing unit characteristics, were collected under the government activity inventory of the housing study from files of the Milwaukee Office of the U. S. Department of Housing and Urban Development, and represent the actual number of housing units insured under the Section 235 subsidy program within the Region from January 1969 through June 1973. It should be noted, however, that complete household composition and income data; assistance calculations data such as the amount of the monthly mortgage payment, monthly assistance payment, and monthly buyer's payment; and home insurance transaction data, including the sale price and mortgage amount, were only available for those households occupying Section 235 housing units insured from May 1972 through June 1973. Therefore, the discussion of household and housing unit characteristics of Section 235 owners is based on data collected for this period. As indicated in Table 113 and on Map 45, there were a total of 5,558 housing units insured under the Section 235 subsidy program within the Region up to June 30, 1973. Of this total, 1,842, or about 33 percent, were existing units, while 3,716, or about 67 percent, were newly constructed. The number and distribution of Section 235 housing units for each county are presented in Tables 114 through 120.

Of the total existing Section 235 units in the Region, 418 units, or nearly 23 percent, were located in Racine County, with 407 of these units located in the City of Racine; while 1,367 units, or 74 percent, were located in Milwaukee County, with 1,360 of these units located in the City of Milwaukee (see Figure 54). Thus, almost 97 percent of the Section 235 existing housing units were located in the two largest urban centers of the Region.

The Section 235 new units were located primarily in Kenosha County, which had 625 units, or about 17 percent of the regional total; Milwaukee County, with 1,622 units, or 44 percent of the regional total; Racine County, with 820 units, or 22 percent of the regional total; Washington County, with 238 units, or 6 percent of the regional total; and Waukesha County, with 330 units, or 9 percent of the regional total. A large percentage of the new units were concentrated in one or two civil divisions, primarily in the more urbanized and densely populated areas of the Region. For example, of the 625 new units constructed in Kenosha County through June 1973, 588, or 94 percent, were located in the City of Kenosha. Similarly, within Milwaukee County, 1,378, or about 85 percent of the 1,622 total new units

Table 113

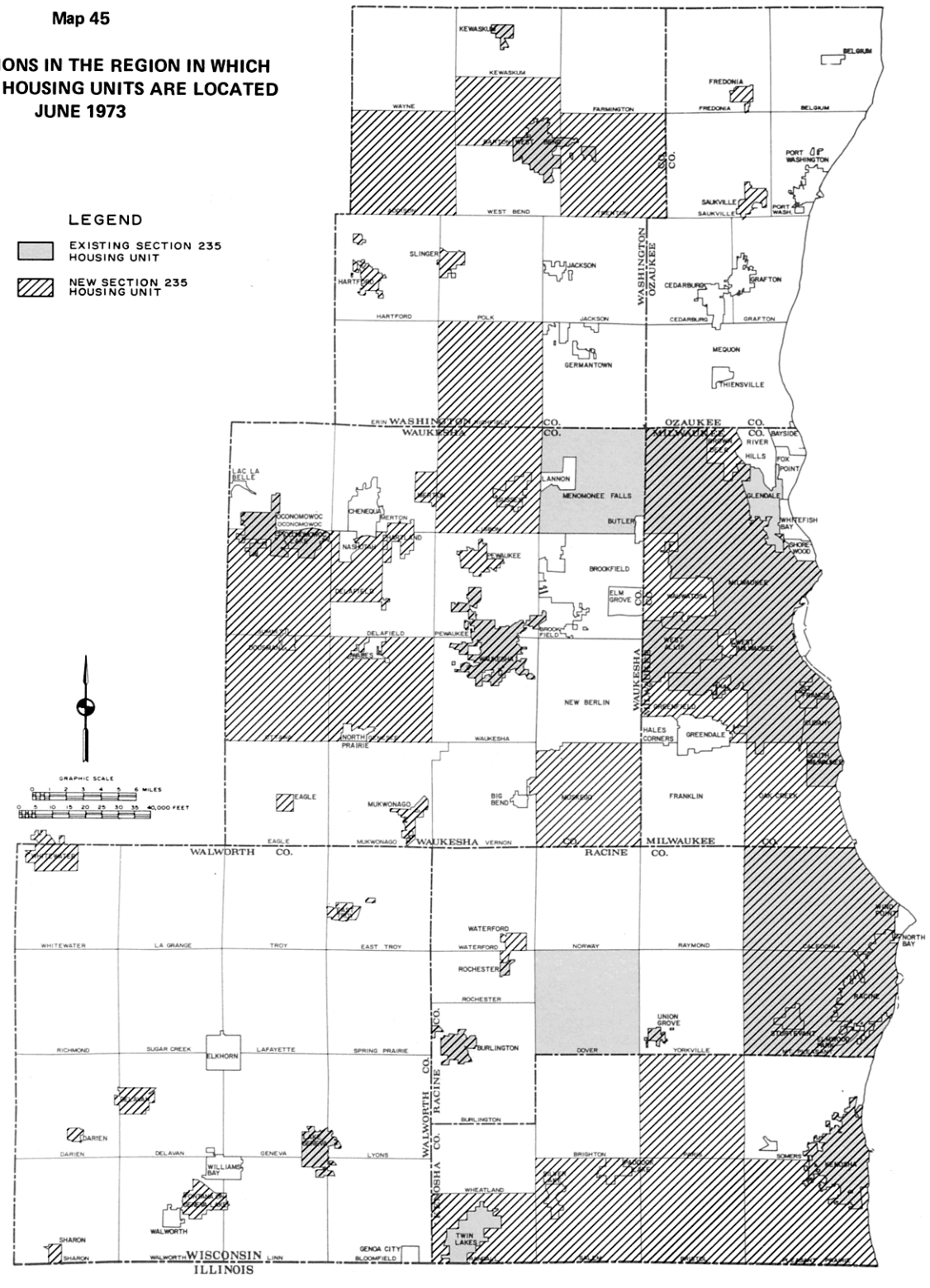
NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS IN THE REGION BY COUNTY: JUNE 1973

County	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Kenosha	43	2.3	625	16.8	668	12.0
Milwaukee	1,367	74.2	1,622	43.6	2,989	53.8
Ozaukee	--	--	28	0.8	28	0.5
Racine	418	22.7	820	22.1	1,238	22.3
Walworth	1	0.1	53	1.4	54	1.0
Washington	3	0.2	238	6.4	241	4.3
Waukesha	10	0.5	330	8.9	340	6.1
Region	1,842	100.0	3,716	100.0	5,558	100.0

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Map 45

CIVIL DIVISIONS IN THE REGION IN WHICH SECTION 235 HOUSING UNITS ARE LOCATED JUNE 1973



A total of 5,558 housing units are insured within the Region under the federal Section 235 housing subsidy program. Of this total, about one-third, or 1,842, were insured as existing units, and the remaining two-thirds, or 3,716, as new units. As shown on this map, the majority of both new and existing units are located in Milwaukee and Racine Counties.

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 114

NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS
IN KENOSHA COUNTY BY CIVIL DIVISION: JUNE 1973

Civil Division	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Cities						
Kenosha	42	2.3	588	15.8	630	11.3
Villages						
Paddock Lake	--	--	30	0.8	30	0.5
Silver Lake	--	--	1	--[a]	1	--[a]
Twin Lakes	1	--[a]	--	--	1	--[a]
Towns						
Bristol	--	--	1	--[a]	1	--[a]
Paris	--	--	1	--[a]	1	--[a]
Pleasant Prairie	--	--	1	--[a]	1	--[a]
Randall	--	--	1	--[a]	1	--[a]
Salem	--	--	2	--[a]	2	--[a]
Kenosha County	43	2.3	625	16.8	668	12.0

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 115

NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS
IN MILWAUKEE COUNTY BY CIVIL DIVISION: JUNE 1973

Civil Division	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Cities						
Cudahy	1	--[a]	57	1.5	58	1.0
Glendale	1	--[a]	--	--	1	--[a]
Greenfield	--	--	68	1.8	68	1.2
Milwaukee	1,360	73.8	1,378	37.1	2,738	49.3
Oak Creek	--	--	24	0.7	24	0.4
St. Francis	1	--[a]	4	0.1	5	0.1
South Milwaukee	1	--[a]	65	1.8	66	1.2
Wauwatosa	--	--	2	--[a]	2	--[a]
West Allis	3	0.2	21	0.6	24	0.4
Village						
Brown Deer	--	--	3	0.1	3	0.1
Milwaukee County	1,367	74.2	1,622	43.6	2,989	53.8

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 116

NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS IN OZAUKEE COUNTY BY CIVIL DIVISION: JUNE 1973

Civil Division	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Villages						
Fredonia . . .	--	--	12	0.3	12	0.2
Saukville . . .	--	--	16	0.4	16	0.3
Ozaukee County	--	--	28	0.8	28	0.5

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 117

NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS IN RACINE COUNTY BY CIVIL DIVISION: JUNE 1973

Civil Division	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Cities						
Burlington . . .	1	--[a]	53	1.4	54	1.0
Racine	407	22.1	403	10.8	810	14.6
Villages						
Rochester	1	--[a]	3	0.1	4	0.1
Sturtevant. . . .	1	--[a]	35	0.9	36	0.7
Union Grove . . .	1	--[a]	27	0.7	28	0.5
Waterford	--	--	1	--[a]	1	--[a]
Towns						
Caledonia	3	0.2	246	6.6	249	4.5
Dover	1	--[a]	--	--	1	--[a]
Mt. Pleasant . . .	3	0.2	52	1.4	55	1.0
Racine County	418	22.7	820	22.1	1,238	22.3

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

constructed, were located in the City of Milwaukee. The City of Racine with 403 new units, and the Town of Caledonia with 246 new units, together had 649 units, or about 79 percent of the 820 Section 235 new units constructed in Racine County. Of the 238 new units in Washington County, 164, or about 69 percent, were built in the City of West Bend. Of the 330 new units in Waukesha County, 158, or about 48 percent, were located in the City of Waukesha, and 80, or about 24 percent, were located in the Village of Mukwonago. As might be expected, most of the Section 235 new units in the Region were located in newer developing subdivisions or in newly developing fringe areas of the more urbanized communities, rather than the predominantly central city area location of existing Section 235 housing units (see Figure 55).

Table 118

NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS
IN WALWORTH COUNTY BY CIVIL DIVISION: JUNE 1973

Civil Division	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Cities						
Delavan	--	--	24	0.7	24	0.4
Lake Geneva	1	0.1	1	--[a]	2	--[a]
Whitewater	--	--	6	0.2	6	0.1
Villages						
Darien	--	--	2	--[a]	2	--[a]
East Troy	--	--	16	0.4	16	0.3
Fontana-on-Geneva Lake	--	--	1	--[a]	1	--[a]
Sharon	--	--	3	0.1	3	0.1
Walworth County	1	0.1	53	1.4	54	1.0

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 119

NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS
IN WASHINGTON COUNTY BY CIVIL DIVISION: JUNE 1973

Civil Division	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Cities						
Hartford	--	--	10	0.3	10	0.2
West Bend	1	--[a]	164	4.4	165	3.0
Villages						
Kewaskum	2	0.1	18	0.5	20	0.4
Slinger	--	--	2	--[a]	2	--[a]
Towns						
Addison	--	--	26	0.7	26	0.5
Barton	--	--	6	0.2	6	0.1
Richfield	--	--	8	0.2	8	0.1
Trenton	--	--	4	0.1	4	0.1
Washington County	3	0.2	238	6.4	241	4.3

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 120

NUMBER AND DISTRIBUTION OF SECTION 235 HOUSING UNITS IN WAUKESHA COUNTY BY CIVIL DIVISION: JUNE 1973

Civil Division	Section 235 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Cities						
Delafield	--	--	5	0.1	5	0.1
Muskego	--	--	2	--[a]	2	--[a]
Oconomowoc	1	--[a]	31	0.8	32	0.6
Waukesha	7	0.4	158	4.3	165	3.0
Villages						
Butler	--	--	2	--[a]	2	--[a]
Dousman	--	--	14	0.4	14	0.3
Eagle	--	--	2	--[a]	2	--[a]
Hartland	--	--	4	0.1	4	0.1
Menomonee Falls	2	0.1	--	--	2	--[a]
Merton	--	--	5	0.1	5	0.1
Mukwonago	--	--	80	2.2	80	1.4
North Prairie	--	--	2	--[a]	2	--[a]
Pewaukee	--	--	14	0.4	14	0.3
Sussex	--	--	4	0.1	4	0.1
Towns						
Genesee	--	--	3	0.1	3	0.1
Lisbon	--	--	2	--[a]	2	--[a]
Ottawa	--	--	1	--[a]	1	--[a]
Summit	--	--	1	--[a]	1	--[a]
Waukesha County	10	0.5	330	8.9	340	6.1

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Figure 54

SECTION 235 EXISTING HOUSING UNIT IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY

SEWRPC Photo.

This home in the City of Milwaukee was purchased with the help of a federal subsidy granted under Section 235 of the Federal Housing Act, and is representative of the 1,842 existing Section 235 units located within the Region. The average sale price for a Section 235 existing housing unit purchased in southeastern Wisconsin was $14,679, with the total monthly mortgage payment averaging $151, including an average of $98 as the buyer's payment and an average of $53 as the federal assistance payment.

Figure 55

SECTION 235 NEW HOUSING UNIT
IN THE CITY OF WAUKESHA, WAUKESHA COUNTY

SEWRPC Photo.

This home was purchased with the help of a federal subsidy granted under Section 235 of the Federal Housing Act, and is representative of the 3,716 new Section 235 homes located throughout the Region. The average sale price for a Section 235 new housing unit purchased in southeastern Wisconsin was $22,255, with the total monthly mortgage payment averaging $223, including an average of $139 as the buyer's payment and an average of $84 as the federal assistance payment.

Table 121

AVERAGE COST DATA RELATED TO
HOUSING UNITS PURCHASED UNDER THE
SECTION 235 EXISTING HOUSING SUBSIDY PROGRAM
IN THE REGION BY COUNTY: MAY 1972-JUNE 1973

County	Average Sale Price	Average Mortgage Amount	Average Monthly Buyer Payment	Average Monthly Assistance Payment	Average Total Monthly Mortgage Payment
Kenosha	$17,783	$17,533	$111	$64	$175
Milwaukee	14,243	14,100	97	51	148
Ozaukee[a]	--	--	--	--	--
Racine	15,564	15,461	98	56	154
Walworth[a]	--	--	--	--	--
Washington[a]	--	--	--	--	--
Waukesha[a]	--	--	--	--	--
Region	$14,679	$14,544	$ 98	$53	$151

[a] *There were not a significant number of existing units from May 1972 to June 1973 to warrant an average.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Housing Unit and Household Characteristics—Section 235 Existing Units: Table 121 presents the average costs involved in purchasing a housing unit under the Section 235 existing housing subsidy program, including the sale price and mortgage amount; the total monthly mortgage payment, which includes principal, interest, taxes, and insurance; the monthly buyer's payment; and the monthly assistance payment. The amounts were tabulated only for those counties which had detailed data available for 10 or more Section 235 existing units. For the Region as a whole, the average sale price for a Section 235 existing housing unit was $14,679, with an average mortgage amount of $14,544 and a repayment period of 30 years. The average total monthly mortgage payment was $151, with averages of $98 included as the buyer's payment and $53 as the federal assistance payment. A comparison of the three counties for which data were available indicates that Milwaukee County had the lowest average sale price ($14,243) for an existing unit, while Kenosha County had the highest ($17,783).

Table 122 presents the characteristics of households occupying housing units purchased under the Section 235 existing housing program in the Region. Again, data were averaged only for those counties with a significant number of existing Section 235 units. On an average, the buyer of an existing Section 235 housing unit had a gross annual income of $5,393, an adjusted annual income of $3,794, and an adjusted monthly income of $316. The head of the household averaged about 34 years of age and was usually a nonwhite female with four children. Of the total existing households for which data were available, 83 percent were headed by females, and 74 percent were nonwhite. In addition, 81 percent of these households were receiving welfare assistance payments.

Table 122 also indicates that 80 percent of the households in Milwaukee County and 63 percent of the households in Racine County were occupied by nonwhites. The greatest concentration of existing Section 235 units was in Milwaukee County, primarily in the City of Milwaukee, and Racine County, primarily in the City of Racine. A large portion of the units purchased under the Section 235 existing housing program were located in the older, central areas of these cities, occupied chiefly by nonwhite female-headed households.

Housing Unit and Household Characteristics—Section 235 New Units: Table 123 presents the average costs involved in purchasing a housing unit under the Section 235 new housing subsidy program, including the sale price and mortgage amount; the total monthly mortgage payment, which includes principal, interest, taxes, and insurance; the monthly buyer's payment; and the monthly assistance payment. The data for Section 235 new housing units are also representative of the period from May 1972 to June 1973, the only period for which data were available. Specific data were not tabulated for Ozaukee County due to the limited number of Section 235 new units in the county. For the Region as a whole, the average sale price for a Section 235 new housing unit was $22,255, with an average mortgage amount of $22,071 and a repayment period of 30 years. The average total monthly mortgage payment was $223, with an average of $139 included as the buyer's payment and an average of $84 as the federal assistance payment. A comparison of the six counties for

Table 122

CHARACTERISTICS OF HOUSEHOLDS RESIDING IN HOUSING UNITS PURCHASED UNDER THE SECTION 235 EXISTING HOUSING SUBSIDY PROGRAM IN THE REGION BY COUNTY: MAY 1972-JUNE 1973

County	Average Household Income			Percent of Households Receiving Welfare Payments	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Percent of Nonwhite Households[a]
	Gross Annual	Adjusted Annual	Adjusted Monthly		Average Age	Percent Male	Percent Female			
Kenosha	$6,190	$4,381	$365	66.7	30.0	50.0	50.0	6.5	5.0	16.7
Milwaukee	5,406	3,768	314	82.6	33.5	16.1	84.9	5.7	4.5	79.9
Ozaukee[b]	--	--	--	--	--	--	--	--	--	--
Racine	5,194	3,727	311	80.0	34.0	20.0	80.0	5.1	3.9	63.0
Walworth[b]	--	--	--	--	--	--	--	--	--	--
Washington[b]	--	--	--	--	--	--	--	--	--	--
Waukesha[b]	--	--	--	--	--	--	--	--	--	--
Region	$5,393	$3,794	$316	81.1	33.6	17.2	82.8	5.6	4.4	74.3

[a] *Nonwhite includes blacks, Orientals, Spanish Americans, and Indians.*

[b] *There were not a significant number of existing units from May 1972 to June 1973 to warrant an average.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 123

AVERAGE COST DATA RELATED TO HOUSING UNITS PURCHASED UNDER THE SECTION 235 NEW HOUSING SUBSIDY PROGRAM IN THE REGION BY COUNTY MAY 1972-JUNE 1973

County	Average Sale Price	Average Mortgage Amount	Average Monthly Buyer Payment	Average Monthly Assistance Payment	Average Total Monthly Mortgage Payment
Kenosha	$21,621	$21,510	$131	$81	$212
Milwaukee	22,409	21,157	148	85	233
Ozaukee[a]	--	--	--	--	--
Racine	22,642	22,499	136	85	221
Walworth	21,902	21,793	131	80	211
Washington	21,950	21,753	131	80	211
Waukesha	22,499	22,296	133	84	217
Region	$22,255	$22,071	$139	$84	$223

[a] *There were not a significant number of new units from May 1972 to June 1973 to warrant an average.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

which data were available indicates that Kenosha County had the lowest average sale price ($21,621) for a new unit, and Racine County had the highest ($22,642).

Table 124 presents the characteristics of households occupying housing units purchased under the Section 235 new housing subsidy program in the Region. A review of Table 124 indicates that, on an average, the purchaser of a new Section 235 housing unit had a gross annual income of $8,502, an adjusted annual income of $7,222, and an adjusted monthly income of $608. The head of the household averaged 30 years of age, and was usually a white male with three children. Of the new units for which data were available, 84 percent of all households were headed by males, and 94 percent of the households were white. Only 6 percent of these households were receiving welfare assistance payments.

Section 221(d)(3) Below Market Interest Rate Housing Subsidy Program

The Section 221(d)(3) below market interest rate (BMIR) housing subsidy program, authorized by the Housing Act of 1954, was designed to provide decent rental housing for low-income families and elderly persons at rates which they could afford. The Section 221(d)(3) BMIR program was considered a subsidy program because the sponsor of a project constructed under the program paid a below market rate of interest, which was to be passed on to low-income tenants in the form of rental rates lower than those charged if the project were financed with a conventional mortgage at a market rate of interest. This program had been utilized in the Region but was phased out in 1969 by the U. S. Department of Housing and Urban Development and replaced by the Section 236 rental housing program.

A total of 634 units were constructed in the Region under the Section 221(d)(3) BMIR housing subsidy program, all located in the City of Milwaukee and utilizing mortgages with a 3 percent interest rate, the minimum

Table 124

CHARACTERISTICS OF HOUSEHOLDS RESIDING IN HOUSING UNITS PURCHASED UNDER THE SECTION 235 NEW HOUSING SUBSIDY PROGRAM IN THE REGION BY COUNTY: MAY 1972-JUNE 1973

County	Average Household Income			Percent of Households Receiving Welfare Payments	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Percent of Nonwhite Households[a]
	Gross Annual	Adjusted Annual	Adjusted Monthly		Average Age	Percent Male	Percent Female			
Kenosha	$8,174	$6,925	$577	10.0	30.2	78.0	22.0	4.5	2.8	8.6
Milwaukee	8,652	7,364	630	2.5	30.9	83.0	17.0	4.7	2.9	6.1
Ozaukee[b]	--	--	--	--	--	--	--	--	--	--
Racine	8,545	7,216	601	10.5	29.6	85.8	14.2	4.8	3.0	6.1
Walworth	8,748	7,070	589	--	32.9	95.5	4.5	6.1	4.1	--
Washington	8,621	7,395	616	1.5	29.0	95.4	4.6	4.5	2.5	--
Waukesha	8,384	7,172	598	6.0	29.4	86.6	13.4	4.5	2.7	--
Region	$8,502	$7,222	$608	6.3	30.1	84.0	16.0	4.7	2.8	5.8

[a] *Nonwhite includes blacks, Orientals, Spanish Americans, and Indians.*

[b] *There were not a significant number of new units from May 1972 to June 1973 to warrant an average.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

allowed under the program. The 634 units are contained in four projects constructed between 1959 and 1969. Sixty-four units are located in the Teutonia Apartments project constructed in 1959, 264 units are in the Green Tree Apartments project constructed in 1960, 231 units are in the Bradley Homes project constructed in 1968, and 75 units are in the West View Manor project constructed in 1969.

The units constructed under this program consisted of 32 one-bedroom apartments, 396 two-bedroom apartments, and 206 three-bedroom apartments. The average monthly rent paid by tenants in these units was $95 for a one-bedroom apartment, $112 for a two-bedroom apartment, and $153 for a three-bedroom apartment. These rental fees were lower in some aspects than the average monthly rental fees for units constructed under other programs because of the subsidized 3 percent mortgage under which the units were constructed, and because the units were constructed at a much earlier date, when construction costs were considerably lower than they are now. For example, the Teutonia Apartments were constructed in 1959 at a cost of $9,527 per unit, the Green Tree Apartments were constructed in 1960 at a cost of $10,013 per unit, the Bradley Homes project was constructed in 1968 at a cost of $15,779 per unit, and the West View Manor project was constructed in 1969 at a cost of $16,547 per unit.

Data were not available concerning the characteristics of households occupying units constructed under the Section 221(d)(3) BMIR program. If it is assumed, however, that tenants of these units pay rental fees which amount to no more than 25 percent of their adjusted monthly income as specified by the program, the adjusted annual incomes for occupants of one-bedroom units would be approximately $4,500; for occupants of two-bedroom units, approximately $5,400; and for occupants of three-bedroom units, approximately $7,300. This assumption would also indicate that the Section 221(d)(3) BMIR program as utilized in southeastern Wisconsin has assisted families and individuals with income levels higher than those assisted by the Section 221(d)(3) rent supplement program and the Section 236 interest subsidy and rent supplement programs, which will be discussed in following sections.

Section 221(d)(3) Housing Program—Rent Supplement

The Housing Act of 1954 created the Section 221(d)(3) rental housing program, which insured lenders against loss on mortgages to provide good quality rental or cooperative housing within the price range of low- and moderate-income families. This program could be utilized individually or in conjunction with the rent supplement program, which allowed up to 100 percent of the households residing in units constructed under the Section 221(d)(3) program to receive a subsidy, known as a rent supplement payment, to assist in their rental payments.

As part of the inventory of government activity in the housing field, data were collected on the number and distribution of housing units constructed under the Section 221(d)(3) program in the Region as well as on the characteristics and composition of households residing in such units. It should be noted that the data represent averages for those households residing in Section 221(d)(3) units which receive a rent supplement payment.

Map 46 and Table 125 show the number and distribution of housing units constructed or committed under the Section 221(d)(3) housing program by civil division and project within the Region. As indicated in Table 125, there were 655 units located within the Region. Of these, 224, or about 34 percent, were located in the City of Kenosha, and 326, or about 50 percent, were located in the City of Milwaukee. The remaining units were located in the Cities of Racine and Waukesha.

As indicated in Table 126, the average occupant receiving a rent supplement payment and residing in a one-bedroom unit constructed under the Section 221(d)(3) housing program was a 68 year old nonwhite female, living alone, who received an average gross annual income of $2,052 and had an average adjusted monthly income of $170. The average market monthly rent for the unit was $151, the tenant portion was an average of $55 and the rent supplement payment was an average of $96 per month. The main source of income for these households was social security and/or other retirement payments. About 89 percent of the households occupying Section 221(d)(3) units received income from these sources. Figure 56 shows units constructed in the City of Kenosha under the provisions of the Section 221(d)(3) housing program, administered in conjunction with the rent supplement program.

Table 125

NUMBER AND DISTRIBUTION OF HOUSING UNITS CONSTRUCTED OR COMMITTED UNDER THE SECTION 221(d)(3) RENT SUPPLEMENT HOUSING PROGRAM IN THE REGION BY CIVIL DIVISION: JANUARY 1973

Civil Division and Project Name	Number of Units
Kenosha County	
City of Kenosha	
Saxony Manor	224
Subtotal	224
Milwaukee County	
City of Milwaukee	
Atkinson Court No. 2	20
Cambridge Apartments	21
Northside Citizens Neighborhood Conservation Corporation (NCNCC)	24
Plymouth Apartments	112
Walnut Park	149
Subtotal	326
Racine County	
City of Racine	
Durand Plaza	72
Subtotal	72
Waukesha County	
City of Waukesha	
Arcadian Apartments (Senior House)	33
Subtotal	33
Region	655

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Section 236 Housing Subsidy Program

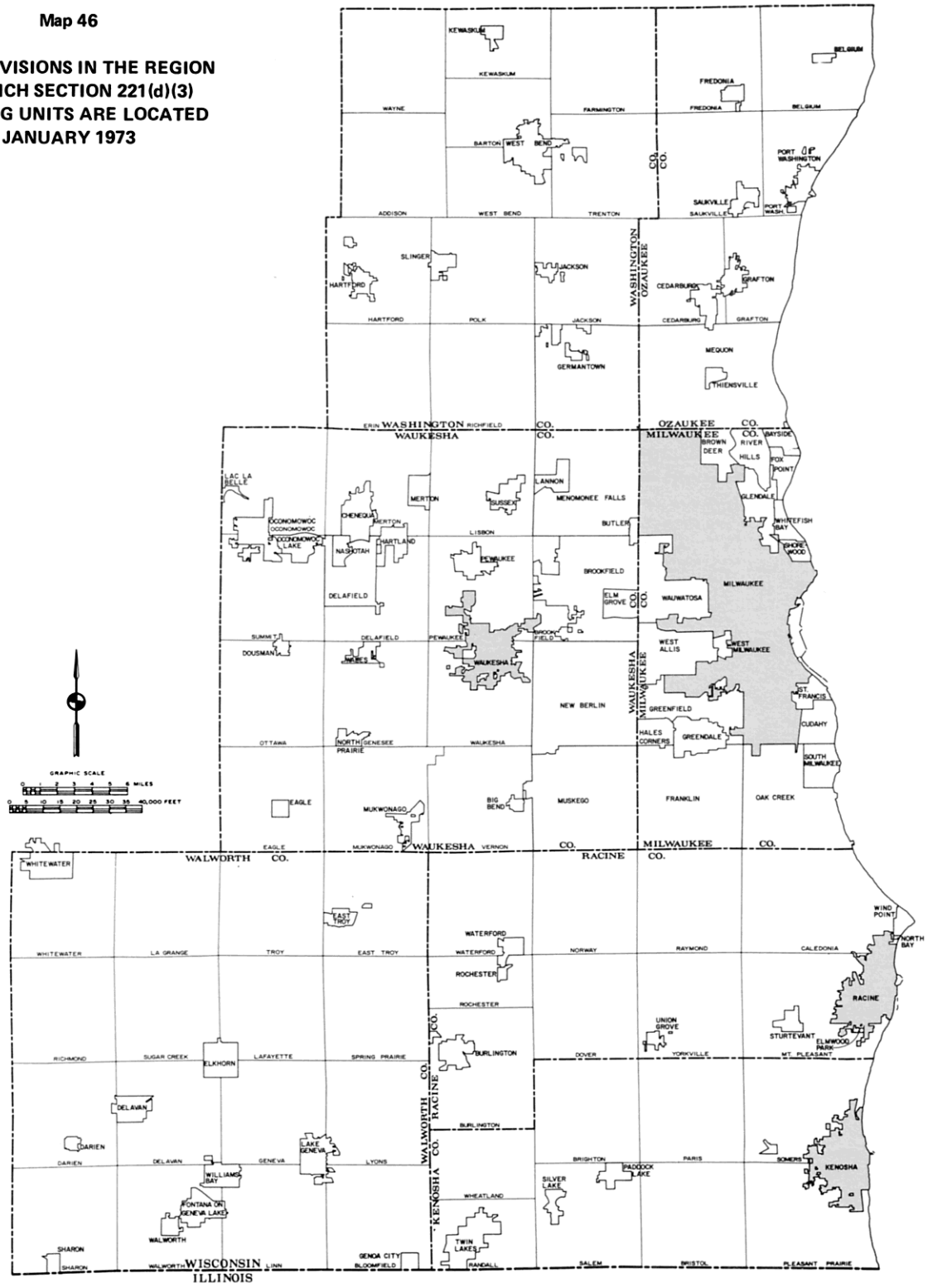
The Section 236 housing subsidy program was created in 1968 with the passage of the Housing and Urban Development Act. Under this program, the Federal Housing Administration, for the U. S. Department of Housing and Urban Development, insured lenders against loss on mortgage loans, and provided interest subsidy payments to reduce interest charges to as low as 1 percent in order to reduce rental housing costs for lower-income families and individuals. Under the subsidy technique, tenants paid at least 25 percent of their adjusted gross income or the subsidized rent, whichever is greater. In order for families and individuals, including the elderly and handicapped, to be eligible to receive subsidy benefits, they had to qualify under income limits determined locally by the HUD area office. In addition to the Section 236 interest subsidy payment, a rent supplement payment was sometimes used to supplement the rental charges for those individuals and families who qualified for such assistance under income and asset limits established by the local HUD office. The supplement assistance payment covered the difference between the tenant's payment and the basic, or subsidized, Section 236 rental, but did not exceed 70 percent of the market rental.

The inventory of government activity in the housing field also included the collection of data from the local office of the U. S. Department of Housing and Urban Development for the period from January 1969, when the first Section 236 units were constructed in the Region, to January 1973, when the federal moratorium on subsidized housing programs went into effect. The data are representative of the households occupying units constructed under the Section 236 housing subsidy program within the Region which received a rent subsidy or which qualified for a rent supplement payment in addition to a subsidy. The data presented in this section, therefore, include the total number of Section 236 rental units by project within the Region, as well as various characteristics of households occupying such units and receiving an interest subsidy or rent supplement.

Map 47 and Table 127 show the number and distribution of Section 236 rental units constructed or committed in the Region by civil division. As of January 1973, there were a total of 3,212 Section 236 rental units in the Region. Of these, 2,436, or about 76 percent, were located in Milwaukee County, including 1,984 in 18 projects in the City of Milwaukee. Racine County had a total of 423 units, or about 13 percent of the units in the Region, and Waukesha County had 32 units located

Map 46

CIVIL DIVISIONS IN THE REGION IN WHICH SECTION 221(d)(3) HOUSING UNITS ARE LOCATED JANUARY 1973



The 655 housing units constructed or committed under the federal Section 221(d)(3) rent supplement housing program in the Region are located exclusively in four major urban centers of the Region—the Cities of Milwaukee, Racine, Kenosha, and Waukesha. Half of the units are located in the City of Milwaukee, about one-third are located in the City of Kenosha, and the remaining units are located in the Cities of Racine and Waukesha.

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 126

CHARACTERISTICS OF HOUSEHOLDS RESIDING IN ONE-BEDROOM HOUSING UNITS CONSTRUCTED UNDER THE SECTION 221(d)(3) RENT SUPPLEMENT HOUSING PROGRAM IN THE REGION: JANUARY 1973

Geographic Area	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Percent of Nonwhite Households	Average Household Income			Percent of Households Receiving Welfare Payments	Percent of Households Receiving Social Security and/or Other Retirement Payments	Average Monthly Market Rental Fee	Average Amount of Rent Supplement	Tenant's Average Monthly Rent
	Average Age	Percent Male	Percent Female				Gross Annual	Adjusted Annual	Adjusted Monthly					
Southeastern Wisconsin Region . .	68	26.7	73.3	1	0	66.6	$2,052	$2,035	$170	16.7	89.4	$151	$96	$55

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Figure 56

SECTION 221(d)(3) RENT SUPPLEMENT HOUSING UNITS IN THE CITY OF KENOSHA, KENOSHA COUNTY

SEWRPC Photo.

Saxony Manor Apartments, located in the City of Kenosha, was constructed under the provisions of Section 221(d)(3) of the Federal Housing Act. Households occupying the total of 655 Section 221(d)(3) units located throughout the Region were, on the average, headed by a 68-year-old nonwhite female living alone who received an average gross annual income of $2,052. The average market monthly rent for a Section 221(d)(3) rent supplement unit was $151, including an average tenant portion of $55 and an average rent supplement payment of $96.

in the Village of Sussex. The 108 units in Walworth County were located in the University Garden Apartments in the City of Whitewater (see Figure 57). Ozaukee County was the only county with no Section 236 units. It would appear from the data that the majority of Section 236 rental housing units have been committed or constructed in the more urbanized areas of the Region, as indicated by the number of units constructed in the City of Milwaukee alone. This may be attributed to a greater need for housing units for low-income households in the urban areas of the Region, particularly in the older, well-established areas of some cities. In addition, private builders and developers have less difficulty

Table 127

NUMBER AND DISTRIBUTION OF HOUSING UNITS CONSTRUCTED OR COMMITTED UNDER THE SECTION 236 HOUSING SUBSIDY PROGRAM IN THE REGION BY CIVIL DIVISION JANUARY 1973

Civil Division and Project Name	Number of Units
Kenosha County	
City of Kenosha	
Birch Gardens	72
Glenview Apartments	24
Subtotal	96
Milwaukee County	
City of Greenfield	
Greenbrook Apartments	172
City of Milwaukee	
Apollo Village	239
Callahan Court	150
Cleveland Terrace	23
Evergreen Square	79
Evergreen Square II	79
Evergreen Square III	79
Florist Garden Apartments	80
Jefferson Court (Juneau Village III)	222
Layton Garden Addition	79
Layton Garden Addition Phase 2	79
Layton Garden Addition Phase 3	79
Lisbon Square	115
Main Street Gardens	25
McKinley Gardens	119
Northridge Lakes II	151
Northridge Lakes III	207
WAICO Housing Development Phase I	107
Wrightown Apartments	72
City of Oak Creek	
Cherry Creek View (Willow Glen Apartments)	104

Table 127 (continued)

Civil Division and Project Name	Number of Units
City of West Allis	
Arbeth Apartments	176
Subtotal	2,436
Racine County	
City of Burlington	
Edgewood Manor	37
City of Racine	
Southside Revitalization Scattered Sites	26
Sunset Terrace Apartments	120
Town of Caledonia	
Shore Haven Homes	120
Town of Mt. Pleasant	
Lincoln Manor of Racine, Inc. (Sections 202/236)	120
Subtotal	423
Walworth County	
City of Whitewater	
University Garden Apartments	108
Subtotal	108
Washington County	
City of Hartford	
Hartford Highland Apartments	44
City of West Bend	
Arbor Trace (Decorah Trace)	74
Subtotal	118
Waukesha County	
Village of Sussex	
Sussex Colonial Apartments	32
Subtotal	32
Region	3,212

Source: U. S. Department of Housing and Urban Development and SEWRPC.

obtaining financing and completing construction in more developed areas. Also, the households occupying Section 236 units very often depend on the proximity to employment, public transportation, and various other conveniences found in a more urbanized area.

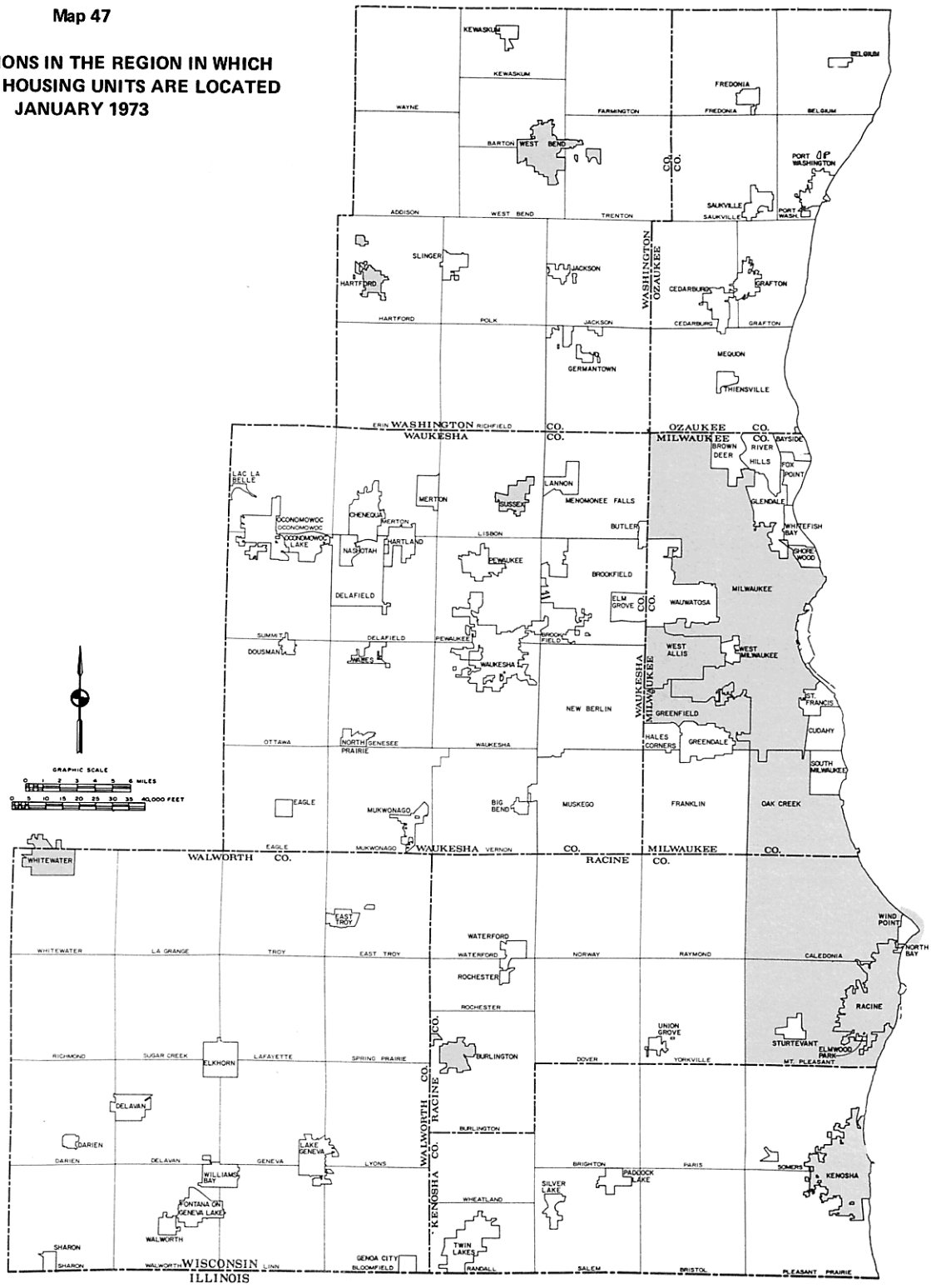
Section 236 Interest Subsidy: Table 128 presents characteristics of households in the Region residing in housing units constructed under the Section 236 housing program and receiving an interest subsidy payment. The data presented are averages, and represent the types of households which have utilized this segment of the program. It is apparent from this table that for one-bedroom units, the average age of the head of household was 56 years, and there was an average of only one person per household. The average gross annual income for the occupants of one-bedroom units was $3,930, with an average adjusted monthly income of $308. About 64 percent of the total number of these one-bedroom households received social security and/or other retirement payments. In addition, about 66 percent of the one-bedroom households were headed by females, and only about 24 percent of these households were nonwhite. The average market rental for one-bedroom units was $173, with the tenant's share being an average of $119 and the federal assistance payment being an average of $54. It would appear, therefore, that the primary occupants of one-bedroom Section 236 interest subsidy rental housing units in the Region were elderly white women receiving a pension and/or social security as their main source of income.

The occupants of two-bedroom units constructed under the Section 236 interest subsidy program, as indicated in Table 128, had a household head who averaged 27 years of age. The average number of persons per household was 3, with an average of one eligible minor. About 53 percent of the households occupying two-bedroom units were headed by males, with 46 percent of the households being nonwhite. Table 128 also indicates that the average gross annual income of these households was $5,491, with an average adjusted monthly income of $404. In addition, about 24 percent of the households received income from welfare payments. The average market rent for these two-bedroom units was $209, including the tenant's average share of $140 and an assistance payment average of $69.

The occupants of three-bedroom units constructed under the Section 236 interest subsidy housing program, as indicated in Table 128, had a household head who averaged 30 years of age. There were an average of five persons per household, and an average of three eligible minors. Almost 70 percent of these households were headed by males, and about 83 percent were white. The average gross annual income of the occupants was $7,303, with an average adjusted monthly income of $504. From the adjusted monthly income, the tenant must pay an average of $155 per month toward the market rental fee, while the federal assistance payment is an average of $72. It would appear from these data that the occupants of the three-bedroom units are mostly white married couples with about three children. Wages were generally the main source of household income, with only 18 percent of the households receiving welfare payments and about 2 percent receiving social security and/or other retirement payments.

Map 47

CIVIL DIVISIONS IN THE REGION IN WHICH SECTION 236 HOUSING UNITS ARE LOCATED JANUARY 1973



The majority of the federal Section 236 rental housing units in the Region have been committed or constructed in the major urban centers of the Region. The City of Milwaukee alone has about 62 percent of the total 3,212 Section 236 rental housing units within the Region. This reflects the concentration of low-income households in the larger and older urban centers of the Region.

Source: U. S. Department of Housing and Urban Development and SEWRPC.

The four-bedroom units constructed under the Section 236 interest subsidy housing program were occupied by an average of six persons per household, with an average of four eligible minors. About 67 percent of the households were headed by males of about 34 years of age. In addition, about 51 percent of the households were nonwhite. The average gross annual income was $8,000, with the average adjusted monthly income being $519. About 25 percent of the households occupying four-bedroom units were receiving welfare assistance payments. The average market rental fee for these four-bedroom units was $263, with the tenant's share being an average of $175 and the federal assistance payment being an average of $88 (see Table 128).

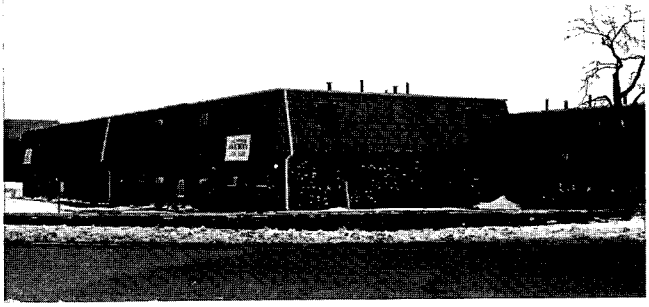
An overview of the types of households which occupied these housing units indicates a wide variance in household size, composition, and income. For example, the average age of the head of household varies from 27 to 56 years, and the household size varies from an average of one occupant to as many as six occupants. In addition, the difference in the gross annual incomes of the occupants ranges from a low of $3,930 for occupants of one-bedroom units to a high of $8,000 for occupants of four-bedroom units.

Section 236 Rent Supplement: As previously noted, the rent supplement program may be used in conjunction with the Section 236 housing subsidy program to supplement the rental charges for individuals and families who qualify for such assistance. The supplement payment covers the difference between the tenant's payment and the basic or subsidized Section 236 rental fee, but may not exceed 70 percent of the market rental fee. Table 129 presents the characteristics of households receiving a rent supplement and residing in housing units constructed under the Section 236 housing program in the Region.

On the average, an occupant receiving a rent supplement payment residing in a Section 236 one-bedroom unit was a 69 year old female receiving an average gross annual income of $2,166 and an average adjusted monthly income of $180. The main source of the income was social security and/or other retirement payments. The average market rental fee for this type of unit was $176 per month. The average assistance payment alloted to the tenant under the interest subsidy program was $55 and the additional rent supplement payment averaged $68, making the total average assistance payment $123.

Figure 57

SECTION 236 RENTAL HOUSING UNITS IN THE CITY OF WHITEWATER, WALWORTH COUNTY



SEWRPC Photo.

Of the 3,212 rental housing units constructed or committed in the Region under Section 236 of the Federal Housing Act, 108 were located in the University Garden Apartments in the City of Whitewater. The average market rental for Section 236 rental housing units in the Region ranged from $173 for a one-bedroom unit (including the tenant's share of an average of $119 and the federal assistance payment of an average of $54), to $263 for a four-bedroom unit (including the tenant's share of an average of $175 and the federal assistance payment of an average of $88).

Table 128

CHARACTERISTICS OF HOUSEHOLDS RESIDING IN HOUSING UNITS CONSTRUCTED UNDER THE SECTION 236 HOUSING PROGRAM AND RECEIVING AN INTEREST SUBSIDY PAYMENT IN THE REGION JANUARY 1973

Geographic Area	Number of Bedrooms	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Percent of Nonwhite Households	Average Household Income			Percent of Households Receiving Welfare Payments	Percent of Households Receiving Social Security and/or other Retirement Payments	Average Monthly Market Rental Fee	Average Assistance Payment	Tenant's Average Monthly Rent
		Average Age	Percent Male	Percent Female				Gross Annual	Adjusted Annual	Adjusted Monthly					
Southeastern Wisconsin Region . .	1	56	33.6	66.4	1	0.0	24.4	$3,930	$3,701	$308	6.7	64.3	$173	$54	$119
	2	27	52.5	47.5	3	1.3	46.0	5,491	4,850	404	24.2	2.9	209	69	140
	3	30	69.8	30.2	5	2.7	16.7	7,303	6,051	504	18.0	1.6	227	72	155
	4	34	66.7	33.3	6	4.5	50.8	8,000	6,232	519	25.4	6.3	263	88	175

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Table 129

CHARACTERISTICS OF HOUSEHOLDS RESIDING IN HOUSING UNITS CONSTRUCTED UNDER THE SECTION 236 HOUSING PROGRAM AND RECEIVING A RENT SUPPLEMENT PAYMENT IN THE REGION: JANUARY 1973

Geographic Area	Number of Bedrooms	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Percent of Nonwhite Households	Average Household Income			Percent of Households Receiving Welfare Payments	Percent of Households Receiving Social Security and/or other Retirement Payments	Average Market Monthly Rental Fee	Average Assistance Payment	Average Rent Supplement Payment	Average Total Assistance Payment	Tenant's Average Monthly Rent
		Average Age	Percent Male	Percent Female				Gross Annual	Adjusted Annual	Adjusted Monthly							
Southeastern Wisconsin Region	1	69	20.2	79.8	1	0.00	40.9	$2,166	$2,157	$180	12.8	88.8	$176	$55	$68	$123	$53
	2	56	61.5	38.5	2	1.36	65.4	3,702	3,547	296	15.4	57.7	218	74	70	144	74

Source: U. S. Department of Housing and Urban Development and SEWRPC.

The tenant's portion of the rent averaged $53 per month. In addition, approximately 41 percent of these units were rented by nonwhite households.

Households receiving a rent supplement and occupying Section 236 two-bedroom units were, on the average, generally two-person households, with an average of one eligible minor. It should be noted that while a somewhat larger portion of these units were occupied by elderly persons, there were younger individuals and families also residing in the two-bedroom units, thus accounting for the average of one eligible minor per household. About 62 percent of the households occupying two-bedroom units were headed by males about 56 years of age, and about 65 percent of these households were nonwhite. The average gross annual income of these households was $3,702, with an average adjusted monthly income of $296. The main source of income for about 58 percent of the households was either social security and/or other retirement payments. The average market rental fee for this type of unit was $218 per month. The average assistance payment alloted to the tenant was $74, with the additional rent supplement payment averaging $70, for a total average assistance payment of $144. The tenant's portion of the rent averaged $74 per month.

Section 202 Elderly Housing Subsidy Program

The Section 202 elderly housing subsidy program was created by the Housing Act of 1959. It was structured to assist private nonprofit organizations, cooperatives, and limited-profit sponsors in providing housing and related facilities for the elderly and handicapped. The program was administered by the U. S. Department of Housing and Urban Development. Direct 3 percent, or 50-year, loans covering 100 percent of development costs were issued to help nonprofit corporations develop new or rehabilitated rental housing and related facilities. Development costs included the cost of land and site improvements; construction; built-in equipment; and architectural, legal, advisory, and other fees. In order to qualify for such loans, potential applicants had to indicate that they could not obtain the necessary funds from other sources on terms as favorable as those of this program.

Very limited funds were available to the Section 202 program during 1971, and further funding for the program was not expected in the near future, mainly because it was anticipated that the program would be phased into the Section 236 housing subsidy program. It would appear from the number of elderly households occupying one-bedroom rental units under the Section 236 interest subsidy and rent supplement programs that provisions for the elderly normally made under the Section 202 rental program were transferred to the Section 236 program.

HUD provisions specified that Section 202 projects should range from 150 to 200 dwelling units, comprised of approximately two-thirds efficiency units and one-third one-bedroom units. Income limits for tenant eligibility were $4,500 adjusted annual income for single persons and $5,400 adjusted annual income for two-person families. The Section 202 elderly housing subsidy program could also be administered in conjunction with the rent supplement program.

One Section 202 elderly housing project—Zonta Manor—was constructed in the Region in 1965. The project, located in the City of Milwaukee and presently called Cambridge Apartments, is a 104-unit structure consisting of 39 efficiency apartments and 65 one-bedroom apartments. This project was originally constructed utilizing a direct Federal Housing Administration (FHA) loan at 3 1/2 percent interest. The Cambridge Apartments project, however, is no longer financed under the Section 202 loan and has been phased into the Section 236 program. No household characteristic data were available for the occupants of this project.

HOUSING SUBSIDY PROGRAM ADMINISTERED BY THE U. S. DEPARTMENT OF AGRICULTURE, FARMERS HOME ADMINISTRATION

The Farmers Home Administration is responsible for the administration of several programs designed to assist low- and moderate-income families and individuals to obtain decent, safe, and sanitary housing. These programs include the Section 502 rural housing loan program, the Section 515 rural rental housing program, the Section 504

home repair loan program, the Section 523 technical assistance program, the Sections 514 and 516 farm labor housing program, and the Section 524 rural housing site loan program. Because of limited utilization of these programs within the Region, only data related to the Section 502 rural housing subsidy program are presented in this chapter. Data for the Section 502 program were obtained for the period January 1969 to January 1973 from the state office of the Farmers Home Administration; three local Farmers Home Administration offices located in the City of Jefferson, the Village of Waterford, and the Town of West Bend; and the Wisconsin Department of Local Affairs and Development.

Section 502 Rural Housing Subsidy Program

The Section 502 rural housing subsidy program was established by the Housing Act of 1949, as amended by Section 502, Public Law 89-117. The program authorizes the Farmers Home Administration to issue loans to assist rural families in obtaining housing. The loans may be used for the repair and/or purchase of existing housing and the construction and purchase of new housing; to provide necessary and adequate sewage disposal facilities for housing purchased under the program; to purchase or install essential equipment which, upon installation, becomes part of the real estate; and to buy a minimum adequate site upon which to place a dwelling. The program itself may be utilized either as a subsidy program, in which the Farmers Home Administration provides interest subsidy payments to reduce the effective interest rate to as low as 1 percent, or as a mortgage guarantee program, utilizing a market rate of interest for families who do not qualify for the subsidy.

This program may also be used as a mutual self help program in rural areas. Groups of six or more families may form together under published guidelines to participate in the actual construction of homes for each of the families. Through December 31, 1972, this segment of the Section 502 program had not been utilized in the Region. However, the Southeastern Wisconsin Housing Corporation, which is a nonprofit housing corporation utilizing the Section 502 self help housing program in the Region, in 1973 completed construction of five self help housing units. In addition, as of December 1973 there were 21 self help units under construction.

As of December 31, 1972, a total of 136 housing units were constructed and/or purchased under the Section 502 rural housing subsidy program in the Region. Of this total, 74, or about 54 percent, were existing units, and 62, or about 46 percent, were new units. The number and distribution of these units is shown in Table 130 and on Map 48. No Section 502 subsidized units are located in Milwaukee County because no portion of the county has been classified as rural area by the Farmers Home Administration.

A review of Table 130 indicates that the greatest concentration of Section 502 housing units occurred in the rural areas of Racine County, with 36 units, or 26 percent of the total such units. Washington County had 29 units, or 21 percent of the total, and Waukesha County had 30 units, or 22 percent of the total. The remaining units were scattered throughout the Region.

Housing Unit and Household Characteristics—Section 502 Existing Units: Table 131 presents average costs involved in a housing unit under the Section 502 existing housing subsidy program, including the sale price and mortgage amount; the total monthly mortgage payment; the monthly buyer's payment; and the monthly assistance payment. It should be noted that the data collected from the Farmers Home Administration offices on the monthly mortgage payment did not include the payment of taxes. A tax amount was estimated based upon a weighted average in the communities in which units were located. For existing units, this approximated $40 each month, which was added to the buyer's total monthly payment. The data presented in this table were tabulated only for those counties where there was a significant number of existing units (five or more) under the Section 502 subsidy program.

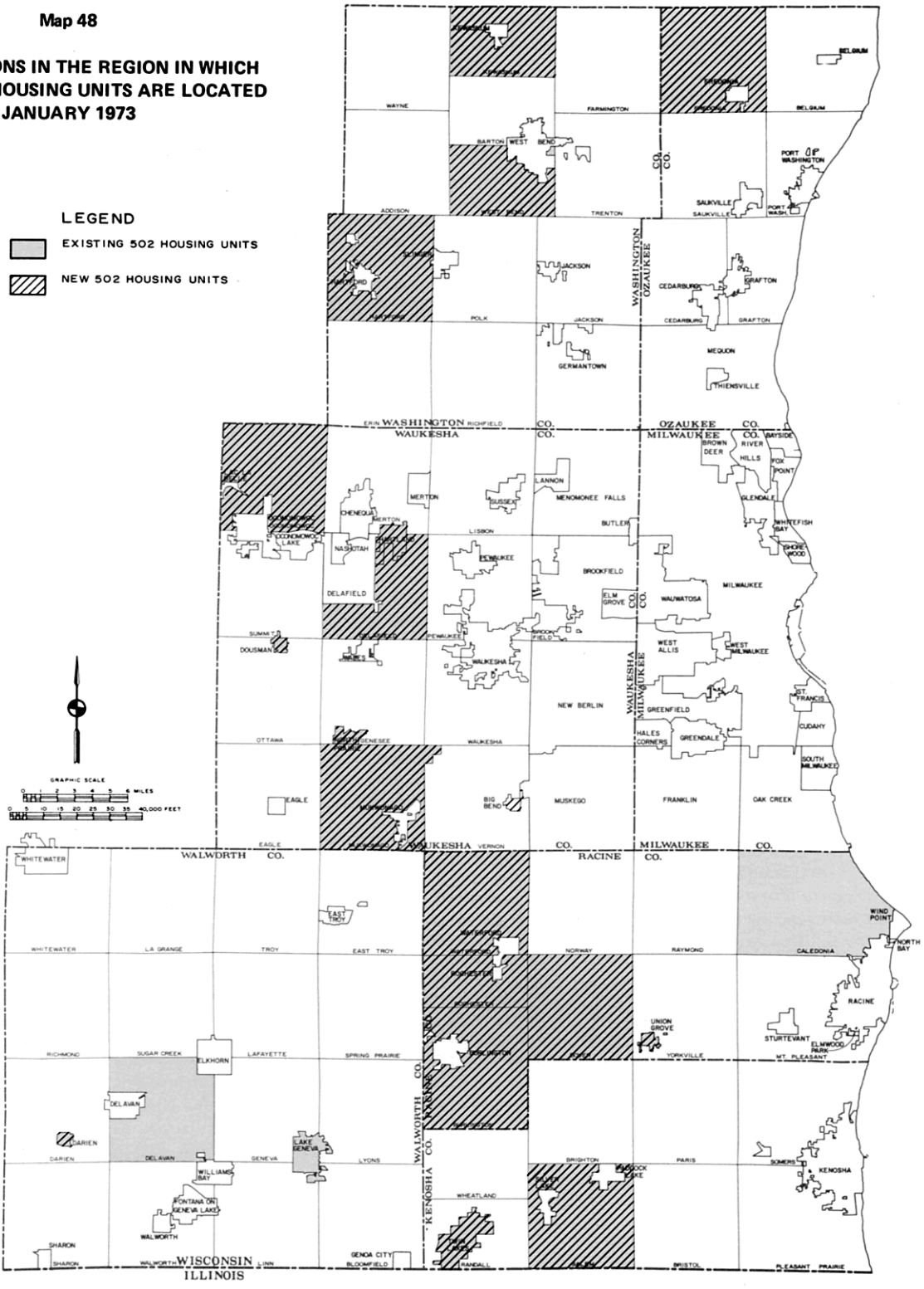
For the Region as a whole, the average sale price for a Section 502 existing housing unit was $18,495, with an average mortgage of $18,377 and a repayment period of 33 years. The average total monthly mortgage payment was $165, with an average of $105 included as the buyer's payment and an average of $60 as the federal assistance payment. A comparison of the counties for which data were available indicates that Walworth County had the lowest average sale price for an existing unit ($16,540), and Kenosha County had the highest ($20,630).

Table 132 presents the characteristics of households occupying housing units purchased under the Section 502 existing housing subsidy program in the Region. Again, data were tabulated only for those counties where there was a significant number of existing units (five or more). On an average, the purchaser of an existing Section 502 housing unit had a gross annual income of $6,827 and an adjusted annual income of $5,271, or an adjusted monthly income of $439. The head of the household on the average was a white male 36 years of age with four children. Of the total number of existing units for which data were available, about 80 percent of the households were headed by males. There were no nonwhite households.

Housing Unit and Household Characteristics—Section 502 New Units: Table 133 presents average costs involved in purchasing a housing unit under the Section 502 new housing subsidy program. Again, because the data collected on the monthly mortgage payment did not include taxes, a tax amount was estimated based on a weighted average in the communities in which units were located. For new units, about $50 was added each month to the buyer's total monthly payment. The data presented in this table were tabulated only for those counties where there was a significant number of new units (five or more). For the Region as a whole, the average sale price for a Section 502 new housing unit was $22,943, with an

Map 48

CIVIL DIVISIONS IN THE REGION IN WHICH SECTION 502 HOUSING UNITS ARE LOCATED JANUARY 1973



The greatest concentration of housing units constructed and/or purchased in the Region under the federal Section 502 rural housing subsidy program is located in the rural areas of Racine County. Of the 136 such units in the Region, 74, or about 54 percent, are existing units, and 62, or about 46 percent, are new units. No Section 502 subsidized units are located in Milwaukee County, which is considered entirely urban by the Farmers Home Administration.

Source: U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

Table 130

NUMBER AND DISTRIBUTION OF SECTION 502 HOUSING UNITS IN THE REGION BY CIVIL DIVISION: JANUARY 1973

Civil Division	Section 502 Housing Units					
	Existing		New		Total	
	Number	Percent of Total Existing Units in Region	Number	Percent of Total New Units in Region	Number	Percent of Total Units in Region
Kenosha County						
Village of Twin Lakes	8	10.8	2	3.2	10	7.4
Town of Salem	2	2.7	1	1.6	3	2.2
Subtotal	10	13.5	3	4.8	13	9.6
Ozaukee County						
Town of Fredonia	2	2.7	1	1.6	3	2.2
Subtotal	2	2.7	1	1.6	3	2.2
Racine County						
Village of Union Grove	4	5.4	1	1.6	5	3.7
Town of Burlington	9	12.2	3	4.8	12	8.8
Town of Caledonia	1	1.3	--	--	1	0.7
Town of Dover	1	1.3	1	1.6	2	1.5
Town of Rochester	2	2.7	5	8.1	7	5.1
Town of Waterford	7	9.5	2	3.2	9	6.6
Subtotal	24	32.4	12	19.3	36	26.4
Walworth County						
City of Lake Geneva	3	4.1	--	--	3	2.2
Village of Darien	2	2.7	1	1.6	3	2.2
Town of Delavan	3	4.1	--	--	3	2.2
Subtotal	8	10.9	1	1.6	9	6.6
Washington County						
Village of Slinger	1	1.3	2	3.2	3	2.2
Town of Hartford	3	4.1	1	1.6	4	2.9
Town of Kewaskum	7	9.5	12	19.4	19	14.0
Town of West Bend	--	--	3	4.8	3	2.2
Subtotal	11	14.9	18	29.0	29	21.3
Waukesha County						
Village of Big Bend	--	--	3	4.8	3	2.2
Village of Dousman	1	1.3	2	3.2	3	2.2
Village of Hartland	1	1.3	1	1.6	2	1.5
Village of North Prairie	1	1.3	1	1.6	2	1.5
Town of Delafield	1	1.3	1	1.6	2	1.5
Town of Mukwonago	1	1.3	10	16.1	11	8.1
Town of Oconomowoc	2	2.7	5	8.1	7	5.1
Subtotal	7	9.2	23	37.0	30	22.1
Units Without Civil Division Location	12	16.2	4	6.5	16	11.8
Region	74	100.0	62	100.0	136[a]	100.0

[a] *There were 136 Section 502 housing units in the Region, but the exact location of 16 of these was withheld by local Farmers Home Administration officials. The location of units was revealed only if there were three or more units in a civil division.*

Source: U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

Table 131

AVERAGE COST DATA RELATED TO HOUSING UNITS PURCHASED UNDER THE SECTION 502 EXISTING HOUSING SUBSIDY PROGRAM IN THE REGION BY COUNTY JANUARY 1969-JANUARY 1973

County	Average Sale Price	Average Mortgage Amount	Average Monthly Buyer Payment[c]	Average Monthly Assistance Payment	Average Total Monthly Mortgage Payment
Kenosha	$20,630	$20,608	$115	$63	$178
Milwaukee[a]	--	--	--	--	--
Ozaukee[b]	--	--	--	--	--
Racine	19,163	19,100	105	62	167
Walworth	16,540	15,925	96	49	145
Washington	18,550	18,318	109	61	170
Waukesha	19,814	19,743	113	59	172
Region	$18,495	$18,377	$105	$60	$165

[a] *No Section 502 units are located in Milwaukee County because no areas within Milwaukee County are classified as rural by the Farmers Home Administration.*

[b] *Averages were calculated only for those counties where there were five or more Section 502 existing housing units.*

[c] *The average monthly buyer payment includes a $40 average tax payment.*

Source: U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

average mortgage amount of $22,703 and a repayment period of 33 years. The average total monthly mortgage payment was $203, with an average of $130 included as the buyer's payment and an average of $73 as the assistance payment. A comparison of the counties for which data were available indicates that Washington County had the lowest average sale price for a new unit ($21,924), and Waukesha County had the highest ($24,492). An example of the type of housing unit constructed under this program is shown in Figure 58.

Table 134 presents the characteristics of households occupying housing units purchased under the Section 502 new housing subsidy program in the Region. Again, data were tabulated only for those counties where there were five or more new units. On the average, a purchaser of a new Section 502 housing unit had a gross annual income of $7,139 and an adjusted annual income of $5,861, or an adjusted monthly income of $488. The head of the household was a white male 30 years of age with 3 children. Of the total number of new units for which data were available, almost 97 percent of all households were headed by males; and, as with existing 502 units, there were no nonwhite households.

HOUSING SUBSIDY PROGRAMS ADMINISTERED BY LOCAL UNITS OF GOVERNMENT

In Wisconsin, municipalities can develop and finance programs designed to ameliorate housing problems within their corporate limits. The federal public housing pro-

Table 132

CHARACTERISTICS OF HOUSEHOLDS RESIDING IN HOUSING UNITS PURCHASED UNDER THE SECTION 502 EXISTING HOUSING SUBSIDY PROGRAM IN THE REGION BY COUNTY: JANUARY 1969-JANUARY 1973

County	Average Household Income			Percent of Households Receiving Welfare Payments	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Percent of Nonwhite Households[c]
	Gross Annual	Adjusted Annual	Adjusted Monthly		Average Age	Percent Male	Percent Female			
Kenosha	$6,626	$4,867	$406	20.0	35.6	70.0	30.0	5.0	3.2	--
Milwaukee[a]	--	--	--	--	--	--	--	--	--	--
Ozaukee[b]	--	--	--	--	--	--	--	--	--	--
Racine	6,867	5,626	470	4.2	36.9	87.5	12.5	5.3	3.7	--
Walworth	6,919	5,372	448	--	32.8	87.5	12.5	5.9	4.0	--
Washington	7,287	5,737	478	9.1	36.5	54.5	45.5	8.6	5.2	--
Waukesha	7,620	5,738	472	--	36.4	85.7	14.3	6.4	4.7	--
Region	$6,827	$5,271	$439	9.5	36.1	79.7	20.3	6.3	4.3	--

[a] *No Section 502 units are located in Milwaukee County because no areas within Milwaukee County are classified as rural by the Farmers Home Administration.*

[b] *Averages were calculated only for those counties where there were five or more Section 502 existing housing units.*

[c] *Nonwhite includes blacks, Orientals, Spanish Americans, and Indians.*

Source: U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

Table 133

AVERAGE COST DATA RELATED TO HOUSING UNITS PURCHASED UNDER THE SECTION 502 NEW HOUSING SUBSIDY PROGRAM IN THE REGION BY COUNTY JANUARY 1969-JANUARY 1973

County	Average Sale Price	Average Mortgage Amount	Average Monthly Buyer Payment[c]	Average Monthly Assistance Payment	Average Total Monthly Mortgage Payment
Kenosha[a]	$ --	$ --	$ --	$--	$ --
Milwaukee[b]	--	--	--	--	--
Ozaukee[a]	--	--	--	--	--
Racine	22,223	22,132	130	67	197
Walworth[a]	--	--	--	--	--
Washington	21,924	21,756	125	78	203
Waukesha	24,492	24,150	140	72	212
Region	$22,943	$22,703	$130	$73	$203

[a] *Averages were calculated only for those counties where there were five or more Section 502 new housing units.*

[b] *No Section 502 units are located in Milwaukee County because no areas within Milwaukee County are classified as rural by the Farmers Home Administration.*

[c] *The average monthly buyer payment includes a $50 average tax payment.*

Source: U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

Figure 58

SECTION 502 NEW HOUSING UNIT IN WALWORTH COUNTY

Photo courtesy of the Southeastern Wisconsin Housing Corporation.

This home is an example of the 62 new homes constructed and purchased within the Region under the provisions of the Section 502 rural housing subsidy program administered by the Farmers Home Administration. The average sale price for a Section 502 new housing unit purchased in southeastern Wisconsin was $22,943, with the total monthly mortgage payment averaging $203, including an average of $130 as the buyer's payment and an average of $73 as the federal assistance payment.

Table 134

CHARACTERISTICS OF HOUSEHOLDS RESIDING IN HOUSING UNITS PURCHASED UNDER THE SECTION 502 NEW HOUSING SUBSIDY PROGRAM IN THE REGION JANUARY 1969-JANUARY 1973

County	Average Household Income			Percent of Households Receiving Welfare Payments	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Percent of Nonwhite Households[c]
	Gross Annual	Adjusted Annual	Adjusted Monthly		Average Age	Percent Male	Percent Female			
Kenosha[a]	$ --	$ --	$ --	--	--	--	--	--	--	--
Milwaukee[b]	--	--	--	--	--	--	--	--	--	--
Ozaukee[a]	--	--	--	--	--	--	--	--	--	--
Racine	7,236	5,361	447	--	32.9	100.0	--	5.6	3.6	--
Walworth[a]	--	--	--	--	--	--	--	--	--	--
Washington	6,828	5,565	464	5.6	30.2	94.4	5.6	4.9	3.0	--
Waukesha	7,243	6,223	519	--	27.7	95.7	4.3	4.3	2.5	--
Region	$7,139	$5,861	$488	1.6	29.8	96.8	3.2	4.8	2.8	--

[a] *Averages were calculated only for those counties where there were five or more Section 502 new housing units.*

[b] *No Section 502 units are located in Milwaukee County because no areas within Milwaukee County are classified as rural by the Farmers Home Administration.*

[c] *Nonwhite includes blacks, Orientals, Spanish Americans, and Indians.*

Source: U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

gram, although funded through the U. S. Department of Housing and Urban Development is, in fact, administered on a local basis, and for the purposes of this discussion is therefore considered a local housing program.

Public Housing Program

Public housing is the oldest national low-income housing program in the United States. Although the program subsists on federal subsidies, it is intended to be a locally administered and controlled program. Under the United States Housing Act of 1937, as amended, local housing authorities may apply for funds from the U. S. Department of Housing and Urban Development (HUD) to provide low-rent housing units in their community. The local housing authority (LHA), upon receiving approval, borrows money to develop and construct the dwelling units. In order to repay the loan, the LHA floats a bond issue. The interesting aspect is that, although the LHA issues the bond, it is the federal government that guarantees payment of the principal and interest through an annual contributions contract with the local housing authority. The federal payment, therefore, covers the full debt service on any public housing project unless the LHA has unused operating receipts to reduce the federal contribution. Once the housing is built and occupied, only the cost of its operation is paid for by income from the rental payments of the tenants.

Local Housing Authorities: A local housing authority is an autonomous public agency set up by local or county government under state law in order to operate housing for middle- and low-income people.[1] The housing authority operates in a way similar to a private corporation except that it cannot make a profit. All local housing authorities basically have the same objectives; to construct and operate high-quality housing units that rent for the lowest possible prices to eligible households of the community.

To establish a housing authority, any legally constituted city, village, and county in the State of Wisconsin, under Sections 66.40 through 66.404 of the Wisconsin Statutes,[2] may pass a resolution stating the need for an authority to function in the area. It should be noted that although towns may not establish local housing authorities, they may, in fact, benefit from the establishment of a housing authority on the county level. A housing authority consists of five members appointed by the mayor or comparable official, and approved by the local governing body or board. The commissioners who are first appointed are designated by the appointing official to serve terms of one, two, three, four, and five years, respectively, from the date of their appointment.

With respect to the powers of the local or county housing authority, the authority constitutes a public body, exercising public powers and having all of the powers necessary or convenient to effectuate the purposes and provisions of the enabling legislation. Legislative statutes permit local and county housing authorities to perform the following functions:

1. To determine the need for low-rent public housing within their respective areas of operation.

2. To act as agents in the acquisition, construction, operation, and management of public housing projects.

3. To acquire by eminent domain, with the approval of the local or county governing body, any real property considered necessary for use in the development of public housing.

4. To arrange or contract for the furnishing of services and facilities in any public housing development.

5. To finance the capital cost of the project through long-term bonds, notes, or debentures.

These powers enable the local or county housing authority to assume responsibility for every facet of the public housing development process. The authority determines the need for public housing within its area of operation, selects the development method to be utilized, applies to the federal government for development funds, supervises the development of the project, assumes ownership (or provides for the leasing) of the project upon its completion, and manages and maintains the property for occupancy by low-income or elderly families and individuals.

The first housing authority established in southeastern Wisconsin was created by the City of Milwaukee in 1944, followed by the City of South Milwaukee, which created a housing authority in 1949. Both of these housing authorities determined a need for public housing units within their respective communities, and subsequently developed units to help meet this need within a relatively short time after their creation. The only other housing authorities within the Region which presently own and operate public housing units are located in the Cities of West Bend and Waukesha.

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[1] *Wisconsin Department of Local Affairs and Development, DLAD Housing Information Series, The Local Housing Authority: Its Functions and Operation.*

[2] *Wisconsin State Statutes include four provisions for different types of housing authorities. Wisconsin Statute 66.40, the most commonly used, pertains to the establishment of local housing authorities by cities and villages to provide low-rent housing for those in need of such housing, including both the elderly and low-income families. Wisconsin Statute 66.395 pertains to the creation of housing authorities for the provision of housing for the elderly by cities and villages. Wisconsin Statute 59.075 pertains to the creation of housing authorities for the provision of low-rent housing by counties. Wisconsin Statute 66.39 pertains to the creation of housing authorities for the provision of housing for veterans by counties.*

Greater promise for future development of public housing units, however, has been evidenced recently with the creation of housing authorities in southeastern Wisconsin[3] by the Cities of Burlington, Hartford, Kenosha, Mequon, West Allis, and Whitewater; the Villages of Shorewood, Union Grove, and Waterford; and Racine County, the only county housing authority in the Region.

Methods of Public Housing Unit Development: A local housing authority has several options in the development of public housing units. These include both the conventional and the turnkey method of development, the leased housing program, and acquisition of units with or without rehabilitation.

The first step in the development of public housing units under the conventional, turnkey, and acquisition with or without rehabilitation methods of development is the submission of an application for a federal program reservation to HUD by the local housing authority. Next, the local housing authority must sign a Cooperation Agreement with the governing body of the community where the public housing is to be provided. This Agreement exempts the public housing from taxation, but may require payments by the housing authority to the local community in lieu of taxes which may not exceed 10 percent of the rental for the housing. After the Cooperation Agreement is signed, the housing authority advertises for bids from developers, with the contract being awarded to the lowest responsible bidder.

Conventional Method: The conventional method of development, which was the original method used in developing public housing units, places the local housing authority in the role of a direct sponsor. Once the proper procedures to provide public housing have been followed, construction may proceed on a site acquired by the housing authority. Upon completion of construction, the local housing authority manages and maintains the property. Ownership of the project is retained by the housing authority, as is responsibility for establishing rent schedules, screening applicants, and collecting rents.

Turnkey Method: The turnkey method was developed in 1966 to reduce the time and bureaucratic procedures involved in the construction of public housing units under the conventional method, and to increase the role of the private developer in housing. The turnkey method places the responsibility for the development and completion of a public housing project on a private developer, who is presumably equipped to perform such tasks more efficiently than a local housing authority. Under this method of development, the local housing authority does not assume the role of direct sponsor for the construction of a project, but rather assumes ownership of a project upon its completion, according to prearranged contractual agreements with a private developer. The developer selected is responsible for the acquisition of a site agreeable to the local housing authority, as well as the preparation of preliminary drawings and specifications for the project. The developer and the housing authority work together during construction to ensure that the result satisfies the local housing authority. Upon completion of construction and all necessary improvement work, ownership of the project and responsibility for its management are transferred to the housing authority.

It should be noted that the turnkey method of development is applicable to all types of public housing projects, including single- and multi-family structures on either grouped or scattered sites. In addition, two HUD provisions under the turnkey program enable great flexibility in the operation of public housing units. The first, called "Turnkey II," permits the local housing authority to contract with a private firm or another agency for the management and administration of a public housing project constructed under either the conventional or turnkey methods of development. The second provision, "Turnkey III," permits families eligible for tenancy in public housing to purchase the units in which they live where these units are single-family detached homes or attached units suitable for sale, such as condominiums. The family accumulates equity in the home by performing maintenance tasks normally carried out by the housing authority. When a sufficient amount of equity has accumulated, it is used as a down payment on the home, with the tenant's regular monthly rental payments becoming mortgage payments. The housing authority then no longer has responsibility for the management or maintenance of the unit.

Acquisition With or Without Rehabilitation: The acquisition and, if necessary, the rehabilitation of housing units is the third method of development of public housing available to a local housing authority. Under this program, properties may be acquired and rehabilitated either by the local housing authority or by contracting with a private firm. The property acquired under this program must meet general and neighborhood standards established by HUD, or, as a result of any rehabilitation, should serve to upgrade the neighborhood in which it is located to satisfy HUD minimum neighborhood standards. The responsibility for the management and maintenance of the property, as well as the screening of applicants and collection of rents, rests with the housing authority. The housing authority, however, may contract for the services of a private firm or other agency to assist it in management and maintenance tasks under the Turnkey II program. The federal regulations regarding the administration of public housing units acquired under this program are the same as those applied to public housing units constructed under either the conventional or turnkey methods.

Leased Housing Program: The leased housing program, also known as the Section 23 leasing program, authorizes HUD to give financial assistance to local housing authorities so that they may help low-income households lease dwelling units from private owners. The purposes of the

[3]*It should be noted that while local housing authorities may still be created, federal funds for the construction of public housing units are not available at the present time due to the moratorium on all federally subsidized housing programs.*

leased housing program are to enable and encourage private real estate interests to participate more directly in meeting the housing needs of low-income families, and to provide homes for those in need of adequate housing more rapidly than is possible through the construction of new housing units. Leases under this program are made for between one and ten years, with provision for renewal for an additional ten years for new, or five years for existing, structures. The owner of the structure receives full market rent for the unit(s) and continues to pay full property tax on the property. Various types of leasing arrangements are possible under this program, including a lease between the local housing authority and the owner, with a sublease to the tenant, or a contract between the local housing authority and the owner guaranteeing payment of a certain rental for the dwelling units involved. Under the latter arrangement, the actual lease is between the tenant and the owner of the unit. This program also provides for the purchase of leased units by the housing authority for resale to low-income tenant families under special terms and conditions.

It should be noted that the Section 23 leased housing program is presently undergoing significant changes in its structure, which will result in expansion and administration modification of the program which would allow HUD to deal directly with developers.

Types of Public Housing Unit Development: The four methods of public housing unit development previously discussed may be employed with differing orientations toward the character of development desired by a local community. Through 1970, the most commonly utilized approach was the project concept, in which a large number of units are concentrated on one site in either one structure or a group of structures. Most of the public housing units owned and operated by the housing authorities in Milwaukee, South Milwaukee, Waukesha, and West Bend have been developed utilizing the project approach.

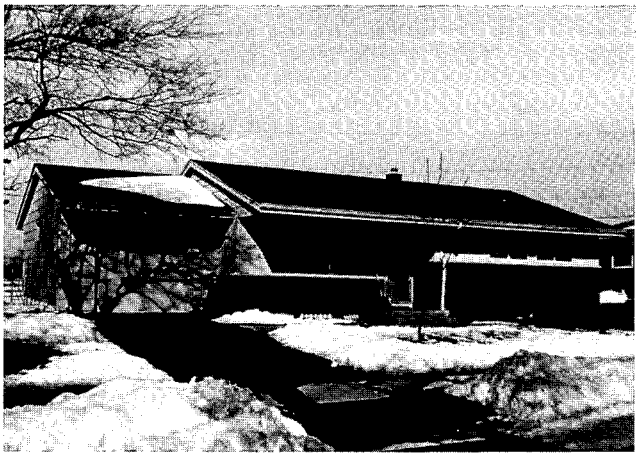
The second development concept, which can utilize any of the four development methods, is the scattered sites concept for family housing. Under this concept, a limited number of housing units are developed on several sites, with a greater number of sites selected to provide the desired number of units to be developed. This concept is being utilized to the extent that single-family homes are being purchased on sites scattered throughout a community for rental to low-income families as public housing. The scattered sites concept for low-income families is currently favored by the U. S. Department of Housing and Urban Development because it is felt such a plan will prevent the concentration of low-income families in one area, and at the same time help to remove the unfavorable institutionalized image of large public housing projects (see Figure 59).

Another advantage of the scattered sites concept for low-income families is the latitude afforded a local community in providing sites for such housing. While many smaller sites may be available within a given community, the amount of land necessary for a large public housing project may be unobtainable in a location with ready access to local community facilities and services. The scattering of low-income public housing sites also permits housing units to be located in areas where employment opportunities, educational facilities, recreational facilities, and alternative life-styles can assist a family in improving its living conditions. The scattered sites approach, however, should not be considered the only solution to the problems of public housing. For example, households headed by females with very young children may not be suited for occupancy in a single-family unit, since such units may require certain skills and attention for maintenance that this type of family head may not be able to readily provide.

In the case of housing for elderly persons, the project approach in the development of public housing is considered the best suited to the needs of the inhabitants. Elderly persons are considered most adequately housed in smaller rental units where maintenance is minimal and access to shopping and other facilities is readily available. The project approach for elderly persons in theory provides them with the quiet and peaceful atmosphere needed to create a suitable neighborhood environment. In addition, the project approach economically supports greater amenities, such as community facilities, laundry facilities, and common rooms set aside for recreation.

Figure 59

SCATTERED SITES PUBLIC HOUSING UNIT IN THE CITY OF WAUKESHA, WAUKESHA COUNTY



SEWRPC Photo.

A recent approach to the provision of public housing for low-income families is the scattered sites concept. Under this approach, low-income families who qualify for public housing may rent single-family homes, such as this one, from the local public housing authority. Because the homes are scattered on sites located throughout a community, the concentration of low-income families in any one geographic area is minimized. This approach also removes the somewhat unfavorable institutionalized image of large public housing projects. There are 304 scattered sites public housing units in the Region, located in the Cities of Milwaukee and Waukesha.

A community, therefore, must determine the approach to be utilized in developing public housing on the basis of the particular housing needs of the group to be assisted. Both the project and scattered sites concepts can be effectively utilized when the physical and social needs of prospective inhabitants are evaluated and embodied in the type of development under consideration.

Eligibility Requirements: In order for households to be eligible for occupancy in public housing units, a local housing authority must establish both income and asset limits within their areas of operation. These limits are based upon such local community characteristics as income and asset characteristics of the population, existing housing costs for various types of housing, and the present housing arrangements of the population group to be assisted by public housing. Income limits vary according to household size, and are used to establish the rent level—usually 25 percent of the household's adjusted monthly income—as well as to determine household eligibility for occupancy in public housing. The level of rent to be paid varies from community to community. The income adjustment methods are fairly uniform for all housing authorities, and generally allow deductions of 5 percent of gross income for Social Security, $300 per child for each minor dependent for low-income facilities, and 10 percent of gross income for the elderly.

The asset limits established by public housing authorities may vary from community to community. Assets defined under the public housing program include money in a bank or savings and loan account; stocks; bonds; and real property, such as land or buildings. Asset limits established by a particular housing authority may also vary according to the age of the head of household. Such variance is normally applied to persons 62 years of age or older in order to permit households of this type to utilize public housing when the cost and maintenance of owning their own homes becomes too great. The sale of a home very often increases an elderly family's assets so that the total assets are temporarily higher than what is allowable for younger families occupying public housing. In situations of this nature, therefore, separate asset limits are often established locally for elderly persons.

Public Housing in the Region

Public housing authorities in the Region were surveyed as part of the inventory on government activity in the housing field. Housing authorities which owned and operated public housing units at the time of the inventory were asked to provide data on the number of units, their date of construction, structure type, and rental charges. Housing authorities were also asked to provide statistical data related to the households occupying the public housing units, such as household size, household income, and the sex, race or ethnic origin, and age of the head of the household.

As previously indicated, only the Cities of Milwaukee, South Milwaukee, West Bend, and Waukesha (see Map 49) presently own and operate public housing units within the Region. Available housing unit and household data related to public housing in these communities are provided in the following sections of this chapter.

City of Milwaukee Public Housing: As indicated in Table 135, there were a total of 5,379 public housing units in the City of Milwaukee in June 1973. Of these, 2,073 were low-income elderly units, 2,338 were low-income family units, and 968 were veterans units.

Table 135 indicates that 2,480, or 56 percent, of the 4,411 low-income elderly and family units were one-bedroom units and were, therefore, most likely occupied by elderly households. This assumption is borne out in a review of Table 136, which presents characteristics of households occupying low-income elderly and low-income family public housing units in the City of Milwaukee.[4] Nine of the thirteen projects for which data were available contained a head of household whose average age was 65 years or older. The majority of households in all projects were headed by females and ranged from 68 percent of the households in Westlawn to over 85 percent of the households in Hillside Terrace. While

Table 135

PUBLIC HOUSING UNITS IN THE CITY OF MILWAUKEE JUNE 1973

Project	Number of Units	Number of Bedrooms				
		1	2	3	4	5 or More
Low-Income Elderly	2,073	2,073	--	--	--	--
Arlington Court	230	230	--	--	--	--
Becher Court	100	100	--	--	--	--
Cherry Court	120	120	--	--	--	--
College Court	251	251	--	--	--	--
Convent Hill	120	120	--	--	--	--
Highland Park	220	220	--	--	--	--
Holton Terrace	120	120	--	--	--	--
Lapham Park	172	172	--	--	--	--
Lincoln Court	110	110	--	--	--	--
Locust Court	230	230	--	--	--	--
Merrill Park	120	120	--	--	--	--
Mitchell Court	100	100	--	--	--	--
Riverview	180	180	--	--	--	--
Low-Income Families	2,338	407	954	693	204	80
Highland Park	56	--	--	--	40	16
Hillside Terrace	596	90	294	168	36	8
Lapham Park	198	--	28	102	48	20
Parklawn	518	136	300	82	--	--
Westlawn	726	181	326	181	38	--
Scattered Sites	244[a]	--	6	160	42	36
Veterans Housing	968	89	623	256	--	--
Berryland	391	16	263	112	--	--
Northlawn	247	31	156	60	--	--
Southlawn	330	42	204	84	--	--
Total	5,379	2,569	1,577	949	204	80

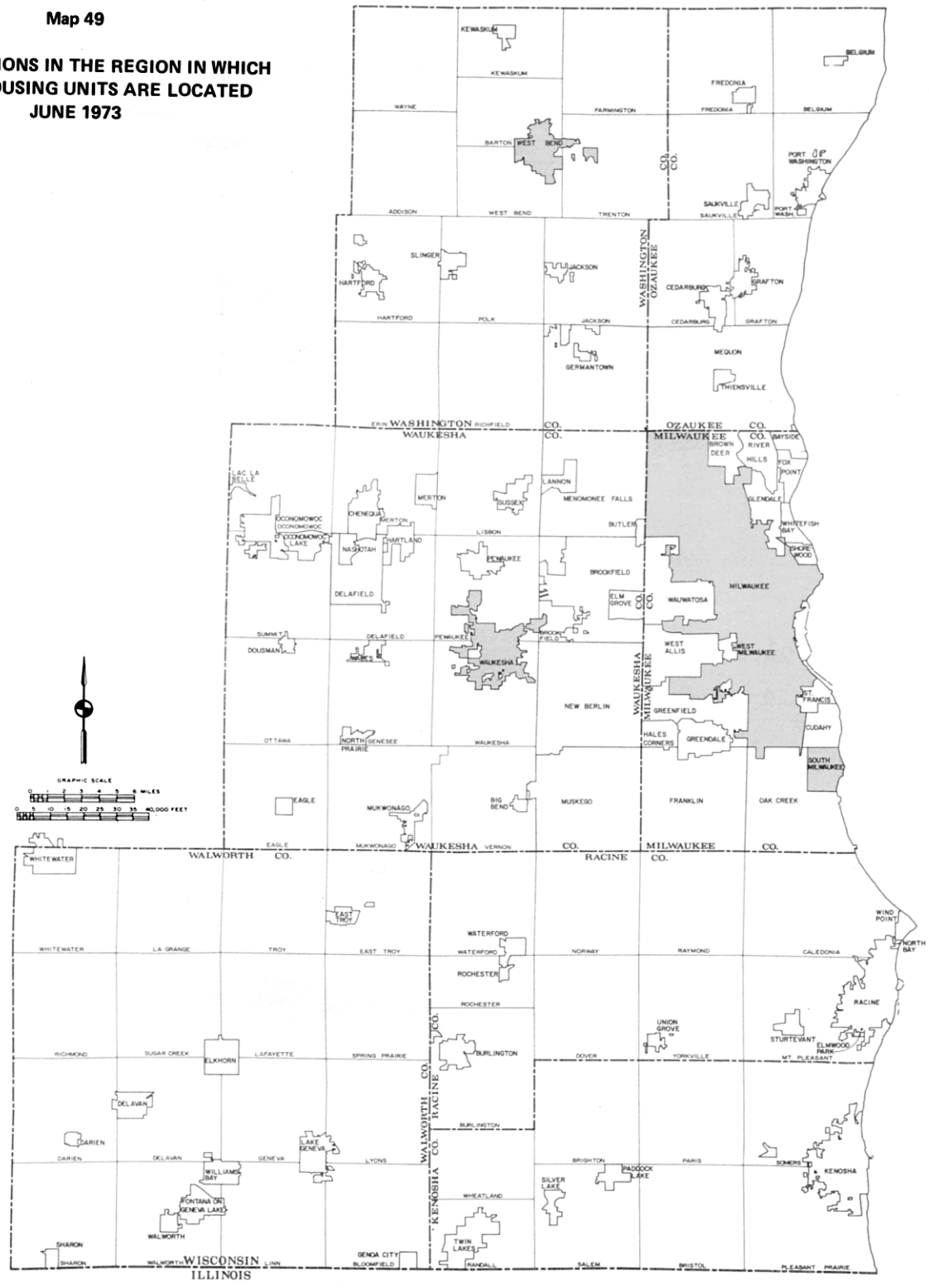
[a] *Includes firm commitments for units, as well as units constructed by June 1973.*

Source: Department of City Development, City of Milwaukee; and SEWRPC.

[4] *Detailed characteristics of households occupying veterans units were not available.*

Map 49

CIVIL DIVISIONS IN THE REGION IN WHICH PUBLIC HOUSING UNITS ARE LOCATED JUNE 1973



Only four cities in the Region—Milwaukee, South Milwaukee, West Bend, and Waukesha—owned and operated public housing projects in 1973. The number of public housing units owned and operated by housing authorities in these four cities ranged from 60 units in the City of South Milwaukee to 5,379 units in the City of Milwaukee.

Source: City of Milwaukee Housing Authority, City of South Milwaukee Housing Authority, City of Waukesha Housing Authority, and City of West Bend Housing Authority.

Table 136

CHARACTERISTICS OF HOUSEHOLDS OCCUPYING PUBLIC HOUSING UNITS IN THE CITY OF MILWAUKEE BY PROJECT: 1970

Project	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Race (Percent)		Source of Income (Percent)				Average Gross Annual Income
	Average Age	Percent Male	Percent Female			White	Nonwhite[a]	Wages	Welfare	Social Security	Other	
Arlington Court	72	20.9	79.1	1	0	98.2	1.8	0.7	10.7	67.3	21.3	$1,876
Becher Court[b]	--	--	--	--	--	--	--	--	--	--	--	--
Cherry Court	72	28.5	72.5	1	0	100.0	0.0	0.0	0.0	78.9	21.1	2,099
College Court	71	16.3	83.7	1	0	98.4	1.6	1.0	6.1	75.4	17.5	1,893
Convent Hill	75	28.3	71.7	1	0	96.7	3.3	0.0	13.2	86.0	0.8	1,890
Highland Park	65	28.3	71.7	2	1	68.6	30.4	5.2	20.9	60.1	13.8	2,584
Hillside Terrace	36	34.9	85.1	3	2	10.0	90.0	29.8	50.5	9.2	10.5	3,530
Holton Terrace	72	20.8	79.2	1	0	98.3	1.7	0.0	6.4	92.8	0.8	1,766
Lapham Park	45	30.0	70.0	5	3	3.5	96.5	21.2	42.3	26.9	9.6	4,124
Lincoln Court[b]	--	--	--	--	--	--	--	--	--	--	--	--
Locust Court	73	17.8	82.2	1	0	97.2	2.8	0.0	12.7	86.9	0.4	1,925
Merrill Park	74	25.0	75.0	1	0	98.8	1.2	0.0	2.6	72.2	25.2	2,035
Mitchell Court[b]	--	--	--	--	--	--	--	--	--	--	--	--
Parklawn	48	23.4	76.6	2	1	86.2	13.8	29.4	25.5	30.2	14.9	3,451
Riverview	73	17.2	82.8	1	0	97.8	2.2	0.0	9.5	71.9	18.6	1,909
Westlawn	45	31.7	68.3	3	2	82.5	17.5	30.6	30.9	26.0	12.5	4,101
Scattered Sites[b]	--	--	--	--	--	--	--	--	--	--	--	--

[a] *Nonwhite includes blacks, Orientals, Spanish Americans, and Indians.*

[b] *These public housing units were still under construction at the time of the government sponsored housing programs inventory, and therefore specific data were not available.*

Source: Department of City Development, City of Milwaukee; and SEWRPC.

most projects were predominantly occupied by white households, the two projects located in the inner city—Hillside Terrace and Lapham Park—had 90 and 96 percent nonwhite households, respectively. Average gross annual income for households in public housing was low, ranging from $1,766 for households in Holton Terrace to $4,124 in Lapham Park. The source of income for households in elderly projects was predominantly social security, and the income source for households in family units was predominantly a combination of wages and welfare. Two public housing projects in the City of Milwaukee—Parklawn and Highland Park—are shown in Figures 60 and 61.

Table 137 presents characteristics of households occupying public housing units in the City of Milwaukee in 1970 by type of household. Low-income elderly households occupying public housing in the City of Milwaukee were generally headed by a female with an average age of 72 years. The overwhelming majority of these households—93 percent—were white. The average gross annual income for these households was approximately $1,900, with the main source of income being social security or other retirement benefits. Average monthly rent for low-income elderly households was $40.

The low-income family households occupying public housing units in the City of Milwaukee were generally headed by a female whose average age was 42 years. The racial composition of these households was about evenly

Figure 60

PUBLIC HOUSING UNITS IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY

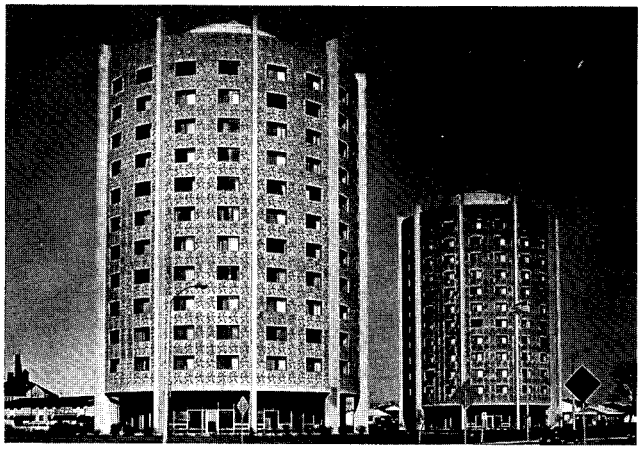
SEWRPC Photo.

One of the first public housing projects constructed within the City of Milwaukee was Parklawn, a 518-unit project housing low-income families. Data collected during the government activity inventory indicated that a little more than 74 percent of low-income family households were headed by females, with the average gross annual income being $3,886.

distributed, with about 51 percent occupied by whites and 49 percent by nonwhites. The average gross annual income for these households was $3,886, with about 30 percent of the households receiving income from wages, about 37 percent from welfare; and about 21 percent from social security. The average rent for units occupied by low-income families, which ranged in size from two to five or more bedrooms, was $64. It should be noted that even though there were 5,379 public housing units in the City of Milwaukee, vacancy rates for most projects were very low. Approximately 1,300 elderly and 200 families were awaiting occupancy in public housing units in Milwaukee as of December 1973. Occupancy in such units is often not available for up to a year or more after an initial application has been filed.

Figure 61

HIGH-RISE PUBLIC HOUSING UNITS IN THE CITY OF MILWAUKEE, MILWAUKEE COUNTY



SEWRPC Photo.

The Highland Park high-rise public housing project contains 276 of the more than 5,000 public housing units located throughout the City of Milwaukee which offer decent, safe, and sanitary housing for low-income individuals and families as well as the elderly.

City of South Milwaukee Public Housing: As of June 1973, there were 60 public housing units in the City of South Milwaukee. Of this total, eight were one-bedroom, 28 were two-bedroom, 16 were three-bedroom, and eight were four-bedroom units. The average age of the head of household occupying such units was 46 years, and about 63 percent of these households were headed by females. The units averaged 3.5 persons per household, with an average of two eligible minors. The average gross annual income of occupants of public housing units in the City of South Milwaukee was $3,482, with an average rent of about $48.

All 60 units owned and operated by the City of South Milwaukee Housing Authority are presently occupied; and in December 1973 there were 15 applicants awaiting occupancy for one-bedroom units, 19 for two-bedroom units, 14 for three-bedroom units; and three for four-bedroom units. Vacancies often are not available for up to two years.

City of Waukesha Public Housing: There were a total of 180 public housing units constructed or committed in the City of Waukesha as of June 1973. Of this total, 60 units were classified as scattered sites units for occupancy by low-income families and were located throughout the city, and 120 units were located in one project presently under construction and were classified as elderly units (see Figure 62).

The rent paid by occupants of scattered sites units was based on 25 percent of their adjusted gross income, thus permitting low-income families with two, three, four, or more dependents to find suitable housing at a price they could afford. For example, a family of four—two adults and two children—with an adjusted gross income of $5,000 may pay about $104 per month for a two- or three-bedroom home.

The units to be occupied by elderly households are presently under construction, and completion of the project is anticipated by mid-1974. The income limits to determine eligible occupancy have been set by the

Table 137

CHARACTERISTICS OF HOUSEHOLDS OCCUPYING PUBLIC HOUSING UNITS IN THE CITY OF MILWAUKEE BY TYPE OF HOUSEHOLD: 1970

Type of Household	Head of Household			Average Number of Persons Per Household	Average Number of Eligible Minors Per Household	Race (Percent)		Source of Income (Percent)				Average Gross Annual Income	Average Rent
	Average Age	Percent Male	Percent Female			White	Nonwhite[a]	Wages	Welfare	Social Security	Other		
Low-Income Elderly . . .	72	24.6	75.4	1	0	93.2	6.8	0.4	10.0	76.2	13.4	$1,906	$40
Low-Income Families . . .	42	25.8	74.2	3	2	50.6	49.4	29.8	37.1	20.7	12.4	3,886	64

[a] *Nonwhite includes blacks, Orientals, Spanish Americans, and Indians.*

Source: Department of City Development, City of Milwaukee; and SEWRPC.

Figure 62

HIGH-RISE PUBLIC HOUSING UNITS FOR THE ELDERLY IN THE CITY OF WAUKESHA, WAUKESHA COUNTY

SEWRPC Photo.

This high-rise project, located along the Fox River in the City of Waukesha, is an example of the project approach used in the development of public housing for the elderly. Elderly persons are considered most adequately housed in smaller rental units where maintenance is minimal and where other amenities, such as community facilities, laundry facilities, and common rooms for recreation, may be easily provided.

Figure 63

PUBLIC HOUSING UNITS IN THE CITY OF WEST BEND, WASHINGTON COUNTY

SEWRPC Photo.

Meadowbrook Manor, located in the City of West Bend, is a public housing project predominantly occupied by elderly households. There are 2,266 low-income elderly public housing units in the Region. Over 75 percent of the households occupying these units are headed by females who received an average annual gross income of $1,906.

City of Waukesha Housing Authority at $4,000 adjusted annual income for a single elderly person and $4,900 adjusted annual income for an elderly couple, with asset limits set at $11,000. The rent to be paid by the occupants will be based on 25 percent of their adjusted monthly income. At the present time, applications for occupancy have been filed for all 120 units, with another 70 applicants on a waiting list.

City of West Bend Public Housing: As of June 1973, one public housing project—Meadowbrook Manor—was located in the City of West Bend (see Figure 63). All 73 units in the project were occupied at that time, and there were 48 applicants on a waiting list. Of the 73 units, 71 were one-bedroom and two were two-bedroom units.

Housing units in Meadowbrook Manor were predominantly occupied by elderly households, with an average age of the head of household of 71 years. About 64 percent of the households were headed by females, and 100 percent of the occupants of the units were white. The average gross annual income of households was $3,172, with an average adjusted annual income of $2,855. Occupant monthly average rent for a unit was $51. The main source of income of the occupants was social security or other retirement pensions, with some households supplementing their incomes through wages received from a part-time job.

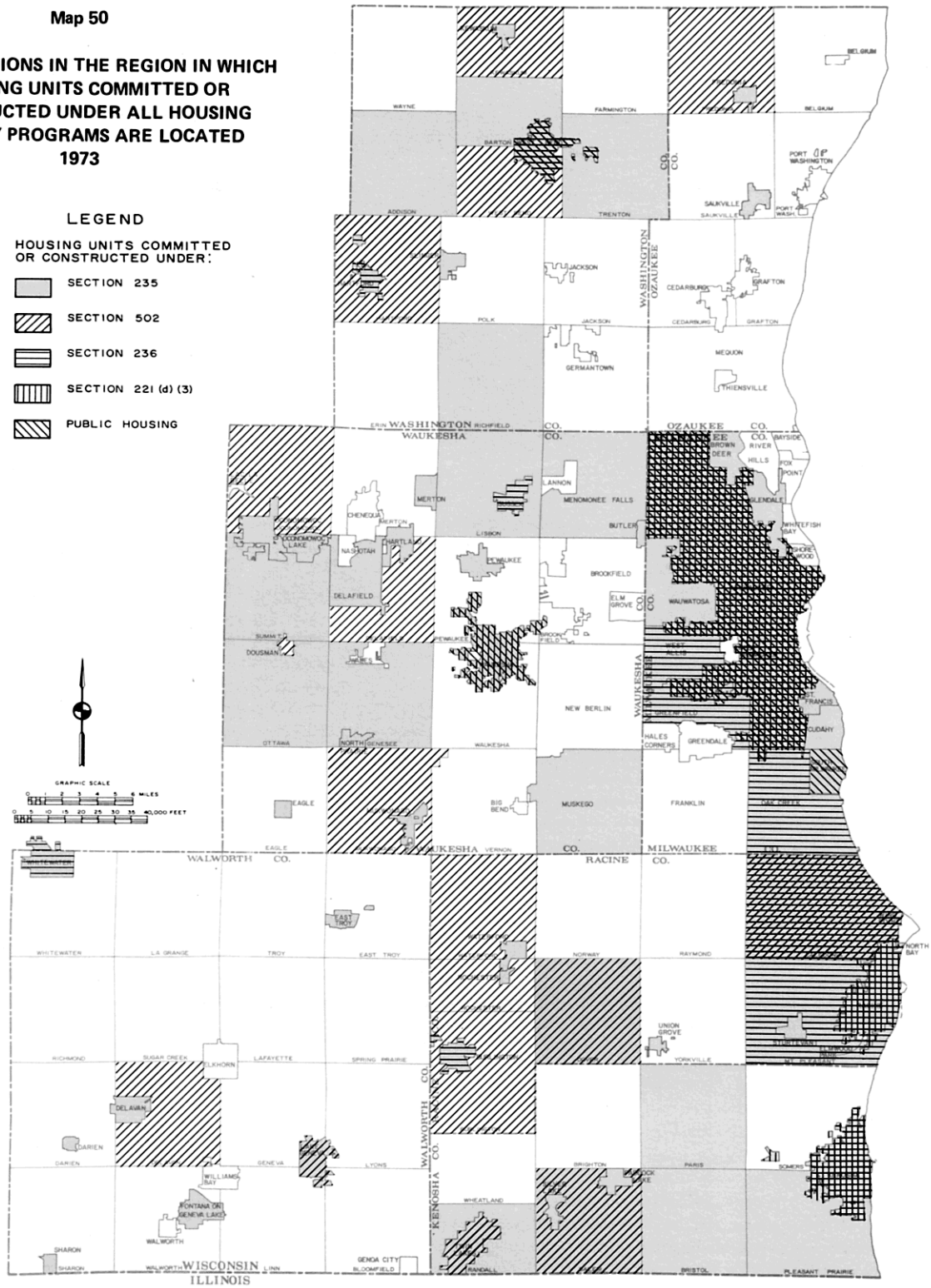
COMPARISON OF HOUSING SUBSIDY PROGRAMS UTILIZED IN THE REGION

Previous sections of this chapter have presented housing unit and household characteristic data related to the Section 235 homeownership program administered by HUD; the Section 502 homeownership program administered by the Farmers Home Administration; the Section 236 rental housing program, including both the interest subsidy and rent supplement segments of the program; the Section 221(d)(3) rent supplement program, administered by HUD; and the public housing program administered by the Housing Assistance Administration through local housing authorities. To provide a thorough understanding of the extent to which such programs together are utilized throughout the Region, data which were previously presented on an individual subsidy program basis have been consolidated and summarized. In this way, the magnitude of the housing subsidy programs, as well as the salient housing unit and household characteristics for households utilizing such programs, can properly be assessed. This section also includes a brief discussion related to household satisfaction with housing subsidy programs.

Number and Distribution of Subsidized Housing Units
As indicated on Map 50 and in Table 138, 15,888 housing units in 75 communities existed or were committed for

Map 50

CIVIL DIVISIONS IN THE REGION IN WHICH HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER ALL HOUSING SUBSIDY PROGRAMS ARE LOCATED 1973



A total of 15,888 housing units in 75 communities in the Region existed or were committed for construction as of 1973 under federal housing subsidy programs. The Section 235 housing program was the most widely used program in the Region, with subsidized housing units located in 63 urban and rural communities. Most of the subsidized multifamily rental units are located in a relatively few urban centers in the Region, while the units subsidized under the Section 502 program are located in predominantly rural areas. More than 74 percent of the 15,888 units authorized under all housing subsidy programs are located in Milwaukee County, 11 percent are located in Racine County, and 6 percent are located in Kenosha County. Ozaukee, Walworth, Washington, and Waukesha Counties combined have 8 percent of the subsidized housing units in the Region.

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; the Cities of Milwaukee, South Milwaukee, Waukesha, and West Bend; and SEWRPC.

Table 138

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN THE REGION BY COUNTY: 1973

County	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
Kenosha	668	66.7	13	1.3	96	9.6	224	22.4	--	--	--	--	1,001	6.3	35,468	2.8
Milwaukee	2,989	25.3	--	--	2,436	20.6	326	2.7	634	5.4	5,439	46.0	11,824	74.4	338,605	3.5
Ozaukee	28	90.3	3	9.7	--	--	--	--	--	--	--	--	31	0.2	14,753	0.2
Racine	1,238	70.1	36	2.0	423	23.9	72	4.0	--	--	--	--	1,769	11.1	49,796	3.6
Walworth	54	31.6	9	5.2	108	63.2	--	--	--	--	--	--	171	1.1	18,554	0.9
Washington	241	52.3	29	6.3	118	25.6	--	--	--	--	73	15.8	461	2.9	17,385	2.7
Waukesha	340	55.3	30	4.9	32	5.2	33	5.3	--	--	180	29.3	615	3.9	61,935	1.0
Civil Division Not Known	--	--	16	100.0	--	--	--	--	--	--	--	--	16	0.1	--	--
Region	5,558	35.0	136	0.9	3,213	20.2	655	4.1	634	4.0	5,692	35.8	15,888	100.0	536,486	3.0

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; Cities of Milwaukee, South Milwaukee, Waukesha, and West Bend; and SEWRPC.

Table 139

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN KENOSHA COUNTY: 1973

Civil Division	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
City																
Kenosha	630	66.3	--	--	96	10.1	224	23.6	--	--	--	--	950	6.0	24,245	3.9
Villages																
Paddock Lake	30	100.0	--	--	--	--	--	--	--	--	--	--	30	0.2	447	6.7
Silver Lake	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	388	0.3
Twin Lakes	1	9.1	10	90.9	--	--	--	--	--	--	--	--	11	0.1	725	1.5
Towns																
Bristol	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	757	0.1
Paris	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	431	0.2
Pleasant Prairie	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	3,303	--[a]
Randall	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	446	0.2
Salem	2	40.0	3	60.0	--	--	--	--	--	--	--	--	5	--[a]	1,732	0.3
Kenosha County	668	66.7	13	1.3	96	9.6	224	22.4	--	--	--	--	1,001	6.3	35,468	2.8

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

construction under housing subsidy programs within the Region through June 1973. Of this total, almost 5,700, or 36 percent, were public housing units, and over 5,500, or 35 percent, were units authorized under the Section 235 housing subsidy program. Of the remaining units, over 3,200, or 20 percent, were authorized under the Section 236 subsidy program, and 1,289 units, or 8 percent, were authorized under the Section 221(d)(3) subsidy program. Only 136 units, or less than 1 percent of the total, were authorized under the Section 502 housing program. It is interesting to note that, on a geographic basis, the Section 235 housing program was the most extensively utilized program, with subsidized housing units located in 63 urban and rural communities throughout the Region. Conversely, most of the subsidized multi-family rental units were located in a relatively few urban centers in the Region, while the subsidized units under the Section 502 program were located in predominantly rural areas.

The number of housing units committed or constructed under the housing subsidy programs for each county in the Region is shown in Tables 139 through 145. Over 11,800 units, or more than 74 percent of the 15,888

Table 140

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN MILWAUKEE COUNTY: 1973

Civil Division	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
Cities																
Cudahy	58	100.0	--	--	--	--	--	--	--	--	--	--	58	0.4	6,807	0.9
Glendale	1	100.0	--	--	--	--	--	--	--	--	--	--	1	..[a]	3,710	..[a]
Greenfield	68	28.3	--	--	172	71.7	--	--	--	--	--	--	240	1.5	6,897	3.5
Milwaukee	2,738	24.8	--	--	1,984	17.9	326	3.0	634	5.7	5,379	48.6	11,061	69.6	236,981	4.7
Oak Creek	24	18.7	--	--	104	81.2	--	--	--	--	--	--	128	0.8	3,585	3.6
St. Francis	5	100.0	--	--	--	--	--	--	--	--	--	--	5	..[a]	2,952	0.2
South Milwaukee	66	52.4	--	--	--	--	--	--	--	--	60	47.6	126	0.8	6,650	1.9
Wauwatosa	2	100.0	--	--	--	--	--	--	--	--	--	--	2	..[a]	17,927	..[a]
West Allis	24	12.0	--	--	176	88.0	--	--	--	--	--	--	200	1.3	23,546	0.8
Village																
Brown Deer	3	100.0	--	--	--	--	--	--	--	--	--	--	3	..[a]	3,465	0.1
Milwaukee County	2,989	25.3	--	--	2,436	20.6	326	2.7	634	5.4	5,439	46.0	11,824	74.4	338,605	3.5

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development; the Cities of Milwaukee and South Milwaukee; and SEWRPC.

Table 141

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN OZAUKEE COUNTY: 1973

Civil Division	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
Villages																
Fredonia	12	100.0	--	--	--	--	--	--	--	--	--	--	12	0.1	292	4.1
Saukville	16	100.0	--	--	--	--	--	--	--	--	--	--	16	0.1	374	4.3
Town																
Fredonia	--	--	3	100.0	--	--	--	--	--	--	--	--	3	..[a]	440	0.7
Ozaukee County	28	90.3	3	9.7	--	--	--	--	--	--	--	--	31	0.2	14,753	0.2

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

units authorized under all housing subsidy programs, were located in Milwaukee County. Other counties with a substantial number of subsidized units were Racine County, with approximately 1,800 units, or 11 percent of the regional total, and Kenosha County, with over 1,000 units, or 6 percent of the regional total. Ozaukee, Walworth, Washington, and Waukesha Counties combined had a total of almost 1,300 units, or 8 percent of the subsidized housing units in the Region.

On a community basis, the City of Milwaukee, with over 11,000 subsidized housing units, or almost 70 percent of the Region total, far exceeded the number of subsidized housing units in any other community. The City of Racine, with 1,028 units, and the City of Kenosha, with 950 units, are the only other communities in the Region to approach or exceed 1,000 subsidized units.

Even though the Cities of Milwaukee, Racine, and Kenosha have large numbers of subsidized units which, as a percent of all occupied units in these communities, exceed the 3 percent regional average, there are other communities in the Region that surpass these three cities on a relative basis. The number of subsidized units in the Cities of Whitewater and West Bend; the Villages of Paddock Lake, Dousman, Mukwonago, and Sussex; and the Towns of Caledonia and Kewaskum, for example, exceeded 5 percent of the total occupied units in these

Table 142

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN RACINE COUNTY: 1973

Civil Division	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
Cities																
Burlington	54	59.3	--	--	37	40.7	--	--	--	--	--	--	91	0.6	2,311	3.9
Racine	810	78.8	--	--	146	14.2	72	7.0	--	--	--	--	1,028	6.5	29,851	3.4
Villages																
Rochester	4	100.0	--	--	--	--	--	--	--	--	--	--	4	--[a]	141	2.8
Sturtevant	36	100.0	--	--	--	--	--	--	--	--	--	--	36	0.2	848	4.2
Union Grove	28	84.8	5	15.2	--	--	--	--	--	--	--	--	33	0.2	810	4.1
Waterford	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	577	0.2
Towns																
Burlington	--	--	12	100.0	--	--	--	--	--	--	--	--	12	0.1	1,331	0.9
Caledonia	249	67.3	1	0.3	120	32.4	--	--	--	--	--	--	370	2.3	4,203	8.8
Dover	1	33.3	2	66.7	--	--	--	--	--	--	--	--	3	--[a]	622	0.5
Mt. Pleasant	55	31.4	--	--	120	68.6	--	--	--	--	--	--	175	1.1	4,363	4.0
Rochester	--	--	7	100.0	--	--	--	--	--	--	--	--	7	--[a]	265	2.6
Waterford	--	--	9	100.0	--	--	--	--	--	--	--	--	9	0.1	992	0.9
Racine County	1,238	70.1	36	2.0	423	23.9	72	4.0	--	--	--	--	1,769	11.1	49,796	3.6

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

Table 143

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN WALWORTH COUNTY: 1973

Civil Division	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
Cities																
Delavan	24	100.0	--	--	--	--	--	--	--	--	--	--	24	0.2	1,733	1.4
Lake Geneva	2	40.0	3	60.0	--	--	--	--	--	--	--	--	5	--[a]	1,715	0.3
Whitewater	6	5.3	--	--	108	94.7	--	--	--	--	--	--	114	0.7	2,150	5.3
Villages																
Darien	2	40.0	3	60.0	--	--	--	--	--	--	--	--	5	--[a]	250	2.0
East Troy	16	100.0	--	--	--	--	--	--	--	--	--	--	16	0.1	544	2.9
Fontana	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	479	0.2
Sharon	3	100.0	--	--	--	--	--	--	--	--	--	--	3	--[a]	367	0.8
Town																
Delavan	--	--	3	100.0	--	--	--	--	--	--	--	--	3	--[a]	1,187	0.3
Walworth County	54	31.6	9	5.2	108	63.2	--	--	--	--	--	--	171	1.1	18,544	0.9

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; and SEWRPC.

Table 144

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN WASHINGTON COUNTY: 1973

Civil Division	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
Cities																
Hartford	10	18.5	--	--	44	81.5	--	--	--	--	--	--	54	0.3	2,033	2.7
West Bend	165	52.9	--	--	74	23.7	--	--	--	--	73	23.4	312	2.0	4,807	6.5
Villages																
Kewaskum	20	100.0	--	--	--	--	--	--	--	--	--	--	20	0.1	571	3.5
Slinger	2	40.0	3	60.0	--	--	--	--	--	--	--	--	5	--[a]	285	1.8
Towns																
Addison	26	100.0	--	--	--	--	--	--	--	--	--	--	26	0.2	568	4.6
Barton	6	100.0	--	--	--	--	--	--	--	--	--	--	6	--[a]	419	1.4
Hartford	--	--	4	100.0	--	--	--	--	--	--	--	--	4	--[a]	650	0.6
Kewaskum	--	--	19	100.0	--	--	--	--	--	--	--	--	19	0.1	313	6.1
Richfield	8	100.0	--	--	--	--	--	--	--	--	--	--	8	0.1	1,502	0.5
Trenton	4	100.0	--	--	--	--	--	--	--	--	--	--	4	--[a]	838	0.5
West Bend	--	--	3	100.0	--	--	--	--	--	--	--	--	3	--[a]	743	0.4
Washington County	241	52.3	29	6.3	118	25.6	--	--	--	--	73	15.8	461	2.9	17,385	2.7

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; City of West Bend; and SEWRPC.

Table 145

HOUSING UNITS COMMITTED OR CONSTRUCTED UNDER HOUSING SUBSIDY PROGRAMS IN WAUKESHA COUNTY: 1973

Civil Division	Housing Subsidy Program												Total Subsidized Units		Total Occupied Housing Units 1970	Total Subsidized Units as Percent of Occupied Units
	Section 235		Section 502		Section 236		Section 221(d)(3)		Section 221(d)(3) BMIR		Public Housing					
	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Total Subsidized Units	Number	Percent of Region Total		
Cities																
Delafield	5	100.0	--	--	--	--	--	--	--	--	--	--	5	--[a]	953	0.5
Muskego	2	100.0	--	--	--	--	--	--	--	--	--	--	2	--[a]	2,944	0.1
Oconomowoc	32	100.0	--	--	--	--	--	--	--	--	--	--	32	0.2	2,778	1.2
Waukesha	165	43.7	--	--	--	--	33	8.7	--	--	180	47.6	378	2.4	11,748	3.2
Villages																
Big Bend	--	--	3	100.0	--	--	--	--	--	--	--	--	3	--[a]	309	1.0
Butler	2	100.0	--	--	--	--	--	--	--	--	--	--	2	--[a]	614	0.3
Dousman	14	82.4	3	17.6	--	--	--	--	--	--	--	--	17	0.1	129	13.2
Eagle	2	100.0	--	--	--	--	--	--	--	--	--	--	2	--[a]	216	0.9
Hartland	4	66.7	2	33.3	--	--	--	--	--	--	--	--	6	--[a]	780	0.8
Menomonee Falls	2	100.0	--	--	--	--	--	--	--	--	--	--	2	--[a]	7,954	--[a]
Merton	5	100.0	--	--	--	--	--	--	--	--	--	--	5	--[a]	168	3.0
Mukwonago	20	100.0	--	--	--	--	--	--	--	--	--	--	80	0.5	685	11.7
North Prairie	2	50.0	2	50.0	--	--	--	--	--	--	--	--	4	--[a]	200	2.0
Pewaukee	14	100.0	--	--	--	--	--	--	--	--	--	--	14	0.1	898	1.6
Sussex	4	11.1	--	--	32	88.9	--	--	--	--	--	--	36	0.2	672	5.4
Towns																
Delafield	--	--	2	100.0	--	--	--	--	--	--	--	--	2	--[a]	956	0.2
Genesee	3	100.0	--	--	--	--	--	--	--	--	--	--	3	--[a]	846	0.4
Lisbon	2	100.0	--	--	--	--	--	--	--	--	--	--	2	--[a]	1,214	0.2
Mukwonago	--	--	11	100.0	--	--	--	--	--	--	--	--	11	0.1	545	2.0
Oconomowoc	--	--	7	100.0	--	--	--	--	--	--	--	--	7	0.1	1,794	0.4
Ottawa	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	467	0.2
Summit	1	100.0	--	--	--	--	--	--	--	--	--	--	1	--[a]	1,053	0.1
Waukesha County	340	55.3	30	4.9	32	5.2	33	5.3	--	--	180	29.3	615	3.9	61,935	1.0

[a] *Less than one-tenth of 1 percent.*

Source: U. S. Department of Housing and Urban Development; U. S. Department of Agriculture, Farmers Home Administration; City of Waukesha; and SEWRPC.

communities. While the number of these units in relation to the total number of subsidized units in the Region is minor, the number of subsidized units as a percent of all occupied housing units in each community is high.

It should be noted that while 75 communities, or 50 percent of the communities in the Region, have housing units committed or constructed under various housing subsidy programs, the remaining 71 communities have no units under any housing subsidy program. The housing requirements of households which may be considered to be in housing need within these communities are at this time, therefore, still unmet.

Housing Unit and Household Characteristics of Households Utilizing Housing Subsidy Programs

While the previous section of this chapter provided an overview of the number and distribution of housing units under various housing subsidy programs, this section will provide an overview of the types of households which utilized such subsidy programs.

As shown in Table 146, the incomes of households which utilized the housing subsidy programs were generally quite low, ranging from about $1,900 for elderly households residing in public housing units to over $8,500 for households in new Section 235 units. Data related to source of income revealed that high percentages of elderly households residing in Section 236 interest subsidy, rent supplement, and public housing units were receiving social security or retirement benefits, while households receiving welfare payments were generally located in Section 235 existing units or public housing units. Female-headed households ranged from 3 percent of the Section 502 new housing units to over 70 percent for existing Section 235, rent supplement, and public

Table 146

CHARACTERISTICS OF HOUSEHOLDS UTILIZING HOUSING SUBSIDY PROGRAMS IN THE REGION: 1969-1973

Household and Housing Unit Characteristics	Homeownership Subsidy Programs				Rental Subsidy Programs					
					Section 236			Section 221(d)(3)	Public Housing[a]	
	Section 235		Section 502		Interest Subsidy					
	Existing	New	Existing	New	1 Bedroom	2 and 3 Bedroom	Rent Supplement	Rent Supplement	Low-Income Elderly	Low-Income Family
Household Characteristics										
Average Household Income										
Gross Annual	$ 5,393	$ 8,502	$ 6,827	$ 7,139	$3,930	$6,397	$2,166	$2,052	$1,906	$3,886
Adjusted Annual	$ 3,794	$ 7,222	$ 5,271	$ 5,861	$3,701	$5,451	$2,157	$2,035	$NA[b]	$NA[b]
Adjusted Monthly	$ 316	$ 608	$ 439	$ 488	$ 308	$ 454	$ 180	$ 170	$NA[b]	$NA[b]
Percent of Households Receiving Welfare Payments	81	6	10	2	7	21	13	17	10	37
Percent of Households Receiving Social Security and/or Other Retirement Payments	NA[b]	NA[b]	NA[b]	NA[b]	64	2	89	89	76	21
Head of Household										
Average Age	34	30	36	30	56	28	69	68	72	42
Percent Male	17	84	80	97	34	61	20	27	25	26
Percent Female	83	16	20	3	66	39	80	73	75	74
Average Number of Persons Per Household	6	5	6	5	1	4	1	1	1	3
Average Number of Eligible Minors Per Household	4	3	4	3	0	2	0	0	0	2
Percent of Nonwhite[c] Households	74	6	0	0	25	31	41	67	7	49
Housing Unit Characteristics—Homeownership										
Average Sale Price	$14,679	$22,255	$18,495	$22,528[d]	$ --	$ --	$ --	$ --	$ --	$ --
Average Mortgage Amount	14,544	22,071	18,377	22,648[d]	--	--	--	--	--	--
Average Monthly Buyer Payment	98	139	105	130	--	--	--	--	--	--
Average Monthly Assistance Payment	53	84	60	73	--	--	--	--	--	--
Average Total Monthly Mortgage Payment	151	223	165	203	--	--	--	--	--	--
Housing Unit Characteristics—Rental										
Average Interest Subsidy Payment	--	--	--	--	54	70	55	--	--	--
Average Rent Supplement Payment	--	--	--	--	--	--	68	96	--	--
Tenant's Average Monthly Rent	--	--	--	--	119	148	53	55	40	64
Average Market Monthly Rental Fee	--	--	--	--	173	218	176	151	--	--
Average Total Assistance Payment	53	84	60	73	54	70	123	96	NA[b]	NA[b]

[a] *Based upon public housing data for units located in the City of Milwaukee.*

[b] *Data not available.*

[c] *Nonwhite includes blacks, Orientals, Spanish Americans, and Indians.*

[d] *Averages were calculated for all counties which had one or more Section 502 new housing units.*

Source: U. S. Department of Housing and Urban Development, City of Milwaukee Office; U. S. Department of Agriculture, Farmers Home Administration; Department of City Development, City of Milwaukee; and SEWRPC.

housing units. The largest household sizes occurred in the homeownership program—Section 235 and Section 502—with an average of five to six members per household, while the smaller household sizes occurred in the rent supplement and elderly public housing units. Nonwhite households, which were nonexistent for the Section 502 housing program, were as high as 74 percent in the Section 235 existing program. High percentages of nonwhite households also occurred in the 221(d)(3) rent supplement programs and the public housing program for families. The monthly payment required by a household to reside in a housing unit varied, but appeared to be quite low—$40 to $64—for households in rent supplement or public housing units, and higher—$98 to $148—for households residing in the Section 235 and Section 502 homeownership or Section 236 rental units. The federal assistance payment, which also varied considerably, ranged from a low of $53 to occupants of Section 235 existing units to $123 to occupants of Section 236 rent supplement units.

On the basis of the data presented in this chapter related to the number and distribution of housing units under the various subsidy programs, as well as the data related to the households which occupy such units, the following general conclusions concerning the utilization of subsidy programs in the Region can be drawn.

The Section 235 existing, rent supplement, and public housing programs serve predominantly lower-income female-headed households, a significant number of which are nonwhite. The Section 235 existing program, as well as the family public housing program, generally serve larger households, a significant number of whom have welfare payments as an income source. The rent supplement and public housing programs for the elderly generally serve smaller households whose income source is primarily social security. Most of the units which are part of these programs are located primarily in the Cities of Milwaukee, Racine, and Kenosha.

The Section 235 new, Section 502, and Section 236 interest subsidy programs serve predominantly moderate-income family-type households headed by white males with income primarily from wages. Units under these programs are located in both urban and rural areas of the Region.

Household Satisfaction with Housing Subsidy Programs

A proper evaluation of housing subsidy programs in the Region should include an assessment of the satisfaction of households utilizing such programs. The Commission, therefore, as part of its social research survey work, requested the University of Wisconsin survey consultant to include questions in the survey related to household satisfaction with present housing unit and neighborhood area. Responses to these types of questions were obtained from a sample of households residing in Section 235 housing units (90 sampled) and public housing units (170 sampled).[5]

[5]*The results of the total social research survey are fully documented in Technical Report No. 14.*

Over 86 percent of the sample of households in public housing units and more than 75 percent of the households in Section 235 units indicated they were "somewhat satisfied" or "very satisfied" with their present housing unit. Including the cost of utilities, 87 percent of the public housing unit tenants and 73 percent of the Section 235 homeowners indicated that they felt the total housing cost was "about right." In response to a question related to such problems as dangerous floors, poor heating, bad wiring, inoperable toilets, or presence of rats, almost 90 percent of the households in public housing and 80 percent of the occupants of Section 235 units indicated they had experienced no problems in these areas. About 70 percent of public housing occupants and 75 percent of the Section 235 occupants indicated they had problems in these areas, but stated that the problems were "not serious."

While a bare majority of households in both public housing and Section 235 units felt they "really belonged" in the neighborhood, almost 90 percent of the Section 235 homeowners considered their present neighborhood a proper place for raising children under 12 years of age, while only 52 percent of the households in public housing units felt this way. The neighborhood features most often mentioned by public housing occupants in order of preference were convenient location, friendly people, and low-cost rent. Section 235 occupants most often mentioned quiet neighborhood, convenient location, and friendly people.

While the results of the survey are limited in that they are based on sampled households utilizing only two subsidy programs, the data do indicate a feeling of overall household satisfaction related to both the housing unit and the neighborhood in which the unit is located.

It appears that within the Region to date, a wide variety of housing subsidy programs have served low- and moderate-income households of all sizes and ages in all areas of the Region. While the moratorium on government subsidy programs enacted in January 1973 will preclude a proper long-range assessment of the majority of such programs, it is apparent that the programs utilized in the Region have provided almost 16,000 decent, safe, and sanitary housing units to households in need. Households residing in such units have, for the most part, been satisfied with both the housing unit and the neighborhood in which it was located.

The determination of whether the existing housing subsidy programs would be the answer to the Region's housing problems if allowed to continue, or whether new legislative proposals for different housing programs will do a better job, cannot now be made, and may remain unanswered until new housing proposals are implemented, utilized for a period of time, and evaluated.

HOUSING PROGRAMS ADMINISTERED BY AGENCIES IN THE STATE OF WISCONSIN

The State of Wisconsin administers four programs concerned with housing and housing-related activities. These

include the State Housing Finance Authority program; the Housing Grant Fund and Housing Loan Fund programs of the Wisconsin Department of Local Affairs and Development; and the equal rights program of the Wisconsin Department of Industry, Labor, and Human Relations.

Wisconsin State Housing Finance Authority

Legislation to create the Wisconsin Housing Finance Authority was passed by the Wisconsin Legislature in 1971. As originally conceived, the Authority is authorized to sell 40-year revenue bonds totaling $150 million, and to use the proceeds to provide long-term mortgages to housing developers at a 6 to 6 1/2 percent interest rate. The savings to the developer as a result of this lower rate would be passed on to the tenant of the rental unit as a lower rental payment, much like the federal Section 236 housing subsidy program. The State Housing Finance Authority program was intended to work in concert with programs like the Section 236 program in order to provide more housing units. The state housing program would provide the initial subsidy to lower the market interest rate to 6 or 6 1/2 percent. The Section 236 program would then provide an additional subsidy from that level to as low as 1 percent.

The State Housing Finance Authority in May 1973 received an allocation from HUD for 300 Section 236 units to be constructed in four projects throughout the state. The processing and financing of all projects is accomplished through the Wisconsin State Housing Finance Authority. All rents for these units will be below new rent costs. However, there will be a substantial difference in the rent charged for units occupied by households receiving the State Housing Finance Authority subsidy in conjunction with the Section 236 interest subsidy, and units receiving only a subsidy from the State Housing Finance Authority. The households occupying units under the Section 236 program are subsidized down to a 1 percent interest rate, while the households occupying units under only the State Housing Finance Authority are subsidized down to a 6 1/2 percent interest rate.

Two of the four projects are located in the Region, one in the City of Racine and the other in the Village of Shorewood. The Racine project will contain 79 units for the elderly, and households occupying these units will receive a Section 236 interest subsidy in addition to the State Housing Finance Authority subsidy. The Shorewood project will contain 215 elderly units, with about 95 being occupied by households receiving both a Section 236 program subsidy and a State Housing Finance Authority subsidy, and the rest receiving a subsidy only from the State Housing Finance Authority.

The other two Section 236 projects are to be constructed in the City of Evansville in Rock County and the City of Manitowoc in Manitowoc County. The Evansville project will contain 24 low-income family units, the Manitowoc project, 103 elderly units. Households occupying units in these two projects will receive a subsidy under both the Section 236 program and the State Housing Finance Authority.

No further allocation for Section 236 units has been made by HUD to the Housing Finance Authority. Any further activity in the construction of low-income housing will be completely processed, financed, and subsidized by the Authority.

Wisconsin Department of Local Affairs and Development, Division of Housing

The Division of Housing of the Wisconsin Department of Local Affairs and Development has two sources of funds available for housing activity in Wisconsin. These are the Housing Grant Fund and the Housing Loan Fund, both established in 1971. Originally, the state grant and loan funds were conceived as sources of funds which would complement and supplement various federal sources for housing activity support. However, as a result of the federal moratorium on subsidized housing programs enacted in January 1973, many federal funding sources have become unavailable, and future federal funding is uncertain.

The guidelines for Housing Grant Fund and Housing Loan Fund use are similar. The only difference is that housing loan funds must be repaid, and the borrower must demonstrate a capability to repay before the loan is issued. Any governmental or nonprofit entity dealing in housing is eligible to submit a proposal for either a grant or a loan. Groups that have benefited from the utilization of these programs include community action agencies, housing authorities, nonprofit housing corporations, and housing service organizations.

Housing Grant Fund: The Housing Grant Fund has $200,000 available for housing programs during the 1973-1975 biennium. Because of the fund's limited size, the Division of Housing indicated it would generally not issue grants of more than $10,000 to $15,000 to any one applicant. In addition, the Division encourages potential applicants to make every effort to obtain funds for various housing programs from additional sources. It should be noted that there is no requirement for a minimum amount of matching financial support, and no restriction upon the sources from which other funds might be obtained.

Housing Grant Fund proposals must contain certain information, including a discussion of the sequence of events which led to the proposed housing activity, a brief description of an area's housing needs, an indication of the manner in which the activity will be undertaken and the anticipated results during the period for which the request is made, a breakdown of the proposed utilization of the funds requested, and a brief description of the efforts which were made to secure funds from other sources.

Most approved grant requests are funded in two installments, one within two weeks after the proposal is made and one at the mid-point of the project period. Groups undertaking housing activities funded for one year or more are expected to submit narrative progress reports and financial reports every three months. Groups with

projects of less than one year must submit these reports at the end of the quarter closest to the mid-point of the project period, and at the end of the quarter closest to the closing date of the project.

Thus far in the 1973-1975 biennium, the following grants have been issued in the Region: $10,000 for the Milwaukee County Community Relations-Social Development Commission for a housing services study; $12,000 to Racine County as matching funds to help pay the salary of the County Housing Director; $7,000 to the Southeastern Wisconsin Housing Corporation to purchase equipment to be utilized in its self-help housing construction program; $10,000 to Southside Revitalization in the City of Racine for rehabilitation and repair of homes for low-income families who cannot qualify for loans elsewhere; $13,000 to Housing, Inc., of Milwaukee for program staff; and a tentative commitment for $15,000 to the Metropolitan Housing Center of Milwaukee.

In addition, the Division of Housing issued five grants in the 1971-1973 biennium. These included $10,000 to the Milwaukee County Community Relations-Social Development Commission for a housing services study; $12,000 to Housing, Inc., of Milwaukee to hire a staff to establish a rehabilitation construction service; $2,100 to the United Migrant Opportunity Service for temporary housing for migrants in the City of Milwaukee; and $5,750 to the Southeastern Wisconsin Housing Corporation—$5,000 to set up a revolving loan fund for the option and purchase of housing sites, and $750 to hire a Spanish-speaking consultant to recruit families for self-help housing groups.

Housing Loan Fund: The Housing Loan Fund has $40,000 available for housing program activities during the 1973-1975 biennium on a revolving short-term, no interest loan basis. The guidelines for use of the Housing Loan Fund are basically the same as for the Housing Grant Fund. The only difference is that the funds must be repaid and a capability to repay must be demonstrated by the borrower. Applications for funds are requested to be kept between $5,000 and $10,000, and should not extend for more than two years. The maximum loan available varies with respect to the amount of time for which it is requested. For example, a loan of more than $10,000 may be made if it is for a maximum of three months. Smaller loans can be made for longer periods of time.

Proposals for housing loans must contain information similar to those for housing grants, and must also indicate a source of funds to repay the loan and a date upon which repayment can be expected. Repayment dates are agreed upon by contract, and cannot be extended beyond the specified date unless extraordinary circumstances can be demonstrated. Progress report requirements are the same as for the Housing Grant Fund. In addition, loan recipients are expected to notify the Division of Housing immediately if any problems occur which may affect ability to repay. Thus far, one $5,000 loan has been issued to the Village of Union Grove to assist in the construction of a 10-unit structure providing low-rent housing for the elderly, and of two duplexes for low-income families.

In addition to the Housing Loan and Grant Funds, the Department of Local Affairs and Development (DLAD), Division of Housing, is involved in the construction of public housing under the Section 23 leased housing program. Originally, HUD allocated 200 units to DLAD to enable the production of low-rent public housing in communities too small to receive money from HUD. It should be noted that this was the first time HUD allocated subsidy dollars to a state agency for this purpose. DLAD then aggregated 10 communities statewide under one contract to decrease overhead to receive Section 23 housing. The allocation of subsidy dollars to DLAD involves HUD money. The permanent financing for the units is supplied by the State Housing Finance Authority. Additional monies are available from the Division of Housing loan and grant funds. Construction under the Section 23 program was recently postponed pending a change in guidelines under the new Section 23 program, which will allow the subsidy amount to be calculated in a new way. The Village of Union Grove is the only community within the Region designated to receive Section 23 units.

Wisconsin Department of Industry, Labor, and Human Relations, Equal Rights Division

The Equal Rights Division of the Wisconsin Department of Industry, Labor, and Human Relations assists communities in establishing local equal rights commissions, and also acts as an information clearinghouse for all state agencies on facts dealing with equal rights in the fields of employment, housing, and public accommodations. It administers the Wisconsin Fair Housing Law, which was enacted on December 19, 1965, and hears grievances concerning discriminatory practices contrary to the provisions of the Wisconsin Fair Housing Law. Discrimination practices and their possible effect on the availability of housing for low-income families is presented in Chapter XIV of this report, "Housing Availability Constraints."

HOUSING-RELATED PROGRAMS

In addition to the aforementioned housing programs, other housing-related programs directed at the amelioration of housing problems have been utilized in the Region, and are included for discussion in this chapter. Such programs deal with household relocation, urban renewal, code enforcement, and model cities.

Relocation Program

The relocation of families displaced by government or public action has been recognized as one of the major problems in the housing field. Through legislation and administrative regulations for housing and urban renewal projects, the federal government has greatly influenced the development of state and local standards for relocation assistance and payments. As early as 1937, the United States Housing Authority, which administered financial help to local housing authorities that constructed public housing, issued regulations urging local authorities to exert every effort to relocate occupants in decent, safe, and sanitary dwellings well within their financial reach.

It is understandable that there has been much difficulty on the part of various government or public agencies in coping with the problems of relocation, particularly since the objectives and authority of these agencies tended to reflect single-purpose operations. For example, a highway department or a city development department working on a tight budget and time schedule would place higher priority on the completion of a project within a given time frame than on the adequate relocation of households displaced by the project. Therefore, while the provision of decent housing and the assurance of a suitable living environment for all residents displaced should be a basic goal of any government activity causing displacement, it is usually secondary to the primary objective, namely, economic and efficient project completion.

Federal Relocation Laws: While the relocation of families displaced by government or public action has for some time been recognized as a major problem in the housing field, it was only in 1968 that the federal government enacted major legislation, in an effort to alleviate this growing problem. The Housing and Urban Development Act of 1968 was one of the first significant articles of legislation dealing with relocation. It authorized a payment of up to $5,000 to homeowners displaced by federal projects. To be eligible for this payment, the displaced owner had to buy and occupy a dwelling within one year after the date on which he was required to move.

A second major article of legislation dealing with relocation was the Federal Aid Highway Act of 1968, which required that all states make relocation payments and provide services by July 1970 for families and individuals displaced by federally aided highway projects, including the provision of decent, safe, and sanitary housing with a minimum of hardship. Payments included an additional replacement housing grant up to $5,000 to assist property owners in purchasing a comparable dwelling.

In January 1971, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 became law. The provisions of this Act applied to all federally aided programs under which families or businesses were displaced. The Act also established uniform property acquisition policies for all such programs. Any family or individual displaced by the acquisition of real property due to federal or federally assisted activity was eligible to receive benefits under the law. The cost of providing payments and assistance under this Act is considered part of the cost of a program or project for which federal financial assistance is available.

Wisconsin Relocation Law: Relocation within the State of Wisconsin was addressed with the 1959 enactment of Wisconsin's initial relocation law and with revisions in 1960. This law provided payments for moving costs, refinancing costs, rent loss, and loss of plans rendered unusable. During 1970, relocation was again addressed in Wisconsin in the "Conta Bill," which became law the same year. Sections 32.19 and 32.25 to 32.27 of the Wisconsin State Statutes state that "persons displaced by any public project be fairly compensated by payment for the property acquired and other losses hereinafter described and suffered as the result of programs designed for the benefit of the public as a whole; ... and that ... payment of such relocation assistance and assistance in the acquisition of replacement housing are proper costs of the construction of public improvements. If the public improvement is funded in whole or in part by a nonlapsible trust, the relocation payments and assistance constitute a purpose for which the fund of the trust is accountable." The purpose of the law was to establish a uniform policy for providing money and other assistance to people who were being uprooted from their homes, businesses, or farms. The law applies to any county, city, village, town, or private corporation in the state that is empowered to condemn and acquire property under Wisconsin's eminent domain laws. Enactment of relocation laws in Wisconsin has affected many agencies since 1970. These include the U. S. Department of Housing and Urban Development; state organizations such as the Wisconsin State Highway Commission, the Wisconsin Department of Natural Resources, and the Wisconsin Electric Power Company; and local organizations such as the Kenosha County Park Commission, the Milwaukee County Expressway and Transportation Commission, the Racine County Park Commission, and the University of Wisconsin in the Cities of Milwaukee and Whitewater.

Relocation payments under the law are made for the cost of actual moving expenses, paid to the displaced individual incurred in moving himself, his family, his business, or his farm operation; the cost of moving expenses, with optional fixed payments not to exceed $300 and a dislocation allowance of $200; or a fixed payment equal to the average annual net earnings of a business or farm operation but not less than $2,500 or more than $10,000.[6] In addition, the cost of replacement housing not to exceed $15,000 may be provided for a dwelling owned and occupied by the owner for not less than 180 days prior to the initiation of negotiations for the acquisition of the property.

With regard to a tenant's relocation benefits, two alternatives are available to enable such persons to occupy a decent, safe, and sanitary dwelling. The first involves payment to tenants to enable them to lease or rent a dwelling for up to four years after displacement for an amount not to exceed $4,000, provided the tenant had resided in the dwelling to be acquired for not less than 90 days prior to the initiation of the attempt to purchase such a property. The second alternative involves payment made to enable tenants to make a down payment on the purchase of a decent, safe, and sanitary home. The total amount of the payment made by the displacing agency

[6] *In the case of a business relocation, no payment is made unless the business is not able to be relocated without a substantial loss of its existing patronage, and is not part of a commercial enterprise having at least one other establishment not being acquired by the condemner which is engaged in the same or similar business.*

may not exceed $4,000. However, when the displacing agency's portion of the payment is up to $2,000, the person must match the excess over $2,000 with the displacing agency in making the down payment. For example, if the total down payment on the purchase of a home is $7,000, the displacing agency will pay $2,000. The remaining balance of $5,000 must be paid equally by both the displacing agency and the individual. In this case, the amount would be $2,500 each. However, because the displacing agency only pays a total amount of up to $4,000, and because it has already paid $2,000, another $2,500 would put the payment over the total amount allowed. Therefore, the displacing agency would only pay an additional $2,000, and the remaining $500 is added to the potential buyer's share of the down payment, thus totaling $3,000 instead of $2,500.

The Wisconsin Department of Local Affairs and Development (DLAD), Division of Housing, is the designated monitoring agency for the state's relocation law. Any government or public agency undertaking a project which may involve the acquisition of property and displacement of persons, businesses, or farm operations must file a relocation payment plan and relocation assistance service plan with DLAD, subject to the Department's approval. The relocation assistance service plan must indicate that appropriate steps have been taken by the government or public agency doing the displacing to determine the cost of any relocation payments and services or the methods that are going to be used to determine such costs. In addition, the plan must indicate the displacing agency's willingness and capability to assist owners of displaced businesses and farms in obtaining and becoming established in suitable business locations or replacement farms; assist displaced owners or renters of housing in the location of comparable dwellings; supply information concerning federal, state, and local programs which offer assistance to displaced persons and businesses; determine the approximate number of persons, farms, or businesses that will be displaced; and assure that there is available decent, safe, and sanitary housing in areas not generally less desirable with regard to public utilities, public and commercial facilities, and rents or prices within the financial means of the families and individuals displaced, and reasonably accessible to their places of employment. Finally, the displacing agency must coordinate relocation activities with other projects and planned or proposed governmental actions in the community or nearby areas which may affect the implementation of the relocation program, and assist in minimizing hardships to displaced persons and families.

Relocation in the Region: Table 147 indicates the number of households by county in the Region which have been relocated, are in the process of relocation, or will be relocated in the future, and is based upon relocation plans filed with the Wisconsin Department of Local Affairs and Development for the period July 1970 to July 1973. It should be noted that data related to relocation activities in southeastern Wisconsin were available beginning in July 1970, the date that government or public agencies involved in displacing households were required by Wisconsin law to file a relocation plan with the DLAD. Data related to the number of, and reasons for, households displaced prior to 1970 can be found in Chapter V of this report, but detailed information related to the satisfactory relocation of these households is not available.

The types of projects which bring about displacement of households vary greatly, and include land acquisition for park areas; urban renewal in the form of neighborhood development programs (NDP); and public utility, highway, freeway, school, and public housing construction. A review of Table 147 indicates that highway and freeway construction has been responsible for much of the displacement of households in individual counties and the Region as a whole. This is particularly true in Milwaukee County, where highway construction has been responsible for about 13 percent of households displaced and freeway construction has been responsible for about 68 percent of households displaced. For the Region as a whole, highway and freeway construction combined have been responsible for about 78 percent of the total households relocated, in the process of relocation, or to be relocated in the future.

While the relocation of households to adequate comparable housing units has been recognized as a serious problem, much remains to be done. The DLAD presently monitors the state's relocation law. However, it is often difficult to fully coordinate the various relocation efforts of displacing agencies, as well as to adequately verify the relocation plans they must file. There is no actual count of the number of suitable vacant housing units available in the existing housing stock of a particular area, and very often estimates of available vacant housing overlap from one relocation plan to another. Many housing officials have expressed the belief that the establishment of a designated central relocation agency is the solution to the problems created by displacement, but to date there has been no action in this direction, either at the state or regional level.

Urban Renewal Program

The problem of slum and deteriorated neighborhoods in large cities has existed for many years. The federal government finally recognized the magnitude of this problem with the passage of the Housing Act of 1949. The purpose of the Act was to provide a program of assistance, called urban renewal, to local public bodies to eliminate and prevent slums and blighted areas. The general purposes of an urban renewal program were twofold: to provide assistance to cities and communities through the activities of acquisition, clearance, redevelopment, and rehabilitation of slum or blighted areas, and to provide the instruments and funds to initiate programs of economic and social action to revitalize urban communities.

An urban renewal program must be undertaken, planned, and carried out by a local public agency which has been authorized by state law to undertake rehabilitation and conservation activities and contract with the federal government to receive urban renewal loans and grants. A local public agency may be any state, county, municipality, local housing authority, or other government

Table 147

RELOCATION OF HOUSEHOLDS IN THE REGION BY COUNTY JULY 1970-JULY 1973

County and Type of Project	Number of Households Relocated[a]			Number of Households In Process of Relocation			Number of Households To be Relocated			Total		
	Owner	Tenant	Total	Owner	Tenant	Total	Owner	Tenant	Total	Owner	Tenant	Total
Kenosha												
Highway Construction	2	1	3	--	--	--	--	--	--	2	1	3
Freeway Construction	--	--	--	--	--	--	--	--	--	--	--	--
Other[b]	--	--	--	--	--	--	1	--	1	1	--	1
Subtotal	2	1	3	--	--	--	1	--	1	3	1	4
Milwaukee												
Highway Construction	34	48	82	--	--	--	50	33	83	84	81	165
Freeway Construction	127	388	515	--	--	--	232	129	361	359	517	876
Other[b]	10	28	38	65	125	190	11	9	20	86	162	248
Subtotal	171	464	635	65	125	190	293	171	464	529	760	1,289
Ozaukee												
Highway Construction	16	16	32	--	--	--	--	--	--	16	16	32
Freeway Construction	--	--	--	--	--	--	--	--	--	--	--	--
Other[b]	4	8	12	3	1	4	--	--	--	7	9	16
Subtotal	20	24	44	3	1	4	--	--	--	23	25	48
Racine												
Highway Construction	--	4	4	--	--	--	--	--	--	--	4	4
Freeway Construction	--	--	--	--	--	--	--	--	--	--	--	--
Other[b]	20	24	44	6	4	10	4	15	19	30	43	73
Subtotal	20	28	48	6	4	10	4	15	19	30	47	77
Walworth												
Highway Construction	5	2	7	--	--	--	--	--	--	5	2	7
Freeway Construction	--	--	--	--	--	--	--	--	--	--	--	--
Other[b]	1	--	1	1	--	1	--	--	--	2	--	2
Subtotal	6	2	8	1	--	1	--	--	--	7	2	9
Washington												
Highway Construction	--	--	--	4	--	4	9	5	14	13	5	18
Freeway Construction	--	--	--	--	--	--	--	--	--	--	--	--
Other[b]	--	--	--	--	--	--	--	--	--	--	--	--
Subtotal	--	--	--	4	--	4	9	5	14	13	5	18
Waukesha												
Highway Construction	11	5	16	55	11	66	34	--	34	100	16	116
Freeway Construction	--	--	--	--	--	--	--	--	--	--	--	--
Other[b]	2	5	7	--	--	--	--	6	6	2	11	13
Subtotal	13	10	23	55	11	66	34	6	40	102	27	129
Region												
Highway Construction	68	76	144	59	11	70	93	38	131	220	125	345
Freeway Construction	127	388	515	--	--	--	232	129	361	359	517	876
Other[b]	37	65	102	75	130	205	16	30	46	128	225	353
Total	232	529	761	134	141	275	341	197	538	707	867	1,574

[a] *The number of households relocated in the Region is taken from records on file with the Wisconsin Department of Local Affairs and Development. It should be noted that the period July 1970 to July 1973 is only an indication of when these records were filed with DLAD, and should not be construed as the period during which the actual displacements of households occurred. Displacement may, and often does, occur some time in the future.*

[b] *Includes various types of construction projects sponsored by public and private agencies such as the University of Wisconsin, the U. S. Department of Housing and Urban Development, the Wisconsin Department of Natural Resources, city planning commissions, county park commissions, and school boards.*

Source: Wisconsin Department of Local Affairs and Development, Division of Housing.

entity or public body or any local public agency established on a state, regional, or metropolitan basis. In the State of Wisconsin, an urban renewal program may be undertaken only by a redevelopment authority formed under provisions of the Wisconsin Statutes. The urban renewal program itself may involve the acquisition and clearance of a slum or blighted area and disposition of the land for redevelopment; rehabilitation by property owners of structures in blighted areas, accompanied by improvement of community facilities by the local government; acquisition, rehabilitation, and sale of properties by the local public agency; or acquisition and sale of property by the local public agency subject to rehabilitation.

The goal of urban renewal in a project area is to improve the quality of life for those who live in the area. The local public agency attempts to meet the housing needs of low- and moderate-income families and individuals by upgrading maintenance of existing dwelling units to rehabilitation standards and urban renewal plan objectives, with a minimum amount of displacement of residents. In addition, improving the residential environment may be carried out by removing causes of blight; providing or improving neighborhood facilities such as schools and parks; building and rebuilding streets, water and sewer facilities, and making related site improvements; raising the level of municipal services; and developing new employment opportunities for the jobless, underemployed, and low-income persons through rehabilitation and redevelopment programs.

Before an area can qualify for financial assistance under an urban renewal program, it must contain deficiencies to the extent that public action is considered necessary to remove existing blight and prevent deterioration of the surrounding area. The area must also be of reasonable size so that it will be feasible for reuse, and so that the project can be planned and carried out expeditiously. Existing deteriorating structures must initially be sound in order to make rehabilitation practical, and there must be neighborhood interest to make a project worthwhile. In addition, a change in the land use and/or total clearance of a renewal area may occur if deterioration is so extensive that rehabilitation would not be practical.

In order to qualify for renewal assistance, a community must have an approved workable program for community improvement and agree to meet the federal requirements. A community must address itself in such a program to housing and relocation, planning and programming, codes and code enforcement, and citizen participation and equal opportunities. Biannual recertification of a local public agency's workable program by HUD is a prerequisite for continued funding of most federally assisted renewal programs designed to overcome the problems of slums and blight.

The City of Milwaukee is the only community in the Region with an urban renewal program underway. The program is administered by the Department of City Development, but it is the responsibility of a board of seven appointed citizens known as the Redevelopment Authority of the City of Milwaukee (RACM). RACM is a separate public body exercising public powers determined to be necessary for its purposes. This includes taking title to real and personal property in its own name and leasing or selling real property for use in accordance with a redevelopment plan.

Milwaukee's urban renewal program consists of eight projects: the Lower Third Ward Redevelopment project; Hillside Neighborhood Redevelopment project; First Project East Side "A" Area; Marquette Urban Renewal Area; Roosevelt Redevelopment project; Haymarket Square Redevelopment project; Kilbourntown No. 3 Redevelopment project; and Midtown Conservation project. Except for Midtown Conservation, these projects are completed or are scheduled for completion by June 1974.

In addition to the Midtown project, the only other urban renewal activity underway is the Neighborhood Development Program (NDP). This newly created program allows communities to carry out urban renewal activities in small areas requiring immediate action, while planning and scheduling more detailed and expansive redevelopment, rehabilitation, and other public improvement activities for the future. This type of program is funded annually. One Neighborhood Development Program with four action areas is underway in the City of Milwaukee. These action areas are the Mt. Sinai Hospital area, WAICO No. 1 and No. 2 areas, and a small portion of Halyard Park, all in the Model Cities Neighborhood.

Area organizations are expected to assume certain responsibilities for implementing proposed plans. There are two project area committees in existence in the four action areas. One committee operates in the Halyard Park area, and the second operates in the Mt. Sinai Hospital area and the two WAICO areas. The future of these NDP areas is questionable, however, since HUD has given no promise for funds beyond June 1974.

Code Enforcement Program

Housing code adoption and enforcement by units of government is important to protect the health, safety, and welfare of citizens. Housing code standards generally represent the minimum conditions considered essential by public health experts and other authorities to maintain decent housing. The Housing Act of 1954 gave federal impetus to housing codes by requiring that such codes be adopted as a condition for obtaining a workable program certification. In 1965, the Section 117 Concentrated Code Enforcement program was enacted, and code enforcement was established as a partner with the more familiar clearance and redevelopment programs as a tool for improving grey areas. Since then, code enforcement programs have come to represent a means of protecting the health and safety of residents and occupants, with emphasis on stabilizing deteriorating but basically sound neighborhoods.

A code enforcement program was basically a program of financial assistance to help enforce codes and to help local governments bring public facilities up to code standards. The three main purposes of a code enforcement program

were to restore properties and their environment to adequate standard conditions, to prevent deterioration of urban areas, and to minimize the need for demolition and clearance in urban programs. The emphasis of the program is on service to the property owner. The program was administered by the U. S. Department of Housing and Urban Development. Any municipality, city, county, Indian tribe, or other political subdivision having statutory authority to enforce housing, building, and related codes may apply for financial assistance under this program.

Funds for grants under the code enforcement program were made from appropriations for slum clearance and urban renewal. In order to be eligible for financial assistance, an applicant had to qualify under the following regulations: 1) a workable program for community development, approved and certified by HUD, must be in effect, including a comprehensive system of codes regulating the minimum conditions of use, location, construction, alteration, repair, maintenance, demolition, and removal of private property which must have been adopted and enforced; 2) a satisfactory program for the provision of necessary public improvements within the area to be assisted by the code enforcement grant must be in existence; 3) relocation assistance to displaced families, individuals, and businesses must be provided; 4) property owners and tenants must be advised, where appropriate, of the availability of assistance under other programs, such as rehabilitation loans and grants; and 5) a certificate of code compliance must be issued to a property owner for each property found to meet code requirements.

The types of assistance available under the code enforcement program included grants to assist eligible public bodies in planning and carrying out concentrated code enforcement projects. The cost of demolition and of limited public improvements complementing private rehabilitation, such as streets, curbs, sidewalks, and street lighting, was also included. These grants could not exceed two-thirds of the cost of the project for communities with a population of over 50,000, or three-fourths of the project cost for communities with a population of 50,000 or less according to the U. S. Bureau of the Census. Assistance also included the entire cost of relocation payments; a direct 3 percent Section 312 rehabilitation loan to eligible property owners or tenants for financing the rehabilitation of property required to meet the housing codes; direct federal Section 115 rehabilitation grants to eligible families and individuals for repairs or improvements required to make their property conform to applicable code standards; or mortgage insurance for properties eligible under the Housing Act of 1949.

In the Region, the City of Milwaukee was the only unit of government that undertook federally assisted code enforcement programs. Two urban renewal projects that involved a certain amount of code enforcement were the Marquette Urban Renewal Program and the Midtown Conservation Program. In addition, two exclusively code enforcement programs were Code Enforcement Project No. 1 and Northside Code Enforcement Project No. 2.

Code Enforcement Project No. 1 was located in an 841-acre area west of 16th Street and north of North Avenue, and involved the inspection of 8,200 dwelling units. Of this total, 6,724 of the units had one or more code violations, but only about 50 percent had serious violations. At the conclusion of the project, 8,054 of the 8,200 dwelling units had been brought into compliance with the codes. The project has been officially completed, and was certified by the U. S. Department of Housing and Urban Development in February 1972.

Code Enforcement Project No. 2 ended in December 1973. Approximately 80 percent of the housing units in the area that violated codes were brought into compliance. It should be noted that the project operated for 20 months rather than the 36 months generally alloted for such programs because of suspension of federal funding. Although the code enforcement project is terminated, the occupants of the 20 percent of the housing units in code violation will still have to upgrade their units to comply with the code. Unfortunately, since no future federal funding is available for code enforcement, no loans or grants will be available for these households, and the availability of other funding sources is not known at the present time.

Model Cities Program

The Model Cities program concept was signed into law in 1966 by the late President Lyndon Johnson. The program was an effort to concentrate all available public and private resources of a community on one or more substandard neighborhoods for the purpose of improving the economic and social level of the people and the physical environment. It was designed to attack such urban problems as physical deterioration, housing, transportation, education, manpower, economic development, recreation and cultural activities, crime reduction, health and social services, and public assistance.

A model city is any municipality (city or county) which has received planning funds as the first step of a five-year program to improve physical, social, and economic conditions in a large, blighted neighborhood. The target area was usually known as the model neighborhood, and included up to 10 percent of the city population in large cities or as many as 15,000 persons in cities of less than 150,000 population. The model neighborhood was selected by the city, and was usually a residential area with a substantial portion of hard-core slums and a high concentration of low-income families.

The U. S. Department of Housing and Urban Development (HUD) was designated by law as the administering agency of the Model Cities program. It should be noted, however, that no single agency had sole responsibility for the program. All federal agencies which administer social, economic, and physical programs, such as the U. S. Departments of Agriculture; Commerce; Health, Education, and Welfare; Justice; Labor; Transportation; and the Office of Economic Opportunity, shared responsibility, as did state and local governments. It should also be noted that the Model Cities program was not supported completely by federal funds. A large portion of

the funds for the program came from new investment of private, local, and state funds; grants from existing federally aided programs; and better use of money already being spent in the model neighborhood.

Model Cities funds were also available in the form of supplemental grants, available only upon approval of the city's plan for improvement of its target area. They could be used as each city chose, but with special emphasis on high priority activities in the model neighborhood program not usually provided for by existing federal grant-in-aid programs.

The plans for the Model Cities program were made locally, and the programs and projects to implement the plans were carried out locally. The federal government's role was to finance the planning and to fund programs and projects that could not be funded locally because of the lack of financial resources in the community. No two Model Cities programs in the United States were alike, because no two communities are exactly alike and each program must be tailored to the individual community and its needs.

Within the Region, the City of Milwaukee was the only municipality which had established a Model Cities program. The city applied for a federal Model Cities planning grant and received federal approval to proceed with planning on April 1, 1969. On May 22, 1969, the Mayor of the City of Milwaukee officially executed a grant agreement with the Regional Office of the Department of Housing and Urban Development for $8.5 million for the first year action program. The second year action program was funded at $8.2 million. The program is funded on an annual basis. The area within the city designated as the Model Neighborhood is bounded generally by the East-West Freeway on the south; the Milwaukee Road tracks on the west; the proposed Park Freeway (to run just above W. North Avenue and parallel to Fond du Lac Avenue) on the north; and the North-South Freeway on the east. A connecting part of the area is bounded by the North-South Freeway, W. Locust Street, Holton Street, and W. Walnut Street.

The Model Neighborhood in the City of Milwaukee was characterized by problems of poverty, deprivation, physical blight, and deterioration. It was basically residential, containing about 90,000 people, or approximately 11 percent of the city's total population. Of this total, about 40 percent of the residents were black, with a large percent of the city's relatively small Puerto Rican and Spanish American population also residing in the Model Neighborhood.

The area was completely within the city's designated poverty target area, and contained more than 37 percent of the city's unemployed, more than 20 percent of the city's families with incomes less than $3,000, more than 40 percent of families receiving Aid to Dependent Children, more than 33 percent of the city's substandard dwelling units, more than 34 percent of those receiving Old Age Assistance, and more than 37 percent of the city's dilapidated dwelling units. In addition, community facilities were generally old, inadequate, and in need of replacement; and schools, parks, and shopping areas were inadequate to serve the present population. The housing supply had also been drastically reduced by expressway construction and other public projects.

A top priority cited by residents and city officials was the critical area of housing need. The three projects concerned with housing in the Model Cities Program were the WAICO project, which has received funding for the construction of Section 236 rental housing units; Project Home, which emphasized education and skills development relative to home improvements through demonstration classes and a tool loan library; and Home Improvement Loans, which provided loans of up to $3,000 at a 1 to 3 percent interest rate to owners to rehabilitate housing they occupied.

The future of the Model Cities Program, like other federal programs, is uncertain. The Model Cities Program in the City of Milwaukee has been federally funded for an additional $1.2 million beyond the end of the 1974 fiscal year. When this money has been utilized, the future of the Milwaukee Model Cities Program will be questionable. It would appear that one of three possibilities exists: the program may be federally refunded; Model Cities funds may be available from revenue sharing; or all future funding for the program may be discontinued.

SUMMARY

One of the specific objectives of the regional housing planning process is the formulation of recommendations concerning the role of government and the private sector in meeting housing needs within the Region. In order to better understand and assess the role of government in the area of housing in the past, and thereby provide a basis for considering its future functions in meeting true housing need within the Region, it was necessary to collect information related to activities of federal, state, and local units of government in the housing field.

Government activity in housing is not new in the Region. Various levels and agencies of government have been directly involved in providing housing since the early 1900s. In 1921, the City of Milwaukee and Milwaukee County in a joint venture each invested $100,000 to provide 105 living units, known as the Garden Homes Project, within the City of Milwaukee. Federal involvement in housing in the Region occurred as early as 1936, when a federally planned and developed "greenbelt community" known as Greendale was constructed and wholly owned by the Resettlement Administration of the U. S. Department of Agriculture. Milwaukee County and the City of Kenosha, during and immediately after the Second World War, were directly involved in the provision of 1,600 and 260 housing units, respectively, for war workers and returning veterans.

More recently, government activity in housing has been related to the provision of decent, safe, and sanitary housing for low- and moderate-income households through various government sponsored housing subsidy

programs, including the Section 235 homeownership program administered by the U. S. Department of Housing and Urban Development (HUD); the Section 502 homeownership program administered by the Farmers Home Administration; the Section 236 rental housing program, including both interest subsidy and rent supplement elements; the Section 221(d)(3) rent supplement program administered by HUD; and the public housing program administered by the Housing Assistance Administration through local housing authorities.

Because the Administration in January of 1973 placed a moratorium on these subsidy programs, as of December 1973 the amount and kind of federal involvement in the provision of decent, safe, and sanitary housing to low- and moderate-income households within the Region was unknown. A review and assessment of past housing subsidy programs is important, however, since it can serve as a measurement of the extent to which such programs have served and satisfied a portion of this Region's housing needs to date, and can provide a basis for rational consideration of the probable future role of government in meeting future housing needs of the Region.

Through June 1973, and discounting all earlier historic public housing efforts, 15,888 housing units located in 75 communities existed or were committed for construction under all housing subsidy programs within the Region. Of this total, almost 5,700, or 36 percent, were public housing units, and over 5,500, or 35 percent, were units authorized under the Section 235 housing subsidy program. Of the remaining units, over 3,200, or 20 percent, were authorized under the Section 236 subsidy program, and 1,289, or 8 percent, were authorized under the Section 221(d)(3) subsidy program. Only 136 units, or less than 1 percent of the 15,888 subsidized units, were authorized under the Section 502 housing program.

Over 11,800 units, or more than 74 percent of the total, were located in Milwaukee County. Other counties with a substantial number of housing units were Racine County, with over 1,800 units, and Kenosha County, with over 1,000 units. On a community basis, the City of Milwaukee, with over 11,000 subsidized housing units, or almost 70 percent of all such units in the Region, far exceeded the number of subsidized housing units in any other community. The Cities of Racine and Kenosha, with approximately 1,000 units each, were the only other communities in the Region with a large number of subsidized units.

While it is important to consider the number and distribution of subsidized housing units in the Region, it is also important to note the characteristics of households which utilized such programs. Data concerning households which utilized the programs indicated that household incomes were generally quite low, ranging from $1,900 for elderly households in public housing units to over $8,500 for households in new Section 235 units. Data related to source of income revealed that high percentages of elderly households residing in Section 236 interest subsidy, rent supplement, and public housing units were receiving social security or retirement benefits, while households receiving welfare payments were generally located in Section 235 existing units or public housing units.

Female-headed households ranged from a low of 3 percent in Section 502 new housing units to over 70 percent in existing Section 235, rent supplement, and public housing units. Household size was largest in the Section 235 and Section 502 homeownership programs, with an average of five to six members per household. The smaller households occurred in the rent supplement and elderly public housing units. Nonwhite households were nonexistent in the Section 502 housing program, but were as high as 74 percent in the Section 235 existing program. High percentages of nonwhite households also occurred in the Section 221(d)(3) rent supplement program and in public housing. The monthly payment required to reside in housing units occupied by low- and moderate-income households varied widely, but appeared to be quite low—$40 to $64—for households residing in rent supplement or public housing units, and higher—$98 to $148—for households residing in Section 235 and 502 homeownership programs or the Section 236 rental program. The federal assistance payment, which also varied considerably, ranged from a low of $53 to occupants of existing Section 235 units to $123 to occupants of Section 236 rent supplement units.

On the basis of the data presented in this chapter related to the number and distribution of housing units resulting from various subsidy programs, as well as the households which occupy such units, the following general conclusions can be drawn.

The Section 235 existing, rent supplement, and public housing programs predominantly serve the lower-income female-headed households, with a significant number of these households being nonwhite. The Section 235 existing program as well as the family public housing program generally serve larger households, a significant number of whose income source is welfare, while the rent supplement and elderly public housing programs generally serve smaller households whose income source is primarily social security. Most of the units under these programs are located in urban areas, primarily the Cities of Milwaukee, Racine, and Kenosha. The Section 235 new, Section 502, and Section 236 interest subsidy programs predominantly serve moderate-income families headed by white males whose income source is primarily wages. Units under these programs are located in both urban and rural areas of the Region.

It appears that within the Region to date, a variety of housing subsidy programs have been utilized to serve low- and moderate-income households of all sizes and ages in all areas of the Region. While the moratorium on government subsidy programs enacted in January 1973 will preclude a proper long-range assessment of the majority of such programs, the housing subsidy programs utilized in the Region to date have provided almost 16,000 decent, safe, and sanitary housing units to households in need. The households residing in such units have, for the most part, been satisfied with both the housing unit and the neighborhood in which the unit was located.

Chapter XII

REGIONAL HOUSING OBJECTIVES, PRINCIPLES, AND STANDARDS

INTRODUCTION

As previously noted, planning is a rational process for formulating and meeting objectives. The formulation of objectives is, therefore, an essential task which must be undertaken before plans can be prepared. The formulation of objectives for organizations whose functions are directed primarily at a single purpose or interest, and therefore are direct and clear-cut, is a relatively easy task. The seven-county Southeastern Wisconsin Planning Region is, however, composed of many diverse and often divergent and conflicting interests. Consequently, the formulation of objectives for the preparation of a comprehensive regional development plan or elements of such a plan is a very difficult task.

Soundly conceived regional development objectives should incorporate the combined knowledge of many people who are informed about the Region, and should be established by duly elected or appointed representatives legally assigned this task, rather than by planning technicians alone. This is particularly important because of the value system implications inherent in any set of development objectives. Participation by duly elected or appointed public officials and citizen leaders in the overall regional planning program is implicit in the composition of the Southeastern Wisconsin Regional Planning Commission. Moreover, the Commission very early recognized that the task of guiding the broad spectrum of related public and private development programs which would influence and be influenced by a comprehensive regional planning program would require an even broader opportunity for public officials and private interest groups to actively participate in the regional planning process.

In light of this recognition, the Commission has provided for the establishment of advisory committees to assist in the conduct of its regional planning programs. The Technical and Citizen Advisory Committee on Regional Housing Studies is one of many such advisory committees which have contributed to the formulation of objectives toward which the regional plan elements have been directed. Others include the Intergovernmental Coordinating Committee on Regional Land Use-Transportation Planning and the Technical Coordinating and Advisory Committee on Regional Land Use-Transportation Planning, which jointly contribute to the formulation of the land use and transportation development objectives, including objectives relating to the socioeconomic development of the Region; the Root, Fox, and Milwaukee River Watershed Committees, which contribute to the formulation of water use and water control facility objectives for their respective watersheds; the Technical Advisory Committee on Natural Resources and Environmental Design, which contributes to the formulation of environmental quality and natural resource conservation objectives; the Urban Planning District Citizens Advisory Committees for the Kenosha and Racine Urban Planning Districts, which contribute to the formulation of detailed urban development objectives, including housing objectives, for these two important urbanized areas in southeastern Wisconsin; the Technical Coordinating and Advisory Committee on Regional Sanitary Sewerage System Planning, which contributes to the formulation of sanitary sewerage system development objectives; the Technical and Citizen Advisory Committee on Regional Park, Outdoor Recreation, and Related Open Space Planning, which contributes to the formulation of park, recreation, and open space development objectives; the Technical Advisory Committee on Regional Library Planning, which contributes to the formulation of library system development objectives; and the Technical Coordinating and Advisory Committee on Regional Airport Planning, which contributes to the formulation of airport development objectives.

This chapter sets forth the relevant housing-related regional planning objectives and attendant principles and standards which have been adopted by the Commission under related regional planning programs after careful review as well as recommendations by the advisory committees concerned. In addition, a series of new objectives, principles, and standards related directly to the development of a regional housing plan is presented.

BASIC CONCEPTS AND DEFINITIONS

The term "objective" is subject to a wide range of interpretation and application, and is closely linked to other terms used in planning work which are also subject to a wide range of interpretation and application. The following definitions have, therefore, been adopted in order to provide a common frame of reference.

1. Objective: a goal or end toward the attainment of which plans and policies are directed.

2. Principle: a fundamental, primary, or generally accepted tenet used to support objectives and prepare standards and plans.

3. Standard: a criterion used as a basis of comparison to determine the adequacy of plan proposals to attain objectives.

4. Plan: a design which seeks to achieve the agreed-upon objectives.

5. Policy: a rule or course of action used to ensure plan implementation.

6. Program: a coordinated series of policies and actions to carry out a plan.

Although this chapter deals with only the first three of these terms, an understanding of the interrelationship of the foregoing definitions and the basic concepts which they represent is essential to the following discussion of development objectives, principles, and standards.

OBJECTIVES, PRINCIPLES, AND STANDARDS

Recognizing that various public and private interest groups within a region as large and diverse as southeastern Wisconsin may have varying and, at times, conflicting objectives; that many of these objectives are of a qualitative nature and, therefore, difficult to quantify; and that many objectives which may be held to be important by the various interest groups within the Region may not be related in a demonstrable manner to physical development plans, the Commission has identified two basic types of objectives. These are: general development objectives, which are by their very nature either qualitative or difficult to relate directly to development plans, and specific development objectives, which can be directly related to physical development plans and at least crudely quantified.

General Development Objectives

After careful review and recommendation by advisory and intergovernmental coordinating committees under the regional land use-transportation study, which was the first planning program conducted by the Commission designed to prepare regional plan elements, the Commission adopted nine general development objectives for the Region. These are:

1. Economic growth at a rate consistent with regional resources, and primary dependence on free enterprise in order to provide maximum employment opportunities for the expanding labor force of the Region.

2. A wide range of employment opportunities through a broad, diversified economic base.

3. Conservation and protection of desirable existing residential, commercial, industrial, and agricultural development in order to maintain desirable social and economic values; renewal of obsolete and deteriorating residential, commercial, and industrial areas in the rural as well as in the urban areas of the Region; and prevention of slums and blight.

4. A broad range of choice among housing designs, types, and costs, recognizing changing trends in age group composition, income, and family living habits.

5. An adequate and balanced level of community services and facilities.

6. An efficient and equitable allocation of fiscal resources within the public sector of the economy.

7. An attractive and healthful physical and social environment with ample opportunities for education, cultural activities, and outdoor recreation.

8. Protection, wise use, and sound development of the natural resource base.

9. Development of communities having distinctive individual character, based on physical conditions, historical factors, and local desires.

Specific Development Objectives

Within the framework established by the general development objectives, a secondary set of more specific development objectives can be postulated which will be directly relatable to physical development plans and can be at least crudely quantified. The quantification is facilitated by complementing each specific objective with a set of quantifiable planning standards which are, in turn, directly relatable to a planning principle which supports the chosen objective. Planning principles thus augment each specific objective by asserting its inherent validity as an objective.

These development objectives were, and are, proposed as goals which public policy within the Region should promote. They are all necessarily general, but nevertheless provide the broad framework within which regional planning can take place and the more specific goals of the various functional elements and component parts of the Region stated and pursued. The statement of these objectives is concerned entirely with ends and not with means, and the principal emphasis of these general development objectives is on those aspects of regional development which relate either to the expenditure of public funds or to the effects of government actions and regulations. With respect to these development objectives, it was deemed sufficient to arrive at a consensus among the concerned advisory committees and the Commission itself that plan proposals do not conflict with the objectives. Such a consensus represents the most practical evaluation of the ability of alternative plan proposals to meet the general development objectives.

In its planning efforts to date, the Commission, after careful review and recommendation by advisory and coordinating committees, has adopted nine specific regional land use development objectives, seven specific regional transportation system development objectives, seven specific regional transit system development objectives, four specific water control facility development objectives, and four specific sanitary sewerage system development objectives. These specific development objectives, together with their supporting principles and standards, are set forth in full in previous Commission planning reports. Certain land use development objectives which are particularly relevant to housing planning and development are listed herein for convenience.

Specific Land Use Development Objectives

The specific objectives adopted for the regional land use plan are largely self-descriptive and are concerned

primarily with spatial allocation to and distribution of the various land uses, land use compatibility, resource protection, and accessibility. The following four of the eight specific objectives adopted for the regional land use plan are particularly relevant to housing development within the Southeastern Wisconsin Region:

1. A balanced allocation of space to the various land use categories which meets the social, physical, and economic needs of the regional population.
2. A spatial distribution of the various land uses which will result in a compatible arrangement of land uses.
3. A spatial distribution of the various land uses which will result in the protection, wise use, and development of the natural resources of the Region.
4. A spatial distribution of the various land uses which is properly related to the supporting transportation, utility, and community facility systems in order to assure the economical provision of transportation, utility, and public facility services.

Regional Housing Objectives

Although housing may be thought of only as shelter, housing more broadly defined includes not only the structure or housing unit but also the immediately surrounding environment within the lot or site on which the structure is located; the surrounding neighborhood; and the relevant social and economic functions provided by the community and the Region such as employment opportunities and needed public and private services, including retail services, health care, recreation facilities, and opportunities for spiritual and cultural enrichment. It is apparent, therefore, that any comprehensive study of housing should include consideration of many factors in addition to the housing unit itself. Although a comprehensive areawide study of housing must address the total housing requirements of all households within the Region, the primary emphasis of such a study, as a public study, should be directed to identifying and meeting true housing needs.[1]

The housing objectives, principles, and standards recommended herein represent, therefore, an attempt to provide both the scope required for a comprehensive approach to regional housing problems and the depth required to enable the quantification of existing and probable future true housing need and the preparation of alternative housing plans to meet this need. The following nine regional housing objectives were adopted by the Technical and Citizen Advisory Committee on Regional Housing Studies after careful review and comment:

1. The provision of decent, safe, and sanitary housing for all residents of the Region.
2. The provision of an adequate stock of decent, safe, and sanitary housing to meet the Region's total housing requirement and, as components of that requirement, the effective market demand and true housing need.
3. The maintenance, preservation, and, where necessary, rehabilitation of the existing stock of housing.
4. The relocation of persons to be displaced by publicly related development programs to housing which is not only decent, safe, and sanitary but is of at least equal quality, and, if necessary, the public provision of the replacement housing.
5. The provision of housing which is designed to be functionally suitable for the occupants residing therein.
6. The provision of adequate locational choice of housing.
7. The provision of aesthetically pleasing housing properly sited and designed to maintain or improve the overall character and appearance of the neighborhood in which it is located.
8. The provision of housing within a suitable physical environment and so sited and designed to comprise an integral part of the neighborhood and the community in which it is located.
9. The efficient and economical satisfaction of housing need, meeting all other objectives as the lowest possible cost.

Principles and Standards

Complementing each of the foregoing specific housing objectives are a set of housing principles and standards set forth in Table 148. Each standard is directly relatable to the housing principle and objective, and serves to facilitate

[1] *See footnote 1, Chapter 1, page 5.*

Table 148

REGIONAL HOUSING OBJECTIVES, PRINCIPLES, AND STANDARDS

OBJECTIVE NO. 1

The provision of decent, safe, and sanitary housing for all residents of the Region.

PRINCIPLE (SUPPORTING REASON)

Housing fulfills one of man's basic needs; that is, the need for shelter for protection against the elements. The provision of decent, safe, and sanitary housing thus satisfies certain basic physiological and psychological needs, enhances physical health, and provides a sense of satisfaction and physical well-being which produces overall benefits to society in terms of a more productive, healthier, happier citizenry. Adequately sized housing which contains the necessary total floor area to assure decent living, sleeping, cooking, and dining accommodations; sufficient storage area; and adequate space for privacy provides all household members with the opportunities to carry out basic family functions and will assist in their normal growth and maturation and provide a sense of mental well-being which can help to maintain stability and order in a dynamic society.

STANDARDS

1. Minimum total improved floor area[a] and sleeping area required for decent household living accommodations should be provided as follows:

Number of Persons	Minimum		Total Minimum Square Feet of Improved Floor Area
	Number of Bedrooms[c]	Square Feet of Sleeping Area	
1	0	100	250
2	1	120	420
3	2	200	550
4	2	200	700
5	3	280	830
6	3	280	980
7	4	380	1,130
8	4	380	1,230
9[b]	5	480	1,330

2. Housing should be constructed so as to provide maximum protection from the elements.[d]

   a. Housing units should be properly weather-stripped and insulated.

   b. Housing units should be equipped with heating facilities adequate for healthful and comfortable living.

3. Housing units should be constructed so as to minimize danger to their occupants due to deficiencies in the basic structural and mechanical components.[d]

   a. Sound construction techniques based upon accepted engineering standards and quality workmanship should be utilized.

   b. Building materials should be structurally adequate and resist the damaging effects of weather, decay, and corrosion; fire; and insects and other pests as well as the abuse which may result from wear due to normal occupancy.

   c. Housing units intended for permanent year-round long-term occupancy should be designed and constructed so that the basic structural components have, with timely and proper maintenance, an indefinite physical life and so that the electrical and mechanical equipment have, with proper maintenance and component replacement, a minimum physical life of 20 years.

   d. The electrical service and accompanying system of wiring, equipment, and appurtenances should be properly installed so as to safely supply electrical energy adequate for efficient operation of essential and appropriate appliances and equipment.

   e. Adequate natural and artificial illumination should be provided.

   f. Security devices in the form of sturdy locks for all exterior windows and doors should be provided.

4. Housing units should be constructed to provide adequate protection from infestations of insects, vermin, and rodents.[d]

5. Housing units should contain the following minimum sanitary facilities and services within the unit:[d]

   a. A ready supply of safe and palatable water.

      1) Housing located in, or to be located in, existing areas of medium-[e] or high-density[f] urban development or areas proposed for such development in the regional land use plan should be served by centralized public water supply facilities.

      2) Housing located in, or to be located in, existing areas of low-density[g] urban development or in areas proposed for such development in the regional land use plan where such areas are contiguous to areas of medium- and high-density urban development should be served by centralized public water supply facilities.

      3) Housing located in basically rural areas not serviced by a centralized public water supply facility should be served by individual wells constructed to conform with state and local plumbing and health codes.

   b. Adequate wastewater disposal and treatment facilities.

1) Housing located in or to be located in existing areas of medium- or high-density urban development or in areas proposed for such development in the regional land use plan should be served by centralized sanitary sewerage facilities.

2) Housing located in or to be located in existing areas of low-density urban development or in areas proposed for such development in the regional land use plan where such areas are contiguous to areas of medium- and high-density urban development should be served by centralized sanitary sewerage facilities. Where noncontiguous low-density development already exists and the underlying soil resource base will not properly support onsite soil absorption waste disposal systems, new housing should be allowed only if centralized sanitary sewer service is provided.

c. Adequate solid waste storage, disposal, and/or removal facilities.

1) Facilities should be available in, or adjacent to, the housing unit for storage and/or disposal of garbage and other solid wastes.

2) Solid waste should be removed at least once each week by means of a private or publicly operated collection program.

d. Adequate storm water removal facilities.

Surface and subsurface water which enters the housing unit through basement or foundation drain tile should be collected in a sump pit and mechanically pumped to the exterior of the unit and channeled to an appropriate storm water drainage facility such as a gutter, road ditch, or piped storm water drain.

e. Direct natural ventilation should be provided by means of an operable window to all sleeping rooms, and natural or mechanical ventilation should be provided to all other habitable rooms.

f. Adequate food preparation facilities.

The kitchen or other food preparation facilities should include a sink connected to an adequate water supply and adequate wastewater disposal system; provision for a permanently connected stove; a refrigerator; and adequate space for storage of food, utensils, and dishes.

g. Adequate bathing and toilet facilities.

A separately enclosed bathroom facility should include a permanently installed flush toilet connected to an adequate wastewater disposal system, lavatory/sink, and bathtub or shower with hot and cold running water under pressure.

h. Laundry facilities.

Laundry facilities should include a laundry tray with adequate plumbing connections properly located within the housing structure.

OBJECTIVE NO. 2

The provision of an adequate stock of decent, safe, and sanitary housing to meet the Region's total housing requirement and, as components of that requirement, the effective market demand and true housing need.

PRINCIPLE (SUPPORTING REASON)

Increases in the total number of households within the Region as a result of new household formations and net in-migration of additional households as well as changing size and composition of existing households require a concomitant increase in the supply of housing units.

STANDARDS

1. The supply of vacant and available housing units should be sufficient to maintain and facilitate ready housing consumer turnover. Rental and homeowner vacancy rates at the SMSA or county level and, if possible, within local housing analysis areas[h] should be maintained at a minimum of 4 percent and a maximum of 6 percent for rental units and a minimum of 1 percent and a maximum of 2 percent for homeowner units over a full range of housing types, sizes, and costs.

2. The supply of sound housing units should be provided through the working of the private housing sector to the maximum extent possible, with continued assistance, incentives, and cooperation by various federal, state, and local governmental agencies rendered as necessary.

PRINCIPLE (SUPPORTING REASON)

Housing is not a luxury; it is a necessity and, as such, should be available to all persons within the Region who do not have the sufficient income or assets to provide decent, safe, and sanitary housing for themselves.

STANDARDS

1. Households should not have to pay more than 30 percent of their adjusted gross income[i] in order to secure decent, safe, and sanitary housing, including, in addition to the contract rent payment or the payment of the principal, interest, and taxes, the necessary insurance, utility, and other attendant costs.

2. Alternative housing plans formulated to meet the Region's true housing needs should be designed to satisfy the housing preferences of households in housing need to the maximum extent possible.

OBJECTIVE NO. 3

The maintenance, preservation, and, where necessary, rehabilitation of the existing stock of housing.

PRINCIPLE (SUPPORTING REASON)

Housing is remarkably durable, and with adequate maintenance, most dwellings will deteriorate rather slowly with age. Important to the establishment of an adequate supply of sound housing, therefore, is the continual need for preventive maintenance of basically sound housing units and early rehabilitation of deteriorating housing units.

STANDARDS

1. Basically sound housing units which have only minor defects[j] should be upgraded and maintained in sound condition to the maximum extent possible.

2. Basically sound housing units which have major defects[k] should be repaired and rehabilitated and measures taken to eliminate or minimize future deterioration.

3. Housing units which have deteriorated to the point of becoming a health or safety hazard for their occupants and which are not economically feasible to rehabilitate should be removed and replaced by decent, safe, and sanitary housing units.

OBJECTIVE NO. 4

The relocation of persons to be displaced by publicly related development programs to housing which is not only decent, safe, and sanitary but is of at least equal quality and, if necessary, the public provision of the replacement housing.

PRINCIPLE (SUPPORTING REASON)

Publicly instituted actions for various types of development programs, which include but are not limited to school and freeway construction; park development; and street widening, urban renewal, and code enforcement projects which cause housing units to be removed from the total housing stock, should proceed only after assurance has been made that the persons being displaced can and will be adequately provided with suitable alternative housing and necessary services to ease the transitional move to their next place of residence. At times, the public provision of replacement housing may be necessary in order to provide these assurances and/or to assure that the demolition of units does not create or compound a shortage of the housing supply.

STANDARDS

1. Projects or activities necessitating displacement of people from their housing units should be planned and carried out so the total number of persons being displaced is minimized.

2. Persons who are displaced should be relocated to adequate, decent, safe, and sanitary housing within a suitable living environment.

3. The relocation program should be carried out in a manner which will promote maximum housing choice and assure equal treatment of all eligible relocatees.

4. Relocation assistance should meet the needs of those persons being displaced and should, in addition to rehousing, include social service counseling, guidance, and financial and technical assistance, where needed.

5. Replacement housing should be publicly provided whenever there is a deficit in the housing supply for one or more categories of housing sizes and costs. It should be considered to be the ultimate responsibility of the displacing agency to provide replacement housing, the cost of which, if any, should be viewed as a legitimate part of the related total project cost.

OBJECTIVE NO. 5

The provision of housing which is designed to be functionally suitable for the occupants residing therein.

PRINCIPLE (SUPPORTING REASON)

Housing unit layout and design will strongly influence a household's satisfaction or dissatisfaction with the unit it occupies. Good housing design will provide for the economical, efficient, and practical distribution of interior space and include necessary appurtenances to afford maximum living comfort, safety, convenience, and living flexibility to its occupants.

STANDARDS

1. The interior design should facilitate easy, noncongested access from room to room throughout the structure.

2. Doors should be located to facilitate circulation and be installed so they can be operated without interfering with each other.

3. Windows should be designed and located so as to maximize the benefits received through natural ventilation and illumination and take advantage of views of the exterior landscape.[d]

4. Storage space should be provided in areas where it will be utilized and be flexible enough to accommodate varying household needs.[d]

5. Stairs should be designed and arranged to provide safety in ascent and descent and to assure adequate head room and space for passage of people, furniture, and equipment.[d]

OBJECTIVE NO. 6

The provision of adequate locational choice of housing.

PRINCIPLE (SUPPORTING REASON)

The Southeast Wisconsin Region provides a wide variety of employment, educational, cultural, and recreational facilities. Adequate choice in the size, cost, and location of housing units will assure equal opportunity for all households to utilize and enjoy these facilities. Geographic distribution and price level variety of housing units can also assist in reducing economic and racial imbalances and equalize fiscal disparities and services differences among communities within the Region.

STANDARD

Vacant and available[l] housing units within local housing analysis areas should be geographically well distributed and include a full range of housing by type, size, and cost.

OBJECTIVE NO. 7

The provision of aesthetically pleasing housing properly sited and designed to maintain or improve the overall character and appearance of the neighborhood in which it is located.

PRINCIPLE (SUPPORTING REASON)

A properly designed and sited housing unit, in addition to providing satisfaction, comfort, and pleasure to its occupants, enhances the desirability of residential neighborhoods and may assist in maintaining neighborhood stability and property values. Good design will also assist in prolonging the physical and economic life of the housing unit, thereby ultimately benefiting both the individual property owner and society as a whole through greater utilization of the existing stock of housing.

STANDARDS

1. The exterior of the housing unit should, to the maximum extent possible, be attractively and effectively related to the size, shape, and topography of the lot.

2. The housing unit should be oriented on the site to maximize the benefits resulting from pleasant views, prevailing winds, direction of sun, and other amenities which tend to enhance the desirability of the unit and increase the comfort and pleasure of the occupants.

3. The housing unit site area should be properly graded to divert water away from buildings to a suitable storm water drainage facility, prevent standing water and soil saturation detrimental to structures and lot use, preserve desirable site features, and provide grades for safe and convenient access to and around buildings and lot for their use and maintenance.[d]

4. Lawns and ground cover should be provided to prevent erosion of swales and slopes and to make yard space usable.[d]

5. Safe, convenient, all-weather vehicular access should be provided in reasonable proximity to the housing unit, with an onsite area for the parking of at least one automobile per housing unit.[d]

6. Sufficient outdoor space should be provided on an individual household or shared basis for play space for small children, gardening, or other outdoor activities; storage of refuse awaiting removal; and storage of lawn and garden tools or other household implements or toys.[d]

7. Outdoor space, especially play space for small children, should be located with proper concern for access and visibility from the interior of the housing unit.

OBJECTIVE NO. 8

The provision of housing within a suitable physical environment and so sited and designed to comprise an integral part of the neighborhood and the community in which it is located.

PRINCIPLE (SUPPORTING REASON)

Housing should be properly located in relation to the underlying and sustaining natural resource base so as to not only enhance and preserve irreplaceable natural resources but also to minimize physical danger, financial losses, and personal aggravation to housing occupants which could occur as a result of improper location of housing units related to certain elements of the natural resource base.

STANDARDS

1. Residential development served by centralized sanitary sewerage facilities or utilizing onsite soil absorption sewage disposal systems should be prohibited on soils which have severe or very severe limitations for such development.[m]

2. Residential development should be prohibited on prime agricultural lands,[n] except those prime agricultural lands proposed to be converted to urban use, as indicated in the Southeastern Wisconsin Regional Planning Commission's adopted 1990 land use plan.

3. Residential development within primary environmental corridors[o] should be discouraged, but, if permitted, should be limited to densities equivalent to a lot area of five acres or greater in size per dwelling unit provided the construction does not alter or destroy the environmental value of the corridor.

4. Residential development within floodlands should be prohibited.

5. Residential development in shoreland areas should be minimized and, when allowed, should conform to the standards published in Chapter NR 115 of the Wisconsin Administrative Code.

PRINCIPLE (SUPPORTING REASON)

Residential areas developed in planned neighborhood units can assist in stabilizing community property values, preserving residential amenities, and promoting efficiency in the provision of public and community service facilities; can best provide a desirable environment for family life; and can provide the population with improved levels of safety and convenience.

STANDARDS

1. Residential neighborhood units should be physically self-contained within clearly defined and relatively permanent isolating boundaries, such as arterial streets and highways, major park and open-space reservations, or significant natural features, such as rivers, streams, or hills.

2. Residential neighborhood units should contain enough area to provide housing for the population served by one elementary school and one neighborhood park; an internal street system which discourages penetration of the unit by through traffic; and all of the community and commercial facilities necessary to meet the day-to-day living requirements of the family within the immediate vicinity of its dwelling unit. To meet these requirements at varied residential densities, the following guidelines should be approximated:

Land Use	Low-Density Development (2 Miles Square)	Medium-Density Development (1 Mile Square)	High-Density Development (1/2 Mile Square)
	Percent of Area	Percent of Area	Percent of Area
Residential	80.0	71.0	66.0
Streets and Utilities	16.5	23.0	25.0
Parks and Playgrounds	1.5	2.5	3.5
Public Elementary School	0.5	1.5	2.5
Other Governmental and Institutional	1.0	1.0	1.5
Commercial	0.5	1.0	1.5
Total	100.0	100.0	100.0

PRINCIPLE (SUPPORTING REASON)

Households require a myriad of goods and supportive neighborhood and community services and, therefore, should be properly located to afford convenient access to existing and proposed commercial facilities, educational facilities, health care facilities, transportation facilities, recreation facilities, and employment opportunities.

STANDARDS

The following maximum walking distance and travel time standards for supportive neighborhood and community services should be met:

Facility	Maximum One Way Walking Distance (Miles)			Maximum One Way Travel Time (Minutes)	
	Neighborhood Density			Automobile At 25 MPH	Transit Facility[p] Total Elapsed Time[q]
	Low	Medium	High		
Shopping Facilities					
Local Retail and Service Center[r]	1 1/4	3/4	1/3	3	--
Community Retail and Service Center[s]	--	1 1/2	1	15	20
Major Retail and Service Center[t]	--	--	--	20	30
Industrial Employment Facilities					
Community Industrial Center[u]	--	--	--	15	20
Major Industrial Center[v]	--	--	--	20	30
Local Transit Facilities	--	3/4	1/3	--	--
Educational Facilities					
Elementary School (K-6)	1 1/4	3/4	1/3	--	--
Junior High (7-9)	--	1 1/2	1	15	20
Senior High (10-12)	--	--	--	20	30
Vocational and Higher Education	--	--	--	30	40
Outdoor Recreational Facilities					
Sub-Neighborhood[w]	--	1/4	1/8	--	--
Local Recreation[x]	1 1/4	3/4	1/3	--	--
Community Recreation[y]	--	--	--	20	30
Major Recreation[z]	--	--	--	30	40
Health Care Facilities					
Community Hospital	--	--	--	20	30
Major Medical Center[aa]	--	--	--	30	40
Other Supportive Community Services and Facilities					
Day Care Center[bb]	--	1 1/2	1	15	20

PRINCIPLE (SUPPORTING REASON)

The health and comfort of housing unit occupants are prime concerns in determining a suitable physical living environment. To this end, housing units should not be located within an environment which includes existing or potential objectionable odors, excessive noise, or dangerous atmospheric contaminants.

STANDARDS

1. The development of residential housing units adjacent to, or in the vicinity of, various nonresidential land uses which release malodorous or unhealthful substances into ambient air should be minimized.

2. The development of residential housing units in areas where noise levels exceed the guidelines established by the U. S. Department of Housing and Urban Development specified in Report No. 2176, "Noise Assessment Guidelines," August 1971, should be minimized.

3. The development of residential housing units in areas which do not meet the ambient air quality standards as published in Section NR 155.03 of the Wisconsin Administrative Code should be minimized.

OBJECTIVE NO. 9

The efficient and economical satisfaction of housing need meeting all other objectives at the lowest possible cost.

PRINCIPLE (SUPPORTING REASON)

The total public financial resources of the Region are limited, and any undue expenditures to meet housing need must occur at the expense of other public or private investment. Private financial resources are also limited, and the cost of housing for all citizens of the Region should be minimized.

STANDARD

The sum of all expenditures required to meet housing need should be minimized.

[a] *Minimum total improved floor area includes total usable floor area, including bathrooms, hallways within the living unit, and closets, but excludes basements, garages, and attics except those portions of same which are improved and could be utilized as year-round living space.*

[b] *For one additional person, add 100 square feet to total minimum square feet of improved floor area. For each two additional persons, add one bedroom or 100 square feet of sleeping area and 200 square feet of improved floor area.*

[c] *The standard of no more than two persons per bedroom is appropriate for regional analysis purposes. Ideally, however, assuming detailed data were available, each household's bedroom needs should be evaluated on an individual basis, and the number of bedrooms required for each household should be allocated in the following order:*

1. *One bedroom to each married couple.*
2. *One bedroom to other single persons 21 years of age or older.*
3. *One bedroom to each pair of persons age 10 to 20 of the same sex.*
4. *One bedroom to an individual age 10 to 20 paired with an individual under 10 of the same sex.*

   (If no pairing of this kind is possible, individual age 10 to 20 should have separate bedroom.)
5. *One bedroom to each remaining pair of individuals under 10 years of age. (Any remaining child under 10 should have a separate bedroom.)*

[d] *There is no singular clear-cut set of universally accepted quantifiable criteria available to substantiate this standard, but for purposes of this report, the relevant data included in FHA document No. 300, "Minimum Property Standards for One- and Two-Family Living Units," and document No. 2600, "Minimum Property Standards for Multi-Family Housing," can be utilized as a guide to substantiate and quantify the standard herein presented.*

[e] *Medium density is defined as 7.3-22.8 persons and 2.3-6.9 dwelling units per net residential acre.*

[f] *High density is defined as 22.9-59.2 persons and 7.0-17.9 dwelling units per net residential acre.*

[g] *Low density is defined as 0.5-7.2 persons and 0.2-2.2 dwelling units per net residential acre.*

[h] *Local housing analysis areas are defined as groups of minor civil divisions, individual communities, or subcommunity areas where there is an assumed existence of a "community of interest" that can be marshalled in the establishment of subregional planning programs.*

[i] *Adjusted gross income equals gross annual income from all sources before taxes and withholding minus 5 percent of such income as allowance in lieu of amounts withheld for such items as social security and civil service retirement minus $300 for each minor dependent.*

[j] *Minor defects are those defects which do not impair the livability of the housing unit nor accelerate the physical deterioration of the structure, e.g., peeling paint, loose gutter or downspout, or cracked window.*

[k] *Major defects are those defects which can impair the livability of the housing unit and may accelerate the physical deterioration of the structure, e.g., large areas of exposed unpainted or unprotected wood, cracks in walls, or missing roof shingles or siding materials.*

[l] *Based upon homeowner and renter vacancy rate standards established in Objective No. 2, Principle No. 1, Standard No. 1.*

[m] *See Table 8 of SEWRPC Planning Report No. 8, Soils of Southeastern Wisconsin.*

[n] *Primary agricultural areas, as delineated in SEWRPC Planning Report No. 7, The Land Use-Transportation Study, Volume 3, Recommended Regional Land Use and Transportation Plans—1990, are defined as those areas which: a) contain soil rated in the regional detailed operational soil survey as very good or good for agriculture, and b) occur in concentrated areas over five square miles in extent which have been designated as exceptionally good for agricultural production by agricultural specialists.*

[o] *Primary environmental corridors, as delineated in SEWRPC Planning Report No. 7, Volume 3, are defined as linear patterns of land which encompass a combination of major elements of the sustaining natural resource base which are essential to maintenance of both the ecological balance and natural beauty of the Region. Resource elements of the corridors include lakes, rivers, and streams, together with their natural floodplains; wetlands; forests and woodlands; wildlife habitat areas; rough topography; significant geological formations; and wet or poorly drained soils.*

[p] *Transit facilities consist of four types of facilities as follows:*

Type I, or interurban, transit facilities are defined as facilities extending beyond a single urban area, as delineated on the regional land use plan, providing public passenger service over established routes on a regularly scheduled basis.

Type II, or intraurban, rapid or modified rapid transit facilities are defined as facilities providing public passenger service over established routes within a single urban area on a regularly scheduled basis with maximum headways of one hour during the daylight hours (6:00 a.m. to 8:00 p.m.), by transit vehicles operating in a modified rapid transit service over freeways or in true rapid transit service over an exclusive right-of-way, or a combination thereof, for at least 50 percent of the trip distance.

Type III, or local intraurban, transit facilities shall be defined as those providing public passenger service over established routes within a single urban area on a regularly scheduled basis with maximum headways of one hour by transit vehicles operating over surface streets.

Type IV, or intraurban center system, transit facilities shall be defined as those providing shuttle or loop service within an urban center or other extensive major land use complexes by transit vehicles operating either over local surface streets or special transitways.

[q] *Overall transit travel time is defined as the summation of the following travel time components:*

1. *Time to reach vehicle boarding point: the average length of time it takes all tripmakers from a given service area to travel from the points of trip origin to the transit vehicle boarding point.*

2. *Time waiting for transit vehicle: the average length of time spent by the tripmakers waiting for the transit vehicle at the transit boarding point.*

3. *Transit vehicle travel time: the average length of time spent by the tripmakers aboard the transit vehicle, including initial embarkation time, all stop times, and all running times.*

4. *Transfer delay time: the length of time spent by the tripmakers in transferring from one transit vehicle to another.*

5. *Time to reach final destination: the length of time spent by the tripmakers to travel from the transit vehicle debarkation point to the final trip destination point.*

[r] *A local retail and service center shall be defined as those facilities which provide the day-to-day retail and service necessities and conveniences for one residential neighborhood with a population of 4,000-8,000 persons.*

[s] *A community retail and service center shall be defined as an existing or officially designated concentration of retail and service uses having a gross site ranging in size from 20 to 60 acres, and intended to serve the retail and service use needs of a community of 10,000 to 25,000 population consisting of two to five residential neighborhoods.*

[t] *A major retail and service center shall be defined as an existing or officially designated concentration of retail and service uses having a minimum gross site of 60 acres and intended to serve areawide retail and service needs for a multi-community population ranging from 75,000 to 150,000 persons located within a 10-mile radius. The term "officially designated," as applied to concentrations of various land uses, shall be defined as an area shown on adopted regional or local land use plans or recognized on local zoning district maps.*

[u] *A community industrial center shall be defined as an existing or officially designated concentration of manufacturing, wholesaling, and related use establishments having a gross site area ranging in size from 20 to 640 acres or providing employment for 300 to 5,000 persons.*

[v] *A major industrial center shall be defined as an existing or officially designated concentration of manufacturing, wholesaling, and related use establishments having a minimum gross site area of 640 acres or providing employment for over 5,000 persons.*

[w] *A sub-neighborhood recreation area shall be defined as an outdoor recreation area which provides the necessary outdoor recreation facilities for a sub-neighborhood population of 1,000-2,000 persons and includes such facilities as tot lots and small parks.*

[x] *A local recreation area shall be defined as the outdoor recreation area which provides the necessary outdoor recreation facilities for one residential neighborhood with a population of 4,000-8,000 persons.*

[y] *A community recreation area shall be defined as an outdoor recreation area having a broad range of recreational facilities on one site having a gross size ranging from 30 to 250 acres, and intended to serve the basic outdoor recreation needs of a surrounding community of 10,000 to 25,000 population consisting of two to five residential neighborhoods.*

[z] *A major recreation area shall be defined as an outdoor recreation area having a broad range of recreational facilities on one site having a minimum gross size of 250 acres, and intended to serve the outdoor recreation needs of a multi-community population.*

[aa] *A major medical center shall be defined as an existing or officially designated complex of buildings and services for the provision of the highest level of health services within a region, including one or more inpatient facilities; one or more outpatient facilities; facilities for specialized services, such as mental health and long-term care and rehabilitation; educational facilities; clinical research facilities; laboratory research facilities; and living quarters.*

[bb] *A day care center shall be defined as a facility established for the protection, care, and supervision of children during a 24-hour day at a fee commensurate with a household's ability to pay.*

Source: SEWRPC.

quantitative application of the housing objective in the formulation and evaluation of alternative housing plans, policies, and programs. The housing principle supports each specific objective by asserting its validity. In the preparation of the housing principles, a careful search of the housing literature unfortunately failed to reveal a documented set of comprehensive housing principles which were universally accepted as basic tenets on which to base a housing planning program. It was necessary, therefore, to adapt comprehensive planning principles to the regional housing study effort, and then draw upon the collective experience of the members of the Technical and Citizen Advisory Committee on Regional Housing Studies to formulate additional principles to augment those adopted from other planning areas.

The housing standards herein described fall into two groups: comparative and absolute. The comparative standards, because of their very nature, can be applied only through a comparison of alternative housing proposals and practices. An example of such a standard is that housing located in or to be located in existing areas of medium or high density urban development, or in areas proposed for such development in the regional land use plan, should be served by centralized sanitary sewerage facilities. No desirable values can be realistically assigned to this standard. Its application, therefore, must be a comparative one in which the locational elements of alternative housing need plans are compared and a decision made as to which plan best meets this standard. Absolute standards can be applied individually to each housing recommendation, since they are expressed in terms of maximum, minimum, or desirable values. An example is the standard of a minimum of 700 square feet of improved floor area for a family of four.

The standards set forth herein should serve as aids not only in the formulation and evaluation of the forthcoming recommendations of the regional housing study, but also in the development, test, and evaluation of housing need plans and in the development of policies and programs to implement the housing recommendations.

OVERRIDING CONSIDERATIONS

In the application of housing development objectives, principles, and standards in the preparation, test, and evaluation of the various housing need plans, several overriding considerations must be recognized. First, it must be recognized that it is unlikely that any one plan proposal will meet all the standards completely; and the extent to which each standard is met, exceeded, or violated must serve as a measure of the ability of each alternative plan proposal to achieve the specific objectives which the given standard complements. Second, it must be recognized that certain objectives and standards may be in conflict and require resolution through adjustments, and that meaningful plan evaluation can only take place through a comprehensive assessment of each of the alternative plans against all of the objectives and supporting standards. Third, it must be recognized that the standards

must be very judiciously applied in partially or fully developed residential areas, since such standards may at once require desirable, but not quickly attainable, improvements in the design, location, and quality of the existing housing stock. In areas where these improvements are necessary, the standards may indicate that long-range programs are in order to upgrade the stock of housing to the levels specified by the standards listed herein. Finally, it must be recognized that implicit in application of the objectives, principles, and standards is the assumption that they apply to all households throughout the Region regardless of race, color, religion, national origin, or economic status, and that all alternative housing need plan proposals will not only be designed but will be implemented in full compliance with the spirit as well as the letter of the national fair housing law.

In an effort to provide a comprehensive approach to regional housing problems, the objectives, principles, and standards presented in Table 148 are, of necessity, broad in scope. Objective No. 1, for instance, attempts to define quantitatively—insofar as possible—the term "decent, safe, and sanitary housing," while Objective No. 2, in addition to facilitating the determination of an "adequate housing stock," seeks to identify standards which will quantify those households in "true housing need." Objective No. 3 deals with the preservation of the existing housing stock while No. 4 relates to the problem of household relocation. Objectives Nos. 5, 6, 7, and 8 cover a variety of housing topics, from proper housing design and locational choice to what constitutes a suitable environment at the individual housing site, the neighborhood, or the community level. As indicated in Objective No. 9, the satisfaction of true housing needs must be consistent with all other objectives and attained at the lowest possible cost.

It should be noted that the objectives and standards presented herein are intended to pertain primarily to housing designed for permanent, year-round occupancy. Some of the objectives and standards may, however, incidently apply to temporary or seasonal housing units. It should also be noted that the objectives and standards are general and, as such, are intended to relate primarily to the traditional family household. It must be recognized that the housing requirements of even the traditional family will change over time with changes in the life cycle of the family. The standards presented herein must, therefore, be judiciously applied.

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Chapter XIII

EXISTING (1970) HOUSING NEED

INTRODUCTION

Similar to the allocation of other scarce commodities in a free market system, the supply of housing, both new and existing, is allocated to consumers within the housing market primarily on the basis of their ability and willingness to pay. The obvious constraint on the quantity and quality of housing which a household can obtain is the household ability to pay, as reflected in the household income and wealth, relative to the cost of available housing. In fact, for a majority of households in the Region, acquisition of decent, safe, and sanitary housing is not impeded by lack of economic means. Indeed, it may be assumed that for a majority of households the effective demand for housing, which relates to that quantity of decent, safe, and sanitary housing for which people are able and willing to pay without undue economic hardship, is satisfied in the housing market, at least in the long-run situation. Households with insufficient economic means, however, may have to pay a disproportionate share of their income to reside in decent, safe, and sanitary housing. Households unable to pay the increased costs required for such housing might find their only other housing alternatives are lower cost, overcrowded, substandard housing units. These households—that is, households which either must pay a disproportionate share of their income in order to reside in decent, safe, and sanitary housing or, because of insufficient economic means, must reside in overcrowded or substandard housing units—are defined herein as households in true "housing need."

Quantification of housing need in terms of the economic means of the households only, however, represents an oversimplification of the existing housing problem. In this regard, it is likely that various noneconomic constraints within the housing market limit the availability of housing for certain households. For example, racial prejudice and discrimination may limit the availability of housing for black and other minority households to the extent that such households must occupy substandard or overcrowded housing even though they may have sufficient income to obtain alternative decent, safe, and sanitary housing in the housing market. Similarly, discrimination against large families may prevent their acquisition of adequately sized housing even when they may have sufficient ability to pay for such housing. These households—that is, households which, because of noneconomic constraints within the housing market, cannot secure decent, safe, and sanitary housing—are also defined herein as households in "housing need."

It should be noted that implicit in the very concept of housing need is a set of housing objectives and a supporting set of standards against which households within the Region can be uniformly evaluated. Indeed, housing need can be identified only within the context of a previously agreed upon set of objectives and standards. Clearly, the formulation of regional housing objectives and standards, as summarized in the previous chapter, is of critical importance in the housing planning process insofar as this adopted set of objectives and standards alone determines, in effect, the magnitude and characteristics of the existing housing need.

Given the set of housing objectives and standards adopted by the Technical and Citizen Advisory Committee on Regional Housing Studies, a major work element of the regional housing study was the determination of housing need through the application of these standards to existing households and housing stock in the Region. The resultant findings concerning the extent, distribution, and characteristics of existing housing need are important considerations in the formulation of recommendations directed toward the amelioration of existing and future housing problems. Accordingly, the methodology utilized in the application of regional housing objectives and standards for the analysis of housing need, as well as a summary of the magnitude and characteristics of the existing housing need, are presented in the following sections.

IDENTIFICATION OF HOUSING NEED

As noted in the introduction, for the purposes of the regional housing study a household is considered to be in housing need either if it cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, or if it is precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market. In order to facilitate the quantification of housing need, it is necessary to specify both what constitutes decent, safe, and sanitary housing, and what level of housing expenditure is consistent with household income in a manner which is appropriate for analysis both at regional and subregional levels.

Decent, Safe, and Sanitary Housing

The housing objectives and supporting standards adopted by the Technical and Citizens Advisory Committee specify in detail what constitutes a decent, safe, and sanitary housing unit. In particular, the standards related to the first regional housing objective dictate the following (see Chapter XII): that housing units contain sufficient improved floor area, as related to the size of the household, to constitute decent household living accommodations (Standard No. 1); that housing should be constructed to provide adequate protection from the elements (Standard No. 2); that housing should be constructed so as to minimize danger to its occupants due to deficiencies in the basic structural and mechanical components (Standard No. 3); that housing should be constructed to provide adequate protection from infestations

of insects, vermin, and rodents (Standard No. 4); and that housing should contain certain minimum sanitary facilities and services within the unit (Standard No. 5).

Decent housing, as indicated in Standard No. 1, relates to the adequacy of total improved floor area, sleeping area, or number of bedrooms for various sized households. For the purposes of regional housing analysis, the relationship of the number of persons in the household to the number of bedrooms in the housing unit was utilized as the measure of decent housing. From a household point of view, a housing unit was considered to be decent if the household was not overcrowded, that is, if there was an average of no more than two persons per bedroom. Depending on the household composition, however, some households may be overcrowded even though there is an average of fewer than two persons per bedroom. For example, a household consisting of a married couple and two teenage children of the opposite sex should preferably be housed in a three-bedroom unit rather than a two-bedroom unit as would be suggested by strict application of the standard. On the other hand, it is likely that other households for which there are more than two persons per bedroom do not feel overcrowded because the household may be accustomed to the situation or because the "overcrowding" is viewed as a temporary situation in view of anticipated changes in the household composition. Ideally, if the necessary detailed data were available, each household's spatial needs would be evaluated individually and the number of bedrooms required for each household determined. In the absence of such detailed data, the average number of persons per bedroom was used as the best available measure of overcrowding for the purposes of determining housing need.

It is important to note that a housing unit which may be overcrowded for one household may provide adequate living space for a smaller household. Provision of an adequate sized housing unit for a large overcrowded household creates a housing unit vacancy which may, in turn, provide adequate housing for a smaller household that was formerly in housing need because of inadequate space or which may remain unoccupied for an indefinite period, thereby enhancing the stock of vacant and available housing. Thus, the provision of a single housing unit for an overcrowded household may result in the resolution of the housing problems of two or more households which are in housing need. These multiple effects must be taken into account in the formulation of recommendations directed toward the diminution of housing need.

Although a particular housing unit may be designated as a decent housing unit for its present occupants according to the standard of no more than two persons per bedroom, the same unit may be unsuitable because of unsafe or unsanitary conditions. Thus, in addition to providing decent living area accommodations, housing units should also be safe and sanitary. Safe and sanitary housing units, as previously indicated in Standards No. 2 through 5 of Regional Housing Objective No. 1, relate to the soundness of construction and the ability of the unit to protect its occupants from the elements and from infestations of insects, vermin, or rodents. The unit should also contain facilities necessary to meet occupant sanitary requirements.

Whereas it would be desirable to evaluate the housing stock in terms of each of the aforementioned standards to determine on an individual basis those units which meet the standards related to safe and sanitary housing, the nature of existing data sources prohibits such a detailed evaluation. No single data source presently exists which individually identifies existing housing units which are in sound physical condition and can provide their occupants with a safe and sanitary living environment. Because such detailed data are not available for individual housing units, the physical condition of a housing unit as determined in the Commission's exterior housing condition survey was used as a substitute for these four standards in determining whether or not the living quarters provide safe and sanitary housing. As part of the exterior housing condition survey, housing units were evaluated in terms of observable defects in major exterior components, including the foundation, exterior walls, and roof; as well as minor components, including the chimney, gutters and downspouts, eaves and facia, siding, windows and doors, porch, and painting. Each major and minor component was given a defect point rating, with the ratings for the major components being weighted more heavily than the minor components (see Chapter V). In the quantification of housing need, a housing unit having a total rating of 20 defect points or more was considered as no longer providing safe and sanitary housing. Such housing units had observable defects which could render the housing unit unsafe or exhibited excessive physical deterioration. Either case would require extensive repairs and rehabilitation or outright demolition.

It should be noted that an exterior housing condition survey cannot include direct consideration of the interior condition of the surveyed housing, and therefore of the degree to which the housing meets all of the aforementioned standards. More specifically, an exterior housing condition survey cannot provide a direct measurement of the availability of kitchen, plumbing, and heating facilities which are required for safe and sanitary housing as defined in the regional housing standards. Indeed, no data source presently exists which tabulates the availability of such facilities along with other household and housing unit characteristics on an individual household basis in a manner which would facilitate an analysis of housing need.[1] Although an exterior housing condition

[1] *The U. S. Bureau of the Census provides housing data concerning the provision of kitchen facilities, plumbing facilities, and heating facilities which are useful in determining the adequacy of the existing housing stock. Unfortunately, such data can be cross-tabulated with, at most, two other household or housing unit characteristics, a constraint which severely limits the usefulness of these tabulations for the purposes of a regional analysis of housing need. These census tabulations, which have been summarized in Chapter V of this report, may, however, supplement the findings of the analysis of housing need by providing further understanding of the adequacy of the housing stock, particularly within minor civil divisions and smaller areas of analysis.*

survey does not include a direct evaluation of the interior of the surveyed housing, housing condition surveys which include interior and exterior rating elements have been conducted by local planning agencies within the Region with the resultant conclusion that there is a strong positive correlation between interior and exterior condition. Consequently, the exterior housing condition survey conducted under the regional housing study was used as an indirect measure of whether a housing unit provides safe and sanitary housing, as defined by the regional housing standards, for the purpose of quantifying housing need.

Level of Housing Expenditures

As indicated in Regional Housing Objective No. 2, a household should not have to pay more than 30 percent of its adjusted gross income to secure decent, safe, and sanitary housing. Adjusted gross income was defined as gross annual income from all sources before taxes and withholding minus 5 percent of such income as an allowance in lieu of amounts withheld for such items as social security and civil service retirement minus $300 for each minor dependent.[2] For renters, the appropriate measure of housing expenditure was defined as the gross rent, which includes the contract rent, or agreed-upon rent payment, plus payments for utilities to the extent that these are paid for by the renter in addition to the contract rent. For homeowners, the housing expenditure was defined as the payment for principal, interest, and taxes as well as the payment for utilities and other attendant housing costs. An overriding consideration in the determination of households in housing need, then, relates to the household's ability to secure decent, safe, and sanitary housing without having to pay an excessive proportion of its monthly income for such housing.

Housing Need

Housing need, which is qualitatively defined as those households which cannot secure decent, safe, and sanitary housing at a cost which is consistent with their household income as well as those households which are precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market, may be defined quantitatively in terms of the foregoing criteria concerning both what constitutes decent, safe, and sanitary housing and the maximum level of housing expenditure which is consistent with household income. For the purposes of the regional housing study, a household was considered to be in housing need if at least one of the following conditions is true.

1. The household occupies a housing unit which is in substandard physical condition,[3] and (a) the household is unable to secure decent, safe, and sanitary housing at a monthly cost which is less than or equal to 30 percent of the household's adjusted monthly income,[4] or (b) the household is precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market.

2. The household is overcrowded,[5] and (a) the household is unable to secure decent, safe, and sanitary housing at a monthly cost which is less than or equal to 30 percent of the household's adjusted monthly income, or (b) the household is precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market.

3. The household's current monthly payment for housing is greater than 30 percent of the household's adjusted monthly income and the household is unable to secure decent, safe, and sanitary housing at a monthly cost which is less than or equal to 30 percent of the adjusted monthly income.

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[2]*It should be noted that for homeowners, the gross income was adjusted upward to reflect the earnings which might be derived on a household's equity in its present home.*

[3]*A substandard housing unit is indicated by a total defect point rating of 20 points or more in the exterior housing condition survey.*

[4]*In order to exclude from the existing housing need those households which presently occupy housing in violation of the specified regional housing standards but which could obtain decent, safe, and sanitary housing at a cost consistent with the household income, it was necessary to make certain assumptions in regard to the cost at which adequate housing might be secured. Households which presently occupy housing in violation of the specified housing standards but which could afford adequate housing based on a comparison of the assumed costs and the household income, and which were not adversely affected by noneconomic constraints within the housing market, were excluded from the category of housing need.*

Based on an analysis of vacancy rates and monthly gross rents for rental housing units of various size, the following housing costs were assumed: one-bedroom unit—$168 per month, two-bedroom unit—$220 per month, three-bedroom unit—$250 per month, four-bedroom unit—$280 per month, and five-bedroom unit—$310 per month. Because of relatively low vacancy rates observed for rental units consisting of two or more bedrooms, it could not be assumed that existing rental housing is available to the households in question; rather, it was necessary to utilize the relatively high monthly gross rent for new housing as a measure of the cost at which adequate alternative housing might be secured. On the other hand, because of a relatively high vacancy rate observed for one-bedroom apartments, it was possible to utilize a monthly gross rent which is somewhat less than the monthly gross rent for new one-bedroom apartments.

[5]*Overcrowding is indicated if the ratio of the number of persons in the household to the number of bedrooms in the housing unit is greater than two.*

It is very important to note that, according to the above criteria, the category of housing need excludes those households which occupy substandard or overcrowded housing but which, on the basis of household income, could afford decent, safe, and sanitary housing and which are not adversely affected by noneconomic constraints, such as discrimination on the basis of race or family size. In the absence of any identifiable constraint, either economic or noneconomic, which might impede the acquisition of adequate alternative housing, it is assumed that such households occupy their present overcrowded or substandard housing unit by choice, opting to allocate their income to commodities other than suitable housing. Similarly, the housing need category excludes those households which are paying more than 30 percent of their adjusted gross income for "extravagant" housing and which would be able to secure decent, safe, and sanitary housing, as defined by the adopted objectives and standards, at a cost which is consistent with the household income.

It should be noted that in the absence of a reliable data source with which to precisely quantify the effect of noneconomic constraints within the housing market, particularly with respect to households which occupy substandard or overcrowded housing and which, on the basis of the household income, should be able to afford adequate alternative housing, a generalized assumption was adopted. As an estimate of the number of households which are forced to occupy inadequate housing solely because of noneconomic constraints within the housing market, the Technical and Citizen Advisory Committee recommended that 50 percent of all households which occupy substandard or overcrowded housing and which appear able to secure decent, safe, and sanitary housing at a cost which is less than 30 percent of the household adjusted gross income be classified as in housing need. It is evident that this assignment is necessarily arbitrary and may overstate or understate somewhat the actual situation. As a result of noneconomic constraints within the housing market, many households, particularly large-sized and minority households, may, through no choice of their own, be residing in substandard or overcrowded housing even though, on the basis of their income, it would appear that they are able to afford adequate housing. Clearly, such households should be included in the existing housing need. On the other hand, there are many households which may be residing in substandard or overcrowded housing simply because they do not choose to pay 30 percent of their income for housing, opting to allocate their disposable income for alternative uses. Clearly, such households should be excluded from the category of housing need.

Whereas it is possible, utilizing existing data sources, to quantify the number of households in the Region which presently occupy substandard or overcrowded housing and which, on the basis of the household income, appear able to afford decent, safe, and sanitary housing, no empirical evidence is available with which to determine the proportion of these households that occupy inadequate housing involuntarily because of noneconomic constraints within the market. Perceiving that noneconomic constraints within the housing market significantly curtail the availability of housing for certain subgroups of the regional population, however, the Committee recommended use of the aforementioned assumption so that the impact of noneconomic constraints might be reflected in the quantification of existing housing need.

DETERMINATION OF HOUSING NEED—REGIONAL ANALYSIS

An accurate measurement of the existing housing need within the Region as defined above requires a data source which provides a variety of information for each household, including the household size and income as well as such characteristics relative to the housing unit which it occupies as the required monthly payment, the number of bedrooms, and the physical condition. No existing data source furnishes the required information on a complete count basis for all households in the Region. However, the Commission's 1972 origin and destination (O & D) travel survey and the exterior housing condition survey[6] together provide all of the required data for households on a statistically valid sample basis, the results of which can be expanded to represent the total universe of households in the Region. Estimates of housing need in the Region, then, were achieved by applying the aforementioned housing need criteria to the expanded results of the O & D survey. In addition to providing data necessary for the determination of total housing need, the O & D survey also collected data concerning the age, race, income, and other characteristics of the members of the surveyed households, thereby facilitating the analysis of housing need for subgroups of the regional population for which special housing problems are suspected to exist.

Because the 1972 O & D survey was conducted for a sample of households throughout the Region, the magnitude of the existing housing need, as presented in this chapter, must be understood to represent the best estimate of the actual housing need, which need may in reality be slightly greater or less than the indicated point estimate. Furthermore, because of the methodology utilized in the quantification of the existing housing need, the most detailed data concerning the existing housing need is presented only at the regional level. In order to maintain statistical reliability, only the most basic data concerning housing need are presented at the subregional

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[6] *The exterior housing condition survey provides an evaluation of the physical condition of the exterior components of all housing units occupied by households which were included in the Commission's 1972 origin and destination travel survey.*

level.[7] The existing housing need is identified and analyzed at both the regional and subregional levels in the following sections.

Extent of Housing Need

The existing housing need in the Region was estimated to be 96,100 households in 1970, representing 18 percent of all households in the Region (see Table 149). Of the total housing need, 69,600 households were classified as being in economic need only, indicating that they presently occupy decent, safe, and sanitary housing but must pay more than 30 percent of their adjusted gross income to do so. The balance of the existing housing need consists of households which occupy housing in violation of the aforementioned standards relative to decent, safe, and sanitary housing and which either are unable to secure adequate housing at a cost which is consistent with the household income or are prevented from doing so because of noneconomic constraints within the housing market, such as discrimination based on race or family size. In particular, the existing housing need includes 7,853 households which occupy substandard housing units, 17,264 households which are overcrowded, and 1,355 households which occupy housing units that are both substandard and overcrowded.

Table 149

HOUSING NEED STATUS OF HOUSEHOLDS IN THE REGION: 1970

Housing Need Status	Households	
	Number	Percent of Total
Need	96,089	17.9
Economic Need Only	69,617	13.0
Substandard	7,853	1.5
Economic Need	5,625	1.1
Noneconomic Need	2,228	0.4
Overcrowded	17,264	3.2
Economic Need	8,421	1.6
Noneconomic Need	8,843	1.6
Substandard and Overcrowded	1,355	0.2
Economic Need	1,140	0.2
Noneconomic Need	215	--[a]
Non-Need	440,397	82.1
Total	536,486	100.0

[a] *Less than one-tenth of 1 percent.*

Source: SEWRPC.

As shown in Table 149, of the 26,472 households in the housing need category which reside in substandard or overcrowded housing, 15,186 households are also in economic need, indicating that they are unable to secure adequate alternative housing because of insufficient household income relative to the cost of housing. The balance of these households are in noneconomic need, indicating that they occupy substandard or overcrowded housing because of noneconomic constraints within the housing market even though, on the basis of their income, it would appear that they are able to afford decent, safe, and sanitary housing. More specifically, of the 7,853 households in the housing need category which reside in substandard housing, 5,625 households, or 72 percent, are classified as being in economic need, while the remaining households are classified as being in noneconomic need. Of the 17,264 overcrowded households in the housing need category in 1970, 8,421 households, or 49 percent, are in economic need while the balance is in noneconomic need. Of the 1,355 households in the housing need category which reside in units which are both substandard and overcrowded, 1,140 households, or 84 percent, are in economic need, while the small balance is in noneconomic need.

It should be noted that the estimate of the number of households in noneconomic need, or households which are forced to live in substandard or overcrowded housing solely because of noneconomic constraints within the housing market, was derived by the application of a generalized assumption adopted by the Technical and Citizen Advisory Committee. As previously indicated, the number of households in the Region which occupy substandard or overcrowded housing because of noneconomic constraints within the housing market was estimated as 50 percent of all households which occupy substandard or overcrowded housing and which, based on the household income, appear able to afford adequate alternative housing. In the absence of a reliable data source with which to precisely quantify the effects of noneconomic constraints within the housing market, the Committee recommended that the foregoing assumption be used because noneconomic constraints such as discrimination based on race or family size do limit the availability of housing for certain segments of the population. Clearly, the estimate of noneconomic housing need derived from the application of this assumption may somewhat overstate or understate the actual situation.

It should be emphasized that, for a majority of households in the housing need category, the housing problem is simply an economic phenomenon. Thus, for house-

[7] *Whereas the sample sizes drawn for the purposes of the Commission's 1972 origin and destination survey were sufficiently large to provide statistically reliable estimates of those variables which are important for transportation planning within very small areas of analysis, namely, traffic analysis zones, the same sample sizes were insufficient to provide detailed information concerning the housing need status of households on a small area basis. The determination of housing need requires the simultaneous classification of households by income and size as well as by the monthly payment, the number of bedrooms, and the physical condition of the unit which it occupies. Detailed information concerning the existing housing need which is presented at the regional level could be presented with statistical reliability at the housing analysis area level only by significantly increasing the sample size.*

holds classified as being in economic need only, the housing problem is strictly economic in nature. Such households, which represent about 72 percent of the total housing need, presently occupy decent, safe, and sanitary housing but are able to obtain this housing only at a cost which is high relative to the household income. Whereas the acquisition of decent, safe, and sanitary housing results in varying degrees of economic hardship for households in economic need only, the financial burden is apparently not so great as to prevent their securing adequate housing. The housing problem is much more severe for the smaller component of the total housing need comprised of households which occupy substandard or overcrowded housing units as determined by the application of regional housing standards. Housing deterioration resulting in major physical defects may endanger the health and safety of the occupants of substandard housing units. Similarly, living space which is inadequate for privacy may impede normal personal development and detract from a sense of mental well-being of the occupants of overcrowded housing units. Housing recommendations which are directed at the reduction in total housing need should be formulated so as to resolve the special problems of the small component of housing need consisting of households which occupy substandard and overcrowded housing units in the shortest possible time.

Characteristics of Households in Housing Need

The extent of the existing housing need is an important consideration in the regional housing planning process. Equally important, however, are certain characteristics of households in the housing need category, examination of which may reveal special areas of unmet housing needs. These characteristics include tenure status, household size, and household income. In addition, data are presented separately concerning the housing need status of the elderly population as well as the black population, two subgroups of the total population for which special housing problems are suspected to exist. Analysis of these characteristics will indicate which household types are most affected by housing problems, thereby facilitating the formulation of recommendations designed to overcome the existing housing need.

As previously indicated, the analysis of housing need has been accomplished on the basis of data provided by the Commission's 1972 O & D survey and exterior housing condition survey, which together comprise the only available data source which provides all of the required information for the quantification of the existing regional housing need. Because of the sampling procedure utilized in the O & D survey, the extent of the existing housing need presented in the previous section should be interpreted as representing the best estimate of the actual housing need. Clearly, stratification of the existing housing need by various household characteristics must also be treated as an estimate of an actual situation, which may somewhat overstate or understate the actual data.

Household Tenure: Significant differences can be observed in the housing need status of households when they are classified by tenure status. As shown in Table 150, an estimated 31 percent of all renter households in the Region were in housing need in 1970, compared to only 10 percent of all homeowner households. Almost

Table 150

HOUSING NEED STATUS OF HOUSEHOLDS IN THE REGION BY TENURE: 1970

Housing Need Status	Occupied Housing Units (Households)					
	Owner Occupied		Renter Occupied		Total	
	Number	Percent	Number	Percent	Number	Percent
Need	31,988	9.7	64,101	31.3	96,089	17.9
Economic Need Only	21,047	6.3	48,570	23.7	69,617	13.0
Substandard	2,032	0.6	5,821	2.8	7,853	1.5
Economic Need	982	0.3	4,643	2.2	5,625	1.1
Noneconomic Need	1,050	0.3	1,178	0.6	2,228	0.4
Overcrowded	8,734	2.7	8,530	4.2	17,264	3.2
Economic Need	2,530	0.8	5,891	2.9	8,421	1.6
Noneconomic Need	6,204	1.9	2,639	1.3	8,843	1.6
Substandard and Overcrowded	175	0.1	1,180	0.6	1,355	0.2
Economic Need	92	--[a]	1,048	0.5	1,140	0.2
Noneconomic Need	83	--[a]	132	0.1	215	--[a]
Non-Need	299,351	90.3	141,046	68.7	440,397	82.1
Total	331,339	100.0	205,147	100.0	536,486	100.0

[a] *Less than one-tenth of 1 percent.*

Source: SEWRPC.

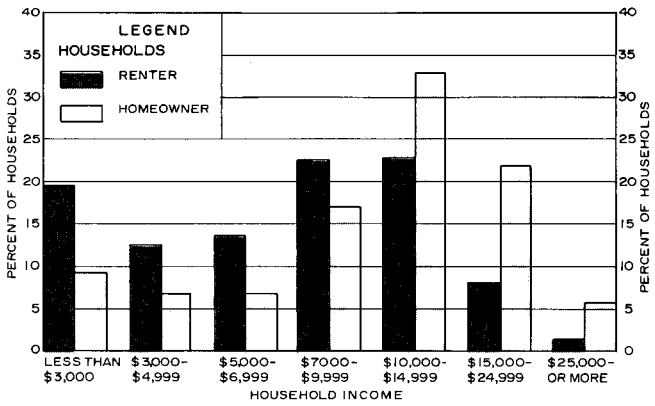
24 percent of the renters in the Region were in economic need only in 1970 compared to only 6 percent of the homeowners. The proportion of renters which occupy substandard or overcrowded housing units (about 8 percent) was also somewhat higher than the corresponding proportion for homeowners (3 percent).

The fact that many more renters are in housing need than homeowners is consistent with the lower household income distribution of renters relative to homeowners. Thus, in 1970, 68 percent of all renter households in the Region had a household income of less than $10,000, compared to only 40 percent of all homeowners (see Figure 64). The median household income for renter households was $7,600, significantly lower than the median household income of $11,600 for homeowners. Because of the lower income distribution, a larger proportion of renters than homeowners must either pay more than is consistent with the household income to secure adequate housing, thereby becoming part of income need, or else forego adequate housing altogether, occupying substandard or overcrowded housing instead.

Household Size: Stratification of housing need by household size provides further insight into the existing housing problem, and is a necessary consideration in the formulation of housing strategies designed to alleviate housing need. As indicated in Table 151 and Figure 65, the proportion of households in need ranged from a low of 9 percent for households consisting of four persons to an exceptionally high proportion, 31 percent, for one-person households in the Region, with most of these belonging to the category of economic need only. The large fraction of one-person households which are in housing need is consistent with the fact that a large proportion (43 percent) of all one-person households in the Region is comprised of persons 65 years old and over for whom special housing problems were found to exist. The special problems of elderly persons are described separately in this section.

Figure 64

PERCENTAGE DISTRIBUTION OF RENTER AND HOMEOWNER HOUSEHOLDS IN THE REGION BY HOUSEHOLD INCOME: 1970



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

As further shown in Table 151, the component of housing need for which the housing problem is most severe, namely, those households which occupy substandard or overcrowded housing units, comprises a very small proportion—less than 4 percent—of each category of households consisting of four persons or less. This component of housing need, however, increases somewhat as household size increases, with 17 percent of all households of six persons or more occupying substandard or overcrowded housing. In particular, the incidence of overcrowding increases significantly with increases in household size, with overcrowded households in the housing need category comprising more than 6 percent of all five-person households and 15 percent of all households consisting of six persons or more. It is also

Table 151

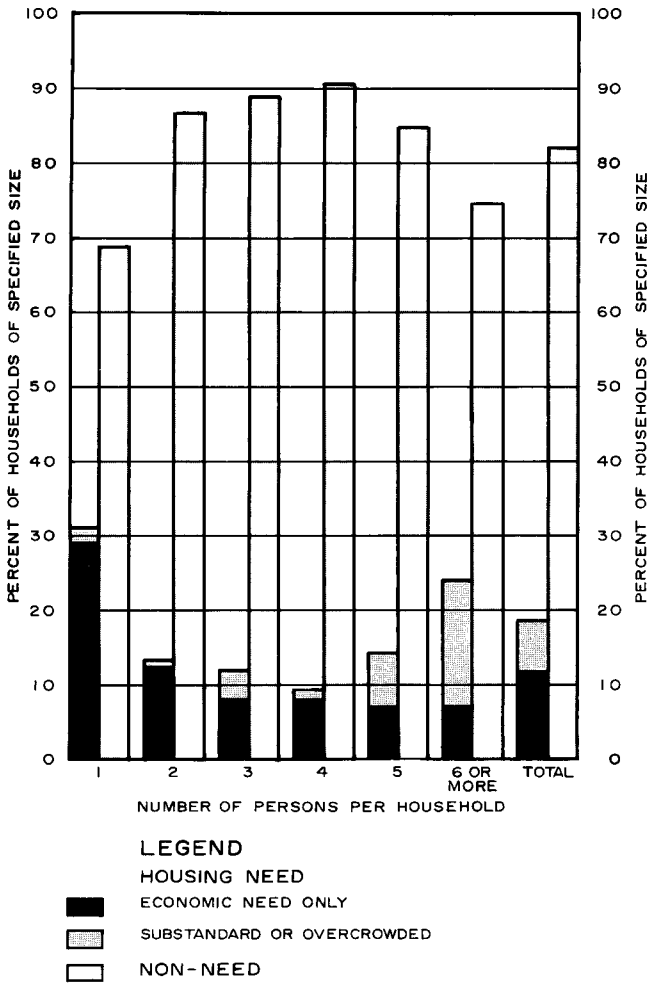
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS IN THE REGION BY HOUSING NEED STATUS AND HOUSEHOLD SIZE: 1970

Housing Need Status	Number of Persons Per Household																	
	1			2			3			4			5			6 or More		
	Rent	Own	Total	Rent	Own	Total	Rent	Own	Total	Rent	Own	Total	Rent	Own	Total	Rent	Own	Total
Need	41.0	13.5	31.2	24.8	6.1	13.4	20.9	6.1	11.8	15.4	6.7	9.3	33.7	9.0	14.8	45.0	18.3	24.2
Economic Need Only	39.0	11.1	29.1	22.9	5.7	12.4	13.2	5.2	8.3	11.7	6.0	7.7	10.9	6.1	7.2	15.0	5.0	7.2
Substandard	2.0	2.4	2.1	1.9	0.4	1.0	2.9	0.6	1.5	2.8	0.6	1.2	3.5	0.4	1.1	5.0	0.8	1.7
Economic Need	1.7	1.2	1.5	1.5	0.1	0.7	1.8	0.1	0.8	1.5	0.4	0.7	2.7	0.2	0.8	3.7	0.3	1.0
Noneconomic Need	0.3	1.2	0.6	0.4	0.3	0.3	1.1	0.5	0.7	1.3	0.2	0.5	0.8	0.2	0.3	1.3	0.5	0.7
Overcrowded	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.3	1.9	0.9	0.1	0.4	17.8	2.2	5.9	20.9	12.3	14.2
Economic Need	0.0	0.0	0.0	0.0	0.0	0.0	2.7	0.1	1.1	0.2	0.0	0.1	12.8	0.9	3.7	14.6	2.7	5.3
Noneconomic Need	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.2	0.8	0.7	0.1	0.3	5.0	1.3	2.2	6.3	9.6	8.9
Substandard and Overcrowded	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	1.5	0.3	0.6	4.1	0.2	1.1
Economic Need	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.2	0.5	3.7	0.1	0.9
Noneconomic Need	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.1	0.2
Non-Need	59.0	86.5	68.8	75.2	93.9	86.6	79.1	93.9	88.2	84.6	93.3	90.7	66.3	91.0	85.2	55.0	81.7	75.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SEWRPC.

Figure 65

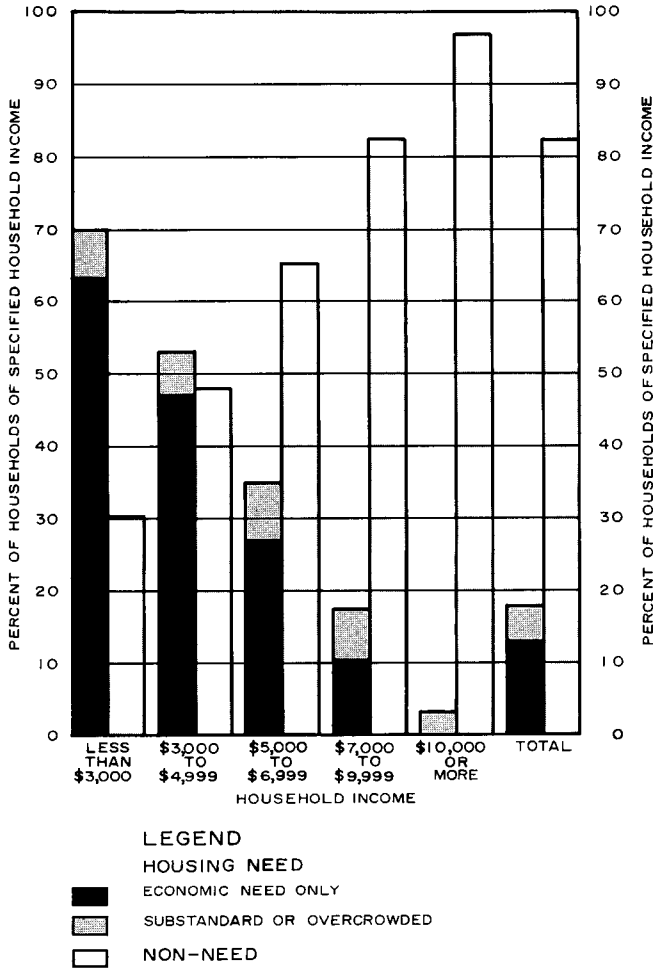
PERCENTAGE DISTRIBUTION OF HOUSEHOLDS IN THE REGION BY HOUSING NEED STATUS AND HOUSEHOLD SIZE: 1970



Source: SEWRPC.

Figure 66

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS IN THE REGION BY HOUSING NEED STATUS AND HOUSEHOLD INCOME: 1970



Source: SEWRPC.

evident from Table 151 that overcrowding is somewhat more prevalent for large renter households than for large homeowner households. Clearly, the apparent difficulty experienced by large households, particularly large renting households, in securing adequately sized housing should be an important consideration in the formulation of regional housing recommendations.

Household Income: The stratification of households in the housing need category by household income provides a further understanding of the existing housing problem. For a majority of households in housing need, the housing problem is primarily an economic phenomenon. Such households either must pay a disproportionate share of their income in order to reside in decent, safe, and sanitary housing, or, because of insufficient economic means relative to the cost of housing, must reside in overcrowded or substandard housing units. Accordingly, it is not surprising to find that the incidence of housing need decreases as household income increases. Thus, the proportion of households in need ranged from 70 percent for households earning less than $3,000 to 3 percent for households earning $10,000 or more (see Table 152 and Figure 66).

It should be noted that, whereas it was possible to quantify the number of households with incomes of $10,000 or more which were in noneconomic need,[8] the precise

[8] *The estimate of the number of households with incomes of $10,000 or more which were in noneconomic need was estimated as 50 percent of all households with incomes of $10,000 or more which occupied substandard or overcrowded housing.*

Table 152

PERCENTAGE DISTRIBUTION OF HOUSEHOLDS IN THE REGION BY HOUSING NEED STATUS AND HOUSEHOLD INCOME: 1970

Housing Need Status	Household Income														
	Less than $3,000			$3,000-$4,999			$5,000-$6,999			$7,000-$9,999			$10,000 or More		
	Rent	Own	Total	Rent	Own	Total	Rent	Own	Total	Rent	Own	Total	Rent	Own	Total
Need	100.0	29.6	69.8	79.9	21.6	52.7	44.2	22.9	34.7	12.0	21.8	17.4	3.5	2.8	3.0
Economic Need Only	90.2	27.7	63.4	69.8	20.3	46.7	31.6	19.7	26.3	2.9	16.3	10.3	--	--	--
Substandard	6.4	1.6	4.3	5.3	0.4	3.0	4.3	2.0	3.3	2.2	0.6	1.3	0.8	0.4	0.5
Economic Need	6.4	1.6	4.3	5.3	0.4	3.0	4.3	2.0	3.3	0.8	0.4	0.6	--	--	--
Noneconomic Need	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.2	0.7	0.8	0.4	0.5
Overcrowded	3.1	0.3	1.9	4.5	0.9	2.8	6.0	1.2	3.8	6.3	4.6	5.4	2.6	2.4	2.5
Economic Need	3.1	0.3	1.9	4.5	0.9	2.8	6.0	1.2	3.8	5.4	3.4	4.3	--	--	--
Noneconomic Need	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.2	1.1	2.6	2.4	2.5
Substandard and Overcrowded	0.3	0.0	0.2	0.3	0.0	0.2	2.3	0.0	1.3	0.6	0.3	0.4	0.1	0.0	0.0
Economic Need	0.3	0.0	0.2	0.3	0.0	0.2	2.3	0.0	1.3	0.5	0.3	0.4	--	--	--
Noneconomic Need	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	--[a]	0.1	--[a]	--[a]
Non-Need	0.0	70.4	30.2	20.1	78.4	47.3	55.8	77.1	65.3	88.0	78.2	82.6	96.5	97.2	97.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[a] *Less than one-tenth of 1 percent.*

Source: SEWRPC.

determination of the economic need status of households with incomes of $10,000 or more was precluded by limitations in the survey data. On the basis of those indicators which are available, however, it could be inferred that a very small proportion of households earning more than $10,000 were in economic need, with a greater incidence of economic need assumed for large households consisting of more than six persons. The effect of adding the economic need of households earning more than $10,000 to the total housing need as identified above would be to increase the existing housing need by an estimated 2 to 4 percent.

Household Age: Certain subgroups of the regional population may be assumed to have more severe housing problems than the population as a whole. In particular, in the recent past there has developed a growing social awareness of the housing plight of the elderly. As indicated in Table 153, 31 percent of all elderly households[9] were found to be in housing need in 1970, with almost all of the housing need for the elderly consisting of households which are in economic need only. Indeed, on the basis of the survey data, only about 2 percent of all elderly households occupied substandard housing, while less than 1 percent of all elderly households were reported as being overcrowded. It is apparent that the housing problem for the elderly is primarily economic in nature; the elderly in housing need generally are able to secure decent, safe, and sanitary housing, but only at a cost which is so high relative to the household income that the acquisition of adequate housing results in financial hardship.

[9] *For the purposes of the regional housing study, an elderly household is defined as a household whose head is 65 years of age or older.*

Table 153

PERCENTAGE DISTRIBUTION OF ELDERLY HOUSEHOLDS IN THE REGION BY HOUSING NEED STATUS AND TENURE 1970

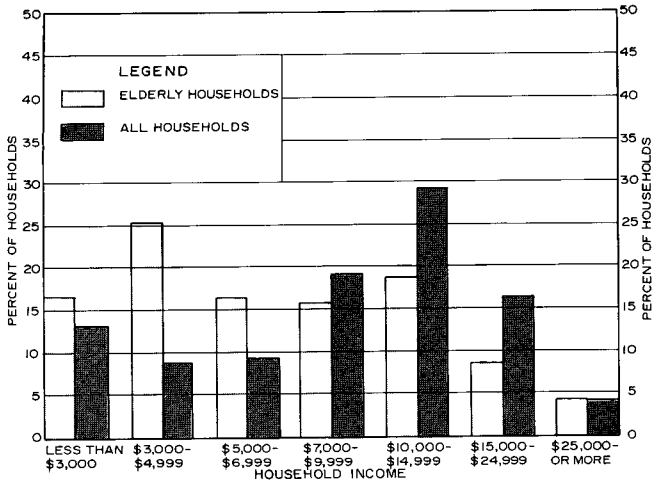
Housing Need Status	Elderly Households		
	Renter Occupied	Owner Occupied	Total
Need	64.9	11.8	30.8
Economic Need Only	62.4	10.3	28.9
Substandard	2.2	1.2	1.6
Economic Need	1.9	0.6	1.1
Noneconomic Need	0.3	0.6	0.5
Overcrowded	0.3	0.3	0.3
Economic Need	0.3	0.0	0.1
Noneconomic Need	0.0	0.3	0.2
Substandard and Overcrowded	0.0	0.0	0.0
Economic Need	0.0	0.0	0.0
Noneconomic Need	0.0	0.0	0.0
Non-Need	35.1	88.2	69.2
Total	100.0	100.0	100.0

Source: SEWRPC.

Economic need is relatively high among the elderly because of the fact that many elderly households are forced to live on a relatively fixed income, comprised of social security benefits and perhaps a pension payment. As might be expected, the income distribution for elderly households is very low (see Figure 67). Thus, the household income was less than $7,000 for 58 percent of all

Figure 67

PERCENTAGE DISTRIBUTION BY INCOME OF ELDERLY HOUSEHOLDS IN THE REGION[a] 1970



[a]IN THE 1970 CENSUS, HOUSEHOLD INCOME DATA FOR THE ELDERLY WERE PROVIDED ONLY FOR HUSBAND-WIFE HOUSEHOLDS, OR THOSE ELDERLY HOUSEHOLDS IN WHICH THE HUSBAND AND WIFE WERE BOTH PRESENT.

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

elderly husband-wife households[10] in the Region in 1970, compared to only 31 percent of the households in the Region overall. The median income for elderly husband-wife households in the Region was $6,000 in 1970, substantially less than the overall median household income of $10,000.

As further indicated in Table 153, the incidence of income need is far greater for elderly renters than for elderly homeowners. Because the income distributions for elderly renters and elderly homeowners are both low, it is apparent that the greater incidence of income need for elderly renters is due to higher housing costs which they experience. Thus, for the majority of elderly homeowners who have completed their mortgage payments and own their homes outright, the cost of housing is relatively low, consisting primarily of payments for property taxes and utilities. In contrast, elderly renters must secure housing in a market where rents are often high relative to the household income, with the result that a large proportion of elderly renters are in the category of economic need.

Household Race: The black population of the Region, which is concentrated primarily in the Cities of Kenosha, Milwaukee, and Racine, represents another subgroup of the total population for which severe housing problems may be assumed to exist. Indeed, on the basis of the survey data, the incidence of housing need was found to be much higher for the black population than for the regional population as a whole (see Table 154). Thus, it is estimated that 50 percent of the black households in the Region were in housing need in 1970, compared to only 18 percent of the households in the Region overall. Approximately 30 percent of the black households were classified as being in economic need only, indicating that they occupied decent, safe, and sanitary housing but that they were able to secure adequate housing only at a cost which is disproportionate with the household income. The housing problem is much more severe for 20 percent of the black households in the Region which occupied housing that was substandard or overcrowded and which did not have the economic means to rectify their housing deficiencies or which were prevented from securing adequate housing because of noneconomic constraints within the housing market.

The high incidence of housing need for black households is consistent with their low household income distribution (see Figure 68). Thus, almost three-fourths of all black households in the Region earned less than $10,000 in 1970, compared to about one-half of the households in the Region overall, and the median income for black households ($6,500) is substantially lower than the median income for all households in the Region ($10,000). Because they lack the ability to pay, many black households either are able to occupy decent, safe, and sanitary housing only at a cost which is disproportionate with the household income or else must forego the acquisition of adequate housing altogether.

Explanation of the high incidence of housing need for the black population in economic terms only, however, may be an oversimplification of the black housing prob-

Table 154

PERCENTAGE DISTRIBUTION OF BLACK HOUSEHOLDS IN THE REGION BY HOUSING NEED STATUS AND TENURE 1970

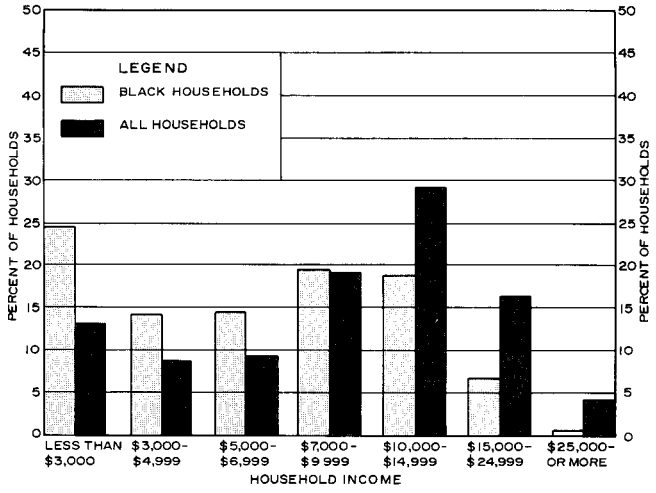
Housing Need Status	Black Households		
	Renter Occupied	Owner Occupied	Total
Need	58.3	32.5	49.6
Economic Need Only	34.6	20.1	29.7
Substandard	8.8	3.6	7.1
Economic Need	7.5	3.0	6.0
Noneconomic Need	1.3	0.6	1.1
Overcrowded	11.6	8.8	10.6
Economic Need	8.7	5.3	7.5
Noneconomic Need	2.9	3.5	3.1
Substandard and Overcrowded	3.3	0.0	2.2
Economic Need	2.9	0.0	1.9
Noneconomic Need	0.4	0.0	0.3
Non-Need	41.7	67.5	50.4
Total	100.0	100.0	100.0

Source: SEWRPC.

[10]*In the 1970 census, household income data for the elderly were provided only for husband-wife households or those elderly households in which the husband and wife are both present. Elderly husband-wife households represented 47 percent of all elderly households in the Region in 1970.*

Figure 68

PERCENTAGE DISTRIBUTION OF BLACK HOUSEHOLDS IN THE REGION BY HOUSEHOLD INCOME: 1970



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

lem. In this respect, it is suspected that forces of racial prejudice and discrimination have acted to limit both the earning power and the housing opportunities of the black population, and therefore their economic ability to secure decent, safe, and sanitary housing, as well as to restrict the freedom of choice in housing for black households which have the ability to pay. The extent to which the forces of racial prejudice and discrimination constrain the flow of adequate housing to black households within the Region is analyzed in detail in the next chapter of this report.

DETERMINATION OF HOUSING NEED—SUBREGIONAL ANALYSIS

Whereas the foregoing portion of this chapter dealt with the determination of housing need and a detailed, comprehensive housing need analysis at the regional level, this section is addressed to the discussion of housing need and a descriptive housing need analysis at the subregional level. Sixty geographic areas comprised of individual and groups of civil divisions and/or groups of census tracts had been delineated to facilitate small area analysis for present and future work of the Southeastern Wisconsin Regional Planning Commission. These areas have been termed planning analysis areas by the Commission, since they are intended to be utilized in conjunction with a variety of planning work programs undertaken by the Commission. However, for purposes of the regional housing study and the regional housing planning program, these areas are called housing analysis areas. Housing analysis areas, therefore, serve as the subregional geographic areas within which housing need is quantified and suitable indicators of housing need distribution are presented. It is important to note that only total estimated 1970 housing need derived from a combination of data obtained in the Commission's 1972 O & D survey and 1972 exterior housing condition survey is presented for housing analysis areas.

As previously stated, because of the methodology utilized in the quantification of housing need, stratification of the existing housing need by tenure, household size, income, age, and race cannot be accomplished in a statistically reliable manner at the housing analysis area level. Relevant census data related to household tenure, size, income, age, and race, however, are provided for all households within given housing analysis areas in order to at least crudely quantify housing need at the housing analysis area level. For example, because at the regional level it was found that the incidence of overcrowding among households increases significantly as the household size increases, an understanding of the distribution of large households by housing analysis area should provide useful insight into the type of housing need within those areas.

The balance of this chapter, then, will be devoted to a descriptive analysis of housing need within the Southeastern Wisconsin Region by housing analysis area, with emphasis placed upon providing detailed census data to more succinctly qualify the probable type and magnitude of housing need for various types of households within given housing analysis areas. The data which follow are primarily illustrative in nature, and are intended to provide the reader with an overview of the spatial distribution of housing need within the Region, with selected census data utilized to provide a more specific indicator of this need. The data will not only indicate the relative severity of problems within the Region, but will also illustrate the severity of problems within given housing analysis areas. The qualification of housing need within housing analysis areas is an important work element of the regional housing planning programs, since it will assist in the preparation of alternative housing plans as well as in the formulation of recommendations to ameliorate the existing housing need problems within subregional geographic areas.

Extent of Housing Need

As previously indicated, housing need was determined on a regional basis from data collected as part of the Commission's 1972 O & D and exterior housing condition surveys, and was estimated to be 96,089 households. The housing need within each housing analysis area, as well as the relative magnitude of this need related to the total number of households in each housing analysis area, are indicated in Table 155 and on Maps 51, 52, and 53.

Table 155 and Map 51 clearly indicate that the housing analysis areas which comprise the three major urban centers of the Region—namely, the Milwaukee, Racine, and Kenosha metropolitan areas—contain well over half of the 536,000 households in the Region. From a further review of Table 155 and Map 52, it is apparent that these metropolitan areas also contain the majority of households in housing need. Housing analysis areas 15 through 26 and 29 and 30 in Milwaukee County, areas 43 and 44

Table 155

TOTAL HOUSEHOLDS AND NUMBER OF HOUSEHOLDS IN HOUSING NEED IN THE REGION BY HOUSING ANALYSIS AREA: 1970

Housing Analysis Area	Total Households		Households in Housing Need		
	Number	Percent of Region	Number	Percent of Region	Percent of Planning Analysis Area
1	1,373	0.26	168	0.17	12.24
2	2,858	0.53	252	0.26	8.82
3	783	0.15	81	0.08	10.34
4	5,648	1.05	475	0.49	8.41
5	4,057[a]	0.76	139	0.14	3.43
Ozaukee County	14,719[a]	2.75	1,115	1.14	--
6	1,327	0.25	173	0.18	13.04
7	6,807	1.27	640	0.67	9.40
8	865	0.16	60	0.06	6.94
9	1,159	0.22	137	0.14	11.82
10	3,462	0.65	353	0.37	10.20
11	1,859	0.35	178	0.19	9.58
12	1,906	0.36	166	0.17	8.71
Washington County	17,385	3.26	1,707	1.78	--
13	3,921[a]	0.73	69	0.07	1.76
14	7,175	1.34	104	0.11	1.45
15	11,304	2.11	1,227	1.28	10.85
16	20,385	3.80	3,815	3.97	18.71
17	9,894	1.84	1,301	1.35	13.15
18	41,353	7.71	8,583	8.94	20.76
19	31,127	5.80	5,065	5.27	16.27
20	55,551	10.34	24,306	25.31	43.75
21	25,196	4.70	7,471	7.79	29.65
22	7,099	1.32	637	0.66	8.97
23	14,875	2.77	1,885	1.96	12.67
24	21,835	4.07	4,350	4.53	19.92
25	9,664	1.80	1,042	1.08	10.78
26	16,409	3.06	3,022	3.15	18.42
27	3,585	0.67	447	0.47	12.47
28	2,941	0.55	205	0.21	6.97
29	13,005	2.42	1,043	1.09	8.02
30	25,391	4.73	3,484	3.63	13.72
31	17,927	3.34	448	0.47	2.50
Milwaukee County	338,637[a]	63.10	68,504	71.34	--
32	8,898	1.66	635	0.66	7.14
33	10,948	2.04	264	0.27	2.41
34	6,768	1.26	281	0.29	4.15
35	2,944	0.55	289	0.30	9.82
36	4,607	0.86	301	0.31	6.53
37	1,626	0.30	172	0.18	10.58
38	2,334	0.43	164	0.17	7.03
39	5,851	1.09	565	0.59	9.66
40	13,323	2.48	1,886	1.96	14.16
41	2,396	0.45	292	0.30	12.19
42	2,240	0.42	338	0.35	15.09
Waukesha County	61,935	11.54	5,187	5.38	--
43	13,783	2.57	2,646	2.75	19.20
44	21,385	3.99	4,422	4.60	20.68
45	1,895	0.35	187	0.19	9.87
46	2,766	0.52	267	0.28	9.65
47	2,495	0.47	319	0.33	12.79
48	3,830	0.71	594	0.62	15.51
49	3,642	0.68	349	0.36	9.58
Racine County	49,796	9.29	8,784	9.13	--
50	8,921	1.66	1,802	1.88	20.29
51	16,848	3.14	3,428	3.57	20.35
52	2,014	0.38	367	0.38	18.22
53	1,880	0.35	213	0.22	11.33
54	1,188	0.22	72	0.07	6.06
55	4,617	0.86	1,031	1.07	22.33
Kenosha County	35,468	6.61	6,913	7.19	--
56	2,009	0.37	567	0.59	28.22
57	3,266	0.61	750	0.78	22.96
58	2,322	0.43	410	0.43	17.66
59	6,965	1.30	1,307	1.36	18.77
60	3,982	0.74	845	0.88	21.22
Walworth County	18,544	3.45	3,879	4.04	--
Region	536,484	100.00	96,089	100.00	--

[a] *That portion of the Village of Bayside in Ozaukee County is included in housing analysis area 13.*

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

in Racine County, and areas 50 and 51 in Kenosha County account for approximately 79,500 households in housing need, or almost 83 percent of the total of about 96,100 households in need in the Region. Housing analysis areas 18, 20, and 21 in the City of Milwaukee alone account for over 40,000 households in need, or almost 42 percent of the total housing need in the Region.

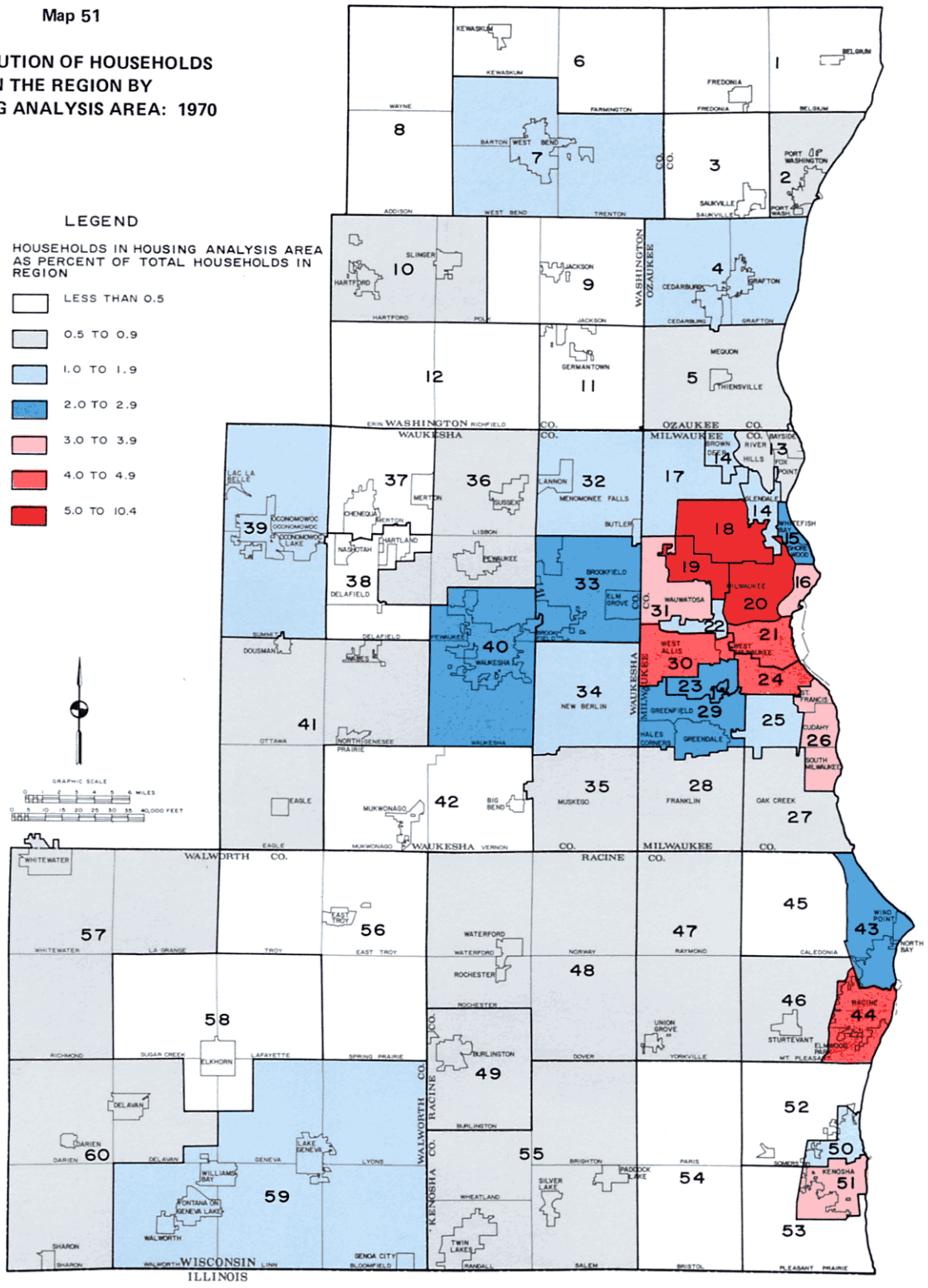
All housing analysis areas within the Region contained some households in housing need. As indicated in Table 155 and on Map 53, however, the relative incidence of housing need within the housing analysis areas varies significantly throughout the Region. Within the 60 housing analysis areas, the proportion of households in housing need ranged from less than 2 percent in areas 13 and 14 to almost 44 percent in area 20. It is important to note that while the majority of households in housing need are concentrated in the urbanized areas of the Region, the incidence of housing need within housing analysis areas is relatively high in certain predominantly rural portions of the Region as well. Specifically, it was found that households in housing need comprise more than 16 percent of all households in each housing analysis area in Walworth County. Furthermore, Walworth County contains three of the 10 areas in the Region where the incidence of housing need was 20 percent or greater.

Distribution of Households
According to Selected Characteristics

As previously indicated, the nature of the data utilized in the determination of housing need precluded a detailed

Map 51

DISTRIBUTION OF HOUSEHOLDS IN THE REGION BY HOUSING ANALYSIS AREA: 1970

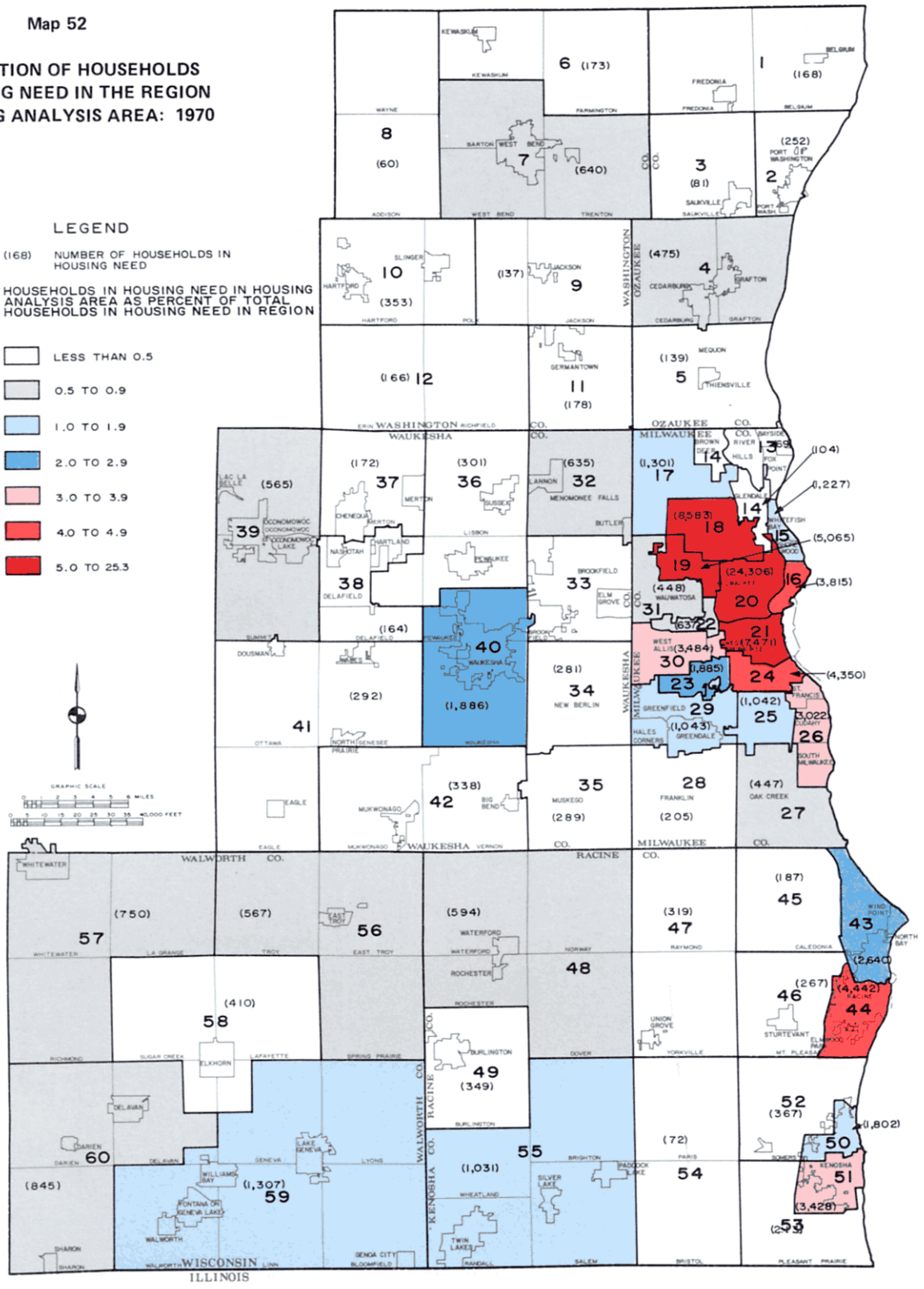


As of 1970, the 14 housing analysis areas which comprise the three major urban centers of the Region, namely, the Cities of Milwaukee, Racine, and Kenosha, contained 298,000 households, or about 56 percent, of the 536,000 households in the Region. Housing analysis area 20 alone, located in the City of Milwaukee, accounted for slightly more than 10 percent of all households in the Region.

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

Map 52

DISTRIBUTION OF HOUSEHOLDS IN HOUSING NEED IN THE REGION BY HOUSING ANALYSIS AREA: 1970

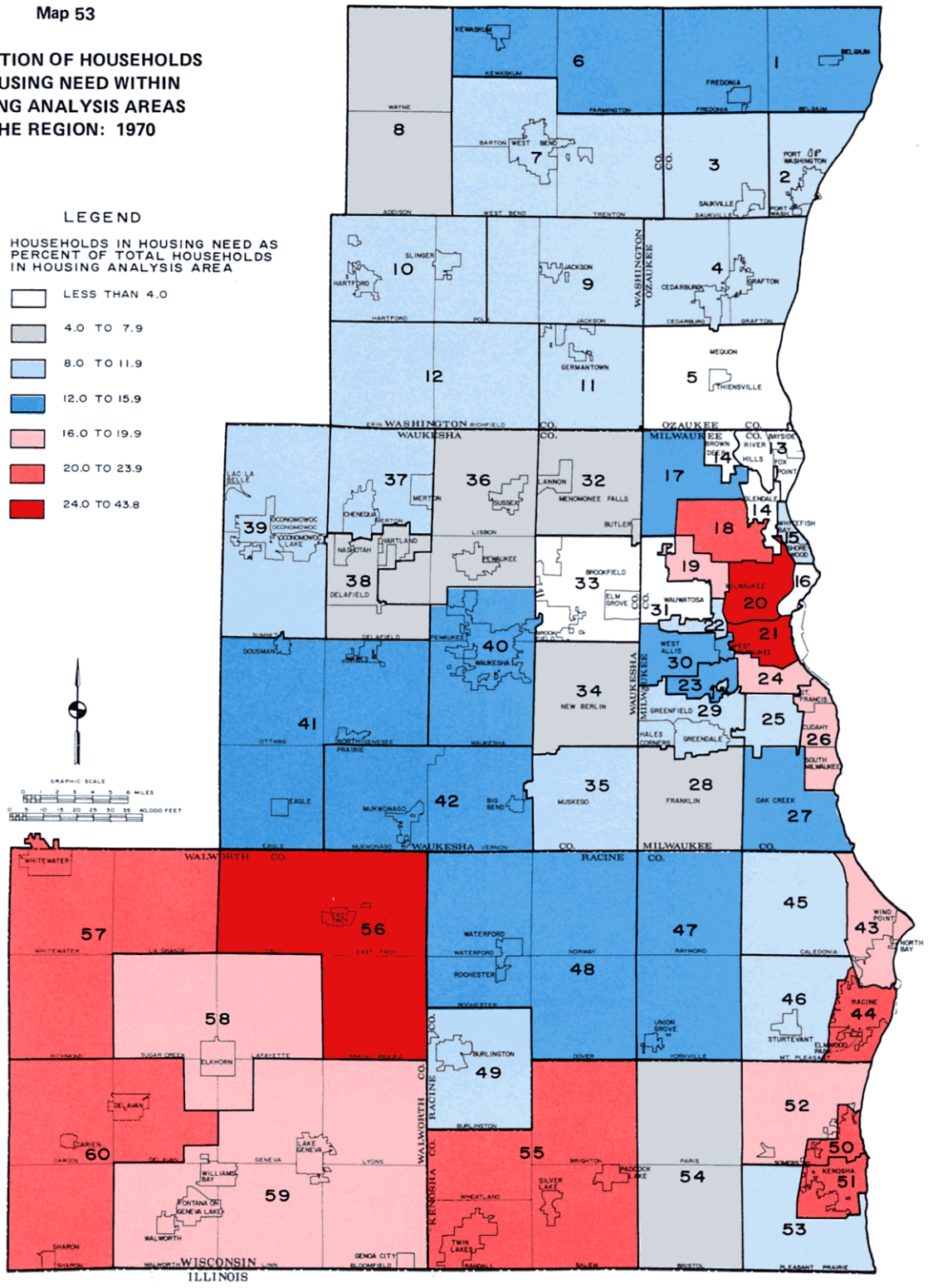


The number of households in housing need in the Region in 1970 was estimated to be about 96,000, or about 18 percent of the total households in the Region. The Milwaukee, Racine, and Kenosha urbanized areas contain 79,500 households in housing need, or almost 83 percent of the total households in housing need in the Region. Housing analysis areas 18, 20, and 21 in the City of Milwaukee alone contain over 40,000 households in housing need, or almost 42 percent of the total housing need in the Region.

Source: SEWRPC.

Map 53

PROPORTION OF HOUSEHOLDS IN HOUSING NEED WITHIN HOUSING ANALYSIS AREAS IN THE REGION: 1970



As shown on this map, all housing analysis areas within the Region contained some households in housing need. The relative incidence of housing need within these 60 housing analysis areas varied from less than 2 percent of all households in areas 13 and 14 to almost 44 percent of all households in area 20. Although the majority of households in housing need are concentrated in the urbanized areas of the Region, the incidence of housing need is also relatively high in certain predominantly rural areas of the Region. Walworth County, for example, contains three of the 10 areas in the Region where the incidence of housing need was 20 percent or more of all households in the housing analysis area.

Source: SEWRPC.

breakdown of households in housing need by tenure, size, income, age, or race at the housing analysis area level. While accurate data for households in housing need are not available at the desired level of geographic detail, accurate data for all households, including households which are not in housing need, are available at the housing analysis area level from the 1970 census, and will be utilized in the following sections to at least crudely qualify the housing need problem within housing analysis areas. Detailed census data utilized to develop Maps 54 through 69 were derived from the first, second, and fourth count 1970 U. S. Census of Population and Housing summary tapes, and are on file in the Commission offices.

Household Income: As previously indicated, the housing problem is primarily an economic one for a majority of households in housing need. Such households either must pay a disproportionate share of the household income in order to reside in decent, safe, and sanitary housing, or, because of insufficient economic means, must reside in overcrowded or substandard housing. Clearly, consideration of the income distribution of households by housing analysis area should provide further understanding of the housing need within those areas. Map 54 shows the income ranges within which the median 1970 income of each housing analysis area may be found. From a review of Map 54, it is evident that housing analysis areas 16, 20, and 21, all of which are located in the City of Milwaukee, had the lowest median household incomes of all housing analysis areas within the Region. It is interesting to note that housing analysis area 20, with the lowest median household income of $5,800, and area 13, with the highest median household income of more than $20,800, are both located in Milwaukee County. It is also interesting to note that four of the five housing analysis areas in Walworth County had household incomes in the $8,000 to $8,999 range, which were lower than the median household incomes of the housing analysis areas in all other counties except Milwaukee.

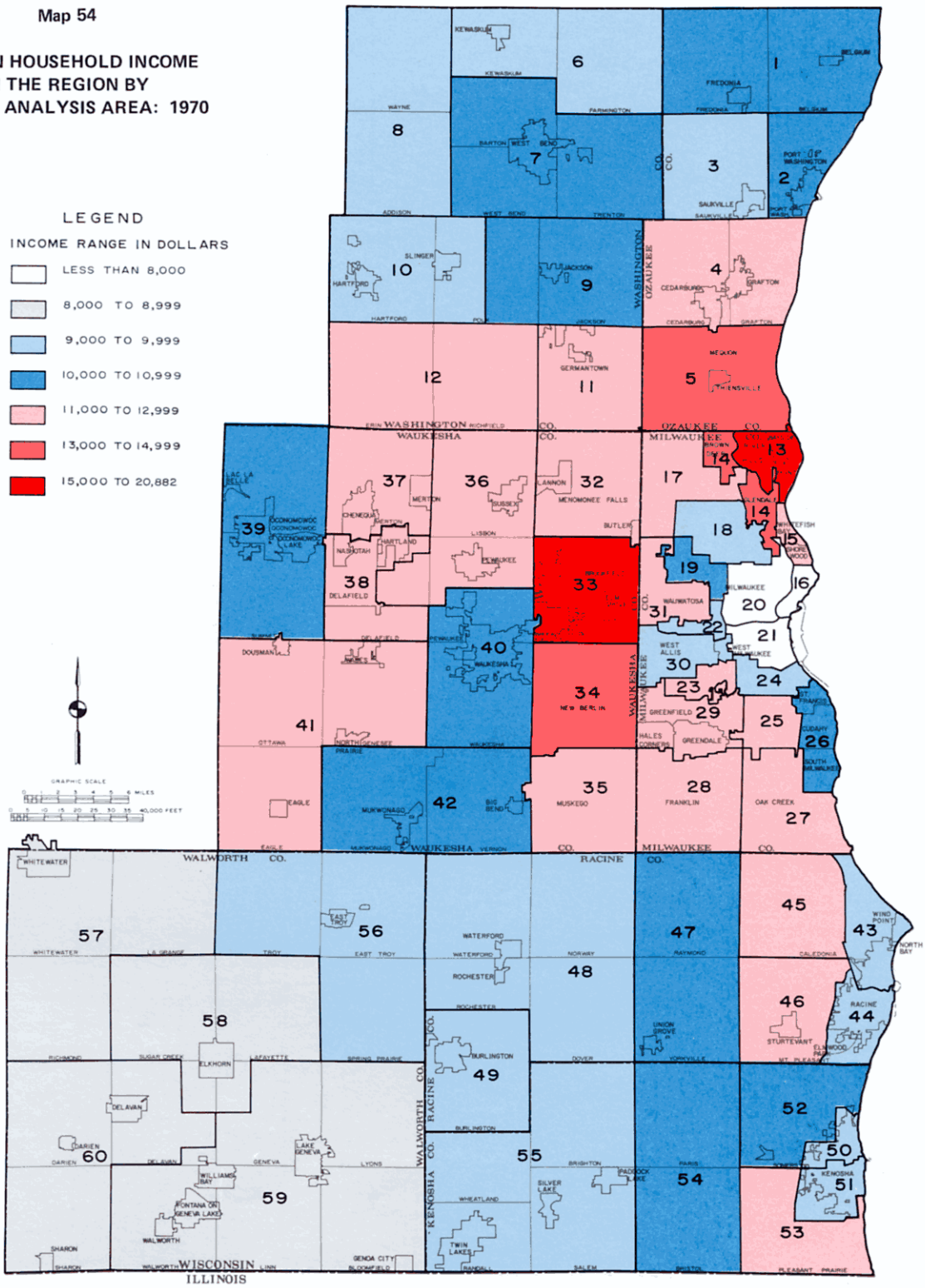
Consideration of the distribution of low-income households within the Region is particularly important, since, as indicated previously in the discussion of housing need at the regional level, it was determined that more than 70 percent of households earning less than $3,000 and 53 percent of households earning $3,000-$4,999 were estimated to be in true housing need in 1970. Maps 55 and 56 provide a more precise identification of the distribution of these low-income households by housing analysis area. It can be seen from Map 55 that the 10 housing analysis areas which comprise the City of Milwaukee and the four housing analysis areas which include the Cities of Kenosha and Racine accounted for the majority of low-income households in the Region. Within the City of Milwaukee alone, housing analysis area 20 contained almost 21 percent, or slightly more than 24,600, of the low-income households in the Region. The relative significance of low-income households within each housing analysis area is shown on Map 56. Of the five housing analysis areas—namely, areas 16, 20, 21, 57, and 59—which had the largest ratio of low-income households, three are located in the most highly urbanized portion of the City of Milwaukee while the remaining two are located in Walworth County, which is predominantly rural. Housing analysis area 20, which as previously indicated accounted for about 25 percent of the total housing need and almost 21 percent of the total low-income households in the Region, also had over 44 percent of its households with incomes of less than $5,000. It is important to note that every housing analysis area in the Region, regardless of its median household income, contained households in the low-income category. It is apparent, therefore, that the housing problem as indicated by low-income households is Region-wide.

Household Tenure: Consideration of the distribution of households by tenure within the Region is important, since, as previously indicated in the discussion of housing need at the regional level, 67 percent of the households in housing need were found to be renter households whereas only 33 percent were found to be owner households. This is indeed significant, since renter households accounted for only 38 percent of all households in the Region. Maps 57 through 60 provide a comparison of the distribution of owner and renter households both within the Region and within each housing analysis area. It is evident from these maps that the housing analysis areas within and including the three major urban centers of the Region—the Cities of Kenosha, Milwaukee, and Racine—not only contained a high percentage of the Region's total renter households, but the number of renter households within the housing analysis areas as a percent of all households within the housing areas was also extremely high. About 71 percent of the renter-occupied housing in the Region occurred in these three urban centers. Three housing analysis areas within the City of Milwaukee—namely, areas 16, 18, and 20—together accounted for approximately 37 percent of all renter households in the Region. Housing analysis areas 16, 20, and 21 in the City of Milwaukee all exhibited a greater proportion of renter households as a percent of all households in their respective housing areas than any other housing analysis areas in the Region.

Housing Unit Condition: Housing condition data presented previously in this chapter indicated that about 9,208 households of the 96,089 households in housing need occupied substandard housing units. However, as previously stated, the methodology utilized in the exterior housing condition survey precludes the presentation of housing condition data on the housing analysis area level. In an effort to provide information related to the condition of housing within housing analysis areas, two indicators of housing condition from 1970 census data were selected and are included herein. These indicators are the number of owner-occupied housing units built before 1940 and valued at less than $15,000, and the number of renter-occupied housing units built before 1940 and having a gross rent of less than $80 per month. Data related to these indicators within each housing analysis area are presented on Maps 61 and 62. It is evident from Map 61 that housing units which are both old and low in value comprised a large proportion of the owner-occupied housing stock within the central areas of the largest cities of the Region as well as certain outlying

Map 54

MEDIAN HOUSEHOLD INCOME IN THE REGION BY HOUSING ANALYSIS AREA: 1970

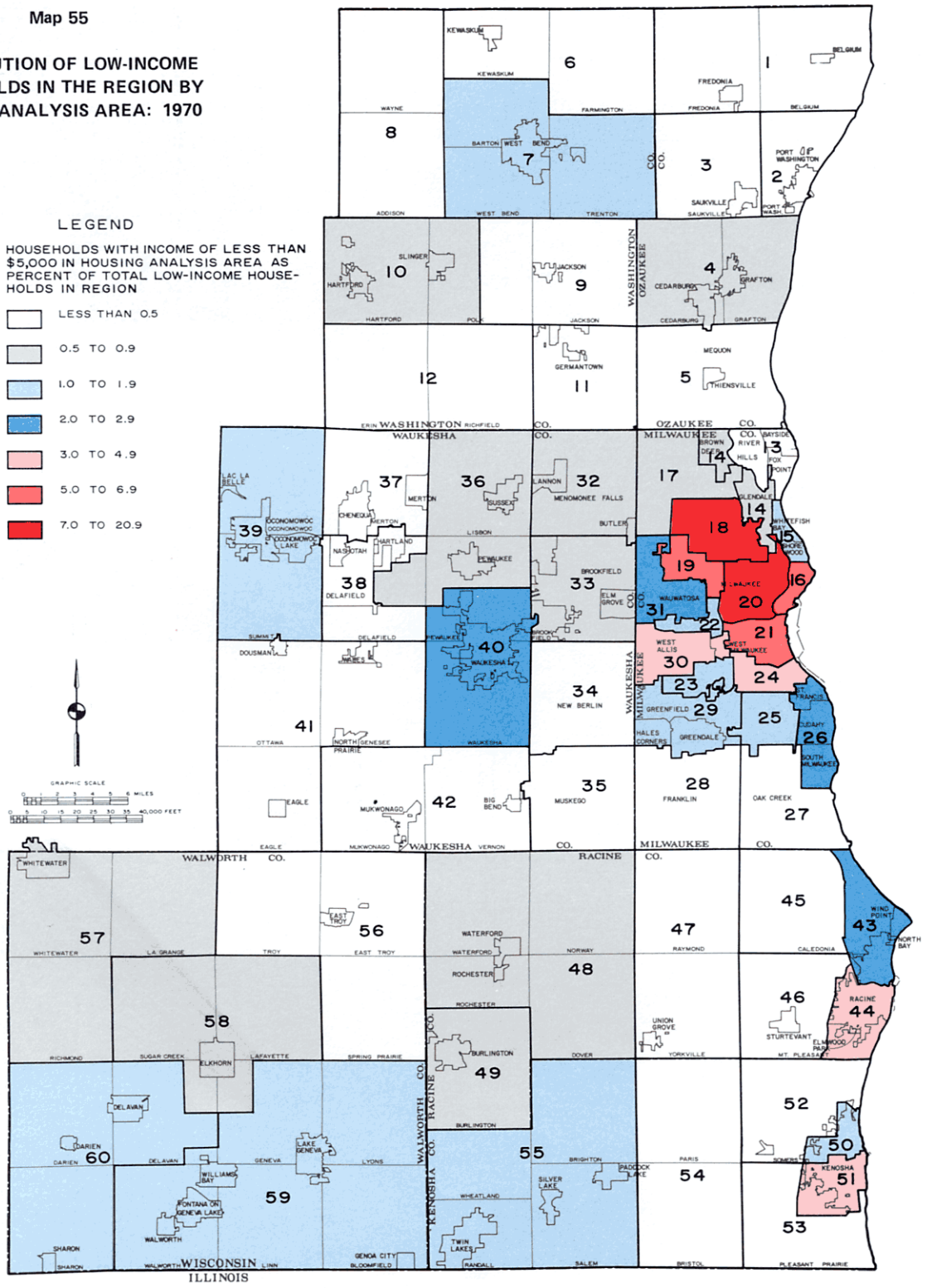


More than any other variable, the household income determines whether a household is economically able to satisfy its housing requirements. Among the 60 housing analysis areas, the median household income ranged from a low of $5,800 in housing analysis area 20 to a high of approximately $20,800 in housing analysis area 13, both located in Milwaukee County.

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

Map 55

DISTRIBUTION OF LOW-INCOME HOUSEHOLDS IN THE REGION BY HOUSING ANALYSIS AREA: 1970

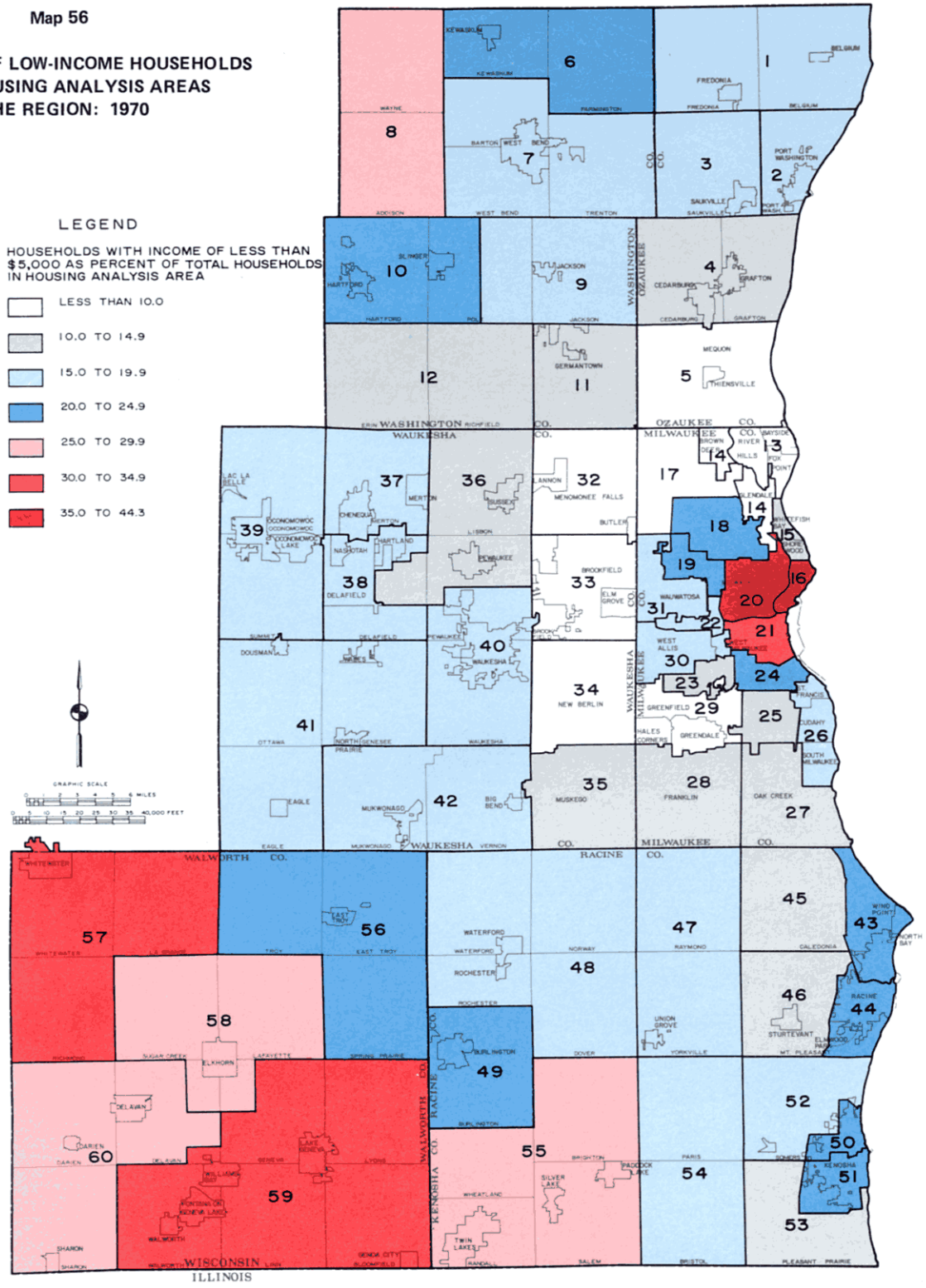


Within the Region in 1970, approximately 118,000 households had annual incomes of less than $5,000. More than 24,600, or almost 21 percent, of these low-income households were located in housing analysis area 20 in the City of Milwaukee. The housing analysis areas which include the Cities of Kenosha, Milwaukee, and Racine accounted for the majority of the low-income households in the Region.

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

Map 56

PROPORTION OF LOW-INCOME HOUSEHOLDS WITHIN HOUSING ANALYSIS AREAS IN THE REGION: 1970

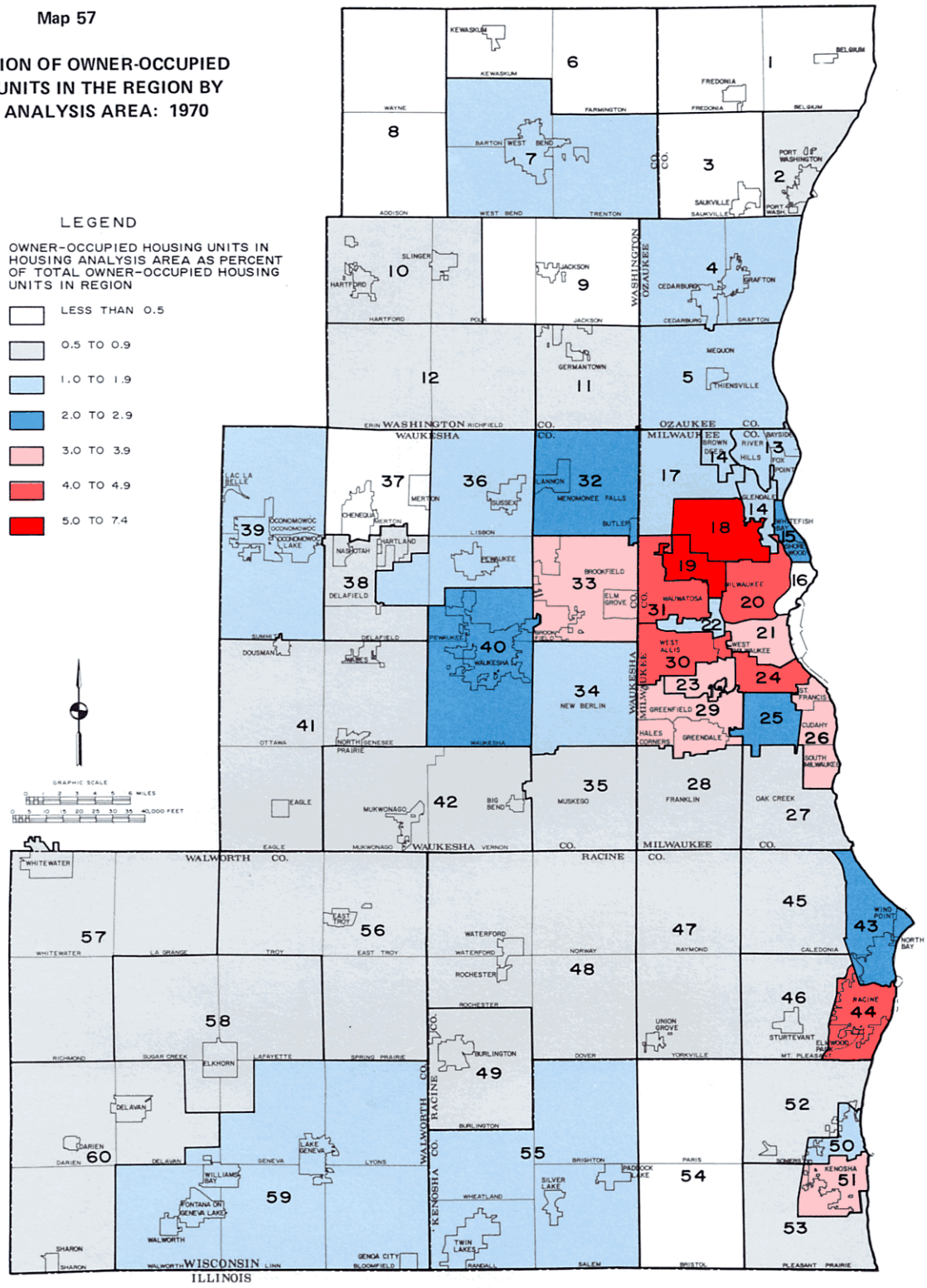


Every housing analysis area in the Region, regardless of its median income, contained households in the low-income category in 1970. Of the five housing analysis areas—namely, areas 16, 20, 21, 57, and 59—which had the largest proportion of low-income households, three were located in the most highly urbanized portion of the City of Milwaukee, while the remaining two were located in predominantly rural Walworth County.

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

Map 57

DISTRIBUTION OF OWNER-OCCUPIED HOUSING UNITS IN THE REGION BY HOUSING ANALYSIS AREA: 1970

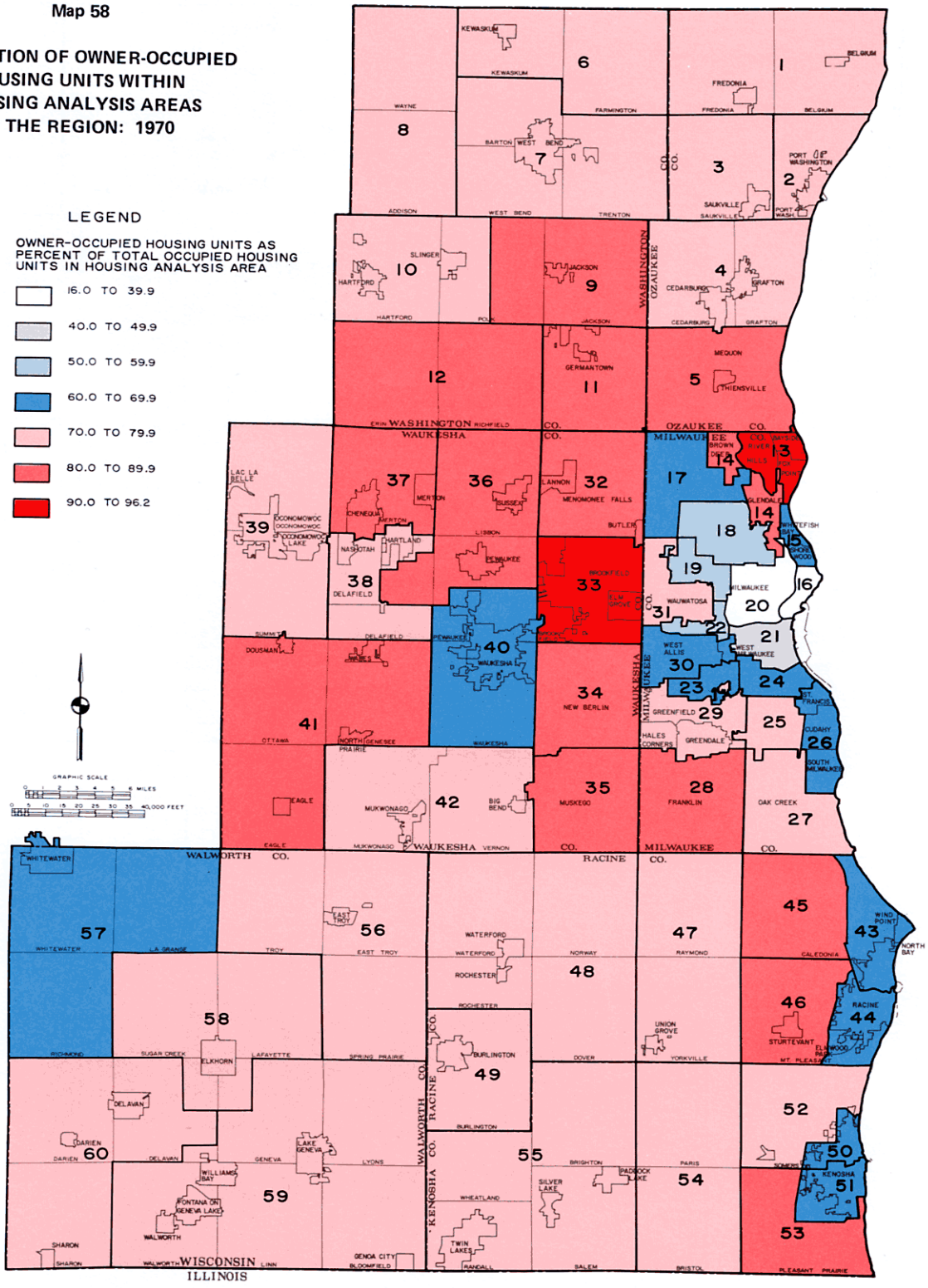


There were approximately 331,300 owner-occupied housing units in the Region in 1970. Housing analysis area 18 in Milwaukee County had the greatest number, with almost 24,450 such units, or 7 percent of the regional total. Housing analysis area 3 in Ozaukee County had the least number of owner-occupied housing units, with about 600 such units, or less than 1 percent of the regional total.

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

Map 58

PROPORTION OF OWNER-OCCUPIED HOUSING UNITS WITHIN HOUSING ANALYSIS AREAS IN THE REGION: 1970

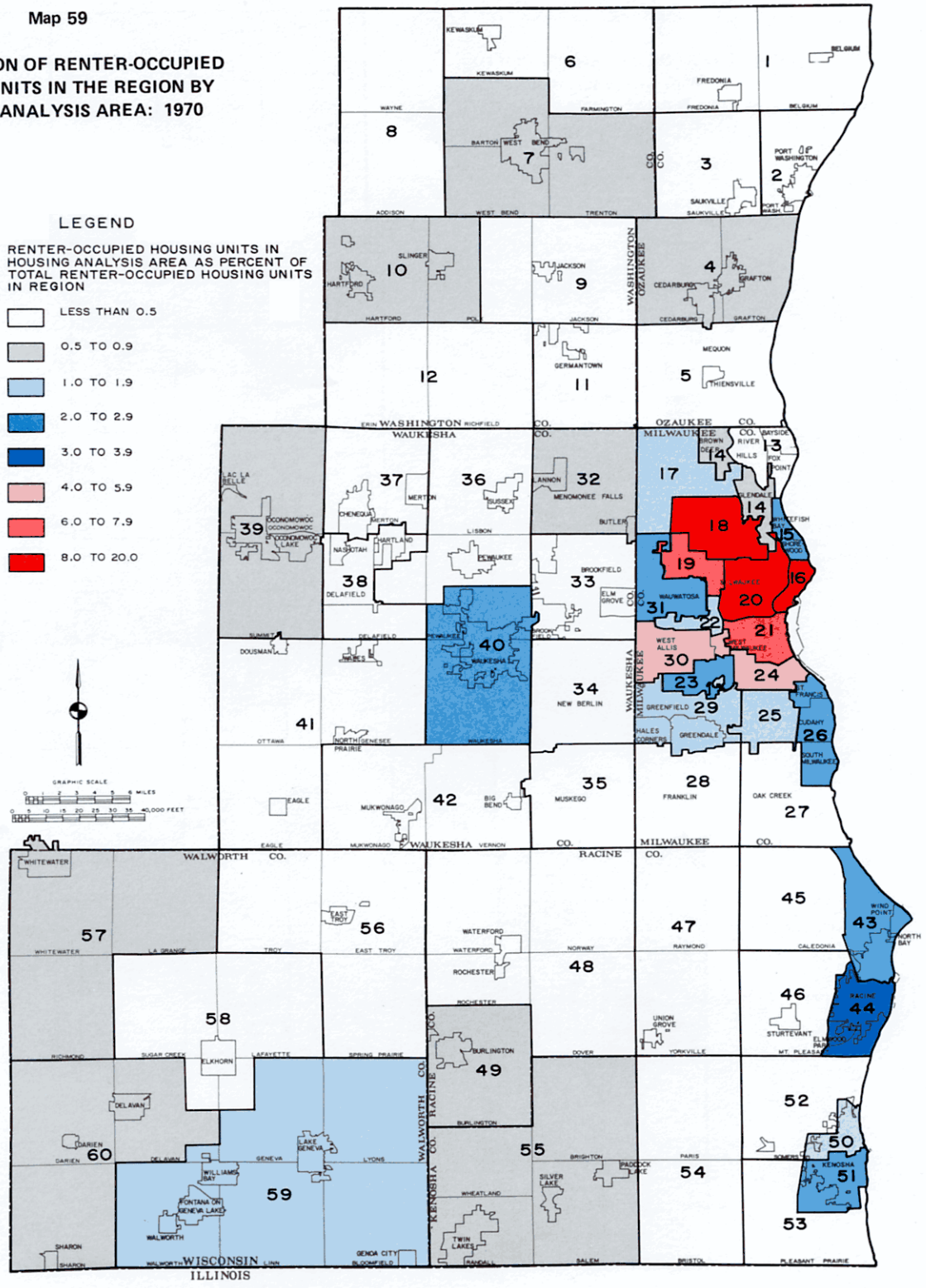


There is considerable variation in the tenure status of the housing stock among housing analysis areas in southeastern Wisconsin. For example, in 1970, of the approximately 3,900 occupied housing units in housing analysis area 13, about 96 percent, or 3,770 units, were owner occupied. At the other extreme, of the 20,385 occupied units in housing analysis area 16, only about 16 percent, or 3,270 units, were owner occupied.

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

Map 59

DISTRIBUTION OF RENTER-OCCUPIED HOUSING UNITS IN THE REGION BY HOUSING ANALYSIS AREA: 1970

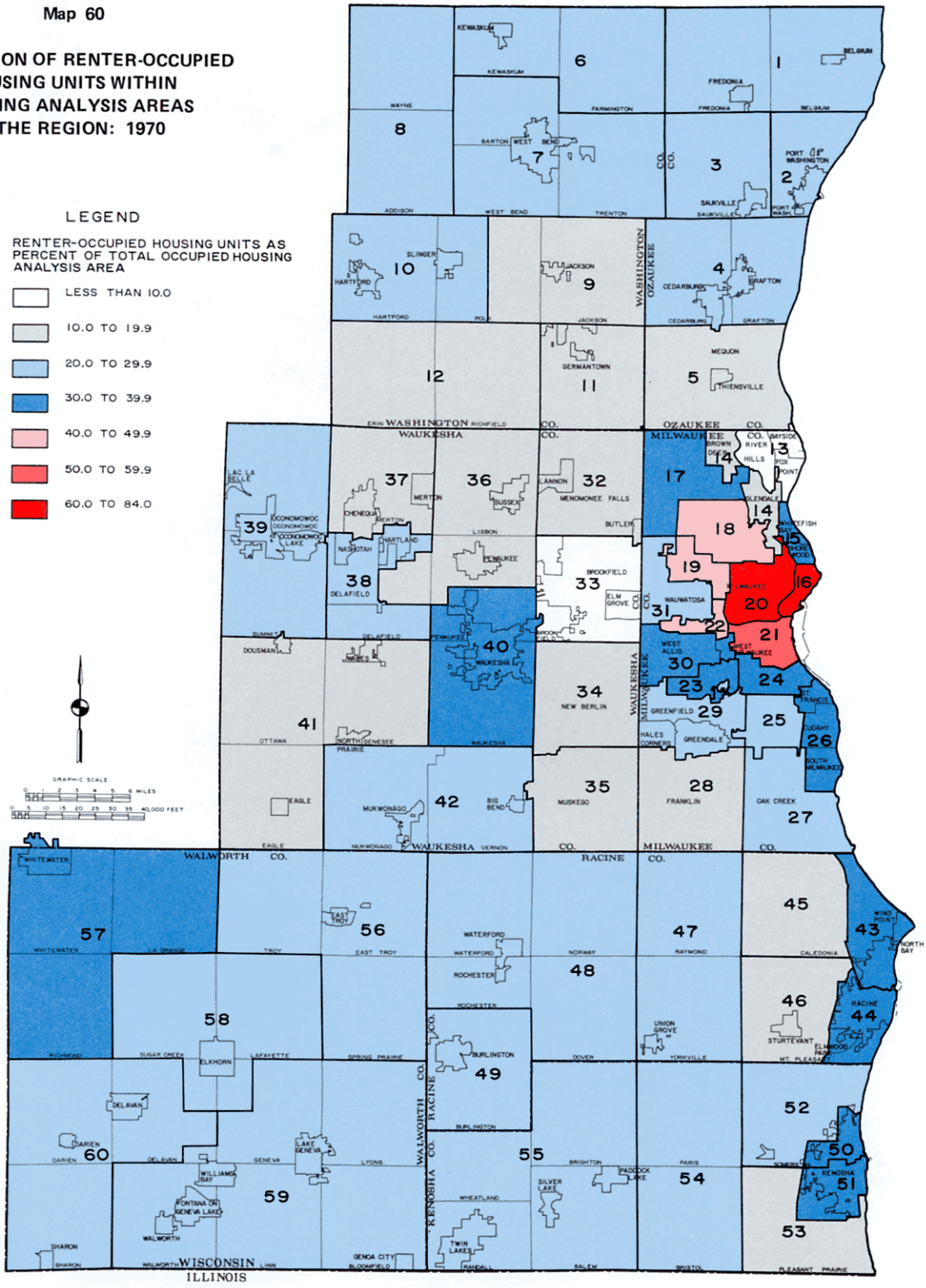


In 1970, there were approximately 205,150 renter-occupied housing units in the Region. Housing analysis area 20 in Milwaukee County had the greatest number, with over 40,900, or about 20 percent of all renter households in the Region. Conversely, housing analysis area 13, also in Milwaukee County, had the smallest number with only 150, or less than one-tenth of 1 percent of all renter households in the Region.

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

Map 60

PROPORTION OF RENTER-OCCUPIED HOUSING UNITS WITHIN HOUSING ANALYSIS AREAS IN THE REGION: 1970

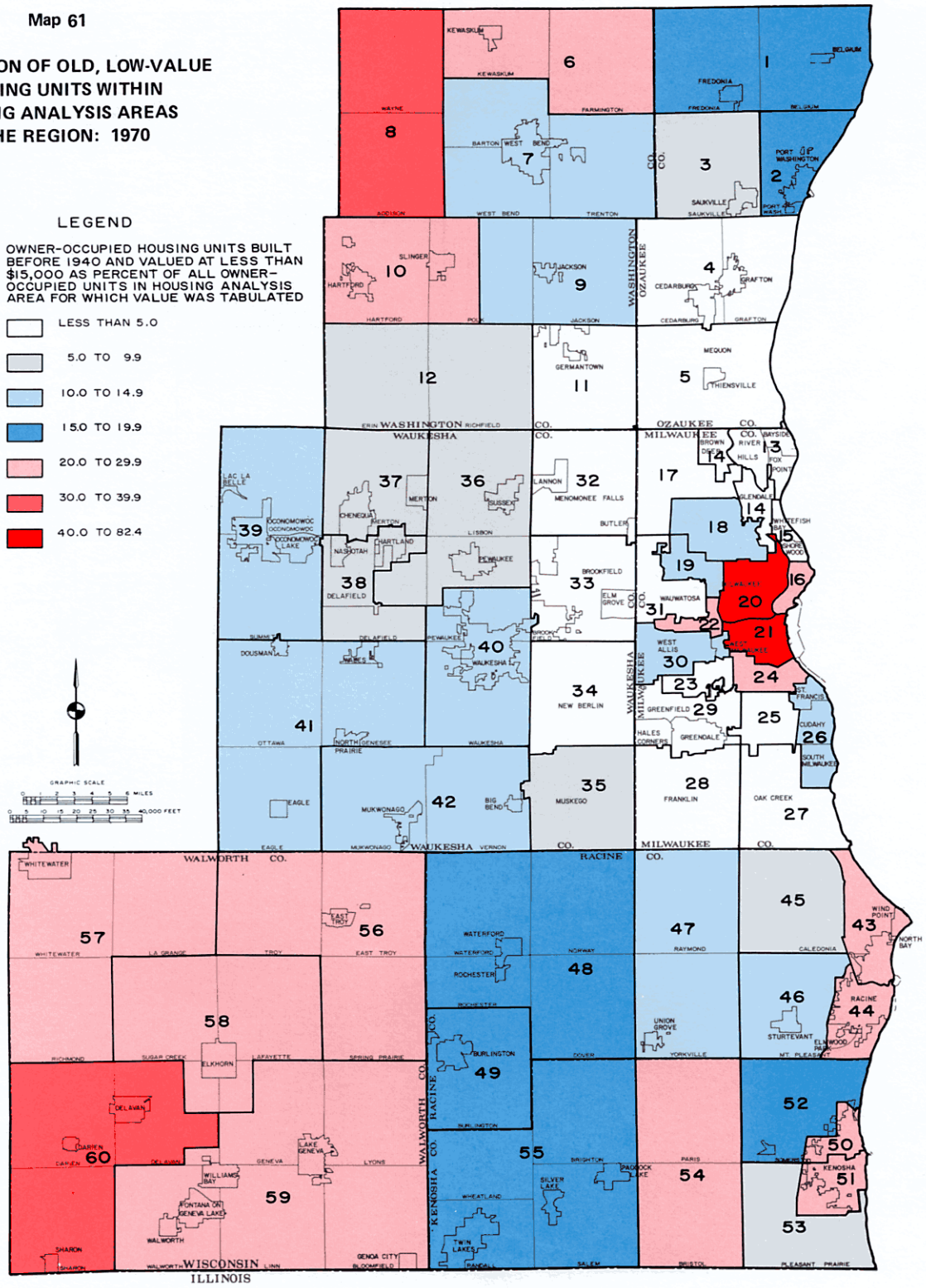


Approximately 38 percent of the occupied housing stock in the Region in 1970 consisted of renter-occupied housing units. On a housing analysis area basis, the proportion of renter-occupied housing ranged from a low of about 4 percent in housing analysis area 13 to a high of about 84 percent in housing analysis area 16, both located in Milwaukee County.

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

Map 61

PROPORTION OF OLD, LOW-VALUE HOUSING UNITS WITHIN HOUSING ANALYSIS AREAS IN THE REGION: 1970

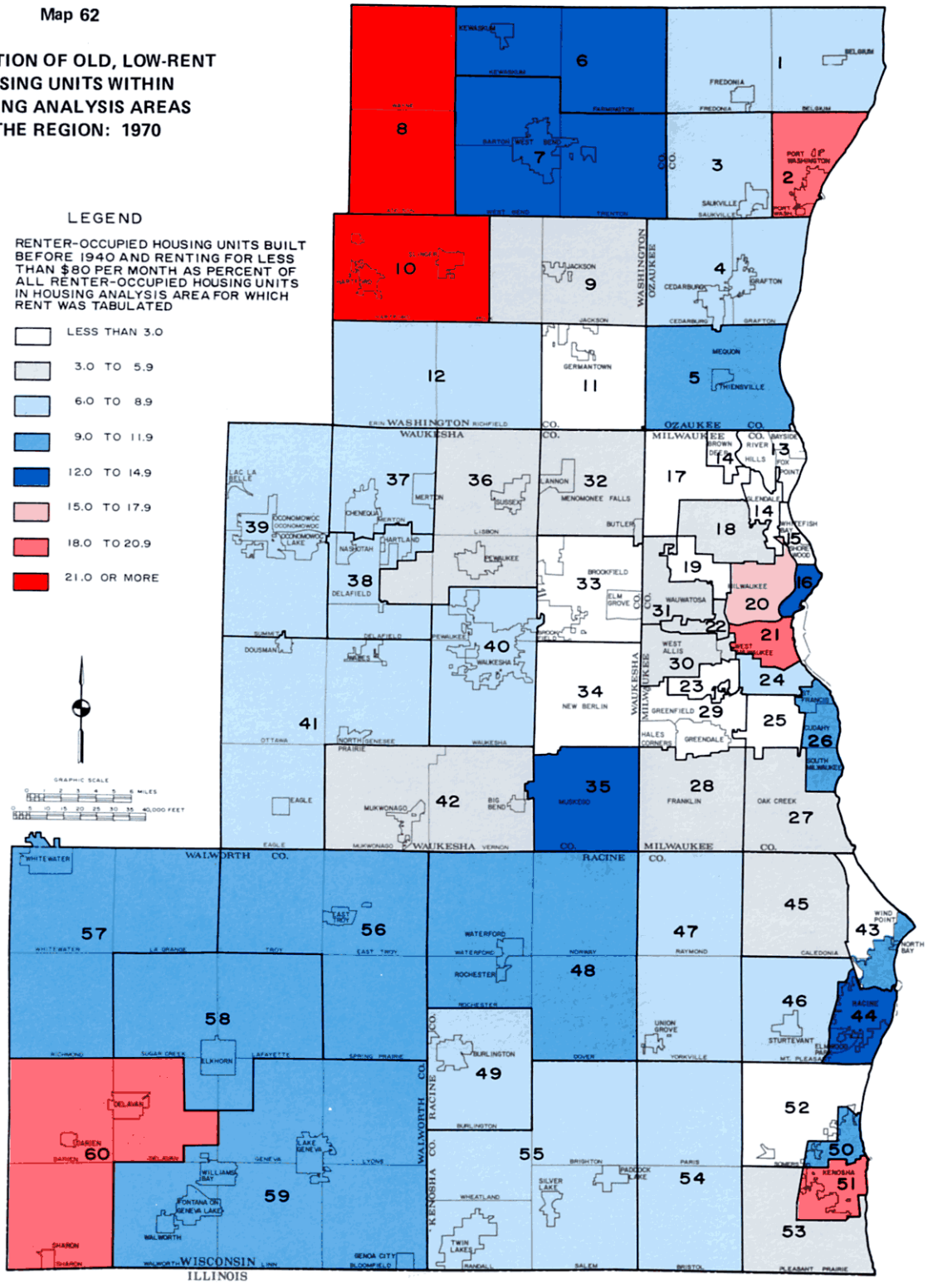


Housing units which are both relatively old and low in value comprised a large proportion of the owner-occupied housing stock within the housing analysis areas of not only the largest cities but also of certain outlying areas of the Region. Housing analysis areas with the greatest percentages of such housing in 1970 were located in the City of Milwaukee and included area 20, with about 82 percent of such housing, and area 21, with about 74 percent. High percentages in more rural portions of the Region occurred in housing analysis area 8 in Washington County, with about 37 percent, and in area 60 in Walworth County, with about 33 percent.

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

Map 62

PROPORTION OF OLD, LOW-RENT HOUSING UNITS WITHIN HOUSING ANALYSIS AREAS IN THE REGION: 1970



Older rental housing units which have a relatively low monthly gross rent, like relatively older and low value owner-occupied housing units, are generally located primarily within the central areas of the largest cities of the Region. Housing areas in which a relatively large proportion—more than 12 percent—of all rental housing is comprised of rental units built before 1940 and renting for less than $80 per month are located primarily in the Cities of Kenosha, Milwaukee, and Racine, although such areas are also located in portions of Walworth, Ozaukee, and Washington Counties.

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

areas of the Region. Thus, housing analysis areas with a significant proportion—greater than 20 percent—of housing units built before 1940 and with a value of less than $15,000 as a percent of all households in the housing area occurred in the Cities of Milwaukee, Racine, and Kenosha, northern and western Washington County, and throughout Walworth County.

A similar pattern is evident in the distribution of older rental housing units for which the monthly gross rent is low (see Map 62). In this regard, housing areas in which a relatively large proportion—more than 12 percent—of all rental housing is comprised of rental units that were built before 1940 and that rent for less than $80 per month were located in the Cities of Kenosha, Milwaukee, and Racine, as well as in certain outlying areas of the Region, including Walworth, Ozaukee, and Washington Counties.

Overcrowded Housing Units: As previously indicated, about 19 percent of all households in housing need in the Region in 1970 also resided in overcrowded housing units. Also, as previously indicated, the incidence of overcrowded housing was most prevalent among large households in housing need. It appears that the severity of housing problems falls very heavily on large households; and it would be useful, therefore, to consider the distribution of large households and overcrowding within the Region as well as on a housing analysis area basis.

In the analysis of existing housing need, a household was considered to be overcrowded if there was an average of more than two persons per bedroom. Unfortunately, the U. S. Bureau of the Census does not tabulate households by the number of persons per bedroom. The Census Bureau itself has, in fact, adopted no standard concerning what constitutes overcrowded living conditions. However, the Census Bureau does provide a tabulation of households according to the average number of persons per room. The 1970 census tabulation of the number of households with an average of 1.51 or more persons per room is utilized herein to provide an indicator of overcrowding. Of the 5,900 households which had 1.51 or more persons per room in the Region in 1970, more than 63 percent were located in the housing analysis areas which were within or included the Cities of Kenosha, Milwaukee, and Racine (see Map 63). Almost 1,350, or 23 percent, of these overcrowded households were located in housing analysis area 20 in the City of Milwaukee. On an individual housing analysis area basis, as indicated on Map 64, housing analysis areas 1, 12, and 20 were the only housing analysis areas with 2 percent or more of all households in their areas residing in overcrowded units.

A more comprehensive understanding of households which may have an overcrowding housing problem is possible from consideration of Maps 65 and 66, which provide data concerning households of six or more persons. Those housing analysis areas which are within or include the Cities of Kenosha, Milwaukee, and Racine again accounted for about half of all of the Region's households which were comprised of six or more persons (see Map 65). It is interesting to note, however, that the number of these large sized households as a percent of all households in the housing analysis area is far greater outside of the metropolitan areas of Milwaukee, Racine, and Kenosha, with the largest percent occurring in housing analysis area 8, where approximately 230 households, or about 27 percent of the total of 865 households, were large households (see Map 66).

Household Age: A previous section of this chapter indicated that in 1970, almost 31 percent of all elderly households in the Region were in housing need. The housing problems of elderly households seem quite significant; and it is important, therefore, to consider the distribution of elderly households within the Region and on a housing analysis area basis. Map 67 indicates that all housing areas had a small representation of the 99,730 elderly households in the Region in 1970. Further, it is evident that the housing areas which are within or include the Cities of Kenosha, Milwaukee, and Racine and much of Milwaukee County accounted for about 60 percent of the elderly households in the Region. Map 68 shows that elderly households comprised more than 21 percent of the total households in each of 16 housing analysis areas, with the most significant concentration occurring in Milwaukee and Walworth Counties.

Household Race: Consideration of the distribution of black households within the Region is important since, as previously indicated in the discussion of housing need at the regional level, black households, like large households and elderly households, experienced severe housing problems. In fact, approximately 50 percent of the black households were estimated to be in housing need in 1970. The distribution of black households is, therefore, considered in this section on a housing analysis area basis. Of all black households in the Region in 1970, about 88 percent resided in housing analysis areas 18 and 20 in the City of Milwaukee. The only other housing analysis areas with significant numbers of black households occurred in the City of Racine, included in portions of areas 43 and 44 in Racine County, and the City of Kenosha, included in portions of areas 50 and 51 in Kenosha County (see Map 69). Black households as a percent of the total households within each housing analysis area were 0 percent in 16 housing areas, less than 1 percent in 52 housing areas, and less than 2 percent in 55 housing areas. In the City of Milwaukee, about 12 percent of all households were black households in housing analysis area 18, and about 40 percent of all households were black households in housing area 20.

SUMMARY

For the purposes of the regional housing study, true "housing need" is defined as those households which cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, as well as those households which are precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market. A major work element of the regional housing study was the application of the adopted set of regional housing objectives and standards to the existing population and housing base in

order to determine the magnitude and characteristics of the existing housing need in southeastern Wisconsin. The magnitude and characteristics of the existing housing need, as presented in this chapter, are important considerations in the formulation of regional housing recommendations directed at the amelioration of existing and future housing problems within the Region. The most significant findings are summarized below.

It is estimated that there were about 96,100 households in housing need in 1970, representing about 18 percent of all households in the Region. Of this total housing need, about 69,600 households were found to be in economic need only, indicating that they presently occupy decent, safe, and sanitary housing but are able to secure such housing only at a cost which is disproportionate with the household income. The housing problem was more severe for the balance of the households in need, namely, 26,500 households which occupy housing units in violation of the adopted standards relative to decent, safe, and sanitary housing and which are unable to secure adequate alternative housing. Thus, the existing housing need includes about 7,800 households which occupy housing units which are in substandard physical condition; about 17,300 households which are overcrowded; and about 1,400 households which occupy housing units that are both substandard and overcrowded. It should be noted that of 26,500 households in the housing need category which occupy substandard or overcrowded housing, 15,200 households, or 57 percent, were also in economic need, indicating that they were unable to secure adequate alternative housing because of insufficient household income relative to the cost of housing, while the remaining households were assumed to be precluded from securing adequate housing because of noneconomic constraints within the housing market, such as discrimination based on race or family size. Housing recommendations which are directed at the reduction in the total housing need should be formulated so as to resolve the special problems of the component of housing need consisting of households which occupy substandard and overcrowded housing units in the shortest possible time.

It is important to note that the existing housing need as quantified above excludes households whose housing needs have been satisfied by various government subsidized housing programs. In 1973 there were almost 16,000 publicly subsidized housing units within the Region. Occupants of government subsidized housing units were surveyed in the same manner as other households in the Commission's 1972 origin and destination travel survey, which represents the primary source of data for the analysis of housing need. On the basis of their government housing subsidy, such households were considered as occupying decent, safe, and sanitary housing at a cost consistent with the household income and were accordingly not included in existing housing need.

Stratification of the existing housing need by various household characteristics, including tenure status, household size, and household income, can provide further insight into the extent of housing problems within the Region. Significant differences can be observed in the housing need status of households when the households are classified by tenure status. Thus, it is estimated that 31 percent of all renter households in the Region were in housing need in 1970, compared to only 10 percent of all homeowner households. Almost 24 percent of the renter households in the Region were in economic need only, compared to only 6 percent of the homeowners. The proportion of renters which occupied substandard or overcrowded housing units (about 8 percent) was also considerably higher than the corresponding proportion for homeowners (about 3 percent).

The greater incidence of housing need for renter households is consistent with the low household income distribution of renters relative to homeowners. Because of the lower household income distribution, a larger proportion of renters than homeowners must either pay more than is consistent with the household income to obtain adequate housing, or forego adequate housing altogether, occupying substandard or overcrowded housing instead.

The incidence of housing need also varies somewhat with household size. In this respect, the proportion of households in need ranged from a low of 9 percent for households consisting of four persons to an exceptionally high proportion, 31 percent, for one-person households in the Region. The large percentage of one-person households which are in housing need is consistent with the fact that a large proportion, 43 percent, of all one-person households in the Region is comprised of elderly households which experience a relatively high incidence of housing need.

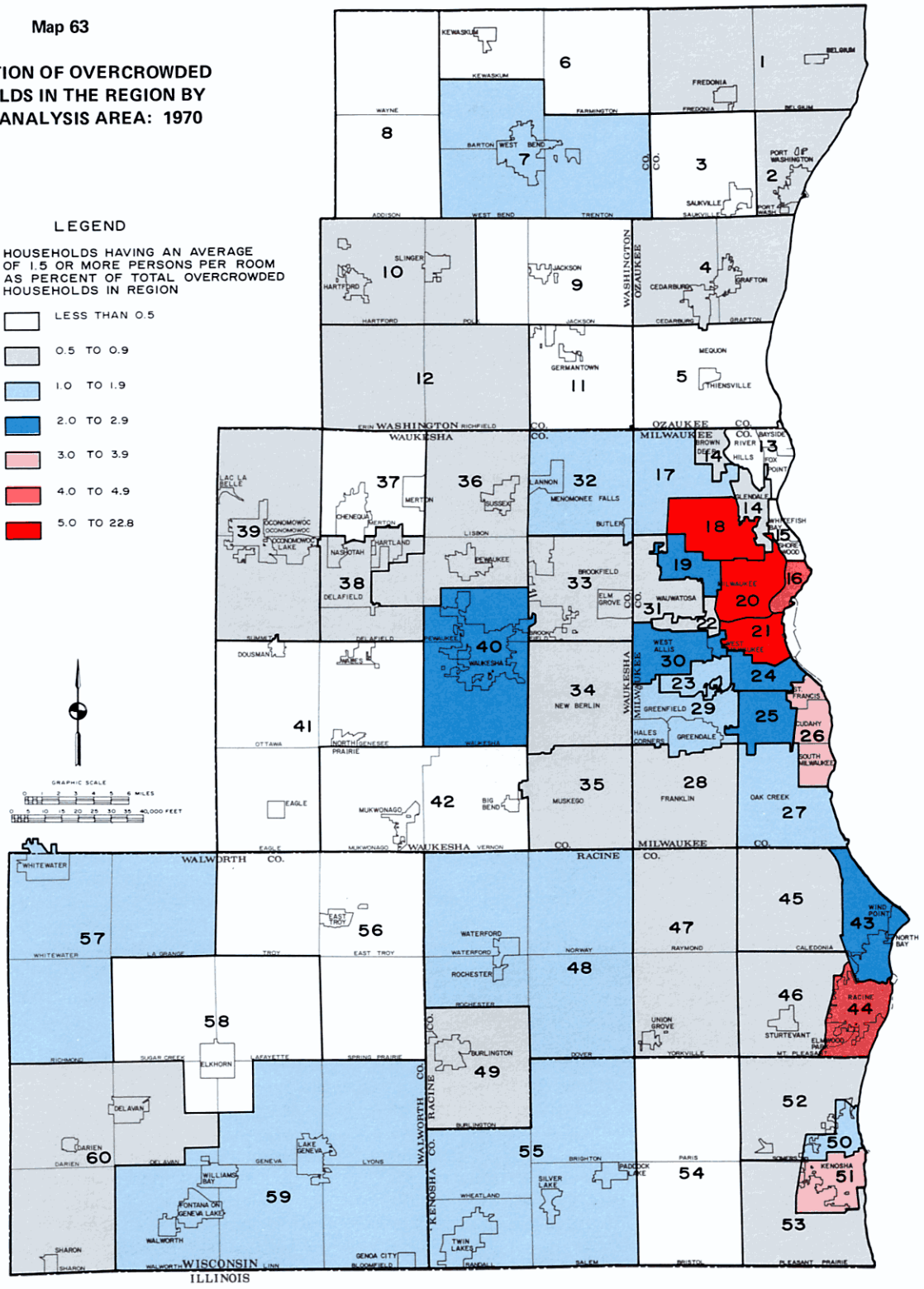
It should also be noted that the component of housing need for which the housing problem is most severe, namely, those households which occupy substandard or overcrowded housing, comprises a relatively small proportion—less than 4 percent—of small-sized households consisting of four persons or less. This component of housing need increases, however, as household size increases, with 17 percent of all households consisting of six persons or more occupying substandard or overcrowded housing.

Stratification of the existing housing need by household income provides further understanding of housing problems within the Region. For a majority of households in housing need, the housing problem is primarily an economic one. Such households must pay a disproportionate share of the household income in order to reside in decent, safe, and sanitary housing, or, because of insufficient economic means, must occupy overcrowded or substandard housing. Accordingly, it is not surprising to find that the incidence of housing need decreases as household income increases. Thus, the proportion of households in housing need ranged from 70 percent for households earning less than $3,000 to 3 percent for households earning $10,000 or more.

Certain subgroups of the regional population, namely, the elderly and the black population, were found to have more severe housing problems than the overall popula-

Map 63

DISTRIBUTION OF OVERCROWDED HOUSEHOLDS IN THE REGION BY HOUSING ANALYSIS AREA: 1970

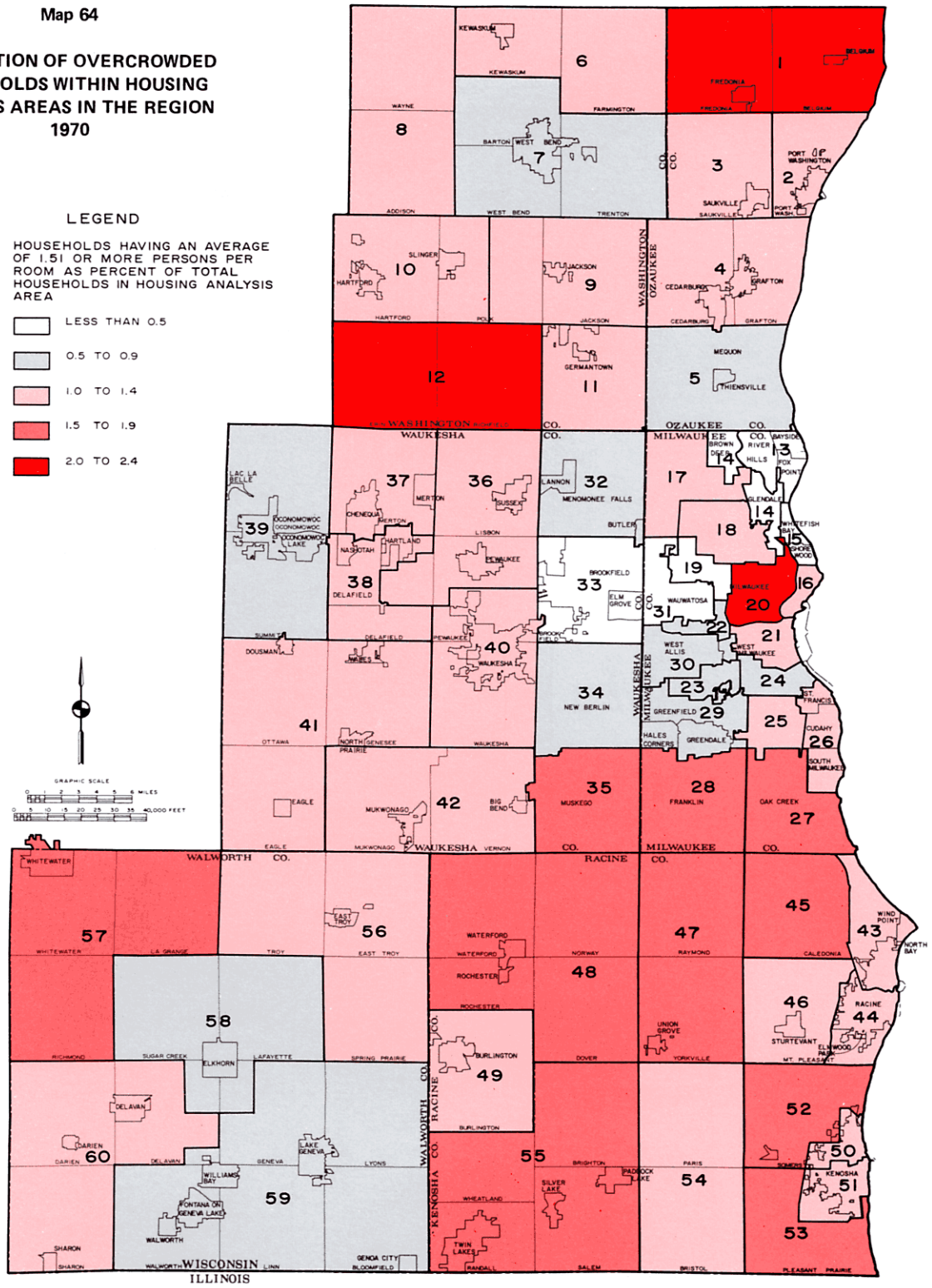


About 5,900 households within the Region had an average of 1.51 or more persons per room in 1970, and as such were considered to be overcrowded. Housing analysis areas which are located in the Cities of Kenosha, Milwaukee, and Racine accounted for more than 63 percent of the overcrowded households in the Region. About 23 percent of these overcrowded households were located in housing analysis area 20 in the City of Milwaukee.

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

Map 64

PROPORTION OF OVERCROWDED HOUSEHOLDS WITHIN HOUSING ANALYSIS AREAS IN THE REGION 1970

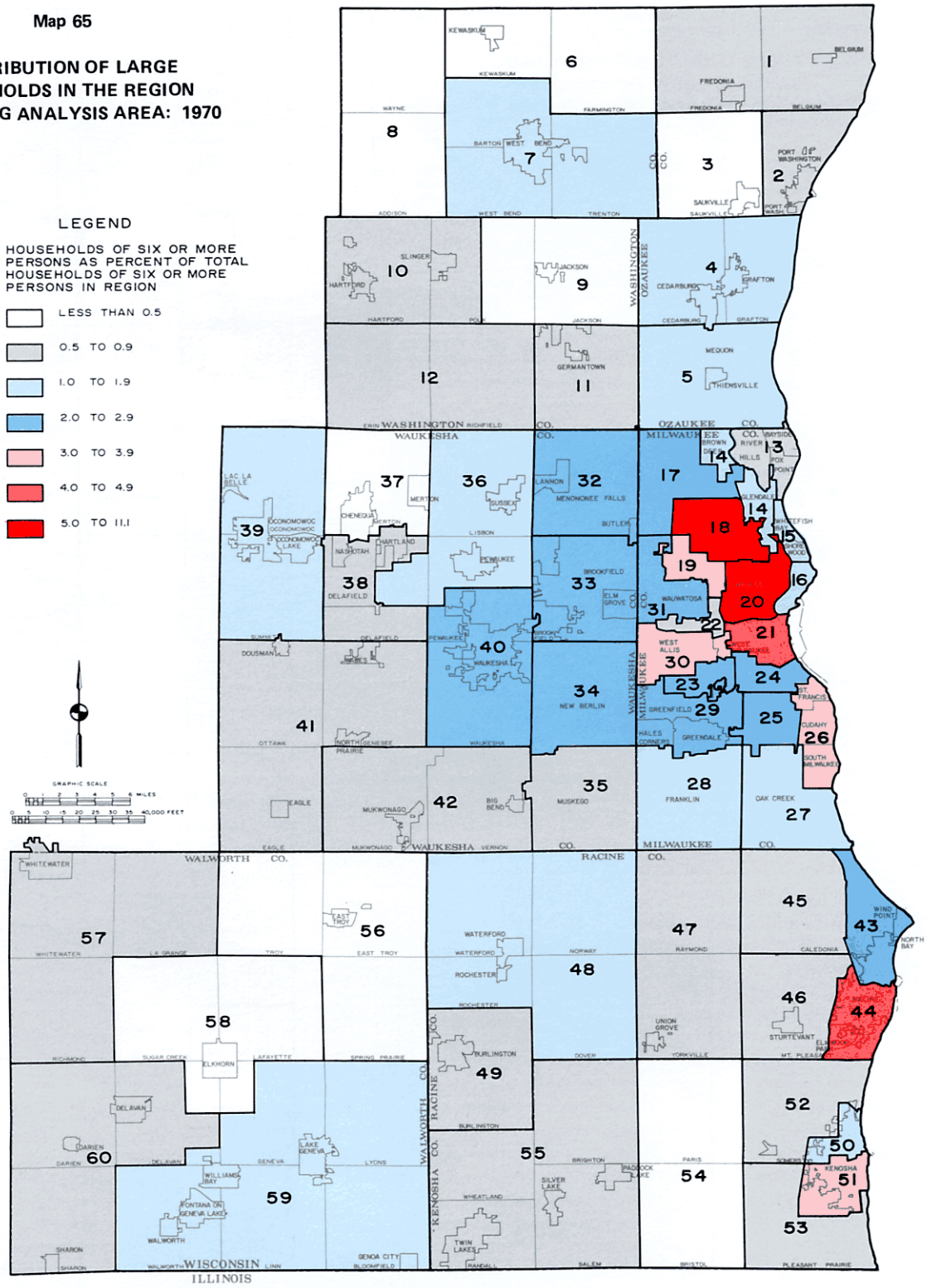


As shown on this map, the proportion of overcrowded households is less than one-half of 1 percent in six housing analysis areas located in Milwaukee and Waukesha Counties. Only in three areas—1, 12, and 20—did overcrowded households reach 2 percent or more of all households in the housing analysis area.

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

Map 65

DISTRIBUTION OF LARGE HOUSEHOLDS IN THE REGION BY HOUSING ANALYSIS AREA: 1970

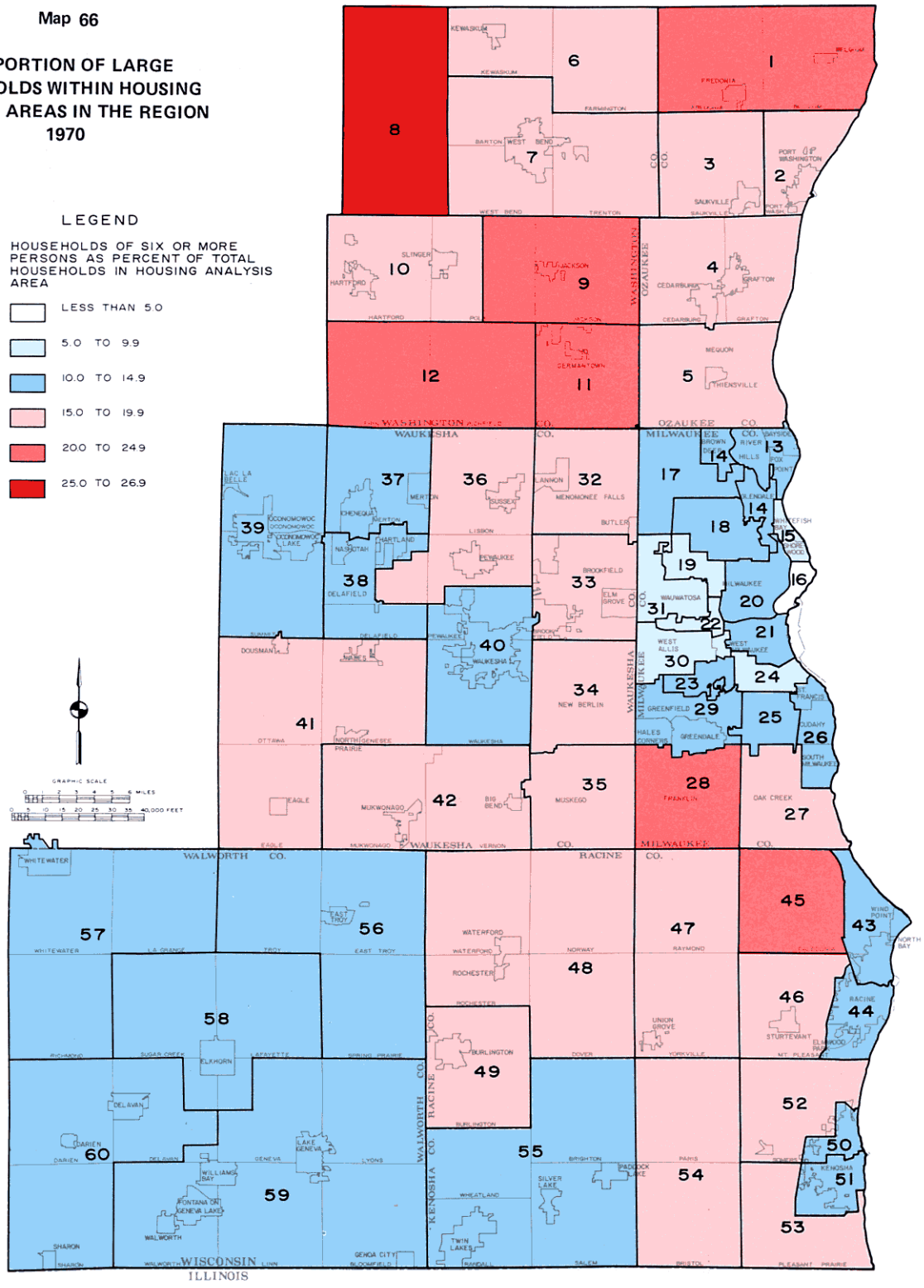


About 12 percent of the 536,486 households in the Region in 1970 consisted of six or more persons. The housing analysis areas having the greatest percentages of large households in the Region were housing analysis area 18 in the City of Milwaukee, with about 6 percent, and housing analysis area 20, also in the City of Milwaukee, with about 11 percent.

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

Map 66

PROPORTION OF LARGE HOUSEHOLDS WITHIN HOUSING ANALYSIS AREAS IN THE REGION 1970

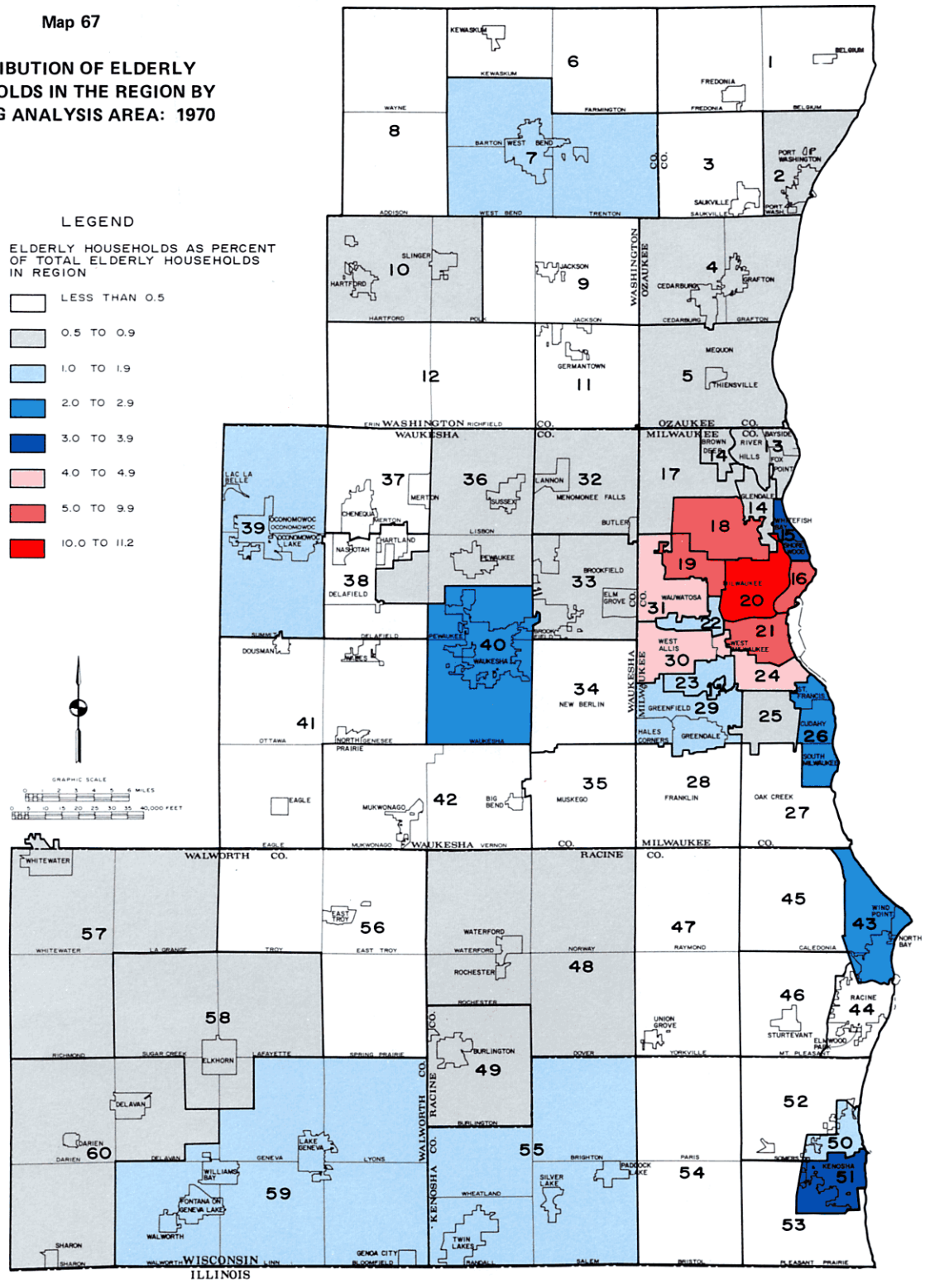


Housing analysis areas having a high proportion of large households are more common outside the older urbanized areas in Milwaukee County and the Cities of Racine and Kenosha. The largest percent of large households occurred in housing analysis area 8 in Washington County, where about 27 percent of the 865 households were comprised of six or more persons.

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

Map 67

DISTRIBUTION OF ELDERLY HOUSEHOLDS IN THE REGION BY HOUSING ANALYSIS AREA: 1970

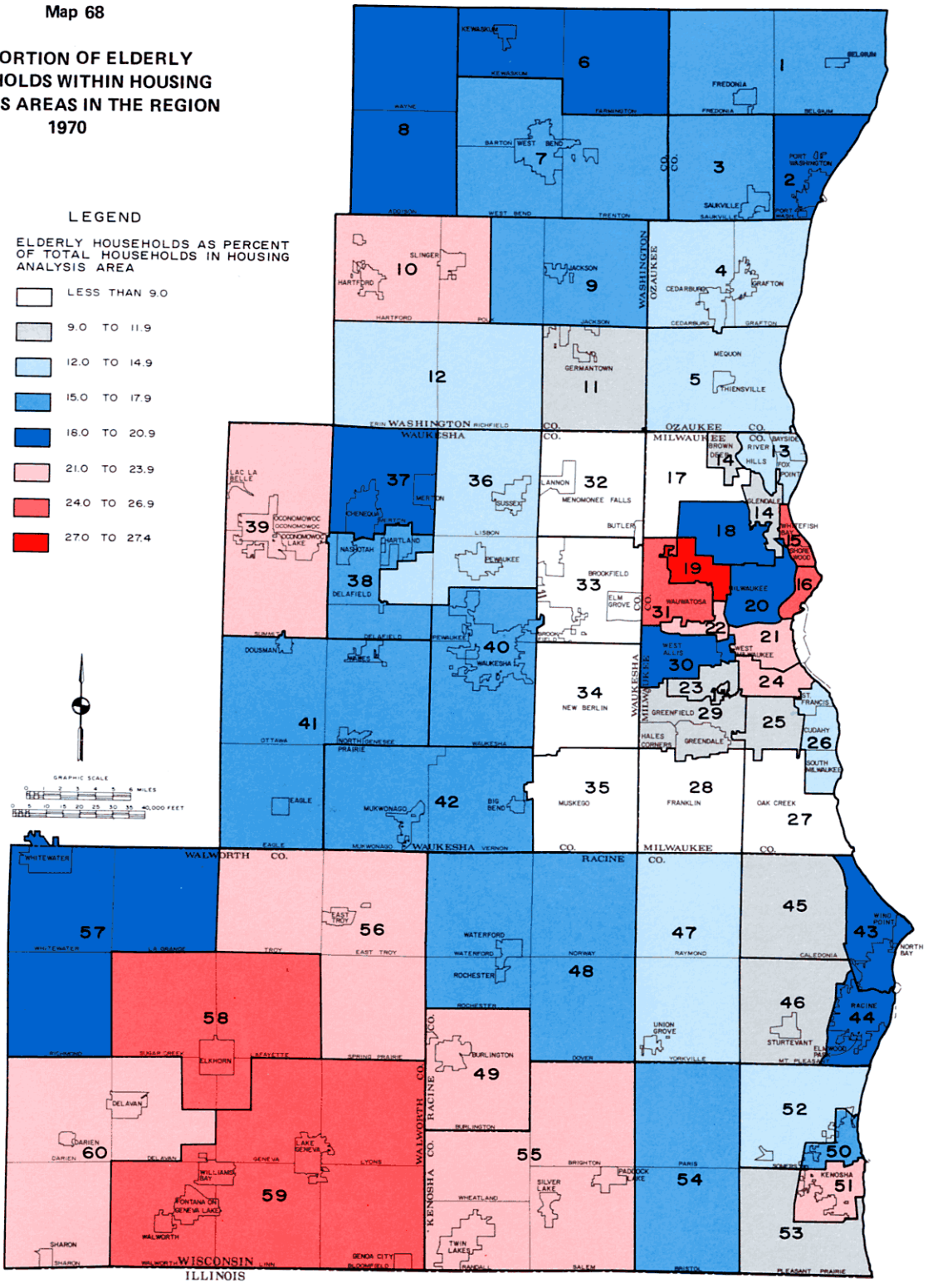


About 99,730 households in the Region in 1970 were headed by persons 65 years of age or older. Of these households, almost 11,200, or 11 percent, resided in housing analysis area 20 in the City of Milwaukee. Housing analysis areas which include the Cities of Milwaukee, Kenosha, and Racine accounted for over 60 percent of the elderly households within the Region.

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

Map 68

PROPORTION OF ELDERLY HOUSEHOLDS WITHIN HOUSING ANALYSIS AREAS IN THE REGION 1970

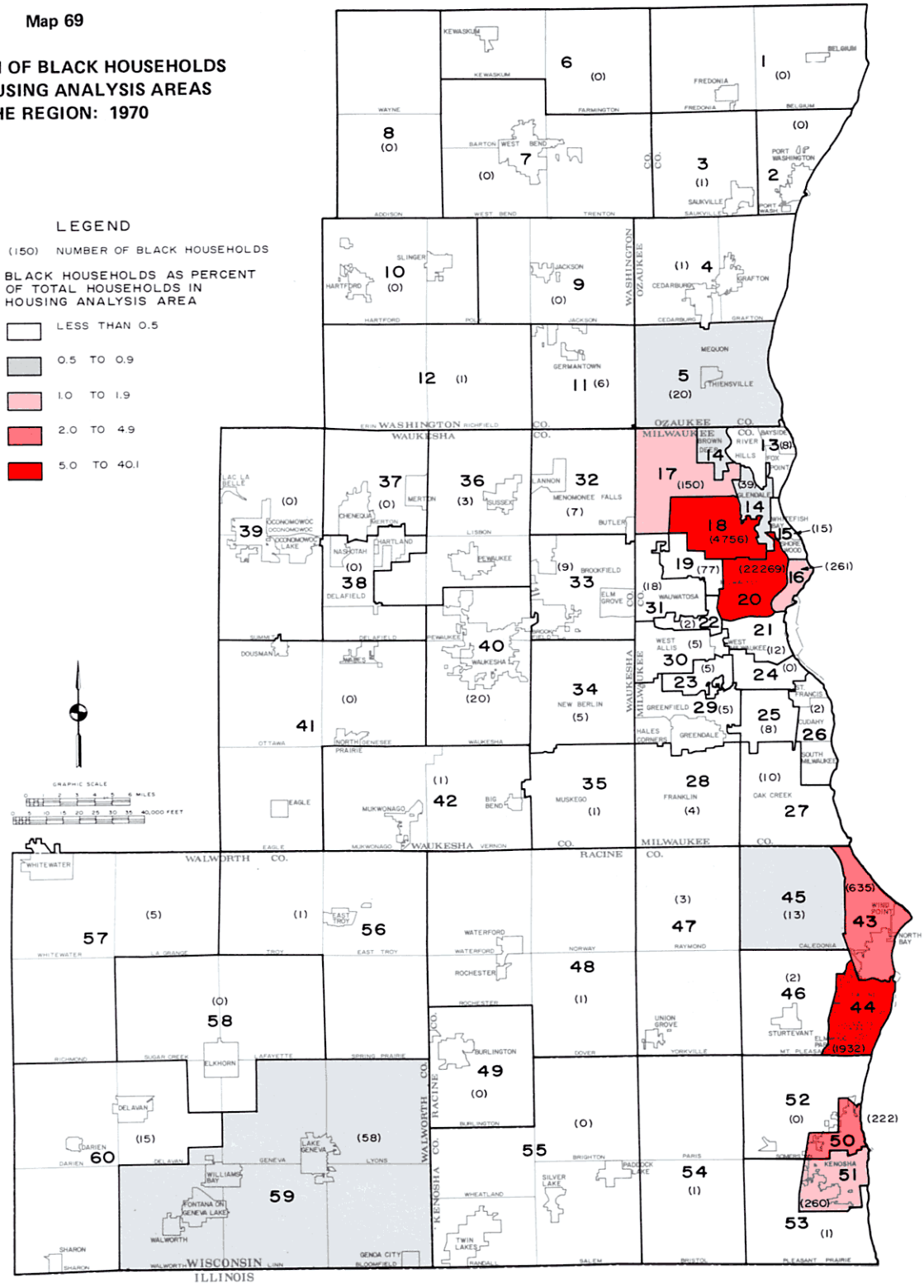


Elderly households comprised more than 21 percent of the total households in each of 16 housing analysis areas in the Region. The most significant concentrations of elderly households are located in Milwaukee and Walworth Counties.

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

Map 69

PROPORTION OF BLACK HOUSEHOLDS WITHIN HOUSING ANALYSIS AREAS IN THE REGION: 1970



In 1970, there were 30,870 black households in the Region. Black households in housing analysis area 20 in the City of Milwaukee represented 40 percent of all households in that area, and 72 percent of all black households in the Region. Only eight housing analysis areas, located in the Cities of Kenosha, Milwaukee, and Racine, had 1 percent or more of the total households in the housing analysis area that were black.

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

tion. In this respect, it was observed that a relatively large proportion of elderly households in the Region, 31 percent, were in housing need in 1970. Since almost all of the housing need for the elderly consisted of households in economic need only, it is apparent that the housing problem for the elderly is primarily economic in nature. The high incidence of economic need among the elderly is directly related to the fact that many elderly households are forced to live on a relatively fixed income, with the result that adequate housing can be secured only at a cost which is disproportionate with their ability to pay.

The black population of the Region, which is concentrated primarily in the Cities of Kenosha, Milwaukee, and Racine, represents another subgroup of the total population for which serious housing problems were found to exist. Thus, it was estimated that 50 percent of the black households in the Region were in housing need in 1970. Approximately 30 percent of the black households were classified as being in economic need only; the housing problem was more severe for 20 percent of the black households which occupied housing that was substandard or overcrowded and which were unable to secure decent, safe, and sanitary housing at a cost consistent with the household income or which were precluded from securing adequate housing because of noneconomic constraints within the housing market.

While the magnitude and characteristics of the existing housing need are important considerations in the formulation of recommendations for the diminution of regional housing problems, the spatial distribution of housing need throughout the Region is equally important. Accordingly, as part of the analysis of the existing housing need, the housing need status was quantified for households within the 60 local housing analysis areas of the Region. As a result of the subregional analysis, it was found that about three-fourths of the existing housing need in the Region consisted of households located in the 10 housing analysis areas which comprise the City of Milwaukee and the four housing analysis areas which are included in the Cities of Kenosha and Racine. However, all housing analysis areas in the Region contained some households in housing need in 1970, with much variation observed in the incidence of housing need among the analysis areas. It is important to note that, in addition to those housing analysis areas in the large urban centers of the Region, the incidence of housing need is highest in certain outlying areas of the Region, specifically housing analysis areas in Walworth County. Analysis of various household characteristics, including tenure status, household size, and household income, as well as such housing unit characteristics as housing age and value or rent, can provide further insight into the magnitude and characteristics of the existing housing need within the various housing analysis areas.

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Chapter XIV

HOUSING AVAILABILITY CONSTRAINTS

INTRODUCTION

The relationship between the effective demand for housing and true housing need is one of the most important considerations in the regional housing planning process. It may be assumed that the effective demand for housing, which relates to the housing accommodations for which people are able and willing to pay, is satisfied in the housing market, at least in the long run. In the recent past, however, there has developed a growing social awareness of the concept of housing need, which for the purposes of the regional housing study has been defined as the number of households which are unable to secure decent, safe, and sanitary housing at a cost which is consistent with the household income, as well as the number of households which are precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market.

A major work element of the regional housing study was the measurement of the magnitude and characteristics of existing housing need by the application of an agreed-upon set of housing objectives and a supporting set of standards, as described in the previous chapter of this report. As a result of the application of the regional housing objectives and standards, a serious housing problem was found to exist within the Region. Approximately 96,100 households, representing about 18 percent of all households in the Region, were found to be in housing need in 1970. Of this total housing need, 69,600 households, or about 72 percent, were classified as being in economic need only, indicating that they presently occupy decent, safe, and sanitary housing but were able to secure such housing only at a cost which is disproportionate with the household income. The housing problem was much more severe for the balance of the existing housing need consisting of households which occupy substandard or overcrowded housing. In this respect, it is estimated that about 15,200 households resided in substandard or overcrowded housing because they were unable to afford adequate alternative housing, while an additional 11,300 households were precluded from securing adequate alternative housing because of noneconomic constraints within the housing market.

It is apparent, then, that although the housing market satisfies the effective demand of the majority of households in the Region, there are obstacles, or constraints, within the housing market which limit the availability of an acceptable minimum standard of housing for certain segments of the regional population. Indeed, identification and analysis of the various housing availability constraints is necessary in order that sound recommendations directed toward the gradual abatement of existing housing problems may be incorporated into the regional housing plan. Accordingly, this chapter presents a summary of the findings of the analysis made under the regional housing study of the constraints within the housing market which were identified as significantly restricting the availability of housing for households in existing housing need. This analysis utilized information on the costs of constructing and occupying new housing, on local land use controls, on the local property tax structure, and on governmental housing programs set forth in other chapters of this report. In addition, the analysis utilizes certain data presented in this chapter on social phenomena which act to constrain the availability of low- and moderate-income housing within the Region.

Inasmuch as the majority of households in existing housing need consists of households which are unable to secure decent, safe, and sanitary housing at a cost which is consistent with the household income, the overriding housing availability constraints are economic in nature, relating specifically to the cost of housing relative to the household's ability to pay. Under the discussion of economic constraints in this chapter, trends in the cost of constructing and occupying new housing are reviewed in an effort to identify those cost components which have risen most rapidly in recent times, and which, therefore, have most effectively limited the availability of housing for low- and moderate-income households.

In addition to the overriding economic considerations, various institutional constraints, including local land use controls and the property tax structure, may affect the availability of housing for low- and moderate-income households. Through a variety of land use controls, an individual community can effectively control the pattern of residential development, particularly the construction of housing for low- and moderate-income families, within its boundaries. Accordingly, certain findings of the land use control inventory conducted under the regional housing study are reviewed in this chapter in order to provide insight into the extent to which specific land use controls may impede the construction of low-cost housing.

The local property tax structure represents another institutional constraint which may affect the availability of housing for low- and moderate-income families within certain areas of the Region. For example, the anticipated increase in school costs associated with housing for low- and moderate-income families may contribute to a negative attitude on the part of citizens and their elected officials toward the provision of such housing within their communities. Accordingly, relevant findings of the tax structure inventory conducted under the regional housing study are reviewed in this chapter in order to provide insight into the property tax structure as a housing availability constraint.

The analysis of institutional constraints also includes an examination of the major governmental programs which have been used to provide housing for low- and moderate-income families. While the overall effect of the various governmental efforts has been to reduce housing problems within the Region, there appear to be constraints within the programs which lessen their effectiveness in meeting housing needs. By identifying some of these constraints, this analysis of past housing programs should provide insight into the development of more effective housing programs in the future.

In addition to the aforementioned economic and institutional constraints, several social phenomena have been identified which may in varying degrees represent constraints on the availability of housing to certain segments of the regional population. These social phenomena include housing discrimination and individual or community opposition to the provision of housing for low- and moderate-income families. Analysis of the magnitude and character of housing discrimination and community opposition is complicated by the lack of reliable data which can be used to provide insight into these factors. However, on the basis of available indicators, the extent to which these constraints appear to limit the availability of housing within the Region is summarized in this chapter.

Although housing availability constraints have been categorized as being primarily economic, institutional, or social in nature for the purposes of this discussion, it is important to note that many of the individual constraints treated in this chapter are interrelated, and tend to reinforce each other in limiting the availability of housing within the Region and within subareas of the Region. Accordingly, although the various housing availability constraints are necessarily discussed individually in order to facilitate an understanding of the effects of each constraint within the housing market, throughout this discussion attention is drawn to those situations in which several constraints appear to act in unison to limit the availability of housing.

ECONOMIC CONSTRAINTS

As indicated in the introduction, of approximately 96,100 households in existing housing need in 1970, about 69,600 households, or about 72 percent, were classified as being in economic need only, meaning that these households occupied decent, safe, and sanitary housing but were able to obtain such housing only at a cost which is disproportionate with the household income. An additional 15,200 households, or 16 percent of the existing housing need, occupied substandard or overcrowded housing and were unable to afford adequate alternative housing. Thus, for a total of about 84,800 households, or 88 percent of all households in the housing need category, the origins of the housing problem were primarily economic in nature.

As part of the analysis of economic constraints, the component costs of constructing and occupying new housing collected under the regional housing study housing cost trends inventory were analyzed to identify which of the component costs of housing are the largest and most rapidly increasing, and accordingly, which of these costs contributes most significantly to the difference between the overall cost of housing and the ability to pay of households in housing need. It is important to note that historically, low- and moderate-income families have not been able to afford new housing. Such households have been virtually dependent on the filtering process to bring the cost of older housing within their ability to pay. New residential construction activity, however, is a major determinant of the effectiveness of the filtering process in providing housing to low- and moderate-income families. In particular, the cost of constructing and occupying new housing has an influence on the cost of housing throughout the housing market. A summary of the analysis of cost information relative to the construction and occupancy of new single-family housing is presented below followed by an analysis of occupancy costs relative to new multifamily housing.

Single-Family Housing Costs

Many diverse factors are responsible for the present high cost of new single-family housing in the Region. Rapidly increasing construction labor wage rates, materials costs, and land costs are among the most often cited. In addition to rising land and construction costs, financing costs and property taxes have risen steeply in recent years, contributing substantially to the overall cost of occupying new single-family housing. Finally, it is apparent that certain governmental land use controls, particularly large minimum floor area and lot requirements, contribute to the high cost of housing.

The component costs of the total single-family housing package—house and lot—as well as the component costs of occupying new single-family housing are analyzed in the next two sections to identify those cost elements which are most responsible for the present high cost of new housing, as well as to provide insight into which of the various cost elements might most effectively be addressed by cost reducing strategies. Reference is also made to the constraining effects of certain governmental land use controls. A more complete discussion of the effects of various land use controls as they act to increase the cost of housing or otherwise constrain the availability of housing in certain subareas of the Region is presented in a separate section of this chapter.

Component Costs of the Total Housing Package: For the purpose of this discussion, the major cost components have been estimated for a four-bedroom, conventional frame, single-family house on a fully improved lot located in an urban area of the Region.[1] The costs are for the

[1] *See Map 33 for a delineation of urban areas within the Region.*

year 1972. Specifically, the data in Table 156 indicate the proportion of the total housing package price which is attributable to onsite labor, materials, overhead and profit, land, and construction financing.[2]

Table 156

MAJOR COMPONENTS OF THE TOTAL COST OF A SINGLE-FAMILY HOUSING PACKAGE IN AN URBAN AREA OF THE REGION: 1972

Cost Component	Housing Package Cost[a]	
	Amount	Percent of Total Package Price
Housing Unit without Lot	$25,000	71.3
Onsite Labor	6,000	17.1
Materials	13,000	37.1
Overhead and Profit	6,000	17.1
Fully Improved Lot in Urban Area	9,100	26.0
Construction Financing[b]	960	2.7
Total	$35,060	100.0

[a] *The cost of the housing package is the cost of a new Cape Cod style house on a fully improved lot in an urban area of the Region previously presented in Table 100. Data provided by the National Association of Home Builders and the U. S. Bureau of Labor Statistics were utilized to obtain the typical percentage distribution of the cost of new single-family housing as it is attributable to onsite labor, materials, and overhead and profit. This percentage distribution was then applied to the cost of the Cape Cod style house without the lot as an estimate of the cost of onsite labor, materials, and overhead and profit for a typical single-family model house presently constructed within the Region.*

[b] *Includes interest on construction loan and closing costs which include such items as appraisal fee, land survey fee, title insurance, attorney fee, and recording fee.*

Source: National Association of Home Builders; U. S. Bureau of Labor Statistics; Milwaukee Chapter of the Society of Real Estate Appraisers; and SEWRPC.

[2] *The cost of the housing package in Table 156 is the cost of a Cape Cod style house on a fully improved lot in an urban area of the Region previously presented in Table 100. Data provided by the National Association of Home Builders and the U. S. Bureau of Labor Statistics were utilized to obtain the typical percentage distribution of the cost of new single-family housing as it is attributable to onsite labor, materials, and overhead and profit. This percentage distribution was then applied to the cost of the Cape Cod style house without the lot as an estimate of the cost of onsite labor, materials, and overhead and profit for a typical single-family model house presently constructed within the Region.*

As indicated in Table 156, the cost of materials is the largest single component of the total cost of the housing package, and represents approximately 37 percent of the total package cost of the model home. The cost of onsite labor, land, and builder overhead and profit also contributes significantly to the overall cost of the house and lot. Indeed, because of the number of factors which contribute significantly to the overall production cost, strategies designed to reduce an individual cost component will have a limited effect on the total cost of the housing package. However, strategies which address several or all of the major cost components can effectively reduce the package cost. For example, if other costs are held constant, a 20 percent reduction in the cost of materials—the largest single cost component—would result in only a 7 percent decrease in the total cost of the housing package. A similar 20 percent reduction in the cost of the lot would result in a 5 percent decrease in the total package cost. A 20 percent decrease in the cost of onsite labor would result in a 3 percent decrease in the cost of the housing package. On the other hand, a 20 percent reduction in the cost of materials combined with similar reductions in the onsite labor and lot costs would result in a 16 percent decrease in the overall package price. A discussion of some of the major components of the total housing package cost follows.

Onsite Labor: It is often argued that high labor costs are the major cause of the high cost of conventional, single-family housing construction. In fact, construction wage rates have increased dramatically in recent times. Thus, as described in Chapter VII of this report, within the Milwaukee SMSA the mean hourly wage rate for the ten trades most utilized in single-family residential construction increased by 135 percent between 1960 and 1972. It is important to realize, however, that onsite labor costs represent only one component—comprising 17 percent—of the total cost of new single-family housing presently constructed in the Region.

Various efforts have been undertaken to reduce the cost of onsite labor, including the introduction of modern tools and the use of premanufactured components within the conventional construction process; the shifting of construction activity from the site to the factory; and experimentation with "self-help" programs whereby the purchaser substitutes his own labor for skilled labor normally employed at the site. Each of these endeavors is discussed briefly below.

Current efforts to reduce the cost of skilled labor within the conventional construction process include the utilization of modern tools and equipment and the use of premanufactured components. As noted in Chapter IX of this report, innovative tools such as power routers, wall jacks, and power nailers and staplers have made the onsite construction process more efficient. In addition, the utilization of such premanufactured components as prefabricated cabinets, pre-assembled windows, and prehung doors has also reduced the needed onsite construction labor. Although no single innovation can be said to represent a major cost saving breakthrough, the combined effect of all of these innovations represents a considerable

increase in efficiency and productivity at the site. Any cost savings resulting from decreases in man-hour requirements at the site have in the past been nullified to some extent by rapidly increasing wage rates.

The development of panelized and modular housing represents another effort to eliminate the high cost of skilled onsite labor by shifting construction activity from the site to the factory, where a higher proportion of less skilled and lower paid labor may be utilized in the production of a housing unit. As indicated in Chapter IX of this report, however, the package price of various types of panelized and modular housing available in the Region today is not significantly lower than the package price of similar conventionally built housing.

There are several apparent reasons for the failure of factory construction techniques to significantly reduce housing costs. As noted above, a major objective of the construction of housing in the factory is the elimination of the costs of expensive, skilled onsite labor. Indeed, factory construction processes generally employ a higher proportion of less skilled and lower paid labor, and efficiency is high because of the repetitive nature of the work assignments. However, because onsite labor costs comprise only about 24 percent of the total construction cost of conventional single-family housing, and only about 17 percent of the overall housing package (house and lot), it is apparent that the potential for cost reduction is limited. In addition, factory construction processes require substantially greater overhead than conventional construction, thereby offsetting some of the cost savings due to the reduction of onsite labor.

It is important to note that the success of manufactured housing efforts is dependent on a high volume of sales. Only by producing in large quantity can the desired cost reduction be realized. Many factory-built housing ventures have failed because they were unable to generate the necessary high volume of demand. Insufficient demand originated, in part, from the fact that manufactured housing firms generally operate within a somewhat limited geographic area. Market areas are often restricted to a 300-mile radius from the factory due to prohibitively high shipping costs. Finally, buyer resistance to factory-built housing due to unfamiliarity with new designs and new materials has also impeded a high volume of demand. In addition, each community may have to modify its inspection requirements for those factory components that do not permit adequate field inspection.

Self-help housing programs in which construction labor is supplied by the purchaser of the housing unit represent still another attempt to eliminate the high cost of skilled onsite labor, as well as the builder's overhead and profit. Under the Section 502 self-help program administered by the U. S. Department of Agriculture, Farmers Home Administration, for example, funds are available to nonprofit organizations for the provision of technical assistance and equipment to assist low- and moderate-income families in rural areas in the construction of their own homes (see Chapter XI). The limited use of the program within the Region to date, however, prohibits a fair evaluation of its effectiveness in making housing available to low- and moderate-income families.

Materials: As indicated in Table 156, the cost of construction materials represents an estimated 37 percent of the total housing package price of $35,060. Based on the Construction Materials Wholesale Price Index, the cost of construction materials increased by 34 percent between 1960 and 1972. It is important to note, however, that there was much variation in the rate of increase among the various types of materials required in residential construction. For example, the cost of lumber required for the house represented in Table 156 increased by about 75 percent between 1960 and 1972.

As indicated in Chapter IX, there have been considerable efforts to reduce the cost of individual housing products and materials. For example, new plumbing systems are making use of plastic pipe for water supply, removal of wastewater, and vent systems. Plastic has also become popular for electrical conduit. Furthermore, drywall gypsum board sheets have virtually replaced plastering of interior walls. Plywood sheets for roofing and subflooring are often used instead of individual roofing and floor boards in new residential construction. While the savings derived from the introduction of these materials may be due to the lower cost of these materials per se, savings may also be generated due to the greater efficiency in the installation of these products at the construction site.

It is important to note, however, that although lumber and wood products comprise the largest class of costs of construction materials, no class of materials can be said to predominate. Indeed, construction materials consist of literally hundreds of products from dozens of industries. Thus, no single technological innovation in residential construction products and materials can be expected to result in a substantial decline in the overall cost of construction materials or in the total package price of single-family housing. The diversity of industries which manufacture materials and products for use in residential construction compounds the difficulty of significant cost reductions in this area.

Land: In addition to the cost of onsite labor and construction materials, land costs also contribute significantly to the overall package cost of new single-family housing. As shown in Table 156, the cost of a fully improved lot represented an estimated 26 percent of the package price of $35,060 for the model home. The average cost of a fully improved lot in an urban area of the Region more than doubled between 1960 and 1972. This increase in land costs was by no means confined to the urban areas of the Region. As described in Chapter VII, land costs increased at a similar rate in the suburban and outlying rural-urban areas during the 1960s.

In addition to the price of raw land, many other factors influence the cost of a typical residential lot. These include land development costs, which typically include

Table 157

ESTIMATED PER LOT DEVELOPMENT COSTS FOR A FULLY IMPROVED RESIDENTIAL SUBDIVISION[a] IN AN URBAN AREA OF THE REGION: 1960 and 1969

Cost Component	1960		1969		Change: 1960-1969	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
Raw Land	$ 810	14.1	$1,155	13.4	$ 345	42.6
Land Carrying and Financing Costs	790	13.7	1,025	11.9	235	29.7
Site Improvement Costs[b]	2,040	35.5	2,780	32.1	740	36.3
Marketing Costs[c]	1,150	20.0	2,080	24.0	930	80.9
Profit	575	10.0	865	10.0	290	50.4
Miscellaneous[d]	385	6.7	745	8.6	360	93.5
Total	$5,750	100.0	$8,650	100.0	$2,900	50.4

[a] *Subdivision is approximately 23 acres in size consisting of lots having a typical width of 75 feet and a typical depth of 125 feet.*

[b] *Includes hard surface street (bituminous pavement), concrete curb and gutter, concrete sidewalk, sanitary sewer main, storm sewer main, and water main. The cost of sewer and water laterals is not included.*

[c] *Includes sales commissions, advertising, office overhead and salaries, legal fees, title policy fees, accounting expense, corporate income taxes, and title insurance fees.*

[d] *Includes engineering and land surveying costs; community fees and bond costs; school and park fees; and costs for grading, fill, earth removal, and landscaping.*

Source: SEWRPC.

payments for financing and carrying costs of land; engineering and surveying costs; grading and earth work; street utility and drainage improvements; posting of community fees or bonds; and marketing costs. Although the land development costs vary considerably among residential subdivisions, the estimated per lot land development cost data for a hypothetical fully improved subdivision located in an urban area of the Region developed as part of the housing costs trends inventory and summarized in Table 157 provide an indicator of the relative magnitude of these costs for a typical urban lot.[3]

As indicated in Table 157, the cost of raw land itself is usually a relatively minor component—about 13 percent in 1969 of the cost of a typical fully improved residential lot. On the other hand, lot improvement costs, including payments for a hard surface street, curb and gutter, and utility mains, comprised a large component, 32 percent, of the total land development cost of this fully improved lot in 1969. Other costs include marketing expenses (24 percent), land carrying and financing costs (12 percent), profit (10 percent), and miscellaneous (9 percent).

[3] *More detailed information concerning the trend in land development costs is presented in Table 94 and a related discussion in Chapter VII of this report.*

It is often argued that local land development regulations, including subdivision control regulations and zoning ordinances, have an effect on the cost of residential land in municipalities throughout the Region. The type and quality of lot improvements which must be provided within a new residential subdivision are generally specified in municipal subdivision control ordinances. It should be noted, however, that although the installation of the various site improvements substantially increases the initial cost of the lot to the consumer, such lot improvements are desirable and often necessary for orderly residential development and for the provision of a suitable physical living environment. Moreover, failure to provide such improvements initially may entail greater costs for the lot purchaser in the future due to rising costs related to the provision of desirable site improvements.

Single-Family Occupancy Costs: Because of the magnitude of the cost of the housing package to the consumer, most purchasers of new single-family housing obtain mortgage loans, thereby incurring an obligation to make monthly outlays for the repayment of the loan amount and for payment of interest on the loan. In addition, purchasers of single-family housing must pay other occupancy costs, including property taxes, utility service charges, maintenance and repair bills, and property insurance. Thus, while the high prices of onsite labor, materials, and land described in the previous section have contributed significantly to the high cost of occupying new single-family housing by increasing the size of the

mortgage loan, other cost factors are also responsible for the high occupancy costs relative to new single-family housing. The component costs of occupying new single-family housing are analyzed in this section in order to identify those other cost elements which are responsible for the current high occupancy costs, as well as to provide insight into which of these cost elements might most effectively be addressed in any cost reducing strategies.

In order to facilitate the analysis of housing occupancy costs, the component costs of occupying a new Cape Cod style housing unit located in an urban area of the Region are shown in Table 158. It is apparent from this table that the two largest components of the total monthly occupancy cost—financing costs and property taxes—experienced rapid increases between 1960 and 1972. Thus, financing costs, which comprised 58 percent of the total occupancy cost in 1972, more than doubled during the 12-year period. Property taxes increased by 121 percent between 1960 and 1972, and comprised 25 percent of the total monthly occupancy cost at the end of this period. Payments for utility services, maintenance and repair, and property insurance comprised the remaining 17 percent of the total monthly occupancy cost in 1972. Because of their large size and rapid growth between 1960 and 1972, both the financing and property tax components are analyzed separately below.

Financing: As noted previously, most purchasers of new single-family housing obtain mortgage loans under which they are obligated to make monthly outlays for the repayment of the loan as well as for the payment of interest on the loan. The magnitude of this monthly finance cost is a function of the cost of the housing package, the percent down payment, the interest rate, and the length of the term for the repayment of the loan. Between 1960 and 1972, significant increases occurred in the prevailing interest rate as well as in the average package price of new single-family housing, resulting in substantial increases in the monthly mortgage payment, and therefore in the monthly cost of occupying new single-family housing. Thus, as described in Chapter VII, the prevailing mortgage terms from a savings and loan association in the Region in 1960 were a 6.50 percent

Table 158

MONTHLY OCCUPANCY COSTS FOR NEW SINGLE-FAMILY HOUSING ON A FULLY IMPROVED LOT IN AN URBAN AREA OF THE REGION:[a] 1960 and 1972

Cost Component	1960 (Package Price: $19,520)		1972 (Package Price: $35,060)		Change: 1960-1972	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
Financing[b,c]	$105.47	56.6	$221.23	58.0	$115.76	109.8
Property Taxes[d]	43.14	23.1	95.39	25.0	52.25	121.1
Utilities[e]	23.09	12.4	36.40	9.5	13.31	57.6
Maintenance and Repairs[f]	12.17	6.5	20.83	5.5	8.66	71.2
Property Insurance[g]	2.51	1.4	7.50	2.0	4.99	198.8
Total[h]	$186.38	100.0	$381.35	100.0	$194.97	104.6

[a] *Includes Cape Cod style house on a lot with the following improvements: centralized sewage treatment facilities, hard surface street with curb and gutter, sidewalks, and street lighting.*

[b] *Assumes a 20 percent down payment, a 25-year term, and a 6.50 percent interest rate in 1960 and an 8.25 percent interest rate in 1972.*

[c] *No adjustments have been made to reflect possible income tax savings due to the deduction of property tax and interest payments from the household's gross income for income tax purposes, as was done in Chapter VII.*

[d] *Based on median full value property tax rate for urban municipalities in the Region.*

[e] *Includes natural gas and electricity based on average household consumption in 1960 and 1972.*

[f] *Based on annual cost of 1 percent of the value of the housing structure.*

[g] *Based on appropriate fire rating on homeowners Form II Policy.*

[h] *Total does not include the opportunity cost of money relative to the down payment as was the case in Chapter VII.*

Source: SEWRPC.

interest rate for a 25-year mortgage with a 20 percent down payment. By 1972 the prevailing interest rate had risen to 8.25 percent. During the same period, the package price of a Cape Cod style home on a fully improved lot increased from $19,520 to $35,060. As a result, the required monthly mortgage payment for this house and lot increased by 110 percent, from $105 in 1960 to $221 in 1972 (see Table 158).

Clearly, both the increased cost of the housing package and the increased interest rate are responsible for the current high cost of financing new single-family housing. As described in the previous section of this chapter, the rising costs of onsite labor, materials, and land have all contributed to the current high cost of the housing package. The higher cost of the housing package necessitates an increase in the principal, or amount of the loan drawn by the purchaser, thereby increasing the required monthly mortgage payment. On the other hand, the cost of borrowing money, especially at the present high rates of interest, also contributes significantly to the total financing costs. The following discussion provides insight into the relative importance of the interest payment and the payment toward principal within the monthly mortgage payment.

For any given mortgage loan arrangement, the proportion of the monthly mortgage payment which is utilized for the payment of interest on the loan decreases gradually with each successive mortgage payment. Thus, the first mortgage payment consists almost entirely of interest because of the large outstanding balance of the loan. If the mortgage payments are continued to the end of the agreed-upon term, the last mortgage payment is almost entirely for the repayment of the loan itself. On the average, however, the payment for interest on the loan comprises a large proportion of the monthly mortgage payment. The average monthly payments for principal and interest for two mortgage loan arrangements are presented in Table 159.

Data for 1960 shown in Table 159 indicate the average monthly payments for principal and interest necessary to finance a housing package price of $19,520 for a Cape Cod style house on a fully improved lot, based on prevailing mortgage terms available from savings and loan associations in the Region at that time (i.e., 20 percent down payment, 6.50 percent interest, and a 25-year term). As shown in Table 159, if the mortgage payments continue to the end of the agreed-upon term, about half of the purchaser's finance costs consist of interest payments. During the first seven years—the average length of time for which conventional loans are outstanding—75 percent of the purchaser's finance costs are for interest on the loan.

Data for 1972 shown in Table 159 indicate the average monthly payment for principal and interest necessary to finance a package price of $35,060 for a similar house and lot, assuming identical mortgage terms, except for an increase in the interest rate from 6.50 to 8.25 percent. As shown in Table 159, if the mortgage payments continue to the end of the agreed-upon term, 58 percent of the purchaser's finance cost consists of interest payments. During the first seven years, 83 percent of the purchaser's finance payments is for interest on the loan.

The proportion of the finance costs consisting of payment for interest on the loan in the 1972 example—58 percent over the life of the mortgage—is somewhat larger than

Table 159

MONTHLY MORTGAGE PAYMENT FOR A NEW SINGLE-FAMILY HOUSE ON A FULLY IMPROVED LOT IN AN URBAN AREA OF THE REGION: 1960 and 1972

Mortgage Payment Component	1960 (6.50 Percent Interest Rate Package Price: $19,520[c])				1972 (8.25 Percent Interest Rate Package Price: $35,060[c])			
	After 7 Years		After 25 Years		After 7 Years		After 25 Years	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent of Total
Principal[b]	$ 26.34	25.0	$ 52.05	49.4	$ 38.19	17.3	$ 93.49	42.3
Interest[b]	79.13	75.0	53.42	50.6	183.04	82.7	127.74	57.7
Monthly Mortgage Payment	$105.47	100.0	$105.47	100.0	$221.23	100.0	$221.23	100.0

[a] *Assuming a 20 percent down payment and a 25-year term.*

[b] *Average payment over indicated time period.*

[c] *Package price of a Cape Cod style house on a fully improved lot in an urban area of the Region.*

Source: SEWRPC.

in the 1960 example—51 percent over the full term. It should be noted that the change in this proportion is due solely to the increase in the interest rate between 1960 and 1972, not to the increase in the cost of the housing package. In fact, if the interest rate had not risen between 1960 and 1972, the monthly mortgage payment necessary to finance a $35,060 housing package would have been $189 in 1972. Over the full life of the mortgage, $93, or 49 percent of this monthly payment, would be used for the repayment of principal, and $96, or 51 percent, would be used for payment of interest on the loan—the same relative breakdown as shown for 1960.

It is evident that the interest, or cost of borrowing, represents a major component of the monthly mortgage payment, and therefore of the cost of occupying new single-family housing. Even when interest rates are relatively low, interest payments may represent half of the financing costs over the life of the loan. As indicated in Chapter VII, the real estate industry must compete for available financial resources which flow to those segments of the national economy which provide the best return. Mortgage interest rates must be high enough to attract the money of potential investors. If the return on mortgage loans is not competitive with investment earnings in other segments of the economy, extensive shortages of money for new housing may result. Accordingly, it is apparent that interest costs will continue to represent a significant proportion of the cost of financing new housing.

Property Taxes: Property taxes represent another major component of the cost of occupying new single-family housing. For example, as indicated in Table 158, the property tax levy on a new Cape Cod style house on a fully improved lot in an urban area of the Region totaled $95 per month in 1972, representing approximately 25 percent of the total monthly cost of occupying such housing. Furthermore, the property tax levy on the model house and lot experienced rapid growth between 1960 and 1972, increasing by 121 percent during this period.

When considering the increase in the property tax levy on this model home, however, it is important to distinguish changes in the levy due to an increase in the value of the property from changes in the levy due to an increase in the full value tax rate. For example, the value of the model house and lot increased from $19,520 in 1960 to $35,060 in 1972. This 80 percent increase in the value of the property would have resulted in an 80 percent increase in the tax levy between 1960 and 1970 even if there were no change in the property tax rate during this time. On the other hand, the median full value property tax rate for urban communities in the Region, on which the tax levy on the model home is based, increased by only 23 percent between 1960 and 1972. Clearly, the increase in the value of the property is more responsible than the increase in the property tax rate for the sharp rise in the tax levy on the model home between 1960 and 1972.

In addition to its effect on the cost of occupying housing, the local property tax structure has other constraining effects on the availability of housing in certain areas of the Region. A further discussion of the property tax structure is provided in a later section of this chapter.

Multifamily Housing Costs

As indicated in Chapter VII of this report, multifamily housing construction costs were not included in the housing cost trends inventory due to wide variances in multifamily development and construction types, styles, sizes, designs, and the wide variety of fixtures and appurtenances provided in the various developments. Review of available data sources, however, clearly indicated that trends in multifamily construction costs generally paralleled those of single-family detached housing described above. Furthermore, trends related to the construction and financing of multifamily housing are reflected in the trends of occupying new multifamily housing. Data concerning the monthly gross rent of new rental housing are analyzed below to provide insight into multifamily housing occupancy costs. It should be noted that the monthly gross rent includes the agreed-upon monthly rent payment together with the monthly cost of utilities to the extent that these are paid for by the renter.

The cost of occupying new rental housing in the Region increased substantially between 1960 and 1970. Thus, as tabulated by the U. S. Bureau of the Census, the median gross rent for new rental housing[4] in the Region was $116 in 1960, and $182 in 1970, an increase of 57 percent. It should be noted that toward the end of the 1960s, a higher proportion of new apartments were offering wall-to-wall carpeting, air conditioning, and other "luxury type" amenities than was the case during the early part of the decade. This increase in the provision of extra amenities contributed to the observed rise in the median rent between 1960 and 1970.

As shown in Table 160, there was considerable variation in the monthly gross rent for new rental housing in the Region from the median rent of $182 reported by the Census Bureau in 1970. Much of this is due to variances in style, design, amenities, and other characteristics of new multifamily housing. Perhaps the characteristic most responsible for this variation, however, is unit size. The monthly rent for a large rental unit consisting of three or more bedrooms is generally far greater than the observed median, with the result that most low-income households and many moderate-income households are precluded from occupying such housing. Nevertheless, it is important to note that the monthly rent of such rental housing is substantially less than the monthly cost of occupying new single-family housing, and thus new

[4] *New housing for which data are presented includes housing which is reported to have been constructed during the 13-month period prior to the date of the federal census.*

Table 160

MONTHLY GROSS RENT FOR NEW RENTER-OCCUPIED HOUSING UNITS IN THE REGION: 1960 and 1970

Monthly Gross Rent	1960[a] New Renter-Occupied Housing Units[c] Number	Percent of Total	Monthly Gross Rent	1970[b] New Renter-Occupied Housing Units[c] Number	Percent of Total
Less Than $40	20	0.6	Less Than $40	43	0.9
$ 40 - 59	32	1.0	$ 40 - 59	313	6.7
60 - 79	53	1.7	60 - 79	37	0.8
80 - 99	416	13.4	80 - 99	44	1.0
100 - 119	1,267	40.8	100 - 149	519	11.1
120 or More	1,321	42.5	150 - 199	2,185	46.7
--	--	--	200 or More	1,534	32.8
Total	3,109	100.0	Total	4,675	100.0
Median	$116		Median	$182	

[a] *1960 data are presented for Kenosha, Milwaukee, Racine, and Waukesha Counties.*

[b] *1970 data are presented for Kenosha, Milwaukee, Ozaukee, Racine, Washington, and Waukesha Counties.*

[c] *Rental units were reportedly constructed during the 13-month period prior to the date of each census.*

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

rental housing offers a viable alternative to many households which do not have the necessary income or down payment for homeownership, or who otherwise prefer to rent new housing.

INSTITUTIONAL CONSTRAINTS

In addition to the basic economic constraints discussed in the preceeding section, the availability of housing is also constrained to some extent by certain institutional phenomena, the most important of which is the existing body of local land use controls and the local property tax structure. As indicated in Chapter X, the rationale for planned land development through the application of such local land use controls as zoning regulations, land subdivision control ordinances, architectural controls, building codes, and others is well documented and convincing. These land use controls, nevertheless, can have a constraining influence on the supply of housing even when they are sound and conceived and enacted in good faith. The extent to which the existing body of land use controls limits the availability of housing is analyzed in this section.

The existing property tax structure also acts to limit the availability of housing for low- and moderate-income families throughout the Region. As previously mentioned, property tax payments significantly increase the occupancy cost for both homeowner and renter, thereby contributing to the economic need of many households in the Region. On the other hand, the provision of housing for low- and moderate-income families in many communities is discouraged because of the suspected negative effects of such housing on the local cost-revenue situation. These constraining effects of the property tax structure on the availability of housing are also analyzed in this section.

Institutional factors may operate negatively to constrain the availability of low- and moderate-income housing, and also act positively to increase the availability of such housing. Consequently, a discussion of past government efforts designed to improve the housing situation of low- and moderate-income families is in order. While the overall effect of such government activity has been to abate existing housing problems, certain constraints within the programs have been identified which have reduced the effectiveness of these programs in meeting housing needs. An analysis of the problems within major government housing programs of the past should assist in the development of more effective housing programs in the future.

Land Use Controls

Land use control powers conferred through state enabling legislation provide counties and local communities with mechanisms which have a profound influence on existing and proposed land use development, particularly residential development. Land use controls can substantially determine the overall characteristics of housing develop-

ment, including the quality, quantity, location, size, type, cost, and to some extent the characteristics of the prospective occupants of housing units themselves. The principal land use control mechanisms utilized by local communities in regulating and controlling development, especially residential development, include zoning ordinances, subdivision control ordinances, architectural control ordinances, and building and housing codes.

Land use controls are important to any consideration of the institutional constraints on housing because the application of such controls within local communities, individually or collectively, may have the effect of limiting the availability of low- and moderate-income housing in the Region. Chapter X of this report analyzed the various land use control regulations in effect in local communities within the Region and, as appropriate, related such regulations to the recommended regional housing objectives and standards in an effort to identify those land use controls which may act to limit the availability of housing in the Region, especially for low- and moderate-income households.

Zoning Regulations: Local zoning ordinances have a particularly important impact on housing. They not only determine where housing may be built, but they also may determine the type, size, and cost of the units. Whether such ordinances could be considered unduly restrictive in that they significantly constrain locational choices of households seeking various types and sizes of housing is important to the housing study.

The number of acres of land suitable and available for new residential development bears heavily on housing locational choice within the Region. An important element of the land use controls inventory was the quantification of residentially zoned lands which, in terms of the adopted regional housing objectives and standards, would be considered suitable for new residential development. This acreage, termed developable land, was defined as all residentially zoned vacant land parcels greater than two acres in size which could readily be provided with public sanitary sewerage and water supply facilities and which were not located in areas designated as primary environmental corridors or prime agricultural land, nor located on soils having severe or very severe limitations for residential development utilizing public sanitary sewerage facilities. Due to the need to provide essential community services, as specified by the recommended regional housing objectives and standards, all developable land was located in or adjacent to existing urban communities of the Region.

Analysis of community zoning data revealed that more than 445,000 acres of land in the Region were zoned for residential development in 1970. Of this total, 19,400 acres, or 4 percent, were found to be developable under the aforementioned criteria. While 19,400 acres of developable land may seem insignificant when compared to the total amount of land zoned for residential use, it is very significant when related to the number of housing units which could be accommodated on such land. In this regard, it is estimated that more than 90,000 new housing units could be constructed on the existing supply of developable land, which is more than sufficient to house the forecast increase in households in the Region between 1970 and 1980. Over 11,000 acres, or about 57 percent of the 19,400 acres of developable land, are zoned to allow modest-sized residential lots—10,000 square feet or less in area—and could accommodate over 78,000 housing units. While the spatial distribution of developable land within the various density classifications is not uniform throughout the Region, and while there are no assurances that all developable land in the Region would be for sale at any given point in time, there still appears to be sufficient developable residential land within the various density classifications to provide an adequate locational choice for households seeking residential lots.

Also considered in the analysis of the land use controls inventory data were the structure type and minimum floor area requirements of local zoning ordinances within the Region. Community minimum floor area requirements especially affect low- and moderate-income households, which may find it exceedingly difficult to construct or reside in the large homes required by local zoning ordinances.

Chapter X of this report identified local community minimum floor area requirements which affect the feasibility of constructing low- and moderate-income housing. The minimum floor area requirements, as specified in local community zoning ordinances, were compared to adopted Commission minimum standards for decent, safe, and sanitary housing—adjusted upward by 20 percent—to allow for a range of modest-sized housing. Those communities with minimum floor area requirements in excess of the adjusted standard were assumed to preclude, in effect, modest-sized housing. With regard to single-family housing, of the 87 urban communities within the Region, 56 communities, or about 65 percent, preclude modest-sized two-bedroom units; 21 communities, or about 25 percent, preclude modest-sized three-bedroom units; and eight communities, or about 10 percent, preclude modest-sized four-bedroom units.

The restrictive pattern is further evidenced by the number of communities which preclude certain structure types altogether. A total of 17 of the 146 communities in the Region and 12 of the 87 urban communities preclude all two-family housing types, while multifamily housing types are precluded by 22 of the 146 communities in the Region and 16 of the 87 urban communities. With respect to two-family housing, including the 12 urban communities which preclude two-family housing altogether, 63 urban communities, or about 70 percent of all urban communities in the Region, preclude modest-sized one-bedroom units; 48 communities, or over 50 percent, preclude modest-sized two-bedroom units; and 22 communities, or about 25 percent, preclude modest-sized three-bedroom units. With respect to multifamily housing, including the 16 urban communities which preclude multifamily housing types altogether, 59 urban communities, or 70 percent, preclude modest-sized efficiency units; 56 communities, or 65 percent, preclude modest-

sized one-bedroom units; 42 communities, or 50 percent, preclude modest-sized two-bedroom units; and 26 communities, or about 30 percent, preclude modest-sized three-bedroom units.

It is apparent from these findings that certain provisions of community zoning ordinances within the Region serve to constrain housing locational choice, especially for low- and moderate-income households. While there appears to be sufficient developable residential land available within various density classifications, low- and moderate-income households may still be precluded from residing in housing units of their choice because of community structure type or size requirements.

Subdivision Control Regulations: Community subdivision control regulations relate to the manner in which raw land is subdivided and prepared for development, and include provisions concerning public improvements, land dedication, land reservation, improvement guarantees, fees, and land suitability requirements. All communities in the Region, either through official adoption of local or county subdivision control ordinances or through specific requirements noted in the land use controls inventory, regulate land development activity in varying degrees. Analysis of local subdivision controls indicated that instances of development regulations beyond those which are necessary for orderly residential development and for the provision of a suitable living environment are rare. The additional development costs which are attributable to local subdivision regulations above those development costs which are dictated by sound land use planning principles appear minimal.

It is often argued that public improvement requirements in urban communities act as a constraint to the availability of suitable lots because they represent additional financial burdens, especially to low- and moderate-income households. But it can also be argued, and more persuasively, that urban improvements, especially public sanitary sewer, water supply, and storm water drainage facilities and paved streets, are necessary to meet housing objectives and standards for a suitable living environment, and as such, the benefits of these improvements outweigh any associated cost constraints.

Architectural Control Ordinances: Architectural control ordinances provide for community review of the exterior architectural appearance and functional plan of proposed structures. These controls serve to extend the purposes of zoning by maintaining standards for compatible land use development and stability of property values. While communities have a justifiable interest in preventing monotonous and unaesthetic subdivisions or extremes of housing styles, they also have an opportunity to improperly utilize the architectural control ordinance as a means of excluding certain housing types from the community. Due, however, to the subjective interpretation of architectural control ordinances as well as the wide variation in their administration, the extent to which such ordinances restrict the locational choice of households within the Region is undetermined.

Building Codes: Building codes are regulations enacted by communities to govern the materials, equipment, and actual construction of buildings within the community. The purpose of such codes is to protect the safety of the occupants from injury due to faulty construction or inferior materials, as well as to minimize potential unhealthy or unsanitary conditions and to prevent accelerated deterioration and blight. Building codes, then, facilitate the attainment of regional housing objectives for decent, safe, and sanitary housing.

Building codes, because of their time-consuming enforcement and differing application among communities, have been criticized as adding to the cost of construction (see Chapter X). As a result, attempts have been made to enact legislation for a uniform statewide building code for one- and two-family dwellings, as well as legislation for uniform construction and inspection of off-site factory-built housing units.

It has been suggested that enactment of legislation to develop a uniform factory built housing code might be the catalyst required to enable manufacturers of factory built housing, in the long run, to expand their operations, develop new markets, and through increased production and technological advances, possibly provide additional cost savings to prospective housing consumers. As indicated in Chapter IX of this report, however, it is doubtful, based upon the current state of the art in housing technology, that substantial cost savings would accrue to housing consumers if such legislation were enacted. This is true for two reasons. First, a 1972 study of local building codes by Wisconsin's largest manufacturer of factory built panelized housing units found that additional costs imposed on the manufacture of such units due to requirements of local building codes average less than 1 percent of the cost of the new unit. Second, even if factory built housing could readily be provided within the Region, cost savings attributable to such units, when compared to similar conventionally constructed housing units, would be less than 10 percent, and would, therefore, only reduce the monthly occupancy cost of such housing from $296.00 to $275.00 per month, far less than would be required to make such housing readily available to low- and moderate-income families. It would appear, then, that while local building codes presently are non-uniform, and as such may cause inconveniences to factory built housing producers, they do not in and of themselves significantly increase the cost nor restrict the availability of such housing within the Region.

In conclusion, while most land use control mechanisms are designed to regulate and control urban development and as such have the capability of restricting or limiting the availability of housing within the Region, it would appear that community zoning regulations, especially those relating to structure type and size, are the only regulations which presently restrict the provision of modest-sized housing and constrain locational choice, especially for low- and moderate-income households in the Region.

Property Tax Structure

The existing property tax structure has far-reaching effects on the availability of housing in southeastern Wisconsin. As observed in a previous section of this chapter, the local property tax levied on residential property significantly increases the cost of occupying housing. The monthly property tax payment together with the monthly mortgage payment and other occupancy costs excludes many low- and moderate-income families from the single-family housing market. Local property taxes significantly increase the cost of occupying rental housing as well. In addition to increasing occupancy costs, the existing property tax structure has a considerable impact on the patterns of urban development within the Region. Thus, under the existing property tax structure, decisions related to land use, and in particular to residential development, are much influenced by cost-revenue considerations. Resident citizens and their elected officials are much concerned about the suspected deficit between the tax revenue generated from certain types of residential development and the cost of providing public services to such development. Indeed, much community opposition to the provision of housing for low- and moderate-income families has arisen because of the alleged adverse effect of such housing on the local tax rate.

As part of the analysis of institutional constraints, then, tax information collected as part of the tax structure inventory was analyzed to identify which of the components of the total property tax are the largest and most rapidly increasing, and therefore are most responsible for the present high level of property taxes in many areas of the Region. A summary of the findings of this analysis is presented below.

Components of the Total Property Tax: The property tax typically accounts for a relatively large proportion, 25 percent, of the cost of occupying new single-family housing in the urban areas of the Region (see Table 158). Indeed, the property tax payment represents a substantial proportion of the cost of occupying most single-family and multifamily housing throughout the Region.

The property tax levy on an individual residential parcel may increase with time due to an increase in the value of the house and lot, an increase in the property tax rate, or a combination of these two. Housing, especially conventionally constructed new housing, tends to appreciate in value over time. As a result of periodic property value reassessment, this appreciation is recorded on the local tax roll. Such increases in the assessed value of the property precipitate proportional increases in the tax levy. Thus, there may be a substantial increase in the tax levy even if there is no corresponding increase in the property tax rate.

In addition to the normal appreciation of property values, specific improvements to an individual housing unit may increase the assessed value of the parcel, thereby causing an increase in the property tax levy. For example, the addition of an extra room to overcome an overcrowded situation or extensive interior or exterior improvements are likely to cause a higher assessed valuation. Indeed, the resultant increment in the property tax levy in conjunction with the cost of the improvement itself may cause the overall cost of the project to be beyond the economic means of the low- or moderate-income homeowner, or economically unfeasible for the owner of rental housing.

In addition to increases in the value of housing either through normal appreciation or specific improvements, increases in the property tax rate may also cause substantial increases in the property tax levy on a house and lot. As shown in Table 161, property tax rates on the average home increased considerably for municipalities in the Region between 1961 and 1971. The median property tax rate for cities increased by 31 percent during this period, while the median tax rate for villages and towns increased by 20 and 23 percent, respectively. The observed increases in the property tax rate result from the fact that growth in the required tax levy has occurred at a faster rate than the growth in property values for most communities in southeastern Wisconsin. An analysis of the various components of the total property tax levy is presented below to identify those components which are most responsible for the presently high tax rate for municipalities within the Region.

The local property tax includes a levy for municipal purposes; that is, a levy to finance the operation of the city, village, or town government and the cost of the local services which it provides. In addition, the property

Table 161

MEDIAN FULL VALUE PROPERTY TAX RATE FOR CITIES, VILLAGES, AND TOWNS IN THE REGION 1961 and 1971

Civil Division	Median Full Value Property Tax Rate[a]			
			Change: 1961-1971	
	1961[b]	1971[b]	Amount	Percent
Cities . . .	$24.72	$32.29	$7.57	30.6
Villages . . .	25.37	30.47	5.10	20.1
Towns . . .	21.58	26.44	4.86	22.5

[a] *Dollars of tax per thousand dollars of equalized value.*

[b] *The property tax rate for 1971 is the net full value rate, or gross full value rate adjusted downward to reflect state property tax relief granted on real property and personal property other than stocks. No property tax relief was paid by the state to local units of government in 1961. Consequently, there is no distinction between the gross rate and the net rate for that year as there is for each succeeding year.*

Source: Wisconsin Department of Revenue and SEWRPC.

tax includes a levy for the operation of the county government and school districts within its boundaries, as well as a small amount levied as a state forestry tax. The trends in the various components of the total property tax levy are presented for cities, villages, and towns in the Region in Table 162.

The property tax for school purposes is clearly the largest and most rapidly increasing of the several components of the total property tax. The property tax levy for school purposes increased 167 percent between 1961 and 1971, and represented 54 percent of all property taxes levied in the Region at the end of this period. In 1971, the property tax for school purposes represented 50 percent of all taxes levied by cities in the Region, 63 percent of all taxes levied by villages, and 77 percent of all taxes levied by towns. Although the property tax levy for municipal and county purposes doubled between 1961 and 1971, each of these two taxes comprised less than one-fourth of all property taxes levied in the Region at the end of the inventory period. The state forestry tax represented less than 1 percent of the total property tax levy in 1971. It is evident that educational costs more than any other component of the total property tax levy are responsible for the current high level of property taxes within many areas of the Region.

Cost-Revenue Considerations: Under the existing property tax structure, it is economically advantageous for municipalities to seek land use development which enhances the community tax base and at the same time demands a relatively low level of local services. In this regard, community residents and their elected officials may oppose the provision of housing for low- and moderate-income families because of its assumed adverse effect on the local cost-revenue situation. Specifically, there is much concern that the property tax generated from such residential development will not pay for the cost of the public services which must be provided, particularly the cost of education. Such economic considerations may contribute to the enactment of land use controls which effectively preclude the development of housing for low- and moderate-income families, as well as to other forms of community opposition to such housing.

Municipal Services: The findings of the cost-revenue study conducted as part of the tax structure inventory, and summarized in Chapter VI, provide insight into the impact of low- and moderate-income family housing on the local fiscal structure. As part of this study, the operating and maintenance cost of providing municipal services such as police and fire protection, solid waste collection, and others was compared to the property tax revenue for local purposes generated on a house and lot with a market value of $25,000, the maximum value of a house and lot allowable under the federal Section 235 homeownership program. The procedures and assumptions utilized in this study are described in Chapter VI. It is important to note here that the cost data utilized in this analysis include operating and maintenance expenses but exclude outlays for major capital improvements and debt retirement.

The findings of the cost-revenue study suggest that the property tax levy for municipal purposes on a moderately priced house and lot offset most of the net operating and maintenance costs of providing municipal services to its occupants. Certainly, the relationship between the cost of providing municipal services to the occupants of moderately priced housing and the revenues derived therefrom varies among the communities of the Region depending on the level of local services provided and the specific financial structure of the individual communities. However, for the minor civil divisions included in the analysis, it appears that on the average the cost of providing municipal services to moderately priced residential development is not a burden on the local fiscal structure. It should be noted, however, that despite these findings, it is still economically advantageous for a community to favor higher value residential development, since any excess in the property tax for municipal services generated on the more expensive housing may be utilized to offset other local costs, including the cost of education.

Cost of Education: In addition to an analysis of costs and revenues relative to the provision of municipal services, the cost-revenue study conducted as part of the tax structure inventory also analyzed educational costs and revenues, examining in particular the relationship between educational operating costs per pupil and the property tax levy for school purposes on a $25,000 house and lot. On the average, the property tax for school purposes on a $25,000 property for all municipalities included in the study was found to be somewhat less than the average operating cost per pupil for the 1970-71 school year. Furthermore, the deficit increases substantially as the number of public school students increases. For example, assuming an average of 2.2 public school students per household for households which purchased new housing authorized under the Section 235 homeownership program through May 1971, it was found that the average property tax for school purposes is $775 less than the net educational operating cost associated with such housing.

It is important to note that even for more expensive family housing, the property tax for school purposes often fails to meet the educational operating expenditures associated with larger households which generate, for example, three or more public school students. However, for a given number of public school students, the proportion of educational expenses which is met by the property tax for school purposes increases significantly with the value of the house and lot. Furthermore, higher value residential development may generate property taxes for municipal purposes which are in excess of the cost of services provided to such housing, and this excess may help defray educational deficits which the household generates.

As indicated in Chapter VI, it is apparent from the results of the cost-revenue analysis that if a large school age population is generated from a moderately-priced residential development which is located in a community where educational resources are utilized at or beyond capacity, the attendant cost of education may far out-

Table 162

DISTRIBUTION OF THE GROSS PROPERTY TAX LEVY FOR CITIES, VILLAGES, AND TOWNS IN THE REGION ACCORDING TO USE FOR STATE, COUNTY, MUNICIPAL, OR SCHOOL PURPOSES: 1961 and 1971

Cities

Purpose	Gross Property Tax Levy[a]					
	1961		1971		Change: 1961-1971	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
State	$ 1,382,470	0.7	$ 2,203,187	0.5	$ 820,717	59.4
County	55,814,662	26.9	111,984,955	23.8	56,170,293	100.6
Municipal	58,635,258	28.2	123,492,405	26.2	64,857,147	110.6
School	91,938,984	44.2	233,626,270	49.5	141,687,386	154.1
Total	$207,771,374	100.0	$471,306,917	100.0	$263,535,543	126.8

Villages

Purpose	Gross Property Tax Levy[a]					
	1961		1971		Change: 1961-1971	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
State	$ 209,154	0.8	$ 420,142	0.5	$ 210,988	100.9
County	7,532,370	28.3	18,393,241	24.0	10,860,871	144.2
Municipal	2,588,839	9.7	9,462,362	12.3	6,873,523	265.5
School	16,279,988	61.2	48,460,520	63.2	32,180,532	197.7
Total	$ 26,610,351	100.0	$ 76,736,265	100.0	$ 50,125,914	188.4

Towns

Purpose	Gross Property Tax Levy[a]					
	1961		1971		Change: 1961-1971	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
State	$ 184,570	0.9	$ 432,567	0.7	$ 247,997	134.4
County	4,435,922	21.4	12,672,242	20.7	8,236,320	185.7
Municipal	1,277,505	6.2	1,174,131	1.9	- 103,374	- 8.1
School	14,862,809	71.5	46,904,446	76.7	32,041,637	215.6
Total	$ 20,760,806	100.0	$ 61,183,386	100.0	$ 40,422,580	194.7

All Minor Civil Divisions

Purpose	Gross Property Tax Levy[a]					
	1961		1971		Change: 1961-1971	
	Amount	Percent of Total	Amount	Percent of Total	Amount	Percent
State	$ 1,776,194	0.7	$ 3,055,896	0.5	$ 1,279,702	72.0
County	67,782,954	26.6	143,050,438	23.5	75,267,484	111.0
Municipal	62,501,602	24.5	134,128,898	22.0	71,627,296	114.6
School	123,081,781	48.2	328,991,336	54.0	205,909,555	167.3
Total	$255,142,531	100.0	$609,226,568	100.0	$354,084,037	138.8

[a] *The gross property tax levy is the total tax levy before the application of property tax relief.*

Source: Wisconsin Department of Revenue and SEWRPC.

weigh the school tax levied on the property. Accordingly, under the existing system of financing public educational services, communities are encouraged to seek land development which lessens the burden which educational costs represent within the local fiscal structure. For example, through its land use controls, a community can ensure that new housing which is expected to generate a large school age population is of sufficient value so that the property tax generated from the development will meet a substantial portion of school costs.

It is evident that under the existing property tax structure, the development and maintenance of a balanced tax base is a necessary and justifiable consideration in the administration of local land development policy. However, when the preservation or enhancement of the local fiscal structure becomes the dominant force in shaping local land use policy, certain housing related problems may arise. Thus, the exclusion of certain types of housing from some communities may constrain the availability of housing for low- and moderate-income households by limiting their choice of location. In addition, such exclusionary practices may result in the imposition of a disproportionate share of "social overhead" on other communities which allow a broad range of residential development.

The general school aid formula, which is one of the most important and complex influences on the property tax level, was revised in 1973. This revision was intended to provide a more equitable distribution of the individual tax burden for education, and to relate property tax levies for education more closely to local school district needs.

The tax base for educational purposes, that is, property value per pupil, is a key element in the new aid distribution formula. A change in the tax base will change the amount of state aid paid to a school district. If the local property value per pupil increases, the amount of state aid decreases, and vice versa. Thus, the current formula for the distribution of general school aids is intended to guarantee that each pupil in the state, whether he lives in a relatively "rich" or a relatively "poor" community, will have the same amount of local property tax base supporting his or her education. This will tend to reduce the pressure which has existed in the past to increase the tax base for school purposes.

Government Activity

Many housing programs have been undertaken by the federal, state, and local units of government in an effort to reduce existing housing problems. In particular, programs initiated by the federal government have increased the availability of housing for many low- or moderate-income families which might otherwise experience severe housing difficulties. In the recent past, however, government housing programs—particularly those undertaken by the federal government—have been criticized for not meeting expectations. Indeed, while the overall effect of past federal housing programs has been a reduction of existing housing problems, there appear to be constraints within these programs which limit their effectiveness in meeting housing needs. Because of these constraints, most federal housing programs were terminated by a moratorium on housing funds imposed by the President of the United States in January 1973. However, analysis of several of the past major federal housing efforts is presented below in order that these constraints might be identified and resolutions recommended for their abatement from future government housing activity.

To assist in the identification of problems within the major federal housing programs, the Commission, in conjunction with the University of Wisconsin-Milwaukee, undertook a social research survey.[5] As part of this survey, a sample of producers, providers, and facilitators of housing was questioned in regard to their perceived disadvantages of the Section 235 homeownership and Section 236 rental housing programs. As shown in Table 163, criticisms of the Section 235 program fall into the following categories: poor quality construction, poor administration, creation of social problems, and disapproval of the philosophy of the program. Suggestions for improving the Section 235 housing program closely paralleled the pattern of criticisms (see Table 164). The most frequently suggested improvements relate to better administration and stricter control over the construction process to ensure better quality housing.

As indicated in Table 165, the perceived disadvantages of the Section 236 rental housing program are similar to those expressed for the Section 235 program, with poor administration, the creation of social problems, and general disagreement with the philosophy of the program most frequently mentioned. The suggestions for making the Section 236 program more effective emphasize the perceived need for better administration and better construction (see Table 166).

In addition to the foregoing criticisms, other problems associated with the major federal housing programs may be discerned by examining the characteristics of the occupants of such government sponsored housing. For example, a problem with the Section 235 homeownership program which was presented in Chapter XI was that it tended to reinforce geographic concentrations of low-income and minority households in the Region. Because of the program eligibility requirements, low-income households generally had to purchase existing rather than new housing units in order to obtain housing under the Section 235 program. However, as shown on Map 70, existing homes available for sale under Section 235 were generally located in the older central areas of the cities of Milwaukee and Racine. Conversely, moderate-income households, because of their greater ability to pay, were able to obtain new Section 235 housing units which typically were located in newer developing subdivisions or in newly developed fringe areas of the more urban communities in the Region (see Map 71).

[5] *The social research survey, in addition to a sample of housing producers, providers, and facilitators, included a probability sample of about 1,700 housing consumers stratified by geographic area, age, income, and race. A complete summary of the findings as well as the documentation of the methodology utilized therein is presented in Technical Report No. 14.*

Table 163

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING PRODUCERS, PROVIDERS, AND FACILITATORS IN THE REGION REGARDING PERCEIVED DISADVANTAGES OF THE FEDERAL SECTION 235 HOMEOWNERSHIP HOUSING PROGRAM

Categories of Response	Housing Producers, Providers, and Facilitators						
	Lenders	Contractors	Realtors	Public Officials	Labor	Public Housing Officials	Advocacy Groups
Poor quality construction	12	11	9	13	34	40	6
Poorly administered	10	9	13	4	12	--[a]	43
Social problems—created more slums, more delinquency; property not maintained; resentment among neighbors	10	5	13	7	6	10	6
Disapprove of government intervention or of 235 program specifically	8	11	11	14	--[a]	10	--[a]
Program does not reach right people, unfair to those ineligible	4	7	8	5	--[a]	--[a]	6
Economic problems—insufficient profit, high cost	6	2	9	2	--[a]	--[a]	--[a]
Other disadvantages	16	7	11	11	6	10	33
No disadvantages	8	11	17	10	12	20	--[a]
Not familiar with program, don't know	22	32	7	30	18	10	6
Not ascertained	4	5	2	4	12	--[a]	--[a]
Total	100	100	100	100	100	100	100
Number Questioned	49	43	56	84	17	10	18

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 164

PERCENTAGE DISTRIBUTION OF SUGGESTIONS BY A SURVEY SAMPLE OF HOUSING PRODUCERS, PROVIDERS, AND FACILITATORS IN THE REGION FOR MAKING THE FEDERAL SECTION 235 HOMEOWNERSHIP HOUSING PROGRAM MORE EFFECTIVE

Categories of Response	Housing Producers, Providers, and Facilitators						
	Lenders	Contractors	Realtors	Public Officials	Labor	Public Housing Officials	Advocacy Groups
Better administration of programs	10	14	28	11	12	40	38
Stricter controls to ensure better construction	8	11	6	17	34	10	28
Expand program	6	9	17	5	6	--[a]	11
Nothing; effective as it is	14	5	7	1	6	10	--[a]
Eliminate program	8	2	7	5	6	--[a]	--[a]
Educate new buyers	2	2	2	1	--[a]	10	6
Other	6	7	6	8	6	20	11
Inapplicable or don't know	42	50	27	47	18	10	6
Not ascertained	4	--[a]	--[a]	5	12	--[a]	--[a]
Total	100	100	100	100	100	100	100
Number Questioned	49	43	56	84	17	10	18

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 165

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING PRODUCERS, PROVIDERS, AND FACILITATORS IN THE REGION REGARDING PERCEIVED DISADVANTAGES OF THE FEDERAL SECTION 236 RENTAL HOUSING PROGRAM

Categories of Response	Housing Producers, Providers, and Facilitators						
	Lenders	Contractors	Realtors	Public Officials	Labor	Public Housing Officials	Advocacy Groups
Poorly administered	6	2	11	1	6	20	50
General disapproval of program or government intervention generally	16	11	9	6	--[a]	10	--[a]
Social problems	4	7	4	2	6	--[a]	11
Other disadvantages	6	7	11	1	6	10	22
No disadvantage	12	5	13	11	--[a]	10	11
Not familiar with program, don't know	52	68	52	78	70	50	6
Not ascertained	4	--[a]	--[a]	1	12	--[a]	--[a]
Total	100	100	100	100	100	100	100
Number Questioned	49	43	56	84	17	10	18

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 166

PERCENTAGE DISTRIBUTION OF SUGGESTIONS BY A SURVEY SAMPLE OF HOUSING PRODUCERS, PROVIDERS, AND FACILITATORS IN THE REGION FOR MAKING THE FEDERAL SECTION 236 RENTAL HOUSING PROGRAM MORE EFFECTIVE

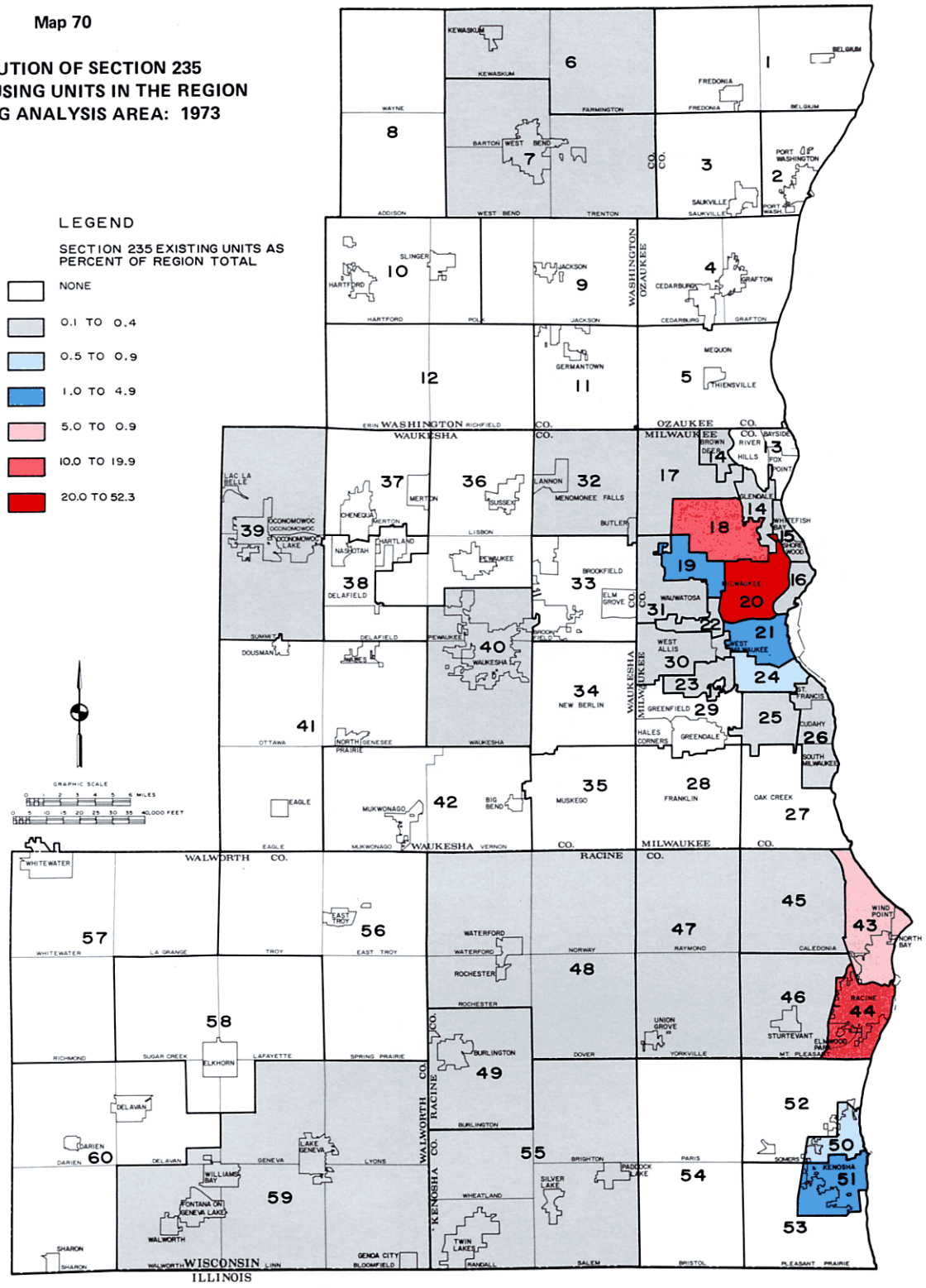
Categories of Response	Housing Producers, Providers, and Facilitators						
	Lenders	Contractors	Realtors	Public Officials	Labor	Public Housing Officials	Advocacy Group
Nothing; effective now	16	2	4	2	--[a]	--[a]	--[a]
More screening	2	--[a]	4	--[a]	--[a]	--[a]	6
Better administration of program	8	9	17	6	6	--[a]	43
Better construction, more diversity	--[a]	2	4	1	12	10	6
Encourage more participation	2	--[a]	2	--[a]	--[a]	20	6
End or reduce program	4	2	--[a]	2	--[a]	--[a]	--[a]
Inapplicable or don't know	60	78	62	82	70	60	22
Other	4	5	7	5	--[a]	10	17
Not ascertained	4	2	--[a]	2	12	--[a]	--[a]
Total	100	100	100	100	100	100	100
Number Questioned	49	43	56	84	17	10	18

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Map 70

DISTRIBUTION OF SECTION 235 EXISTING HOUSING UNITS IN THE REGION BY HOUSING ANALYSIS AREA: 1973

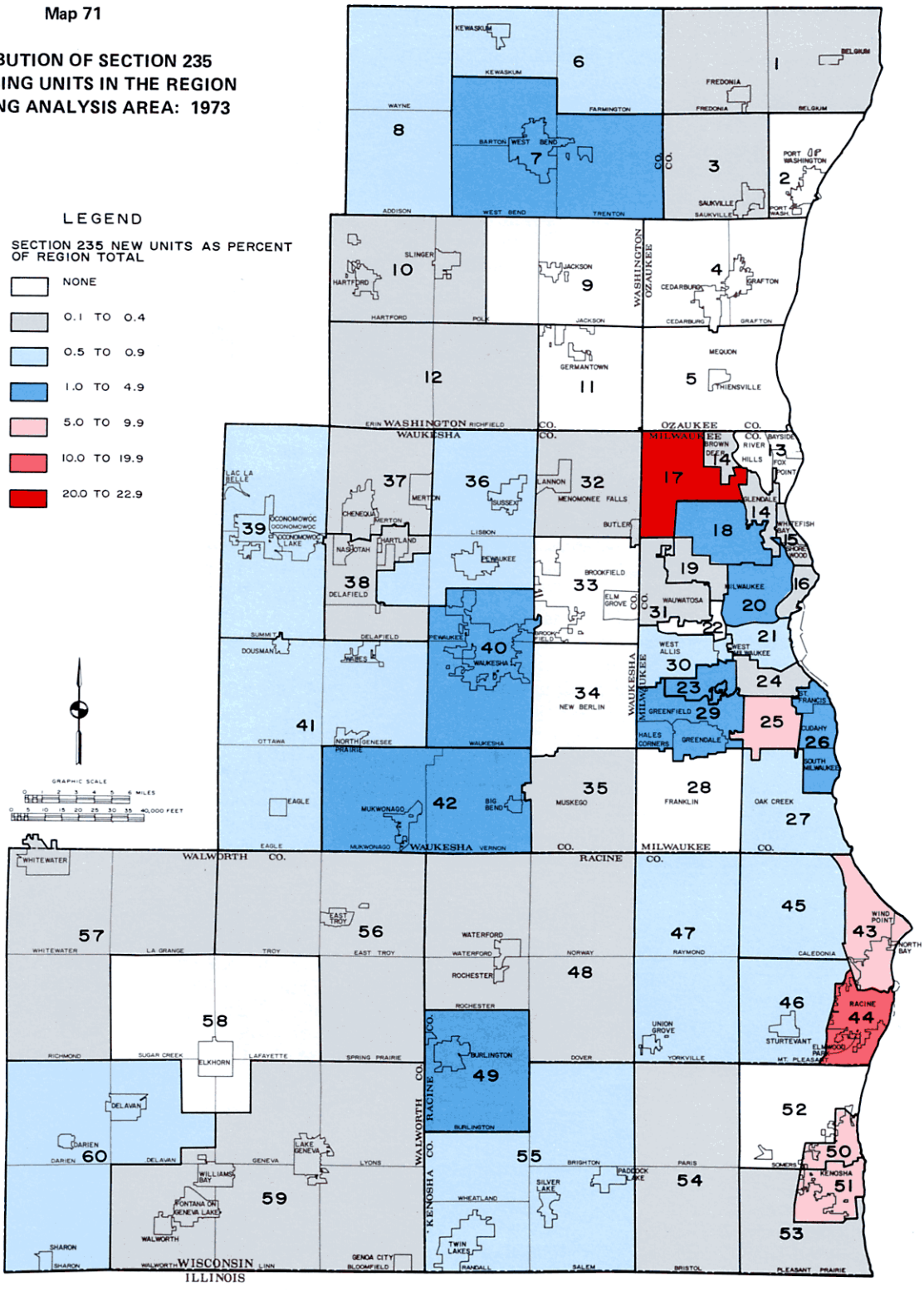


The less expensive existing homes available for purchase under the federal Section 235 housing program are generally located in the older areas of the Cities of Milwaukee and Racine. Housing analysis area 20 in the City of Milwaukee contains 964 units, or 52 percent of all existing units in the Region whose purchase was assisted under the Section 235 program.

Source: U. S. Department of Housing and Urban Development and SEWRPC.

Map 71

DISTRIBUTION OF SECTION 235 NEW HOUSING UNITS IN THE REGION BY HOUSING ANALYSIS AREA: 1973



New Section 235 housing units, available to moderate-income families, are generally located in the newly developing fringes of the existing urban communities in the Region. Housing analysis areas with 100 or more new Section 235 units include area 7 in Washington County; areas 17, 18, 25, and 26 in Milwaukee County; area 40 in Waukesha County; areas 43 and 44 in Racine County; and areas 50 and 51 in Kenosha County. Housing analysis area 17 alone accounted for 851 units, or about 23 percent of all new Section 235 units in the Region.

Source: U. S. Department of Housing and Urban Development and SEWRPC.

A profile of the occupants of new and existing Section 235 housing in the Region is presented in Table 167. The average income of a family residing in a Section 235 existing housing unit was only $5,400, substantially lower than the average income of $8,500 for families residing in new Section 235 housing. As further indicated in Table 167, 74 percent of the household heads in Section 235 existing homes were nonwhite, while 94 percent of all household heads in new Section 235 housing were white. Based on the geographic distribution of new and existing Section 235 housing units and the characteristics of the occupants of these units, it is apparent that the existing patterns of segregation on the basis of income and race within the Region are reinforced, to some extent, through the workings of the Section 235 homeownership program. The income limits of the Section 235 homeownership program were intended to provide equitable eligibility for low- and moderate-income families without committing them beyond their means. However, since the majority of the lower-cost existing units available for purchase under Section 235 were in the older, more densely populated areas, the lower-income minority families who obtained housing under this program had no alternative but to remain in these areas, whether or not this was their preferred choice of location.

Referring again to Map 71, it is clear that concentrations of new subsidized housing have developed in certain areas of the Region. For example, housing analysis areas 17 and 44 have a disproportionate share of all new Section 235 housing which has been developed in the Region—about 23 and 10 percent, respectively. The concentration of new Section 235 housing units in these areas is due, to a great extent, to the availability of suitably zoned vacant land. The large-scale development of low-cost family housing in certain areas of the Region may result in the sudden overcrowding of school, transportation, public utility, and recreational facilities, thereby overtaxing the area's natural and financial resource bases. In addition, such concentrated development of subsidized housing may contribute to community resident opposition to the provision of such housing for low- and moderate-income families.

Table 167

HOUSEHOLD AND HOUSING UNIT CHARACTERISTICS RELATIVE TO NEW AND EXISTING SECTION 235 HOUSING IN THE REGION: 1973

Characteristics	Section 235 Housing Units	
	New	Existing
Housing Unit		
Average Sale Price	$22,255	$14,679
Average Mortgage	22,071	14,544
Average Monthly Payment	223	151
Buyer Payment	139	98
Assistance Payment	84	53
Household		
Average Income		
Gross Annual	$ 8,502	$ 5,393
Adjusted Annual	$ 7,222	$ 3,794
Adjusted Monthly	$ 608	$ 316
Race of Household Head		
Percent White	94.0	26.0
Percent Nonwhite	6.0	74.0
Sex of Household Head		
Percent Male	84.0	17.0
Percent Female	16.0	83.0
Total Number of Units	3,716	1,842

Source: U. S. Department of Housing and Urban Development and SEWRPC.

SOCIAL CONSTRAINTS

As part of the analysis of housing availability constraints, several social phenomena have been identified as contributing to the housing problems experienced by certain subgroups of the regional population, including the forces of community opposition to the provision of housing for low- and moderate-income families and housing discrimination. It is impossible to determine in a precise manner the actual number of households which are experiencing housing problems because of these social constraints. As part of the quantification of housing need, the Technical and Citizen Advisory Committee on Regional Housing Studies adopted a generalized assumption in this regard in order that the impact of these forces might at least be reflected in the estimate of the existing housing need.[6] However, further analysis of the forces of community opposition and housing discrimination is necessary in order to provide greater insight into the extent to which they limit the availability of housing within the Region. A better understanding of the scope and characteristics of these forces will facilitate the development of sound housing recommendations.

In order to provide insight into the extent and impact of the forces of community opposition and housing discrimination as well as of other attitudes and preferences related to housing, the Commission, in conjunction with the University of Wisconsin-Milwaukee, undertook an attitudinal survey of housing consumers, producers, providers, and facilitators in southeastern Wisconsin. The results of this social research survey were analyzed to evaluate the effects of the forces of community opposition and housing discrimination within the Region. It is important to note that these forces are emotion-charged phenomena, and the difficulty of evaluating their magnitude and impact increases as fact becomes intermingled with emotion. While precise determination of the effects of these forces may not be

[6] *As an estimate of the number of households which are forced to occupy inadequate housing solely because of noneconomic constraints within the housing market, the Advisory Committee recommended that 50 percent of all households which occupy substandard or overcrowded housing and which appear able to secure adequate housing at a cost which is less than 30 percent of the household adjusted gross income be classified in housing need. It is evident that this assignment is necessarily arbitrary and may overstate or understate somewhat the actual situation.*

Table 168

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING WHETHER GOVERNMENT SHOULD ENCOURAGE HOUSING FOR LOW- AND MODERATE-INCOME FAMILIES WHERE INSUFFICIENT HOUSING OF THAT TYPE EXISTS

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	
Yes	79	87	80	75	90	77	72	85	73	70	72	70	73
No	7	--[a]	6	9	8	9	14	5	13	21	14	21	14
Don't know	10	13	11	16	1	14	14	10	14	8	14	8	12
Not ascertained	4	0	3	--[a]	1	--[a]	--[a]	0	--[a]	1	0	1	1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

possible, the results of the social research survey, as summarized below, provide a valuable indicator of the extent of the problems.

Community Opposition

One of the most difficult housing availability constraints to be overcome relates to opposition on the part of community residents and often their elected officials which may be brought to bear against the provision of housing for low- and moderate-income families within a community. Community resident opposition may occur at all levels of income or educational backgrounds, or for different races or creeds. Furthermore, community opposition may be expressed in a variety of ways. For example, residents may organize citizen groups to oppose the development of a particular low-income housing development within their community. Through letters and petitions, individual citizens may attempt to influence their elected officials toward a negative stance on the provision of low-income housing in their community. Ultimately, community opposition may find expression in the municipality's adopted land use controls, such as unnecessarily restrictive zoning which can effectively preclude the construction of housing for low- and moderate-income families.

Attitudes Toward Housing for Low- and Moderate-Income Families: Response to certain questions posed to the consumers of housing as part of the social research survey provides an indicator of the magnitude of community opposition to low- and moderate-income housing. When asked whether government should encourage the development of housing for low- and moderate-income families when insufficient housing of that type exists, almost three-fourths of the consumers throughout the Region said yes. However, 14 percent of the respondents were opposed to such government action (see Table 168). As further indicated in Table 168, there is some variation in the responses when the consumers are stratified by race and income level.[7] For example, upper-income households are more conservative about such government action in housing than are poor people. Thus, the proportion of positive responses decreases and the proportion of negative responses increases as household income rises. Furthermore, this inverse relationship appears to be more pronounced among nonwhite respondents than among

[7] *For the purposes of the social research survey, the definition of economic levels is based on household income and household size as indicated below. Poverty households: all households with incomes less than $3,000, three or more person households with incomes less than $4,000, four or more person households with incomes less than $5,000, five or more person households with incomes less than $6,000, and seven or more person households with incomes less than $7,000. Low-income households: one or two person households with incomes between $3,000 and $3,999, one to three person households with incomes between $4,000 and $4,999, two to four person households with incomes between $5,000 and $5,999, three to six person households with incomes between $6,000 and $6,999, four or more person households with incomes between $7,000 and $7,999, five or more person households with incomes between $8,000 and $8,999, and six or more person households with incomes between $9,000 and $9,999. Moderate-income households: one person households with incomes between $5,000 and $5,999, one or two person households with incomes between $6,000 and $6,999, one to three person households with incomes between $7,000 and $7,999, one to four person households with incomes between $8,000 and $8,999, one to five person households with incomes between $9,000 and $9,999, and three or more person households with incomes between $10,000 and $14,999. Upper-income households: one or two person households with incomes between $10,000 and $14,999, and all households with incomes of $15,000 or more.*

whites. However, more nonwhites than whites at all income levels favor government sponsorship of housing for low-income households.

Respondents in the study were also asked: "How would you feel about housing in your community being made available to moderate- and low-income families?" In the survey interview, this question followed the one just discussed, and not surprisingly, the patterns of response to the two questions are quite similar (see Table 169). There are, however, some interesting differences.

Although both questions received the same proportion of positive responses for the population as a whole, the distribution of these responses differed. First, more poor and low-income households responded positively to the second question than to the first. Second, fewer upper-income people responded positively to the second question than to the first. Third, upper-income nonwhites had even fewer positive responses than upper-income whites on the question dealing with housing for low-income people in the respondent's community. Upper-income nonwhites were thus less in favor of making housing for low-income people available in their community than any race-income group in the study. Even so, a majority—nearly 6 in 10—favor such action. It is apparent from the responses to these questions that some upper-income people who favor more housing for low-income people do not want such housing in their community, though they favor low-income housing in general.

Over the past several decades, the federal government has undertaken a variety of programs to deal with the nation's housing problems. Examination of consumer perceptions relative to specific federal housing subsidy programs which were in existence at the time of the social research survey provides further insight into the extent of community opposition to the provision of housing for low- and moderate-income families. As part of the social research survey, consumers were asked a series of questions in regard to the major federal housing subsidy programs. The results are presented in Table 170.

It is important to note that public perceptions of each federal housing program presented in Table 170 reflect only the responses of those consumers who had heard of the program. A very large proportion, 85 percent, of the respondents have heard of public housing for the elderly. However, less than half of the respondents were familiar with any of the other housing subsidy programs. In particular, only 45 percent of the respondents had heard of the Section 235 home ownership program; 32 percent were familiar with public projects; and only 10 percent were familiar with the Section 236 rental housing program. A much smaller proportion of the respondents indicated that they have actually had contact with the various government housing programs, suggesting that incomplete or inaccurate information concerning government housing activities may have had considerable influence on the expressed attitudes toward the various federal housing programs.

As part of the social research survey, consumers who had heard of the various federal housing programs were asked to evaluate the programs in terms of their effectiveness in meeting housing needs. With only minor exceptions, the majority of the respondents indicated that each program was doing a fair or a good job in meeting housing needs (see Table 170). Among the programs, public housing for the elderly received the most favorable evaluation, with 82 percent of the respondents who have heard of this program indicating that it was doing a fair or good job. On the other hand, some respondents indicated that many of the federal housing programs were doing a poor job in meeting housing needs. In this regard, 15 percent of the respondents gave a "poor"

Table 169

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING HOUSING BEING MADE AVAILABLE IN THEIR COMMUNITIES TO LOW- AND MODERATE-INCOME FAMILIES

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	
In favor	85	84	85	83	92	85	73	83	74	60	58	60	73
Okay	53	60	54	57	60	57	54	64	55	42	42	42	51
Good idea	25	17	24	22	24	23	9	19	10	14	15	14	15
Okay, qualified	7	7	7	4	8	5	10	--[a]	9	4	1	4	7
Opposed	4	14	6	9	0	7	13	12	13	22	42	23	14
No, would not like it	2	14	4	4	0	3	6	7	6	12	14	12	7
No, qualified	2	0	2	5	0	4	7	5	7	10	28	11	7
Other	6	1	5	6	0	5	8	0	7	6	0	5	6
Not ascertained	5	1	4	2	8	3	6	5	6	12	--[a]	12	7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 170

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING THEIR PERCEPTIONS OF FEDERALLY SUBSIDIZED HOUSING PROGRAMS

Housing Program	Have You Ever Heard of this Program?[a]			Have You Ever Had Contact with This Program?[a]			Do You Think This Program Does a Good Job, a Fair Job, or a Poor Job in Meeting Housing Needs?[b]			Do You Think This Program Is Needed in Your Community?[b]			Do You Think the Residents in the Vicinity of These Government Sponsored Dwellings Are Friendly Toward the People Who Live in Them?		
	Yes	No	Not Ascertained	Yes	No	Other	Good or Fair	Poor	Other	Yes	No	Other	Yes	No	Other
Public Housing for Elderly	85	14	1	11	74	15	82	3	15	67	18	15	61	6	33
235 Homeownership	45	54	1	7	38	55	66	15	19	50	32	18	43	25	32
Scattered Site Housing for Sale to Low-Income Families at Reduced Interest	33	66	1	1	31	68	55	17	28	47	29	24	31	28	41
Public Housing Projects	32	67	1	5	26	69	65	15	20	50	27	23	31	29	40
Rental Units for Low-Income Families Built by Nonprofit Groups with Government Assistance	24	75	1	2	22	76	55	8	37	48	29	23	31	14	55
Public Rental Housing on Scattered Sites	15	84	1	1	14	85	49	16	35	42	25	33	29	21	50
Farmers Home Loan	15	84	1	2	13	85	46	3	51	36	35	29	47	6	47
236 Rent Supplement Housing	10	89	1	1	9	90	54	13	33	38	37	25	35	24	41

[a] *Percentages are based on the total number of respondents.*

[b] *Percentages are based on the total number of respondents excluding those who have not heard of the program.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

rating to the effectiveness of the Section 235 homeownership program, public housing projects, and scattered site low-cost housing for sale or rent.

In the same series of questions, consumers who were familiar with the various housing programs were asked whether the programs were needed in their community. As shown in Table 170, two-thirds of the respondents indicated that public housing for the elderly is needed in their community, while one-half or less said that the other subsidy programs are needed. Conversely, with the exception of public housing for the elderly, 25 percent or more of the respondents indicated no need for the various housing programs in their community.

In another effort to discover how residents would welcome federally subsidized housing programs into their area, respondents who had heard of the programs were also asked the question, "Are residents friendly to people in government sponsored housing?" As shown in Table 170, less than half of the respondents replied positively for each of the housing subsidy programs with the exception of public housing for the elderly. A substantial proportion of the respondents—approximately one-fourth—indicated that residents were not friendly toward the occupants of housing constructed under such major subsidy programs as the Section 235 homeownership and Section 236 rental housing programs. Furthermore, almost 30 percent of the respondents indicated that residents were not friendly toward occupants of public housing projects.

Certainly, the extent of the forces of community opposition to the provision of low- and moderate-income housing cannot be precisely determined on the basis of this series of questions nor from the preceding questions concerning the provision of low-cost housing in general. However, the significant minority of consumers who responded negatively to such issues as the provision of low-cost housing in their community, the effectiveness of the various subsidy programs in meeting housing needs, and the friendliness of residents toward the occupants of government sponsored housing units confirms the widespread supposition that community opposition may indeed be a constraining factor in the provision of housing for low- and moderate-income families within certain areas of the Region. Accordingly, recommendations directed at the lessening of community opposition to the provision of low-cost housing should be incorporated into the regional housing plan.

Origins of Community Opposition: Community resident opposition to the provision of housing for low- and moderate-income families arises from a combination of many socioeconomic forces. One of the most frequently heard community objections to low-income housing—the allocation of taxes to offset the cost of community services to such units—was discussed earlier in this chapter. Other resident objections to the provision of low- and moderate-income housing may stem from economic and aesthetic considerations regarding their neighborhood, from preferences regarding the characteristics of their neighbors, and from resident opposition to the philosophy

of housing programs. In addition, part of the expressed opposition to the provision of low- and moderate-income housing may be due to public unfamiliarity with such housing programs. Each of these causal factors is analyzed below.

Economic and Aesthetic Considerations: Resident opposition to the provision of housing for low- and moderate-income families within their community arises, in part, from a number of interrelated economic and aesthetic considerations regarding the neighborhood in which they live. For example, homeowners concerned about protecting their investments may fear that the introduction of small, lower cost housing into their neighborhood will result in a decline in property values. Such fear may arise from the unfortunate stigma of low quality that low- and moderate-income housing suggests to many people, or from the suspicion that the prospective occupants may fail to properly maintain their housing. In addition, tastes and preferences relative to the desirability of certain types of housing can contribute to resident opposition toward the provision of low- and moderate-income housing in their community. For example, the introduction of small, lower cost housing into a neighborhood of larger, more elaborate housing is likely to conflict with the sense of aesthetics of many of the neighborhood residents, thereby diminishing the desirability of the neighborhood as a place to live and possibly reducing property values.

For whatever reason, a significant portion of the consumers interviewed as part of the social research survey were found to be opposed to the mixing of houses of different size and value within the same neighborhood. Asked whether it is a good idea to have a mix of large and small homes in the same neighborhood, 32 percent of the respondents indicated it is not a good idea; 26 percent indicated it is a good idea; and 41 percent indicated that such mixing does not matter (see Table 171). Significantly, the proportion of households which oppose such mixing increases with household income, ranging from a low of 19 percent for households with a poverty income to 41 percent for upper-income households.

As further shown in Table 171, consumer opposition to mixing houses of different value within the same neighborhood was considerably greater than their opposition to mixing homes of different size. Asked whether it was a good idea to have a mixture of expensive and low-cost housing in the same neighborhood, 57 percent of the respondents indicated it is not a good idea; 15 percent indicated that such mixing is good; and 27 percent indicated that such mixing does not matter. The proportion of households which oppose the mixing of expensive and low-cost housing increases with household income, with 73 percent of the upper-income respondents opposed to such mixing. The findings of the social research survey corroborate the widely held belief

Table 171

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING THEIR ATTITUDES TOWARD VARIOUS TYPES OF HOUSING ON THE SAME BLOCK

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	
Mixing Expensive and Low-Cost Housing													
Good idea	8	35	13	16	45	20	12	38	14	14	15	14	15
Not good idea	45	46	45	48	31	46	55	37	54	73	71	73	57
Does not matter	42	12	36	36	24	34	32	25	31	12	14	12	27
Do not know	3	7	4	--[a]	0	--[a]	1	0	1	--[a]	0	--[a]	1
Not ascertained	2	0	2	--[a]	--[a]	--[a]	--[a]	0	--[a]	1	0	1	--[a]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100
Mixing Large and Small Homes													
Good idea	15	45	20	30	52	33	25	34	26	24	3	23	26
Not good idea	17	29	19	23	15	22	32	34	32	40	69	41	32
Does not matter	61	19	54	47	33	45	43	32	42	35	28	35	41
Do not know	5	7	5	--[a]	0	--[a]	--[a]	0	--[a]	1	0	1	1
Not ascertained	2	0	2	--[a]	--[a]	--[a]	--[a]	0	--[a]	--[a]	0	--[a]	--[a]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

that the provision of small, low-cost housing is likely to encounter more resistance in upper-income neighborhoods than in poor neighborhoods.

It is evident from the foregoing that care must be taken in the location and construction of low- and moderate-income housing to physically integrate the units into the neighborhood as much as possible within the cost constraints. In some cases this may simply mean the use of certain exterior materials or exterior design techniques for a particular housing unit. In other cases, it may mean the use of development design techniques such as clustering, land use buffering, and planned unit development.

Preferences Regarding the Characteristics of Neighbors: It is important to note that much of the opposition to various combinations of different housing types may have more to do with the implied differences among the types of residents associated with the housing types than with any aesthetic or economic consideration. In order to gain insight into consumer attitudes concerning the preferred characteristics of their neighbors, respondents to the social research survey were questioned in regard to the desirability of people of different racial and economic status living in the same neighborhood. As shown in Table 172, 13 percent of the consumers in the Region believe that racial integration of neighborhoods is a good idea; 59 percent believe that it does not matter; and 26 percent, believe that neighborhoods should be racially segregated. Nonwhites seem significantly more favorable toward integration than whites, with 88 percent of the nonwhites indicating that racial integration is desirable or does not matter compared to 71 percent of the white respondents. Similarly, only half the percentage of nonwhites as whites believes that neighborhoods should be racially segregated. It is apparent that the desire for racially segregated neighborhoods may contribute to resident opposition toward the provision of housing for low- and moderate-income families, depending on the resident's perception of the racial makeup of the prospective occupants of the proposed housing.

A majority of the consumers surveyed, 69 percent, also indicated that mixing households of different incomes in the same neighborhood is a good idea or that such mixing does not matter (see Table 173). However, 31 percent of the respondents replied in favor of income segregation. Apparently, opposition to mixing households with different income is stronger than opposition to racial integration. It should also be noted that sympathy for income segregation increases somewhat as income increases among white respondents. Community residents who feel that neighborhoods should be homogeneous in economic class may strongly resist locating low-income households in middle- and upper-income neighborhoods.

In addition to preferences regarding the racial and economic status of their neighbors, community resident attitudes relative to families with children may influence their acceptance of prospective occupants of low- and moderate-income housing. When asked how they feel, or would feel, about large low- and moderate-income families—i.e., families with five or more children—living near them, the majority of the consumers surveyed, 80 percent, answered in a positive manner (see Table 174). However, a significant minority, 14 percent, responded negatively, citing excessive noise, lack of discipline, and other problems.

Opposition to the Philosophy of Government Subsidized Housing Programs: In addition to the foregoing considerations, citizen disagreement with the philosophy of the various government subsidized housing programs may contribute to community opposition to the provision of housing for low- and moderate-income families. For example, residents may simply be opposed in principle to the utilization of their tax dollars for the purpose of making housing more available to families who do not have the ability to pay for adequate housing. Other residents may object to specific government subsidized housing programs which they believe provide assistance to the wrong households—that is, to households which are not really in need of government assistance. Still

Table 172

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING ATTITUDES ON THE RACIAL MIX OF THEIR NEIGHBORHOOD

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households		
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
Good if different. .	7	8	7	13	38	16	12	24	13	14	14	14	12	22	13
Good if same. . .	22	21	22	26	15	25	31	9	29	23	--[a]	22	27	12	26
Does not matter . .	68	71	69	59	47	57	57	67	58	59	86	60	59	66	59
Not ascertained . .	3	--[a]	2	2	--[a]	2	--[a]	0	--[a]	4	0	4	2	--[a]	2
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 173

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING ATTITUDES ON THE INCOME MIX OF THEIR NEIGHBORHOOD

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	
Good if different. .	1	8	2	14	23	15	16	10	15	15	--[a]	15	14
Good if same. . .	14	24	16	24	28	25	37	32	37	33	15	32	31
Does not matter . .	83	68	80	62	49	60	47	58	48	52	85	53	55
Not ascertained . .	2	--[a]	2	--[a]	--[a]	--[a]	--[a]	0	--[a]	0	0	0	--[a]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 174

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING ATTITUDES ON LARGE LOW- AND MODERATE-INCOME FAMILIES LIVING NEARBY

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	
Positive	70	72	71	82	78	81	83	61	81	77	86	78	80
Okay	48	63	51	73	70	72	67	39	65	56	71	57	63
Okay, qualified. .	22	9	20	9	8	9	16	22	16	21	15	21	17
Negative	17	14	16	13	8	12	10	20	11	19	14	18	14
Other	10	7	9	1	6	2	3	5	3	3	0	3	3
Not ascertained . .	3	7	4	4	8	5	4	14	5	1	0	1	3
Total	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

other problems can arise from the fact that the owners of existing units, which may not be better constructed or larger than the subsidized homes, may feel that they are being discriminated against, not only because they were unable to obtain the same kinds of subsidy as the family in the low- and moderate-income housing unit, but because they must also support the subsidy through their taxes. Although the quantification of the magnitude of these forces is precluded by a lack of available data, citizen disagreement with the philosophy of the various government subsidized housing programs must be considered in the formulation of any regional housing recommendations designed to reduce community opposition to the provision of low-cost housing.

Unfamiliarity With Government Housing Programs: Part of the expressed opposition to the provision of low- and moderate-income housing may be due to public unfamiliarity with federal housing programs. During the conduct of the short-range action housing program (see Technical Report No. 12, A Short-Range Action Housing Program for Southeastern Wisconsin—1972 and 1973), it became apparent through conversation with citizens and civic and governmental agency leaders that misinformation is widespread regarding subsidy programs and the housing that is a product of such programs. Indeed, with the exception of public housing for the elderly, a relatively small proportion of the respondents to the social research survey had heard of the various federally subsidized housing programs, and an even smaller proportion had actually had contact with the various subsidy programs. Thus, it is likely that rumor and myth have adversely influenced the public's attitude toward federally subsidized housing programs, which in the past have been the vehicle for the provision of most low-income housing.

Housing Discrimination

In addition to community opposition, another social constraint on the availability of housing identified and analyzed as part of the regional housing study relates to discrimination in housing. For the purpose of this analysis, discrimination in housing is defined as the denial of housing to financially capable consumers solely on non-economic grounds. Thus, free access to housing might be denied to certain households solely on the basis of race, religion, or national origin, despite the fact that such discrimination is forbidden by federal and state law as well as by many local ordinances. In addition, the free

choice of housing may also be restricted by a person's age, marital status, or number of children. Although not covered by current status, such discrimination may significantly curtail the availability of housing for certain subgroups of the regional population. In the following discussion, only those types of discrimination in housing which appear to be most widespread in the Region, namely racial discrimination and discrimination on the basis of family size, are analyzed.

The analysis of discrimination in housing is complicated by the lack of reliable data which can be utilized to measure precisely the impact of discriminatory practices. Indeed, there is no method of quantifying in exact terms the degree to which housing discrimination limits the availability of housing for certain subgroups of the population. However, on the basis of those available indicators, the extent to which discrimination appears to affect the freedom of housing choice for blacks and for large families in the Region is summarized below.

Discrimination on the Basis of Race or Color: The analysis of racial discrimination in housing is most meaningfully accomplished within the context of the special housing problems experienced by the black population. Accordingly, a brief overview of the housing plight of black households within the Region is presented. Following this is a summary of the evidence of discriminatory attitudes and practices in the Region, including a review of the formal complaints of racial discrimination as well as indicators of racial discrimination in housing from the social research survey.

As reported by the U. S. Bureau of the Census, there were 30,870 black households in the Region in 1970, representing nearly 6 percent of all households in the Region. The black population was concentrated in the large urban centers of the Region, with 99 percent residing in the Cities of Kenosha, Milwaukee, and Racine. In fact, as indicated in Chapter XIII, almost three-fourths of all black households in the Region were located in the dense urban area comprising housing analysis area No. 20 on the near north side of the City of Milwaukee.

The black population in the Region increased by 72 percent between 1960 and 1970, a much faster growth rate than the 12 percent increase for the regional population overall. However, the growth in the black population occurred in areas adjacent to the existing concentrations of blacks. There was no significant movement of the black population to outlying areas between 1960 and 1970, and very little dispersion of the black population even within the City of Milwaukee.

Concentrated in the urban centers of the Region, a large proportion of all black households reside in housing which is old and very low in value. Thus, as reported in the 1970 census, approximately 75 percent of all black households in the Region occupied housing units which were built before 1940, compared to only 46 percent of the households in the Region overall. A very high proportion, 69 percent, of the black owner-occupied housing units in the Region were valued at less than $15,000, compared to only 21 percent of owner-occupied housing units in the Region overall. The median value of black owner-occupied housing units in the Region was $12,700, substantially lower than the median value of $20,400 for all owner-occupied housing units in the Region.

In light of these observations, it is not surprising to find that the incidence of housing need was greater for black households than for households in the Region overall. It is estimated that almost 50 percent of the black households were in housing need in 1970 compared to only 18 percent of all households in the Region. In particular, 30 percent of the black households in the Region were in economic need only, indicating that they occupied decent, safe, and sanitary housing but were able to secure such housing only at a cost which was inconsistent with the household income. About 20 percent of the black households in the Region occupied housing which was overcrowded or in substandard condition and were unable to secure adequate housing.

The high incidence of housing need for black households in the Region is consistent with the very low income distribution observed for black households. Almost three-fourths of all black households in the Region earned less than $10,000 in 1970, compared to only about one-half of the households in the Region overall. The median income for black households in the Region was only $6,500 in 1970, substantially lower than the median of $10,000 for households in the Region overall. Because they lack the ability to pay, many black households either are able to occupy decent, safe, and sanitary housing only at a cost which is disproportionate with the household income or else must forego the acquisition of adequate housing.

Explanation of the high incidence of housing need for the black population in purely economic terms, however, may be an oversimplification of the black housing problem. In this regard, it is suspected that the forces of racial prejudice and discrimination have acted to limit the earning power of the black population, and therefore their economic ability to secure decent, safe, and sanitary housing as well as to restrict the freedom of choice in housing for black households which have the ability to pay for adequate shelter. Whereas the racial inequalities in educational and employment opportunities throughout much of American history may have contributed to the present low-income distribution of black households, and therefore to their high incidence of housing need, the analysis of racial prejudice and discrimination in education and employment is beyond the scope of this report. The forces of racial prejudice and discrimination are analyzed in terms of the degrees to which they appear to limit the free choice of housing for minority households on the basis of available indicators in following sections.

Complaints of Housing Discrimination: Discrimination in the sale, rental, or financing of housing on the basis of race, creed, or national origin is prohibited by federal and state law. Complaints of housing discrimination can be

filed with the U. S. Department of Housing and Urban Development; the U. S. Department of Justice; the Division of Equal Rights of the State of Wisconsin Department of Industry, Labor, and Human Relations; or the appropriate local agency which administers local fair housing ordinances where such ordinances exist. Analysis of the number and disposition of complaints of discrimination in housing filed with the various agencies which administer fair housing laws provides some insight into the probable extent of discriminatory practices in southeastern Wisconsin.

The Equal Rights Division of the Wisconsin Department of Industry, Labor, and Human Relations reported the filing of 41 complaints of discrimination in the sale or rental of housing over the eight-year period from 1965 through 1972 within the Southeastern Wisconsin Region. The majority of complaints concerned alleged racial discrimination. Only a few involved discrimination based on national origin and creed. Disposition of the 41 complaints has been as follows: 20 were considered as providing probable cause to believe discrimination occurred, and 21 were dismissed as not having cause. Of those deemed to provide probable cause to believe discrimination occurred, 13 were conciliated and seven went to hearing to be subsequently resolved.

It should be noted that, as specified in the federal fair housing legislation, complaints of housing discrimination filed with the U. S. Department of Housing and Urban Development are referred to state or local authorities whenever the state or local legislation provides rights and remedies substantially equivalent to those provided by federal law. Because of the similarity of the federal and state fair housing legislation, complaints of housing discrimination filed by residents of Wisconsin with the U. S. Department of Housing and Urban Development generally are referred to the State of Wisconsin Department of Industry, Labor, and Human Relations.

In addition to complaints filed with the State of Wisconsin, complaints of discrimination in housing can be filed with any city, village, or town which has a fair housing ordinance. However, the City of Milwaukee is the only municipality within the Region which has reported a significant number of complaints of housing discrimination. The Milwaukee Commission on Community Relations received a total of 133 complaints of housing discrimination from 1968 through 1972. Upon investigation by the city's Commission on Community Relations, 34 of these complaints were found to provide no probable cause to believe that discrimination occurred.

Based on the number of formal complaints of discrimination in housing within the Region, it would appear that racial discrimination has limited the free choice of housing for only a very small proportion of minority households in the Region. However, agency representatives interviewed suggest that many instances of such discrimination are not reported because of ignorance of the law and the rights which it guarantees; because of anticipated administrative red tape which may extend the legal process over a long period of time; or because of psychological stress foreseen by the prospective complainant as a result of filing a complaint. Because the reported cases of discrimination in housing may represent only a portion of all discriminatory practices perpetrated within the Region, other indicators were analyzed in an effort to determine the extent to which racial discrimination limits the freedom of choice in housing for black households in southeastern Wisconsin. Responses to the social research survey provided some additional insight into the problem.

Social Research Survey—Racial Discrimination: In an effort to ascertain the public's attitude toward racial segregation, respondents to the social research survey were asked their opinion about the mixing of households of different race in the same neighborhood. As indicated in the foregoing analysis of community opposition, the majority of the consumers surveyed replied that such mixing is good or does not matter. However, 26 percent were opposed to racially integrated neighborhoods. Depending on the strength of this conviction, the desire for racially homogeneous neighborhoods could result in racial discrimination in housing sale or rental.

To the extent that it exists, racial discrimination in housing tends to restrict the minority household's freedom of location. As part of the social research survey, consumers were asked to react to the statement that people are refused a free choice of location in housing. As shown in Table 175, 71 percent of the nonwhite respondents agreed with this statement compared to only 39 percent of the whites. The proportion of nonwhite respondents who agree diminishes somewhat at the upper-income level, reemphasizing, perhaps, the economic nature of much of the existing housing problem. Nevertheless, the responses remain significantly different between nonwhites and whites in the middle- and upper-income levels where there is widespread ability to pay for decent, safe, and sanitary housing. The greater perception of restricted locational choice among financially capable nonwhites than financially capable whites may be due to the nonwhite's perception of racial barriers within the housing market.

The consumer's freedom of choice in housing is limited by his knowledge of opportunities in housing and financing. As part of the social research survey, consumers of housing were also asked to react to the statement that information about opportunities in housing and financing is not made readily available to all people. As shown in Table 176, a large proportion, 79 percent, of the nonwhite respondents agreed with this statement, compared to only 46 percent of the whites. Significantly, the discrepancy between nonwhite and white responses is highest in the upper-income level. Nonwhites in the upper-income level who have the ability to pay for new housing apparently feel that their housing opportunities are somewhat limited by the fact that they are denied sufficient housing related information.

Certainly, the extent of the forces of racial discrimination cannot be measured precisely on the basis of this series of responses from the social research survey. But the

Table 175

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING STATEMENT THAT PEOPLE ARE REFUSED A FREE CHOICE OF LOCATION IN HOUSING

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households		
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
Agree	53	64	55	36	89	43	36	68	39	39	58	40	39	71	42
Disagree	28	22	27	57	10	51	60	22	57	57	41	56	54	21	51
Don't know	16	14	16	7	1	6	4	5	4	3	1	3	6	6	6
Not ascertained	3	0	2	--[a]	--[a]	--[a]	--[a]	5	--[a]	1	0	1	1	2	1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 176

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING STATEMENT THAT INFORMATION ABOUT HOUSING OPPORTUNITIES AND FINANCING IS NOT MADE READILY AVAILABLE TO ALL PEOPLE

Categories of Response	Poverty Households			Low-Income Households			Moderate-Income Households			Upper-Income Households			All Households		
	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total	White	Nonwhite	Total
Agree	48	77	53	51	76	55	51	78	53	35	85	37	46	79	49
Disagree	28	9	25	28	16	26	39	12	37	54	14	52	40	12	38
Don't know	21	14	20	21	8	19	10	10	10	10	0	10	13	9	13
Not ascertained	3	--[a]	2	--[a]	--[a]	--[a]	--[a]	0	--[a]	1	1	1	1	--[a]	--[a]
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

foregoing responses, as well as the existing pattern of racial segregation within the Region, do suggest that racial barriers within the housing market represent a constraint on the availability of housing to minority households in the Region, despite the relatively small number of formal complaints of housing discrimination in recent times. Racial barriers appear to intensify the impact of the overriding economic constraints which arise from the low income distribution of minority households relative to the high cost of housing, thereby compounding the housing problems of minority households in the Region.

Discrimination on the Basis of Family Size: Families with children, and in particular large families that desire to rent may have difficulty in acquiring suitable housing simply because of their children. For example, it is common for rental housing, often consisting of two or three bedrooms, to be advertised as "no children," or perhaps "one child acceptable." By restricting their tenants to single persons or married couples with one child or no children, landlords can avoid the additional noise as well as the extra wear and tear often associated with children. Unlike racial discrimination in housing, discrimination in housing on the basis of family size is not prohibited by law. Such discrimination, however, may constitute a serious housing availability constraint for families with children, particularly young children.

To the extent that it exists, discrimination on the basis of family size is likely to be a greater housing availability constraint for large families than for small families. The incidence of severe housing problems is relatively high for large families in the Region. The component of housing need consisting of households which reside in substandard or overcrowded housing comprises about 8 percent of all five-person households and 17 percent of all households consisting of six or more persons, compared to only 5 percent of the households in the Region overall. The incidence of severe housing problems was even greater for large renting households. Thus, the component of housing need consisting of households which occupy substandard or overcrowded housing comprised 23 percent of all five-person renter households

and 30 percent of all renter households consisting of six or more persons. The observed housing problems for large families are probably to a large extent economic in nature, originating from the difference between the cost of sound, adequately sized housing and the household's ability to pay. However, it is likely that discrimination on the basis of family size also contributes to the high incidence of housing problems for large households, and in particular, large renting households.

As part of the social research survey, the consumers of housing were asked how, if at all, they had been personally affected by housing problems. As shown in Table 177, 83 percent of all respondents indicated that they perceived no housing problem or that they had not been affected by existing housing problems. The balance of respondents indicated that they had been affected by a variety of phenomena, most of them economic. Only a very small proportion of the total respondents had difficulty in finding housing because of their children.

From further analysis of Table 177, it is clear that responses to this question vary considerably when the respondents are stratified by tenure status and the number of children. In particular, it was found that 24 percent of the renting families with three or more children had trouble in acquiring adequate housing because of their children. It is apparent from this response that, in addition to the overriding economic constraints, discrimination on the basis of family size may compound the housing problems of large renting families within the Region.

As indicated in the discussion of racial discrimination in housing, respondents to the social research survey were asked to react to the statement that people are refused a free choice of location in housing. Stratification of the responses to this question by tenure status and number of children provides further insight into the extent of discrimination on the basis of family size in the Region. As shown in Table 178, the proportion of respondents

Table 177

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION REGARDING HOW, IF AT ALL, THEY HAVE BEEN PERSONALLY AFFECTED BY HOUSING PROBLEMS

Categories of Response	0 Children			1 or 2 Children			3 or More Children			All Households		
	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total
Higher costs	4	2	3	3	14	8	5	9	6	4	7	5
Had to take what we could get	1	1	1	2	6	4	2	3	2	2	3	2
Couldn't find place because of children	--[a]	1	--[a]	--[a]	--[a]	--[a]	--[a]	24	5	--[a]	3	1
Other	4	8	6	9	10	10	7	2	6	6	8	7
Not at all	35	44	38	40	25	33	34	24	32	36	35	35
Inappropriate, no problems	56	42	51	46	37	41	47	33	44	51	39	48
Not ascertained	--[a]	2	1	--[a]	8	4	5	5	5	1	5	2
Total	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

Table 178

PERCENTAGE DISTRIBUTION OF RESPONSES BY A SURVEY SAMPLE OF HOUSING CONSUMERS IN THE REGION BY TENURE STATUS AND NUMBER OF CHILDREN REGARDING STATEMENT THAT PEOPLE ARE REFUSED A FREE CHOICE OF LOCATION IN HOUSING

Categories of Response	0 Children			1 or 2 Children			3 or More Children			All Households		
	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total	Own	Rent	Total
Agree	37	41	39	40	52	45	36	83	46	38	50	42
Disagree	52	49	51	56	45	51	63	8	51	55	43	51
Don't know	10	8	9	4	3	4	1	9	3	7	6	6
Not ascertained	1	2	1	--[a]	0	--[a]	0	--[a]	--[a]	--[a]	1	1
Total	100	100	100	100	100	100	100	100	100	100	100	100

[a] *Less than one-half of 1 percent.*

Source: University of Wisconsin-Milwaukee social research survey and SEWRPC.

in agreement with this statement increased gradually with household size from 39 percent of the respondents with no children to 46 percent of the respondents with three or more children. This trend, however, is much more pronounced for renter respondents than for homeowners. Only 41 percent of the renters with no children felt that people are refused a free choice of housing location, whereas 83 percent of the renters with three or more children felt this way. Certainly, the responses indicating that people are refused a free choice of location reflect an awareness of the overriding economic constraints. It is likely, however, that the responses of the vast majority of large renter families who agree that people are refused a free choice of housing also reflect their perceptions of discrimination in housing based on family size.

SUMMARY

Although the housing market satisfies the effective demand of the majority of households in the Region, there are obstacles, or constraints, within the housing market which limit the availability of even an acceptable minimum standard of housing for certain segments of the resident population of the Region. Identification and analysis of the various housing availability constraints is necessary in order that sound recommendations directed toward the gradual abatement of existing housing problems may be incorporated into the regional housing plan. This chapter presented the findings of an analysis of those constraints within the housing market which were identified as restricting in a significant way the availability of housing for households in existing housing need.

For the purposes of this chapter, the identified housing availability constraints were classified into three general categories: economic constraints, institutional constraints, and social constraints. Since the majority of households in existing housing need described in Chapter XIII consist of households which are unable to secure decent, safe, and sanitary housing at a cost which is consistent with the household income, the overriding housing availability constraints are economic in nature. Various institutional phenomena, including the existing body of local land use controls and the property tax structure, were also found to limit to some extent the availability of housing for low- and moderate-income households. In addition to these economic and institutional constraints, several social forces have been identified which may, in varying degrees, represent constraints on the availability of housing to certain segments of the regional population, including housing discrimination and community opposition to the provision of housing for low- and moderate-income families. Although the various housing availability constraints were treated individually in this chapter, it must be understood that the identified constraints are interrelated, often acting in unison and reinforcing each other in limiting the availability of housing within the Region.

For the vast majority of households in housing need, the overriding housing availability constraints appear to be economic, relating specifically to the difference between the cost of adequate housing and the household's ability to pay. As part of the analysis of economic constraints, the component costs of constructing and occupying new housing were analyzed to identify which of the component costs are the largest and most rapidly increasing, and accordingly, which of these component costs represents the greatest obstacle to the acquisition of decent, safe, and sanitary housing.

In the analysis of housing production costs, it was found that many diverse factors are responsible for the high package price of a typical new single-family house in the Region today, including rapidly increasing materials costs, labor wage rates, land costs, and builder overhead. No single cost component is dominant in this respect, rather, each component contributes significantly to the cost of the total package.

The various cost components with respect to the production of single-family housing are important considerations in the analysis of economic constraints within the housing market. Equally important, however, are the occupancy costs actually faced by the household which resides in new single-family housing. Because of the magnitude of the cost of the housing package to the consumer, most purchasers of new single-family housing obtain mortgage loans, thereby incurring a long-term obligation to make monthly outlays to finance this loan. In addition, purchasers of single-family housing must pay other occupancy costs, including property taxes, utility service charges, maintenance and repair bills, and property insurance. Because of their size and rapid rate of increase in recent times, two of these occupancy cost components—the financing costs and the property tax payment—represent a particularly severe economic burden on the owners of single-family housing.

The magnitude of the monthly finance cost is a function of the cost of the housing package, the percent down payment, the interest rate, and the length of the term for the repayment of the loan. Substantial increases in both the cost of the housing package and in the rate of interest in recent times are primarily responsible for the current high cost of financing new single-family housing. The rising costs of onsite labor, materials, and land have all contributed to the current high cost of the housing package. The higher cost of the housing package necessitates an increase in the principal, or amount of the loan drawn by the purchasers, thereby increasing the monthly mortgage payment. On the other hand, the cost of borrowing money, especially at the present high rates of interest, also contributes significantly to the total financing costs. For example, at interest rates prevailing in 1972, if the mortgage payments continue to the end of a typical 25-year term, 58 percent of the borrower's finance costs consists of interest payments. During the first seven years, 83 percent of the purchaser's payments is for interest on the loan. It is evident that interest, or the cost of borrowing, represents a major component of the monthly mortgage payment, and therefore, of the cost of occupying single-family housing. Even when interest rates are relatively low, as during the early 1960s, interest payments may represent half of the financing costs over the life of the loan.

Property taxes on new single-family housing have also increased rapidly in recent times, and next to the monthly mortgage payment, comprise the largest cost component of occupying single-family housing. Increases in property tax levies on new single-family housing have occurred both because of increases in the local property tax rate and because of increases in the average value of new single-family units.

Based on the foregoing discussion, it is apparent that the cost of occupying new single-family housing is affected by a large number of individual cost elements. Although it may be popular to attribute the high cost of occupying new housing to labor costs, land costs, high interest rates, or some other factor, no individual cost factor can be singled out as being solely responsible. Accordingly, it is evident that a housing strategy designed to reduce an individual cost element will have little effect on the total cost of occupying new housing. A strategy which addresses several or all of the major cost components, however, may effectively reduce the overall occupancy cost.

In addition to the overriding economic constraints, certain institutional phenomena were identified as constraining the availability of housing to some extent. The application of local land use controls, while well justified in terms of orderly and economic land use development, can have a constraining influence on the supply of housing. Furthermore, the existing property tax structure, in addition to increasing the cost of occupying housing, can act in other ways to limit the availability of housing for low- and moderate-income families. Finally, analysis of past government efforts in housing revealed problems in the programs which constrained their effectiveness in meeting housing needs.

Land use controls—land use plans, zoning ordinances, subdivision control ordinances, architectural control ordinances, and building and housing codes—can substantially determine the overall characteristics of housing development, including the quality, quantity, location, size, type, cost, and even to some extent the characteristics of the prospective occupants of housing units themselves. Of importance to the housing study is whether such local controls could be considered unduly restrictive in that they significantly constrain the locational choice of households seeking various types and sizes of housing.

Local zoning regulations have a particularly important impact on residential development, determining where housing may be built, including the type and size of construction, as well as the relationship to other land uses. Analysis of community zoning data revealed that while there appears to be sufficient quantities of developable residentially zoned land within various density classifications to provide adequate locational choice for households seeking residential lots, certain provisions of local zoning ordinances within the Region—structure type and minimum floor area requirements—can serve to constrain the locational choice in housing, especially for low- and moderate-income families. In this regard, it was found that of 87 urban communities in the Region, 56 communities, or about 65 percent, preclude modest-sized two-bedroom single-family housing; 21 communities, or about 25 percent, preclude modest-sized three-bedroom single-family units; and eight communities, or about 10 percent, preclude modest-sized four-bedroom single-family housing. The restrictive pattern is further evidenced by the number of communities which preclude modest-sized two-family and multifamily housing, as well as the number of communities which exclude two-family and multifamily housing altogether.

Other land use control mechanisms, including subdivision controls, architectural controls, and building codes, were not found to be significant constraints to the availability of housing. The degree to which these land use control mechanisms facilitate attainment of sound regional and local development objectives far outweighs their constraining influence. Although these land use control mechanisms can be misused with exclusionary intent, they do not in and of themselves presently appear to be constraints to the availability of housing in the Region.

The existing property tax structure has far-reaching effects on the availability of housing in southeastern Wisconsin. In addition to increasing occupancy costs, the existing property tax structure has a considerable impact on the patterns of urban development within the Region. Local government decisions related to land use, and in particular to residential development, are much influenced by cost-revenue considerations. Resident citizens and their elected officials are much concerned about the suspected difference between the tax revenue generated from certain types of residential development and the cost of providing services to such development. The cost of education is of greatest concern. In this regard, a cost-revenue study conducted as part of the regional housing study concluded that, on the average, the cost of education associated with lower cost housing is likely to be substantially greater than the property tax generated from such development. It is evident that under the existing property tax structure, the development and maintenance of a balanced tax base is a necessary and justifiable consideration in the administration of local land development policy. However, when the preservation and enhancement of the local fiscal structure becomes the dominant force in shaping local land use policy, certain housing-related problems may arise. The exclusion of certain types of housing from some communities may constrain the availability of housing for low- and moderate-income households by limiting their choice of location. In addition, such exclusionary practices may result in the imposition of a disproportionate share of "social overhead" on other communities which allow a broad range of residential development.

Many housing programs have been undertaken by the federal, state, and local units of government in an effort to reduce housing problems. Although programs initiated by the federal government have increased the availability of housing for many low- and moderate-income families, there appear to be certain constraints within these programs which limit their overall effectiveness. Respondents to the social research survey conducted as part of the

housing study suggest that these problems include poor quality construction, poor administration, and creation of social problems.

Operation of federal housing programs in the Region, particularly the Section 235 homeownership program, reveals some of the bases for these criticisms. Eligibility requirements for the Section 235 program tended to reinforce geographic concentration of low-income and minority households in the Region, since the majority of the lower-cost existing units available for purchase under the Section 235 program were located in the older, more densely populated areas where minority concentrations already existed. On the other hand, the new Section 235 housing units, which were generally purchased by nonminority households having greater ability to pay, were typically located in newer developing subdivisions or in newly developed fringe areas of the more urban communities in the Region. Furthermore, it was found that concentrations of new subsidized housing have developed in certain areas of the Region. Large-scale development of low-cost family housing in certain areas of the Region could result in the sudden overutilization of the area's school facilities, transportation system, public utility system, and recreational facilities, thereby overtaxing the area's natural and financial resource bases and contributing to community resident opposition.

As part of the analysis of housing availability constraints, several social phenomena were identified as contributing to the housing problems experienced by certain subgroups of the regional population, including the forces of community opposition to the provision of housing for low- and moderate-income families and housing discrimination. Because of a lack of reliable data, it is impossible to determine precisely the actual number of households which are experiencing housing problems because of these social constraints. As indicated in Chapter XIII of this report, as part of the quantification of housing need, the Technical and Citizen Advisory Committee on Regional Housing Studies adopted a general assumption in this regard in order that the impact of these forces might at least be reflected in the estimate of existing housing need. However, as part of the analysis of housing availability constraints, the forces of community opposition and housing discrimination were analyzed, using the social research survey as input, in order to provide greater insight into the extent to which they limit the availability of housing within the Region.

One of the most difficult housing availability constraints to overcome relates to opposition on the part of community residents, and often their elected officials, which may be brought to bear against the provision of housing for low- and moderate-income families within a community. Results of the social research survey suggest that community resident opposition to the provision of housing for low- and moderate-income families arises from a combination of many socioeconomic forces. One of the most frequently heard community objections to low-cost housing is the allocation of taxes to offset the cost of providing community services to such units. Other resident objections to the provision of low- and moderate-income housing may stem from economic and aesthetic considerations regarding their neighborhood, from preferences regarding the characteristics of their neighbors, and from resident opposition to the philosophy of housing programs. In addition, part of the expressed opposition to the provision of low- and moderate-income housing may be due to public unfamiliarity with such housing programs. Regardless of its origins, community opposition may ultimately find expression in the municipality's adopted land use controls, which can effectively preclude the construction of housing for low- and moderate-income families.

Another social constraint on the availability of housing relates to discrimination in housing. For the purposes of this analysis, discrimination in housing is understood to be the denial of housing to financially capable consumers solely on noneconomic grounds. Racial discrimination and discrimination on the basis of family size appear to be the more common types of housing discrimination in the Region. Patterns of responses to the social research survey as well as the existing pattern of racial segregation within the Region suggest that racial barriers within the housing market represent constraints on the availability of housing to minority households in the Region, despite the relatively small number of formal complaints of housing discrimination. During the course of the regional housing study, it also became apparent that large families may have difficulty in acquiring suitable housing simply because of their children. Responses to the social research survey suggest the availability of housing for large renting families in particular is limited, to some extent, by discrimination on the basis of family size.

The analysis of the responses to the social research survey corroborate the widespread supposition that community opposition to the provision of housing for low- and moderate-income households and housing discrimination on the basis of race or family size are significant constraints on the availability of housing for certain segments of the regional population. While the results of the social research survey do not facilitate a precise quantification of the number of households adversely affected by these social forces, the findings of the survey support the validity of the generalized assumption adopted by the Advisory Committee under which the impact of these social constraints was reflected in the overall estimate of the existing housing need.

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Chapter XV

HOUSING FORECASTS

One of the products of any sound housing planning effort should be a forecast of the total number of new housing units which must be added to the existing housing stock to meet the future housing requirements of the population of the planning area. Such a forecast is an important indicator of the scale of effort which may be required to both abate and avoid housing problems, and is useful in the preparation of other functional plan elements such as land use, transportation system, and sewerage system plans. This chapter summarizes the methodology used in the regional housing study to forecast probable future housing production requirements and future unmet housing needs in southeastern Wisconsin during the 20-year projection period 1970 through 1990, as well as the results of the application of this methodology.

The future housing production requirements presented in this chapter represent the minimum amount of residential construction which must be undertaken in order to house the forecast population of southeastern Wisconsin. They were determined on the basis of the anticipated increase in the number of households, the anticipated number of housing unit demolitions, and anticipated vacancy rates within the Region. The attainment of this housing production requirement will not necessarily ensure that each household in the Region will reside in decent, safe, and sanitary housing at a cost which is consistent with the household's income. The attainment of this future housing production requirement will simply assure the existence of a housing stock adequate to provide a housing unit for each household in the Region.

In addition to the forecast of the overall housing production requirement, this chapter also presents a forecast of the level of unmet housing needs in southeastern Wisconsin which is likely to occur without an effective housing program to alleviate the housing problem. For the purposes of the regional housing study, the concept of "housing need" has been adopted as the primary measure of the areawide housing problem. Housing need is a collective term defined as those households which cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, as well as those households which are precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market.

As described in Chapter XIII of this report, a major effort was devoted under the regional housing study to a determination of the magnitude and character of the existing (1970) housing need within the Region, based upon application of the adopted regional housing objectives, principles, and standards to the housing situation of the regional population. A forecast of the future housing need in southeastern Wisconsin will provide an indicator of the level of unmet housing needs which could be expected if positive action is not taken to relieve areawide housing problems. The forecast of housing need as presented in this chapter includes an estimate of the overall magnitude of the future housing need, as well as the estimated size of several components of the future housing need which indicate the types of housing problems which may be expected in the absence of an effective housing program. Thus, these forecasts include an estimate of the number of households which may be expected to occupy substandard or overcrowded housing as well as an estimate of the number of households which may be expected to be in "economic need only," a designation indicating that a household occupies decent, safe, and sanitary housing but must pay a disproportionate share of its income to secure such housing.

Certain basic demographic forecasts—namely, forecasts of probable future population and household levels within the Region—represent important inputs to the preparation of any forecast of housing production requirements as well as of the level of housing need. The demographic forecasts which are required as input to determine the magnitude of the future production requirement and the future housing need are presented in the first section of this chapter. The forecasts of the probable future housing production requirement and the future level of housing need are presented in the second and third sections of this chapter, respectively.

It must be recognized that all forecasts, however made, involve uncertainty, and therefore must always be used with great caution. Forecasts cannot take into account events which are unpredictable but may have major effects upon future conditions. Such events include wars, epidemics, major social, political, and economic upheavals, and radical institutional changes. Moreover, events of a less radical nature, such as changes in governmental housing policies, can occur which may significantly affect the ultimate validity of any forecast.

DEMOGRAPHIC FORECASTS

Population Levels

Forecasts of probable future levels of population and economic activity were prepared by the Commission in 1963 as a necessary basis for the preparation of the regional land use and transportation plans adopted by the Commission in 1966. Following the adoption of these plan elements, the Commission in 1967 mounted a continuing land use-transportation study to monitor development within the Region and to assess the continuing validity of the regional population forecasts used in the preparation of these plans. As previously indicated in this report, the 1970 U. S. Census of Population pro-

vided important new base year socioeconomic data for regional planning purposes. This census enabled a comparison to be made between the census results, in terms of the total population size and distribution, and the Commission population forecast for the year 1970 (see Table 179). This comparison indicated that population growth within the Region was departing from the past trends on which the original population forecasts were based. On a county basis, the results of the census indicated that population was tending to grow more rapidly in the outlying areas of the Region than originally anticipated and less rapidly in the three counties—Kenosha, Milwaukee, and Racine—containing large central cities. In light of the results of the 1970 Census of Population and the 1970 reinventory of land use, and in accordance with sound planning practice, the Commission in 1972 began a major effort toward reevaluation of the adopted regional land use and transportation plans. As a first step in this reevaluation, the Commission prepared revised population forecasts for the year 1990, and extended such forecasts to the year 2000—the new design year selected for the revised land use and transportation plans.

Both short- and long-term data on changes in regional population and economic activity levels indicate that the fundamental trend toward growth and urbanization in the Region, which has been uninterrupted over a period of more than 130 years, may be expected to continue over the foreseeable future. The most recent data on population and economic activity levels nationally and for the Region indicate, however, that the scale, if not the character, of this growth and urbanization process may be changing. Nationally, two long-term demographic phenomena which strongly influenced the rapid growth of metropolitan regions in the United States appear to be ending. First, the high rate of natural population increase which produced the high population growth rates of the post-World War II period was replaced by a substantially lower rate during the 1960s and early 1970s. Second, the massive rural to urban migration which occurred over a long period of time and contributed to the rapid concentration of the population of the United States in its large metropolitan regions appears to be terminating.

These national trends in birthrates and migration patterns have been paralleled within the Southeastern Wisconsin Region, and as a result, major changes have occurred in regional population growth between the 1950-1960 and 1960-1970 decades. The total population of the Region increased by about 333,000 persons, or about 27 percent, between 1950 and 1960. This rapid growth was caused by a high rate of natural increase—as evidenced by a crude birthrate of 26.2 births per thousand persons in 1960—combined with a large net in-migration of approximately 108,000 people during the 10-year period. In contrast to the rapid growth of the 1950s, the regional population increased by only about 182,500 persons, or by about 12 percent, between 1960 and 1970. The slower population growth rate of the 1960s was due to a substantial decline in the rate of natural increase—as evidenced by a drop in the crude birthrate to 17.7 births per thousand persons in 1970—as well as to a reversal in the migration patterns, with a net out-migration of approximately 20,000 persons, primarily from Milwaukee County occurring during this decade.

The revision of the regional population forecasts was particularly difficult in view of these extreme changes in regional growth and in the components of this growth,

Table 179

COMPARISON OF THE 1970 U. S. CENSUS OF POPULATION AND THE 1970 SEWRPC POPULATION FORECAST FOR THE REGION BY COUNTY

County	Population		Difference SEWRPC Forecast Minus U. S. Census	
	U. S. Census (April 1, 1970)	SEWRPC Forecast (July 1, 1970)	Number	Percent
Kenosha	117,917	124,900	6,983	5.92
Milwaukee	1,054,249	1,170,400	116,151	11.01
Ozaukee	54,461	53,900	- 561	- 1.03
Racine	170,838	173,100	2,262	1.32
Walworth	63,444	62,100	- 1,344	- 2.12
Washington	63,839	57,900	- 5,939	- 9.30
Waukesha	231,338	228,000	- 3,338	- 1.44
Region	1,756,086	1,870,300	114,214	6.50
Region Except Milwaukee County	701,837	699,900	- 1,937	- 0.27

Source: U. S. Department of Commerce, Bureau of the Census; and SEWRPC.

and more particularly, in view of the uncertainties which exist concerning the probable trends in the factors which determine the future size and composition of the regional population. Future population levels within the Region will be determined by future trends in several components of population change, namely, the mortality rate, the birthrate, and the migration rate. Thus, the preparation of forecasts of future regional population levels requires that assumptions be made with respect to future trends in each of these components. Of these three components, the mortality rate has historically been the most stable. Therefore, it may be reasonably assumed that current mortality rates will remain essentially unchanged over the forecast period. Birthrates within the Region have fluctuated widely over time, but have been generally declining since the mid-1960s. Although there is no incontrovertible evidence that the current rate of decline will continue, and although there is no evidence to indicate to what level the rates will decline before stabilizing or even increasing, it seems reasonable to assume that the decline in the birthrate will continue in the near future.

The trend in migration patterns is currently even more uncertain than the trend in birthrates. The direction and magnitude of net migration in southeastern Wisconsin is directly related to the level of economic activity, and in particular to employment opportunities in the Region. Trends in the many factors which affect the scale of the regional economic base, and therefore affect net migration, are currently highly uncertain. These factors include the increased energy demands of diffused urban development in the face of an increasingly costly and perhaps uncertain energy supply; the current high rates of price inflation within the United States; and the difficulty of the east north central states, including Wisconsin, to compete with the newly developing industrial economies of the southern and western states for the location of new economic enterprises and the creation of employment opportunities. While all of these factors could affect the future scale and character of regional development, the manner in which they may do so, if at all, is not clear at this time. In light of the uncertainty with respect to the future scale of economic activity within southeastern Wisconsin, it appears most reasonable to assume that the net out-migration of population which occurred between 1960 and 1970 will continue well into the forecast period.

Based on the foregoing assumptions with respect to mortality, birth, and migration rates, and after consideration of alternative assumptions and the preparation of 15 projections based on such alternative assumptions,[1] a population forecast was developed for the Region to the year 2000, utilizing a modified cohort-survival projection model. As indicated in Table 180, under the stated assumptions the regional population may be expected to reach about 2.2 million persons by the year 2000, an absolute increase of about 463,000 persons over the 1970 level and a relative increase of about 26 percent. Under the forecast, the regional population would approximate 2.0 million persons by 1990, representing a gain of about 288,000 persons, or 16 percent, over the 1970 level.

In addition to the expected population size, the future age composition of the population represents an important consideration in the preparation of housing forecasts.

[1] *Fifteen different population projections were made varying the assumptions concerning the rates of fertility and migration, and the most probable range within which the actual population level may be expected to fall was identified. In this regard the regional population may be expected to range from a low of 2.11 million persons to a high of 2.59 million persons by the year 2000. The projection of 2.22 million persons was finally selected as the best estimate and adopted as the forecast for regional planning purposes.*

Table 180

ACTUAL AND FORECAST POPULATION LEVELS IN THE REGION BY COUNTY: SELECTED YEARS 1970-2000

County	Actual 1970 Population Level	Forecast Population Levels			Population Change					
					1970-1980		1970-1990		1970-2000	
		1980	1990	2000	Number	Percent	Number	Percent	Number	Percent
Kenosha	117,917	139,200	159,900	174,800	21,283	18.0	41,983	35.6	56,883	48.2
Milwaukee	1,054,249	1,014,500	1,022,200	1,049,600	- 39,749	- 3.8	- 32,049	- 3.0	- 4,649	- 0.4
Ozaukee	54,461	76,200	97,400	114,000	21,739	39.9	42,939	78.8	59,539	109.3
Racine	170,838	185,600	203,600	217,700	14,762	8.6	32,762	19.2	46,862	27.4
Walworth	63,444	74,700	86,600	99,600	11,256	17.7	23,156	36.5	36,156	57.0
Washington	63,839	90,900	117,600	143,000	27,061	42.4	53,761	84.2	79,161	124.0
Waukesha	231,338	292,300	356,600	420,600	60,962	26.4	125,262	54.1	189,262	81.8
Region	1,756,086	1,873,400	2,043,900	2,219,300	117,314	6.7	287,814	16.4	463,214	26.4

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

In particular, because of the high incidence of housing problems experienced by elderly persons, a forecast of the size of the elderly component of the regional population provides a valuable indicator of the possible future extent of unmet housing needs in southeastern Wisconsin. Estimates of the future age composition of the regional population are presented in Table 181. Among the 10-year age groups which are shown in this table, the most rapid rate of growth between 1970 and the year 2000 is expected to occur in the 35-44 year group. On the other hand, actual decreases are anticipated in the number of persons less than 15 years of age and between 15 and 24 years of age. As further indicated in Table 181, the elderly population is expected to increase at a faster rate than the total population over the forecast period. Because of this, the proportion of the population consisting of persons 65 years and over is expected to increase from nearly 10 percent in 1970 to 12.2 percent by 1990 and 12.3 percent by the year 2000.

Number of Households

Increases in population levels will be accompanied by increases in the number of households in the Region. Projected increases in the number of households have particularly important implications for long-range housing planning, since the household is the basic unit of demand for housing. Projections of the number of households presented in this section represent an important input in the determination of the probable future housing production requirement as well as the future level of unmet housing needs.

The household projections were derived from the regional population forecast, utilizing the historic trend in the relationship between the levels of population and households within the Region. As indicated in Table 182, the number of households in the Region may be expected to approximate 748,000 by the year 2000, an increase of about 211,000, or 39 percent, over the 1970 level. By

Table 181

AGE COMPOSITION OF THE POPULATION IN THE REGION: SELECTED YEARS 1970-2000

Age Group (Years)	Actual 1970 Population Level		Forecast Population Levels						Change					
			1980		1990		2000		1970-1980		1970-1990		1970-2000	
	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent of Region	Number	Percent	Number	Percent	Number	Percent
Less Than 15	523,391	29.8	414,736	22.1	452,705	22.1	498,254	22.5	- 108,655	- 20.8	- 70,686	- 13.5	- 25,137	- 4.8
15-24	295,705	16.8	368,952	19.7	278,930	13.6	292,664	13.2	73,247	24.8	- 16,775	- 5.7	- 3,041	- 1.0
25-34	212,043	12.1	307,076	16.4	377,448	18.5	284,701	12.8	95,033	44.8	165,405	78.0	72,658	34.3
35-44	200,488	11.4	209,951	11.2	309,179	15.1	380,501	17.1	9,463	4.7	108,691	54.2	180,013	89.8
45-54	196,854	11.2	190,605	10.2	204,076	10.0	302,075	13.6	- 6,249	- 3.2	7,222	3.7	105,221	53.5
55-64	157,991	9.0	175,897	9.4	173,126	8.5	188,198	8.5	17,906	11.3	15,135	9.6	30,207	19.1
65 and Over	169,415	9.7	206,152	11.0	248,353	12.2	272,962	12.3	36,737	21.7	78,938	46.6	103,547	61.1
Total	1,755,687	100.0	1,873,369	100.0	2,043,817	100.0	2,219,355	100.0	117,482	6.7	287,930	16.4	463,468	26.4

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

Table 182

PROJECTED NUMBER OF HOUSEHOLDS AND HOUSEHOLD POPULATION IN THE REGION BY COUNTY 1970, 1980, 1990, and 2000

County	1970		1980		1990		2000	
	Number of Households	Persons Per Household	Number of Households	Persons Per Household	Number of Households	Persons Per Household	Number of Households	Persons Per Household
Kenosha	35,500	3.26	42,800	3.19	50,400	3.11	56,800	3.02
Milwaukee	338,600	3.04	358,900	2.76	376,600	2.65	400,300	2.56
Ozaukee	14,800	3.66	21,200	3.56	27,500	3.51	32,500	3.48
Racine	49,800	3.35	55,100	3.29	61,800	3.22	67,800	3.14
Walworth	18,500	3.16	22,000	3.13	25,800	3.09	30,200	3.04
Washington	17,400	3.63	25,300	3.50	33,800	3.39	42,300	3.29
Waukesha	61,900	3.66	80,200	3.57	98,700	3.54	117,800	3.50
Region	536,500	3.20	605,500	3.02	674,600	2.95	747,700	2.90

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

1990 it is expected that there will be about 675,000 households in the Region, an increase of about 138,000, or 26 percent, over the 1970 level. As further indicated in Table 182, the mean household size in the Region may be expected to continue to decline from 3.20 persons per household in 1970 to 2.95 persons in 1990 to 2.90 persons by the year 2000.

Projecting the future number of households in the Region is a difficult task because, in addition to the many socio-economic factors which affect the future population level, additional factors affect the size and therefore the number of households within the Region. For example, unforeseen changes in the marriage or divorce rates will cause the actual number of households to differ from the forecast level. Changes in economic conditions may encourage young single persons to form their own households, or conversely, discourage them from doing so. Economic recessions may also cause more "doubling-up" of households, especially lower income households which may have difficulty maintaining their own unit. Consequently, the household projection must be interpreted as the best estimate of the probable future level of households, given the uncertainties involved. The possibility of unforeseen conditions and events affecting the household projection is real, although the nature as well as probability of the occurrence of such conditions and events is currently unknown.

FUTURE HOUSING PRODUCTION REQUIREMENTS

Available evidence indicates a need to substantially increase the supply of housing in the Region by the year 1990. The projected increase in the number of households itself indicates the need for the construction of a significant number of new residential units. In addition, considerable building activity will also be required to replace units which may be demolished during this period. Because of inadequate original construction or insufficient maintenance, a portion of the existing housing stock may be expected to deteriorate to the point where demolition will be required under local code enforcement programs. Additional demolition will be necessitated by essential public work projects, while still other demolition will take place through action of the private sector. Finally, as the number of households in the Region increases, the size of the vacant housing stock which is required to provide a ready turnover of housing units should also be increased. Based upon the foregoing considerations—namely, the expected increase in the number of households in the Region, the anticipated volume of residential demolitions, and the required reserve of vacant housing units—the housing production requirement through the year 1990 has been estimated and the results presented in this section.

The major component of the future production requirement, the increase in households, was described in the previous section of this chapter. Estimates of future housing demolitions and of the future vacancy reserve are included in this section before presentation of the overall production requirement.

Residential Demolition

As indicated in Chapter V of this report, residential demolition activities have removed many housing units from the existing housing stock in southeastern Wisconsin in the recent past. During the period from 1960 through 1969, approximately 21,400 housing units were demolished through public actions for a variety of purposes, including code enforcement, urban renewal, and freeway construction, as well as through private renewal efforts. It is very likely that such demolition activities will continue in the Region in the near future, thereby causing further losses in the regional housing stock and increasing the future housing production requirement.

Residential demolition activities have historically occurred primarily in the large urban centers of the Region. Approximately 97 percent of all housing units which were demolished in southeastern Wisconsin from 1960 through 1969 were located in the six largest cities of the Region—Kenosha, Milwaukee, Racine, Waukesha, Wauwatosa, and West Allis. Under the assumption that the housing demolitions in these six cities will continue to comprise a large proportion of all housing demolitions in southeastern Wisconsin, the future level of residential demolition activities within each of these six cities was estimated and the results adjusted to reflect total housing demolitions in the Region as a whole through the year 1990. The projections of housing demolitions within each city were generally obtained as extrapolations of the rates of demolition observed for the period from 1960 through 1969, adjusted appropriately to reflect adopted regional plan recommendations as well as changes in trends as foreseen by local planners, engineers, and building inspectors in the respective communities, including changes which may result from the implementation of locally adopted development plans.

It should be noted that the estimate of housing unit demolitions which may result from future freeway construction was based on an analysis of residential demolition required for the implementation of the adopted regional transportation plan and not upon historic demolitions. Virtually all of the demolitions for freeway construction would occur in Milwaukee County as follows: the Stadium Freeway North—1,493 units, the Bay Freeway—1,256 units, the Bay-Stadium Interchange—324 units, the Stadium Freeway South—100 units, the Lake Freeway—535 units, and the Belt Freeway—47 units. Outside of Milwaukee County, the residential demolition associated with freeway plan implementation would be minor—approximately 25 units—if action is taken to reserve the required rights-of-way before urban development encroaches into the planned transportation corridors.

The actual and projected levels of housing demolition in southeastern Wisconsin are presented for the years 1960 through 1990 in Table 183. As shown in this table, approximately 24,600 housing units in the Region may be expected to be demolished from 1970 through 1990. Significantly, the regional total over the 20-year projection period is only slightly greater than the actual number

Table 183

ACTUAL AND PROJECTED HOUSING UNIT DEMOLITIONS IN THE REGION 1960-1990

Reason for Demolition	Actual Demolitions[a] 1960-1969	Projected Demolitions 1970-1990
Large Urban Areas[b]	20,769	23,665
Public	15,320	14,135
Public Housing	615[d]	--[e]
Code Enforcement	2,889	5,865[f]
Urban Renewal	3,968[d]	565[g]
Freeway Construction	5,700	3,755[h]
Other Public Works[c]	2,148	3,950[f]
Private	5,449	9,530[f]
Region Balance	669	909[i]
Total	21,438	24,574

[a] *Based on demolition permit authorizations.*

[b] *Includes the Cities of Kenosha, Milwaukee, Racine, Waukesha, Wauwatosa, and West Allis.*

[c] *Includes demolitions necessitated by street widening; development of local parks and playgrounds; and the construction of schools, libraries, police and fire stations, and other civic buildings.*

[d] *City of Milwaukee only.*

[e] *No public housing developments necessitating the demolition of a significant number of existing units are foreseen at the present time.*

[f] *These projections represent extrapolations of the rates of residential demolition for code enforcement, for other public works, and for private purposes observed within the Region's six largest cities during the 1960s.*

[g] *Urban renewal projects resulted in the demolition of 565 housing units in the City of Milwaukee in 1970 and 1971. However, no urban renewal projects necessitating the demolition of a significant number of existing units are foreseen at this time.*

[h] *Includes all residential demolitions associated with the completion of the freeway system within Milwaukee County as recommended under the adopted regional transportation plan.*

[i] *Includes 25 units associated with the completion of the regional freeway network outside of Milwaukee County.*

Source: SEWRPC.

of housing demolitions—21,438 units—in southeastern Wisconsin during the 10-year period from 1960 through 1969. This lower rate of housing demolition anticipated during the projection period can be traced primarily to a significant drop in the amount of demolitions which are expected as a result of such public programs as urban renewal and freeway construction.

Vacant Housing Requirement

An adequate supply of vacant housing is commonly considered a prerequisite for the proper operation of a housing market, being necessary to facilitate a ready turnover of housing units among households in a market area. As the number of households in an area increases, the reserve of vacant housing units which is necessary to facilitate the allocation and reallocation of housing units among households also increases. This required reserve of vacant housing must be considered in the preparation of an estimate of the overall future housing production requirement of any area.

According to the adopted regional housing objectives, principles, and standards, the rental unit vacancy rate should be maintained at a minimum of 4 percent and at a maximum of 6 percent, while the owner occupied unit vacancy rate should range from a minimum of 1 to a maximum of 2 percent. Utilizing these vacancy rates in conjunction with the expected increase in the number of households, the required number of vacant housing units was estimated for the forecast period. The estimated future vacant housing unit requirements in the Region, based upon the midpoints of the recommended vacancy rate ranges, are shown through the year 1990 in Table 184.

As indicated in Table 184, owing to the growth in the number of households in the Region, the required reserve of vacant housing may be expected to reach 19,900 units by 1990, necessitating the construction of approximately 8,400 housing units by that time. The required reserve of vacant housing is expected to be 17,900 by the year 1980, an increase of about 6,400 units over the 1970 level. It should be noted that a substantially greater increase in the vacant housing stock is called for during the 1970-1980 decade than during the 1980-1990 decade. This is because of the low vacancy rate observed for the Region overall in 1970.

It should also be noted that because different vacancy rates are required for rental and owner-occupied housing, it was necessary to make an assumption concerning the probable future status of the occupied housing stock in the preparation of estimates of the overall future vacancy requirement. In this regard, it was assumed that the tenure status of the occupied housing stock throughout the projection period would be proportionally similar to that observed in 1970; that is, about 38 percent renter occupied and 62 percent owner occupied. The record of building permits issued in the Region since the 1970 census, however, suggests a shift in the tenure status of housing to a higher proportion of renter-occupied units. It is uncertain today whether this shift to rental housing will continue over the long run. It should be noted, however, that because of the higher vacancy rate required for rental housing, an increase in the proportion of rental housing during the projection period would raise

Table 184

ESTIMATED VACANT HOUSING STOCK REQUIRED IN THE REGION
SELECTED YEARS 1970-1990

Existing Stock of Vacant Housing 1970 (A)	Required Vacant Housing Stock		Required Construction (Units)		
	1980 (B)	1990 (C)	1970-1980 (B minus A)	1980-1990 (C minus B)	1970-1990 (C minus A)
11,480	17,881	19,921	6,401	2,040	8,441

Source: SEWRPC.

the overall future vacancy requirement somewhat above the levels shown in Table 184. For example, if rental housing comprises a majority of all new housing units produced during the projection period and the proportion of rental housing increases to 50 percent in 1990, the vacancy requirement would approximate 22,900 units by 1990, an increase of about 11,000 units over the 1970 level.

Production Requirement

Based on the anticipated number of households in the Region and the anticipated level of residential demolitions as well as the anticipated requirement for vacant housing, an estimate of the overall housing production requirement for the Region through 1990 was prepared (see Table 185). This estimated future production requirement is intended as a guide to both the public and private sectors of the housing supply system in their attempts to meet the total housing requirements of the growing regional population. In particular, a comparison of the projected production requirement with recent housing construction levels should indicate the direction and approximate magnitude of regional housing construction activities within the Region.

The total overall housing production requirement in the Region is estimated to be approximately 171,000 units by 1990.[2] Approximately 87,700 units, or 51 percent of this total, would be required during the 1970 to 1980 decade. Of the total 20-year production requirement, about 138,100 housing units, or 81 percent of the total, would be required simply to accommodate growth in the regional population; about 8,400 housing units, or 5 percent, would be required to provide a sufficient stock of vacant housing; and about 24,600 units, or 14 percent, would be required to replace housing which may be expected to be demolished.

Table 185

ESTIMATED FUTURE HOUSING PRODUCTION
REQUIREMENT IN THE REGION
1970-1990

Reason For Required Construction	Required Construction (Units)		
	1970-1980	1980-1990	1970-1990
Increase in Households . . .	69,000	69,100	138,100
Increase in Vacant Stock . .	6,401	2,040	8,441
Housing Unit Demolitions . .	12,288	12,288	24,576
Total	87,689	83,428	171,117

Source: SEWRPC.

Analysis of changes in the regional housing stock between 1960 and 1970 indicates that approximately 87,400 housing units were constructed in the Region during this 10-year period. If future residential construction within the Region approximates the scale of such construction during the 1960s, approximately 175,000 housing units would be built during the 20-year period between 1970 and 1990. It is thus apparent that if residential construction from 1970 through 1990 approximates the levels of the 1960s, production during the 20-year projection period would be slightly in excess of the total production requirement for the Region—171,000 housing units—by the year 1990.

As previously indicated, the future housing production requirement represents the minimum amount of residential construction which must be undertaken to house the future population of the Region. The provision of this future production requirement will not necessarily ensure that each household in the Region will reside in safe and sanitary housing at a cost which is consistent with the household income. This future production requirement

[2] *It should be noted that the estimate of the housing production requirement presented above is based upon a regional population projection of 2.04 million persons by the year 1990. While this projection is considered to be the best estimate of the size of the future population and has been adopted as the forecast for regional planning purposes, the actual future population may differ somewhat from this projected level. In this regard, the regional population may be expected to range from a low of 1.97 million persons to a high of 2.26 million persons by the year 1990. The housing production requirement associated with the low end of this range is 106,000 units by the year 1990; the housing production associated with the high end of this projection range is 227,000 by the year 1990.*

does, however, represent the minimum number of units which must be constructed in order that all households in the Region are at least provided with a dwelling unit. Even if the projected housing production requirements are met, a portion of the regional population may still reside in substandard housing, depending on the extent of residential rehabilitation efforts which are undertaken during the forecast period. As indicated in Chapter V of this report, approximately 12,000 year-round housing units in the Region were in substandard physical condition in 1972, indicating that they are no longer suitable for rehabilitation in their present condition. An additional 19,900 housing units were found to be in fair condition, indicating deterioration was imminent or that deterioration requiring considerable repairs had already begun. It is essential, therefore, that rehabilitation efforts be undertaken as soon as possible to upgrade the existing stock of substandard housing and that proper maintenance be provided to other units in need of major repairs. In the absence of an effective program of maintenance and repair, the future housing production requirement will be substantially larger than indicated by the foregoing forecast.

FUTURE HOUSING NEED

The level of unmet housing needs in the Region may be expected to increase unless positive action is taken soon to relieve areawide housing problems. The level of unmet housing needs expected in the absence of an effective housing program, along with the existing level of unmet housing needs, are important indicators of the effort which must be undertaken to reduce the severity of the housing problem within the Region. The purpose of this section, then, is to provide a forecast of the level of unmet housing needs which would develop in the Region in the absence of an effective housing program.

For the purposes of the regional housing study, the concept of housing need has been utilized as the measure of unmet housing needs in southeastern Wisconsin. Housing need is a collective term defined as those households which cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, as well as those households which are precluded from obtaining adequate housing because of noneconomic constraints within the housing market. As described in Chapter XIII of this report, the magnitude and characteristics of the existing (1970) housing need were analyzed under the housing study by application of the adopted regional housing objectives, principles, and standards to the existing housing situation in the Region.

The magnitude of the future housing need which may be expected to develop in the absence of an effective housing program depends on trends in many interrelated social and economic phenomena. The magnitude of future housing need in the Region is related to the future size and characteristics of the regional population and to the corresponding number and type of households. It also depends on the relative effect of the various constraints on the availability of housing within the regional housing market during the forecast period. As a result of the analysis of the constraints on the availability of housing which are most responsible for areawide housing problems, various economic, institutional, and social constraints were identified as effectively precluding certain segments of the population from the acquisition of adequate housing at a reasonable cost (see Chapter XIV). Thus, the future level of unmet housing needs in southeastern Wisconsin depends on the future effects of the various housing availability constraints within the regional housing market.

The forecast of housing need in southeastern Wisconsin was prepared on the basis of the projected number of households within the Region, with consideration of the probable future effect of the various housing availability constraints on the regional housing market. Demographic projections which serve as input to the estimation of the future housing need in southeastern Wisconsin were described in the first section of this chapter. Results of attempts to estimate the future influence of constraints on the availability of housing within the regional market are presented below.

It must be recognized that projections of the future impact of constraints on the availability of housing can be accomplished only in the most general terms. As indicated in Chapter XIV of this report, the various constraints on the availability of housing are complex and interrelated so that it is often impossible to isolate the effects of individual constraints even in the existing situation.

Constraints on the Availability of Housing

For the purposes of estimating the future magnitude of the housing need within the Region, the various housing availability constraints can be classified as essentially economic or noneconomic. Based on the application of regional housing objectives and standards to the housing situation of the regional population, about 96,000 households, or 18 percent of all households in the Region, were found to be in housing need in 1970, indicating that they experienced some type of housing problem. Of the total in housing need, 88 percent experienced housing problems because of economic constraints as evidenced by a gap between the cost of housing and the ability of the households to pay for housing. Only 12 percent of households in the need category experienced housing problems because of noneconomic constraints within the housing market. These households have the financial ability to obtain adequate housing but are prevented from securing such housing because of noneconomic constraints, including racial discrimination and discrimination against large families. The probable future impact of economic and noneconomic constraints within the housing market is discussed separately below.

Economic Constraints: Perhaps the best overall indicator of the future impact of economic constraints within the housing market is a projection of the relationship between housing costs and household incomes. The projection of a substantial rise in housing costs relative to household incomes would logically indicate more severe economic constraints and, therefore, a proportionately higher inci-

Table 186

ACTUAL AND PROJECTED COST OF A SINGLE-FAMILY HOUSING UNIT ON A FULLY IMPROVED LOT IN AN URBAN AREA OF THE REGION: 1960-1990

Year	Lot			House			Total Package		
		Percent Change			Percent Change			Percent Change	
	Cost (Actual Dollars)	From Previous Decade	From 1970	Cost (Actual Dollars)	From Previous Decade	From 1970	Cost (Actual Dollars)	From Previous Decade	From 1970
1960	4,400	--	--	14,600	--	--	19,000	--	--
1970	6,700	52.3	--	22,700	55.5	--	29,400	54.7	--
1980	9,100	35.8	35.8	35,200	55.1	55.1	44,300	50.7	50.7
1990	11,500	26.4	71.6	47,300	34.4	108.4	58,800	32.7	100.0

Source: SEWRPC.

dence of housing need in the future. Conversely, projection of a substantial decline in housing costs relative to household income would indicate a lessening of economic constraints and a proportionately lower incidence of housing need. In order to project the relationship of housing costs to household incomes, independent projections of housing costs and household incomes were made.

Housing Cost Projections: As an indicator of the future cost of housing, projections of the sale price of new single-family housing on a fully improved lot in urban areas of the Region were developed on the basis of housing construction and land cost trends collated under the housing cost trends inventory. Thus, square foot construction costs for new single-family housing units were projected to the year 1990 on the basis of an extrapolation of square foot construction cost data available on an annual basis from 1960 through 1973. In order to convert the square foot construction costs to unit costs, a unit size of 1,560 square feet was assumed.[3] Similarly, square foot land prices were projected to the year 1990 on the basis of an extrapolation of square foot land prices for fully improved lots[4] in the urban areas of the Region from 1960 through 1970. In order to convert the square foot costs to lot costs, a lot size of about 8,000 square feet was assumed.[5] The resulting housing unit and lot costs were summed, yielding projections of the cost of the housing package presented in Table 186 and Figure 69.

As shown in Table 186, under the assumption of a continuation of construction and land cost trends observed during the recent past, the package price of a new single-

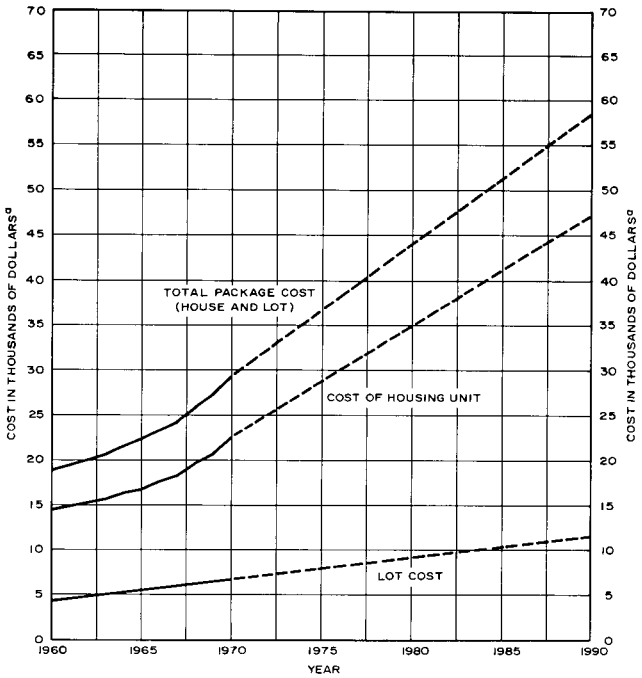
[3] *This unit size was selected in order to maintain consistency with Chapter VII of this report, wherein trends in the cost of constructing and occupying new housing were illustrated for a Cape Cod model house having 1,560 square feet of total floor area.*

[4] *For the purposes of this discussion, a fully improved lot includes at least centralized public water and sewer service and hard surface street with curb, gutter, and sidewalk.*

[5] *The lot size of 8,180 square feet was used because, as reported in Chapter VII, this is the median size of all fully improved lots sold in the urban areas of the Region in 1970.*

Figure 69

ACTUAL AND PROJECTED COST OF NEW SINGLE-FAMILY HOUSING IN THE REGION 1960-1990



[a] COSTS ARE SHOWN FOR A 1,560 SQUARE FOOT HOUSE ON A 8,180 SQUARE FOOT FULLY IMPROVED LOT IN AN URBAN AREA OF THE REGION.

Source: SEWRPC.

family house and lot is projected to increase to $44,300 by 1980, representing an increase of about 51 percent over 1970. By 1990, the price of the housing package may be expected to reach about $59,000, approximately twice the 1970 price.

The foregoing cost projections represent extrapolations of trends observed over the recent past. It is possible that during the 20-year projection period unforeseen changes may occur which significantly affect—either favorably or unfavorably—the projected cost of the housing package. For example, adoption of labor saving construction techniques or the introduction of new materials may cause the actual rate of increase in construction costs to be somewhat different from the projected level. While it is necessary to be aware of the possibility of such changes, it is not possible to specify the probability of the occurrence of such events.

It should be noted that the historical cost trends on which the cost projection for new single-family housing is based are expressed in actual rather than real dollars. It is implicitly assumed, then, that the rate of inflation during the forecast period will be approximately the same as that observed between 1960 and 1973, during which the Consumer Price Index for the City of Milwaukee increased by 43 percent. If the future rate of inflation is significantly different from the historical rate, the actual cost of single-family housing may be considerably different from the projected level.

It should also be noted that no attempt has been made to project multifamily housing costs. As noted in Chapter VII, multifamily construction cost trends were not included in the housing cost trends inventory due to the wide variances in multifamily development and construction types, styles, sizes, designs, and the wide variety of fixtures and appurtenances provided in the various developments. Review of the available data sources, however, clearly indicated that trends in multifamily construction costs generally paralleled those for single-family detached housing, and it may be assumed that this parallel relationship will continue throughout the projection period.

Household Income Forecasts: In order to forecast future levels of household income within the Region, it was necessary first to forecast future levels of aggregate personal income. The actual and forecast levels of aggregate personal income in the Region are presented for selected years from 1950 through 1990 in Table 187. Aggregate personal income in the Region is estimated to reach $14.2 billion by 1990, an increase of almost $8.2 billion, or 136 percent, over the 1970 level. This forecast represents a continuation of the 1950-1970 trend of increasing absolute changes and decreasing percentage changes.

Future average (mean) household incomes for the years 1980 and 1990 were estimated by dividing the regional aggregate income forecast by the projection of households in the Region. As further indicated in Table 187, the mean household income in the Region may be expected to reach $21,000 by 1990, an increase of approximately $9,800, or 87 percent, over the 1970 level. The mean household income in the Region may be expected to increase to $15,600 by 1980, representing an increase of approximately $4,400, or 39 percent, over the 1970 level.

Cost/Income Ratio: A comparison between the projected cost of new single-family housing and the forecast level of household income can provide insight into the relative impact of economic constraints on the future availability of housing. As shown in Table 188, based on an extrapolation of past trends, the rate of increase in the package price of new single-family housing may be expected to be somewhat higher than the rate of increase in the mean household income during the 1970-1980 and 1980-1990 decades. However, the overall difference in growth rates during the 20-year projection period is not expected to be substantial. The cost of new single-family housing may be expected to increase by 100 percent while the mean household income may be expected to increase by about 87 percent.

Because of anticipated similar rates of growth, the ratio of the cost of new single-family housing to the mean

Table 187

ACTUAL AND FORECAST INCOME LEVELS IN THE REGION: SELECTED YEARS 1950-1990

Year	Aggregate Income (Actual Dollars)	Change From Preceding Decade		Mean Household Income (Actual Dollars)	Change From Preceding Decade	
		Dollars	Percent		Dollars	Percent
1950	1,655,000,000	--	--	4,668	--	--
1960	3,492,000,000	1,837,000,000	111.0	7,496	2,828	60.6
1970	6,029,000,000	2,537,000,000	72.7	11,238	3,742	49.9
1980	9,400,000,000	3,371,000,000	55.9	15,600	4,362	38.8
1990	14,200,000,000	4,800,000,000	51.1	21,000	5,400	34.6

Source: SEWRPC.

household income may be expected to remain relatively stable over the projection period. Thus, as indicated in Table 188 and Figure 70, the cost-income ratio for new single-family housing is projected to rise only modestly, from 2.6 in 1970 to 2.8 in 1990. Based on the projected stability of this index, it would appear that economic constraints may be expected to have about the same general impact on the regional housing market during the projection period as they have at the present time.

Table 188

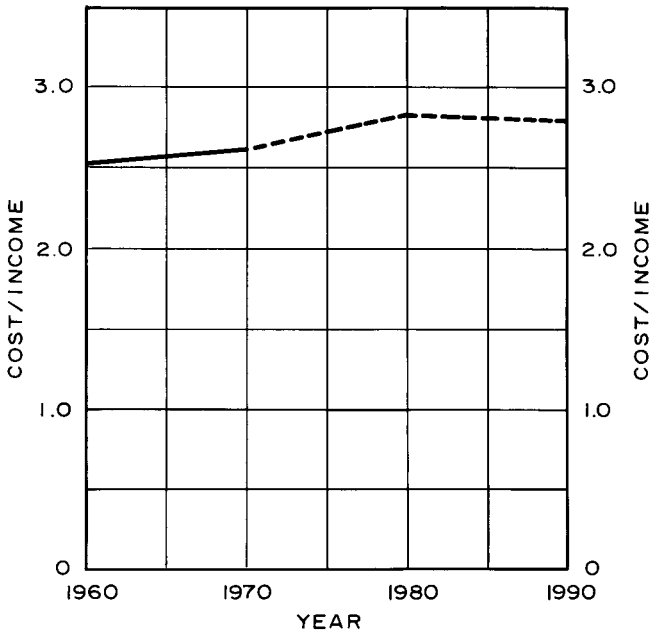
COMPARISON BETWEEN THE COST OF NEW SINGLE-FAMILY HOUSING AND THE MEAN HOUSEHOLD INCOME IN THE REGION 1960, 1970, 1980, and 1990

Year	Package Price		Mean Household Income		Cost/ Income Ratio
	Actual Dollars	Percent Change From Previous Decade	Actual Dollars	Percent Change From Previous Decade	
1960	19,000	--	7,496	--	2.53
1970	29,400	54.7	11,238	49.9	2.62
1980	44,300	50.7	15,600	38.8	2.84
1990	58,800	32.7	21,000	34.6	2.80

Source: SEWRPC.

Figure 70

PURCHASE COST/ANNUAL INCOME RATIO FOR NEW SINGLE-FAMILY HOUSING IN THE REGION: 1960, 1970, 1980, and 1990



Source: SEWRPC.

Because the incidence of housing need is highest for low- and moderate-income households, a cost-income analysis specifically for lower income households would provide a more precise indicator of the future impact of economic constraints within the Region. However, such an analysis would require the compilation of historical trends correlating housing costs and household incomes for lower income households in order that the appropriate forecasts could be made. Due to a lack of reliable data sources which correlate housing costs and household income on a historical basis for lower income households in southeastern Wisconsin, such an analysis was not considered practical. Historical family income data were analyzed, however, in an effort to determine the relative magnitude of changes within the lower income groups as compared to the higher income groups. A summary of this analysis is presented in Table 189. As indicated, the mean income of the lowest quarter of the Region's families increased by about 176 percent between 1950 and 1970, considerably faster than the increase of 141 percent for families in the Region overall. The mean income of the lowest quarter of the Region's families increased at a considerably faster rate than the overall mean between 1950 and 1960, while the growth rate in the mean incomes was approximately the same between 1960 and 1970. Under the assumption that the incomes of the lowest income groups will continue to increase at a faster rate than the average income in the Region overall, it may be expected that the impact of economic constraints on lower income households will be no worse during the projection period than their impact at the present time.

Developing a projection of the future impact of economic constraints within the housing market is a difficult task involving a high degree of uncertainty and requiring the exercise of much judgment. Based on the foregoing considerations, however, it would appear reasonable to assume that the relative impact of economic constraints within the housing market may be expected to be approximately the same during the projection period as it is at the present time. Accordingly, for the purpose of estimating the future level of housing needs within the Region, the same proportionate incidence of economic need was assumed during the 20-year projection period as was observed in 1970. The results of the application of this assumption are presented later in this chapter.

Noneconomic Constraints: In the analysis of existing unmet housing needs, it became apparent that some financially capable households were forced to occupy substandard or overcrowded housing because of noneconomic constraints within the housing market, such as discrimination based on race or family size and community opposition to the provision of low-cost housing. As stated in Chapter XIII, no reliable data source exists which can be used to quantify precisely the effects of such noneconomic constraints on the housing market. Nevertheless, a gross estimate of the number of households who were forced to occupy inadequate housing despite their apparent financial ability to secure alter-

Table 189

MEAN FAMILY INCOME IN THE REGION: 1950, 1960, and 1970

Category	Mean Family Income			Percent Change		
	1950	1960	1970	1950-1960	1960-1970	1950-1970
All Families	$4,668	$7,496	$11,238	60.6	49.9	140.7
Families in the Lowest One-Quarter With Respect to Income	1,721	3,215	4,741	86.8	47.5	175.5

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

native housing was made in order that the impact of noneconomic constraints might be reflected in the quantification of existing housing need.[6]

The future impact of noneconomic constraints on the availability of housing in southeastern Wisconsin is unknown. Changes in social attitudes and institutions suggest that a gradual lessening of the impact of certain noneconomic constraints has occurred over the last several decades, and offer reason to expect a continuation of this trend. The most obvious is the relatively recent enactment of fair housing legislation by the federal government, by the State of Wisconsin, and by many local units of government in the Region, thereby providing a legal mechanism with which to counter discrimination on the basis of race, creed, and national origin. On the other hand, the influence of other noneconomic constraints such as discrimination against large families and community opposition to the construction of low- or moderate-cost housing does not appear to have decreased in recent times and may actually have increased.

In the absence of any information which might indicate a major change in the future effects of these noneconomic constraints, it appears most reasonable to assume that the relative impact of the noneconomic constraints will be about the same in the near future as in the recent past. Therefore, for the purpose of estimating the future level of housing needs within the Region, the same proportionate incidence of noneconomic need was assumed during the 20-year projection period as was observed in 1970.

Determination of Future Housing Need

For the purpose of estimating the magnitude of the housing need over the forecast period, it was considered logical to apply the actual proportional incidence of housing need observed among households in the Region in 1970 to the projected number of households in the Region for the years 1980 and 1990. Since 18 percent of all households in the Region were in housing need in 1970, the same proportion of households was assumed to be in housing need in 1980 and 1990. The estimates of future housing need in southeastern Wisconsin, based upon the application of this assumption, are presented in Table 190.

Assuming a continuation of present trends with respect to the future impact of the various housing availability constraints within the regional housing market, and assuming that no effective housing program is undertaken to abate the housing problem, the housing need may be expected to approximate about 120,800 households by 1990, an increase of about 24,700 households, or 26 percent, over the 1970 level.[7] Under these assump-

[6] *In the absence of reliable data with which to quantify precisely the effect of noneconomic constraints within the housing market, particularly with respect to households which occupy substandard or overcrowded housing and which, on the basis of the household income, should be able to afford adequate alternative housing, a generalized assumption was adopted. As an estimate of the number of households which are forced to occupy inadequate housing solely because of noneconomic constraints within the housing market, 50 percent of all households which occupy substandard or overcrowded housing and which appear able to obtain adequate alternative housing at a cost which is less than 30 percent of the household adjusted gross income were classified as being in housing need.*

[7] *It should be noted that the estimate of the size of the future housing need presented above is based upon a regional population projection of 2.04 million persons by the year 1990. While this projection is considered to be the best estimate of the size of the future regional population and has been adopted as the forecast for regional planning purposes, the actual future population may differ somewhat from this projected level. The regional population may be expected to range from a low of 1.97 million persons to a high of 2.26 million persons by the year 1990. The housing need associated with the low end of this range is 109,800 households by the year 1990; the housing need associated with the high end of this projection range is 130,700 households by the year 1990.*

Table 190

ACTUAL AND PROJECTED HOUSING NEED IN THE REGION: 1970, 1980, and 1990

Housing Need Status	Households in Housing Need: 1970		Projected Households in Housing Need			
			1980		1990	
	Number	Percent of Total	Number	Change: 1970-1980	Number	Change: 1970-1990
Need	96,089	17.91	108,446	12,357	120,821	24,732
Economic Need	84,803	15.81	95,730	10,927	106,654	21,851
Economic Need Only	69,617	12.98	78,594	8,977	87,563	17,946
Substandard	5,625	1.05	6,358	733	7,083	1,458
Overcrowded	8,421	1.57	9,506	1,085	10,591	2,170
Substandard and Overcrowded	1,140	0.21	1,272	132	1,417	277
Noneconomic Need	11,286	2.10	12,716	1,430	14,167	2,881
Substandard	2,228	0.41	2,483	255	2,766	538
Overcrowded	8,843	1.65	9,991	1,148	11,131	2,288
Substandard and Overcrowded	215	0.04	242	27	270	55
Non-Need	440,397	82.09	497,054	56,657	553,779	113,382
Total	536,486	100.00	605,500	69,014	674,600	138,114

Source: SEWRPC.

tions, of the total housing need in 1990, about 87,600 households may be expected to be in economic need only. The balance of the projected housing need includes households which experience physical housing problems and which are unable to secure alternative housing because of constraints, both economic and noneconomic, within the housing market. It is anticipated that by 1990 the housing need will approximate 9,800 households occupying housing units which are substandard, 21,700 households occupying overcrowded units, and 1,700 households in units which are both overcrowded and substandard.

It should be noted that unexpected changes in the characteristics of households in southeastern Wisconsin could significantly affect the validity of the forecast housing need. For example, because of the high level of housing problems experienced by elderly households, a substantial increase in the proportion of such households in southeastern Wisconsin would probably result in a higher relative incidence of housing need for the overall population than is currently foreseen. Similarly, a substantial increase in the proportion of large families might cause the actual size of housing need to be greater than the projected level. However, while the elderly population is expected to increase at a faster rate than the total population, the proportion of the regional population consisting of elderly persons is not expected to increase significantly during the projection period. Furthermore, the projected decrease in the average household size suggests that large households may actually decline as a proportion of all households in the Region during the projection period, tending to lower the future level of housing need below the projected level.

It is important to recognize that the foregoing forecast of housing need represents the level of unmet housing need which is likely to occur if there is no concerted effort on the part of the public and private sectors to lessen the impact of the various housing availability constraints within the regional housing market in an effort to reduce the housing problem. It should be emphasized that the forecast of housing need is the result of the application of the relative incidence of housing need observed among households in the Region in 1970 to the projected number of households in the Region in 1980 and 1990. The estimates of future housing need in southeastern Wisconsin represent extrapolations of the existing situation under the assumption that the relative impact of the various housing availability constraints within the regional housing market will not change significantly during the projection period. The implementation of an effective regional housing plan could significantly reduce the effect of economic, institutional, and social constraints on the availability of housing, with the result that the projected level of housing need would never be reached.

SUMMARY

In any planning effort, forecasts are required of all future events which are outside the scope of the plan to be prepared, but which affect plan formulation and implementation. With respect to housing planning, a forecast of the total housing production requirement is necessary as a guide to the various sectors of the housing supply system, indicating the total amount of new housing units which must be added to the existing housing stock to meet the probable future housing requirements of

the existing and future population. Furthermore, a forecast of the future level of housing need in the Region should be developed to provide an indicator of the extent of unmet housing needs which would occur in the absence of an effective housing program for the abatement of areawide housing problems. This chapter presents a description of the methodology used in the regional housing study to forecast the probable future housing production requirement and future unmet housing need in southeastern Wisconsin during the 1970 through 1990 forecast period, together with the results of this methodology.

To some extent, the magnitude of both the future housing production requirement and the future housing need depends on the overall growth in the regional population and the corresponding increase in the number of households. Forecasts of regional population levels to the year 2000 prepared by the Commission in 1974 as a part of its continuing planning effort were used as a basis for the preparation of forecasts of future housing production requirement and future housing need in southeastern Wisconsin.

According to demographic forecasts, the regional population is expected to reach 2.0 million persons by 1990, representing a gain of about 288,000 persons, or 16 percent, over the 1970 level. During the same forecast period, the number of households in the Region is expected to reach 675,000, an increase of about 138,000 households, or 26 percent, over 1970 level. The faster rate of increase in the number of households relative to the rate of increase in the population reflects the decline in the average household size anticipated over the forecast period, from 3.20 persons per household in 1970 to 2.95 persons per household by 1990.

Available evidence indicates a need for a substantial increase in the supply of housing in the Region by 1990. The projected increase in the number of households itself indicates the need for the construction of a significant number of new residential units. Considerable building activity will also be required to replace units demolished during this period. Finally, as the number of households in the Region increases, the size of the vacant housing stock which is required to provide a ready turnover of housing units should also be increased. Based on the foregoing considerations, namely, the expected increase in the number of households in the Region, the anticipated volume of residential demolitions, and the required reserve of vacant housing, the housing production requirement through the year 1990 has been estimated. This estimate is intended as a guide to both the public and private sectors of the housing supply system in attempting to meet the total housing requirements of the growing regional population.

The overall housing production requirement in the Region is estimated to be approximately 171,000 units by 1990. Approximately 87,700 units, or 51 percent of this total, would be required during the 1970 to 1980 decade. Of the total 1990 housing production requirement, 138,000 housing units, or 81 percent of the total, would be required simply to accommodate growth in the regional population; 8,400 housing units, or 5 percent, would be required to provide a sufficient stock of vacant housing; and 24,600 units, or 14 percent, would be required to replace housing which may be expected to be demolished.

It is important to note that future housing need represents the minimum residential construction which must be undertaken to house the future population of the Region. The provision of this future production requirement will not necessarily ensure that each household in the Region will reside in decent, safe, and sanitary housing at a cost which is consistent with the household income. Rather, it represents the minimum number of units which must be constructed so that all households in the Region may at least be provided with a dwelling unit.

For the purposes of the regional housing study, the concept of housing need has been adopted as the measure of housing problems within the Region. Housing need is a collective term defined as those households which cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, as well as those households which are precluded from obtaining adequate housing because of noneconomic constraints within the housing market. The extent of the housing need in the Region may be expected to increase unless positive action is taken in the immediate future to relieve areawide housing problems. The level of unmet housing needs expected in the absence of an effective housing program, along with the existing level of unmet housing needs, represent important indicators of the scale of effort which must be undertaken to reduce the severity of the housing problem within the Region.

The extent of future housing need is related to the future size and characteristics of the regional population and to the corresponding number and type of households. It also depends on the relative effect of various constraints on the availability of housing within the regional housing market during the forecast period. Various economic, institutional, and social constraints were identified as effectively precluding certain segments of the population from acquiring adequate housing at a reasonable cost. Thus, the future level of unmet housing needs in southeastern Wisconsin depends on the future effects of the various housing availability constraints within the regional housing market.

Projections of the impact of these constraints, however, can be accomplished only in the most general terms. Based on the analysis of relevant forecast information, it appeared reasonable to assume that the impact of the various housing availability constraints, both economic and noneconomic, will not change appreciably between 1970 and 1990. Under this assumption, the actual percentage incidence of housing need observed among households in the Region was applied to the projected number of households in the Region in 1980 and 1990 to obtain estimates of the size of the future housing need.

Assuming that present trends continue, the housing need may be expected to consist of about 120,800 households by 1990, an increase of about 24,700 households, or 26 percent, over the 1970 level. Of the total housing need in 1990, about 87,600 would be in economic need only. The balance of the projected housing need includes households which would experience physical housing problems and which would be unable to secure adequate housing because of economic and noneconomic constraints within the housing market. It is anticipated that by 1990, the housing need will include about 9,800 households which occupy substandard units, 21,700 households in overcrowded units, and 1,700 households in housing which is both overcrowded and substandard.

The forecasts represent the levels of unmet housing need which are likely to occur if there is no concerted effort by the public and private sectors to minimize the effect of various housing availability constraints within the regional housing market in an effort to reduce the housing problem. The estimate of future housing need represents an extrapolation of the existing situation under the assumption that the relative impact of the various housing availability constraints within the regional housing market will not change significantly during the projection period. The implementation of an effective regional housing plan could reduce the effect of economic, institutional, and social constraints on the availability of housing, with the result that the projected level of housing need would never be reached.

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Chapter XVI

ALTERNATIVE REGIONAL HOUSING ALLOCATION STRATEGIES

INTRODUCTION

The relationship between the effective demand for housing and true housing need has been one of the most important considerations in the regional housing study. The housing needs of a great majority of the households in the Region are met by the housing industry in the normal operation of the housing market, and it may be assumed that the effective demand for housing will be satisfied by the private market, at least in the long run. A minority of the Region's households, however, because of economic, institutional, and social constraints within the housing market, are unable to secure decent, safe, and sanitary housing entirely, or are unable to secure such housing without expending a disproportionate share of their income for housing. The regional housing study has been directed toward the identification of these unmet housing needs and the identification of the constraints on the availability of housing which are most responsible for the existing housing need. The results of these analyses provide a basis for the plan design phase of the regional housing study, under which an overall plan directed at meeting the agreed-upon regional housing objectives and satisfying the unmet housing needs is formulated.

For the purposes of the regional housing study, the measure of housing need has been defined as the number of households which are unable to secure decent, safe, and sanitary housing at a cost which is consistent with the household income, as well as those households which are precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market. Based upon the application of regional housing objectives and standards to the existing housing situation of the regional population, it was found that approximately 96,100 households, or about 18 percent of all households in the Region, were in housing need in 1970.

An overall plan for reducing this housing need in southeastern Wisconsin can be most meaningfully formulated in the context of the types of problems experienced by households in the need category. Although the housing problems of such households are varied in nature and origin, some generalizations can be made. Of the total households in housing need in 1970, about 26,500, or 28 percent, actually experienced a physical housing need inasmuch as they resided in substandard or overcrowded housing units and were prevented from securing adequate alternative housing because of economic or noneconomic constraints within the housing market. This component of the existing housing need reflects a deficiency in the existing housing stock relative to the needs of the regional population. On the other hand, 69,600 households, or 72 percent of the existing housing need, were classified as being in economic need only, since they occupy decent, safe, and sanitary housing but must pay a disproportionate share of their income to secure such housing.

In general, existing areawide housing problems reflect the fact that a certain segment of the regional population is excluded from the effective demand for housing and, therefore, either cannot obtain decent, safe, and sanitary housing in the normal operation of the housing market, or must pay an excessive share of the household income to obtain adequate shelter. Based upon the analysis of the existing constraints on the availability of housing, it is apparent that a substantial reduction in the existing housing need will be achieved only with the provision of public assistance to reduce the gap between housing costs and the ability to pay for households in the need category. While the importance of such government subsidy programs to the resolution of areawide housing problems is readily apparent, the determination of areas within the seven-county Region in which subsidized housing should be located is a major planning problem whose resolution has significant implications for the future socioeconomic structure of the Region. There are many alternative ways in which housing subsidy funds which may become available to southeastern Wisconsin could be geographically distributed. This chapter presents three alternatives for the spatial distribution of subsidized housing, as well as an evaluation of these alternative allocation strategies against the adopted regional housing objectives.

The alternative housing allocation strategies presented in this chapter distribute 17,840 subsidized housing units, a sufficient size to eliminate the physical housing need in southeastern Wisconsin. The number of units distributed is far less than the total existing (1970) housing need of 96,100 households. As indicated above, however, the majority of households in need are considered to be in economic need only and, because their housing problem is primarily economic in nature, could be relieved by various economic measures which would reduce the gap between their current housing costs and their ability to pay those costs, with no change of residence required to reduce the economic burden. Conversely, households which experienced physical housing problems—that is, households which occupy substandard or overcrowded housing—generally must move in order to reside in decent, safe, and sanitary housing. Logically, only those households in housing need which experience a physical housing problem necessitating a change in residence should be considered in a locational strategy.

A subsidized housing allocation strategy identifies local responsibility for the resolution of physical housing problems in the Region. It is important to recognize that a housing allocation strategy itself will not result in

the abatement of existing housing problems. Rather, it provides the geographic framework within which existing physical housing problems can be resolved. The actual resolution of current housing problems, both physical and economic, is contingent upon the effective implementation of a series of wide-ranging housing recommendations which are presented in the next chapter of this report and which, in conjunction with the subsidized housing allocation strategy ultimately adopted, comprise the recommended regional housing plan.

PHYSICAL HOUSING NEED

The alternative housing strategies presented in this chapter consist of different proposals for the spatial distribution of housing which must be provided with the assistance of the public or quasi-public sector to overcome the identified physical housing need in southeastern Wisconsin. Substandard and overcrowded living conditions are evidence of the existence of a physical housing need within the Region. The approximate size of this need, as measured by the incidence of substandard and overcrowded conditions, is presented in this section as an indication of the amount of subsidized housing which must be provided to eliminate existing physical housing problems in the Region.

Substandard housing conditions represent the most obvious symptom of the existing physical housing need, since such units are unfit for safe and sanitary habitation in their present condition, and therefore cannot be considered a viable part of the existing housing stock. Accordingly, the existing physical housing need includes all of the substandard housing units occupied by households in housing need—9,200 units—as determined in the analysis of the existing housing need presented in Chapter XIII. It should be noted that 1,355 units, or 15 percent of this total, are also overcrowded. It should also be recognized that although housing which is in substandard condition should not be considered part of the usable housing stock, many such units may be restored to safe and sanitary condition through rehabilitation, the cost of which is, on the average, much lower than the cost of replacing such housing.

Overcrowded living arrangements are another symptom of a physical housing need within the Region. It is unreasonable, however, to include all overcrowded housing units in the physical housing need, because an overcrowded but otherwise safe and sanitary unit simply implies a mismatch of a household and a housing unit. The overcrowded housing unit is a potentially viable part of the existing housing stock, and once vacated, may provide decent, safe, and sanitary housing for a smaller household. Thus, it may be assumed that the construction of adequately sized housing units for large overcrowded households would free up otherwise sound housing which may be of sufficient size for smaller households which are presently overcrowded. It should be possible, therefore, to eliminate overcrowded conditions by providing fewer housing units than the number of overcrowded households. Unfortunately, no good means exist on which to base an estimate of the minimum amount of construction necessary to eliminate overcrowded living arrangements. Nevertheless, it seems appropriate to include in the physical housing need a proportion of the overcrowded households in housing need. In the absence of empirical data with which to estimate this fraction, a figure of 50 percent was judged most reasonable by the Advisory Committee. Accordingly, the existing physical housing need is assumed to include 50 percent of the number of overcrowded households in the need category, or 8,600 units.

A summary of the existing total economic and physical housing need within the Region and the corresponding need for publicly assisted housing, based upon the incidence of substandard and overcrowded housing, is presented in Table 191. The estimated existing (1970) physical housing need in the Region is 17,800 units. Alternative strategies which provide a framework for the location of the subsidized housing necessary to overcome this physical need are presented in the next section of this chapter.

It is important to note that under the regional housing plan, emphasis is focused on overcoming existing rather than future levels of housing need. In the absence of an effective housing program for the reduction of the housing need in southeastern Wisconsin, and based upon the projected incidence of substandard and overcrowded conditions, the physical housing need may be expected to reach 22,400 households by 1990. If, however, the recommendations which comprise the overall regional housing plan are implemented, the impact of the various housing availability constraints within the regional housing market should be substantially reduced. For this reason, the magnitude of the future physical housing

Table 191

TOTAL HOUSING NEED AND PHYSICAL HOUSING NEED IN THE REGION: 1970

Housing Status	Total Housing Need (Households)	Physical Housing Need (Units)
Economic Need Only	69,617	--
Substandard		
Economic Need	5,625	5,625
Noneconomic Need.	2,228	2,228
Overcrowded		
Economic Need	8,421	4,210[a]
Noneconomic Need.	8,843	4,422[a]
Substandard and Overcrowded		
Economic Need	1,140	1,140
Noneconomic Need.	215	215
Total	96,089	17,840

[a] *Represents 50 percent of overcrowded households in housing need.*

Source: SEWRPC.

need should be significantly lower than the projected level. Thus, rather than addressing probable future housing problems which might develop in the absence of an effective housing program, the regional housing plan proposes to eliminate the identified level of existing unmet housing needs. This approach is deemed practicable because, unlike public works facilities such as arterial highways, transitways, trunk sewers, and major storm water drains, the design of which must at least consider, if not meet, probable long-term future as well as short-term existing demand, housing can be provided much more readily on an incremental basis to meet existing need only.

ALTERNATIVE HOUSING LOCATIONAL STRATEGIES

There are many ways in which the subsidized housing necessary to reduce the existing physical housing need in southeastern Wisconsin might be geographically distributed throughout the Region. First, it might be distributed to various subareas of the Region in direct relation to the level of housing need, thereby meeting the housing need where it exists. Under such an approach, the responsibility for resolving the housing need would rest primarily on those communities which have historically borne this burden. Second, it might be dispersed in accordance with an agreed-upon formula, with the result that many communities not formerly involved in the resolution of areawide housing problems would be called on to assume some responsibility in this respect. Third, housing units might be assigned to subareas of the Region on the basis of suitability for the location of low- and moderate-income housing as measured by such factors as land availability, fiscal resources, and employment opportunities. Regardless of the allocation system used, the number of housing units assigned might be adjusted in view of the area's past efforts in providing housing for low- and moderate-income families.

Three distinctly different alternative housing locational strategies were accordingly formulated under the regional housing study: an existing need, a dispersal, and a composite factor allocation strategy. Each represents a different geographic distribution within which the existing physical housing need could be reduced or eliminated, thereby meeting the adopted regional housing objectives, principles, and standards. While many variations of the three basic allocation strategies are possible, the three selected are believed to represent the basic choices practically available to the Region with respect to the distribution of housing units which must be provided to remedy the existing physical housing need.

The existing need strategy represents a conscious effort to resolve the physical housing need where it exists by assigning to each housing analysis area an allocation of subsidized low- and moderate-income housing units which bears a direct relationship to the housing analysis area's share of the total regional housing need. Because of the high incidence of housing need in the older urban centers of the Region, the publicly assisted housing necessary to eliminate the physical housing need would be concentrated, under the existing need strategy, in the Region's older urban centers. Implementation of this strategy would tend to perpetuate the existing distribution of low- and moderate-income households.

In direct contrast to this is the dispersal strategy, which assigns a higher allocation of publicly assisted housing units to areas with a lower incidence of housing need. Under the dispersal strategy, more low- and moderate-income housing would be provided in the suburban and outlying rural-urban fringe areas of the Region than in older urban centers. This dispersal could contribute to the integration of households of different socioeconomic backgrounds within the Region.

Finally, the composite factor housing allocation strategy represents a conscious effort to locate future publicly assisted housing in areas which are most suitable for the location of such housing, based upon a consideration of the housing need in the area, the general fiscal and physical ability of the area to absorb such housing, and the past performance of the area in providing housing for low- and moderate-income families. This strategy results in an intermediate distribution pattern, allocating more publicly assisted housing to the suburban and outlying rural-urban areas than the existing need strategy, and more publicly assisted housing to the older urban centers than the dispersal strategy.

The three strategies may be expressed in the form of mathematical formulas for the geographic distribution of the required publicly assisted housing. The use of such formulas ensures that the alternative distribution systems can be applied to various subareas on a consistent, uniform basis.

Under each alternative, quotas of publicly assisted housing were assigned to subareas of the Region consisting of one or more minor civil divisions. Each local housing analysis area was considered to be an allocation area, with the following exceptions: housing analysis areas 16-25 in the City of Milwaukee were considered as a single allocation area; housing analysis areas 43 and 44 in Racine County were considered as a single allocation area; and housing analysis areas 50 and 51 in Kenosha County were considered as a single allocation area. These consolidations were adopted so that the Cities of Kenosha, Milwaukee, and Racine might be treated as a whole in the implementation of the housing plan. Since the primary purpose of a housing allocation system is the delineation of local responsibility for the resolution of the areawide housing shortage, the assignment of a specific quota of publicly assisted housing to small areas within a local unit of government is beyond the scope of a regional housing allocation system.

Many varied housing subsidy programs have been utilized in southeastern Wisconsin and may be expected to continue to be used within the Region in efforts to meet the assigned housing allocations. These programs may be distinguished according to several categories: programs which directly facilitate rehabilitation of existing substandard housing, programs which directly facilitate con-

struction of new residential units, and programs which utilize existing standard housing as alternative housing for households in the need category. In monitoring efforts to meet the housing allocation strategy ultimately adopted, credit should be given to housing analysis areas regardless of the program type, as long as the provision of the subsidized housing results in a reduction of the existing physical housing need. Each of the major program categories is briefly discussed below.

Government subsidy programs involving the rehabilitation of substandard housing represent an effective means for reducing the existing physical housing need because of their multiple benefits. The rehabilitation of a substandard housing unit not only provides sound housing for households in housing need, but may serve to upgrade the overall quality of the neighborhood in which the housing is located and thereby check the self-perpetuating cycle of urban deterioration and decay within certain subareas of the Region. The rehabilitation of substandard housing tends to enhance the local tax base by significantly increasing the value of formerly dilapidated structures. Furthermore, rehabilitation efforts directly increase the stock of sound housing at a relatively low cost by maximizing the use of the sound structural and mechanical components of the existing substandard units as well as the site on which the units are located and the attendant site improvements. For these reasons, rehabilitation should be utilized to the maximum extent possible in efforts to reduce the existing physical housing need.

In addition to the rehabilitation of existing substandard housing, the subsidized construction of new housing would also result in a direct reduction of the existing physical housing need. It is expected that most housing analysis areas in the Region will meet at least part of their allocation through subsidized construction activities. Subsidy programs involving new construction can significantly increase the locational choice of low- and moderate-income households, and will be particularly important in expanding housing opportunities in subareas of the Region where growth in the low- and moderate-income housing stock has not kept pace with growth in employment opportunities.

The third major type of subsidy program utilizes existing standard housing as alternative housing for households in need. Programs of this type generally involve direct or indirect subsidization of households in the need category to the point that they are economically able to compete in the marketplace as part of the effective demand for housing. It is anticipated that residential construction activity would ultimately increase to meet the higher, subsidized level of effective market demand.

Existing Need Housing Allocation Strategy

The existing need strategy assigns to each housing analysis area a share of the total publicly assisted housing requirement which is directly proportional to the level of housing need existing within the area. This allocation strategy represents a continuation of past trends in that it assigns the greatest allocation to the older urban centers of the Region where the incidence of housing problems has historically been the highest, and where past efforts to build publicly assisted housing have been heavily concentrated. This strategy, however, does propose to modify the past trend in that it suggests that each housing area, without exception, address itself at least to the housing problems within its own geographic boundaries.

Specifically, each housing analysis area is allocated a portion of the existing publicly assisted housing requirement equal to its proportion of the regional housing need in 1970. The results of the application of this formula are presented in Table 192 and on Map 72. Under the existing need strategy, the publicly assisted construction and rehabilitation activity necessary for the abatement of the existing physical housing need would be concentrated in the Cities of Kenosha, Milwaukee, and Racine, with almost three-fourths of the total allocation of 17,840 units assigned to housing analysis areas in these cities. In contrast, relatively small allocations—frequently less than 100 units—would be assigned to housing analysis areas in the suburban and outlying rural-urban fringe areas. Among the seven counties, the allocations range from 202 units for Ozaukee County to more than 12,700 for Milwaukee County.

Implementation of the existing need strategy would facilitate meeting the physical housing need with very little change in the social and economic structure of the Region. The provision of publicly assisted housing in areas where physical housing need exists would reinforce the existing distribution of low- and moderate-income households throughout the Region. Under this strategy, households which reside in substandard or overcrowded conditions may obtain adequate alternative housing without being uprooted from their neighborhoods.

Implementation of the existing need strategy would also facilitate a most effective utilization of existing community housing resources. Because efforts to eliminate physical housing need would occur in areas in which the need exists, use of the existing housing stock could be maximized through the rehabilitation of all substandard housing for which rehabilitation is economically feasible. In addition, because of the concentration of publicly assisted housing in the older urban centers of the Region proposed under this strategy, the occupants of this housing would have at their disposal the transportation facilities, recreational opportunities, and health and social services provided in these centers.

It must be recognized, however, that the concentration of low- and moderate-income housing in the large central cities of the Region implies that the social overhead associated with the provision of such housing will continue to fall on those communities which have historically borne this burden. As part of the tax structure inventory, it was found that high concentrations of low- and moderate-income family housing may have a significant adverse impact on the local fiscal structure because of the high cost of education relative to the local property tax levy against such residential development. Furthermore, the provision of a relatively high level of health

Table 192

ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE EXISTING NEED HOUSING ALLOCATION STRATEGY

Housing Analysis Area	Existing Housing Need 1970		Allocation (Units)
	Households	Percent of Region	
1	168	0.17	30
2	252	0.26	46
3	81	0.08	14
4	475	0.49	87
5	139	0.14	25
Ozaukee County	1,115	1.14	202
6	173	0.18	32
7	640	0.67	120
8	60	0.06	11
9	137	0.14	25
10	353	0.37	66
11	178	0.19	34
12	166	0.17	30
Washington County	1,707	1.78	318
13	69	0.07	12
14	104	0.11	20
15	1,227	1.28	228
16-25	58,455	60.86	10,859
26	3,022	3.15	562
27	447	0.47	84
28	205	0.21	37
29	1,043	1.09	194
30	3,484	3.63	648
31	448	0.47	84
Milwaukee County	68,504	71.34	12,728
32	635	0.66	118
33	264	0.27	48
34	281	0.29	52
35	289	0.30	54
36	301	0.31	55
37	172	0.18	32
38	164	0.17	30
39	565	0.59	105
40	1,886	1.96	350
41	292	0.30	54
42	338	0.35	62
Waukesha County	5,187	5.38	960
43-44	7,068	7.36	1,313
45	187	0.19	34
46	267	0.28	50
47	319	0.33	59
48	594	0.62	111
49	349	0.36	64
Racine County	8,784	9.14	1,631
50-51	5,230	5.44	970
52	367	0.38	68
53	213	0.22	39
54	72	0.07	12
55	1,031	1.07	191
Kenosha County	6,913	7.18	1,280
56	567	0.59	105
57	750	0.78	139
58	410	0.43	77
59	1,307	1.36	243
60	845	0.88	157
Walworth County	3,879	4.04	721
Region	96,089	100.00	17,840

Source: SEWRPC.

and social services often required by lower income households adds to the overall public cost of lower-income residential development.

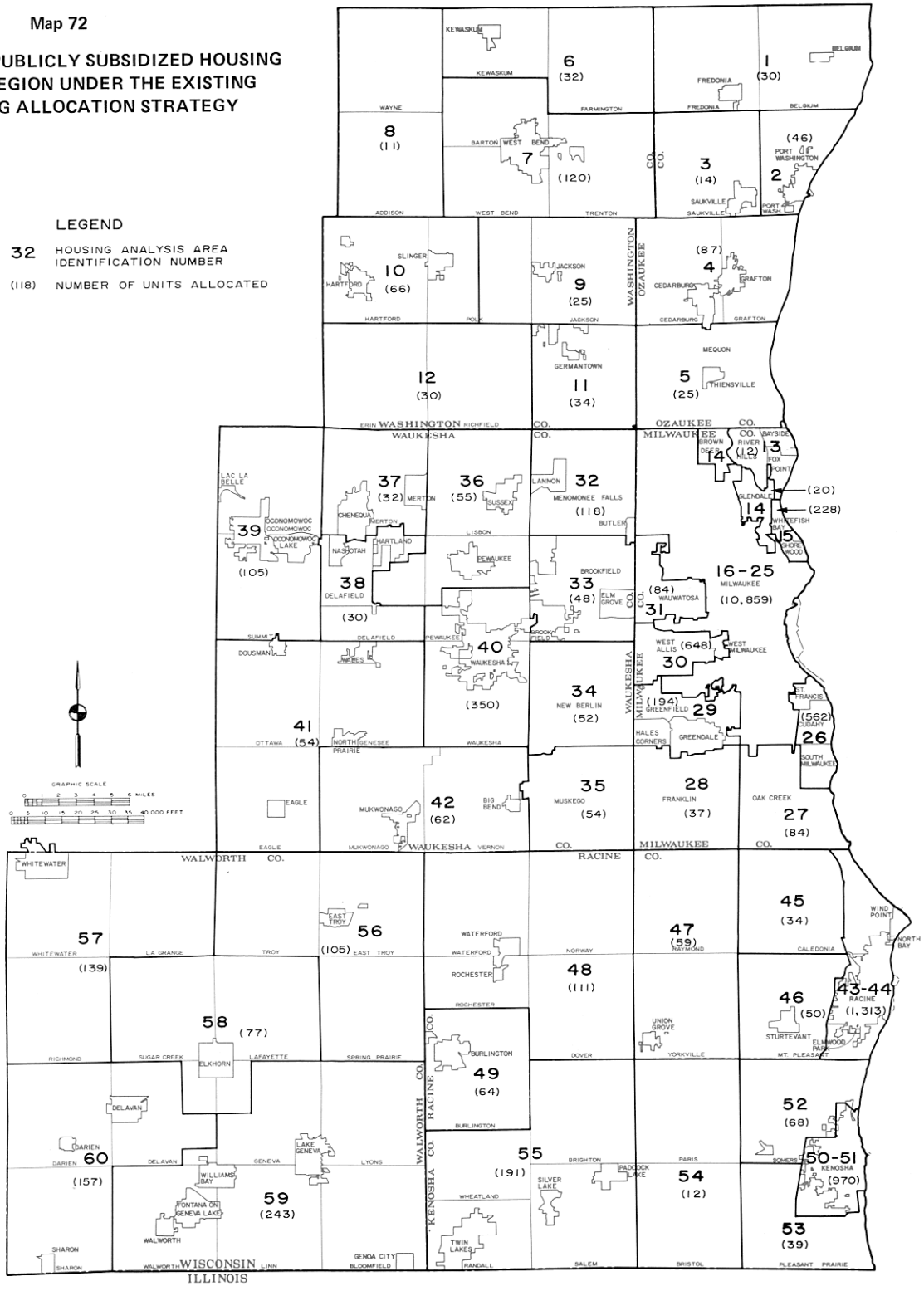
Dispersal Housing Allocation Strategy

In direct contrast to the existing need strategy, the dispersal strategy assigns to each area a share of the total publicly assisted housing requirement which is inversely related to the level of housing problems observed in each area. The overall effect of the dispersal strategy is the allocation of relatively large quotas of publicly assisted housing to the suburban and outlying rural-urban fringe areas of the Region, which have typically been less active than the older urban centers in attempting to resolve areawide housing problems. Conversely, under the dispersal strategy, quotas of publicly assisted housing assigned to the older urban centers of the Region would be minimal.

More specifically, under the dispersal strategy each housing analysis area is allocated a portion of the existing publicly assisted housing requirement on the basis of an

Map 72

ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE EXISTING NEED HOUSING ALLOCATION STRATEGY



Under the existing need strategy, the greatest allocation of publicly subsidized housing would be made to the older urban centers of the Region, where the incidence of housing problems has historically been, and is presently, highest. Construction and rehabilitation activity necessary for the abatement of the existing physical housing need would be concentrated in the Cities of Kenosha, Milwaukee, and Racine, with 13,142 units, or almost 75 percent of the total allocation of 17,840 units, being assigned to the 14 housing analysis areas in these cities.

Source: SEWRPC.

inverse ranking of the existing housing need in the area. The size of the quota decreases as the magnitude of the housing need in the area increases.[1] The results of the application of this formula are presented in Table 193 and on Map 73.

Under the dispersal strategy, very small quotas—less than 50 units—would be assigned to the Cities of Kenosha, Milwaukee, and Racine. At the other extreme, relatively large quotas of more than 600 units would be assigned to housing areas 3 and 5 in Ozaukee County; housing areas 8 and 9 in Washington County; housing areas 13 and 14 in Milwaukee County; and housing area 54 in Kenosha County. Among the seven counties, the allocations assigned under the dispersal strategy ranged from a low of 984 units for Walworth County to approximately 4,200 units for Waukesha County.

The dispersal of publicly assisted housing throughout the suburban and outlying rural-urban fringe areas of southeastern Wisconsin, as recommended under this strategy, could be expected to result in greater economic and racial integration within the Region, since, based upon the analysis of the characteristics of households in housing need, most of the future occupants of such housing will be of low and moderate income and many may be expected to be members of minority races. Implementation of the dispersal strategy would also result in a diffusion of the social overhead costs associated with the provision of publicly assisted housing over many communities throughout southeastern Wisconsin rather than a continued concentration of this burden in the larger urban centers.

It should be recognized that if the publicly assisted housing which is necessary for the reduction or elimination of the existing physical housing need is allocated to the suburban and outlying rural-urban fringe areas of the Region as suggested under the dispersal strategy, it is likely that new construction will be more extensive than rehabilitation activity in the provision of the required units. The existing stock of substandard housing is, to a great extent, concentrated in the large urban centers of the Region. Accordingly, the potential for residential rehabilitation activity is considerably greater in the older urban centers of the Region than in its suburban and outlying rural-urban fringe areas. Indeed, because it recommends that housing which is to be provided by the public sector to eliminate the existing physical housing need should be distributed primarily throughout the suburban and rural-urban fringe areas of southeastern Wisconsin, the dispersal strategy may be expected to be more costly than other allocation systems, which allow for greater rehabilitation of the existing stock

[1] *Under the dispersal housing allocation strategy, the 49 housing areas were first ranked inversely according to each area's share of the total existing housing need in the Region. That is, the housing area with the largest share of the regional need received a rank of "1," while the housing area with the smallest share of the regional need received a rank of "49." Ultimately, each housing area was assigned a portion of the total allocation of 17,840 units equal to the proportion obtained by dividing its rank by the sum of all the ranks.*

Table 193

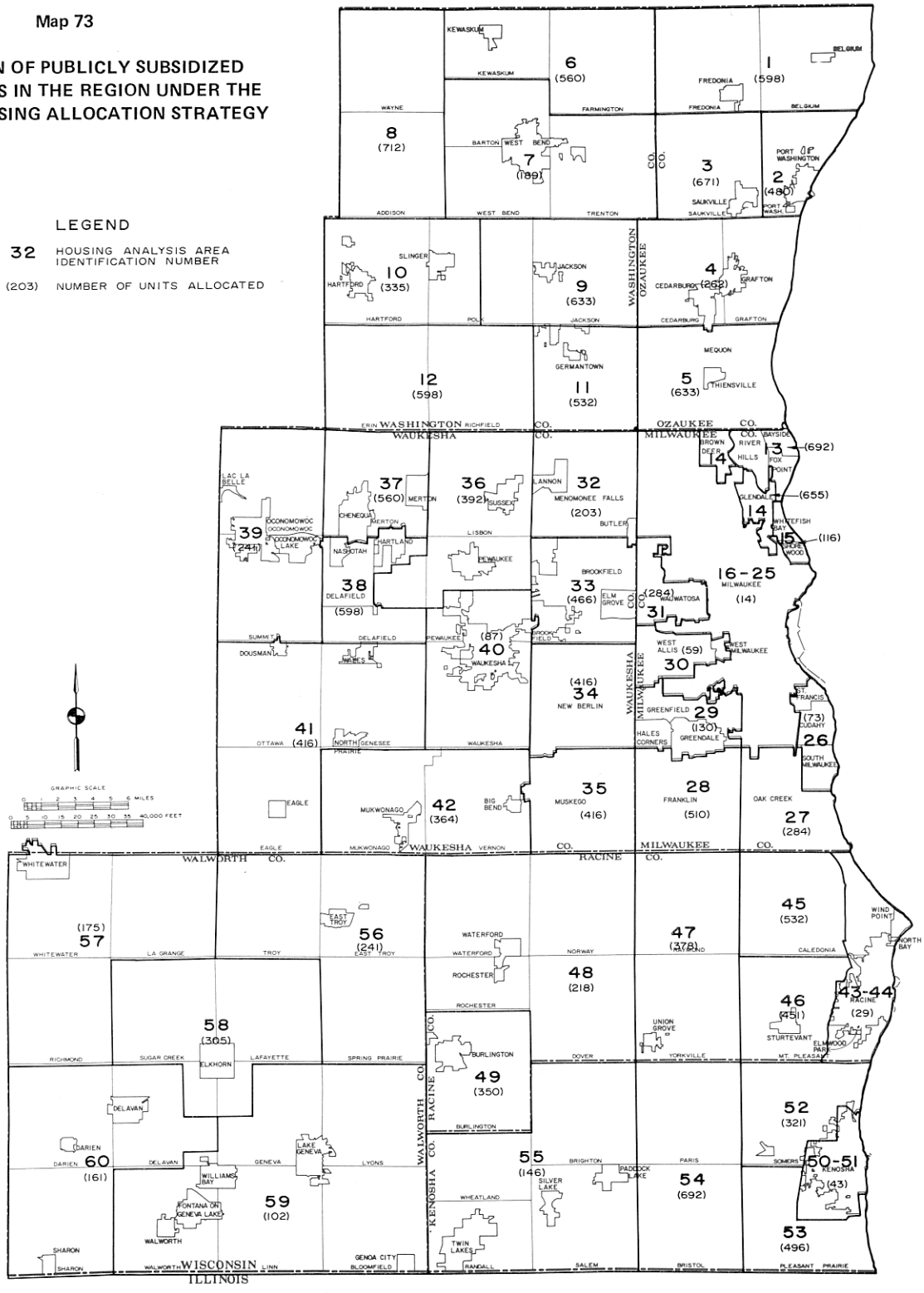
ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE DISPERSAL HOUSING ALLOCATION STRATEGY

Housing Analysis Area	Existing Housing Need 1970		Inverse Rank	Allocation (Units)
	Households	Percent of Region		
1	168	0.17	40	598
2	252	0.26	33	480
3	81	0.08	46	671
4	475	0.49	18	262
5	139	0.14	43	633
Ozaukee County	1,115	1.14	--	2,644
6	173	0.18	38	560
7	640	0.67	13	189
8	60	0.06	49	712
9	137	0.14	43	633
10	353	0.37	23	335
11	178	0.19	36	532
12	166	0.17	40	598
Washington County	1,707	1.78	--	3,559
13	69	0.07	47	692
14	104	0.11	45	655
15	1,227	1.28	8	116
16-25	58,455	60.86	1	14
26	3,022	3.15	5	73
27	447	0.47	19	284
28	205	0.21	35	510
29	1,043	1.09	9	130
30	3,484	3.63	4	59
31	448	0.47	19	284
Milwaukee County	68,504	71.34	--	2,817
32	635	0.66	14	203
33	264	0.27	32	466
34	281	0.29	30	437
35	289	0.30	28	416
36	301	0.31	27	392
37	172	0.18	38	560
38	164	0.17	40	598
39	565	0.59	16	241
40	1,886	1.96	6	87
41	292	0.30	28	416
42	338	0.35	25	364
Waukesha County	5,187	5.38	--	4,180
43-44	7,068	7.36	2	29
45	187	0.19	36	532
46	267	0.28	31	451
47	319	0.33	26	378
48	594	0.62	15	218
49	349	0.36	24	350
Racine County	8,784	9.14	--	1,958
50-51	5,230	5.44	3	43
52	367	0.38	22	321
53	213	0.22	34	496
54	72	0.07	47	692
55	1,031	1.07	10	146
Kenosha County	6,913	7.18	--	1,698
56	567	0.59	16	241
57	750	0.78	12	175
58	410	0.43	21	305
59	1,307	1.36	7	102
60	845	0.88	11	161
Walworth County	3,879	4.04	--	984
Region	96,089	100.00	--	17,840

Source: SEWRPC.

Map 73

ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE DISPERSAL HOUSING ALLOCATION STRATEGY



The dispersal strategy would assign very small allocations of publicly subsidized housing—less than 50 units—to the Cities of Kenosha, Milwaukee, and Racine, where past efforts to construct such housing have been concentrated. Relatively large allocations of more than 600 units would be assigned to housing analysis areas 3 and 5 in Ozaukee County, areas 8 and 9 in Washington County, areas 13 and 14 in Milwaukee County, and area 54 in Kenosha County. These allocations are inversely related to the incidence of housing need in these areas.

Source: SEWRPC.

of substandard housing. A comparison of the costs of implementation associated with each of the alternative housing allocation plans is presented in a later section of this chapter.

Composite Factor Housing Allocation Strategy

As indicated above, the existing need strategy and the dispersal housing allocation strategy assign the total amount of publicly assisted housing necessary to reduce or eliminate the existing physical housing need to housing analysis areas on the basis of a single parameter: the incidence of housing need within each area. The existing need strategy specifies a direct relationship between the size of the allocation of publicly assisted housing for an area and the magnitude of the area's existing housing need. The dispersal strategy specifies an inverse relationship in this regard. Many other parameters, however, might be incorporated into a meaningful regional housing allocation formula. The third alternative locational strategy prepared under the regional housing study, the composite factor housing allocation strategy, represents an attempt to allocate the needed publicly assisted housing units on the basis of a number of indicators relating to the suitability of an area for the location of such units.

The formula for the composite factor strategy includes three general types of indicators: the existing need in an area for publicly assisted housing, the suitability of the area for the location of such housing, and the past performance of the area in providing such housing. Within the overall formula, each of these general types of indicators is weighted equally. Under the composite factor strategy, one-third of the total allocation of 17,840 units is assigned to housing analysis areas on the basis of housing need within the area, one-third on the basis of the suitability of the area, and one-third on the basis of the past performance of the area in providing such housing (see Table 194). A description of the various indicators which are included in this composite allocation formula as well as the results of the application of this formula are presented below.

Need (5,946 Units): Under the composite factor strategy, the distribution of the existing housing need throughout southeastern Wisconsin is recognized as an important rational determinant of the location of future publicly assisted residential construction and rehabilitation activities, as evidenced by the fact that 5,946 units are allocated on the basis of this indicator. Each housing area receives a share of the total allocation equal to its proportion of the regional housing need in 1970. This indicator tends to assign relatively high allocations to the large central cities and substantially lower allocations to the suburban and outlying rural-urban fringe areas of the Region.

Suitability (5,947 Units): The composite factor strategy also includes a series of indicators which assign housing units to housing analysis areas according to their suitability as a location for publicly assisted housing. Indicators reflecting suitability with respect to the local fiscal structure, land availability, employment opportunities, and the availability of mass transit were included

Table 194

RELATIVE WEIGHTING OF INDICATORS UNDER THE COMPOSITE FACTOR HOUSING ALLOCATION STRATEGY FOR THE REGION

Indicator	Allocation	
	Units	Percent of Total
Existing Need	5,946	33.32
Area Suitability	5,947	33.34
Fiscal	1,486	8.32
Property Tax Rate	496	2.78
Property Tax Base	495	2.77
Personal Income	495	2.77
Land Availability	1,487	8.34
Employment Opportunities	1,487	8.34
Provision of Transit Service	1,487	8.34
Past Performance	5,947	33.34
Previous Efforts in Provision of Subsidized Housing	2,974	16.67
Existing Stock of Low-Cost Housing	2,973	16.67
Total	17,840	100.00

Source: SEWRPC.

in the allocation formula. Equal portions of the overall suitability allocation of 5,947 units were assigned under each of these four indicators, as described below.

Land Availability (1,487 Units): An important consideration of the suitability of an area for the location of publicly assisted housing, especially with respect to new construction, is the amount of developable land it contains. Under the regional housing study, the amount of developable land was determined for each U. S. Public Land Survey quarter section which was served by public sanitary sewerage facilities in 1970 by subtracting from the quarter section total the area which is included in primary environmental corridors, the area covered by soils poorly suited to residential development, the area covered by water and wetlands, and the area covered by existing urban development. The results were aggregated to the housing analysis area level and incorporated into the allocation formula. Specifically, under this indicator, each housing analysis area receives a share of the total allocation of 1,487 units which is equal to its proportion of all developable land in the Region.

Employment Opportunities (1,487 Units): Another important indicator of an area's suitability as a location for publicly assisted housing is the level of employment opportunities available in the area. The best available indicator of employment opportunities is the number of jobs currently provided within each area. Under this indicator, each housing analysis area receives a share of the total allocation of 1,487 units which is equal to the area's proportion of all jobs in the Region.

Availability of Mass Transit (1,487 Units): The availability of mass transit is another indicator of an area's suitability as a location for publicly assisted housing, since many of the future occupants of such housing, particularly very low income and elderly households, are likely to have a relatively high need for transit service. Accordingly, the areas within each housing analysis area for which public mass transit service was available were determined and the results applied in the formula. Under this indicator, each housing area receives a share of the total allocation of 1,487 units which is equal to the area's proportion of the total transit service area of the Region.

Fiscal Suitability (1,486 Units): The provision of certain types of publicly assisted housing may place additional burdens on the public financial resources of the community in which such housing is located. Therefore, it is reasonable that an allocation formula for the spatial distribution of such housing should take into account an area's fiscal capability to absorb it. Accordingly, three indicators of the wealth and taxing power of housing areas in the Region have been incorporated into the composite factor strategy: the property tax rate, the equalized value of property, and the level of personal income. Equal portions of the allocation of 1,486 units are assigned under each of these indicators, as described below.

Equalized Property Tax Rate (496 Units): The equalized property tax rate is the best available indicator of property tax effort among housing areas in southeastern Wisconsin. Equalized property tax rates were determined for each area as the total amount of property taxes levied by all communities in the housing area divided by the total equalized value of property within the housing area. Housing allocations were assigned to housing areas in the Region on the basis of an inverse ranking of the areas according to the equalized tax rate.[2] Under this indicator, the size of the allocation decreases as the property tax rate increases.

Equalized Property Values (495 Units): As indicated in Chapter VI of this report, the average equalized value of taxable property per household provides a good indication of the wealth and taxing potential for subareas of the Region. The average equalized value of property per household has been calculated for each housing analysis area as the total equalized value of taxable property for all communities in the housing area divided by the total number of households in the area. Housing allocations were made on the basis of a direct ranking of the areas according to the equalized value of property per household.[3] Under this indicator, the size of the allocation increases as the average per household equalized property value increases.

Personal Income (495 Units): Because the property tax levy in an area is not necessarily related to the level of personal income in that area, the level of personal income provides an additional indicator of the ability of the households of an area to help meet certain social burdens. Accordingly, a measure of the variation in the level of personal income among housing analysis areas has been incorporated into the composite factor strategy. The percentage of households having an income over $15,000 was calculated for each housing area based on results of the 1970 census. Housing allocations were then assigned to housing analysis areas on the basis of a direct ranking of the areas according to these percentages.[4] Under this indicator, the size of the allocation increases as the level of household income increases.

Performance (5,947 Units): Many communities of the Region have contributed to the resolution of areawide housing problems by allowing construction of substantial numbers of publicly subsidized housing units within their boundaries as well as by permitting the construction of privately financed modestly priced housing. Two indicators have been incorporated into the composite factor strategy in an attempt to recognize these efforts. Equal portions of the overall performance allocation of 5,947 units are assigned under each of these indicators, as described below.

Subsidized Housing (2,974 Units): Approximately 16,697 federally subsidized housing units were provided within the Region from January 1, 1936, through December 31, 1973. As part of the composite factor strategy, an effort was made to recognize the efforts of those communities which undertook a fair share of the subsidized construction activity during this period. Within each housing analysis area, the percent of the total housing stock which consists of federally subsidized housing was determined,

[2] *The 49 housing analysis areas were first ranked inversely according to the equalized property tax rate, that is, the housing area with the highest property tax rate received a rank of "1" while the housing area with the lowest property tax rate received a rank of "49." Ultimately, each housing area was assigned a portion of the total allocation of 496 units equal to the proportion obtained by dividing its rank by the sum of all the ranks.*

[3] *The 49 housing analysis areas were first ranked directly according to the equalized value of property per household, that is, the housing area with the lowest equalized value of property per household received a rank of "1" while the housing area with the highest equalized value of property per household received a rank of "49." Ultimately, each housing area was assigned a portion of the total allocation of 495 units equal to the proportion obtained by dividing its rank by the sum of all the ranks.*

[4] *The 49 housing analysis areas were first ranked directly according to the percentage of high-income households, that is, the housing area with the lowest percentage received a rank of "1" while the housing area with the highest percentage received a rank of "49." Ultimately, each housing area was assigned a portion of the total allocation of 495 units equal to the proportion obtained by dividing its rank by the sum of all the ranks.*

and housing allocations were assigned on the basis of an inverse ranking of the areas according to their percentage of subsidized housing.[5] Under this indicator, the size of the allocation decreases as the percentage of subsidized housing increases.

Low-Cost Housing (2,973 Units): In addition to federally subsidized housing construction activity, many communities in the Region have historically allowed the construction of privately financed moderately priced housing within their boundaries. As a result, these municipalities presently contain a relatively large number of housing units which may provide decent, safe, and sanitary living arrangements at a reasonable cost for many low- and moderate-income households. Under the composite factor strategy, the percent of the total housing consisting of low-cost housing in each housing area was determined based on the findings of the 1970 census. Homeowner units valued at less than $20,000 and rental units renting for less than $100 per month were included in the total of low-cost housing within each housing area. Housing allocations were assigned on the basis of an inverse ranking of the areas according to their percentage of low-cost housing.[6] Under this indicator, the size of the allocation decreases as the percentage of low-cost housing increases.

Results of Application of Composite Factor Allocation Strategy: The results of the application of the formula utilized under the composite factor strategy are presented in Table 195 and on Map 74. Under this strategy, the largest quotas of publicly assisted housing are assigned to the large urban centers of the Region, with 36 percent of the total allocation of 17,840 units assigned to the Cities of Kenosha, Milwaukee, and Racine. Conversely, significantly lower housing allocations are recommended for many of the suburban and outlying rural-urban fringe areas of the Region.

The City of Milwaukee would receive the highest allocation of all housing areas in the Region—5,098 housing units. Excluding the City of Milwaukee, quotas for the housing areas ranged from less than 100 units in housing areas 6 and 8 in Washington County to 791 units in the City of Racine. On a county basis, the housing allocations range from a low of 997 units in Walworth County to more than 8,700 units in Milwaukee County.

A comparison of Maps 72, 73, and 74 reveals that the housing allocations assigned under the composite factor strategy generally range between the allocations suggested under the existing need and dispersal strategies. Thus, in the large central cities of the Region, the allocations assigned under the composite factor strategy are considerably lower than those recommended under the existing need strategy but considerably higher than those recommended under the dispersal strategy. In most of the suburban and outlying rural-urban fringe areas, the housing allocation suggested under the composite factor strategy is greater than that recommended under the existing need strategy but less than that assigned under the dispersal strategy.

Because of the intermediate nature of the composite factor strategy, its implementation may be expected to produce some of the effects of both the existing need and dispersal strategies. Thus, similar to the existing need strategy, and because of the large housing allocations assigned to the major urban centers of the Region where concentrations of substandard housing exist, implementation of the composite factor strategy could be accomplished in a manner which maximizes the use of the existing housing stock through rehabilitation where such efforts are economically feasible. On the other hand, similar to the dispersal strategy, implementation of the composite factor strategy could potentially contribute to the economic and racial integration of the Region as well as a diffusion of the social overhead costs associated with the provision of publicly assisted housing over many communities throughout the Region, although the impact could be expected to be less than that of the dispersal strategy.

Different allocation patterns would be obtained if the entire allocation of 17,840 subsidized housing units were assigned separately on the basis of indicators relating to area need, area suitability, and area performance alone. The allocation of subsidized housing on the basis of the existing need alone is the existing need housing allocation strategy, one of the three basic alternative housing allocation strategies developed under the regional housing study. The allocation of the required subsidized housing solely on the basis of suitability or performance criteria is described below to provide an indication of the relative impact that each of these factors has on the final allocation generated in the composite factor housing allocation strategy.

The distribution of subsidized housing on the basis of indicators relating to suitability and performance alone is presented in Table 196 and on Map 75. The allocation of required subsidized housing according to suitability indicators alone yields a distribution which is, in many respects, similar to the distribution obtained under the overall composite factor housing allocation strategy.

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[5] *The 49 housing analysis areas were first ranked inversely according to the percentage of subsidized housing, that is, the housing area with the highest percentage of subsidized housing received a rank of "1" while the housing area with the lowest percentage of subsidized housing received a rank of "49." Ultimately, each housing area was assigned a portion of the total allocation of 2,974 units equal to the proportion obtained by dividing its rank by the sum of all the ranks.*

[6] *The 49 housing areas were first ranked inversely according to the percentage of low-cost housing, that is, the housing area with the highest percentage of low-cost housing received a rank of "1" while the housing area with the lowest percentage of low-cost housing received a rank of "49." Ultimately, each housing area was assigned a portion of the total allocation of 2,973 units equal to the proportion obtained by dividing its rank by the sum of all the ranks.*

Table 195

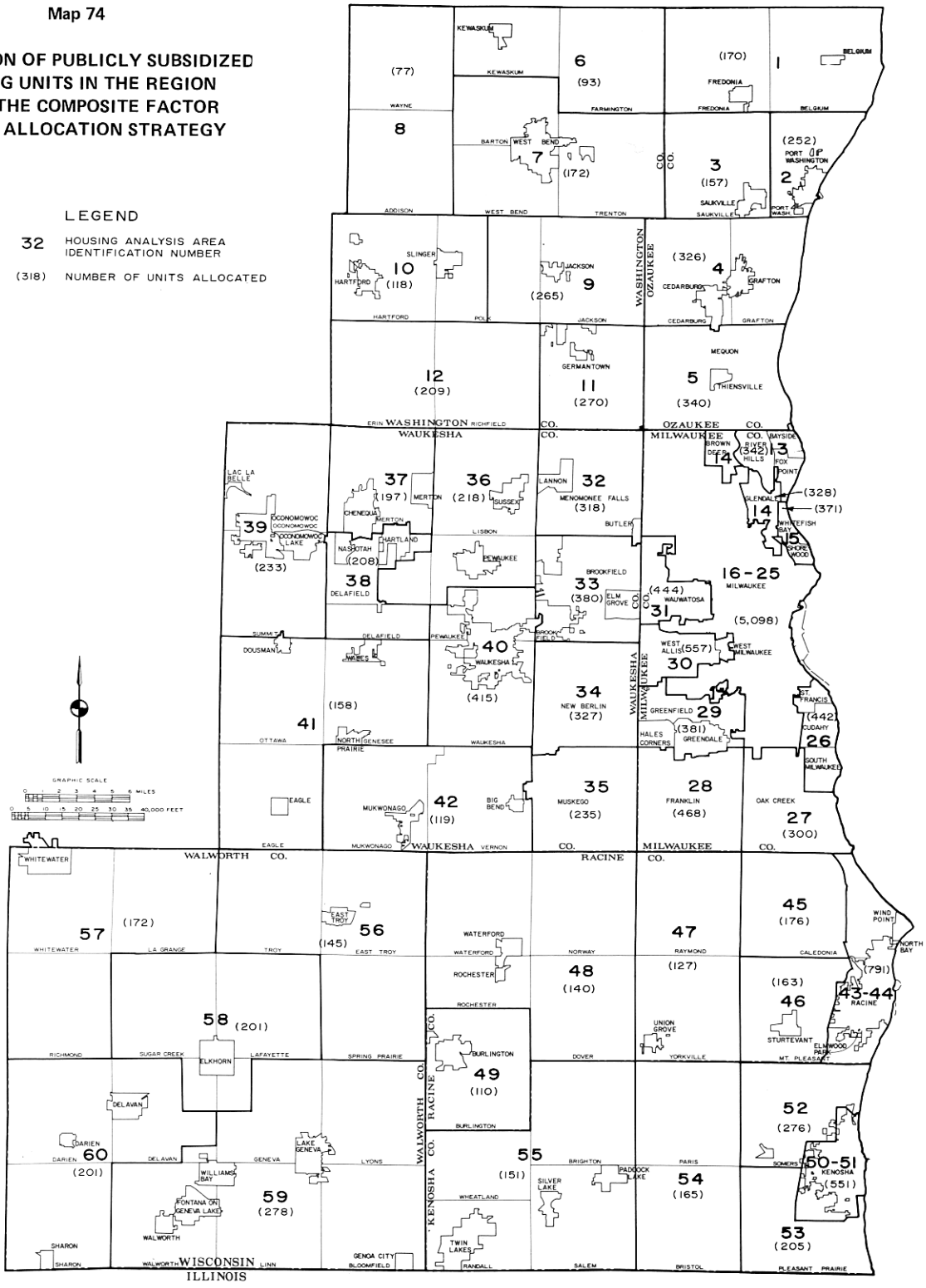
ALLOCATION OR PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE COMPOSITE FACTOR HOUSING ALLOCATION STRATEGY

Housing Analysis Area	Existing Need: 1970 (5,946 Units–33.32 Percent)			Area Suitability (5,947 Units–33.34 Percent)																				Past Performance (5,947 Units–33.34 Percent)										Total Allocation (17,840 Units)	
				Fiscal (1,486 Units–8.32 Percent)																				Subsidized Housing (2,974 Units–16.67 Percent)				Low-Cost Housing (2,973 Units–16.67 Percent)							
				Property Tax Rate (496 Units–2.77 Percent)			Property Tax Base (495 Units–2.78 Percent)			Personal Income (495 Units–2.77 Percent)				Land Availability (1,487 Units–8.34 Percent)			Employment Opportunities (1,487 Units–8.34 Percent)			Provision of Transit Service (1,487 Units–8.34 Percent)														
	Households in Need	Percent of Region	Allocation	Full Value Tax Rate 1970	Inverse Rank	Allocation	Average Equalized Value of Property Per Household 1970	Direct Rank	Allocation	Households with Income Greater Than $15,000 1970	Percent of Housing Analysis Area	Direct Rank	Allocation	Allocation Subtotal	Developable Land: 1970 (Acres)	Percent of Region	Allocation	Number of Jobs 1970	Percent of Region	Allocation	Service Area 1971 (Acres)	Percent of Region	Allocation	Allocation Subtotal	Subsidized Housing Units 1972	Percent of Housing Analysis Area	Inverse Rank	Allocation	Units Valued at $20,000 and Units With Rent Under $100/Month	Percent of Housing Analysis Area	Inverse Rank	Allocation	Allocation Subtotal	Units	Percent of Region
1	168	0.17	10	27.50	41	17	34,334	32	13	307	22.96	28	11	41	590	1.33	20	928	0.13	2	--	--	--	63	15	1.09	23	56	407	46.94	17	41	97	170	0.95
2	252	0.26	15	23.07	49	21	33,337	30	12	562	19.80	13	5	38	513	1.15	17	5,427	0.73	11	--	--	--	66	0	0.00	38	106	973	38.75	27	65	171	252	1.41
3	81	0.08	5	24.05	48	20	34,246	31	13	187	23.11	30	12	45	172	0.39	6	319	0.04	1	--	--	--	52	17	2.17	13	32	200	37.88	28	68	100	157	0.88
4	475	0.49	29	26.39	45	18	36,250	36	15	1,500	26.55	36	15	48	1,009	2.27	34	6,742	0.91	14	--	--	--	96	0	0.00	38	106	1,111	22.43	39	95	201	326	1.83
5	139	0.14	8	29.96	26	10	45,705	46	19	1,849	45.60	47	19	48	1,805	4.06	60	4,485	0.60	9	--	--	--	117	0	0.00	38	106	412	11.23	45	109	215	340	1.91
Ozaukee County	--	--	67	--	--	86	--	--	72	--	--	--	62	220	--	--	137	--	--	37	--	--	0	394	--	--	--	406	--	--	--	378	784	1,245	6.98
6	173	0.18	11	26.39	45	18	32,047	26	10	249	18.68	12	5	33	214	0.48	7	1,531	0.21	3	--	--	--	43	42	3.17	11	27	483	60.15	5	12	39	93	0.52
7	640	0.67	40	34.38	12	5	33,205	29	12	1,528	22.48	27	11	28	654	1.47	22	11,893	1.60	24	--	--	--	74	335	4.92	3	7	2,534	43.28	21	51	58	172	0.96
8	60	0.06	4	25.44	47	19	29,781	19	8	194	22.43	26	11	38	150	0.34	5	450	0.06	1	--	--	--	44	28	3.24	10	24	262	62.98	2	5	29	77	0.43
9	137	0.14	8	29.90	27	11	36,719	38	15	275	23.83	32	13	39	568	1.28	19	641	0.09	1	--	--	--	59	0	0.00	38	106	186	25.91	38	92	198	265	1.49
10	353	0.37	22	34.78	11	4	30,217	22	9	707	20.39	17	7	20	546	1.23	18	4,408	0.59	9	--	--	--	47	67	1.94	14	34	1,543	57.53	6	15	49	118	0.66
11	178	0.19	11	33.17	16	6	30,185	21	8	598	32.19	42	17	31	677	1.52	23	1,012	0.14	2	--	--	--	56	0	0.00	38	106	299	20.48	40	97	203	270	1.51
12	166	0.17	10	28.07	38	15	36,573	37	15	409	21.45	19	8	38	--	--	--	366	0.05	1	--	--	--	39	8	0.42	29	70	380	27.36	37	90	160	209	1.17
Washington County	--	--	106	--	--	78	--	--	77	--	--	--	72	227	--	--	94	--	--	41	--	--	0	362	--	--	--	374	--	--	--	362	736	1,204	6.74
13	69	0.07	4	37.21	8	3	49,777	48	19	2,607	67.17	49	20	42	752	1.69	25	3,980	0.54	8	3,858	2.55	38	113	0	0.00	38	106	67	1.79	49	119	225	342	1.92
14	104	0.11	7	33.29	15	6	52,528	49	20	2,875	40.07	45	18	44	666	1.50	22	19,450	2.62	39	2,436	1.61	24	129	8	0.11	33	80	771	11.14	46	112	192	328	1.84
15	1,227	1.28	76	39.61	5	2	27,380	13	5	4,568	40.28	46	19	26	14	0.03	0	11,360	1.53	23	2,669	1.76	26	75	0	0.00	38	106	928	8.88	47	114	220	371	2.08
16-25	58,455	60.86	3,619	48.33	1	1	21,214	1	1	35,009	14.77	2	1	3	6,264	14.09	208	356,479	48.07	712	50,835	33.56	500	1,423	11,445	4.83	4	10	90,536	44.75	19	46	56	5,098	28.57
26	3,022	3.15	187	40.01	4	2	26,840	11	4	3,305	20.14	16	6	12	1,057	2.38	35	12,759	1.72	26	7,402	4.89	73	146	194	1.18	21	51	6,006	41.98	24	58	109	442	2.48
27	447	0.47	28	30.55	24	10	47,327	47	19	864	24.05	33	13	42	3,211	7.22	107	5,675	0.77	11	2,788	1.84	27	187	256	7.14	1	2	934	31.03	34	83	85	300	1.68
28	205	0.21	12	38.90	7	3	25,652	8	3	791	27.00	37	15	21	715	1.61	24	2,165	0.29	4	21,817	14.40	214	263	0	0.00	38	106	688	28.36	36	87	193	468	2.62
29	1,043	1.08	65	37.08	9	4	28,455	16	6	4,182	32.14	41	17	27	1,203	2.71	40	8,897	1.20	18	9,476	6.26	93	178	246	1.89	15	36	2,156	17.71	42	102	138	381	2.14
30	3,484	3.63	216	35.89	10	4	37,051	39	16	4,446	17.52	9	4	24	494	1.11	17	51,138	6.90	103	8,200	5.41	80	224	202	0.80	26	63	9,409	43.11	22	54	117	557	3.12
31	448	0.47	28	31.98	19	8	39,642	43	17	6,095	33.99	44	18	43	528	1.19	18	39,003	5.26	78	8,730	5.76	86	225	10	0.06	35	84	2,647	16.29	44	107	191	444	2.49
Milwaukee County	--	--	4,242	--	--	43	--	--	110	--	--	--	131	284	--	--	496	--	--	1,022	--	--	1,161	2,963	--	--	--	644	--	--	--	882	1,526	8,731	48.94
32	636	0.66	39	31.52	22	9	35,147	35	14	2,809	31.60	40	16	39	719	1.62	24	11,512	1.55	23	--	--	--	86	4	0.04	37	89	1,379	16.69	43	104	193	318	1.78
33	264	0.27	16	29.90	27	11	45,097	45	18	5,837	53.36	48	19	48	1,379	3.10	46	15,703	2.12	32	1,607	1.06	16	142	0	0.00	38	106	721	6.86	48	116	222	380	2.13
34	281	0.29	17	29.04	35	14	34,994	34	14	2,197	32.47	43	17	45	1,168	2.63	39	6,206	0.84	12	789	0.52	8	104	0	0.00	38	106	1,128	17.79	41	100	206	327	1.83
35	289	0.30	18	28.73	36	15	26,168	10	4	860	29.21	38	15	34	729	1.64	24	1,759	0.24	4	--	--	--	62	2	0.07	34	82	995	37.60	30	73	155	235	1.32
36	301	0.31	18	28.00	39	16	31,250	24	10	1,179	25.54	35	14	40	452	1.02	15	2,761	0.37	6	--	--	--	61	53	1.15	22	54	1,153	30.21	35	85	139	218	1.22
37	172	0.18	11	31.37	23	9	38,290	41	17	509	31.11	39	16	42	--	--	--	421	0.06	1	--	--	--	43	5	0.31	30	73	470	37.69	29	70	143	197	1.10
38	164	0.17	10	31.53	21	8	27,872	14	6	551	23.64	31	13	27	590	1.33	20	2,533	0.34	5	--	--	--	52	15	0.64	28	68	716	34.64	32	78	146	208	1.17
39	565	0.59	35	30.25	25	10	29,659	18	7	1,249	21.38	18	7	24	759	1.71	25	4,541	0.61	9	--	--	--	58	40	0.68	27	65	1,766	34.68	31	75	140	233	1.31
40	1,886	1.96	117	29.33	34	14	31,333	25	10	2,990	22.42	25	10	34	1,501	3.38	50	19,976	2.69	40	6,647	4.39	65	189	409	3.07	12	29	4,132	33.82	33	80	109	415	2.33
41	292	0.30	18	27.29	42	17	30,159	20	8	528	21.90	21	8	33	95	0.21	3	805	0.11	2	--	--	--	38	35	1.46	17	41	660	39.15	25	61	102	158	0.89
42	338	0.35	21	31.81	20	8	27,043	12	5	493	22.16	23	9	22	594	1.34	20	982	0.13	2	--	--	--	44	95	4.24	6	15	811	47.40	16	39	54	119	0.67
Waukesha County	--	--	320	--	--	131	--	--	113	--	--	--	144	388	--	--	266	--	--	136	--	--	89	879	--	--	--	728	--	--	--	881	1,609	2,808	15.75
43-44	7,068	7.36	438	39.22	6	2	22,177	3	1	6,554	18.64	11	4	7	3,039	6.84	102	50,710	6.84	102	10,512	6.94	103	314	1,504	4.28	5	12	17,148	53.94	11	27	39	791	4.43
45	187	0.19	11	29.64	31	13	26,135	9	4	421	22.16	23	9	26	1,332	3.00	45	1,054	0.14	2	--	--	--	73	24	1.27	20	48	705	46.02	18	44	92	176	0.99
46	267	0.28	17	29.36	33	13	39,550	42	17	639	23.05	29	12	42	1,066	2.40	36	3,295	0.44	7	805	0.53	8	93	161	5.82	2	5	1,090	44.65	20	48	53	163	0.91
47	319	0.33	20	40.23	2	1	24,522	6	2	494	19.80	15	6	9	454	1.02	15	1,704	0.23	3	--	--	--	27	33	1.32	19	46	815	50.18	14	34	80	127	0.71
48	594	0.62	37	34.04	13	5	24,542	7	3	688	17.85	10	4	12	315	0.71	11	955	0.13	2	--	--	--	25	35	0.91	25	61	1,651	55.91	7	17	78	140	0.78
49	349	0.36	21	32.03	18	7	29,557	17	7	618	17.00	8	3	17	168	0.38	6	4,172	0.56	8	--	--	--	31	123	3.38	9	22	1,516	47.79	15	36	58	110	0.62
Racine County	--	--	544	--	--	41	--	--	34	--	--	--	38	113	--	--	215	--	--	124	--	--	111	563	--	--	--	194	--	--	--	206	400	1,507	8.44
50-51	5,230	5.44	323	40.03	3	1	21,994	2	1	3,916	15.20	3	1	3	868	1.95	29	34,470	4.65	69	10,198	6.73	100	201	1,002	3.89	7	17	13,974	61.25	4	10	27	551	3.09
52	367	0.38	23	26.98	43	17	24,102	5	2	393	19.69	14	6	25	1,536	3.46	51	1,515	0.20	3	1,260	0.83	12	91	0	0.00	38	106	630	42.48	23	56	162	276	1.55
53	213	0.22	13	28.50	37	15	22,569	4	2	418	21.99	22	9	26	1,007	2.27	34	1,694	0.23	3	1,450	0.96	14	77	1	0.05	36	86	819	53.32	12	29	115	205	1.15
54	72	0.07	4	29.85	29	12	37,573	40	16	297	24.83	34	14	42	318	0.72	11	263	0.04	1	--	--	--	54	2	0.17	31	75	353	51.16	13	32	107	165	0.92
55	1,031	1.07	64	33.59	14	6	28,346	15	6	768	16.66	7	3	15	691	1.65	23	1,267	0.17	3	--	--	--	41	66	1.43	18	44	2,373	63.42	1	2	46	151	0.85
Kenosha County	--	--	427	--	--	51	--	--	27	--	--	--	33	111	--	--	148	--	--	79	--	--	126	464	--	--	--	328	--	--	--	129	457	1,348	7.56
56	567	0.59	35	27.56	40	16	34,739	33	13	429	21.47	20	8	37	284	0.64	10	1,109	0.15	2	--	--	--	49	31	1.54	16	39	736	54.84	9	22	61	145	0.81
57	750	0.78	46	32.33	17	7	32,076	27	11	525	16.07	5	2	20	466	1.05	16	3,858	0.52	8	--	--	--	44	120	3.67	8	19	973	39.11	26	63	82	172	0.96
58	410	0.43	26	29.49	32	13	30,869	23	9	363	15.73	4	2	24	572	1.29	19	3,673	0.50	7	--	--	--	50	0	0.00	38	106	927	54.85	8	19	125	201	1.13
59	1,307	1.36	81	26.86	44	18	42,526	44	18	1,028	14.73	1	1	37	1,153	2.59	39	9,449	1.27	19	--	--	--	95	9	0.13	32	78	2,985	54.43	10	24	102	278	1.56
60	845	0.88	52	29.67	30	12	32,956	28	11	649	16.26	6	2	25	1,394	3.14	47	6,108	0.82	12	--	--	--	84	39	0.98	24	58	1,927	62.73	3	7	65	201	1.13
Walworth County	--	--	240	--	--	66	--	--	62	--	--	--	15	143	--	--	131	--	--	48	--	--	0	322	--	--	--	300	--	--	--	135	435	997	5.59
Region	--	--	5,946	--	--	496	--	--	495	--	--	--	495	1,486	--	--	1,487	--	--	1,487	--	--	1,487	5,947	--	--	--	2,974	--	--	--	2,973	5,947	17,840	100.00

Source: SEWRPC.

Map 74

ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE COMPOSITE FACTOR HOUSING ALLOCATION STRATEGY



Under the composite factor strategy, publicly subsidized housing units would be assigned to a housing analysis area based on the area's existing housing need, its suitability, and its past performance in providing low- and moderate-income housing. Under this allocation strategy, the largest quotas of publicly assisted housing were assigned to the large urban centers of the Region, with 6,440 units, or 36 percent of the 17,840 total units assigned, being allocated to the Cities of Kenosha, Milwaukee, and Racine. Excluding allocation to these three cities, the allocations for the remaining housing analysis areas ranged from less than 100 units in areas 6 and 8 in Washington County to 557 units in area 30 in Milwaukee County.

Source: SEWRPC.

Table 196

ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION BASED ON THE COMPOSITE FACTOR HOUSING ALLOCATION STRATEGY AND BASED ON SUITABILITY AND PERFORMANCE INDICATORS ALONE

Housing Analysis Area	Allocation Based on Composite Factor Housing Allocation Strategy		Allocation Based on Suitability Indicators		Allocation Based on Performance Indicators	
	Units	Percent of Total	Units	Percent of Total	Units	Percent of Total
1	170	0.95	189	1.06	291	1.63
2	252	1.41	198	1.11	514	2.88
3	157	0.88	155	0.87	300	1.68
4	326	1.83	287	1.61	603	3.38
5	340	1.91	351	1.97	646	3.62
Ozaukee County	1,245	6.98	1,180	6.62	2,354	13.19
6	93	0.52	128	0.72	118	0.66
7	172	0.96	221	1.24	175	0.98
8	77	0.43	132	0.74	87	0.49
9	265	1.49	177	0.99	594	3.33
10	118	0.66	141	0.79	146	0.82
11	270	1.51	168	0.94	608	3.41
12	209	1.17	118	0.66	480	2.69
Washington County	1,204	6.74	1,085	6.08	2,208	12.38
13	342	1.92	339	1.90	672	3.76
14	328	1.84	387	2.17	576	3.23
15	371	2.08	225	1.26	660	3.70
16-25	5,098	28.57	4,275	23.95	168	0.94
26	442	2.48	439	2.46	326	1.83
27	300	1.68	560	3.14	255	1.43
28	468	2.62	789	4.42	580	3.25
29	381	2.14	533	2.99	414	2.32
30	557	3.12	673	3.77	351	1.97
31	444	2.49	674	3.78	573	3.21
Milwaukee County	8,731	48.94	8,894	49.84	4,575	25.64
32	318	1.78	259	1.45	580	3.25
33	380	2.13	426	2.39	665	3.73
34	327	1.83	312	1.75	617	3.46
35	235	1.32	186	1.04	466	2.61
36	218	1.22	184	1.03	417	2.34
37	197	1.10	128	0.72	428	2.40
38	208	1.17	155	0.87	439	2.46
39	233	1.31	175	0.98	419	2.35
40	415	2.33	567	3.18	326	1.83
41	158	0.89	114	0.64	307	1.72
42	119	0.67	132	0.74	162	0.91
Waukesha County	2,808	15.75	2,638	14.79	4,826	27.06
43-44	791	4.43	942	5.28	118	0.66
45	176	0.99	219	1.23	277	1.55
46	163	0.91	278	1.56	159	0.89
47	127	0.71	80	0.45	241	1.35
48	140	0.78	75	0.42	234	1.31
49	110	0.62	93	0.52	175	0.98
Racine County	1,507	8.44	1,687	9.46	1,204	6.74

Table 196 (continued)

Housing Analysis Area	Allocation Based on Composite Factor Housing Allocation Strategy		Allocation Based on Suitability Indicators		Allocation Based on Performance Indicators	
	Units	Percent of Total	Units	Percent of Total	Units	Percent of Total
50-51	551	3.09	603	3.38	80	0.45
52	276	1.55	273	1.53	485	2.72
53	205	1.15	230	1.29	344	1.93
54	165	0.92	162	0.91	321	1.80
55	151	0.85	123	0.69	137	0.77
Kenosha County	1,348	7.56	1,391	7.80	1,367	7.67
56	145	0.81	146	0.82	184	1.03
57	172	0.98	132	0.74	246	1.38
58	201	1.13	150	0.84	375	2.10
59	278	1.56	285	1.60	307	1.72
60	201	1.13	252	1.41	194	1.09
Walworth County	997	5.59	965	5.41	1,306	7.32
Region	17,840	100.00	17,840	100.00	17,840	100.00

Source: SEWRPC.

Under a suitability allocation, the largest quotas of subsidized housing would be assigned to the large urban centers of the Region, with 33 percent of the total allocation being assigned to the Cities of Kenosha, Milwaukee, and Racine. Significantly lower housing allocations would be assigned to the suburban and outlying rural-urban fringe areas of the Region. Large quotas of subsidized housing are assigned to the older urban centers of the Region because of their greater suitability in terms of the amount of developable land, employment opportunities, and transit service.

As also indicated in Table 196 and on Map 75, the allocation of the required subsidized housing to housing analysis areas on the basis of their past performance in providing subsidized or privately financed modestly priced housing would result in a distribution which is substantially different from that obtained under the composite factor strategy. According to performance indicators alone, relatively small allocations would be assigned to the older urban centers of the Region, which have been most active in efforts to resolve the housing problems in southeastern Wisconsin. Based on performance indicators alone, the Cities of Kenosha, Milwaukee, and Racine would receive only 366 units, or 2 percent of the total. Conversely, higher allocations would be assigned to many suburban and outlying rural-urban fringe communities which historically have been less active in the resolution of the housing problem.

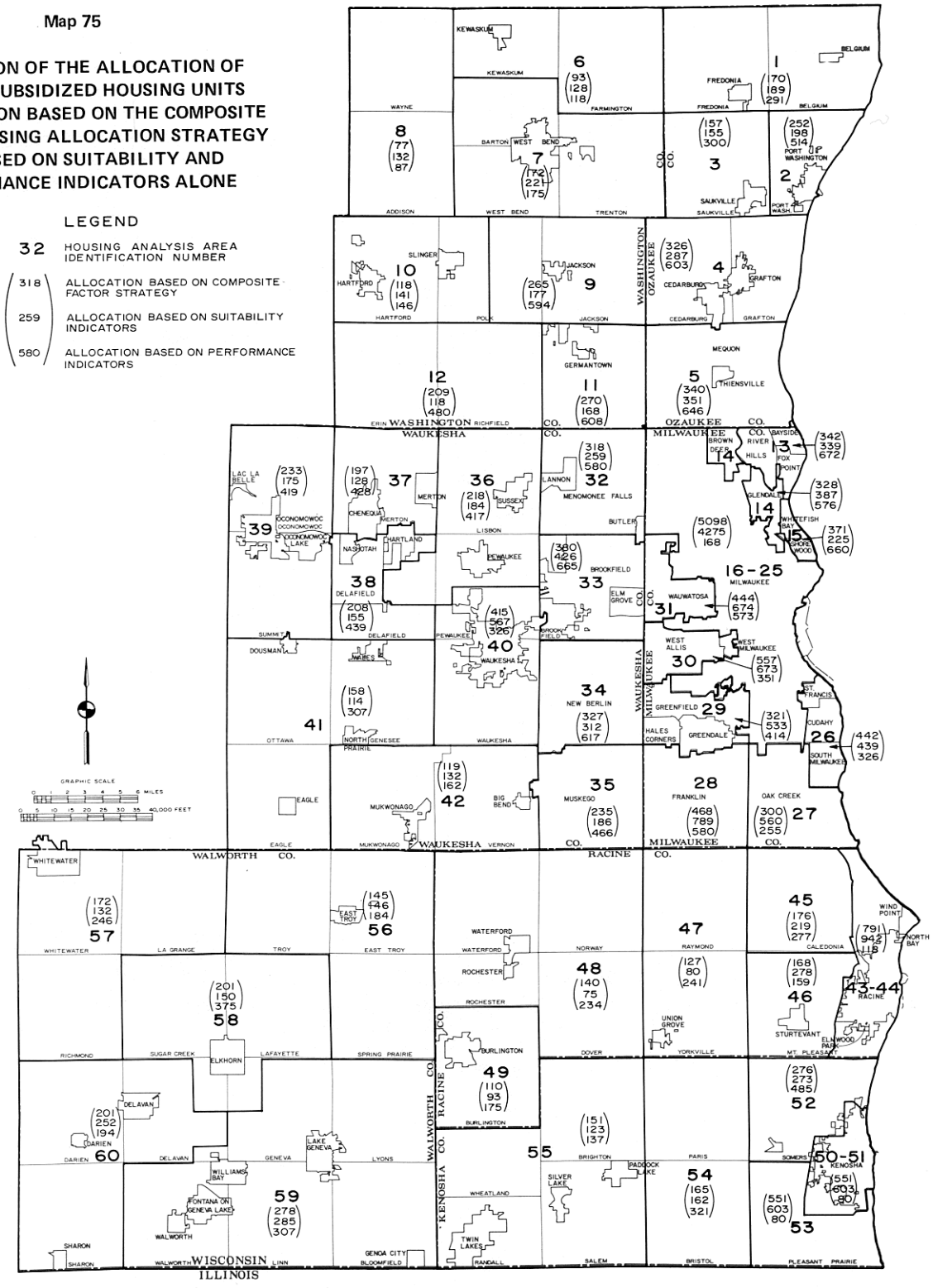
EVALUATION OF ALTERNATIVE REGIONAL HOUSING ALLOCATION STRATEGIES

Previous sections of this chapter have indicated that the housing problem in the Region is twofold: an economic problem for those households which must pay a disproportionate share of their income to occupy decent, safe, and sanitary housing; and a physical problem for those households which, due to economic, institutional, and social constraints, must occupy substandard or overcrowded housing units. With respect to the physical housing need, it was found that approximately 26,500 households in the Region currently reside in substandard or overcrowded housing units and are unable to secure adequate housing in the normal operation of the housing market. It is estimated that with a more efficient use of the existing stock of overcrowded but otherwise sound housing, the physical housing need could be eliminated with the provision of 17,800 publicly assisted housing units.

While the amount of subsidized housing necessary to overcome the physical housing need is readily quantified, the determination of areas within which the required subsidized housing should be located is a major planning problem, the resolution of which has significant implications for the future socioeconomic structure of the Region. Alternative regional housing location strategies are therefore required to identify areas within the Region

Map 75

COMPARISON OF THE ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION BASED ON THE COMPOSITE FACTOR HOUSING ALLOCATION STRATEGY AND BASED ON SUITABILITY AND PERFORMANCE INDICATORS ALONE



An allocation of publicly subsidized housing based on an area's suitability for housing development would assign greater quantities of such housing to the large urban centers of the Region, with 5,820 units, or about 33 percent of the total allocation of 17,840 units, assigned to the Cities of Kenosha, Milwaukee, and Racine. Based on an area's past performance in providing low- and moderate-income housing, these same cities would be allocated only 366 units, or 2 percent of the total allocation. Based on the composite factor allocation strategy, these same three cities would be allocated 6,440 units.

Source: SEWRPC.

where publicly assisted housing should be provided to meet the physical housing need. Three housing allocation strategies—an existing need strategy, a dispersal strategy, and a composite factor strategy—were formulated under the regional housing study, each offering an alternative geographic distribution within which to meet the physical housing need. The final section of this chapter will assess these alternative strategies against the adopted regional housing objectives to determine which strategy should be adopted as the recommended one for southeastern Wisconsin.

All of the alternative regional housing allocation strategies were assumed to meet six of the nine regional housing objectives equally well. This assumption was made because the alternative strategies all deal with the provision of housing for low- and moderate-income households, which out of necessity must be provided with the assistance of the public sector. The public agencies which provide the required assistance will design their projects to meet the regional housing objectives to the maximum extent possible. The following six regional housing objectives would be equally well achieved by each of the alternative strategies: regional housing objective Number 1—the provision of decent, safe, and sanitary housing for all residents of the Region; Number 2—the provision of an adequate stock of decent, safe, and sanitary housing to meet the Region's total housing requirement and, as components of that requirement, the effective market demand and true housing need; Number 4—the relocation of persons to be displaced by publicly related development programs to housing which is not only decent, safe, and sanitary but is of at least equal quality and, if necessary, the public provision of the replacement housing; Number 5—the provision of housing which is designed to be functionally suitable for the occupants residing therein; Number 7—the provision of aesthetically pleasing housing properly sited and designed to maintain or improve the overall character and appearance of the neighborhood in which it is located; and Number 8—the provision of housing within a suitable physical environment and so sited and designed to comprise an integral part of the neighborhood and the community in which it is located.

The following three regional housing objectives would be met in different degrees by the alternative strategies: regional housing objective Number 3—the maintenance, preservation, and, where necessary, the rehabilitation of the existing stock of housing; Number 6—the provision of adequate locational choice of housing; and Number 9—the efficient and economical satisfaction of housing need meeting all other objectives at the lowest possible cost.

Regional housing objective Number 3 would not be met equally by each alternative strategy because each strategy allocates varying quantities of publicly assisted housing units to the housing analysis areas. Those strategies which allocate such housing primarily to areas with a significant stock of existing housing which can be rehabilitated will best meet the objective. Allocation strategies which propose housing units in areas where relatively small quantities of existing housing can be rehabilitated will not meet this objective, since all allocation of this type would result in less rehabilitation and thus an underutilization of the existing housing stock.

Regional housing objective Number 6 would not be met equally by each alternative strategy, since the alternative strategies by their very nature propose to allocate varying quantities of housing units to specific housing analysis areas in the Region, and thus, depending on the allocation method utilized, may facilitate or constrain the locational choice of housing in other areas of the Region.

Regional housing objective Number 9 would also not be met equally by each alternative strategy because each strategy proposes allocating varying quantities of publicly assisted units to various housing analysis areas in the Region. Owing to the relatively lower cost of housing rehabilitation versus new construction, those strategies which allocate housing units to areas where the existing stock can be rehabilitated will facilitate the provision of needed housing at a lower cost than those areas where housing must be newly constructed, and thus would better meet this objective.

The rest of this section will be devoted to an assessment of the alternative regional housing location strategies against these three regional housing objectives in an effort to determine which regional housing locational strategy best meets these objectives.

Evaluation of Alternative Regional Housing Allocation Strategies Relative to Meeting Regional Housing Objective Number 3

The main emphasis of regional housing objective Number 3 is the maximum utilization of the existing housing stock. Therefore, housing strategies which allocate units to housing analysis areas with a substantial housing stock which could be rehabilitated would best meet this standard. Table 197 indicates the potential amount of housing rehabilitation which could be undertaken under the three allocation strategies.[7] Based on data in this table, the existing need and composite factor strategies appear to best meet the housing objectives related to the utilization of the existing housing stock. Over 9,500 housing units could be rehabilitated under each of these strategies, far more than the 3,400 housing units which could be

[7] *It should be noted that the quantification of housing units determined suitable for rehabilitation was based on the Commission's 1972 exterior housing condition survey, which quantified, at the county level, substandard housing units based on ranges of housing defect points (see Chapter V, "Existing Housing Stock"). Substandard units within each housing analysis area were then estimated on the basis of the relative distribution of dilapidated housing units among housing analysis areas within each county, utilizing the 1960 Census of Housing. It was further assumed, based upon housing rehabilitation work actually conducted in the City of Milwaukee, that 90 percent of the substandard housing units in each housing analysis area could be expected to be economically feasible to rehabilitate.*

Table 197

COMPARISON OF THE ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE EXISTING NEED, DISPERSAL, AND COMPOSITE FACTOR HOUSING ALLOCATION STRATEGIES

Housing Analysis Area	Existing Need Housing Allocation				Dispersal Housing Allocation				Composite Factor Housing Allocation			
	New Construction (Units)	Rehabilitation (Units)	Total Units	Total Percent of Region	New Construction (Units)	Rehabilitation (Units)	Total Units	Total Percent of Region	New Construction (Units)	Rehabilitation (Units)	Total Units	Total Percent of Region
1	0	30	30	0.17	529	69	598	3.35	101	69	170	0.95
2	0	46	46	0.26	433	47	480	2.69	205	47	252	1.41
3	0	14	14	0.08	655	16	671	3.76	141	16	157	0.88
4	28	59	87	0.49	203	59	262	1.47	267	59	326	1.83
5	0	25	25	0.14	586	47	633	3.55	293	47	340	1.91
Ozaukee County	28	174	202	1.14	2,406	238	2,644	14.82	1,007	238	1,245	6.98
6	7	25	32	0.18	535	25	560	3.14	68	25	93	0.52
7	82	38	120	0.67	151	38	189	1.06	134	38	172	0.96
8	0	11	11	0.06	694	18	712	4.00	59	18	77	0.43
9	5	20	25	0.14	613	20	633	3.55	245	20	265	1.49
10	3	63	66	0.37	272	63	335	1.88	55	63	118	0.66
11	22	12	34	0.19	520	12	532	2.98	258	12	270	1.51
12	13	17	30	0.17	581	17	598	3.35	192	17	209	1.17
Washington County	132	186	318	1.78	3,366	193	3,559	19.96	1,011	193	1,204	6.74
13	0	12	12	0.07	680	12	692	3.88	330	12	342	1.92
14	0	20	20	0.11	609	46	655	3.67	282	46	328	1.84
15	165	63	228	1.28	53	63	116	0.65	308	63	371	2.08
16-25	4,628	6,231	10,859	60.86	0	14	14	0.08	0	5,098	5,098	28.57
26	369	193	562	3.15	0	73	73	0.41	249	193	442	2.48
27	0	84	84	0.47	110	174	284	1.59	126	174	300	1.68
28	0	37	37	0.21	422	88	510	2.86	380	88	468	2.62
29	126	68	194	1.09	62	68	130	0.73	313	68	381	2.14
30	461	187	648	3.63	0	59	59	0.33	370	187	557	3.12
31	34	50	84	0.47	234	50	284	1.59	394	50	444	2.49
Milwaukee County	5,783	6,945	12,728	71.34	2,170	647	2,817	15.79	2,752	5,979	8,731	48.94
32	38	80	118	0.66	123	80	203	1.14	238	80	318	1.78
33	0	48	48	0.27	414	52	466	2.61	328	52	380	2.13
34	0	52	52	0.29	385	52	437	2.45	275	52	327	1.83
35	0	54	54	0.30	322	94	416	2.33	141	94	235	1.32
36	20	35	55	0.31	357	35	392	2.20	183	35	218	1.22
37	18	14	32	0.18	546	14	560	3.14	183	14	197	1.10
38	0	30	30	0.17	513	85	598	3.35	123	85	208	1.17
39	0	105	105	0.59	124	117	241	1.35	116	117	233	1.31
40	93	257	350	1.96	0	87	87	0.49	158	257	415	2.33
41	0	54	54	0.30	297	119	416	2.33	39	119	158	0.89
42	2	60	62	0.35	304	60	364	2.04	59	60	119	0.67
Waukesha County	171	789	960	5.38	3,385	795	4,180	23.43	1,843	965	2,808	15.75
43-44	1,056	257	1,313	7.36	0	29	29	0.16	534	257	791	4.43
45	0	34	34	0.19	457	75	532	2.98	101	75	176	0.99
46	0	50	50	0.28	303	148	451	2.53	15	148	163	0.91
47	32	37	59	0.33	341	37	378	2.12	90	37	127	0.71
48	16	95	111	0.62	123	95	218	1.22	45	95	140	0.78
49	0	64	64	0.36	267	83	350	1.96	27	83	110	0.62
Racine County	1,094	537	1,631	9.14	1,491	467	1,958	10.97	812	695	1,507	8.44
50-51	583	387	970	5.44	0	43	43	0.24	164	387	551	3.09
52	0	68	68	0.38	232	89	321	1.80	187	89	276	1.55
53	0	39	39	0.22	297	199	496	2.78	6	199	205	1.15
54	0	12	12	0.07	632	60	692	3.88	105	60	165	0.92
55	0	191	191	1.07	0	146	146	0.82	0	151	151	0.85
Kenosha County	583	697	1,280	7.18	1,161	537	1,698	9.52	462	886	1,348	7.56
56	0	105	105	0.59	101	140	241	1.35	5	140	145	0.81
57	79	60	139	0.78	115	60	175	0.98	112	60	172	0.96
58	0	77	77	0.43	204	101	305	1.71	100	101	201	1.13
59	53	190	243	1.36	0	102	102	0.57	88	190	278	1.56
60	56	101	157	0.88	60	101	161	0.90	100	101	201	1.13
Walworth County	188	533	721	4.04	480	504	984	5.51	405	592	997	5.59
Region	7,979	9,861	17,840	100.00	14,459	3,381	17,840	100.00	8,292	9,548	17,840	100.00

Source: SEWRPC.

rehabilitated under the dispersal strategy. While both the existing need and the composite factor strategies propose similar numbers of rehabilitated housing units, the composite factor strategy provides for greater flexibility in the number and geographic location of housing analysis areas where such housing units may be rehabilitated. For example, the composite factor strategy proposes to rehabilitate more housing units in six of the seven counties. Only in Milwaukee County does the existing need strategy propose to rehabilitate more units than the composite factor strategy. The composite factor strategy, therefore, would facilitate rehabilitation efforts in outlying suburban and rural housing analysis areas to a greater degree than the existing need or dispersal strategies.

Based on the number of housing units which are suitable for rehabilitation under the composite factor strategy, as well as the more favorable geographic distribution of these units throughout the housing analysis areas, it may be concluded that the composite factor strategy best meets regional housing objective Number 3.

Evaluation of Alternative Regional Housing Allocation Strategies Relative to Meeting Regional Housing Objective Number 6

Evaluation of the alternative regional housing allocation strategies relative to regional housing objective Number 6 can be facilitated through a review of Table 197 and Map 76. As shown in Table 197 and on Map 76, the existing need strategy allocates almost 74 percent of the 17,840 total units to housing areas which include the Cities of Kenosha, Milwaukee, and Racine. Although much of the existing housing need is located in these urban areas, such an allocation strategy may severely restrict the locational choice of households in the Region, especially those which would prefer housing units located outside of the urban areas. Conversely, the dispersal strategy allocates most units to the suburban and outlying rural-urban fringe housing analysis areas. This method, which ostensibly provides greater housing locational choice, would severely limit or restrict the locational choice for households which may seek units in the urban areas of the Region.

The composite factor strategy, in attempting to recognize each housing analysis area's housing need, its ability to absorb additional publicly assisted housing units, and its past efforts in meeting the housing needs of low- and moderate-income households in its area, provides a relatively uniform distribution of units and thereby a greater flexibility in choice of housing location for those households in need. The composite factor strategy in 40 of the 49 areas would result in a housing allocation ranging between the allocations of the existing need and the dispersal strategies for the same housing analysis area. It would appear, then, that the composite factor strategy best meets regional housing objective Number 6.

Evaluation of Alternative Regional Housing Allocation Strategies Relative to Meeting Regional Housing Objective Number 9

Housing allocation strategies which propose housing units in areas having a substantial housing stock which could be rehabilitated would not only make the most efficient use of the existing housing stock, and therefore best meet regional housing objective Number 3, but would also best meet regional housing objective Number 9, which seeks to satisfy regional housing need at the lowest possible cost. Housing need can be satisfied most economically under a strategy of this type because the cost of providing decent, safe, and sanitary housing units through rehabilitation of an existing unit is substantially less than through the construction of new housing units. Based upon detailed cost data for housing units rehabilitated by a nonprofit housing corporation[8] in the City of Milwaukee, it was determined that a substandard housing unit approximately 1,100 square feet in area requiring complete interior and exterior rehabilitation could be rehabilitated for $16,100 including lot in 1972, and thus provide a decent, safe, and sanitary housing unit with a physical life of approximately 30 additional years. Conversely, the cost of constructing a new unit of 1,100 square feet in 1972 was over $24,600 including lot, or about 53 percent more than the cost of rehabilitation.

Based on these two average costs, and assuming the 17,840 housing units required to meet the housing shortage were provided as proposed by the alternative regional housing allocation strategies indicated in Table 197, the cost of meeting housing need would approximate $355 million under the existing need strategy, $410 million under the dispersal strategy, and $358 million under the composite factor strategy. It would appear that the estimated cost of satisfying the current housing shortage utilizing the existing need or composite factor strategies are approximately equal, and both strategies would substantially meet the objective of the economic satisfaction of housing need at the lowest possible cost. Both strategies provide potential overall cost savings of more than $50 million when compared with the cost of meeting the housing shortage utilizing the dispersal strategy.

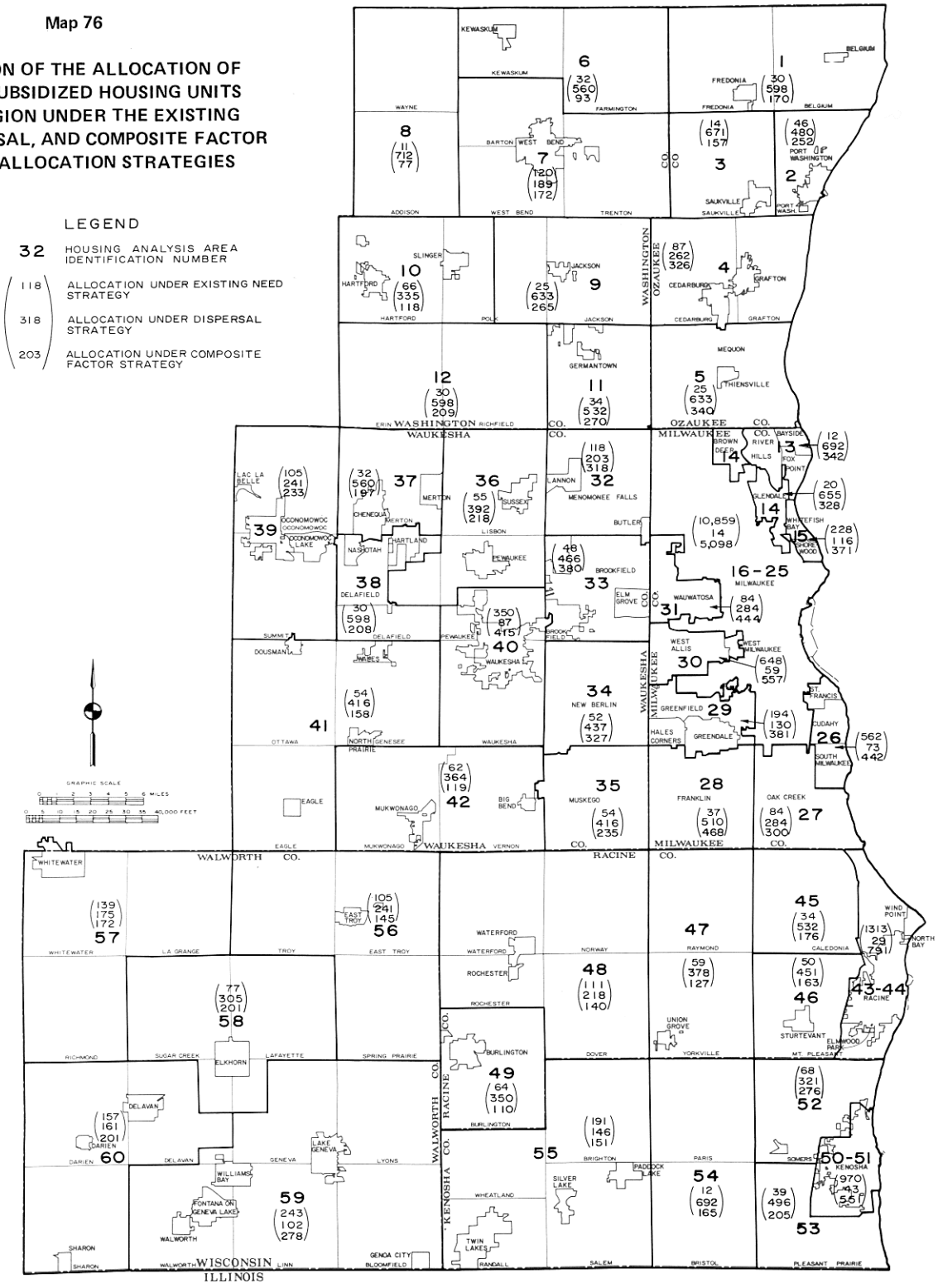
Plan Selection

To assist in the selection of a single housing allocation strategy for the Region, the alternative strategies were ranked in order of the degree to which they meet the regional housing objectives concerned with 1) the maximum utilization of the existing housing stock, 2) the provision of adequate locational choice, and 3) the economic satisfaction of the existing housing need. For example, based on the foregoing discussion, it was concluded that of the three allocation strategies, the composite factor strategy would best facilitate the utilization of the existing housing stock, and therefore it received a rank of 3 with respect to this objective. Conversely, the dispersal strategy would least facilitate the utilization of the existing housing stock, and received a rank of 1 with respect to this objective. Total strategy values were obtained by summing the individual rankings. Logically, the strategy with the highest overall value should be recommended for use as the regional housing allocation strategy.

[8] *Over 190 housing units were rehabilitated by the Northside Citizens Neighborhood Conservation Corporation from 1968 through 1972.*

Map 76

COMPARISON OF THE ALLOCATION OF PUBLICLY SUBSIDIZED HOUSING UNITS IN THE REGION UNDER THE EXISTING NEED, DISPERSAL, AND COMPOSITE FACTOR HOUSING ALLOCATION STRATEGIES



The existing need strategy allocates almost 74 percent of the 17,840 total units needed to the Cities of Milwaukee, Racine, and Kenosha. While much of the existing need may be located in these urban areas, this strategy may severely restrict the locational choice of households. The dispersal strategy, on the other hand, allocates most units to the suburban and outlying rural-urban fringe housing analysis areas. The composite factor strategy attempts to recognize each area's housing need, its ability to absorb additional publicly assisted housing units, and its past efforts in meeting the housing needs of low- and moderate-income households in its area, and thereby provide a more balanced distribution of units, thus affording greater locational choice of housing for households in need.

Source: SEWRPC.

Table 198

RANKING OF ALTERNATIVE HOUSING ALLOCATION STRATEGIES IN ORDER OF DEGREE TO WHICH THEY MEET SELECTED REGIONAL HOUSING OBJECTIVES

Housing Allocation Strategy	Regional Housing Objective			Strategy Value (Total)
	The Maintenance, Preservation, and Where Necessary, the Rehabilitation of the Existing Stock of Housing (No. 3)	The Provision of Adequate Locational Choice of Housing (No. 6)	The Efficient and Economical Satisfaction of Housing Need Meeting All Other Objectives at the Lowest Possible Cost (No. 9)	
	Rank	Rank	Rank	
Existing Need	2	2	3	7
Dispersal	1	1	2	4
Composite Factor. . .	3	3	3	9

Source: SEWRPC.

The results of this evaluation and selection procedure are shown in Table 198. These results indicate that the composite factor strategy best meets the regional housing objectives, and it may be concluded that the composite factor strategy should be adopted as the recommended housing allocation strategy for southeastern Wisconsin.

Short-Range Housing Allocation Strategy

In May of 1971, at the specific request of the U. S. Department of Housing and Urban Development (HUD), the Commission modified its ongoing comprehensive regional housing study and undertook a short-range action housing program in an effort to facilitate an immediate reduction of the housing need, even before the scheduled completion of the long-range housing study. The primary objective of this short-range action housing program was the identification of sites within the Region which were well suited for the construction of 2,000 low- and moderate-income housing units during the 1972 and 1973 construction seasons. The findings and recommendations of the short-range program went far beyond the findings and recommendations envisioned by HUD. This study not only identified areas and sites suitable for the construction of 2,000 low- and moderate-income housing units, as specifically requested by HUD, but included a recommended method of allocating those housing units among suitable areas.[9] The purpose of this section is to provide a general comparative analysis of the housing allocation strategy developed under the short-range action housing program and the composite factor housing allocation strategy for southeastern Wisconsin.

Both the short-range allocation strategy and the composite factor strategy are multiple indicator formulas for distributing subsidized housing throughout the seven-county Region. The formulas for both allocation systems include three general types of indicators: the existing need in an area for publicly assisted housing; the suitability of the area for the location of such housing; and the past performance of the area in providing such housing. While the general framework of the two allocation strategies is similar, the specific indicators utilized under the two formulas differ, primarily as a result of the availability of certain types of data not previously available obtained as part of the long-range study. A comparison of the specific indicators utilized under the respective allocation strategies is presented below.

Need Indicators

Under both strategies, the distribution of existing housing need throughout southeastern Wisconsin is recognized as an important determinant of the location of future publicly assisted housing within the Region. With respect to the short-range strategy, in the absence of data quantifying the existing housing need, census tabulations concerning the number of households having 1.51 or more persons per room and the number of households which were eligible for subsidized housing based on a consideration of household income and size were utilized. On the other hand, the composite factor strategy utilized data compiled under the ongoing regional housing study concerning the actual distribution of the existing housing need within the Region to allocate housing under this measure.[10]

[9] *The housing allocation strategy recommended under the short-range action housing program, as well as the other findings and recommendations of this program, are documented in Technical Report No. 12, A Short-Range Action Housing Program for Southeastern Wisconsin—1972-1973.*

[10] *It should be recognized that different measures of overcrowding were utilized in the short-range housing study and in the analysis of housing need conducted as part of the long-range regional housing study. Under the short-range study, a household was considered to be overcrowded if there were 1.51 or more persons per room. The total number of such households in the Region was 5,916, according to the results of the 1970 census. Under the long-range housing study, overcrowding was more precisely measured in terms of the number of persons per bedroom; specifically, a household was considered to be overcrowded if there were more than two persons per bedroom. Based upon this standard, it was determined under the long-range housing study that approximately 18,600 households in the need category resided in overcrowded living arrangements in 1970.*

Suitability Indicators

Both the short-range and composite factor strategies include a series of indicators which assign housing units to housing areas in accordance with the suitability of the areas as a location for publicly assisted housing. Indicators reflecting suitability with respect to the local fiscal structure and land availability are included under both allocation strategies. However, the composite factor strategy includes two indicators relating to area suitability which are not included in the short-range strategy, namely, the availability of mass transit and the availability of employment opportunities. The availability of mass transit is an important measure of an area's suitability for the provision of publicly assisted housing, since many of the future occupants of such housing, in particular very low income and elderly households, are likely to have limited access to other forms of transportation. The level of employment opportunities is logically included as an indicator of area suitability because sites for the provision of low- and moderate-income housing should be within a reasonable travel time from employment centers of the prospective inhabitants.

It should also be noted that the short-range strategy included one suitability measure which is not included in the composite factor strategy. Specifically, the population change between 1960 and 1970 was used as an indication of the dynamics of a community, which in turn was considered to be an indicator of a need for additional housing units of all types. Population change was not included in the composite factor strategy, rather, the level of employment opportunities was incorporated as a better indicator of a need for all types of additional housing.

Performance Indicators

Both the short-range strategy and the composite factor strategy attempt to recognize the efforts of local units of government which have directly or indirectly facilitated the provision of low- and moderate-income housing within their boundaries. In this regard, both strategies include measures which recognize housing areas which have facilitated the construction of publicly assisted low- and moderate-income housing. It should be noted, however, that the composite factor strategy includes an additional measure which recognizes the provision of privately financed modestly priced housing, which often provides decent, safe, and sanitary living arrangements at a reasonable cost to many low- and moderate-income households.

For the purposes of the short-range housing study, the Region was divided into 25 areas based primarily on the homogeneity of existing development (see Map 77). A proportionate share of the 2,000 subsidized housing units to be constructed during the 1972 and 1973 construction seasons was assigned to each area based on the short-range housing allocation strategy. During the two-year construction period of the short-range study, more than 5,000 new federally subsidized housing units were built in the Region, far exceeding the recommended 2,000 units. But while construction surpassed the allocation within 12 of the 25 planning areas, little has been accomplished to date in some areas to meet the specific allocations (see Table 199). Nine planning areas met less than 20 percent of their allocations in 1972 and 1973, with no government subsidized housing being built in five of these areas during this period.

It is important to note that the Administration's placement of a moratorium on all federally subsidized housing early in 1973 suspended funding for a time for the construction of housing units under all federal subsidy programs, including Section 235 homeownership and Section 236 rental housing, and under all federally supported public housing developments. Since the moratorium, some exceptions have been made, including in Wisconsin those Section 236 and 221(d)(3) units related to urban renewal and other commitments, Section 502 housing, and Section 23 leased housing. Even with these exceptions, however, the effect of the moratorium within the Region in 1973 was to significantly curtail construction of federally subsidized housing. The only other such construction was limited to single-family housing units subsidized under the Section 235 homeownership program, which had received a firm commitment for construction prior to the moratorium.

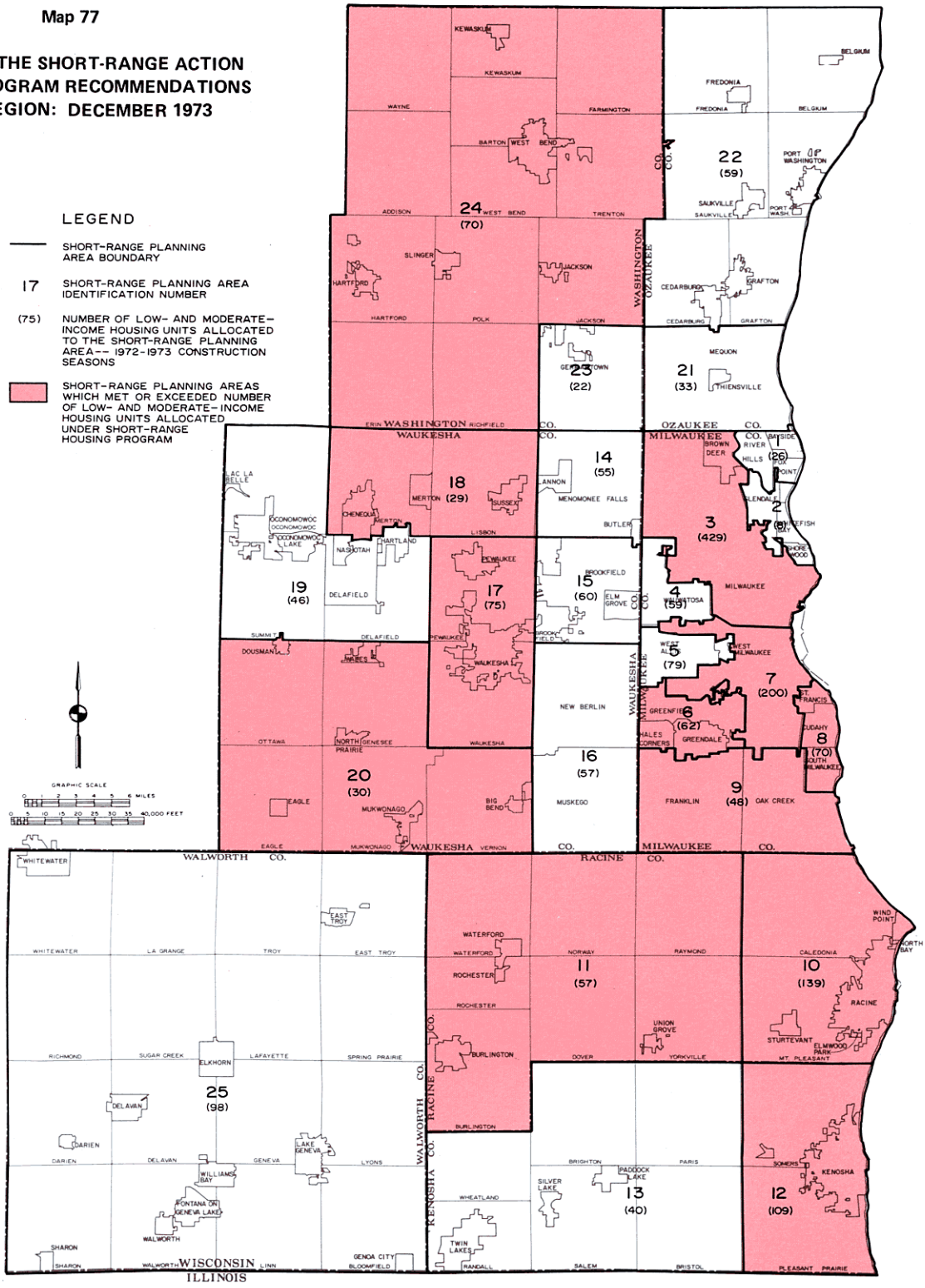
SUMMARY

Because of the nature of the existing housing problems in southeastern Wisconsin, the existing housing need in the Region can be significantly reduced only through the provision of substantial amounts of monetary assistance from the public sector to households in the need category. While the need for such public assistance is readily apparent, the determination of areas in the Region within which the subsidized housing should be located in a major problem. Its resolution has significant implications for the future socioeconomic structure of the Region. Three different alternative housing allocation strategies were formulated under the regional housing study: an existing need, a dispersal, and a composite factor housing allocation strategy. Under each strategy, proportions of the required publicly subsidized housing were assigned to 49 subareas of the Region, with each subarea consisting of one or more minor civil divisions. The three alternative allocation strategies may be expressed in the form of a mathematical formula for the geographic distribution of the required publicly assisted housing. While many variations of the three basic allocation strategies are possible, the three strategies selected are believed to represent the basic choices practically available with respect to the future distribution of subsidized housing within southeastern Wisconsin.

Each strategy distributes 17,840 subsidized housing units, which is sufficient to eliminate the physical housing need in southeastern Wisconsin. It should be recognized that the number of units distributed is far less than the housing need of 96,100 households in 1970. The majority of households in the need category, however, are considered to be in economic need only, meaning that they occupy decent, safe, and sanitary housing but must pay a disproportionate share of their income to secure adequate housing. Because their housing problem is primarily

Map 77

STATUS OF THE SHORT-RANGE ACTION HOUSING PROGRAM RECOMMENDATIONS IN THE REGION: DECEMBER 1973



Prior to 1973, the Commission conducted a short-range action program to identify areas in the Region where publicly subsidized housing could be developed, and to further identify the proportionate share of 2,000 housing units which should be built throughout the Region during the 1972-1973 construction seasons. For this program the Region was divided into 25 areas based primarily on the homogeneity of the existing development. Each planning area was assigned a proportion of the 2,000 units based on an allocation formula related to housing need, fiscal capability, population growth, and land suitability. During the two-year construction period, more than 5,000 new federally subsidized housing units were built in the Region, far exceeding the 2,000 unit allocation. The map shows those planning areas where the allocation was met or exceeded or where it has not been met.

Source: SEWRPC.

Table 199

SUBSIDIZED LOW- AND MODERATE-INCOME HOUSING UNITS IN THE REGION BY PLANNING AREA

Short-Range Housing Planning Area	Federally Subsidized Housing								Total Number of Units Allocated Under SEWRPC Short-Range Program
	Number of Housing Units Committed Through December 31, 1971				Number of New Housing Units Committed Between January 1, 1972 and December 31, 1973				
	Public Housing	Multifamily	Single Family	Total	Public Housing	Multifamily	Single Family	Total	
1	--	--	--	--	--	--	--	0	26
2	--	--	1	1	--	--	--	0	48
3[a]	5,411	1,191	1,557	8,159	- 32[b]	1,547	1,357	2,872	629
4	--	--	--	--	--	--	9	9	59
5	--	175	17	192	--	--	8	8	79
6	--	--	37	37	--	172	32	204	62
8	60	--	59	119	--	--	74	74	70
9	--	104	2	106	--	128	22	150	48
Milwaukee County	5,471	1,470	1,673	8,614	- 32[b]	1,847	1,502	3,317	1,021
10	--	311	551	862	--	186	477	663	139
11	--	37	40	77	--	--	95	95	57
Racine County	--	348	591	939	--	186	572	758	196
12	--	320	253	573	--	--	420	420	109
13	--	--	15	15	--	--	36	36	40
Kenosha County	--	320	268	588	--	--	456	456	149
14	--	--	4	4	--	--	1	1	55
15	--	--	--	--	--	--	--	0	60
16	--	--	--	--	--	--	2	2	57
17	--	33	104	137	180	--	107	287	75
18	--	--	8	8	--	32	3	35	29
19	--	--	32	32	--	--	21	21	46
20	--	--	90	90	--	--	31	31	30
Waukesha County	--	33	238	271	180	32	165	377	352
21	--	--	--	--	--	--	--	0	33
22	--	--	23	23	--	--	9	9	59
Ozaukee County	--	--	23	23	--	--	9	9	92
23	--	--	--	--	--	--	--	0	22
24	73	168	64	305	--	--	170	170	70
Washington County	73	168	64	305	--	--	170	170	92
25	--	108	21	129	--	--	46	46	98
Walworth County	--	108	21	129	--	--	46	46	98
Total	5,544	2,447	2,878	10,869	148	2,065	2,920	5,133	2,000

[a] *Planning area 3 includes southern Milwaukee from planning area 7.*

[b] *Conversion of one-bedroom units to multibedroom units in the Hillside Terrace project in 1972 resulted in a decrease in the number of public housing units in planning area 3.*

Source: U. S. Department of Housing and Urban Development and SEWRPC.

economic in nature, their situation could be relieved either through a reduction in housing costs or an increase in their ability to pay. No change of residence is necessarily required to reduce the economic burden. Conversely, households which experienced a physical housing problem—that is, households which occupy substandard or overcrowded housing—generally must move in order to reside in decent, safe, and sanitary housing. Logically, only those households which experience a physical housing problem necessitating a change in residence are considered in the locational strategy.

The existing need housing allocation strategy represents a conscious effort to resolve the housing shortage where it exists by assigning to each housing analysis area an allocation of subsidized housing which is directly related to the housing analysis area's share of the total regional housing need. Because of the high incidence of housing need in the older urban centers of the Region, under this strategy the publicly assisted housing which is necessary to eliminate the physical housing need would be concentrated, to a great extent, in the Region's older urban centers. For example, under the existing need strategy, approximately 13,100 subsidized housing units, or 74 percent of the total regional allocation, would be provided in the Cities of Kenosha, Milwaukee, and Racine. Implementation of the existing need strategy would tend to perpetuate the existing distribution of low- and moderate-income households in the Region.

In contrast, the dispersal housing allocation strategy assigns a higher allocation of publicly assisted housing units to areas with a lower incidence of housing need. Under the dispersal strategy, more low- and moderate-income housing would be provided in the suburban and outlying rural-urban fringe areas of the Region than in the older urban centers. Under this strategy, less than 100 subsidized housing units would be provided in the Cities of Kenosha, Milwaukee, and Racine, while approximately 11,400 subsidized units would be provided in Ozaukee, Walworth, Washington, and Waukesha Counties. The dispersal of publicly assisted housing throughout the suburban and outlying rural-urban fringe areas of southeastern Wisconsin, as recommended under this strategy, could contribute to the integration of households of different socioeconomic backgrounds. In addition, the implementation of this strategy would result in a diffusion of the social overhead costs associated with the provision of publicly assisted housing over many communities rather than a continued concentration of this burden in the large central cities.

Finally, the composite factor housing allocation strategy represents a conscious effort to locate future publicly assisted housing in areas which are most suitable for the location of such housing based on a consideration of housing need in the area, the general suitability of the area to absorb such housing, and the past performance of the area in providing housing for low- and moderate-income families. This strategy results in a distribution pattern intermediate between the other two strategies, allocating more publicly assisted housing to the suburban and outlying rural-urban fringe than the existing need strategy, and allocating more such housing to the urban centers of the Region than the dispersal strategy. On a county basis the composite factor strategy allocates the following units: Kenosha, 1,348; Milwaukee, 8,731; Ozaukee, 1,245; Racine, 1,507; Walworth, 997; Washington, 1,204; and Waukesha, 2,808.

All three housing allocation strategies were evaluated against the adopted regional housing objectives in order to facilitate the selection of one allocation strategy for use as part of the overall regional housing plan. All of the regional housing allocation strategies were assumed to meet six of the nine regional housing objectives equally well, and differed only with respect to three objectives, namely, Objective Number 3—the maintenance, preservation, and where necessary, rehabilitation of the existing housing stock; Objective Number 6—the provision of adequate locational choice of housing; and Objective Number 9—the efficient and economical satisfaction of housing need meeting all other objectives at the lowest possible cost. Based upon the evaluation of the alternative regional housing strategies and an assessment of the degree to which those strategies meet the foregoing regional housing objectives, it was recommended by the Technical and Citizen Advisory Committee on Regional Housing Studies that the composite factor housing allocation strategy be adopted as the recommended regional housing allocation strategy.

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Chapter XVII

RECOMMENDED REGIONAL HOUSING PLAN

INTRODUCTION

Previous chapters of this report have identified the magnitude and type of unmet housing needs in the Region and the constraints on the availability of housing which contribute to the existence of these unmet housing needs. Based upon these findings, a series of recommendations has been prepared through which the unmet housing needs within the Region can be significantly reduced, if not eliminated. These recommendations as set forth in this chapter constitute the regional plan for the abatement of housing problems within southeastern Wisconsin.

Based on the application of regional housing objectives and standards to the housing situation of the regional population, it was found that approximately 96,100 households, or about 18 percent of all households in the Region, were in housing need in 1970. Of this total, 26,500 households were in physical need. This component of the existing housing need reflects a physical deficiency in the housing stock relative to the needs of the regional population. It was determined that with a more effective utilization of presently overcrowded but otherwise sound housing, only 17,800 housing units would be required to alleviate the physical housing problems of these 26,500 households which are currently unable to obtain decent, safe, and sanitary units.

In addition to the physical housing need, about 69,600 households, or about 13 percent of all households in the Region, were found to be in economic need. These households occupy decent, safe, and sanitary housing, but must pay a disproportionate share of their income to do so. Although recommendations to abate or eliminate the existing housing need within the Region should address both the physical and economic need, the actions required to abate the former may be quite different than those needed to abate the latter.

The housing plan recommendations for the resolution of the areawide problems presented in this chapter are varied. It is useful, therefore, to distinguish between those recommendations which involve public assistance, or subsidy, to the households in need, and those which do not involve public assistance. In accordance with the adopted regional housing objectives, principles, and standards, nonsubsidized approaches should be utilized to the maximum extent practicable in order to reduce the existing housing need without relying on public financial resources. The implementation of certain nonsubsidy plan recommendations may serve to stabilize rapidly increasing housing costs, or may reduce the adverse impact of the various noneconomic constraints within the housing market. Specific nonsubsidy recommendations directed toward both the public and private sectors of the housing market are presented so that areawide housing problems may be abated at the lowest possible public cost.

It should be noted, however, that although nonsubsidized housing plan recommendations represent an integral part of the regional housing plan, their potential for reducing the size of the existing housing need is limited. Based upon the analysis of housing availability constraints which contribute to the existing housing problem, it is apparent that the implementation of the nonsubsidy plan recommendations for the removal of those constraints would, at best, result in a marginal reduction of the existing housing need in the foreseeable future. In particular, it is evident that nonsubsidy plan recommendations alone are incapable of overcoming the overriding economic constraints which result from high housing costs relative to the low household incomes for large segments of the regional population. Thus, it appears that the existing housing need can be effectively reduced only through the provision of public assistance to decrease the gap between housing costs and the ability to pay for households in the need category.

The previous chapter of this report addressed a major planning problem related to the provision of subsidized housing—namely, the determination of areas in the seven-county Region within which subsidized housing should be located. This locational problem received much attention because of the significant implications which its resolution may have for the future socioeconomic structure of the Region. Three alternative strategies for the geographic distribution of the subsidized housing which must be provided to eliminate the physical housing need in southeastern Wisconsin were prepared and evaluated against the adopted regional housing objectives. Based upon this evaluation, the composite factor housing allocation strategy was recommended for use in the distribution of subsidized housing throughout the Region.[1] This

[1] *The composite factor housing allocation strategy distributes 17,840 subsidized housing units, which is sufficient to eliminate the physical housing need in southeastern Wisconsin. It should be recognized that the number of units distributed is far less than the existing (1970) housing need of 96,100 households. The majority of households in housing need, however, are in "economic need only," meaning that they occupy decent, safe, and sanitary housing but must pay a disproportionate share of their income to secure such housing. Because their housing problem is primarily economic in nature, their situation could be relieved with a housing subsidy which reduced the gap between their current housing costs and their ability to pay. No change of residence would thus be necessary to reduce the economic burden. Households which experience physical housing problems—that is, households which occupy substandard or overcrowded housing—generally must move in order to obtain decent, safe, and sanitary housing. Therefore, only those "need" households which experience a physical housing problem necessitating a change in residence are considered in the locational strategy.*

strategy is a formula which distributes subsidized housing to planning areas in southeastern Wisconsin on the basis of statistical measures of each area's need for subsidized housing, its general suitability as a location for subsidized housing, and its past efforts in providing such housing. The composite factor strategy, which performs the important function of identifying local responsibility in the resolution of existing areawide housing problems, represents an integral part of the overall regional housing plan.

The amount of public assistance for housing within the Region is limited, and available funds should therefore be used as effectively as possible to resolve the housing problem. To this end, this chapter contains a series of recommendations with respect to the effective use of housing subsidy programs in southeastern Wisconsin, recommending priorities both with respect to the types of households which should be subsidized and with respect to areas within which subsidized housing should be located in the near future. In addition, this chapter identifies the several units and agencies of government which must act to implement the plan recommendations, and indicates their roles in the effective utilization of housing subsidy programs in the Region.

BASIC PRINCIPLES AND CONCEPTS

Because of the nature of the housing problem, the housing plan recommended herein represents somewhat of a departure from the more traditional regional plan elements prepared and adopted to date by the Regional Planning Commission. Those elements, such as the regional transportation and regional sanitary sewerage system plans, generally constitute long-range plans for the development of systems of public works facilities required not only to resolve existing problems, but also to serve probable future population and economic activity levels in specified plan design years. This approach is necessary because the nature of public works facilities requires that at least some capacity to absorb probable future growth in demand must be built into such facilities in order to avoid premature obsolescence and costly reconstruction.

The regional housing plan as presented herein, however, is focused on the housing problem which currently exists within the Region, and represents a series of recommendations which, if implemented, would not only overcome this current housing problem, but would also prevent the development of a new housing problem in the future. Rather than addressing probable future housing problems which might develop in the absence of an effective housing program, the recommended regional housing plan proposes to eliminate the identified level of existing unmet housing needs. This approach is practicable because, unlike public works facilities such as arterial highways, transitways, trench sewers, and major storm water drains, the design of which must at least consider if not meet probable future as well as existing demand, housing can be provided much more readily on an incremental basis to meet existing need only.

During the course of the regional housing study, it became apparent that the origin of many existing housing problems lies outside of the field of housing and can be traced, more generally, to socioeconomic conditions in the Region. As indicated in Chapter XIII of this report, the vast majority of households currently in the need category experience housing problems whose roots are economic in nature, resulting from a gap between housing costs and the household's ability to pay those costs. It is important to note that while high housing costs are a major cause of existing housing problems within the Region, the limited income of households in the need category is also an important consideration. Recommendations concerning changes in income levels and distribution were, however, considered beyond the scope of the regional housing study, and therefore the plan recommendations presented herein deal primarily with housing rather than income related solutions.

It should be noted that housing planning is a very complex and difficult task. Detailed socioeconomic data would be required for each of the 536,000 households and housing units in the Region in order to fully and precisely identify the housing needs within the Region. Since the provision of such data is impractical, the basic inventory data used to determine housing need at the regional level were derived from sample surveys. These data provide a reliable basis for estimating aggregate housing need at the regional, county, and in some cases, housing analysis area level. More precise determination of housing need, as well as the formulation of specific solutions to such need, however, can only be accomplished at the community, neighborhood, and individual household level. It is at the community and neighborhood level where deteriorating and substandard housing units must ultimately be precisely identified and quantified, where housing need must be further qualified, and where rehabilitation and new construction needs for subsidized housing must be identified more precisely. The analysis of local housing needs and the implementation of housing programs to abate the identified needs call for vigorous and aggressive local action.

Owing to the dynamic nature of the housing situation, it is anticipated that a continuing inventory and analysis of basic housing and housing-related information will be required at a regional level. A great deal can be achieved with respect to guiding housing development, particularly subsidized housing, through the simple task of collecting and analyzing basic housing data on a continuing, uniform, areawide basis. The dissemination of current housing information will assist local efforts with respect to the analysis of community housing needs and the administration of housing programs to meet these needs. Furthermore, such data are required to determine if subsidized housing is being located in accordance with the recommended regional housing allocation strategy and if the nonsubsidy and subsidy plan recommendations have, in fact, been successful in reducing housing need. Such inventory and analysis will also identify any necessary modifications and adjustments in the recommended regional housing plan over time.

HOUSING PLAN RECOMMENDATIONS

Based upon the analysis of the constraints on the availability of housing in southeastern Wisconsin conducted under the regional housing study, a series of housing plan recommendations has been prepared through which the level of unmet housing needs in the Region can be significantly reduced, if not eliminated. These recommendations, along with the composite factor allocation strategy for the geographic distribution of subsidized housing presented in Chapter XVI, comprise the overall regional housing plan for the abatement of areawide housing problems. Housing plan recommendations which seek to reduce the existing housing need without reliance on governmental subsidy are presented first, and housing plan recommendations which involve a public subsidy to the households in need follow.

Nonsubsidy Recommendations

Existing housing problems are the result of constraints within the housing market which limit the availability of housing to certain segments of the regional population. The reduction and elimination of areawide housing problems depend to some extent on a lessening of the impact of these constraints on the availability of housing. Specific nonsubsidy housing recommendations for the removal of the various housing availability constraints directed at the public, quasi-public, and private sector of the housing market are presented in this section.

These housing plan recommendations deal with housing availability constraints identified under the regional housing study as described in Chapter XIV of this report. As indicated in that chapter, inasmuch as the majority of households in existing housing need cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, the overriding housing availability constraints are economic in nature, relating specifically to the cost of housing relative to the household's ability to pay. In addition, various institutional and social phenomena have been identified as precluding certain segments of the regional population from acquiring adequate housing. The nonsubsidy recommendations presented herein have been grouped according to whether they address constraints which are primarily economic, institutional, or social in nature. While this format facilitates presentation of the nonsubsidy housing recommendations, it is important to recognize that the implementation of a particular recommendation may result in the removal of several constraints on the availability of housing in southeastern Wisconsin. Throughout this section, then, attention is drawn to the multiple effects of those recommendations which may reduce the impact of several housing availability constraints.

Recommendation for the Abatement of Economic Constraints: Many individual cost factors are responsible for the high cost of housing in southeastern Wisconsin. With respect to production costs, the total package price for a new conventionally built house on a fully improved city lot was $35,060 in 1972, with the costs typically distributed as follows: onsite labor—$6,000, or 17 percent; materials—$13,000, or 37 percent; fully improved lot—$9,100, or 26 percent; overhead and profit—$6,000, or 17 percent; and construction financing—$960, or 3 percent. While the cost of materials is the largest component, it is apparent that the cost of land and labor as well as builder overhead and profit also contribute significantly to the overall cost.

It should be noted, however, that high production costs are only partially responsible for the present high cost of housing. In addition, increases in financing costs and property taxes as well as utility, maintenance, and insurance costs have set the price of occupying new, and particularly new single-family, housing beyond the economic means of virtually all low- and moderate-income families in the Region. The monthly cost of occupying a new Cape Cod style house on a fully improved lot in an urban area of the Region was approximately $381 in 1972. Financing costs typically comprise about $221, or 58 percent of the total cost of occupying new single-family housing, with more than half of all financing costs consisting of payments for interest on the mortgage loan. Property taxes typically represent $95, or 25 percent of the total cost, while the cost of utility service ($36, or 10 percent), and maintenance and insurance ($29, or 7 percent) comprise the balance of new single-family occupancy costs.

Based upon the foregoing, it is apparent that the cost of producing new single-family housing is affected by a myriad of individual cost elements. The cost analyses documented in Chapter VII of this report indicated that even very significant reductions in any one of these elements alone cannot effect a significant reduction in the cost of the total housing package. For example, if other costs are held constant, a 20 percent reduction in the cost of materials—the largest single production cost component—would result in a 7 percent decrease in the total cost of the housing package. A similar 20 percent reduction in the cost of the lot would result in a 5 percent decrease in the total package cost. A 20 percent decrease in the cost of onsite labor would result in a 3 percent decrease in the cost of the housing package. On the other hand, a 20 percent reduction in the cost of materials combined with similar reductions in the labor and lot costs would result in nearly a 16 percent decrease, or over $5,600, in the overall 1972 housing package price. A $5,600 savings in the housing package price coupled with a two point reduction in the 1972 interest rate from 8.25 percent to 6.25 percent would result in a 24 percent, or $92, reduction in 1972 monthly occupancy costs. Accordingly, an effective program for the minimization of housing costs must be comprehensive in nature, addressing as many of the individual cost elements as possible. A program designed to reduce only a single cost element will have little effect on the total cost of producing housing. Only efforts which address all of the major cost components can effectively stabilize or reduce housing costs. Consequently, little can be recommended to reduce housing production costs except to urge all elements of the housing supply mechanism—including builders and developers, construction trade unions, financers, and real estate brokers—to cooperate in efforts to lower housing costs by seeking out and

incorporating within the overall housing delivery system such innovations in residential construction, financing, and marketing which will seem to reduce one or more of the component costs of producing and occupying housing, while at the same time maintain adequate standards of housing quality.

Recommendations for the Abatement of Institutional Constraints: In addition to the overriding economic constraints, various constraints relating to the existing property tax structure and the existing body of local land use controls have been identified which limit the availability of housing in southeastern Wisconsin. Certain changes with respect to these institutional constraints would increase the availability of housing in the Region.

Property Tax Structure: The existing property tax structure affects the availability and cost of housing in a variety of ways. Most obviously, property tax payments increase the cost of occupying both owner-occupied and rental housing, intensifying the economic problem of many low- and moderate-income families in their efforts to secure adequate shelter. In addition, under the existing property tax structure, the preservation and enhancement of the local tax base is a major consideration in the shaping of local land use policies, and this has contributed to housing and housing-related problems. Thus, the exclusion of certain types of housing from some communities may serve to constrain the availability of housing for low- and moderate-income households by limiting their choice of location. Furthermore, such exclusionary practices may result in the imposition of a disproportionate share of social overhead costs on those communities which allow a broad range of residential development.

The total property taxes levied by a local unit of government include individual levies for local, county, and school purposes as well as a small levy collected for state forestry purposes. A cost-revenue study conducted under the regional housing study suggests that the property tax for municipal purposes generated from a moderately priced housing unit can offset most of the net operating and maintenance costs of providing essential municipal services, such as sanitary sewerage, storm water drainage, police and fire protection, solid waste collection and disposal, and library services. On the average, for all civil divisions included in the study, the tax levy for municipal purposes on a $25,000 house was only $8 per year less than the per household cost of providing municipal services. The findings of the cost-revenue study did indicate, however, that educational costs associated with moderately priced housing may indeed constitute an undue burden on the local fiscal structure, depending on the size of the school age population generated by such housing. For all civil divisions analyzed, the net school operating cost for a single pupil on the average, when reduced by the application of state aids, is greater by $42 than the property tax for school purposes levied on a $25,000 house in 1971. The deficit increases substantially as the number of children attending public school increases. For example, the educational deficit associated with a $25,000 house generating three public school students is estimated to be more than $1,200 per year. The property tax for school purposes, including amounts levied for vocational schools, is the largest and has been the most rapidly increasing component of the total property tax levy, comprising 54 percent of all property taxes levied in the Region in 1970. The change of the school tax from a property to some other form of tax would not only substantially decrease the cost of occupying housing, but would largely eliminate the detrimental effects of low- and moderate-income family housing on the local cost-revenue situation. It is further recommended that the state carefully investigate alternative means of financing public elementary and secondary schools so that the importance of the property tax as a source of educational funding can be reduced.

The existing property tax structure constrains the rehabilitation of substandard housing because specific improvements to a housing unit may increase its assessed value, thereby resulting in an increase in the property tax levy. This increase in the tax levy in conjunction with the cost of the improvement itself may cause the overall cost of the improvement to be beyond the economic means of a low- or moderate-income homeowner or economically unfeasible for the owner of substandard rental housing. It is, therefore, recommended that local units of government in the Region having substantial concentrations of substandard housing encourage the rehabilitation of such housing by exempting physical improvements which would serve to improve substandard structures within locally designated conservation areas from local property tax as authorized under Section 70.11(24) of the Wisconsin Statutes.[2]

Land Use Controls: Land use control powers conferred through state enabling legislation provide local units of government with mechanisms which have a profound influence on existing and proposed land development, particularly residential development. Land use controls can substantially determine the overall characteristics of housing development, including the quality, quantity, location, size, type, and cost of the housing units, and even to some extent the characteristics of the prospective occupants of housing units themselves. The rationale for planned land development through the application of local land use controls such as zoning regulations, land subdivision control ordinances, and sanitary and building codes is well documented and convincing. Certain provisions of existing land use control mechanisms, however, can have a constraining influence on the supply of housing.

Zoning Regulations: Local zoning ordinances not only determine where housing may be built, but influence the type, size, and cost of the units as well. The analysis of community zoning data conducted under the regional housing

[2]*According to Wisconsin Statutes 70.11(24)(c), the assessment exemption may continue for five assessment years. The maximum value of any assessment exclusion shall be either $1,000 or 10 percent of the value of the improved property, as determined by the governing body of the municipality.*

study indicated that the existing supply of residentially zoned readily developable land—approximately 19,400 acres—is more than sufficient to meet the demands generated by population growth through 1980. While a sufficient quantity of residentially zoned and readily developable land exists in southeastern Wisconsin, constraints on the locational choice of housing owing to excessive zoning restrictions with respect to size and type of housing exist in certain communities. It is recommended, therefore, that all urban communities within the Region incorporate provisions for a full range of residential structure types—single family, two-family, and multifamily—within their zoning ordinances. It is recommended that these communities incorporate provisions for a full range of housing sizes within their zoning ordinances. Such zoning ordinances should include and apply to developable land, and should include one or more residential districts specifying minimum floor area requirements which approximate the standards for decent housing set forth in Chapter XII of this report and summarized in Table 200. It is also recommended that all urban communities incorporate provisions for a full range of lot sizes within their zoning ordinances. In this regard, zoning ordinances should include one or more residential districts specifying minimum lot sizes of 7,200 square feet or less for single-family detached housing units and 8,000 square feet or less for two-family structures.

Site improvement costs, including costs of paved streets, curb and gutter, sidewalk, sanitary sewer main, storm sewer main, and water main, typically comprise about one-third of the cost of a single-family lot in an urban area of the Region. Such site improvement costs may be reduced somewhat through the use of clustering or planned unit development techniques, which permit the intensification of residential densities in a portion of an area zoned for residential use while providing that the balance of the area be maintained as park or other open space, thereby creating the same overall net density for the area as specified in the local zoning ordinance, but requiring less street and utility depth per lot. It is recommended that local units of government in the Region incorporate provisions within their zoning ordinances for planned unit developments as a conditional use within residential zoning districts, similar to provisions suggested in the SEWRPC Model Zoning Ordinance.[3]

Table 200

MINIMUM FLOOR AREA REQUIREMENTS FOR HOUSING IN THE REGION

Number of Bedrooms in Unit	Minimum Square Feet of Improved Floor Area
0	250
1	550
2	700
3	980
4	1,230
5	1,330

Source: SEWRPC.

Building Codes: Building codes are enacted by local units of government to regulate the materials, equipment, and methods used in the construction of buildings within a community. Because of the complexity involved in compliance and the differing application among differing communities, building codes have been criticized as adding unnecessarily to the cost of residential construction. The adoption of a uniform building code to replace the current multiplicity of differing building codes would make possible certain savings in residential construction costs. It is recommended, therefore, that all local units of government in the Region adopt the Wisconsin Uniform Building Code regulating the construction of one- and two-family residential structures.[4]

Most local building codes in southeastern Wisconsin are oriented toward the regulation of conventionally built housing, which is constructed at the site, typically over a period of several months, utilizing well-known, traditional construction methods. Consequently, the application of local building codes to manufactured housing is frequently complicated by assembly line techniques employed in industrialized housing systems. A uniform manufactured housing code would simplify the regulation of factory built housing and could provide the catalyst required to enable manufacturers of factory built housing, in the long run, to expand their operations, develop new markets, and through increased production and technological advances, provide some cost savings to prospective housing consumers.

It is, therefore, recommended that the state enact a uniform building code regulating the manufacture and installation of factory built housing in Wisconsin. It should be noted, however, that the analyses documented in Chapter IX of this report indicated that while the application of factory production techniques to housing could effect some modest reductions in the cost of housing, factory built housing has not to date proven to be substantially less costly than conventionally built housing. Analysis of the construction costs associated with comparably sized conventionally built and factory built housing indicated that the construction cost savings accruing to factory built housing presently available within the Region currently ranges from 0 to 10 percent, depending on the model. With respect to actual occupancy costs, only one of the factory built models included in the analysis realized any savings—7 percent—over conventionally built housing.

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[3]*See SEWRPC Planning Guide No. 3, Zoning Guide, April 1964.*

[4]*As of April 1974, 18 cities, 21 villages, and 20 towns within the Region had adopted this code, which is maintained current by Southeastern Wisconsin Building Inspectors Association.*

Subdivision Control Ordinances: As indicated previously, site improvement costs typically comprise one-third of the cost of a fully improved lot in an urban area of the Region, thereby adding significantly to the overall cost of single-family housing. Local subdivision control ordinances, which specify the minimum site improvements which must be provided to new subdivisions within a community, must ensure the provision of those physical improvements which are necessary for a safe, healthful, efficient, stable, and aesthetically pleasing physical environment, but at the same time, must avoid excessively stringent regulations which needlessly increase the cost of the lot. It is, therefore, recommended that all local units of government in the Region adopt land development regulations similar to those contained in the SEWRPC Model Land Development Ordinance.[5]

In most communities of the Region at the present time, the costs of site improvements are paid for by the developer, who in turn passes them on to the purchaser of the lot. Certain changes in the method of financing these costs could result in some savings to the consumer. For example, a local unit of government could assist in financing the necessary improvements by initially financing the improvement through the issuance of general-purpose municipal bonds, or assessing the cost of the improvements as well as the debt service on the bonds back to the developer and ultimately the lot purchasers over a specified period of time. Under such a system, the developer, and in turn the purchaser, would benefit from the lower interest rate associated with the municipal bonds used to finance the improvement cost. It is estimated that such a financing arrangement would result in a savings of approximately 3 percent in the total package price of new single-family housing.

It is recommended that local units of government within the Region investigate changes with respect to the present system of financing site improvement costs, and adopt changes that would result in a saving to the prospective housing consumer and which are consistent with the overall growth policy of the community.

Recommendations for the Abatement of Social Constraints: The forces of housing discrimination and community opposition to the provision of low-income housing have been identified as contributing to the housing problems experienced by certain subgroups of the regional population. It is important to recognize that these social forces are by nature emotion charged, which greatly compounds the difficulty of counteracting their influence within the regional housing market.

Housing Discrimination: For the purposes of the regional housing study, discrimination in housing is defined as the denial of housing to financially capable consumers solely on noneconomic grounds. The analysis of discrimination in housing is, of course, complicated by the lack of reliable data sources which can be utilized to measure precisely the extent of discriminatory practices. Based on the analysis of certain indicators, including the record of formal complaints of discrimination in housing as well as the results of the social research survey, it is apparent that various types of discrimination affect the availability of housing for certain subgroups of the population in southeastern Wisconsin. Discrimination in the sale, rental, or financing of housing on the basis of race, creed, or national origin is prohibited by federal and state law as well as by fair housing laws which have been enacted by many local units of government in the Region. It is apparent that additional legislation would not reduce the incidence of these types of discrimination within the regional housing market.

Based on the findings of the social research survey, however, it is evident that certain forms of housing discrimination which are not addressed in federal, state, or local fair housing laws limit the availability of housing for various segments of the regional population, despite their apparent ability to pay. Discrimination on the basis of the marital status or sex of the household head, the source of income, and family size represent the most serious housing availability constraints in this regard. It is therefore recommended that federal, state, and local fair housing laws which prohibit housing discrimination on the basis of race, creed, and national origin be expanded to prohibit discrimination in the sale, rental, or financing of housing on the basis of sex, marital status, source of income, and family size.

Fair housing legislation will be effective in reducing discrimination in housing only if prospective complainants are cognizant of the legal avenues which are available to them. Accordingly, it is recommended that the agencies charged with the administration of fair housing laws establish or expand public informational programs to make minority group members more aware of the existing legal mechanisms with which discrimination in housing can be countered.

The processing of reported complaints of housing discrimination is difficult. As indicated above, housing discrimination is an emotion-charged issue. The ascertainment of the facts of a case may be difficult as the facts become intermingled with emotional response. Therefore, a means should be developed for the periodic assessment of the procedures utilized by the agencies charged with the administration and enforcement of open housing laws to ensure that all complaints of housing discrimination are fairly and expeditiously processed.

Community Opposition: Community opposition to the provision of low-income housing represents another constraint on the availability of housing in southeastern Wisconsin. Such community opposition may be expressed in a variety of ways. For example, residents may organize citizen groups to oppose the development of a particular low-income housing development within their community. Through letters and petitions, individual citizens may attempt to influence their elected officials toward a negative position relative to the provision of low-income housing in their community. Ultimately, community opposition may find expression in the municipality's

[5]*See SEWRPC Planning Guide No. 1, Land Development Guide, November 1963.*

adopted land use controls, such as unnecessarily restrictive zoning which can effectively preclude the construction of housing for low- and moderate-income families.

Community resident opposition to the provision of low-income housing arises from a combination of many socioeconomic forces. One of the most frequently heard community objections to low-income housing, the allocation of taxes to offset the cost of community services to such units, has been addressed previously in this chapter. In addition, homeowners concerned about protecting their investments may fear that the introduction of small, lower cost housing into their neighborhood will result in a decline in property values or otherwise reduce the desirability of their neighborhood as a place to live. It is recommended that the developers of low-income housing locate and construct such housing in a manner which physically integrates the units into the neighborhood to the maximum extent possible. In some cases this may mean the use of certain exterior materials or design techniques for a particular housing unit. In others it may mean the use of development design techniques such as clustering, land use buffering, or planned unit development.

Because of its emotion-charged nature, local sentiment against the provision of housing for low- and moderate-income families within certain subareas of the Region may be so strong that it severely delays or precludes provision of such housing. Although it may be extremely difficult to avoid community opposition towards the provision of low- and moderate-income housing, it is possible to at least mitigate its influence through an appeal mechanism. A state housing appeals board appears to be an effective vehicle which could expedite the provision of housing for low- and moderate-income families in areas which have a need and are otherwise suitable for such housing, but which have rejected the application for the construction or modification of such housing. It is, therefore, recommended that the state establish a housing appeals board to review applications for the construction or modification of low- and moderate-income housing that are rejected at the local level. In its review, the appeals board should consider the following: any existing need for, or shortage of, low- and moderate-income housing in the area; employment opportunities within the area; transportation facilities; the availability of necessary public services and facilities; and the fiscal capability of the area to absorb such housing in terms of levels of personal income and property values. The appeals board should be empowered to issue a permit allowing the construction of low- and moderate-income housing in those instances where good cause for the original rejection cannot be shown. Any determination of the board would, of course, be subject to court appeal.

Subsidy Recommendations

The housing recommendations presented above represent efforts which should be undertaken to abate the existing housing problem without relying on public assistance, thereby reducing the existing housing need at the lowest possible cost. As previously indicated, however, it is unlikely that these nonsubsidy recommendations will cause more than a marginal reduction in the existing housing need. It is apparent that the impact of the various housing availability constraints, and in particular the overriding economic constraints which are responsible for the existing housing need, can, in the case of most needy households, be effectively reduced only through the provision of some form of public financial assistance. A series of recommendations with respect to the effective use of federal, state, and local subsidy resources which are available for the reduction of the housing need in the Region are presented in this section.

Recognizing that there are over 96,000 households in housing need and that housing subsidy funds to alleviate this need are extremely limited, and recognizing that the severity of housing need varies among households, priorities are herein recommended with respect to the types of households that should be subsidized through use of the limited available housing subsidy funds. In addition, the recommendations in this section suggest the types of subsidy programs which are appropriate for use within housing analysis areas in the Region. The latter recommendations refine the composite factor strategy for the distribution of subsidized housing throughout the Region, offering more specific guidelines for the implementation of that allocation system. This section also identifies the potential roles of the various levels and units of government concerned relative to the effective use of subsidy programs in southeastern Wisconsin.

Recommendations for the Disposition of Housing Subsidy Funds—Priority Households: The analysis of the existing housing need conducted under the regional housing study indicated that certain housing problems impose greater hardship than others. For example, a housing unit which is both substandard and overcrowded imposes the most severe hardship. Other housing problems in decreasing order or severity include a substandard but not overcrowded situation, an overcrowded but not substandard situation, and a situation involving economic need only. Similarly, it is possible to differentiate among households in the need category with respect to the relative difficulty they experience in obtaining decent, safe, and sanitary housing. The greatest difficulty in securing adequate housing is generally encountered by large, low-income households. Other household types, in decreasing order of difficulty encountered in securing adequate housing, include small low-income households, including the elderly; large moderate-income households; and small moderate-income households.

Clearly, housing subsidy programs should be administered in such a manner as to simultaneously relieve the most severe housing problems and to assist those households which experience the greatest difficulty in securing adequate shelter. It is, therefore, recommended that all agencies administering housing subsidy programs give priority to households in the following decreasing order in determining applicant eligibility:

1. Occupants of housing which is substandard and overcrowded, giving priority to household types as follows: large low income, small low income, large moderate income, and small moderate income households.

2. Occupants of housing which is substandard but not overcrowded, giving priority to household types as indicated above.

3. Occupants of housing which is overcrowded but not substandard, giving priority to household types as indicated above.

4. Households in economic need only, giving priority to households as indicated above.

Recommendations for the Disposition of Housing Subsidy Funds—Priority Areas: In Chapter XVI of this report, the composite factor strategy was recommended for use in the geographic distribution of the subsidized housing which must be provided to eliminate the physical housing need in southeastern Wisconsin. This strategy distributes subsidized housing to planning areas in the Region on the basis of statistical measures of each area's need for subsidized housing, its general suitability as a location for subsidized housing, and its past efforts in the provision of such housing. While the meaningful resolution of area-wide housing problems requires that all housing analysis areas eventually meet their allocation of subsidized housing units, it must be recognized that the amount of subsidy funds which will be available annually for the abatement of housing problems within southeastern Wisconsin is limited. It is anticipated that if federal agencies match the scale of efforts undertaken during the short-range action housing program for 1972 and 1973, when approximately 2,900 households were assisted annually under federal housing subsidy programs, there would be sufficient subsidy funds to overcome the Region's entire physical housing need in about six years. In light of the shortage of housing subsidies, recommendations presented in this section serve as a refinement of the composite factor strategy by establishing "priority areas"—that is, areas which are most suitable as locations for the immediate utilization of available subsidy funds and within which subsidized housing could be immediately developed. It is intended that the areas designated as priority areas will remain as such until half of the existing physical housing need has been eliminated. Assuming that federally subsidized housing continues to be provided at the annual rates attained under the short-range action housing program, this would take approximately three years.

The designation of priority areas in this section is accomplished within the context of the major categories of housing subsidy programs which have been used and which may be expected to continue to be used within the Region. These major program categories were described in Chapter XVI of this report and may be distinguished as programs which directly facilitate new residential construction, programs which directly facilitate the rehabilitation of the existing stock of substandard housing, and programs which utilize the existing stock of standard housing as alternative housing for households in need.

It must be recognized that the establishment of priority areas with respect to the various types of housing subsidy programs is intended to serve as a refinement of the composite factor strategy, offering a generalized guide to the use of housing subsidy programs in southeastern Wisconsin in the immediate future. Local units of government which are part of the priority areas designated herein should take immediate action to expedite the use of the appropriate subsidy programs within their jurisdictions. On the other hand, it is very likely that some communities will find an urgent need for subsidized housing and desire to provide such housing in the near future, even though they have not been designated as priority areas. Certainly such local initiative is encouraged and the required housing should be provided.

Priority Areas for Programs Involving Rehabilitation of Substandard Housing: Government subsidy programs involving the rehabilitation of substandard housing represent an effective means for reducing the existing physical housing need in southeastern Wisconsin because of the multiple benefits which may be realized through such efforts. The rehabilitation of a tract of substandard housing not only provides an equal number of additional units of sound housing for households in need, but may serve to upgrade the overall quality of the neighborhood in which the housing is located, and thereby check the self-perpetuating cycle of urban deterioration and decay within certain subareas of the Region. The rehabilitation of substandard housing tends to enhance the local tax base by significantly increasing the value of formerly dilapidated structures. Furthermore, rehabilitation efforts have the economic advantage of directly increasing the stock of sound housing at a relatively low cost by maximizing the use of the sound structural and mechanical components of the existing substandard units. For these reasons it is apparent that rehabilitation efforts should be utilized to the maximum extent possible in efforts to reduce the existing physical housing need.

Table 201 indicates the allocations of subsidized housing assigned under the composite factor strategy, and further indicates the potential number of substandard housing units which might be rehabilitated within each area in meeting its allocation. A study of Table 201 indicates that each housing analysis area may provide part of its allocation through the rehabilitation of substandard housing. However, housing subsidy funds which are available for the rehabilitation of substandard housing in the near future are limited, and therefore it is appropriate that such funds be channeled primarily to those areas in which the benefits associated with the rehabilitation activities can be maximized.

In general, rehabilitation efforts yield the greatest benefit when undertaken in the large central cities of the Region where concentrations of poor housing currently exist. There, rehabilitation activities not only add an equivalent number of units to the stock of decent, safe, and sanitary housing, but can also serve to arrest the cycle of neighborhood deterioration which will result in the creation of more substandard housing unless some positive action is taken. More than 200 units of substandard housing occur in housing analysis areas which are contained in or which are part of the Cities of Kenosha, Milwaukee, Racine, and Waukesha. It is accordingly recommended that in screening applications for subsidy funds for the

Table 201

POTENTIAL NUMBER OF REHABILITATED AND NEW OR EXISTING STANDARD HOUSING UNITS IN THE REGION UNDER THE COMPOSITE FACTOR HOUSING ALLOCATION STRATEGY

Housing Analysis Area	Rehabilitated Housing Units	New Housing or Existing Standard Housing Units	Total Allocation	
			Units	Percent of Region
1	69	101	170	0.95
2	47	205	252	1.41
3	16	141	157	0.88
4	59	267	326	1.83
5	47	293	340	1.91
Ozaukee County	238	1,007	1,245	6.98
6	25	68	93	0.52
7	38	134	172	0.96
8	18	59	77	0.43
9	20	245	265	1.49
10	63	55	118	0.66
11	12	258	270	1.51
12	17	192	209	1.17
Washington County	193	1,011	1,204	6.74
13	12	330	342	1.92
14	46	282	328	1.84
15	63	308	371	2.08
16-25	5,098	0	5,098	28.57
26	193	249	442	2.48
27	174	126	300	1.68
28	88	380	468	2.62
29	68	313	381	2.14
30	187	370	557	3.12
31	50	394	444	2.49
Milwaukee County	5,979	2,752	8,731	48.94
32	80	238	318	1.78
33	52	328	380	2.13
34	52	275	327	1.83
35	94	141	235	1.32
36	35	183	218	1.22
37	14	183	197	1.10
38	85	123	208	1.17
39	117	116	233	1.31
40	257	158	415	2.33
41	119	39	158	0.89
42	60	59	119	0.67
Waukesha County	965	1,843	2,808	15.75
43-44	257	534	791	4.43
45	75	101	176	0.99
46	148	15	163	0.91
47	37	90	127	0.71
48	95	45	140	0.78
49	83	27	110	0.62
Racine County	695	812	1,507	8.44
50-51	387	164	551	3.09
52	89	187	276	1.55
53	199	6	205	1.15
54	60	105	165	0.92
55	151	0	151	0.85
Kenosha County	886	462	1,348	7.56
56	140	5	145	0.81
57	60	112	172	0.96
58	101	100	201	1.13
59	190	88	278	1.56
60	101	100	201	1.13
Walworth County	592	405	997	5.59
Region	9,548	8,292	17,840	100.00

Source: SEWRPC.

rehabilitation of housing, the administrating agencies concerned give first priority to applications involving the restoration of substandard housing in the Cities of Kenosha, Milwaukee, Racine, and Waukesha.

As further indicated in Table 201, relatively large quantities of substandard housing—between 100 and 200 units—exist in certain suburban and outlying rural-urban fringe areas of the Region as well, including housing analysis areas 26, 27, 30, 39, 41, 46, 53, 55, 56, and 58 through 60. Unlike the concentrations of substandard housing which occur in the large urban centers of the Region, the substandard housing units in these suburban and rural areas tend to consist of isolated dwellings distributed somewhat randomly. The relatively large number of substandard units dictates that action be taken in the near future to restore them to a decent, safe, and sanitary condition. It is, therefore, recommended that in the process of screening applications for subsidy funds for the rehabilitation of housing, the administrating agencies concerned give second priority to applications involving the rehabilitation of substandard housing in rural areas of the Region where substantial amounts of such housing occur—including housing analysis areas 26, 27, 30, 39, 41, 46, 53, 55, 56, and 58 through 60 (see Map 78).

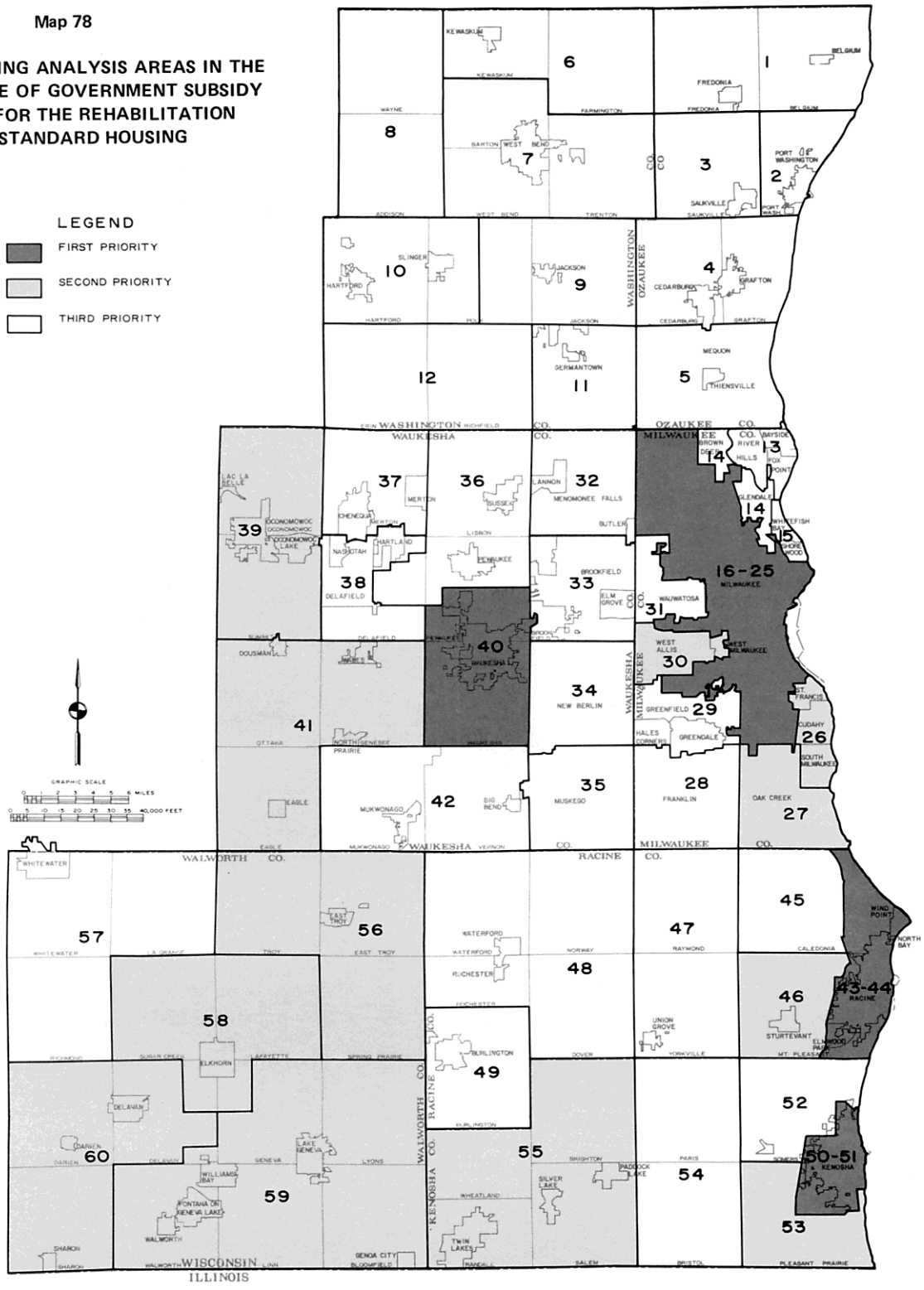
Priority Areas for Programs Involving New Housing Construction: As previously indicated, approximately 26,500 households in the Region currently reside in a substandard or overcrowded housing unit and are unable to obtain adequate alternative housing. Substandard and overcrowded living arrangements are symptomatic of a physical deficiency in the existing housing stock relative to the needs of the regional population. In this regard, it was determined that with a more effective utilization of presently overcrowded but otherwise sound housing, about 17,800 housing units would be required to eliminate this physical housing need. In addition to the rehabilitation of existing substandard housing discussed above, the subsidized construction of new housing would also result in a direct reduction of the existing physical housing need. Indeed, government subsidy programs which directly facilitate the construction of new housing units represent an effective means for reducing the physical housing need in southeastern Wisconsin.

Government programs for the subsidized construction of new housing are an appropriate tool for meeting part of the allocation of subsidized housing assigned under the composite factors strategy to each housing analysis area of the Region. Such construction may be less important in certain areas such as the City of Milwaukee and housing area 55 in Kenosha County (see Table 201).[6] It is important to note, however, that the amount of subsidy funds which will be available annually for the construction of new housing within southeastern Wisconsin is limited. Moreover, certain subareas of the Region are more suitable than others for the immediate construction of low- and moderate-income housing because of their relatively high level of employment opportunities and large amounts of developable land. Recognizing the limited amount of subsidy funds

[6]*The City of Milwaukee and housing area 55 are the only housing areas which can meet their entire allocations through the rehabilitation of substandard housing units.*

Map 78

PRIORITY HOUSING ANALYSIS AREAS IN THE REGION FOR USE OF GOVERNMENT SUBSIDY PROGRAMS FOR THE REHABILITATION OF SUBSTANDARD HOUSING



First priority for use of rehabilitation housing subsidy programs is recommended for the larger cities of the Region—Kenosha, Milwaukee, Racine, and Waukesha—where concentrations of substandard housing occur. Housing analysis areas which are contained in or which are part of these cities contain more than 200 units of substandard housing. Second priority is recommended for housing analysis areas where between 100 and 200 substandard housing units are distributed somewhat randomly throughout the area. These housing analysis areas are located in the suburban and outlying rural-urban fringe areas of the Region, and include areas 26, 27, 30, 39, 41, 46, 53, 55, 56, and 58 through 60.

Source: SEWRPC.

which may be expected to be available for new residential construction, and recognizing the greater suitability of certain areas for the immediate construction of low- and moderate-income housing, priority areas have been determined in which construction subsidy funds may be most effectively utilized in the near future. It is intended that these priority areas remain as such until half of the existing physical housing need has been eliminated, which should be accomplished within a three-year period.

The determination of priority areas with respect to new subsidized housing construction was based upon two measures of area suitability, namely, employment opportunities and developable land. Sites for the construction of low- and moderate-income housing should be located within reasonable travel time from employment centers for the prospective inhabitants. In this regard, a housing analysis area was considered a priority area with respect to new subsidized construction only if it generated 4,000 jobs or more. Analysis of the Commission's land use files indicated that each housing analysis area which generates at least 4,000 jobs also appears to have significant quantities of developable land to support major new residential development, with the exception of housing area 15, consisting of the Villages of Shorewood and Whitefish Bay in Milwaukee County. The priority areas for subsidized construction activity resulting from a consideration of employment and developable land are shown on Map 79. The effective use of subsidized housing construction programs within the Region in the near future dictates that funds which are available for subsidized construction be channeled primarily into the designated priority areas. It is, therefore, recommended that in screening applications for subsidy funds for the construction of new housing, the administering agencies concerned give priority to housing proposed to be located in areas which have both sufficient employment opportunities and sufficient amounts of developable land to support the new residential development, as indicated on Map 79.

Priority Areas for Programs Involving Utilization of the Existing Stock of Standard Housing: In addition to government subsidy programs involving the rehabilitation of substandard housing and the construction of new housing, a third major type of subsidy program exists which entails the utilization of the existing stock of standard housing as alternative housing for households in the need category. Programs of this type generally involve either direct or indirect subsidization of households in need to the point that they are economically able to compete in the marketplace as part of the effective demand for housing. It is anticipated that residential construction activity would ultimately increase to meet the higher, subsidized level of effective market demand.

The decision to employ subsidy programs which involve the use of the existing housing stock in a given subarea of the Region must be made in the context of current market conditions prevalent in that area. An overriding consideration is that there be sufficient quantities of vacant housing of the type and price range desired by the eligible applicants. Efforts to use subsidy programs which involve the utilization of the existing stock of standard housing in subareas of the Region where there is an insufficient vacant housing stock may serve to intensify the housing shortage in that area and may create inflationary pressure on the sale prices and rents of other housing in the area. Recognizing that the subsidy funds which are available for programs which utilize the existing stock of standard housing as alternative housing for households in the need category are limited, it is recommended that the administrators of such programs give priority to applications which offer evidence of sufficient vacancy rates—1.5 percent for homeowner housing and 5 percent for rental housing—for housing of the type and price range desired by eligible applicants for the subsidized housing.

Recommendations to Facilitate Utilization of Housing Subsidy Programs at the Local Level: Housing need, while a regional problem, ultimately must be resolved at the local level. A regional housing allocation strategy has been formulated to identify on a subregional, or housing analysis area, basis, local responsibility for providing 17,800 decent, safe, and sanitary housing units required to alleviate physical housing need in the Region. While a variety of housing subsidy programs to solve housing need are available to local communities, utilization of such programs can be greatly facilitated by vigorous and aggressive local actions. Recommendations set forth in this section, therefore, are primarily directed to the local units of government, and suggest local actions required to enable fuller utilization of existing housing subsidy programs.

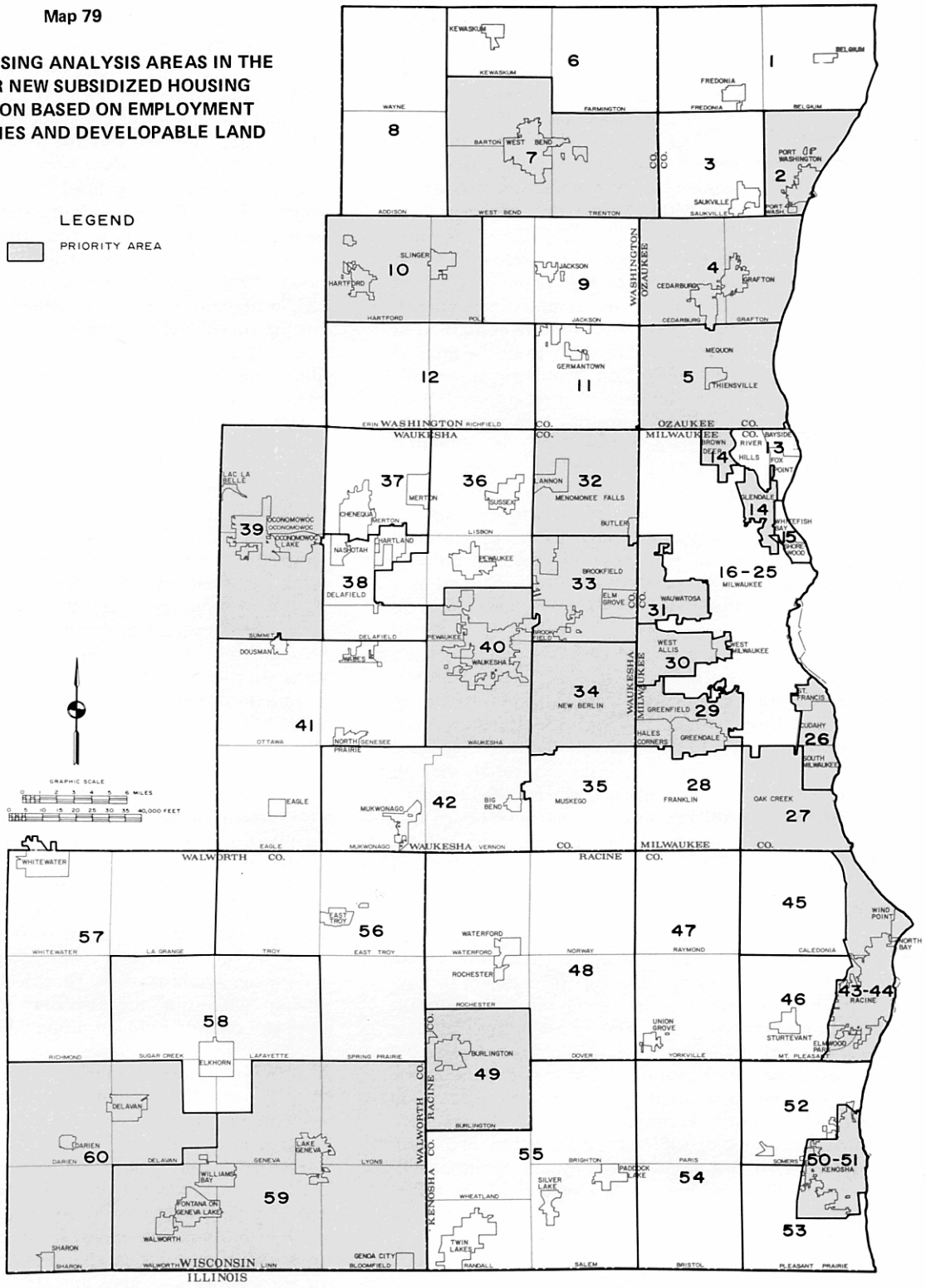
Local efforts to reduce housing need in southeastern Wisconsin will be most effective when guided by a local government housing agency which is able to carefully analyze local needs and to carry out a housing program in accordance with those needs. Traditionally, the municipal housing authority, with powers specified in Sections 66.401-66.404 of the Wisconsin Statutes, has been the local agency established to implement local housing activities in the Region. Municipal housing authorities have been established in 13 cities and villages in southeastern Wisconsin, although only four of these currently own and operate public housing units.

With respect to future local housing activities within the Region, however, a county housing agency appears to be the logical entity to analyze local housing needs and to administer a housing program for the abatement of the identified housing problems. Ideally, a county housing agency should be a county housing authority with powers specified under Section 59.075 of the Wisconsin Statutes. County housing authorities are granted all of the powers of a municipal housing authority in unincorporated parts of the county and may operate housing projects within incorporated areas with the consent of the governing body of the city or village.

Alternatively, however, a county housing agency, department, or division other than a county housing authority could be created by county action for the purpose of analyzing housing needs within the county and implementing local housing programs in accordance with its

Map 79

PRIORITY HOUSING ANALYSIS AREAS IN THE REGION FOR NEW SUBSIDIZED HOUSING CONSTRUCTION BASED ON EMPLOYMENT OPPORTUNITIES AND DEVELOPABLE LAND



Although the recommended regional housing plan emphasizes greater utilization of existing housing stock, some new construction will also be required to reduce the physical housing need in the Region. A housing analysis area was considered a priority area for new subsidized construction only if it generated 4,000 jobs or more and had significant quantities of developable land. Priority areas for new subsidized construction are located in areas of more recent urbanization in each of the seven counties of the Region because of their relatively high level of employment opportunities and their large amounts of developable land.

Source: SEWRPC.

findings. Regardless of the precise structure, the use of seven county housing agencies to implement the regional housing plan could avoid needless duplication of effort which might arise if each community within the Region formed its own housing agency, hired its own staff, and undertook its own housing program, possibly in isolation from other communities in the county, and could, in addition, greatly reduce the problems of interagency coordination. Furthermore, a recent court decision[7] has directed a local housing authority to prepare a comprehensive metropolitan plan for publicly assisted housing, and include as location for such housing areas beyond the geographic limits of the community. Local units of government, in light of this landmark decision, may find it more desirable to cooperate with and support a county housing agency than to acquiesce to the possible intervention of a local housing authority. It is, therefore, recommended that a county housing agency—either a county housing authority, department, or division—be established in the six counties of the Region which do not have such an agency at the present time.[8] Municipal housing authorities which do not currently own and operate public housing units should be disbanded upon formation of the county housing agency. However, in the absence of a county housing authority, local authorities can still perform an important function in the analysis of housing need and the administration of housing programs.

Owing to the complexity of the housing problem—the wide variation in housing conditions, the complex economic, social, and institutional nature of housing constraints, and the diversity of households in need—housing need has been identified and described herein only at the regional, county, and housing analysis area levels. Proper resolution of local housing need, however, will require more precise quantification and qualification of housing need at the local community and neighborhood level. Furthermore, a summary of such a local analysis of housing need is to be included in the housing assistance plan, which must be filed with the U. S. Department of Housing and Urban Development by all units of government which seek federal funding under Title I of the Housing and Community Development Act of 1974. The county housing agency staff, with the assistance of local public officials, local planning agencies and staffs, and local housing agencies and staffs, can most effectively perform this local analysis of housing needs. The county housing agency should be the coordinating agency with respect to the local needs analysis, ensuring the collection and collation of information on a uniform, consistent basis and maximizing the use of available local input in such efforts. It is, therefore, recommended that the county housing agency, assisted by and with the full cooperation of all planning agencies within the county, perform the following local housing analyses at the neighborhood unit level, utilizing the data assembled in the regional housing study as the point of departure:

1. Survey the condition of the existing housing stock, quantifying the number of occupied and vacant units in standard and substandard condition and identifying those units suitable for rehabilitation.

2. Determine the number of households in housing need by specific household categories of elderly, large family, or handicapped.

3. Determine the number of households displaced or to be displaced by public improvement projects.

4. Within the context of the Commission's composite factor strategy, specify annual goals for the number of households to be assisted through the provision of new, rehabilitated, or existing housing units.

5. Identify the location of proposed new housing construction or rehabilitation for households in housing need by neighborhood unit.

Based upon the analysis of local housing needs outlined above, the county housing agency, in conjunction with local public officials and local planning agencies within the county, can determine the exact types of subsidized housing needed as well as the specific areas within which such housing should be located. The county housing agency, in conjunction with local public officials and local planning agencies, should make the findings of their analyses known to the members of the private and quasi-public sector who are instrumental in the utilization of the various housing subsidy programs. In this regard, it is recommended that the county housing agency develop good working relationships with local landlords, real estate broker associations, builders, and developers, as well as with community and neighborhood organizations which have an interest in providing housing for lower-income families, explaining fully the findings of the local need analysis and the provisions of the various subsidy programs which are available for the abatement of the existing need.

In certain situations, subsidy programs may be implemented through the private sector—for example, by private builders and developers working directly with the funding agency. In other situations, the county housing agency may play a more active role, either as an intermediary between the private sector and the funding agency, or it may construct, own, and operate the subsidized housing itself. In this regard, it is recommended that the county housing agency take those actions necessary to ensure the full use of housing subsidy programs in an effort to meet the recommended regional allocation strategy in a manner which is consistent with the local analysis of housing need. The county housing agency's role with respect to the actual implementation of the various subsidy programs will necessarily be greater in

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[7] *Gautreaux v. the Chicago Housing Authority, 74-1048, 74-1049 (7th circuit 1974).*

[8] *Racine County currently is the only county in the Region which has established a county housing authority.*

those areas in which there is insufficient action on the part of the private quasi-public sector in terms of providing needed subsidized housing.

While the overwhelming majority of housing subsidies are provided through federal agencies, and to a lesser extent, state agencies, certain local units of government also provide housing subsidies within the Region. Milwaukee County has established a housing fund which has been utilized to "write down" the costs of land, thereby enabling housing consumers to reside in housing units at lower than market costs. In addition, the City of Milwaukee has established an urban homestead program whereby households in housing need can purchase deteriorated or substandard housing units for a nominal amount, and through utilization of housing rehabilitation programs, reside in housing units at below market costs. Housing subsidies provided through various local units and agencies of government can play a significant role in the provision of decent, safe, and sanitary housing to households in housing need. Therefore, it is recommended that local units of government investigate the possibility of utilizing local revenues as a source of public subsidy funds to reduce the cost of housing to households in the need category. Such subsidies, though marginal in nature, may allow very low income households to secure adequate housing when utilized in conjunction with subsidies provided under state or federal housing programs.

Role of the Southeastern Wisconsin Regional Planning Commission: As indicated above, local involvement is essential for the effective utilization of housing subsidy programs in efforts to eliminate the existing housing need. However, housing planning in a multicommunity urbanizing region must be conducted on an areawide basis as well. The magnitude, characteristics, and spatial distribution of the existing housing need are determined by basic social and economic forces which operate over the entire urbanizing Region with little regard for artificial corporate boundaries. Housing planning cannot be accomplished successfully solely within the confines of a single municipality or even a single county if the municipality is part of a large urban complex. Recommendations set forth in this section, therefore, are directed to the Southeastern Wisconsin Regional Planning Commission itself in order to facilitate a meaningful reduction of housing problems on an areawide basis.

Having conducted a comprehensive regional housing study, the Commission has determined the magnitude of the existing housing need at a regional, county, and housing analysis area level and has compiled extensive data files which will assist in the determination of housing need for smaller subareas of the Region. This information is invaluable as a point of departure for county housing authorities and local units of government in analyzing housing needs on a community and neighborhood level. It is recommended, therefore, that the Commission provide technical assistance on a continuing basis to enable county housing authorities and local units of government to more precisely establish the magnitude and characteristics of the existing housing need on a community and neighborhood level. Furthermore, the Commission should provide technical assistance on a continuing basis as required with respect to the utilization of housing subsidy programs which are available for the abatement of the identified housing problems.

An important part of any planning effort is the monitoring of plan implementation activities to determine major departures from or significant progress towards the realization of the agreed upon objectives. With respect to housing planning, it is important to monitor the provision of subsidized housing to determine whether housing subsidy programs are being utilized in the appropriate areas, rectifying appropriate housing problems, and assisting the appropriate households. It is, therefore, recommended that the Commission establish a monitoring system with respect to the provision of subsidized housing in southeastern Wisconsin. Such a system should be capable of:

1. Determining whether subsidized housing units are being provided in accordance with the composite factor strategy.

2. Determining whether housing subsidy programs are addressing the most severe housing problems, as previously indicated in this chapter.

3. Determining whether housing subsidy programs are being utilized to assist those households which experience the greatest difficulty in securing adequate housing, as previously indicated in this chapter.

Because of the dynamic nature of the housing situation, it is anticipated that a continuing inventory and analysis of basic housing information will be required at the regional level. A great deal can be achieved with respect to guiding housing development, particularly subsidized housing, through such inventory activities. Such inventory and analysis will also identify any necessary modifications and adjustments which may be required in the recommended regional housing plan over time. It is, therefore, recommended that the Commission provide for the collection, analysis, and dissemination of housing-related information on a continuing uniform, timely, and areawide basis, including information concerning the following: levels of residential construction and demolition activity; land, development, construction, and financing costs; property tax rates; and government activity in the field of housing. It is further recommended that the Commission undertake a major reevaluation of the magnitude and characteristics of the housing need at regular intervals to determine the extent of housing problems in the Region, the effectiveness of efforts undertaken for the abatement of those problems, and the need for modification or adjustment of the recommended regional housing plan. A major reevaluation of the regional housing situation should be conducted approximately every fifth year after the publication of this report.

Recommendations to State Agencies: Certain state agencies can play important roles with respect to the utilization of housing subsidy programs in the Region. The

Wisconsin Department of Local Affairs and Development (DLAD) can provide technical assistance to county housing authorities and local units of government concerning the quantification of housing need at the county or neighborhood level, as well as the utilization of various housing subsidy programs which are available for the abatement of the identified housing problems. DLAD is also authorized to administer limited general housing grant and loan funds for various housing-related projects in the state. In addition, the Wisconsin Housing Finance Authority, created under Section 234 of the Wisconsin Statutes, is authorized to sell 40-year revenue bonds totaling $150 million and to use the proceeds to provide long-term mortgages to developers of housing units at a 6 to 6 1/2 percent rate of interest. Savings which accrue to the developer as a result of the lower mortgage interest rate would be passed on to the tenant of the rental unit in the form of a lower rental payment.

It is recommended that the Wisconsin Department of Local Affairs and Development continue to provide technical and financial assistance to county housing authorities and local units of government in support of efforts to analyze and resolve local housing problems. It is recommended that the Wisconsin Housing Finance Authority provide long-term low-interest mortgages to developers to enable the construction of housing units at below market rent. It is further recommended that the Wisconsin Housing Finance Authority, where possible, work in concert with existing federal housing subsidy programs, and through greater interest reductions, allow larger subsidies and thereby provide housing units to lower income households.

Recommendations to Federal Agencies: Although a limited amount of subsidy funding may emanate from the state and local units of government, it is anticipated that the vast majority of housing subsidy funds available within the Region will be supplied by agencies of the federal government. As described in Chapter XI of this report, numerous federal housing subsidy programs which provide new, existing, or rehabilitated housing units to households in housing need are administered by the U. S. Department of Housing and Urban Development and the U. S. Department of Agriculture, Farmers Home Administration. Continued funding of housing subsidy programs administered by these agencies is required if decent, safe, and sanitary housing is to be provided to households in housing need. It is recommended, therefore, that housing subsidy programs administered by the U. S. Department of Housing and Urban Development and the U. S. Department of Agriculture, Farmers Home Administration, which provide new, existing, or rehabilitated housing units to households in housing need, be sufficiently funded to facilitate a significant reduction in the existing housing need in the shortest possible time. In order to make significant progress toward the reduction of housing need in the near future, federal agencies should, at a minimum, endeavor to match the scale of efforts undertaken during the short-range action housing program, when approximately 2,900 households were assisted annually under federal housing subsidy programs.

A moratorium with respect to the funding of housing subsidy programs effective January 5, 1973 virtually ended the provision of subsidized housing units under the Section 235—Homeownership, Section 236—Rental, Rent Supplement, and Public Housing programs in the Southeastern Wisconsin Region. Although such housing subsidy programs met with great difficulties and proved unworkable in many areas of the United States, these programs were, with few exceptions, successful in the Region, and provided many households in housing need with decent, safe, and sanitary housing units. It is recommended, therefore, that authorized funds for the Section 235—Homeownership, Section 236—Rental, Rent Supplement, and Public Housing programs be released by the federal government for use in the Southeastern Wisconsin Region.

As observed throughout this chapter, the amount of housing subsidy funds which may be expected to become available to assist households in southeastern Wisconsin is very limited relative to the magnitude of the existing housing need. It is important, then, that the limited amount of subsidy funds be directed to households which have the most severe housing problems and which experience the greatest difficulty in the acquisition of adequate shelter. Under the continuing regional housing study, subsidized housing activities will have to be monitored by the Commission in order to determine whether housing funds are being utilized in accordance with the regional housing plan. In order to facilitate this monitoring process, it is recommended that the agencies administering housing subsidy programs in addition to income eligibility records and household demographic data also collect and keep records concerning the previous address and the condition of the housing unit—substandard or overcrowded—at the previous address. With such information, it will be possible to quantify the households in need which are being subsidized in accordance with the recommendations of the regional housing plan.

The Federal Housing Administration, through the U. S. Department of Housing and Urban Development, and the Veterans Administration, through the U. S. Department of Veterans Benefits, respectively insure and guarantee lenders against loss on mortgage loans made to eligible households. While such programs do not provide a direct subsidy to households, they do assist buyers with low down payments to obtain financing, and thereby facilitate the provision of housing to moderate income households. It is, therefore, recommended that these agencies continue to administer such programs, incorporating, where applicable, appropriate recommendations of the regional housing plan.

PLAN IMPLEMENTATION ORGANIZATIONS

Although the Regional Planning Commission can promote and encourage implementation of the regional housing plan, it is assigned, by law, a completely advisory role in actual plan implementation actions. Because of this, implementation of the regional housing plan will be largely dependent upon the actions of local, county,

state, and federal agencies and units of government concerned with housing in the Region. These include general-purpose units of government, such as cities and villages; state agencies, such as the Wisconsin Department of Local Affairs and Development; and federal agencies, such as the U. S. Department of Housing and Urban Development. In addition to these public agencies, certain quasi-public organizations and elements of the private housing sector can effect implementation of the recommended regional housing plan.

Because of the many and varied agencies in existence which can affect housing, it is important to identify those agencies which have the legal powers, financial means, or influence to implement the plan most effectively. These agencies are identified and discussed below by level of government and by type of agency. The interdependence between the various levels and agencies of government as well as between the public, quasi-public, and private agencies concerned with housing, and the consequent need for close cooperation in resolving the housing problem of the Region, cannot be overemphasized.

Public Agencies

Local Agencies: The Wisconsin Statutes grant local government powers which may directly or indirectly affect the provision of housing. Powers for planning and regulating residential development at the local level are important to the implementation of the recommended regional housing plan.

Planning Agencies: Pursuant to Section 62.23 of the Wisconsin Statutes, cities, villages, and towns with village powers are authorized to operate plan commissions, which are charged with the duty and function of making and adopting a master plan for the physical development of the municipality. The scope of the master plan explicitly includes recommendations concerning the general location, character, and extent of community centers and neighborhood units; the general character, extent, and layout of the replanning of blighted districts and slum areas; and a comprehensive zoning ordinance to implement the land use and housing elements of the master plan. The local plan commissions are advisory to the governing body, which is the principal plan implementation agency.

Towns which do not have village powers have limited planning powers garnered from several statutes. Limited planning powers may be exercised through either a town park commission or a town zoning committee. The town park commission's planning powers extend to making reservations of land for public uses and laying out ample open spaces, parks, highways, and roads. If the county has not adopted a county zoning ordinance as provided by Section 59.97, any town may, by ordinance, empower the town park commission, or if there is no such commission, create a town zoning committee, to establish zoning regulations. Where there is no county zoning ordinance, any town may (Section 60.74(1)(a), Wisconsin Statutes) by ordinance regulate, restrict, and determine areas for agriculture, forestry, and recreation; location of roads, schools, trades, and industries; and location, height, bulk, number of stories, and size of buildings and other structures. Another alternative where there is no county zoning ordinance is that town boards, acting under Section 60.29(41) to participate in a regional planning program, may adopt town zoning ordinances in the manner provided for village planning (Section 61.35) and, by reference, for city planning (Section 62.23).

Counties are granted powers to create a planning and zoning committee or to designate any previously established committee to act in matters pertaining to county planning and zoning under Section 59.97 of the Wisconsin Statutes. Such a committee is directed to prepare a county development plan for the physical development of the unincorporated territory within the county and areas within incorporated jurisdictions whose governing bodies, by resolution, agree to having their areas included in the county's development plan. Included in this section of the Wisconsin Statutes, the county is empowered to establish a county zoning ordinance (Sections 59.97(4) and (5)).

Local Housing Authorities: Sections 66.40 to 66.404 of the Wisconsin Statutes provide for the creation of local housing authorities. Such an authority may be established by resolution of a city council declaring a need for a housing authority if it is found that unsanitary or unsafe inhabited dwelling accommodations exist in the city, or that there is a shortage of safe or sanitary dwelling accommodations in the city available to persons of low income at rentals they can afford. Under Section 66.40(9) of the Wisconsin Statutes, local housing authorities are authorized to prepare, carry out, acquire, lease, and operate housing projects and to provide for the construction, reconstruction, improvement, alteration, or repair of any housing project or part thereof; to investigate living, dwelling, and housing conditions; to acquire by eminent domain any real property; and to own, hold, clear, and improve property. Under Section 66.40(13)(a) of the Wisconsin Statutes, an authority shall have the power to issue bonds for any of its corporate purposes.

The provisions of this law are made applicable to villages by Section 61.73 of the Statutes and to counties by Section 59.075, although county authority cannot operate in cities or villages without approval of the cities and villages (Section 59.075(4) of the Statutes). There is no legislation for housing authorities applicable to towns. An authority created under the provisions of the State Statutes may not operate for profit (Section 66.401), may select tenants (Section 66.402), may cooperate with other agencies in housing projects (Section 66.403), and may enter into contracts to assist counties and municipalities.

At the present time in southeastern Wisconsin, housing authorities have been established in the Cities of Burlington, Hartford, Kenosha, Mequon, Milwaukee, South Milwaukee, Waukesha, West Allis, West Bend, and Whitewater; the Villages of Shorewood, Union Grove, and Waterford; and Racine County.

Areawide Agencies—Regional Planning Commission: Although not a plan implementation agency itself, the Regional Planning Commission through its work can aid implementation of the regional housing plan. As already

noted, the Commission has no statutory plan implementation powers. In its role as a coordinating agency for planning development activities within the Region, however, the Commission may promote plan implementation through community assistance planning services and through the review of federal and state grants-in-aid using adopted plan elements as a basis for this review. In addition, the Commission can provide regional housing and housing-related data through a housing outreach program to guide and advise communities, organizations, and individuals that are concerned with the provision of decent, safe, and sanitary housing for those segments of the regional population experiencing the most difficulty in securing such housing through the private sector.

State Agencies: There exist at the state level a number of agencies with powers related to housing. The general or specific planning authority and certain implementation powers of these agencies are important to implementation of the recommended regional housing plan.

Wisconsin Department of Local Affairs and Development: This department is broadly charged with coordinating activities of state and local government and with promoting orderly community development. The department carries out its obligations by advising the governor and legislature on the role of the state in state-local affairs, making studies of the problems affecting state and local government relations and recommendations for relieving these problems, and coordinating state agency activities affecting local governments and local government participation in, and utilization of, federal aid programs. This department is authorized to assist in the development and implementation of human resource programs through technical assistance and administration of state and federal grant programs in support of governmental or private activities that serve the needs of disadvantaged persons, particularly lower-income persons. In state-local relations, this department is also authorized to review proposed changes in local government boundaries and administer state grant programs to strengthen local government. It is also empowered to provide housing assistance (Wisconsin Statutes, Section 22.13(3)) to sponsors of low- and moderate-income housing projects in the form of grants and loans. Properly directed and used, all of these departmental activities can contribute to the successful implementation of the regional housing plan.

This department has additional authority to enforce the State Housing Relocation Act (Section 32.26 of the Statutes). The department is assigned jointly with the State Department of Industry, Labor, and Human Relations to determine standards for decent, safe, and sanitary dwellings for replacement housing. The Relocation Act itself requires that, within a reasonable time prior to displacement, housing meeting the standards established shall be available to the extent that may be reasonably accomplished. This and the coordinating and planning powers of this department make it very important to the implementation of the regional housing plan.

Wisconsin Housing Finance Authority: Chapter 234 of the Wisconsin Statutes creating the Wisconsin Housing Finance Authority was passed by the Wisconsin Legislature in 1971. The Wisconsin Housing Finance Authority was authorized to sell 40-year revenue bonds totaling $150 million and to use the proceeds to provide long-term mortgages to developers of housing units at a 6 to 6 1/2 percent rate of interest. The saving which would accrue to the developer as a result of the lower mortgage interest rate would be passed on to the tenant of the unit in the form of a lower rental payment. The Wisconsin Housing Finance Authority may work in concert with federal housing subsidy programs, thereby providing deeper subsidies and facilitating the provision of housing to very low income families.

Wisconsin Department of Industry, Labor, and Human Relations: The Wisconsin Department of Industry, Labor, and Human Relations has several important powers related to housing. It is empowered by Section 101.02(15)(a) of the Statutes to supervise the safety of public buildings, which by definition include buildings occupied by three or more tenants. To this end, the department has authority to ascertain, fix, and order standards, rules, or regulations for the construction, repair, and maintenance of public buildings. The department is empowered to make inspections for fire prevention, and to order the repair or removal of any buildings or structures which, for reason of age or dilapidated condition, are especially liable to fire and which are so situated as to endanger other buildings and structures (Section 101.14(1)(a)). The department also has the authority to determine standards jointly with the State Department of Local Affairs and Development for decent, safe, and sanitary dwellings for relocation, as discussed previously. These powers will be important to implementation of the regional housing plan.

An important power granted to this department is the administration of the Equal Rights Act through its Division of Equal Rights (Sections 101.22(3) and (4) of the Statutes). Under this empowerment, the department may receive and investigate complaints charging violation of the Equal Rights Act, hold hearings, subpoena witnesses, take testimony, make investigations, and take action by conciliation or fine if there is probable cause to believe that discrimination has occurred. The Department's Division of Equal Rights, in addition to investigating alleged discrimination in public places of accommodation and amusement, is authorized to encourage and assist local units of government in guaranteeing all persons an equal opportunity for housing (Sections 101.222(1) and (2) of the Wisconsin Statutes).

Federal Agencies: Agencies of the federal government provide important sources of funding for many of the activities of state and local government. The actions of the federal government thus strongly influence the capability of states and communities to initiate programs in functional areas, and therefore will be critical to the implementation of the regional housing plan.

U. S. Department of Housing and Urban Development: The U. S. Department of Housing and Urban Development is responsible for administering the Federal Housing and Community Development Act of 1974. Through a block grant program for community development

under Title I of this Act, funding may be made available to local governments for such activities as the construction of water, sewer, neighborhood, or other public facilities; the conduct of urban renewal and neighborhood development programs; the acquisition and development of park and open spaces; urban beautification; historic preservation; and housing rehabilitation. Under Title II of this Act and Sections 221, 235, and 236 of the Housing and Urban Development Act of 1968, federal housing programs are available to assist local governments in providing homeownership or rental opportunities for low- and moderate-income households by subsidizing the construction, lease, acquisition, or rehabilitation of housing units for such households.

In addition, the department, through the Federal Housing Administration, is responsible for administering various mortgage insurance programs. While such programs do not provide a direct subsidy to households, they do insure lenders against loss on mortgage loans, and assist buyers with low down payments to obtain financing, thereby facilitating the provision of housing to moderate-income households. Loans may be used to finance the purchase of proposed, under construction, or existing one- to four-family housing, as well as to refinance indebtedness on existing homes.

U. S. Department of Agriculture, Farmers Home Administration: The U. S. Department of Agriculture, Farmers Home Administration, administers several programs intended to increase opportunities for low- and moderate-income households to obtain decent, safe, and sanitary housing in rural areas. Low interest loans are made available directly to low- and moderate-income rural households or to eligible public or nonprofit organizations to build, purchase, or repair and rehabilitate housing. This department also funds a self-help program of technical assistance for provision of low-cost housing in rural areas.

U. S. Department of Veterans Benefits: The U. S. Department of Veterans Benefits of the Veterans Administration is responsible for administering the Veterans Loan Guarantee program. While this program does not provide a direct subsidy to households, it does guarantee lenders against loss on mortgage loans made to eligible veterans, and assists veterans with little or no down payment to obtain financing, thereby facilitating the provision of housing to moderate-income households. Loans may be used to finance the purchase of proposed, under construction, or existing homes, as well as to refinance indebtedness on existing homes.

Quasi-Public Organizations

There are a number of quasi-public organizations within the Region interested in the provision of low- and moderate-income housing which may support implementation of the recommended regional housing plan. These organizations are composed of private individuals or nonprofit corporations with activities or interests in the area of housing. These quasi-public organizations may be special interest groups, such as the League of Women Voters; community action groups, such as the Milwaukee Alliance of Concerned Citizens, Inc. in the City of Milwaukee; or nonprofit housing corporations, such as the Southeast Wisconsin Housing Corporation in the City of Burlington.

Such agencies or organizations normally do not provide a source of housing funding, although they may provide "seed money" or sponsor low- and moderate-income housing development projects on a nonprofit basis. These agencies may, however, provide technical assistance and support plans for low- and moderate-income housing within the public sector. Their activities include educating the public on the need for publicly assisted housing in order to help lessen community opposition to such housing. The recognition and support of these organizations for the regional housing plan may aid its acceptance and implementation on the local level.

Private Housing Sector

In addition to the public agencies and quasi-public organizations, there are elements of the private housing sector which may facilitate implementation of the recommended regional housing plan within the private sector. Such elements include those involved in the production of housing, such as builders, and labor unions, and those involved in the provision of housing, such as lenders and real estate brokers. These private housing sector elements have a financial stake in the operations of the private housing market, and should have an interest in removing constraints to the provision of housing within the Region. They can facilitate implementation of the regional housing plan by effecting recommended changes in their own area of private housing activity and by influencing changes within the public sector.

PLAN ENDORSEMENT AND IMPLEMENTATION

Upon adoption of the regional housing plan by formal resolution of the Southeastern Wisconsin Regional Planning Commission, in accordance with Section 66.945(10) of the Wisconsin Statutes, the Commission will transmit a certified copy of the resolution adopting the plan, together with a copy of the plan itself, to all local legislative bodies within the Southeastern Wisconsin Region and to all of the aforementioned existing local, areawide, state, and federal agencies that have potential plan implementation functions.

Endorsement of the regional housing plan by local legislative bodies and the existing local, areawide, state, and federal agencies concerned is highly desirable to assure a common understanding among the several governmental levels and to enable their staffs to program the necessary plan implementation work. Because of the complexities of housing planning discussed in a previous section, the endorsement and cooperation of implementing agencies will be required to translate the recommended allocation and recommendation elements of the regional housing plan into local level housing programs for solutions to regional housing problems. In addition, endorsement of the recommended housing plan may be a preliminary element of federal financial aid eligibility, particularly in application for community development block grant entitlements. It is extremely important to understand

that endorsement of the recommended regional housing plan by any unit or agency of government pertains only to the statutory duties and functions of the endorsing agencies, and such endorsement does not and cannot in any way preempt or commit action by another unit or agency of government acting within its own area of functional and geographic jurisdiction.

Upon endorsement of the regional housing plan by a unit or agency of government, it is recommended that the policy-making body of the unit or agency direct its staff to review in detail the recommendations constituting the plan as these may relate to the unit or agency concerned. Once such review is completed, the staff can propose to the policy-making body for its consideration and approval the steps necessary to integrate the plans and programs of the unit or agency of government into the regional housing plan.

Local and County Units of Government

1. It is recommended that the governing bodies of all cities and villages within the Region endorse the regional housing plan after a report and recommendations by appropriate committees and local plan commissions.

2. It is recommended that the plan commissions of all cities and villages in the Region endorse the regional housing plan as it affects them, and certify such endorsement to their respective governing bodies.

3. It is recommended that local and county housing authorities endorse the regional housing plan and utilize the plan recommendations in administering housing programs, and certify such endorsement to their respective governing bodies.

State Agencies

1. It is recommended that the Wisconsin Department of Local Affairs and Development endorse the recommended regional housing plan and integrate it into its activities with respect to technical assistance to local units of government, and with respect to administering any appropriate state and federal grant-in-aid programs.

2. It is recommended that the Wisconsin Housing Finance Authority endorse the recommended regional housing plan and utilize the plan allocation and recommendation elements in administering its housing-related programs and technical and financial assistance.

3. It is recommended that the Wisconsin Department of Industry, Labor, and Human Relations endorse the recommended regional housing plan and utilize the plan recommendations with respect to maintenance of existing housing stock and with respect to equal opportunity for housing.

Federal Agencies

1. It is recommended that the U. S. Department of Housing and Urban Development endorse the recommended regional housing plan and utilize the recommended housing allocation and subsidy recommendation elements of the plan in the administration of community development grants, housing assistance programs, and Federal Housing Administration nonsubsidy loan insurance programs.

2. It is recommended that the Farmers Home Administration of the U. S. Department of Agriculture endorse the recommended regional housing plan and utilize housing allocation and subsidy recommendations elements of the plan in administration of rural housing programs.

3. It is recommended that the Veterans Administration of the U. S. Department of Veterans Benefits endorse the recommended regional housing plan and utilize appropriate recommendations of the plan in administering their housing loan guarantee program.

Quasi-Public Agencies

It is recommended that special interest organizations, community action groups, and nonprofit corporations involved in the provision of low- and moderate-income housing endorse the recommended regional housing plan and utilize plan recommendations to influence and support public endorsement and integration of the plan.

Private Housing Sector

It is recommended that builders, labor unions, lending institutions, and realtors involved in the production and provision of housing within the private housing market endorse the recommended regional housing plan and utilize plan recommendations to effect changes within the private market and to influence public implementation and integration of the plan.

SUMMARY

The primary purpose of the regional housing study was the definition and quantification of the unmet housing need within the Southeastern Wisconsin Region and the formulation of a plan to meet this need. The plan prepared under the study for the abatement of areawide housing problems consists of two major elements. The first is a housing allocation strategy, which is recommended for use in the geographic distribution within the Region of the subsidized housing units required to abate the physical housing need in the Region. The second major element of the regional housing plan consists of a series of recommendations which, in conjunction with the housing allocation strategy, can reduce the constraints on the availability of low-cost housing which were found to exist within the Region and thereby help to make such housing more readily and widely available to households in need. The recommendations include

both actions which do not rely on governmental subsidy and actions which require such subsidy to households in need.

NONSUBSIDY RECOMMENDATIONS

Existing housing problems are in part the result of constraints within the housing market which limit the availability of housing to certain segments of the regional population. To the maximum extent possible, nonsubsidy approaches should be utilized in efforts to remove these constraints. The regional housing plan includes 15 recommendations for the abatement of economic, institutional, and social constraints on the availability of housing within the regional housing market which do not require public subsidy.

Recommendation for the Abatement of Economic Constraints

The overriding housing availability constraints are economic in nature, relating specifically to the cost of housing relative to the household's ability to pay. The total cost of occupying housing, however, is affected by many individual cost elements with interest payments being the singularly largest occupancy cost component. An effective program to minimize housing costs must, therefore, be comprehensive, addressing as many of these individual elements as possible. It is, therefore, recommended that all elements of the housing supply mechanism—including builders and developers, construction trade unions, financers, and real estate brokers—cooperate in efforts to lower housing costs by seeking out and incorporating within the overall housing delivery system such innovations in residential construction, financing, and marketing which may be expected to reduce one or more of the component costs of producing and occupying housing, and at the same time maintain adequate standards of housing quality.

A program designed to reduce only a single cost element will have little effect on the total cost of occupying housing. Conversely, a program which addresses several or all of the individual cost components may effectively reduce the overall cost of housing. For example, if other costs are held constant, a 20 percent reduction in the cost of materials would result in a 7 percent decrease in the total cost of the housing package. A similar 20 percent reduction in the cost of the lot would result in a 5 percent decrease in the total package cost. A 20 percent decrease in the cost of onsite labor would result in a 3 percent decrease in the cost of the housing package. On the other hand, a 20 percent reduction in the cost of materials combined with similar reductions in the labor and lot costs would result in nearly a 16 percent decrease, or over $5,600, in the overall 1972 housing package price. A $5,600 saving in the housing package price, coupled with a two-point reduction in the 1972 interest rate from 8.25 percent to 6.25 percent, would result in a 24 percent, or $92 reduction, in 1972 monthly occupancy costs.

Recommendations for the Abatement of Institutional Constraints

In addition to the economic constraints, various institutional constraints relating to the existing property tax structure and the existing body of local land use controls have been identified as limiting the availability of housing in southeastern Wisconsin.

Property Tax Structure: The property tax for school purposes, including amounts levied for vocational schools, is the largest and has been the most rapidly increasing component of the total property tax levy. It is recommended that the state carefully investigate alternative means of financing public elementary and secondary schools so that the importance of the property tax as a source of educational funding can be reduced.

The existing property tax structure constrains the rehabilitation of substandard housing because specific improvements to a housing unit may increase its assessed value, thereby resulting in an increase in the property tax levy. It is, therefore, recommended that local units of government in the Region having substantial concentrations of substandard housing encourage the rehabilitation of such housing by exempting physical improvements which would serve to improve substandard structures within locally designated conservation areas from the local property tax, as authorized under Section 70.11(24) of the Wisconsin Statutes.

Land Use Controls: The rationale for planned land development through the application of such local land use controls as zoning regulations, land subdivision control ordinances, and building and sanitary codes is well documented and convincing. Certain provisions of existing land use control mechanisms, however, can have a constraining influence on the supply of housing even when sound and enacted in good faith. In order to minimize the constraining effects of the various land use control mechanisms on the supply of housing in southeastern Wisconsin, it is recommended that all urban communities within the Region incorporate provisions for a full range of residential structure types—single-family, two-family, and multifamily—within their zoning ordinances. It is recommended that these communities incorporate provisions for a range of housing and lot sizes within their zoning ordinances, and incorporate within their zoning ordinances provisions for planned unit developments as a conditional use within residential zoning districts. It is further recommended that all local units of government within the Region adopt the Wisconsin Uniform Building Code regulating the construction of one- and two-family residential structures. It is also recommended that the state enact a uniform building code regulating the manufacture and installation of factory built housing in Wisconsin. Finally, it is recommended that all local units of government within the Region adopt land development regulations similar to those contained in the SEWRPC Model Land Development Ordinance.

Recommendations for the Abatement of Social Constraints: The forces of housing discrimination and community opposition to the provision of low-income housing have been identified as contributing to the housing problems experienced by certain subgroups of the regional population. Certain forms of discrimination which are not addressed in federal, state, or local fair housing laws limit the availability of housing for various segments of the regional population, despite their apparent ability to

pay. Discrimination on the basis of marital status or sex of head, source of income, and family size represent the most serious housing availability constraints in this regard. Accordingly, it is recommended that federal, state, and local fair housing laws should be expanded to prohibit discrimination in the sale, rental, or financing of housing on the basis of sex, marital status, source of income, and family size. The agencies charged with the administration of fair housing laws should establish or expand public informational programs to make minority group members more aware of the existing legal mechanisms with which discrimination in housing can be countered. In addition, a means should be developed to periodically assess the procedures utilized by the agencies charged with the administration and enforcement of fair housing laws to ensure that all complaints of housing discrimination are fairly and expeditiously processed.

Community opposition to the provision of low-income housing represents another constraint on the availability of housing in southeastern Wisconsin. Although it may be extremely difficult to avoid such community opposition, it is possible to at least mitigate its influence through an appeal mechanism. Accordingly, it is recommended that the state establish a housing appeals board to review applications for the construction or modification of low- and moderate-income housing that are rejected at the local level. The appeals board should be empowered to issue a permit allowing the construction of low- and moderate-income housing in those instances where good cause for the original rejection cannot be shown. Any determination of the board would, of course, be subject to court appeal.

SUBSIDY RECOMMENDATIONS

The impact of the various housing availability constraints, particularly the overriding economic constraints which are responsible for the existing housing need, can, in the case of the most needy households, be effectively reduced only through the provision of some form of public financial assistance. A series of recommendations with respect to the effective use of federal, state, and local subsidies which are available to reduce housing need in the Region comprises an important part of the regional housing plan.

Recommendations for the Disposition of Housing Subsidy Funds—Priority Households

Housing subsidy funds should be administered in such a manner as to simultaneously relieve the most severe housing problems and to assist those households which experience the greatest difficulty in securing adequate shelter. Therefore, in determining applicant eligibility, all agencies administering housing subsidy programs should give priority to households in the following order:

1. Occupants of housing which is substandard and overcrowded, giving priority to household types as follows: large low-income households, small low-income households, large moderate-income households, and small moderate-income households.
2. Occupants of housing which is substandard but not overcrowded, giving priority to household types as indicated above.
3. Occupants of housing which is overcrowded but not substandard, giving priority to household types as indicated above.
4. Households in economic need only, giving priority to households as indicated above.

Recommendations for the Disposition of Housing Subsidy Funds—Priority Areas

In light of the limited available housing subsidy funds, the regional housing plan includes a series of recommendations which serve to refine the recommended subsidized housing allocation strategy by establishing priority areas, that is, areas which are most suitable as locations for the immediate construction of subsidized new or rehabilitated housing units. It is recommended that, in screening applications for subsidy funds for the rehabilitation of housing, the administrating agencies concerned give first priority to applications involving the rehabilitation of substandard housing located in the Cities of Kenosha, Milwaukee, Racine, and Waukesha, where the largest concentrations of substandard units exist. Second priority should be given to applications involving the rehabilitation of substandard housing located in those suburban and outlying rural portions of the Region where significant concentrations of such housing occur. In screening applications for subsidy funds for the construction of new housing, it is recommended that the administering agencies concerned give priority to housing proposed to be located in those areas which have both sufficient employment opportunities and sufficient amounts of developable land to support the new residential development.

In addition to subsidy funding for residential construction and rehabilitation, it is expected that funds will be available for subsidy programs which utilize the existing stock of standard housing as alternative housing for households in need. With respect to such programs, it is recommended that the administering agencies give priority to applications which indicate sufficient vacancy rates—1.5 percent for homeowner housing and 5.0 percent for rental housing—for housing of the type and price range desired by eligible applicants for the subsidized housing.

Recommendations to Facilitate Utilization of Housing Subsidy Programs at the Local Level

Local efforts to reduce housing need in southeastern Wisconsin will be most effective when guided by a local government housing agency which is able to carefully analyze local needs and to carry out a housing program in accordance with those needs. It is, therefore, recommended that a county housing agency—either a county housing authority, department, or division—be established in the six counties of the Region which do not have such an agency at the present time. It is further recommended that this county housing agency, with the full cooperation of all planning agencies within the county, analyze the housing need at the community and neighborhood levels,

utilizing data assembled in the regional housing study as a point of departure for these analyses. The county housing agency should develop good working relationships with local landlords, real estate broker associations, builders, and developers, as well as community and neighborhood organizations which have an interest in providing housing for lower income families, explaining fully the findings of the local need analysis and the provisions of the various subsidy programs which are available for the abatement of the existing need. The county housing agency should take those actions necessary to ensure the full use of housing subsidy programs in an effort to meet the recommended regional allocation strategy in a manner which is consistent with the local analysis of housing need. Local units of government should investigate the possibility of utilizing local revenues as a source of public subsidy funds to reduce the cost of housing to households in need.

Role of the Southeastern Wisconsin Regional Planning Commission: Local involvement is essential for effective use of housing subsidy programs to eliminate existing housing need. However, housing planning in a multi-community urbanizing region must be conducted on an areawide basis as well. The following recommendations, therefore, are directed to the Southeastern Wisconsin Regional Planning Commission itself in order to facilitate a meaningful reduction of housing problems on an areawide basis. It is recommended that the Commission provide technical assistance on a continuing basis to enable county housing agencies and local units of government to establish more precisely the magnitude and characteristics of the existing housing need on a community and neighborhood level. The Commission should provide technical assistance on a continuing basis as required with respect to the utilization of housing subsidy programs which are available for the abatement of the identified housing problems. The Commission should establish a monitoring system to determine whether housing subsidy programs are being utilized in the appropriate areas, rectifying appropriate housing problems, and assisting the appropriate households. The Commission should provide for the collection, analysis, and dissemination of housing-related information on a continuing uniform, timely, and areawide basis. The Commission should undertake a major reevaluation of the magnitude and characteristics of the housing need at regular intervals to determine the extent of housing problems in the Region, the effectiveness of efforts undertaken for the abatement of those problems, and the need for modification or adjustment of the recommended regional housing plan. A major reevaluation of the regional housing situation should be conducted approximately every fifth year after the publication of this report.

Recommendations to State Agencies: Certain state agencies can play important roles with respect to the utilization of housing subsidy programs in the Southeastern Wisconsin Region. It is recommended that the Wisconsin Department of Local Affairs and Development continue to provide technical and financial assistance to county housing agencies and local units of government in support of efforts to analyze and resolve local housing problems. It is recommended that the Wisconsin Housing Finance Authority provide long-term low-interest mortgages to developers to enable the construction of housing units at below market rents.

Recommendations to Federal Agencies: It is anticipated that the vast majority of housing subsidy funds available within the Region will be supplied by federal agencies. In this regard, it is recommended that housing subsidy programs administered by the U. S. Department of Housing and Urban Development and the U. S. Department of Agriculture, Farmers Home Administration which provide new, existing, or rehabilitated housing units to households in housing need be sufficiently funded to facilitate a significant reduction in the existing housing need in the shortest possible time. In order to make significant progress toward the reduction of housing need in the near future, federal agencies should, at a minimum, endeavor to match the scale of efforts undertaken during the short-range action housing program for the years 1972 and 1973, during which time approximately 2,900 households were assisted annually under federal housing subsidy programs. It is recommended that authorized funds for the Section 235—Homeownership, Section 236—Rental, Rent Supplement, and Public Housing programs be released by the federal government for use in the Region. It is recommended that the Federal Housing Administration continue to insure and guarantee lenders against loss on mortgage loans made to eligible households. In processing applications for subsidized housing, it is recommended that the administering agencies, in addition to keeping income eligibility records and households demographic data, also collect and keep records concerning the previous address and condition of the housing unit—substandard or overcrowded—at the previous address. With such information, it will be possible to quantify those households in need which are being subsidized in accordance with the recommendations of the regional housing plan.

Chapter XVIII

SUMMARY AND CONCLUSIONS

INTRODUCTION

The Regional Planning Commission, at the specific request of the Mayor of the City of Milwaukee and with the approval of the seven constituent county boards, initiated a regional housing study. The cost of the study was shared by the seven county boards in the Region, the Wisconsin Department of Local Affairs and Development, and the U. S. Department of Housing and Urban Development. The study was conducted by the Commission staff, with the assistance of the University of Wisconsin-Milwaukee, under the direction of a technical and citizen advisory committee comprised of people from throughout the Region who were particularly knowledgeable about the housing problems of the area. The study represented a concentrated effort to identify the nature and extent of the housing problem within the Region, assess the overall effectiveness of past attempts to resolve these problems, and develop an areawide housing plan to meet the current and probable future housing needs of the Region.

More specifically, the regional housing study was intended to serve a three-fold purpose: first, to permit broad public evaluation and choice of alternative housing development plans, policies, and programs leading to the provision of decent, safe, and sanitary housing for all residents of the Region; second, to promote, through a long-range, areawide plan for housing development, the coordination of housing development with other forms of regional development such as transportation, public utility, and community facility development; and third, to promote coordination of local, state, and federal housing development policies and programs within the Region. In addition, the housing planning process was intended to provide a framework of agreed-upon regional housing objectives and a supporting set of housing standards relevant to the needs and values of the citizens of the Region; provide on a continuing basis for the collection, analysis, and dissemination of timely, uniform, areawide information about the supply of, and demand and need for, housing within the Region; and provide recommendations concerning the role of government and the private sector in meeting true housing needs within the Region.

The major findings and recommendations of the regional housing study are documented and presented in this report. The report briefly summarizes the information assembled in the extensive data collection, analysis, and plan design phases of the program. Although the reproduction in report form of all information assembled in the study is impractical due to its magnitude and complexity, all of the basic data are on file in the Commission offices and are available to member units and agencies of government and to the general public upon request.

INVENTORY FINDINGS

The supply of, and demand for, housing, as well as the true housing need, are influenced by a myriad of interrelated social, economic, institutional, and environmental phenomena. Accordingly, pertinent information related to housing was gathered under the regional housing study on the demographic and economic base of the Region, the natural resource base and man-made physical environment of southeastern Wisconsin, the existing housing stock, the tax structure, the trends in the cost of buying and occupying new housing, technology in the housing industry, land use controls, and government activity in the housing field.

Demographic and Economic Base

The resident population of, and economic activities taking place within, the Region are important factors which determine the need for and the ability to provide decent, safe, and sanitary housing. Demographic data relating to the size, distribution, and characteristics of the regional population are indicators of housing demand and of unmet housing needs. Trends in personal income and economic data relating to changes in economic activity are indicators not only of changing housing requirements, but also of the ability of the population to provide adequate housing for itself.

The population of the Region has been increasing at an average rate of about 18,000 persons per year from 1960 to 1970, and as of 1970, totaled 1,756,086. While the population of the Region as a whole increased by about 182,000 persons from 1960 to 1970, the population of the City of Milwaukee, following national trends, actually decreased by over 24,000 persons. Certain older "first ring" suburbs adjacent to Milwaukee also showed population decreases, while large increases in population occurred in newer outlying rural-urban fringe areas in Ozaukee, Washington, and Waukesha Counties. This population decentralization has been accompanied by a marked decrease in the average population density of the developed urban area of the Region, from an average of about 11,400 persons per square mile in 1920 to about 4,350 persons per square mile in 1970.

In addition to the size and distribution of the regional population, the characteristics of the population, including its composition by age, marital status, and race, also changed significantly between 1960 and 1970. With respect to age composition, the most striking changes were the decrease in the proportion of children under 5 years of age—a decrease of from 12 to nearly 9 percent of the total population—and the increase in the proportion of young persons between the ages of 10 and 24 years—an increase of from 21 to 27 percent of the

total population. The proportion of the population consisting of elderly persons increased slightly between 1960 and 1970, from about 9 to about 10 percent.

The most significant change in the marital status of the population between 1960 and 1970 was the decrease in the proportion of married persons. In 1970, about 62 percent of the total regional population 14 years old and over were married, while in 1960 almost 68 percent were married. This decrease is responsible in part for the increase in one-person households which occurred over the last decade.

The racial composition of the Region also changed somewhat between 1960 and 1970. The 1960 census indicated that about 5 percent of the regional population was nonwhite, while in 1970 this percentage was 7. The vast majority of the nonwhite group was comprised of blacks. The nonwhite populations of the Region are concentrated in the Cities of Kenosha, Milwaukee, and Racine. In fact, nearly 96 percent of the nonwhite population in the Region and 98 percent of all blacks in the Region resided in these three cities in 1970.

While the size, characteristics, and distribution of the regional population are essential considerations in the analysis of the regional housing situation, of even greater importance are data relating to households in the Region, since the household is the basic unit used in the analysis of housing demand and housing need. There were a total of 536,486 households in southeastern Wisconsin in 1970, an increase of 70,573 households, or 15 percent, over 1960. Since 1950, the count of households in the Region has increased at a faster rate than the household population. The rapid growth in households relative to the growth in the household population reflects significant changes in the size of households in the Region over the last two decades. These changes are significant because household size, more than any other variable, determines a household's housing requirements. Between 1960 and 1970, the proportion of one-person households in the Region increased by 5 percent while the proportion of three-, four-, and five-person households decreased by a total of 6 percent. These changes have contributed to a decrease in the median household size in the Region from 3.0 persons per household in 1960 to 2.7 persons per household in 1970.

While household size is one of the most important determinants of a household's housing requirements, household income is the fundamental determinant of whether the household has the economic ability to meet its housing requirements. In 1970, about one-half of all households in the Region earned less than $10,000. Furthermore, approximately 167,500 households, or 31 percent of all households in the Region, had an income of less than $7,000. Of these, 23,304 households were comprised of four persons or more, while 7,525 consisted of six persons or more. As might be expected, many of these low-income households, especially the larger households, are incapable of meeting their housing needs in the private market.

Employment opportunities in the Region have increased at a rate of approximately 9,370 jobs per year over the last decade to a level of 741,600 jobs in 1970. Distribution of relative job growth generally parallels the trend of population decentralization from urban areas toward suburban and rural areas. From 1960 to 1970, 54 percent of all new jobs created within the Region were located outside of the City of Milwaukee and Milwaukee County in Ozaukee, Washington, and Waukesha Counties. However, all of the counties in the Region except Milwaukee County have a larger labor force residing within their boundaries than jobs available, indicating that, although economic activity is decentralizing, Milwaukee County is still a major supplier of jobs to residents of the Region.

Natural Resource Base

The natural resource base of the Region is the primary determinant of the Region's development potential and of its ability to provide a pleasant and habitable environment for all forms of life. A proper understanding of the elements of the natural resource base and their interrelationships is necessary so that human use and alteration of the natural environment does not proceed at the risk of excessive costs in terms of both monetary expenditure and the destruction of nonrenewable or slowly renewable resources.

Two elements of the natural resource base have particularly important implications for housing development: the lakes and streams of the Region together with their associated shorelands and floodlands, and the soils of the Region. The Region contains 1,148 lineal miles of major streams and 100 major lakes, the latter having a total surface area of 57 square miles, or about 2 percent of the total area of the Region. The Commission has delineated the floodlands lying along 558 lineal miles of streams within the Region, and studies are underway to delineate the remaining floodlands as quickly as possible. Homes built in floodplains are subject to periodic flooding. Besides the obvious nuisance created by such flooding, severe and costly damage may be done to the foundations of homes, to electrical and heating equipment, and to personal property in the homes, and the public health and safety may be endangered. In the interest of achieving safe and healthful conditions as well as economies in housing development and in the inordinate public costs attendant to floodland development, floodplain development for housing should be avoided.

A highly complex soil pattern has developed in southeastern Wisconsin because of the interaction over time of parent glacial deposits with topography, climate, plants, and animals. Detailed soil survey data collected by the Commission indicate that approximately 716 square miles, or about 27 percent of the Region, are covered by soils which are poorly suited for residential development with public sanitary sewer service; approximately 1,637 square miles, or about 61 percent, are covered by soils poorly suited for residential development without sanitary sewer service on lots smaller than one acre in size; and about 1,181 square miles, or about 44 percent, are covered by soils poorly suited for residential develop-

ment without public sanitary sewer service on lots one acre or larger in size. In the interest of public health, as well as stability, efficiency, and economy, housing developments should be located in areas covered by soils well suited to such development.

Analysis revealed that the most important elements of the natural resource base of the Region are concentrated in narrow elongated areas which have been termed primary environmental corridors. Such corridors occupy approximately 486 square miles, or about 18 percent of the Region, and contain almost all of the remaining high-value wildlife habitat areas and woodlands of the Region; most of the wetlands, lakes, streams, and associated floodlands; as well as many significant physiographic features, potential park sites, and sites having scientific, historic, or other cultural value. The preservation of these corridors in a natural state or in park and related open space uses is essential to maintaining a high level of environmental quality in the Region and to the protection of its natural beauty. Consequently, housing development should not be permitted to intrude into the environmental corridors.

Man-Made Physical Environment

Certain man-made features important to any consideration of future development within the Region, and particularly important to the development of decent, safe, and sanitary housing, include existing land uses and the supporting transportation and public utility networks. Land has been undergoing a particularly rapid conversion from rural to urban use. Recent urban development has been discontinuous and highly diffused, consisting primarily of many scattered, low-density, isolated enclaves of residential development located away from established urban centers. The highly diffused nature of recent urban development and the sharp decline in urban population density have intensified many long-standing environmental problems, and have presented new environmental and developmental problems of an unprecedented scale and complexity.

Although the Region is the most highly urbanized area in the state, the largest single land use category in the Region is still agriculture, which presently occupies about 60 percent of the total area. The next largest single land use categories are the water and wetland group, which occupies about 10 percent of the total area, and woodlands and open lands, which presently occupy another 10 percent. Urban land uses occupy approximately 20 percent of the total area, of which residential uses comprise 46 percent.

With respect to the regional surface transportation network, a total of 9,819 miles of surface transportation facilities were open to traffic in the Region in 1972. Land access and collector streets accounted for 6,713 miles, or more than 68 percent of this total; ordinary surface arterial streets and highways accounted for 2,800 miles, or about 29 percent of the total; and freeways and expressways totaled about 304 miles, or about 3 percent of the total miles of surface transportation facilities in the Region. Freeways and expressways form the backbone of the regional arterial street and highway system, comprising about one-tenth of the total arterial street and highway system mileage in 1972, but carrying about one-third of the total vehicle miles traveled. Clearly, freeway location and service is an important consideration in commercial and industrial as well as housing location.

Mass transit in the Region today consists basically of buses operating on surface streets. Bus travel is of particular importance to lower-income, elderly, and other households with limited access to automobile transportation. The general trend in the number of transit revenue passengers carried within the Region during the past eight years has been an annual decline. In 1963, the total number of transit revenue passengers was a little over 94 million. By the end of 1972, total ridership had declined to less than 54 million. These major declines have been accompanied by increased transit fares and reduced transit service. It should be noted that one element of the mass transit system, the freeway flyer bus service, stands in contrast to the decline in mass transit utilization. Annual ridership has increased steadily from about 81,000 revenue passengers in 1964 to about 705,000 revenue passengers in 1972. Both ordinary mass transit and freeway flyer service are important considerations in housing location, particularly housing for low- and moderate-income families.

Public utility service is an important consideration in housing location. There are a total of 91 centralized public sanitary sewerage systems presently operated by utilities within the Region. These 91 systems serve a total area of about 309 square miles, or about 11 percent of the area of the Region, and a total population of about 1.5 million persons. Plan proposals would extend sanitary sewer service to an additional 675 square miles within the Region. Sixty-seven publicly owned water utilities are presently operating within the Region, serving about 1.4 million persons. Gas and electric power services can be considered to be virtually ubiquitous within the Region, and unlike sewer and water supply services, do not constitute a major constraint on the location or intensity of residential development.

The adopted regional land use plan recommends that recent development trends be altered in the public interest by encouraging intensive urban development to occur only in areas which can readily be served by essential municipal facilities and services, including centralized public sanitary sewerage, public water supply, and mass transit. In addition to avoiding areas subject to flooding and covered by soils poorly suited to residential development, housing development should avoid intruding into the primary environmental corridors and the prime agricultural areas as delineated by the Commission.

The Existing Housing Stock

The total housing stock in the Region consisted of 566,756 housing units in 1970, representing an increase of 65,995 housing units, or about 13 percent, over 1960.

The most rapid growth rates in the housing stock during the past decade occurred in certain outlying counties, notably Ozaukee and Waukesha, while the housing stock in Milwaukee County increased at a relatively slower rate.

Of the total housing units in 1970, 556,586 units, or 98 percent, were intended for occupancy throughout the year, while the small balance was intended for occupancy only during the summer. Of the total year-round housing units in 1970, 536,486 units, or 96 percent, were occupied. The balance of the year-round housing stock—20,100 units—was vacant in 1970, with about 57 percent of these units actually being offered for sale or rent at the time of the inventory.

Single-family housing units represented about 59 percent of all year-round housing units in 1970, while the balance of the year-round housing stock consisted of multifamily housing units. In 1960, single-family housing units represented about 62 percent of all year-round housing units in the Region. By far, the majority of single-family housing units in 1970 were conventional detached structures. Conventional attached housing units—row houses—and mobile homes each represented less than 1 percent of the year-round housing stock in 1970. On the other hand, more than half of the multifamily housing units were located in two-unit structures, or duplexes, while one-fourth were located in structures of three to nine units, and the balance in structures of 10 units or more.

Assessment of the quality of housing is facilitated by data concerning the provision of plumbing and kitchen facilities in year-round housing units. In the 1970 census, 18,733 housing units, or 3 percent of the year-round housing stock, were reported as lacking one or more plumbing facilities. Of these, about 24 percent lacked hot or cold piped water; 56 percent lacked a flush toilet for the occupant's exclusive use; and 86 percent lacked a bathtub or shower for the occupant's exclusive use. Conversely, in the 1970 census, 8,383 housing units in the Region, representing less than 2 percent of the year-round housing stock, were reported as being without complete kitchen facilities because they lacked one or more of the following: a sink with piped water, a range or cookstove, and a mechanical refrigerator. In addition, 1,057 other housing units had complete kitchen facilities which were shared, or intended to be shared, with occupants of another housing unit.

The exterior condition of housing in the Region described in terms of selected ranges of defect points rated for major and minor components of the housing structure indicates that almost 95 percent, or 545,255 units, of all year-round housing in the Region was in generally good physical condition in 1972. Only 3 percent, or 19,878 housing units, were rated in fair physical condition. Only 2 percent, or 12,006 housing units, were rated in poor condition meaning they are considered to be substandard and do not meet regional standards for decent, safe, and sanitary housing.

Data concerning the value and rent of housing units in the Region are required to determine the extent to which the regional population may be economically able to satisfy its housing needs. In 1970, the median value of single-family owner-occupied housing units in the Region stood at approximately $20,400, an increase of $4,600, or 29 percent, over 1960. The median monthly gross rent for renter-occupied housing units increased by $33, or about 38 percent, over the last decade, and stood at $120 in 1970. These increases in market value and rent resulted in part from increases in the value and rent of many housing units built before 1960, reflecting both inflation as well as real appreciation in value. Certainly, however, the volume of new, higher value construction which took place after 1960 also contributed to the increase in the value and rent of the regional housing stock during the last decade.

The Property Tax Structure

The property tax structure is an important consideration in the housing planning process, since the property tax affects both the supply of, and demand for, housing within any given municipality. Because the property tax effectively increases the cost of owning or renting a home, the property tax structure influences the demand for housing in an area. In this regard, property taxes typically comprise about one-fourth of the cost of occupying new single-family housing in an urban area of the Region, and currently represent a major economic constraint on the availability of housing in southeastern Wisconsin.

The best available measure of tax effort among communities is the full value property tax rate, which indicates the dollars of tax levied after property tax relief per thousand dollars of equalized property value. The full value property tax rate varies significantly among cities, villages, and towns in the Region, ranging from $17.88 per thousand dollars of equalized value in the Town of Waukesha to $44.83 in the City of Milwaukee in 1971. The median net full value property tax rate for all towns in the Region was $26.44 in 1971, compared to a median rate of $30.47 for villages and $32.29 for cities.

The existing property tax structure also affects the supply of housing in certain subareas of the Region. Communities generally seek development which generates an amount of property tax revenue which is equal to, or greater than, the cost of services which are provided. It is often argued that low- and moderate-income housing is a detriment to the local fiscal structure because of the high cost of services, and in particular the cost of education, which must be provided to serve such development. The results of a cost-revenue study conducted under the regional housing study suggest that the property tax for municipal purposes generated from a moderately priced housing unit can offset most of the net operation and maintenance costs of providing essential municipal services, such as sanitary sewerage, storm water drainage, police and fire protection, solid waste collection and disposal, and library services. On the average, for all civil divisions included in the study, the tax levy for municipal purposes on a $25,000 house was only $8 less than the per household cost of providing municipal services. The findings of the cost-revenue study did indicate, however, that educational costs associated with moderately priced housing may indeed constitute an undue burden on the local fiscal structure, depending on the size of the school

age population generated by such housing. Thus, on the average for all civil divisions analyzed, the net school operating cost for a single pupil when reduced by the application of state aids is greater by $42 than the property tax for school purposes levied on a $25,000 house in 1971. The deficit increases substantially as the number of children attending public school increases. For example, the educational deficit associated with a $25,000 house generating three public school students is estimated to be more than $1,200 per year. Although the deficit between educational costs and property tax revenues commonly exists for all but very expensive family housing, the problem is intensified for low- and moderate-income family housing because of the relatively low assessed value of the housing unit and the generally large school age population generated.

Housing Costs

The overriding constraints on the availability of housing are economic in nature, arising from the differential between rising housing costs and the ability to pay of many households in the Region. In the analysis of housing cost trends, the primary emphasis was focused on the component costs of constructing and occupying new single-family housing in the Region. Wide variances in types, styles, sizes, and designs and the wide variety of fixtures and appurtenances provided in various multifamily structures precluded the efficient collection and analysis of multifamily construction cost data on a uniform, areawide basis. Review of available data sources, however, clearly indicated that trends in multifamily construction costs generally parallel those of single-family detached housing.

The overall price of new single-family housing in the Region has increased dramatically in recent times. The package price for a new Cape Cod style home on a fully improved lot in an urban area of the Region increased from $19,520 in 1960 to $35,060 in 1972, an increase of $15,540, or 80 percent. The total production cost of this housing package in 1972 is generally distributed as follows: onsite labor—$6,000, or 17 percent of the total price; materials—$13,000, or 37 percent of the total; builder overhead and profit—$6,000, or 17 percent of the total; fully improved urban lot—$9,100, or 26 percent of the total; and construction financing—$960, or 3 percent of the total. While the cost of materials is the largest single construction cost item, other cost components, including onsite labor, land, and builder overhead and profit contribute significantly to the total package cost. Moreover, construction materials consist of literally hundreds of products from dozens of industries. The very diversity of industries which manufacture materials and products for use in residential construction compounds the difficulty of significant cost reductions in this area.

Because of the magnitude of the cost of the housing package to the consumer, most purchasers of new single-family housing obtain mortgage loans, thereby incurring an obligation to make monthly outlays for the repayment of the loan. In addition, purchasers of single-family housing must pay other occupancy costs, including property taxes, utility service charges, maintenance and repair bills, and property insurance. Thus, while the high prices of onsite labor, materials, and land have contributed significantly to the high cost of occupying new single-family housing by increasing the size of the mortgage loan, other cost factors are also responsible for the high occupancy costs relative to new single-family housing. The monthly cost of occupying a new Cape Cod style home on a fully improved lot in an urban area of the Region stood at approximately $381 in 1972, an increase of about $195, or 105 percent, over the occupancy cost in 1960. The total monthly cost of occupying this housing package in 1972 is generally distributed as follows: financing costs—$221, or 58 percent of the total occupancy cost; property taxes—$95, or 25 percent of the total; utility costs—$36, or 10 percent of the total; and maintenance and insurance—$29, or 7 percent of the total.

The study thus indicated that the cost of residing in new single-family housing is affected by a myriad of individual cost elements, which greatly compounds the difficulty in formulating effective cost reducing strategies. Even significant cost savings in any one of these elements alone cannot effect a significant reduction in the ultimate cost to the consumer. For example, if other costs are held constant, a 20 percent reduction in the cost of materials—the largest single production cost component—would result in only a 7 percent decrease in the cost of the housing package. A similar 20 percent reduction in the cost of the lot would result in a 5 percent decrease in the total package price. A 20 percent decrease in the cost of onsite labor would result in only a 3 percent decrease in the cost of the housing package. On the other hand, a 20 percent decrease in the cost of materials with similar reductions in the labor and lot costs would result in a 16 percent decrease, or a savings in the overall 1972 housing package price of over $5,600. A $5,600 savings in the housing package price coupled with a two point reduction in the 1972 interest rate from 8.25 percent to 6.25 percent would result in a 24 percent, or $92, reduction in 1972 monthly occupancy costs. Clearly, efforts which address a single component cost of constructing or occupying housing will have little effect on the ultimate cost to the consumer. However, approaches which address several or all of the various cost components may effectively reduce the overall cost of housing.

Technology in the Housing Industry

The term "housing technology" for purposes of this report is defined as any existing or potentially marketable aspect of the entire system, employed to produce and assemble housing components, prepare sites for housing, construct housing, prepare housing for delivery, and transport housing to its permanent site, which has increased or could increase productivity in the provision of housing in the Region so as to make housing less costly to the consumer. Technological innovations in housing construction tools and equipment as well as products and materials have been implemented in the housing building process over many years. While such innovations have undoubtedly increased the efficiency and productivity of the housing building industry, quan-

tifiable data do not exist which enable the determination of the extent to which such innovations have affected the cost of housing.

Factory built housing has gained prominence in the United States since World War II, but to date has failed to gain widespread acceptance because of builder resistance due to unfamiliarity with construction techniques, buyer resistance due to unfamiliarity with housing unit design or prohibitive costs, community resistance due to structure nonconformance with local building codes, or lack of sufficient working capital by the housing innovator. Moreover, on the basis of analysis of the costs associated with comparable conventional and factory built housing units, there is little evidence to indicate that factory built housing which is currently available within the Region can, at least in the foreseeable future, economically meet the housing needs of low- and moderate-income households. Indeed, analyses made under the regional housing study indicate the maximum construction cost savings which may be expected for factory built units amount to about 10 percent, while occupancy cost savings amount to about 7 percent when compared to comparable conventionally constructed units. However, factory built housing can, in many cases, offer certain advantages over "stick-built" housing, such as better quality based on more rigorous control and the utilization of top-grade kiln-dried lumber in the assembly process, controlled climatic conditions due to manufacture inside a factory, stronger component parts necessary to withstand shipping and erection, and savings of time and money due to the relatively short onsite construction period.

Land Use Controls

Land use control powers conferred through state enabling legislation provide local units of government with mechanisms which have a profound influence on existing and proposed land development, particularly residential development. Land use controls can affect the overall characteristics of housing development, including the quality, quantity, location, size, type, and cost, and even to some extent the characteristics of the prospective occupants of housing units themselves. The rationale for planned land development through the application of such local land use controls as zoning regulations, land subdivision control ordinances, building codes, and others is well documented and convincing. However, certain provisions of existing land use control mechanisms can have a constraining influence on the supply of housing even when sound and enacted in good faith.

Local zoning ordinances determine where housing may be built, and influence the type, size, and cost of that housing. Zoning ordinances by definition are discriminatory and exclusionary, allowing specific uses or structures in some areas and prohibiting the same uses or structures in other areas. Of concern to the regional housing study, however, is whether such ordinances are unduly restrictive, significantly constraining the locational choice of households seeking various types and sizes of housing.

Analysis of residential zoning patterns within the Region indicated that over 455,000 acres, or 26 percent of the total 1,721,000 acres of land in the Region, were zoned for residential use in 1971. An additional 847,000 acres of land were zoned for agricultural use, but under district regulations which also permitted residential use. Of the 445,000 acres of land in the Region which are zoned for residential use, approximately 19,400 acres can be considered "developable" in that they meet land use and housing development standards for a "suitable living environment." Developable lands include all residentially zoned vacant land parcels greater than two acres in size which can readily be provided with public sanitary sewerage and water supply facilities and which are not located in areas designated as primary environmental corridors, as prime agricultural lands, or on soils having severe or very severe limitations for residential development utilizing public sanitary sewerage facilities. While such lands may not be uniformly distributed by density classification within the Region, there are sufficient quantities of developable land available to provide housing sites for over 90,000 additional households. Over 11,000 acres, or about 57 percent of the 19,400 acres of developable land, are zoned to allow modest-size residential lots—10,000 square feet or less, and can accommodate over 78,000 housing units. It cannot be concluded, therefore, that, with respect to density requirements, zoning patterns, on a regional basis, constitute a significant constraint on the locational choice of households seeking housing.

Zoning with respect to structure type and minimum floor area requirements, however, exhibits a different pattern. Excessive minimum floor area requirements may make it financially difficult or impossible for low- and moderate-income households to construct or reside in the large homes required by such zoning provisions.

A great variance was found to exist with respect to the minimum floor area requirements of communities within the Region, ranging from no such minimum requirement in some communities to a maximum of 1,700 square feet minimum floor area in other communities. With respect to single-family housing, it was found that 56 urban communities, or about 65 percent of the 87 urban communities within the Region, preclude modest-sized two-bedroom units—840 square feet of floor area or less in size; 21 communities, or about 25 percent, preclude modest-sized three-bedroom units—1,180 square feet of floor area or less in size; and eight communities, or about 10 percent, preclude modest-sized four-bedroom units—1,480 square feet of floor area or less in size. The restrictive pattern is also evident for modest-sized two-family and multifamily housing. A total of 17 of the 146 communities in the Region and 12 of 87 urban communities preclude two-family housing types altogether. Including the 12 urban communities which preclude two-family housing types altogether, 63 communities, or over 70 percent of the urban communities in the Region, preclude modest-sized one-bedroom units—500 square feet of floor area or less in size; 48 communities, or over 50 percent, preclude modest-sized two-bedroom units—840 square feet minimum floor area; and 22 communities, or about 25 percent, preclude modest-sized three-bedroom units—1,180 square feet of floor area or less in size. A total of 22 of the 146 communities in the Region and 16 of the

87 urban communities preclude multifamily housing types altogether. Including the 16 urban communities which preclude such housing, 59 communities, or almost 70 percent of the urban communities in the Region, preclude modest-sized efficiency units—300 square feet of floor area or less in size; 56 communities, or about 65 percent, preclude modest-sized one-bedroom units—500 square feet of floor area or less in size; 42 communities, or about almost 50 percent, preclude modest-sized two-bedroom units—840 square feet of floor area or less in size; and 26 communities, or about 30 percent, preclude modest-sized three-bedroom units—1,180 square feet or less in size. The provisions of community zoning ordinances related to structure type and size requirements were found to represent the single most important constraining influence on the locational choice of low- and moderate-income households.

Land subdivision control regulations, which usually include provisions related to public improvements, land dedication, land reservation, and land suitability requirements, are important to the provision of housing within the Region primarily because of the manner in which such regulations affect the cost of land development and, ultimately, the cost of an improved residential lot. While it may be argued that public improvement requirements in urban communities act as a constraint on the availability of suitable lots in that they represent additional financial burdens, especially for low- and moderate-income households, it can also be argued, and more persuasively, that urban improvements, especially public sanitary sewer, water supply, and storm water drainage facilities, are a necessary part of "sanitary housing" and a "suitable living environment," and as such, outweigh any cost constraints which may be associated with the provision of such improvements.

Building codes are regulations enacted by communities to govern materials, equipment, and the actual construction of buildings within the Region, and to facilitate the attainment of regional housing objectives which seek to provide decent, safe, and sanitary housing for all households. It has been suggested, however, that the nonuniformity and excessively stringent inspection requirements of local building codes have precluded greater utilization of factory built housing, which housing was thought to produce substantial cost savings to prospective housing consumers. An analysis of building code and factory built housing data, however, revealed that local building codes had a negligible effect on the cost and provision of factory built housing in the Region. While local building codes are not uniform and caused some inconveniences to producers of factory built housing, they did not in and of themselves significantly increase the cost of housing—less than $130 of additional cost being found attributable to local building codes—or significantly restrict the availability of housing within the Region.

Government Activity in the Housing Field

Housing subsidy programs to provide decent, safe, and sanitary housing to households in housing need in the Region have been in effect for over 50 years. Only in the past 25 years, however, have housing subsidy programs been extensively utilized, and only in the past five years have a significant variety of housing programs been designed to meet a full range of housing needs. The government sponsored housing subsidy programs most utilized in the Region in the recent past include the Section 235 homeownership program administered by the U. S. Department of Housing and Urban Development (HUD); the Section 502 homeownership program administered by the Farmers Home Administration; the Section 236 rental housing program, including both interest subsidy and rent supplement segments of this program; the Section 221(d)(3) rent supplement program administered by HUD; and the public housing program administered by the Housing Assistance Administration through local housing authorities.

Through June 1973, and discounting the earliest historic public housing efforts prior to 1935, 15,889 housing units located in 75 communities existed or were committed for construction under all housing subsidy programs within the Region. Of this total, almost 5,700, or 36 percent, were public housing units. Over 5,500, or 35 percent, were units authorized under the Section 235 housing subsidy program. Of the remaining units, over 3,200, or 20 percent, were units authorized under the Section 236 subsidy program; and 1,290, or 8 percent, were authorized under the Section 221(d)(3) supplement program. Only 136 units, or less than 1 percent of the 15,889 subsidized housing units, were authorized under the Section 502 housing program.

Over 11,800 units, or more than 74 percent of the 15,889 units authorized under all housing subsidy programs, were located in Milwaukee County. Other counties with a substantial number of housing units were Racine County, with over 1,800 units, and Kenosha County, with over 1,000 units. On a community basis, it is apparent that the City of Milwaukee, with over 11,000 subsidized housing units, or almost 70 percent of all subsidized housing units in the Region, far exceeds the number of subsidized housing units of any other community. The Cities of Racine and Kenosha, with approximately 1,000 units each, were the only other communities in the Region to have a large number of subsidized housing units.

Of the 75 communities, or 51 percent of the 146 communities in the Region in 1972, with subsidized housing, three communities were located in Ozaukee County, eight were located in Walworth County, nine were located in Kenosha County, 10 were located in Milwaukee County, 11 were located in Washington County, 12 were located in Racine County, and 22 were located in Waukesha County.

A January 5, 1973 moratorium placed on all housing subsidy programs administered by the U. S. Department of Housing and Urban Development virtually ended the provision of federally subsidized housing units in the Region under the aforementioned subsidy programs after that date. Although such programs met with great difficulties and proved unworkable in many areas of the

United States, they were, with few exceptions, successful in the Southeastern Wisconsin Region, and provided many households in housing need with decent, safe, and sanitary housing units. Indeed, the Section 235 homeownership program was the first large-scale subsidized housing program to offer the luxury of homeownership and the pride, stability, and security which accompanies such ownership to the low- and moderate-income households in the Region. Therefore, as part of the regional housing plan, it has been recommended that authorized funds for the Section 235 homeownership, Section 236 rental, rent supplement, and public housing programs be released for use in southeastern Wisconsin in conjunction with the other government sponsored housing subsidy programs which are currently being utilized in the Region.

REGIONAL HOUSING OBJECTIVES

Planning may be defined as a rational process for formulating and meeting objectives. Nine regional housing objectives, together with supporting principles and standards, were formulated under the regional housing planning program. These nine objectives are:

1. The provision of decent, safe, and sanitary housing for all residents of the Region.

2. The provision of an adequate stock of decent, safe, and sanitary housing to meet the Region's total housing requirement and, as components of that requirement, the effective market demand and true housing need.

3. The maintenance, preservation, and, where necessary, rehabilitation of the existing stock of housing.

4. The relocation of persons to be displaced by publicly related development programs to housing which is not only decent, safe, and sanitary but is of at least equal quality, and, if necessary, the public provision of the replacement housing.

5. The provision of housing which is designed to be functionally suitable for the occupants residing therein.

6. The provision of adequate locational choice of housing.

7. The provision of aesthetically pleasing housing properly sited and designed to maintain or improve the overall character and appearance of the neighborhood in which it is located.

8. The provision of housing within a suitable physical environment and so sited and designed to comprise an integral part of the neighborhood and the community in which it is located.

9. The efficient and economical satisfaction of housing need, meeting all other objectives at the lowest possible cost.

Together with the land use development objectives previously established under other Commission work programs, these new housing objectives and their supporting principles and standards provided the basic framework within which a recommended regional housing plan was synthesized.

EXISTING HOUSING NEED

Owing to the existence of various interrelated economic, institutional, and social constraints on the availability of housing in southeastern Wisconsin, which were identified under the inventory and analysis phase of the regional housing study, certain households experience undue economic hardship in their efforts to secure decent, safe, and sanitary housing. For the purposes of the study, true housing need was defined as the number of households which cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, as well as those households which are precluded from obtaining decent, safe, and sanitary housing because of noneconomic constraints within the housing market. A major work element of the regional housing study was the application of the adopted regional housing objectives and standards to the existing population and housing base in order to determine the magnitude and characteristics of the existing housing need.

It was estimated that there were about 96,100 households in housing need in 1970, representing about 18 percent of all households in the Region. Of this total housing need, about 69,600 households were found to be in "economic need only," indicating that they presently occupy decent, safe, and sanitary housing but are able to secure such housing only at a cost which is disproportionate with the household income. The housing problem was more severe for the balance of the households in need, namely, the 26,500 households which occupy housing units in violation of the adopted standards relative to decent, safe, and sanitary housing and which are unable to secure adequate alternative housing. Thus, the existing housing need includes about 7,800 households which occupy housing units which are in substandard physical condition, about 17,300 households which are overcrowded, and about 1,400 households which occupy housing units that are both substandard and overcrowded. It should be noted that of the 26,500 households, 15,200, or 57 percent, were also in economic need, indicating that they were unable to secure adequate alternative housing because of insufficient household income relative to the cost of housing. The remaining households were assumed to be precluded from securing adequate housing because of noneconomic constraints within the housing market, such as discrimination based on race or family size.

Stratification of the existing housing need by various household characteristics, including tenure status, household size, and household income, indicate significant differences. It is estimated that 31 percent of all renter households in the Region were in housing need in 1970, compared to only 10 percent of all homeowner households. Almost 24 percent of the renter households in

the Region were in economic need only, compared to only 6 percent of the homeowners. The proportion of renters which occupied substandard or overcrowded housing units—about 8 percent—was also considerably higher than the corresponding 3 percent for homeowners. The greater incidence of housing need for renter households is consistent with the low household income distribution of renters relative to homeowners. Because of the lower household income distribution, a larger proportion of renters than homeowners must either pay more than is consistent with the household income to obtain adequate housing, or forego adequate housing altogether, occupying substandard or overcrowded housing instead.

The incidence of housing need also varies with household size. The proportion of households in need ranged from a low of 9 percent for four-person households to an exceptionally high 31 percent for one-person households. The large fraction of one-person households in housing need is consistent with the fact that 43 percent of all one-person households in the Region are comprised of elderly households which typically rely heavily on limited social security and pension payments as a main source of income.

It should also be noted that the component of housing need for which the housing problem is most severe, namely, those households which occupy substandard or overcrowded housing, comprises less than 4 percent of households consisting of four persons or less. This component of housing need, however, increases as household size increases, with 17 percent of all households of six persons or more occupying substandard or overcrowded housing.

Stratification of the existing housing need by household income provides further understanding of housing problems within the Region. For a majority of households in housing need, the housing problem is primarily an economic one. Such households must pay a disproportionate share of the household income in order to reside in decent, safe, and sanitary housing, or because of insufficient economic means, must occupy overcrowded or substandard housing. Accordingly, it is not surprising to find that the incidence of housing need decreases as household income increases. Thus, the proportion of households in housing need ranged from 70 percent for households earning less than $3,000 to 3 percent for households earning $10,000 or more.

Certain subgroups of the regional population, namely, the elderly and the blacks, were found to have more severe housing problems than the population overall. A relatively large proportion of elderly households in the Region, 31 percent, were in housing need in 1970. Almost all of the housing need for the elderly consisted of households in economic need only, which is directly related to the fact that many elderly households are forced to live on a relatively fixed income, with the result that adequate housing can be secured only at a cost which is disproportionate with their ability to pay.

The black population of the Region, which is concentrated primarily in the Cities of Kenosha, Milwaukee, and Racine, represents another subgroup of the total population for which serious housing problems were found to exist. It was estimated that 50 percent of the black households in the Region were in housing need in 1970. Approximately 30 percent of the black households were classified as being in economic need only. The housing problem was more severe for 20 percent of the black households, which occupied housing that was substandard or overcrowded and which were unable to secure decent, safe, and sanitary housing at a cost consistent with the household income or which were precluded from securing adequate housing because of noneconomic constraints within the housing market.

HOUSING FORECAST

One of the products of the regional housing planning effort envisioned in the Prospectus for that study was a forecast of the total number of new housing units which may have to be added to the existing housing stock to meet the needs of the future resident population of the Region. Such a forecast is an important indicator of the scale of effort which may be expected to be required within the Region to abate existing housing problems and to help to avoid future housing problems. Such a forecast is also useful in the preparation of other functional plan elements such as land use, transportation system, and sewerage system plans at both the regional and local levels.

Available evidence indicates a need to substantially increase the supply of housing in the Region by the year 1990. The projected increase in the number of households itself indicates the need for the construction of a significant number of new residential units. Considerable building activity will also be required to replace units which may be demolished during this period. Finally, as the number of households in the Region increases, the size of vacant housing stock which is required to provide a ready turnover of housing units should be increased, and this will require some new building activity.

Based on the anticipated number of households in the Region, the anticipated level of residential demolitions, and a desired vacancy rate, the total overall housing production requirement in the Region is estimated to be 171,100 units to the year 1990. Of this total, about 138,100 housing units, or 81 percent, would be required simply to accommodate increases in the number of households in the Region; about 8,400 units, or 5 percent, would be required to provide a sufficient stock of vacant housing; and about 24,600 units, or 14 percent, would be required to replace housing which may be expected to be demolished.

It should be noted that the future housing production requirement as described above represents an estimate of the minimum amount of residential construction which

must be undertaken to house the future population of the Region. The provision of this future production requirement will not necessarily ensure that each household in the Region will reside in decent, safe, and sanitary housing at a cost which is consistent with the household income. Rather, it represents the minimum number of units which must be constructed so that all households in the Region are at least provided with a dwelling unit. Indeed, the level of housing need in the Region may be expected to increase unless positive action is taken in the immediate future to relieve area-wide housing problems. The level of housing need expected in the absence of an effective housing program, together with the magnitude of the existing housing need, represent additional important indicators of the scale of effort required to reduce the severity of the housing problem within the Region. Accordingly, the magnitude of the future housing need which may be expected to develop in the absence of an effective housing program was also estimated under the regional housing study.

Assuming that no effective housing program is undertaken to abate the housing problems within the Region, the housing need may be expected to approximate 120,800 households by 1990, an increase of 24,700 households, or 26 percent, over the 1970 level. Of the total housing need in 1990, about 87,600 households may be expected to be in economic need only. The balance includes households which experience physical housing problems and which are unable to secure alternative housing because of economic and noneconomic constraints within the housing market. In the absence of an effective housing program within the Region, the housing need by 1990 may be expected to include approximately 9,800 households occupying substandard units, 21,700 households occupying overcrowded units, and 1,700 households occupying both overcrowded and substandard units.

It is important to recognize that the foregoing forecast of housing need represents the level of unmet housing need which is likely to occur if there is no concerted effort by the public and private sectors to lessen the impact of the various housing availability constraints within the regional housing market and reduce the housing problem. The estimates of the future housing need in southeastern Wisconsin represent an extrapolation of the existing situation under the assumption that the relative impact of the various housing availability constraints within the regional housing market will not change significantly during the projection period. Implementation of the regional housing plan should significantly reduce the effect of the economic, institutional, and social constraints on the availability of housing, with the result that the projected level of housing need within the Region would never be reached.

ALTERNATIVE REGIONAL HOUSING ALLOCATION STRATEGIES

Because of the nature of the existing housing problems in southeastern Wisconsin, the existing housing need in the Region can be significantly reduced only through the provision of substantial monetary assistance from the public sector to households in the need category. While the need for such public assistance is readily apparent, the determination of areas in the Region within which subsidized housing should be located is a major planning problem, the resolution of which has significant implications for the future socioeconomic structure of the Region. There are many ways in which subsidized housing could be geographically distributed throughout the seven-county Region. Three distinctly different alternative housing allocation strategies were formulated under the regional housing study: an existing need, a dispersal, and a composite factor housing allocation strategy. While many variations of these basic strategies are possible, the three selected are believed to represent the basic choices practically available with respect to the future distribution of subsidized housing within southeastern Wisconsin.

Each of the alternative housing allocation strategies distributes 17,840 subsidized housing units, which is sufficient to eliminate the physical housing need in southeastern Wisconsin. It should be recognized that the number of units distributed is far less than the 1970 housing need of 96,100 households. It will be recalled, however, that the majority of households in the need category are considered to be in economic need only, and thus their situation could be relieved either through a reduction in housing costs or an increase in their ability to pay. No change of residence is necessarily required to reduce the economic burden. Conversely, households which experienced physical housing problems generally must move in order to reside in decent, safe, and sanitary housing. Logically, only those households which experience a physical housing problem necessitating a change in residence are considered in the locational strategy. Under each alternative housing allocation strategy, a proportion of the required publicly subsidized housing was assigned to 49 subareas of the Region, each consisting of one or more minor civil divisions. The three alternative allocation strategies may be expressed in the form of mathematical formulas for the geographic distribution of the required publicly assisted housing.

The existing need housing allocation strategy represents a conscious effort to resolve the housing shortage where it exists by assigning to each housing analysis area an allocation of subsidized housing which bears a direct relationship to the housing analysis area's share of the total regional housing need. Because of the high incidence of housing need in the older urban centers of the Region, the publicly assisted housing which is necessary to eliminate the physical housing need would be concentrated under this strategy in the Region's older urban centers. Approximately 13,100 subsidized housing units, or 74 percent of the total regional allocation, would be provided in the Cities of Kenosha, Milwaukee, and Racine. Implementation of this strategy would tend to perpetuate the existing distribution of low- and moderate-income households in the Region.

In direct contrast to the existing need strategy, the dispersal housing allocation strategy assigns a higher allocation of publicly assisted housing units to areas with a lower incidence of housing need. Under this strategy,

more low- and moderate-income housing would be provided in the suburban and outlying rural-urban fringe areas than in the older urban centers. Thus, under this strategy, less than 100 subsidized housing units would be provided in the Cities of Kenosha, Milwaukee, and Racine, while approximately 11,400 subsidized units would be provided in outlying Ozaukee, Walworth, Washington, and Waukesha Counties. This dispersal of publicly assisted housing throughout the suburban and outlying rural-urban fringe areas could contribute to the integration of households of different socioeconomic backgrounds within the Region.

Finally, the composite factor strategy represents a conscious effort to locate future publicly assisted housing in areas which are most suitable for the location of such housing based on a consideration of housing need in the area, the area's general suitability to absorb such housing, and the area's past performance in providing housing for low- and moderate-income families. This strategy results in a distribution pattern intermediate between the other two strategies, allocating more publicly assisted housing in the suburban and outlying rural-urban fringe than the existing need strategy, while allocating more publicly assisted housing to the urban centers of the Region than the dispersal strategy.

All three housing allocation strategies were ultimately evaluated against the adopted regional housing objectives in order to facilitate the selection of one strategy for use as part of the overall regional housing plan. Each strategy was assumed to meet six of the nine regional housing objectives equally well and differed only with respect to three objectives, namely, Objective Number 3, the maintenance, preservation, and, where necessary, rehabilitation of the existing housing stock; Objective Number 6, the provision of adequate locational choice of housing; and Objective Number 9, the efficient and economical satisfaction of housing need, meeting all other objectives at the lowest possible cost. Based upon the evaluation of the alternative regional housing strategies and an assessment of the degree to which those strategies meet the foregoing regional housing objectives, the advisory committee recommended that the composite factor strategy be adopted as the recommended regional housing allocation strategy.

RECOMMENDED REGIONAL HOUSING PLAN

The primary purpose of the regional housing study was the definition and quantification of the unmet housing need within southeastern Wisconsin and the formulation of a plan to meet this need. The regional housing plan for the abatement of areawide housing problems consists of two basic elements. The first is a housing allocation strategy, which has been recommended for use in the geographic distribution of subsidized housing necessary to abate the physical housing need in the Region. Having identified the magnitude and type of unmet housing needs in the Region, and having analyzed the constraints on the availability of housing which contribute to the existence of these needs, a series of recommendations was prepared through which these needs can be significantly reduced, if not eliminated. These recommendations as set forth in this report comprise the second element of the regional housing plan, and in conjunction with the composite factor strategy, constitute the recommended plan for the abatement of housing problems in the Southeastern Wisconsin Region. A brief summary of both plan elements follow.

Composite Factor Housing Allocation Strategy

The composite factor strategy provides a geographic framework for the location of the publicly subsidized housing which is necessary for the abatement of the physical housing need in southeastern Wisconsin, thereby identifying local responsibility for the abatement of this need. More specifically, this strategy allocates the 17,840 units necessary to eliminate the physical housing need to 49 housing analysis areas according to the existing need in the area for publicly assisted housing, the area's suitability for the location of such housing, and the area's past performance in providing such housing. Within the overall formula, each of these parameters is weighted equally, that is, one-third of the total allocation is assigned to housing analysis areas on the basis of each of the parameters.

Under the composite factor strategy, the largest quotas of subsidized housing are assigned to the large urban centers, with 36 percent being assigned to the Cities of Kenosha, Milwaukee, and Racine. Conversely, significantly lower allocations are recommended for many of the suburban and outlying rural-urban fringe areas of the Region. On a county basis, the housing allocations recommended under this strategy include: Kenosha, 1,348 units; Milwaukee, 8,731 units; Ozaukee, 1,245 units; Racine, 1,507 units; Walworth, 997 units; Washington, 1,204 units; and Waukesha, 2,808 units.

Many varied housing subsidy programs have been used to provide low- and moderate-income housing and may be expected to continue to be used within the Region. These programs may, for convenience, be divided into those which directly facilitate new residential construction, those which directly facilitate the rehabilitation of existing substandard housing, and those which utilize the existing stock of standard housing as alternative housing for households in the need category. Under the composite factor strategy, more than 9,500 of the 17,840 units could be provided through the rehabilitation of substandard housing, while the balance of the required housing will necessarily be supplied through programs which involve new construction or which utilize the existing stock of standard housing. Priority areas with respect to the use of rehabilitation subsidy funds are the older urban centers of the Region, where the rehabilitation of a tract of substandard housing not only provides additional sound housing units for households in need, but may serve to upgrade the overall quality of the neighborhood in which the housing is located and thereby check the self-perpetuating cycle of urban decay and deterioration. Priority areas with respect to the use of programs involving new construction are those which have sufficient employment opportunities for the prospective low- and moderate-income occupants of such housing, and

sufficient amounts of developable land to sustain the implied growth. Priority areas with respect to programs which utilize the existing stock of standard housing are those which have a sufficient vacant housing stock of the type and price range desired by eligible applicants for the subsidized housing.

Nonsubsidy Housing Plan Recommendations

Existing housing problems are the result of constraints within the housing market which limit the availability of standard housing to certain segments of the regional population. Based upon the analysis of housing availability constraints in southeastern Wisconsin, a series of housing plan recommendations was prepared through which the level of unmet housing needs in the Region can be significantly reduced, if not eliminated. Housing recommendations which seek to reduce the existing housing need without relying on governmental subsidy are summarized first. Housing plan recommendations which involve a public subsidy to the households in need follow.

The reduction and elimination of areawide housing problems depend to some extent on the abatement of the impact of certain housing availability constraints. To the maximum extent possible, nonsubsidy approaches should be utilized in efforts to remove these constraints, thereby reducing the existing housing need without relying on public financial resources. The regional housing plan includes nonsubsidy recommendations for the abatement of economic, institutional, and social constraints on the availability of housing within the regional housing market.

Recommendations for the Abatement of Economic Constraints: Inasmuch as the majority of households in existing housing need cannot secure decent, safe, and sanitary housing at a cost which is consistent with the household income, the overriding housing availability constraints are economic in nature, relating specifically to the cost of housing relative to the household's ability to pay. However, the cost of occupying housing is affected by many individual cost elements, and therefore an effective program for the minimization of housing costs must be comprehensive, addressing as many of the individual cost elements as possible. A program designed to reduce only a single cost element will have little effect on the total cost of occupying housing. Only efforts which address all of the major cost components can be recommended to reduce housing costs. Little else can be recommended except to urge all elements of the housing supply mechanism, including builders and developers, construction trade unions, financers, and real estate brokers, to cooperate in efforts to lower housing costs by seeking out and incorporating within the overall housing delivery system such innovations in residential construction, financing, and marketing which seem to reduce one or more of the component costs of producing and occupying housing, while at the same time maintaining adequate standards of housing quality.

Recommendations for the Abatement of Institutional Constraints: In addition to the overriding economic constraints, various constraints relating to the existing property tax structure and the existing body of local land use controls have been identified which limit the availability of housing in southeastern Wisconsin. Certain changes with respect to these institutional constraints would increase the availability of housing in the Region.

Property Tax Structure: The total amount of property taxes levied by a local unit of government includes individual levies for local, county, and school purposes as well as a small levy collected for state forestry purposes. The property tax for school purposes, including amounts levied for vocational schools, is the largest and has been the most rapidly increasing component of the total property tax levy, comprising 54 percent of all property taxes levied in the Region in 1970. The change of the school tax from the property tax to some other form of tax would not only substantially decrease the cost of occupying housing, but would largely eliminate the detrimental effects of low- and moderate-income family housing on the local cost-revenue situation. Under the regional housing plan, it is recommended that the state carefully investigate alternative means of financing public elementary and secondary schools so that importance of the property tax as a source of educational funding can be reduced.

The existing property tax structure constrains the rehabilitation of substandard housing because specific improvements to a housing unit may increase its assessed value, thereby resulting in an increase in the property tax levy. This increase, in conjunction with the cost of the improvement itself, may cause the overall cost of the improvement to be beyond the economic means of a low- or moderate-income homeowner or economically unfeasible for the owner of substandard rental housing. Therefore, under the regional housing plan, it is recommended that local units of government in the Region having substantial concentrations of substandard housing encourage the rehabilitation of such housing by exempting physical improvements to substandard structures within locally designated conservation areas from local property tax as authorized under Section 70.11(24) of the Wisconsin Statutes.

Land Use Controls: Land use control powers conferred through state enabling legislation provide local units of government with mechanisms which have a profound influence on existing and proposed land development, particularly residential development. The rationale for planned land development through the application of such local land use controls as zoning regulations, land subdivision control ordinances, and building and sanitary codes is well documented and convincing. Certain provisions of existing land use control mechanisms, however, can have a constraining influence on the supply of housing even when sound and enacted in good faith.

Local zoning ordinances not only determine where housing may be built, but influence the type, size, and cost of the units as well. While a sufficient quantity of residentially zoned and readily developable land exists in southeastern Wisconsin, constraints on the locational choice of housing owing to excessive zoning restrictions with respect to size and type of housing allowed exist in certain communities. Therefore, under the regional hous-

ing plan, it is recommended that all urban communities within the Region incorporate provisions for a full range of residential structure types—single family, two-family, and multifamily—within their zoning ordinances. It is further recommended that these communities incorporate provisions for a range of housing lot sizes within their zoning ordinances.

Site improvement costs, including costs of paved streets, curb and gutter, sidewalk, sanitary sewer main, storm sewer main, and water main, typically comprise about one-third of the cost of a single-family lot in an urban area. Such costs may be reduced through the use of clustering or planned unit development techniques, which permit the intensification of residential densities in a portion of an area zoned for residential use while providing that the balance of the area be maintained as park or other open space, thereby creating the same overall net density for the area as specified in the local zoning ordinance, but requiring less street and utility depth per lot. Under the regional housing plan, it is recommended that local units of government in the Region incorporate within their zoning ordinances provisions for planned unit developments as a conditional use within residential zoning districts.

Building codes, because of the complexity involved in compliance and the different application among different communities, have been criticized as adding unnecessarily to the cost of residential construction. The adoption of a uniform building code to replace the current multiplicity of building codes in the Region would serve to make possible certain savings in residential construction costs. Therefore, under the regional housing plan, it is recommended that all local units of government in the Region adopt the Wisconsin Uniform Building Code regulating the construction of one- and two-family residential structures.

Most local building codes in southeastern Wisconsin are oriented toward the regulation of conventionally built housing, which is typically constructed at the site over a period of several months, utilizing well-known, traditional construction methods. Consequently, the application of local building codes to manufactured housing is frequently complicated by assembly line techniques employed in industrialized housing systems. A uniform manufactured housing code would simplify the regulation of factory-built housing, and could provide the catalyst required to enable manufacturers of factory-built housing, in the long run, to expand their operation, develop new markets, and, through increased production and technological advances, provide some cost savings to prospective housing consumers. Therefore, under the regional housing plan, it is recommended that the state enact a uniform building code regulating the manufacture and installation of factory built housing in Wisconsin.

As indicated previously, site improvement costs typically comprise one-third of the cost of a fully improved lot in an urban area of the Region, thereby adding significantly to the overall cost of single-family housing. Local subdivision control ordinances, which specify the minimum site improvements which must be provided to new subdivisions within a community, must ensure the provision of those physical improvements which are necessary for a safe, healthful, efficient, stable, and aesthetically pleasing physical environment, but at the same time, must avoid excessively stringent regulations which needlessly increase the cost of the lot. Under the regional housing plan, it is recommended that all local units of government in the Region adopt land development regulations similar to those contained in the SEWRPC model land development ordinance. It is further recommended that local units of government investigate changes with respect to the present system of financing site improvement costs, and adopt changes that would result in a saving to the prospective housing consumer and which are consistent with the overall growth policy of the community.

Recommendations for the Abatement of Social Constraints: As part of the analysis of housing availability constraints conducted under the regional housing study, the forces of housing discrimination and community opposition to the provision of low-income housing were identified as contributing to the housing problems experienced by certain subgroups of the regional population. Discrimination in the sale, rental, or financing of housing on the basis of race, creed, or national origin is prohibited by federal and state law as well as by fair housing laws which have been enacted by many local units of government in the Region. It is apparent that additional legislation would not reduce the incidence of these forces of discrimination within the regional housing market. Indeed, little else can be recommended except that the U. S. Department of Housing and Urban Development, the agency charged with administration of the federal fair housing law; the Wisconsin Department of Industry, Labor, and Human Relations, the agency charged with the administration of the state fair housing law; and local agencies charged with the administration of local fair housing laws vigorously process all complaints of housing discrimination which are brought to their attention.

Community opposition to the provision of low-income housing represents another constraint on the availability of housing in southeastern Wisconsin. Because of its emotion-charged nature, local sentiment against the provision of housing for low- and moderate-income families within certain subareas of the Region may be so strong that provision of such housing is severely delayed or wholly precluded. It is important to recognize, however, that although it may be extremely difficult to avoid community opposition towards the provision of low- and moderate-income housing, it is possible to at least mitigate its influence through an appeal mechanism. Under the regional housing plan, it is recommended that the state establish a housing appeals board to review applications for the construction or modification of low- and moderate-income housing that are rejected at the local level. The appeals board should be empowered to issue a permit allowing the construction of such housing in those instances where good cause for the original rejection cannot be shown. Any determination of the board would, of course, be subject to court appeal.

Subsidy Housing Plan Recommendations

The housing recommendations presented above represent efforts which should be undertaken to abate the existing housing problem without relying on public assistance,

thereby reducing the existing housing need at the lowest possible cost. However, it is unlikely that these nonsubsidy recommendations will cause more than a marginal reduction in the existing housing need. It is apparent that the impact of the various housing availability constraints, particularly the overriding economic constraints which are responsible for the existing housing need, will be effectively reduced only through the provision of some form of public financial assistance. A series of recommendations with respect to the effective use of federal, state, and local subsidy resources which are available for the reduction of housing need in the Region comprise an important part of the regional housing plan. Recognizing that there are over 96,000 households in housing need and that housing subsidy funds to alleviate this need are extremely limited, and recognizing that the severity of housing need varies among households, recommendations were made with respect to the types of households that should be subsidized through the use of the limited available funds. Furthermore, regional housing plan recommendations identify the potential roles of the various levels and units of government relative to the effective use of the subsidy programs.

Recommendations for the Disposition of Housing Subsidy Funds—Priority Households: The analysis of the existing housing need indicated that certain housing problems impose greater hardship than others. Of the identified housing problems, a housing unit which is both substandard and overcrowded imposes the most severe hardship. A generalized ranking of housing problems in decreasing order of severity includes: a substandard and overcrowded situation; a substandard but not overcrowded situation; an overcrowded but not substandard situation; and a situation involving economic need only. Similarly, it is possible to differentiate among households in need with respect to the relative difficulty they experience in obtaining decent, safe, and sanitary housing. For example, the greatest difficulty in securing adequate housing is generally encountered by large, low-income households, followed by small low-income households, including the elderly; large moderate-income households; and small moderate-income households.

Recognizing that the amount of subsidy funds which will be available annually for the abatement of housing problems is limited, it becomes apparent that housing subsidy programs should be administered in such a way as to simultaneously relieve the most severe housing problems and to assist those households which experience the greatest difficulty in securing adequate shelter. Under the regional housing plan, it is recommended that all agencies administering housing subsidy programs, give priority in determining applicant eligibility to households according to the foregoing criteria with respect to both the type of problem experienced and the household composition.

Recommendations to Facilitate Utilization of Housing Subsidy Programs at the Local Level: While housing need is a regional problem, it must ultimately be resolved at the local level. Although a variety of housing subsidy programs for the abatement of the existing need are available to local units of government, utilization of such subsidy programs can be greatly facilitated by vigorous local action. Local efforts to reduce housing need will probably be most effective when guided by a local government housing agency which is able to carefully analyze local needs and to carry out a housing program in accordance with those needs. A county housing agency—either a county housing authority, department, or division—appears to be the logical entity for this purpose. Regardless of the precise structure, the use of seven county housing agencies to implement the regional housing plan could avoid needless duplication of effort, and would greatly reduce the problems of interagency coordination. Accordingly, it is recommended that a county housing agency—either a county housing authority, department, or division—be established in the six counties of the Region which do not have such an agency at the present time.

With the assistance of local public officials, local planning agencies and staffs, and local housing agencies and staffs, the county housing agency should act to ensure the effective use of housing subsidy programs within its boundaries. As a first step, it is recommended that the county housing agency, with the full cooperation of all planning agencies within the county, analyze housing need at the community or neighborhood levels, utilizing data assembled in the regional housing study as a point of departure. Furthermore, it is recommended that the county housing agency develop good working relationships with local landlords, real estate broker associations, builders, and developers, as well as community and neighborhood organizations interested in providing housing for lower income families, explaining fully the findings of the local need analysis and the provisions of subsidy programs available for the abatement of the existing need. In addition, it is recommended that the county housing agency undertake actions necessary to ensure the full use of housing subsidy programs in an effort to meet the allocation strategy in a manner which is consistent with the local analysis of housing need. The county housing agency's role with respect to the actual implementation of the various subsidy programs will necessarily be greater in areas with insufficient action on the part of the private quasi-public sector in terms of providing needed subsidized housing.

Role of the Southeastern Wisconsin Regional Planning Commission: Having conducted a comprehensive regional housing study, the Commission has determined the magnitude of the existing housing need at a regional, county, and housing analysis area level, and has compiled extensive data files which will assist in determining housing need for smaller subareas of the Region. This information is invaluable as a point of departure for county housing authorities and local units of government in analyzing housing needs on a community and neighborhood level. Accordingly, under the regional housing plan it is recommended that the Commission provide, on a continuing basis, technical assistance to enable county housing authorities and local units of government to more precisely establish the magnitude and characteristics of the existing housing need on a community and neighborhood level. The Commission should also provide technical assistance on a continuing basis as required with respect to the utilization of housing subsidy programs which are available for the abatement of the identified housing problems. Furthermore, the Commission should establish a monitoring system to determine whether housing sub-

sidy programs are being utilized in the appropriate areas and are assisting appropriate households. It is also recommended that the Commission undertake a major reevaluation of the magnitude and characteristics of the housing need at regular intervals to determine the extent of housing problems, the effectiveness of efforts undertaken to abate those problems, and the need to modify or adjust the recommended regional housing plan. A major reevaluation of the regional housing situation should be conducted approximately every fifth year after the publication of this report.

Recommendations to State Agencies: Certain state agencies can play important roles with respect to the utilization of housing subsidy programs in the Region. It is recommended that the Wisconsin Department of Local Affairs and Development continue to provide technical and financial assistance to county housing authorities and local units of government in support of efforts to analyze and resolve local housing problems. It is recommended that the Wisconsin Housing Finance Authority provide long-term low-interest mortgages to developers to enable the construction of housing units at below market rent. It is further recommended that the Authority, where possible, work in concert with existing federal housing subsidy programs, and through greater interest reductions, allow larger subsidies and thereby provide housing units to lower income households.

Recommendations to Federal Agencies: It is anticipated that the vast majority of housing subsidy funds available within the Region will be supplied by agencies of the federal government. Numerous federal housing subsidy programs which provide new, existing, or rehabilitated housing units to households in housing need are administered by the U. S. Department of Housing and Urban Development and the U. S. Department of Agriculture, Farmers Home Administration. Continued funding of housing subsidy programs administered by these agencies is required if decent, safe, and sanitary housing is to be provided to households in housing need. Therefore, under the regional housing plan, it is recommended that housing subsidy programs administered by the U. S. Department of Housing and Urban Development and the U. S. Department of Agriculture, Farmers Home Administration which provide new, existing, or rehabilitated housing units to households in housing need be sufficiently funded to facilitate a significant reduction in the existing housing need in the shortest possible time. In order to make significant progress in this respect, federal agencies should, at a minimum, endeavor to match the scale of efforts undertaken during the short-range action housing program for 1972 and 1973, during which approximately 2,900 households were assisted annually under federal housing subsidy programs. Under such funding levels, federal housing program subsidies could eliminate the existing physical housing need in less than seven years.

CONCLUSION

The regional housing plan provides another important element of the evolving comprehensive plan for the physical development of the seven-county southeastern Wisconsin Region. Together with the regional land use plan, the series of comprehensive watershed plans, and the sanitary sewerage system plan, the housing plan provides the Region, its public officials, and its citizens with a sound coordinated approach to regional development. The regional housing plan is based upon extensive inventories and analyses of the Region's socioeconomic and natural resource base, existing housing stock, community tax structure, land use controls, and utilization of government subsidized housing programs, as well as recent trends in housing costs, financing, and technology. The plan has been endorsed by a committee comprised of knowledgeable and experienced representatives from the mortgage banking community, private land development firms, the home building industry, real estate appraisers, public and private housing agencies, the university community, and church groups and citizen organizations concerned with housing, and was subject to public review at a public hearing held in the Region.

The recommended regional housing plan has identified the physical, economic, and social aspects of regional housing need; recommends a strategy designed to meet the most critical aspect of this need—the amelioration of current physical housing problems; and contains recommendations directed at both the public and private sectors designed to minimize and eventually eliminate existing as well as future housing need. The regional housing allocation strategy formulated under this plan is intended to serve as a guide to federal, state, and local funding agencies which seek a more rational basis for the distribution of limited housing subsidy funds. The housing and housing related data provided in the plan will also serve as a sound point of departure in the preparation of community housing assistance plans, which are required by the U. S. Department of Housing and Urban Development (HUD) for all communities seeking community development funds under the Housing and Community Development Act of 1974. In addition, the regional housing plan is intended to satisfy the housing element requirement of the Federal Housing and Urban Development Act of 1968, and therefore enable continued financial assistance for comprehensive planning programs carried out under Section 701 of the Act.

Recognizing the complex social, economic, and physical factors affecting housing and the resultant dynamic nature of the regional as well as local housing markets, it is imperative that housing supply, demand, and need information continue to be collated and collected by the Commission on a uniform areawide basis, and that such data form the basis of a housing market information file which would be available to both the public and private housing sectors. It is also important that regional housing needs and changes in such needs be evaluated on a regular basis so that, in light of such changes, adopted regional housing strategies and recommendations can be revised. It is only through the implementation of the regional housing plan and timely and meaningful revisions to it that regional housing needs can be met in the most cost-effective way, and the goal of decent, safe, and sanitary housing within a suitable living environment attained for all residents of the Southeastern Wisconsin Region.

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APPENDICES

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Appendix A

TECHNICAL AND CITIZEN ADVISORY COMMITTEE ON REGIONAL HOUSING STUDIES

*Richard W. Cutler Chairman	Attorney, Quarles & Brady, Milwaukee; Member, Village of Fox Point Plan Commission; Commissioner, SEWRPC
Robert B. Barrows. Vice-Chairman	Vice-President, Mortgage Loan Department, Northwestern Mutual Life Insurance Company, Milwaukee
Kurt W. Bauer Secretary	Executive Director, SEWRPC
William B. Ardern	Past President, Society of Real Estate Appraisers, Milwaukee Chapter No. 64, Milwaukee
John Bach	Director, Southeastern Wisconsin Housing Corporation, Burlington
Richard Barry	Representative, Metropolitan Milwaukee Association of Commerce; Vice President-Treasurer, Bruce, Barry, & Gleysteen, Inc., Milwaukee
Richard P. Blake	Architect, Blake-Wirth & Associates, Inc., Milwaukee; Board Member, Wisconsin Chapter—Southeast Section, American Institute of Architects
Delbert Blasdel	Administrative Code Consultant, Division of Industrial Safety and Buildings, Wisconsin Department of Industry, Labor, and Human Relations
*Paul Borrmann	Advisor, Milwaukee Tenants Union; Coordinator, Metropolitan Housing Center, Milwaukee
Paul J. Cody	Urban Affairs Manager, S. C. Johnson & Son, Inc., Racine
Clarence Dittmar	President, Dittmar Realty, Inc., Menomonee Falls
The Rev. John D. Fischer	Executive Director, Greater Milwaukee Conference on Religion and Urban Affairs, Milwaukee
Leonard F. Forschner	Economist, U. S. Department of Housing and Urban Development, Milwaukee Area Office
Norman N. Gill	Executive Director, Citizens Governmental Research Bureau, Milwaukee
Jay Gilmer	Director, Bureau of Milwaukee Area Service, Department of Local Affairs and Development, Milwaukee
*Melvin Goldin	Secretary-Treasurer, Recht-Goldin-Siegel, Milwaukee
William Kelly	Director, Indian Urban Affairs Council, Milwaukee
*Mrs. James Mills	Legislative Chairman, League of Women Voters, Inter-League Council, Milwaukee
Bernard N. Nill	Assistant Planning Director, Department of City Development, City of Milwaukee
*Edward J. J. Olson	Director of Research and Planning, Community Relations-Social Development Commission, Milwaukee
William H. Orenstein	Project Director, Northridge Lakes, Milwaukee
*Kenneth Payne	Housing Coordinator, Milwaukee County
Glenn Peters	Secretary-Treasurer, Peters Development Corporation, West Bend
Clinton Rose	Supervisor, Milwaukee County; Chairman, Committee on Housing and Relocation, Milwaukee
*Gerald Schwerm	Village Manager, Village of Brown Deer
Wesley Scott	Executive Director, Milwaukee Urban League
Ronald P. Siepmann	President, Siepmann Realty Corporation, Brookfield
Jonathan Slesinger	Professor of Sociology, University of Wisconsin-Milwaukee

*Member of the Special Subcommittee on Housing Program Implementation

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Appendix B

EXTERIOR HOUSING CONDITION RATING FORM

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION – REGIONAL HOUSING STUDY

EXTERIOR HOUSING CONDITION SURVEY

DATE OF RATING _____

RATED BY _____

STRUCTURE CLASSIFICATION		NO. OF UNITS IN STRUCTURE	NO. OF STORIES	TYPE OF CONSTRUCTION	
1. SINGLE FAMILY 2. TWO FAMILY 3. MULTI-FAMILY	4. MOBILE HOME 5. MIXED USE ☐	☐☐	☐☐	1. WOOD FRAME 2. METAL 3. CONCRETE	4. STRUCTURAL MASONRY 5. OTHER 6. UNKNOWN ☐

MAJOR COMPONENTS				REMARKS
EXTERIOR ITEMS[a]	MATERIAL	CONDITION	VALUE 4 8 12 16	
FOUNDATION 1. OK 2. NOT OK ☐	1. STONE 2. WOOD 3. BLOCK 4. CONCRETE 5. POST OR PIER 6. BRICK 7. SLAB 8. OTHER 9. NONOBSERVABLE ☐☐☐ (1st 2nd 3rd)	LEANING BOWED CRACKED MISSING MATERIALS	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
EXTERIOR WALL 1. OK 2. NOT OK ☐	NOT APPLICABLE	LEANING BOWED CRACKED (MASONRY) MISSING MATERIALS (MASONRY)	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
ROOFING 1. OK 2. NOT OK ☐	1. SHINGLE 2. ROLL 3. OTHER 4. NONOBSERVABLE ☐☐☐ (1st 2nd 3rd)	SAGGING BOWED HOLE OR WORN MISSING MATERIALS	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
MINOR COMPONENTS			1 2 3 4	
CHIMNEY 1. OK 2. NOT OK ☐	1. BRICK 2. BLOCK 3. METAL 4. OTHER 5. NONOBSERVABLE ☐☐☐ (1st 2nd 3rd)	MAKESHIFT LEANING MISSING MATERIALS	☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
GUTTERS & DOWNSPOUTS 1. OK 2. NOT OK ☐	1. WOOD 2. METAL 3. PLASTIC 4. OTHER 5. NONOBSERVABLE ☐☐☐ (1st 2nd 3rd)	ROTTED HOLE LOOSE MISSING MATERIALS	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	

MINOR COMPONENTS				
EXTERIOR ITEMS[a]	MATERIAL	CONDITION	VALUE	REMARKS
FAVES & FACIA 1. OK 2. NOT OK ☐	1. WOOD 2. METAL 3. PLASTIC 4. MASONRY 5. COMPOSITION BOARD 6. OTHER 7. NONOBSERVABLE ☐☐☐ 1st 2nd 3rd	CRACKED ROTTED HOLE MISSING MATERIALS	1 2 3 4 ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
SIDING 1. OK 2. NOT OK ☐	1. WOOD 2. ALUMINUM 3. BRICK, BLOCK, OR STONE 4. ASPHALT 5. ASBESTOS 6. OTHER 7. NONOBSERVABLE ☐☐☐ 1st 2nd 3rd	BROKEN CRACKED WEATHERED MISSING MATERIALS	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
WINDOWS & DOORS 1. OK 2. NOT OK ☐	1. METAL 2. WOOD 3. OTHER 4. NONOBSERVABLE ☐☐☐ 1st 2nd 3rd	BROKEN LEANING ROTTED MISSING MATERIALS	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
PORCH 1. OK 2. NOT OK ☐	1. WOOD 2. CONCRETE 3. BRICK 4. BLOCK 5. OTHER 6. NONOBSERVABLE ☐☐☐ 1st 2nd 3rd	ROTTED BROKEN MISSING MATERIALS SAGGING	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	
PAINTING 1. OK 2. NOT OK ☐		EAVES & FACIA WALLS WINDOWS & DOORS GUTTERS & DOWNSPOUTS PORCH	☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐ ☐☐☐☐	

[a] *If an exterior item cannot be seen, such as the roof of a tall building, use code no. 9.*

OUT-BUILDINGS		IMMEDIATE NEIGHBORHOOD		
	GOOD POOR			GOOD POOR
STRUCTURE PAINTING ACCESSORIES	☐☐ ☐☐ ☐☐	PUBLIC	STREETS & WALKS LIGHTING LANDSCAPING	☐☐ ☐☐ ☐☐
		PRIVATE	HOUSING YARDS	☐☐ ☐☐

Appendix C

EQUALIZED PROPERTY VALUES, PROPERTY TAX LEVIES, AND PROPERTY TAX RATES FOR THE REGION BY COUNTY: 1961 AND 1971

Table C-1

KENOSHA COUNTY

Minor Civil Division	Equalized Value of General Property[a]				Gross Property Tax Levy[c]			Percentage Distribution of Gross Property Tax Levy According to Use 1971[d]				Property Tax Rate: 1971		Change in the Net Property Tax Rate:[g] 1961-1971
	1961	1971	Percent Change 1961-1971	Per Household[b] 1971	1961	1971	Percent Change 1961-1971	State	County	Local	School	Gross Full Value Rate[e]	Net Full Value Rate[f]	
Cities														
Kenosha	$376,709,350	$571,997,000	51.8	$23,592	$9,807,751	$22,868,076	133.2	0.5	18.1	28.4	53.0	$39.97	$36.60	$10.57
Villages														
Paddock Lake	$ 5,375,800	$ 11,050,000	105.6	$24,720	$ 129,204	$ 368,845	185.5	0.6	21.7	1.1	76.6	$33.37	$30.41	$ 6.38
Silver Lake	4,769,300	7,988,000	67.5	20,588	122,199	330,202	170.2	0.5	17.5	11.3	70.6	41.33	37.45	11.83
Twin Lakes	16,231,250	31,537,000	94.3	43,499	363,946	1,112,666	205.7	0.6	20.5	12.0	66.9	35.23	32.47	10.05
Towns														
Brighton	$ 4,789,700	$ 10,381,000	116.7	$33,272	$ 127,581	$ 289,233	126.7	0.7	26.0	0.0	73.3	$27.86	$26.44	$ -0.20
Bristol	11,133,650	33,267,000	198.8	43,946	273,302	1,003,077	267.0	0.7	24.0	1.2	74.1	30.15	27.92	3.37
Paris	8,675,800	17,780,000	104.9	41,253	198,651	531,117	167.4	0.0	14.5	0.0	85.5	29.89	28.26	5.36
Pleasant Prairie	39,135,700	90,500,000	131.2	27,399	994,595	2,338,215	135.1	0.8	28.0	0.0	71.2	25.83	24.05	-1.36
Randall	10,871,600	22,042,000	102.8	49,422	237,751	627,154	163.8	0.7	20.7	0.1	78.6	28.43	26.26	4.39
Salem	24,465,450	47,331,000	93.5	27,327	548,546	1,601,388	191.9	0.6	21.4	0.0	78.0	33.83	31.61	9.19
Somers	28,671,600	53,882,000	87.9	25,476	620,174	1,470,073	137.0	0.7	21.1	0.0	78.1	27.28	25.78	4.15
Wheatland	7,981,250	17,089,000	114.1	30,139	171,839	545,763	217.6	0.6	22.7	0.8	75.9	31.93	29.83	8.30

Table C-2

MILWAUKEE COUNTY

Minor Civil Division	Equalized Value of General Property[a]				Gross Property Tax Levy[c]			Percentage Distribution of Gross Property Tax Levy According to Use 1971[d]				Property Tax Rate: 1971		Change in the Net Property Tax Rate:[g] 1961-1971
	1961	1971	Percent Change 1961-1971	Per Household:[b] 1971	1961	1971	Percent Change 1961-1971	State	County	Local	School	Gross Full Value Rate[e]	Net Full Value Rate[f]	
Cities														
Cudahy	$ 123,897,200	$ 213,237,000	72.1	$ 31,326	$ 3,440,486	$ 9,185,692	167.0	0.5	27.9	17.5	54.2	$43.07	$39.69	$11.92
Franklin	44,222,700	81,526,000	84.4	27,721	1,495,211	3,156,966	111.1	0.5	32.0	6.4	61.1	38.72	34.51	0.70
Glendale	141,314,200	270,796,000	91.6	72,991	2,889,371	9,365,130	224.1	0.6	35.2	13.7	50.6	34.58	32.54	12.09
Greenfield	84,225,900	200,198,000	137.7	29,027	2,521,653	7,237,377	187.0	0.6	34.1	6.2	59.2	36.15	31.47	1.53
Milwaukee (Part)	3,756,093,300	5,072,514,000	35.0	21,405	126,435,994	252,491,071	99.7	0.4	24.1	31.0	44.5	49.77	44.83	11.17
Oak Creek	71,520,975	171,063,000	139.2	47,716	1,608,662	5,932,592	268.8	0.6	34.6	11.2	53.6	34.68	32.03	9.54
St. Francis	37,799,800	60,537,000	60.2	20,507	1,114,956	2,613,242	134.4	0.5	27.8	18.4	53.4	43.16	39.55	10.05
South Milwaukee	111,037,350	170,481,000	53.5	25,636	3,320,879	6,986,920	110.4	0.5	26.3	18.8	54.4	40.98	37.65	7.74
Wauwatosa	419,628,000	727,885,000	73.5	40,603	10,142,247	26,920,839	165.4	0.5	32.5	19.5	47.5	36.98	34.76	10.59
West Allis	465,889,000	777,163,000	66.8	33,006	13,696,632	28,886,569	110.9	0.5	32.2	24.1	43.1	37.16	33.95	4.55
Villages														
Bayside (Part)	$ 32,929,850	$ 61,220,000	85.9	$ 51,619	$ 841,750	$ 2,373,687	182.0	0.5	30.9	7.8	60.8	$38.77	$35.69	$10.13
Brown Deer	68,862,000	119,862,000	74.1	34,592	1,887,718	4,882,070	158.6	0.5	30.0	7.8	61.7	40.73	37.27	9.86
Fox Point	74,465,400	114,205,000	53.4	50,466	1,975,566	4,350,177	120.2	0.5	32.4	4.4	62.6	38.09	35.09	8.56
Greendale	36,735,900	151,755,000	313.1	38,526	1,016,998	5,554,957	446.2	0.6	33.3	6.8	59.3	36.60	32.91	5.23
Hales Corners	37,114,300	70,914,000	91.1	32,694	1,186,699	2,922,152	146.2	0.5	29.1	7.9	62.5	41.20	37.99	6.02
River Hills	20,050,675	30,507,000	52.2	69,651	494,790	1,257,779	154.2	0.5	29.4	16.1	54.0	41.22	38.25	13.57
Shorewood	94,851,700	139,644,000	47.2	23,616	2,714,956	6,075,418	123.8	0.5	28.7	19.2	51.6	43.50	40.20	11.58
West Milwaukee	135,538,100	203,452,000	50.1	110,272	3,053,891	7,074,392	131.6	0.6	34.5	20.0	44.8	34.77	32.17	9.64
Whitefish Bay	128,901,350	175,657,000	36.3	32,583	3,355,931	7,085,119	111.1	0.5	29.7	8.3	61.5	40.33	37.20	11.17
City of Milwaukee (All)	$3,756,093,300	$5,072,543,900	35.0	$ 21,405	$126,435,994	$252,492,445	99.7	0.4	24.1	31.0	44.5	$49.77	$44.83	$11.17
Village of Bayside (All)	34,334,350	63,380,000	84.6	51,951	869,471	2,441,409	180.8	0.5	30.3	7.8	66.4	38.52	35.48	10.16

Table C-3

OZAUKEE COUNTY

Minor Civil Division	Equalized Value of General Property[a]				Gross Property Tax Levy[c]			Percentage Distribution of Gross Property Tax Levy According to Use 1971[d]				Property Tax Rate: 1971		Change in the Net Property Tax Rate:[g] 1961-1971
	1961	1971	Percent Change 1961-1971	Per Household[b] 1971	1961	1971	Percent Change 1961-1971	State	County	Local	School	Gross Full Value Rate[e]	Net Full Value Rate[f]	
Cities														
Cedarburg	$30,779,750	$ 82,892,000	169.3	$36,825	$ 651,632	$2,393,050	267.2	0.7	11.2	15.1	73.0	$28.86	$26.61	$ 5.44
Mequon	62,710,200	156,382,000	149.4	49,441	1,326,116	5,356,528	303.9	0.6	9.4	15.1	75.0	34.25	31.86	10.71
Port Washington	36,992,500	84,263,000	127.8	34,267	598,714	2,152,452	259.5	0.8	12.6	0.0	86.6	25.51	24.12	7.94
Villages														
Bayside (Part)	$ 1,404,500	$ 2,160,000	53.8	$63,529	$ 27,721	$ 67,722	144.3	0.6	10.3	8.2	80.9	$31.35	$29.49	$ 9.75
Belgium	3,891,500	8,526,000	119.1	38,755	44,818	282,001	529.2	0.6	9.7	11.1	78.6	33.07	30.98	19.46
Fredonia	3,970,150	7,899,000	99.0	27,051	70,071	239,646	242.0	0.7	10.6	17.6	71.1	30.33	28.10	10.45
Grafton	23,679,150	66,734,000	181.8	41,971	450,211	1,920,545	326.6	0.7	11.2	10.5	77.6	28.77	25.99	6.98
Saukville	5,390,050	13,609,000	152.5	36,388	121,799	356,930	193.0	0.8	12.3	13.6	73.4	26.22	22.84	.24
Thiensville	17,671,350	35,825,000	102.7	40,073	420,799	1,102,670	162.0	0.6	10.5	6.3	82.6	30.77	28.50	4.69
Towns														
Belgium	$10,176,550	$ 20,001,000	96.5	$47,508	$ 137,929	$ 577,560	318.7	0.7	11.3	5.0	83.1	$28.87	$27.20	$13.65
Cedarburg	13,379,300	41,470,000	210.0	43,379	214,046	965,834	351.2	0.9	5.0	0.0	94.2	23.28	22.44	6.44
Fredonia	6,751,250	14,525,000	115.2	33,011	149,635	400,526	167.7	0.7	11.8	3.2	84.3	27.57	26.26	4.10
Grafton	11,590,400	31,127,000	168.6	36,577	178,172	744,223	317.7	0.8	5.5	0.0	93.6	23.90	22.68	7.31
Port Washington	6,810,150	15,350,000	125.4	38,471	110,562	367,243	232.2	0.8	13.6	0.0	85.6	23.92	22.98	6.75
Saukville	6,657,450	16,049,000	141.1	39,240	102,364	467,141	356.4	0.7	11.2	0.0	88.1	29.10	28.33	12.95

Table C-4

RACINE COUNTY

Minor Civil Division	Equalized Value of General Property[a]				Gross Property Tax Levy[c]			Percentage Distribution of Gross Property Tax Levy According to Use 1971[d]				Property Tax Rate: 1971		Change in the Net Property Tax Rate:[g] 1961-1971
	1961	1971	Percent Change 1961-1971	Per Household[b] 1971	1961	1971	Percent Change 1961-1971	State	County	Local	School	Gross Full Value Rate[e]	Net Full Value Rate[f]	
Cities														
Burlington	$ 36,019,750	$ 81,505,000	126.3	$35,268	$ 765,234	$ 2,822,187	268.8	0.6	25.9	23.5	50.1	$34.62	$31.71	$10.46
Racine	475,066,300	646,375,000	36.1	21,653	11,745,797	27,633,374	135.3	0.5	18.6	31.4	49.5	42.75	39.33	14.61
Villages														
Elmwood Park	$ 3,443,600	$ 5,093,000	47.9	$37,175	$ 53,318	$ 157,164	194.8	0.6	25.8	2.8	70.7	$30.85	$29.23	$13.75
North Bay	3,811,300	5,689,000	49.3	64,648	18,454	154,410	736.7	0.0	22.4	0.0	77.6	27.14	27.14	22.30
Rochester	1,464,400	2,820,000	92.6	20,000	36,403	101,503	178.8	0.6	24.9	14.1	66.4	35.99	30.47	5.61
Sturtevant	5,255,800	19,153,000	264.4	22,586	154,509	762,011	393.2	0.5	20.0	27.9	51.6	39.78	36.37	6.97
Union Grove	7,633,400	15,778,000	106.7	19,479	231,141	670,293	190.0	0.5	21.1	14.2	64.3	42.48	37.41	7.13
Waterford	7,032,400	13,353,000	89.9	23,142	188,691	573,817	204.1	0.5	20.8	16.7	62.0	42.97	38.87	12.04
Wind Point	5,263,400	21,610,000	310.6	63,746	47,104	595,361	1,163.9	0.0	28.9	0.1	71.0	27.55	27.01	18.06
Towns														
Burlington	$ 22,277,450	$ 43,991,000	97.5	$33,051	$ 370,685	$ 1,276,020	244.2	0.7	31.2	3.0	65.1	$29.00	$27.49	$10.85
Caledonia	44,034,250	119,736,000	171.9	28,488	986,888	3,716,768	276.6	0.6	25.9	5.2	68.3	31.04	29.02	6.61
Dover	11,509,800	22,426,000	94.8	36,055	238,594	653,837	174.0	0.7	31.0	0.0	68.3	29.15	27.23	6.50
Mt. Pleasant	76,086,450	219,068,000	187.9	50,210	1,533,506	6,049,425	294.5	0.7	29.2	0.0	70.1	27.61	26.17	6.02
Norway	16,219,800	34,750,000	114.2	28,183	366,196	1,097,386	199.7	0.6	28.6	0.0	70.7	31.57	29.49	6.91
Raymond	12,543,900	31,776,000	153.3	34,021	298,305	1,012,505	239.4	0.6	28.4	5.8	65.2	31.86	29.10	5.32
Rochester	4,624,850	9,844,000	112.8	37,147	85,574	300,778	251.5	0.7	29.6	0.0	69.7	30.55	28.53	10.03
Waterford	14,605,300	26,289,000	80.0	26,501	300,757	946,108	214.6	0.6	25.1	1.9	72.4	35.98	32.97	12.38
Yorkville	11,287,000	24,827,000	120.0	33,059	255,977	942,676	268.3	0.5	23.8	5.3	70.3	37.96	34.41	11.73

Table C-5

WALWORTH COUNTY

Minor Civil Division	Equalized Value of General Property[a]				Gross Property Tax Levy[c]			Percentage Distribution of Gross Property Tax Levy According to Use 1971[d]				Property Tax Rate: 1971		Change in the Net Property Tax Rate:[g] 1961-1971
	1961	1971	Percent Change 1961-1971	Per Household[b] 1971	1961	1971	Percent Change 1961-1971	State	County	Local	School	Gross Full Value Rate[e]	Net Full Value Rate[f]	
Cities														
Delavan	$29,009,810	$54,730,800	88.7	$31,582	$654,072	$1,768,349	170.36	0.6	18.5	16.1	64.8	$32.30	$30.05	$ 7.50
Elkhorn	20,762,460	40,511,000	95.1	29,678	478,822	1,293,339	170.11	0.6	18.7	18.3	62.4	31.92	29.81	6.75
Lake Geneva	29,686,900	52,966,500	78.4	30,884	799,780	1,737,149	117.20	0.6	18.2	19.7	61.4	32.79	30.57	3.63
Whitewater (Part)[b]	20,795,300	48,582,600	133.6	22,597	558,716	1,889,861	238.25	0.5	15.4	22.5	61.6	38.89	35.61	8.74
Villages														
Darien	$ 3,161,800	$ 4,340,000	37.3	$17,360	$ 83,915	$ 143,468	70.97	0.6	18.1	7.1	74.2	$33.05	$24.72	$ -1.82
East Troy	11,469,000	18,054,200	57.4	33,188	310,905	548,310	76.36	0.7	19.7	13.3	66.4	30.37	27.96	0.85
Fontana-on-Geneva Lake	13,165,500	37,896,400	187.8	79,116	344,462	1,093,417	217.43	0.7	20.7	19.3	59.2	28.85	26.86	0.70
Genoa City	4,161,670	6,848,600	64.6	21,469	102,863	257,169	150.01	0.5	15.9	18.1	65.4	37.55	34.70	9.98
Sharon	3,156,720	5,257,800	66.6	14,326	89,001	201,822	126.76	0.5	15.6	13.1	70.8	38.38	35.33	7.14
Walworth	7,840,270	14,524,400	85.2	27,098	220,282	438,396	99.02	0.7	19.8	8.4	71.1	30.18	27.86	-0.24
Williams Bay	12,604,000	29,676,400	135.4	56,851	317,182	904,064	185.03	0.7	19.6	18.3	61.4	30.46	28.13	2.96
Towns														
Bloomfield	$16,124,810	$33,160,700	105.6	$39,477	$362,524	$ 966,100	166.49	0.7	20.5	2.4	76.4	$29.13	$27.55	$ 5.07
Darien	8,264,970	21,645,700	161.9	57,722	198,917	633,736	218.59	0.7	20.4	0.0	78.9	29.27	27.38	3.31
Delavan	26,686,020	51,480,700	92.9	43,370	539,616	1,399,533	159.36	0.7	22.0	0.0	77.2	27.18	25.55	5.33
East Troy	14,125,240	31,120,300	120.3	40,574	365,539	910,703	149.14	0.7	20.4	7.7	71.2	29.26	27.57	1.69
Geneva	12,889,960	31,029,700	140.7	33,838	349,235	807,205	131.14	0.8	23.0	4.5	71.7	26.01	24.67	-2.42
LaFayette	6,618,440	14,218,700	114.8	55,542	140,836	403,907	186.79	0.7	21.1	4.1	74.2	28.40	27.00	5.72
LaGrange	12,143,130	29,127,900	139.9	72,278	215,984	816,528	278.05	0.7	21.3	4.2	73.7	28.03	26.49	8.70
Linn	26,681,650	59,977,000	124.8	98,484	517,521	1,522,210	194.13	0.8	23.6	8.0	67.6	25.37	24.26	4.86
Lyons	8,194,800	29,767,700	263.2	49,862	214,774	802,050	273.44	0.7	22.2	2.0	75.0	26.94	26.08	-0.13
Richmond	7,848,630	17,282,700	120.2	46,837	156,497	546,442	249.17	0.6	18.9	4.2	76.2	31.61	29.85	9.91
Sharon	8,022,720	14,785,700	84.3	52,432	193,520	486,355	151.32	0.6	18.2	4.3	76.9	32.89	30.51	6.39
Spring Prairie	6,546,050	14,022,400	114.2	43,820	141,645	372,330	162.86	0.8	22.5	3.4	73.4	26.55	25.24	3.60
Sugar Creek	9,475,720	20,016,000	111.2	37,483	181,962	528,963	190.70	0.8	22.6	1.4	75.2	26.42	25.12	5.92
Troy	6,486,970	14,717,500	126.9	38,935	162,900	426,681	161.93	0.7	20.6	6.1	72.6	28.99	27.46	2.35
Walworth	7,754,230	19,062,200	145.8	49,384	197,360	515,212	161.05	0.7	22.1	0.0	77.1	27.02	25.35	-0.10
Whitewater	7,564,420	17,877,100	136.3	51,968	135,967	547,495	302.67	0.6	19.5	3.5	76.3	30.62	28.86	10.89

Table C-6

WASHINGTON COUNTY

Minor Civil Division	Equalized Value of General Property[a]				Gross Property Tax Levy[c]			Percentage Distribution of Gross Property Tax Levy According to Use 1971[d]				Property Tax Rate: 1971		Change in the Net Property Tax Rate:[g] 1961-1971
	1961	1971	Percent Change 1961-1971	Per Household[b] 1971	1961	1971	Percent Change 1961-1971	State	County	Local	School	Gross Full Value Rate[e]	Net Full Value Rate[f]	
Cities														
Hartford	$30,321,350	$ 64,050,600	111.2	$31,505	$ 824,647	$2,461,428	198.5	0.5	12.2	14.2	73.1	$38.42	$35.42	$ 8.22
Milwaukee (Part)[i]	--	29,900	--	--	--	1,374	--	0.4	10.6	36.7	52.1	45.95	42.97	--
West Bend	76,531,280	173,013,400	126.1	35,992	1,760,049	6,603,910	275.2	0.5	12.2	20.9	66.3	38.16	35.04	12.04
Villages														
Germantown[j]	$ 3,854,100	$ 58,074,600	--	$33,300	$ 117,045	$2,030,570	--	0.6	13.4	16.3	69.7	$34.96	$32.13	$ 1.76
Jackson	2,845,200	9,954,900	249.9	61,073	67,295	350,435	420.7	0.6	13.3	15.6	70.6	35.20	33.40	9.75
Kewaskum	9,672,850	22,904,200	136.8	40,112	224,170	676,188	201.6	0.7	15.8	17.9	65.6	29.52	27.68	4.50
Slinger	4,274,010	8,749,400	104.7	30,700	139,367	251,602	80.5	0.7	16.2	23.3	59.8	28.75	26.13	-6.48
Towns														
Addison	$ 8,101,380	$ 18,176,900	124.4	$32,002	$ 223,973	$ 455,086	103.2	0.8	18.9	5.9	74.4	$25.03	$23.94	$ -3.71
Barton	4,692,980	15,739,800	235.4	37,565	93,544	430,627	360.4	0.7	17.3	0.0	81.9	27.35	25.75	5.82
Erin	5,804,370	19,137,700	229.7	47,371	148,099	560,552	278.5	0.7	16.2	0.2	83.0	29.29	27.61	2.09
Farmington	5,866,050	16,270,700	177.4	36,728	120,069	396,771	230.4	0.8	19.4	5.4	74.4	24.38	23.01	2.54
Germantown[j]	18,218,710	2,325,500	--	20,222	470,076	72,684	--	0.6	15.2	6.6	77.6	31.25	29.11	3.31
Hartford	9,626,860	25,517,800	165.1	39,258	205,353	831,110	304.7	0.6	14.6	2.9	81.9	32.56	30.57	9.24
Jackson	7,558,750	24,755,700	227.5	35,214	156,359	747,440	378.0	0.7	15.7	0.0	83.6	30.19	28.51	7.82
Kewaskum	3,086,290	8,804,300	185.3	28,129	70,936	199,447	181.2	0.9	14.8	0.0	84.3	22.65	21.83	-1.15
Polk	9,186,810	27,975,300	204.5	35,547	173,437	679,772	291.9	0.8	19.5	0.0	79.7	24.29	23.66	4.78
Richfield	14,106,180	56,672,600	301.8	37,731	318,327	1,641,580	415.7	0.7	16.4	0.0	82.9	28.96	27.33	4.76
Trenton	10,118,620	31,142,400	207.8	37,163	178,665	848,926	375.2	0.7	7.9	0.0	91.4	27.25	26.06	8.40
Wayne	5,434,780	10,839,200	99.4	36,496	115,918	300,034	158.8	0.7	17.2	13.2	68.9	27.68	25.74	4.41
West Bend	13,975,250	35,034,200	150.7	47,152	259,171	1,018,662	293.0	0.7	16.3	0.0	83.0	29.07	27.88	9.34

Table C-7

WAUKESHA COUNTY

Minor Civil Division	Equalized Value of General Property[a]				Gross Property Tax Levy[c]			Percentage Distribution of Gross Property Tax Levy According to Use 1971[d]				Property Tax Rate: 1971		Change in the Net Property Tax Rate:[g]
	1961	1971	Percent Change 1961-1971	Per Household[b] 1971	1961	1971	Percent Change 1961-1971	State	County	Local	School	Gross Full Value Rate[e]	Net Full Value Rate[f]	1961-1971
Cities														
Brookfield	$140,036,225	$394,787,000	181.9	$48,233	$3,540,406	$12,733,336	259.7	0.6	14.9	14.1	70.4	$32.25	$30.07	$ 4.79
Delafield	13,541,800	31,643,000	133.7	33,204	269,067	967,210	259.5	0.7	15.8	9.3	74.3	30.56	28.82	8.95
Muskego	42,866,300	83,769,000	95.4	28,454	1,080,491	2,562,673	137.2	0.6	15.8	0.0	83.6	30.59	27.08	1.87
New Berlin	82,389,950	255,744,000	210.4	37,787	1,967,056	8,244,522	319.1	0.6	15.0	10.0	74.5	32.23	30.45	6.58
Oconomowoc	36,573,950	72,591,000	98.5	26,131	1,020,036	2,606,659	155.6	0.6	13.4	27.8	58.2	35.90	33.05	5.16
Waukesha	176,446,300	374,769,000	112.4	31,901	4,337,388	12,435,083	186.7	0.6	14.5	28.1	56.8	33.18	30.86	6.28
Villages														
Big Bend	$ 3,243,100	$ 6,461,000	99.2	$20,909	$ 94,610	$ 198,383	109.7	0.6	15.7	11.6	72.1	$30.70	$27.74	$ -1.43
Butler	15,911,750	37,388,000	135.0	60,893	360,500	1,460,402	305.1	0.5	12.3	18.8	68.4	39.06	36.93	14.27
Chenequa	6,764,375	15,741,000	132.7	85,549	108,156	529,861	389.9	0.6	14.3	11.9	73.2	33.66	31.74	15.75
Dousman	1,704,000	3,203,000	88.0	24,829	50,950	120,867	137.2	0.5	12.8	29.0	57.7	37.73	35.19	5.29
Eagle	2,179,775	4,119,000	89.0	19,069	59,946	119,323	99.0	0.7	16.6	15.2	67.5	28.96	26.05	-1.45
Elm Grove	44,654,050	98,731,000	121.1	55,592	1,003,878	2,866,159	185.5	0.7	16.6	2.7	80.0	29.02	27.52	5.04
Hartland	9,367,400	21,294,000	127.3	27,300	307,526	871,300	183.3	0.5	11.8	18.9	68.9	40.91	37.35	4.52
Lac La Belle	1,333,200	2,638,400	97.9	44,719	25,456	67,559	165.4	0.7	18.2	0.0	81.0	25.60	24.53	5.44
Lannon	3,954,850	8,731,000	120.8	26,458	106,096	282,492	166.3	0.6	14.9	7.2	77.3	32.35	30.35	3.52
Menomonee Falls	115,921,550	283,186,000	144.3	35,603	2,368,096	9,818,467	314.6	0.6	13.9	15.0	70.5	34.67	32.50	12.07
Merton	1,735,800	4,413,000	154.2	26,268	38,276	145,754	280.8	0.6	14.6	0.0	84.8	33.02	30.36	8.31
Mukwonago	8,311,600	15,118,000	81.9	22,070	253,041	509,688	101.4	0.6	14.3	22.1	63.0	33.71	30.30	-0.14
Nashotah	2,036,950	4,375,000	114.8	33,915	36,441	131,331	260.4	0.7	16.0	0.0	83.3	30.01	28.51	10.62
North Prairie	2,283,750	4,485,000	96.4	22,425	62,959	123,057	95.5	0.7	17.6	3.6	78.1	27.43	25.01	-2.56
Oconomowoc Lake	6,261,500	15,460,000	146.9	92,575	126,609	410,656	224.4	0.8	18.1	0.0	81.1	26.56	25.23	5.01
Pewaukee	11,707,750	24,433,000	108.7	27,208	348,838	981,428	181.3	0.5	12.0	22.6	64.9	40.16	37.23	7.43
Sussex	5,221,350	18,980,000	263.5	28,244	200,415	649,539	224.1	0.6	14.1	13.8	71.5	34.22	31.79	-6.59
Wales	1,337,300	7,259,000	442.8	39,238	33,924	183,099	439.7	0.8	19.1	0.0	80.1	25.22	24.17	-1.20
Towns														
Brookfield	$ 15,617,850	$ 43,638,000	179.4	$44,213	$ 331,025	$ 1,037,800	213.5	0.8	20.3	0.0	78.9	$23.78	$22.88	$ 1.68
Delafield	15,630,650	31,531,000	101.7	32,982	368,358	883,808	139.9	0.7	13.0	0.0	86.3	28.02	26.32	2.75
Eagle	6,301,750	11,977,000	90.1	33,929	140,312	311,200	121.8	0.8	18.5	0.3	80.4	25.98	24.49	2.22
Genesee	11,758,650	32,319,000	174.8	38,202	228,579	787,733	244.6	0.8	14.7	0.1	84.4	24.37	23.30	3.86
Lisbon	16,478,150	44,035,000	167.2	36,273	447,580	1,375,581	207.3	0.6	15.4	1.9	82.0	31.23	29.21	2.05
Merton	21,366,500	50,665,000	137.1	39,768	461,874	1,551,542	235.9	0.6	15.7	0.7	82.9	30.62	28.59	6.97
Mukwonago	8,461,850	24,022,000	183.9	44,077	228,102	631,662	176.9	0.8	18.3	3.4	77.6	26.29	24.61	-2.35
Oconomowoc	27,959,400	58,843,000	110.5	32,800	582,159	1,679,367	188.5	0.7	16.9	4.4	78.0	28.53	27.15	6.33
Ottawa	7,383,825	20,047,000	171.5	42,927	145,600	494,777	239.8	0.8	13.5	0.0	85.7	24.68	23.53	3.81
Pewaukee	29,939,150	75,167,000	151.1	40,175	622,910	2,011,283	222.9	0.8	18.0	1.6	79.7	26.75	25.73	4.92
Summit	20,228,700	40,017,000	97.8	38,003	415,293	1,092,583	163.1	0.7	17.6	3.9	77.8	27.30	25.61	5.08
Vernon	9,809,500	25,219,000	157.1	35,976	240,382	650,726	170.7	0.8	18.7	0.0	80.6	25.80	23.64	-0.87
Waukesha	25,272,000	48,091,000	90.3	46,108	357,794	883,213	146.8	1.1	3.9	0.0	95.0	18.36	17.88	3.72

[a] *The equalized value of general property is the estimate of the full, or market, value of taxable property within each community prepared annually by the Wisconsin Department of Revenue through the Office of the Supervisor of Assessments.*

[b] *The equalized value of property per household is the equalized value of property in the city, village, or town divided by the number of households in the minor civil division in 1970, as reported by the U. S. Census Bureau.*

[c] *The gross property tax levy is the property tax levy within each minor civil division consisting of levies for state, county, local, and school purposes, before property tax relief.*

[d] *The total property tax levy consists of levies for state, county, local, and school purposes. The tax levy for state purposes is a forestation tax imposed on all general property in the state at a rate of $0.20 per thousand dollars of equalized value. The tax levy for county purposes is the tax which each minor civil division must levy to meet its share of the county's expenses. The tax levy for local purposes is the portion of the total property tax levy used to finance the balance of the costs of local government which are not met by other sources of income. The property tax levy for school purposes is the portion of the total property tax levy which is used to meet the cost of education. The tax levy for school purposes includes the amounts levied by school authorities against a city, village, or town, as well as levies for vocational school tuition and city taxes in cities where public schools are administered by a board of education.*

[e] *The gross full value property tax rate is calculated by dividing the gross property tax levy (before property tax relief) for a city, village, or town by the equalized value of general property in the civil division. The gross full value tax rate is expressed as the dollar amount of tax per thousand dollars of equalized value. By relating the property tax levy to the equalized value of property in this manner, the gross full value property tax rate provides a measure of tax effort which is comparable among civil divisions.*

[f] *The net full value property tax rate is the gross full value property tax rate adjusted downward to reflect property tax relief on real property and personal property other than stocks. This is the "Effective Real Estate Full Value Rate" calculated by the Wisconsin Department of Revenue and presented in Bulletins No. 171, 271, and 371 combined.*

[g] *No property tax relief was granted by the state to local units of government in 1961. Consequently, there is no distinction between the gross property tax rate and the net property tax rate for that year as there is for each succeeding year.*

Source: Wisconsin Department of Revenue, U. S. Bureau of the Census, and SEWRPC.

Appendix D

SELECTED HOUSING CONSTRUCTION ELEMENT COSTS FOR THE REGION

Table D-1

HOURLY COMPENSATION RATES OF SELECTED BUILDING TRADES IN THE REGION BY LOCAL UNION JURISDICTION:[a] 1969 AND 1972

Trade	Hourly Compensation Rate[b]											
	Milwaukee, Ozaukee, Washington, and Waukesha Counties			Kenosha County			Racine County			Walworth County		
	1969	1972	Percent Increase 1969-1972	1969	1972	Percent Increase 1969-1972	1969	1972	Percent Increase 1969-1972	1969	1972	Percent Increase 1969-1972
Bricklayer	$7.84	$9.59	22.3	$7.80	$8.72	11.8	$7.80	$8.72	11.8	$7.15	$8.32	16.4
Building Laborer	6.40	7.98	24.7	5.80	6.67	15.0	6.13	7.00	14.2	5.67	6.97	22.9
Carpenter	7.25	8.96	23.6	7.25	8.20	13.1	7.22	8.17	13.2	6.05	8.40	38.8
Cement Mason	6.99	8.70	24.5	6.80	7.72	13.5	6.68	7.60	13.8	6.50	7.67	18.0
Electrician	7.28	9.15	25.7	7.17	9.14	27.5	6.97	8.98	28.8	6.63	8.82	33.0
Painter (Brush)	7.08	8.28	16.9	5.70	6.86	20.4	5.70	6.96	22.1	5.51	6.96	26.3
Plumber	7.83	9.50	21.3	7.96	9.14	14.8	7.75	8.91	15.0	7.10	8.31	17.0
Roofer	7.06	8.77	24.2	6.38	7.65	19.9	6.38	7.65	19.9	5.40	7.75	43.5
Sheet Metal Worker	7.54	9.24	22.5	6.78	8.83	30.2	6.78	8.83	30.2	6.78	8.83	30.2
Tile Setter	6.80	8.50	25.0	6.63	7.55	13.9	6.85	7.55	10.2	7.15	7.55	5.6
Mean Hourly Wage	$7.21	$8.87	23.0	$6.83	$8.05	17.9	$6.83	$8.04	17.7	$6.39	$7.96	24.6

City of Milwaukee Consumer Price Index (CPI)[c]	1969 CPI	1972 CPI	Percent Increase 1969-1972
	123.6	139.6	12.9

[a] *In those instances where local union jurisdiction did not include entire counties, the prevailing wage rate was utilized which represented the most predominant portion of the county.*

[b] *The figures shown include all benefits, health and welfare fund contributions, vacation, pension, and other benefits, but not employers' costs for social security, unemployment compensation, and workmen's compensation insurance.*

[c] *Based on the annual average index number for each applicable year.*

Source: Wisconsin Department of Industry, Labor, and Human Relations; Milwaukee Building and Construction Trades Council; U. S. Bureau of Labor Statistics; and SEWRPC.

Table D-2

COMPARISON OF CHANGES IN THE CONSTRUCTION MATERIALS WHOLESALE PRICE INDEX FOR THE U. S. WITH THE CITY OF MILWAUKEE CONSUMER PRICE INDEX: 1969 AND 1972

Index	1969	1972	Percent Increase 1969-1972
Construction Materials Wholesale Price Index[a]	110.9	126.6	14.2
City of Milwaukee Consumer Price Index[b,c]	123.6	139.6	12.6

[a]*Base year 1967 = 100*

[b]*Base year 1957 = 100*

[c]*Based upon annual average index numbers.*

Source: U. S. Bureau of Labor Statistics and SEWRPC.

Table D-3

COMPARISON OF COMPONENT COST ITEMS OF THE STRUCTURE PRICE FOR A SELECTED HOUSING MODEL[a] IN THE REGION: 1969 AND 1972

Component Item	Cost		Percent Change 1969-1972	Component Item	Cost		Percent Change 1969-1972
	1969	1972			1969	1972	
Survey	$ 60	$ 60	0.0	Plumbing	$ 1,825	$ 2,350	28.8
Permit	70	90	28.6	Heating and Sheet Metal	740	915	23.6
Excavate, Grade, Backfill	275	375	36.4	Electrical Wiring	710	880	23.9
Masonry and Cement	2,100	2,620	24.8	Electrical Fixtures	100	125	25.0
Iron Work	125	175	40.0	Insulation	185	210	13.5
Carpenter Labor	2,350	2,850	21.3	Dry Wall	1,105	1,300	17.6
Lumber	2,500	3,540	41.6	Weather Stripping	50	50	0.0
Millwork	1,500	1,925	28.3	Tile Work - Ceramic	130	180	38.5
Cabinets	430	625	45.3	Linoleum and Floor Tile	225	290	28.9
Formica	165	220	33.3	Painting	940	1,140	21.3
Aluminum Storms and Screens	285	335	17.5	Call-Back Service and Cleanup	125	150	20.0
Floor Sanding and Finishing	125	160	28.0	Plans and Specification	125	125	0.0
Hardware—Rough, Finish, and Medicine Cabinet	150	160	6.7	Builders' Overhead and Profit[b]	2,999	3,819	27.3
Roofing, Labor and Material	265	365	37.7	Total	$19,659	$25,034	27.3
				City of Milwaukee Consumer Price Index[c]	--	--	12.6

[a]*One and one-half story, conventional frame construction, 1,560 square feet, Cape Cod style house with full basement, living room, kitchen, 4 bedrooms, 1½ bathrooms, and no garage.*

[b]*Includes builder's profit, employer's social security contribution, overhead, workmen's compensation insurance, real estate sales commissions, advertising, and miscellaneous expenses.*

[c]*Based upon annual average index numbers.*

Source: Milwaukee Chapter of the Society of Real Estate Appraisers and SEWRPC.

Table D-4

COMPARISON OF MAJOR COST ELEMENTS OF PURCHASING A COMPLETE HOUSING PACKAGE BY SELECTED GEOGRAPHIC AREA IN THE REGION: 1969 AND 1972

Cost Elements of Housing Package on Fully Improved Lot	Geographic Area					
	Urban[a]			Suburban[a]		
	1969	1972	Percent Increase 1969-1972	1969	1972	Percent Increase 1969-1972
Lot[b]	$ 6,500	$ 8,300	27.7	$ 7,200	$ 9,800	36.1
House[c]	19,700	25,000	26.9	19,700	25,000	26.9
Other Costs						
Construction Financing[d]	750	960	28.0	750	990	28.0
House Service Laterals[e]	600	800	33.3	600	800	33.3
Total	$27,550	$35,060	27.3	$28,270	$36,590	29.4
City of Milwaukee Consumer Price Index[f]	Percent Increase 1969-1972 12.9					

[a] *Based upon geographic area delineated on Map 29.*

[b] *Based on overall median lot price for fully improved lots in 1969, as indicated in Figures 42, 43, and 44, and on estimated 1972 selling prices for fully improved lots.*

[c] *Based on price for Cape Cod style model house as indicated in Table 100.*

[d] *Includes service charge, interest on construction loan, and closing costs which include such items as appraisal fees, survey fees, title insurance, attorney fee, recording fees, and loan application and credit check fees.*

[e] *Includes water and sewer service laterals.*

[f] *Based on average annual index numbers.*

Source: Milwaukee Chapter of the Society of Real Estate Appraisers; The Journal Company; U. S. Bureau of Labor Statistics; and SEWRPC.

Table D-5

COMPARISON OF MONTHLY OCCUPANCY COSTS FOR NEW SINGLE-FAMILY HOUSING BY SELECTED GEOGRAPHIC AREA IN THE REGION: 1969 AND 1972

	Housing on a Fully Improved Lot[b]					
	Urban			Suburban		
	1969	1972	Percent Change 1969-1972	1969	1972	Percent Change 1969-1972
Cost of Housing Package[a]	$27,550	$35,060	27.3	$28,270	$36,590	29.4
Monthly Occupancy Costs						
Financing[c]	$ --	$ --	27.3	$ --	$ --	27.3
Principal	30.00	38.19	--	30.78	39.83	--
Interest[d]	115.03	146.43	--	118.04	152.74	--
Property Taxes[d,e]	63.66	76.31	19.9	55.24	66.38	20.2
Utilities[f]	27.48	36.40	32.5	27.48	36.40	32.5
Maintenance and Repair[g]	16.42	20.83	26.9	16.42	20.83	26.9
Opportunity Cost of Money[h]	23.19	29.22	26.0	23.78	30.49	28.2
Property Insurance[i]	5.31	7.50	41.2	5.31	7.50	41.2
Total	$281.09	$354.88	26.3	$277.05	$354.17	27.8
City of Milwaukee Consumer Price Index[j]	Percent Increase 1969-1972 12.9					

[a] *Includes Cape Cod style house in the specified geographic area on the type of lot specified (see Table 101).*

[b] *This type of lot is served by a centralized public or private sewage treatment facility, usually includes hard surfaced street with curb and gutter, and often includes sidewalks and street lighting.*

[c] *Assumes a 20 percent down payment, an 8.25 percent interest rate and 25 year term in 1969 and 1972, and an average ownership period of seven years.*

[d] *Property taxes and interest payments are deductible from adjusted gross income for income tax purposes. These items were, therefore, reduced by an assumed 20 percent income tax savings. Lower income families may realize smaller savings from the deduction of interest and property taxes than would higher income families.*

[e] *Based on median tax rates of communities for the alternatives presented.*

[f] *Includes natural gas and electric based on average household consumption in 1969 and 1972.*

[g] *Based on assumed annual cost of 1 percent of the value of the housing structure only.*

[h] *Based on fact that down payment is lost for alternative investments; assumed safe investment return of 5 percent in 1969 and 5 percent in 1972.*

[i] *Based on appropriate fire rating in given geographic area and on Homeowners' Form II Policy.*

[j] *Based on average annual index numbers.*

Source: U. S. Bureau of Labor Statistics and SEWRPC.

Table D-6

MONTHLY OCCUPANCY COSTS FOR MULTIFAMILY HOUSING
IN MILWAUKEE COUNTY: 1969 AND 1972

Monthly Occupancy Costs	1969	1972	Percent Change 1969-1972
Rent[a]	$150.00	$195.00	30.0
Utilities[b]	8.33	11.86	42.4
Personal Property Insurance[c]	1.77	2.03	14.7
Total	$160.10	$208.89	30.5
City of Milwaukee Consumer Price Index[d]		--	12.9

[a]*Includes heat, hot water, and outside parking space.*

[b]*Includes 80 percent of average residential usage of electricity.*

[c]*Includes insurance covering personal property only.*

[d]*Based on annual average index numbers.*

Source: U. S. Bureau of Labor Statistics and SEWRPC.

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Appendix E

TRENDS IN HOUSING FINANCE COST ELEMENTS IN THE REGION 1960-1969

Table E-1

SINGLE-FAMILY MORTGAGE TERMS OF BANKS IN THE REGION: 1960-1969

Type of Mortgage	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
FHA										
Interest Rate[a] (%)	6¼	5¾	5¾	5¾	5¾	5¾	6¼	6½	7¼	8
Minimum Down Payment (%)	10	10	10	10	10	10	10	10	10	10
Maximum Term (years)	30	30	30	30	30	30	30	30	30	30
Closing Costs[b] (%)	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½
Discount Range[c] (%)	--	--	--	--	--	--	--	--	--	--
VA										
Interest Rate (%)	5¼	5¼	5¼	5¼	5¼	5¼	5¾	6	6¾	7½
Minimum Down Payment (%)	10	10	10	10	10	10	10	10	10	10
Maximum Term (years)	25	25	25	25	25	25	25	25	25	25
Closing Costs[b] (%)	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3
Discount Range[c] (%)	--	--	--	--	--	--	--	--	--	--
Conventional										
Interest Rate (%)	5¾	5½	5½ - 5¾	5¼ - 5¾	5¼ - 5¾	5¼ - 5¾	6½ - 6¾	6¼ - 6½	7¼ - 7¾	7¾ - 8¾
Minimum Down Payment (%)	33⅓	33⅓	33⅓	25	25	25	25	25	20–30	20
Maximum Term (years)	20	20	20	20	20	25	25	25	25	25
Closing Costs[b] (%)	0 - 1½	0 - 1½	0 - 1½	½ - 1½	½ - 1	½ - 1	½ - 1	½ - 1	½ - 1	1 - 2

[a] *Including ½ percent for FHA mortgage insurance.*

[b] *Closing costs include any applicable service fees. FHA and VA mortgages made directly with the mortgagor have a maximum allowable fee of 1 percent, but a maximum fee of 2½ and 3 percent, respectively, may be charged for construction financing.*

[c] *Banks made very few mortgages of these types, and the discounts varied greatly among banks and from one specific mortgage to another.*

Source: The Journal Company and SEWRPC.

Table E-2

SINGLE-FAMILY MORTGAGE TERMS OF MORTGAGE COMPANIES IN THE REGION: 1960-1969

Type of Mortgage	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
FHA										
Interest Rate[a] (%)	6¼	5¾	5¾	5¾	5¾	5¾	6¼	6½	7¼	8
Minimum Down Payment (%)	3	3	3	3	3	3	3	3	3	3
Maximum Term (years)	30	30	30	35	35	35	35	30	30	30
Closing Costs[b] (%)	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½
Discount Range (%)	--	--	2 - 7	0 - 5	1 - 4	1 - 6½	5 - 12	2 - 7	5 - 12	6 - 9
VA										
Interest Rate (%)	5¼	5¼	5¼	5¼	5¼	5¼	5¾	6	6¾	7½
Minimum Down Payment (%)	0	0	0	0	0	0	0	0	0	0
Maximum Term (years)	30	30	30	30	30	30	30	30	30	30
Closing Costs[b] (%)	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3
Discount Range (%)	--	--	2 - 7	0 - 5	1 - 4	1 - 6½	5 - 12	2 - 7	5 - 12	6 - 9
Conventional										
Interest Rate (%)	6 - 6½	5¾ - 6	5½ - 5¾	5¼ - 5½	5¼ - 5½	5½ - 5¾	6½ - 6¾	6 - 6¾	7½	8¾
Minimum Down Payment (%)	25	25	25	25	25	25	25	20	25	25
Maximum Term (years)	25	25	25	30	30	30	25	25	25	25
Closing Costs[b] (%)	1 - 2½	1 - 2½	1 - 2	1 - 1½	1 - 1½	1 - 1½	1 - 1½	1 - 1½	1 - 1½	1 - 1½

[a] *Including ½ percent for FHA mortgage insurance.*

[b] *Closing costs include any applicable service fees. FHA and VA mortgages made directly with the mortgagor have a maximum allowable fee of 1 percent, but a maximum fee of 2½ and 3 percent, respectively, may be charged for construction financing.*

Source: The Journal Company and SEWRPC.

Table E-3

SINGLE-FAMILY MORTGAGE TERMS OF SAVINGS AND LOAN ASSOCIATIONS IN THE REGION: 1960-1969

Type of Mortgage	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
FHA										
Interest Rate[a] (%)	6¼	5¾	5¾	5¾	5¾	5¾	6¼	6½	7¼	8
Minimum Down Payment (%)	3	3	3	3	3	3	3	3	3	3
Maximum Term (years)	30	30	30	30	30	30	30	30	30	30
Closing Costs[b] (%)	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½	1 & 2½
Discount Range (%)	--	--	2 - 7	0 - 5	1 - 4	1 - 6½	5 - 12	2 - 7	5 - 12	6 - 9
VA										
Interest Rate (%)	5¼	5¼	5¼	5¼	5¼	5¼	5¾	6	6¾	7½
Minimum Down Payment (%)	0	0	0	0	0	0	0	0	0	0
Maximum Term (years)	30	30	25	30	30	30	30	30	30	30
Closing Costs[b] (%)	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3	1 & 3
Discount Range[c] (%)	--	--	2 - 7	0 - 5	1 - 4	1 - 6½	5 - 12	2 - 7	5 - 12	6 - 9
Conventional										
Interest Rate										
With Insurance[c] (%)	6¼	6	6	6	5½ - 6	5¾ - 6¼	6¾ - 7	5¾ - 7	7½ - 8	8 - 9¼
Interest Rate										
Without Insurance (%)	6 - 6¼	5¾ - 6	5½ - 6	5½ - 6	5¼ - 6	5¾ - 6	6½ - 6¾	6 - 6¾	7 - 7¾	7½ - 9
Minimum Down Payment (%)	10 & 20	10 & 20	10 & 20	10	10	10 & 20	20	10	20	20
Maximum Term (years)	25	25	25	30	30	30	25	30	30	30
Closing Costs[b] (%)	1 - 2	1 - 2	1 - 2	1 - 1½ & ½ - 2	1 - 1½ & ½ - 2	½ - 2	½	1 - 1½	1 - 2	1 - 2

[a] *Including ½ percent for FHA mortgage insurance.*

[b] *Closing costs include any applicable service fees. FHA and VA mortgages made directly with the mortgagor have a maximum allowable fee of 1 percent, but a maximum fee of 2½ and 3 percent, respectively, may be charged for construction financing.*

[c] *Including the appropriate average annual percent for the cost of the private mortgage insurance.*

Source: The Journal Company and SEWRPC.

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Appendix F

FORM PRD-4-71

REGIONAL HOUSING STUDY
LAND USE CONTROLS INVENTORY
ZONING SUMMARY

	DATE	INIT.
CODED:		
CHECKED:		

TOWN RANGE SECTION

CIVIL DIVISION

PERCENT OF SECTION ALLOCATED TO CIVIL DIVISION

NUMBER OF SQUARES IN SECTION

NUMBER OF CIVIL DIVISIONS IN SECTION

NUMBER OF SQUARES ALLOCATED TO CIVIL DIVISION

REGIONAL ZONING CLASSIFICATION	ZONING CODE	NUMBER OF GRID SQUARES		
1. LOW DENSITY RESIDENTIAL 20,000 SQ. FT. TO 1 ACRE	R1a			
2. LOW DENSITY RESIDENTIAL 1 ACRE TO 2 ACRES	R1b			
3. LOW DENSITY RESIDENTIAL 2 ACRES TO 5 ACRES	R1c			
4. MEDIUM DENSITY RESIDENTIAL 6,000 – 9,999 SQ. FT.	R2a			
5. MEDIUM DENSITY RESIDENTIAL 10,000 – 14,999 SQ. FT.	R2b			
6. MEDIUM DENSITY RESIDENTIAL 15,000 – 19,999 SQ. FT.	R2c			
7. HIGH DENSITY RESIDENTIAL LESS THAN 1,000 SQ. FT.	R3a			
8. HIGH DENSITY RESIDENTIAL 1,000 – 3,599 SQ. FT.	R3b			
9. HIGH DENSITY RESIDENTIAL 3,600 – 5,999 SQ. FT.	R3c			
10. MOBILE HOMES	R4			
11. PLANNED UNIT DEVELOPMENT	R5			
12. GENERAL AND LOCAL COMMERCIAL	B1			
13. REGIONAL COMMERCIAL	B2			
14. MANUFACTURING (INDUSTRIAL AND RELATED)	M1			
15. TRANSPORTATION, COMMUNITY & UTILITIES	T1			
16. INSTITUTION AND GOVERNMENT SERVICES	I1			
17. PRIVATE RECREATION	P1			
18. PUBLIC RECREATION	P2			
19. GENERAL AGRICULTURE AND RELATED	A-1			
20. EXCLUSIVE AGRICULTURE				
21. FLOODLAND				
22. SHORELAND				
23. FLOODPLAIN				
24. CONSERVANCY	C-1			
25. WATER	W-1			
26. UNRESTRICTED	UN			
27. UNPLANNED OR UNZONED	UPZ			
TOTAL				

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Appendix G

RESIDENTIALLY ZONED LAND FOR URBAN AND RURAL COMMUNITIES IN THE REGION BY DENSITY CLASSIFICATION: 1971

Community	Urban									Rural								
		Total Zoned Residential		Low-Density Residential		Medium-Density Residential		High-Density Residential			Total Zoned Residential		Low-Density Residential		Medium-Density Residential		High-Density Residential	
	Total Area in Acres	Acres	Percent of Community Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Total Area in Acres	Acres	Percent of Community Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area
Town of Brighton	--	--	--	--	--	--	--	--	--	23,042	91	--[a]	--	--	85	93	6	7
Town of Bristol	--	--	--	--	--	--	--	--	--	23,109	749	3	--	--	748	100	1	--[a]
City of Kenosha	8,746	6,158	70	--	--	3,793	62	2,365	38	--	--	--	--	--	--	--	--	--
Village of Paddock Lake	1,091	627	57	--	--	627	100	--	--	--	--	--	--	--	--	--	--	--
Town of Paris	--	--	--	--	--	--	--	--	--	23,055	392	2	392	100	----	--	--	--
Town of Pleasant Prairie	23,828	1,229	5	--	--	1,220	99	9	1	--	--	--	--	--	--	--	--	--
Town of Randall	--	--	--	--	--	--	--	--	--	11,639	440	4	--	--	412	94	28	6
Town of Salem	--	--	--	--	--	--	--	--	--	21,270	4,230	20	--	--	4,230	100	--	--
Village of Silver Lake	905	475	52	--	--	--	--	475	100	--	--	--	--	--	--	--	--	--
Town of Somers	22,279	5,631	25	--	--	5,561	99	70	1	--	--	--	--	--	--	--	--	--
Village of Twin Lakes	3,694	697	19	--	--	--	--	697	100	--	--	--	--	--	--	--	--	--
Town of Wheatland	--	--	--	--	--	--	--	--	--	15,443	474	3	--	--	474	100	--	--
Kenosha County	60,543	14,817	24	--	--	11,201	76	3,616	24	117,558	6,376	5	392	6	5,949	93	35	1
Town of Belgium	--	--	--	--	--	--	--	--	--	23,634	693	3	693	100	--	--	--	--
Village of Belgium	417	257	62	--	--	257	100	--	--	--	--	--	--	--	--	--	--	--
City of Cedarburg	1,564	1,148	73	16	1	835	73	297	26	--	--	--	--	--	--	--	--	--
Town of Cedarburg	--	--	--	--	--	--	--	--	--	17,549	1,640	9	1,640	100	--	--	--	--
Town of Fredonia	--	--	--	--	--	--	--	--	--	22,441	749	3	677	90	72	10	--	--
Village of Fredonia	743	534	72	--	--	534	100	--	--	--	--	--	--	--	--	--	--	--
Town of Grafton	--	--	--	--	--	--	--	--	--	13,944	5,663	41	4,372	77	1,291	23	--	--
Village of Grafton	1,380	599	43	--	--	547	91	52	9	--	--	--	--	--	--	--	--	--
City of Mequon	29,932	23,445	78	23,326	99	103	--[a]	16	--[a]	--	--	--	--	--	--	--	--	--
City of Port Washington	1,777	927	52	--	--	604	65	323	35	--	--	--	--	--	--	--	--	--
Town of Port Washington	--	--	--	--	--	--	--	--	--	12,611	2,130	17	2,130	100	--	--	--	--
Town of Saukville	--	--	--	--	--	--	--	--	--	22,406	1,056	5	1,056	100	--	--	--	--
Village of Saukville	880	518	59	3	1	515	99	--	--	--	--	--	--	--	--	--	--	--
Village of Thiensville	675	473	70	--	--	473	100	--	--	--	--	--	--	--	--	--	--	--
Ozaukee County[b]	37,368	27,901	75	23,345	84	3,868	14	688	2	112,585	11,931	11	10,568	89	1,363	11	--	--
City of Burlington	1,944	835	43	--	--	518	52	317	38	--	--	--	--	--	--	--	--	--
Town of Burlington	--	--	--	--	--	--	--	--	--	24,799	1,699	7	1,699	100	--	--	--	--
Town of Caledonia	30,162	8,394	28	5,411	65	2,635	31	348	4	--	--	--	--	--	--	--	--	--
Town of Dover	--	--	--	--	--	--	--	--	--	23,132	0	--	--	--	--	--	--	--
Village of Elmwood Park	97	97	100	--	--	97	100	--	--	--	--	--	--	--	--	--	--	--
Town of Mt. Pleasant	24,148	6,359	26	--	--	--	--	6,359	100	--	--	--	--	--	--	--	--	--
Village of North Bay	78	78	100	78	100	--	--	--	--	--	--	--	--	--	--	--	--	--
Town of Norway	--	--	--	--	--	--	--	--	--	22,859	11	--[a]	--	--	--	--	11	100
City of Racine	8,391	5,723	68	2	--[a]	2,762	48	2,959	52	--	--	--	--	--	--	--	--	--
Town of Raymond	--	--	--	--	--	--	--	--	--	22,638	119	1	119	100	--	--	--	--
Town of Rochester	--	--	--	--	--	--	--	--	--	11,006	1,244	11	1,244	100	--	--	--	--
Village of Rochester	254	198	78	--	--	178	90	20	10	--	--	--	--	--	--	--	--	--
Village of Strutevant	981	761	78	--	--	--	--	761	100	--	--	--	--	--	--	--	--	--
Village of Union Grove	519	358	69	--	--	--	87	45	13	--	--	--	--	--	--	--	--	--
Town of Waterford	--	--	--	--	--	--	--	--	--	22,049	1,151	5	1,151	100	--	--	--	--
Village of Waterford	1,070	861	80	--	--	788	92	73	8	--	--	--	--	--	--	--	--	--
Village of Wind Point	812	789	97	--	--	789	100	--	--	--	--	--	--	--	--	--	--	--
Town of Yorkville	--	--	--	--	--	--	--	--	--	22,623	260	1	--	--	24	9	236	91
Racine County	68,456	24,453	36	5,491	22	8,080	33	10,882	45	149,106	4,484	3	4,213	94	24	--[a]	247	6

Community	Urban									Rural								
		Total Zoned Residential		Low-Density Residential		Medium-Density Residential		High-Density Residential			Total Zoned Residential		Low-Density Residential		Medium-Density Residential		High-Density Residential	
	Total Area in Acres	Acres	Percent of Community Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Total Area in Acres	Acres	Percent of Community Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area
Village of Bayside[b]	1,558	1,482	95	1,049	71	433	29	--	--	--	--	--	--	--	--	--	--	--
Village of Brown Deer	2,802	2,127	76	--	--	1,972	--	155	--	--	--	--	--	--	--	--	--	--
City of Cudahy	3,030	1,326	44	--	--	662	50	664	50	--	--	--	--	--	--	--	--	--
Village of Fox Point	1,843	1,641	89	830	51	811	49	--	--	--	--	--	--	--	--	--	--	--
City of Franklin	22,130	14,053	63	9,851	70	3,482	25	720	5	--	--	--	--	--	--	--	--	--
City of Glendale	3,845	2,007	52	65	3	1,916	96	26	1	--	--	--	--	--	--	--	--	--
Village of Greendale	3,566	1,762	49	397	23	1,076	61	289	16	--	--	--	--	--	--	--	--	--
City of Greenfield	7,436	6,188	83	1,026	17	3,709	60	1,453	23	--	--	--	--	--	--	--	--	--
Village of Hales Corners	2,038	1,816	89	1,322	73	278	15	216	12	--	--	--	--	--	--	--	--	--
City of Milwaukee	61,666	40,789	66	545	1	9,334	23	30,910	76	--	--	--	--	--	--	--	--	--
City of Oak Creek	18,180	11,321	62	--	--	11,117	98	204	2	--	--	--	--	--	--	--	--	--
Village of River Hills	3,351	3,259	97	3,259	100	--	--	--	--	--	--	--	--	--	--	--	--	--
City of St. Francis	1,635	664	41	--	--	486	73	178	27	--	--	--	--	--	--	--	--	--
Village of Shorewood	1,069	878	82	--	--	235	27	643	73	--	--	--	--	--	--	--	--	--
City of South Milwaukee	3,080	2,486	81	--	--	1,708	69	778	31	--	--	--	--	--	--	--	--	--
City of Wauwatosa	8,469	5,344	63	--	--	3,939	74	1,405	26	--	--	--	--	--	--	--	--	--
City of West Allis	7,354	5,185	71	4	--[a]	1,985	38	3,196	62	--	--	--	--	--	--	--	--	--
Village of West Milwaukee	714	189	26	--	--	--	--	189	100	--	--	--	--	--	--	--	--	--
Village of Whitefish Bay	1,360	1,168	86	--	--	153	13	1,015	87	--	--	--	--	--	--	--	--	--
Milwaukee County	155,126	103,685	67	18,348	18	43,296	42	42,041	40	--	--	--	--	--	--	--	--	--
Town of Bloomfield	--	--	--	--	--	--	--	--	--	22,546	1,438	6	--	--	1,438	100	--	--
Town of Darien	--	--	--	--	--	--	--	--	--	22,585	465	2	--	--	465	100	--	--
Village of Darien	415	332	80	--	--	--	--	332	100	--	--	--	--	--	--	--	--	--
City of Delavan	1,922	1,500	78	--	--	1,420	95	80	5	--	--	--	--	--	--	--	--	--
Town of Delavan	--	--	--	--	--	--	--	--	--	20,605	2,487	12	--	--	2,487	100	--	--
Town of East Troy	--	--	--	--	--	--	--	--	--	22,258	2,593	12	--	--	2,593	100	--	--
Village of East Troy	775	505	65	--	--	505	100	--	--	--	--	--	--	--	--	--	--	--
City of Elkhorn	2,587	692	27	--	--	516	75	176	25	--	--	--	--	--	--	--	--	--
Village of Fontana-on-Geneva Lake	2,160	995	46	--	--	940	94	55	6	--	--	--	--	--	--	--	--	--
Town of Geneva	--	--	--	--	--	--	--	--	--	20,943	1,450	7	--	--	1,450	100	--	--
Village of Genoa City	645	227	35	--	--	203	89	24	11	--	--	--	--	--	--	--	--	--
Town of Lafayette	--	--	--	--	--	--	--	--	--	22,470	0	--	--	--	--	--	--	--
Town of LaGrange	--	--	--	--	--	--	--	--	--	22,923	1,930	8	--	--	1,753	91	177	9
City of Lake Geneva	2,227	1,074	48	--	--	490	46	584	54	--	--	--	--	--	--	--	--	--
Town of Linn	--	--	--	--	--	--	--	--	--	21,841	4,211	19	--	--	4,211	100	--	--
Town of Lyons	--	--	--	--	--	--	--	--	--	23,021	679	3	--	--	679	100	--	--
Town of Richmond	--	--	--	--	--	--	--	--	--	23,150	737	3	--	--	737	100	--	--
Town of Sharon	--	--	--	--	--	--	--	--	--	22,837	123	1	--	--	123	100	--	--
Village of Sharon	554	305	55	--	--	305	100	--	--	--	--	--	--	--	--	--	--	--
Town of Spring Prairie	--	--	--	--	--	--	--	--	--	23,107	582	3	--	--	582	100	--	--
Town of Sugar Creek	--	--	--	--	--	--	--	--	--	22,394	1,478	7	--	--	1,478	100	--	--
Town of Troy	--	--	--	--	--	--	--	--	--	22,809	1,316	6	--	--	1,316	100	--	--
Town of Walworth	--	--	--	--	--	--	--	--	--	19,686	618	3	--	--	618	100	--	--
Village of Walworth	701	310	44	--	--	284	92	26	8	--	--	--	--	--	--	--	--	--
City of Whitewater	2,636	1,659	63	123	7	183	11	1,353	82	--	--	--	--	--	--	--	--	--
Town of Whitewater	--	--	--	--	--	--	--	--	--	20,413	1,282	6	--	--	1,277	100	5	--[a]
Village of Williams Bay	1,770	855	48	--	--	732	86	123	14	--	--	--	--	--	--	--	--	--
Walworth County	16,392	8,454	52	123	1	5,578	66	2,753	33	353,588	21,389	6	--	--	21,207	99	182	1

Community	Urban									Rural								
		Total Zoned Residential		Low-Density Residential		Medium-Density Residential		High-Density Residential			Total Zoned Residential		Low-Density Residential		Medium-Density Residential		High-Density Residential	
	Total Area in Acres	Acres	Percent of Community Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Total Area in Acres	Acres	Percent of Community Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area	Acres	Percent of Residential Area
Town of Addison	--	--	--	--	--	--	--	--	--	23,084	363	2	258	71	105	29	--	--
Town of Barton	--	--	--	--	--	--	--	--	--	13,679	826	6	800	97	6	1	20	2
Town of Erin	--	--	--	--	--	--	--	--	--	23,064	0	--	--	--	--	--	--	--
Town of Farmington	--	--	--	--	--	--	--	--	--	23,529	1,494	6	779	52	715	48	--	--
Town of Germantown	1,154	74	6	59	80	15	20	--	--	--	--	--	--	--	--	--	--	--
Village of Germantown	21,952	2,900	13	456	16	2,413	83	31	1	--	--	--	--	--	--	--	--	--
City of Hartford	1,502	881	59	--	--	583	66	298	34	--	--	--	--	--	--	--	--	--
Town of Hartford	--	--	--	--	--	--	--	--	--	22,063	1,083	5	122	11	961	89	--	--
Town of Jackson	--	--	--	--	--	--	--	--	--	22,876	712	3	712	100	--	--	--	--
Village of Jackson	533	200	38	--	--	115	57	85	43	--	--	--	--	--	--	--	--	--
Town of Kewaskum	--	--	--	--	--	--	--	--	--	14,829	2	--[a]	2	100	--	--	--	--
Village of Kewaskum	738	396	54	--	--	379	96	17	4	--	--	--	--	--	--	--	--	--
Town of Polk	--	--	--	--	--	--	--	--	--	22,147	888	4	--	--	888	100	--	--
Town of Richfield	--	--	--	--	--	--	--	--	--	23,257	4,084	18	793	19	3,291	81	--	--
Village of Slinger	1,031	594	58	404	68	137	23	53	9	--	--	--	--	--	--	--	--	--
Town of Trenton	--	--	--	--	--	--	--	--	--	22,831	5,417	24	30	1	5,387	99	--	--
Town of Wayne	--	--	--	--	--	--	--	--	--	22,888	0	--	--	--	--	--	--	--
City of West Bend	4,272	2,750	64	5	--[a]	2,103	77	642	23	--	--	--	--	--	--	--	--	--
Town of West Bend	--	--	--	--	--	--	--	--	--	13,304	10,556	79	8,470	80	1,883	18	203	2
Washington County	31,182	7,795	25	924	12	5,745	74	1,126	14	247,551	25,425	10	11,966	47	13,236	52	223	1
Village of Big Bend	435	302	69	286	95	16	5	--	--	--	--	--	--	--	--	--	--	--
City of Brookfield	16,313	11,732	72	11,543	98	189	2	--	--	--	--	--	--	--	--	--	--	--
Town of Brookfield	4,903	2,103	43	2,051	98	52	2	--	--	--	--	--	--	--	--	--	--	--
Village of Butler	499	177	35	--	--	93	53	84	47	--	--	--	--	--	--	--	--	--
Village of Chenequa	2,991	2,243	75	2,243	100	--	--	--	--	--	--	--	--	--	--	--	--	--
City of Delafield	6,561	2,863	44	1,721	60	1,142	40	--	--	--	--	--	--	--	--	--	--	--
Town of Delafield	--	--	--	--	--	--	--	--	--	14,381	4,200	29	4,200	100	--	--	--	--
Village of Dousman	453	285	63	--	--	272	95	13	5	--	--	--	--	--	--	--	--	--
Town of Eagle	--	--	--	--	--	--	--	--	--	22,555	15,344	68	15,344	100	--	--	--	--
Village of Eagle	633	199	31	--	--	199	100	--	--	--	--	--	--	--	--	--	--	--
Village of Elm Grove	2,052	1,588	77	1,510	95	78	5	--	--	--	--	--	--	--	--	--	--	--
Town of Genesee	--	--	--	--	--	--	--	--	--	21,663	14,713	68	14,704	100	9	--[a]	--	--
Village of Hartland	1,658	767	46	--	--	582	76	185	24	--	--	--	--	--	--	--	--	--
Village of Lac LaBelle	533	220	41	220	100	--	--	--	--	--	--	--	--	--	--	--	--	--
Village of Lannon	1,597	966	60	948	98	18	2	--	--	--	--	--	--	--	--	--	--	--
Town of Lisbon	--	--	--	--	--	--	--	--	--	22,494	17,116	76	17,085	100	31	--[a]	--	--
Village of Menomonee Falls	21,452	15,311	71	8,624	56	6,579	43	108	1	--	--	--	--	--	--	--	--	--
Town of Merton	--	--	--	--	--	--	--	--	--	18,397	5,569	30	5,552	100	17	--[a]	--	--
Village of Merton	1,447	415	29	59	14	356	86	--	--	--	--	--	--	--	--	--	--	--
Town of Mukwonago	--	--	--	--	--	--	--	--	--	21,860	1,543	7	1,543	100	--	--	--	--
Village of Mukwonago	1,199	609	51	--	--	548	90	61	10	--	--	--	--	--	--	--	--	--
City of Muskego	22,959	10,138	44	8,841	87	1,227	12	70	1	--	--	--	--	--	--	--	--	--
Village of Nashotah	1,040	160	15	160	100	--	--	--	--	--	--	--	--	--	--	--	--	--
City of New Berlin	23,533	16,028	68	12,673	79	3,221	20	134	1	--	--	--	--	--	--	--	--	--
Village of North Prairie	397	343	86	343	100	--	--	--	--	--	--	--	--	--	--	--	--	--
City of Oconomowoc	2,737	1,904	70	167	9	1,180	62	557	29	--	--	--	--	--	--	--	--	--
Town of Oconomowoc	--	--	--	--	--	--	--	--	--	21,239	11,191	53	10,968	98	223	2	--	--
Village of Oconomowoc Lake	1,983	1,165	59	1,165	100	--	--	--	--	--	--	--	--	--	--	--	--	--
Town of Ottawa	--	--	--	--	--	--	--	--	--	22,956	5,047	22	5,047	100	--	--	--	--
Town of Pewaukee	--	--	--	--	--	--	--	--	--	19,135	14,293	75	11,454	80	2,839	20	--	--
Village of Pewaukee	1,668	511	31	--	--	420	82	91	18	--	--	--	--	--	--	--	--	--
Town of Summit	--	--	--	--	--	--	--	--	--	20,114	7,005	35	6,915	99	90	1	--	--
Village of Sussex	791	562	71	--	--	559	99	3	1	--	--	--	--	--	--	--	--	--
Town of Vernon	--	--	--	--	--	--	--	--	--	22,489	6,736	30	6,736	100	--	--	--	--
Village of Wales	1,030	912	89	767	84	145	16	--	--	--	--	--	--	--	--	--	--	--
City of Waukesha	6,449	4,270	66	466	11	2,154	50	1,650	39	--	--	--	--	--	--	--	--	--
Town of Waukesha	--	--	--	--	--	--	--	--	--	19,049	10,137	53	10,116	100	--	--	21	--[a]
Waukesha County	125,313	75,773	60	53,787	71	19,030	25	2,956	4	246,332	112,894	46	109,664	97	3,209	3	21	--[a]
Region	494,380	262,878	53	102,018	39	96,798	37	64,062	24	1,226,720	182,499	15	136,803	75	44,988	25	708	--[a]

[a] *Less than 1 percent.*

[b] *That part of the Village of Bayside in Ozaukee County is counted in Milwaukee County.*

Source: SEWRPC. That part of the Village of Bayside in Ozaukee County is counted in Milwaukee County.

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Appendix H

MINIMUM FLOOR AREA REQUIREMENTS FOR COMMUNITIES IN THE REGION: 1971

Community	Minimum Floor Area Requirement[a] (Square Feet)									
	Single Family			Two Family			Multifamily			
	2 Bedroom	3 Bedroom	4 Bedroom	1 Bedroom	2 Bedroom	3 Bedroom	0 Bedroom	1 Bedroom	2 Bedroom	3 Bedroom
SEWRPC Minimum Floor Area Standards	700	980	1,230	420	700	980	250	420	700	980
Kenosha County										
Town of Brighton					840					
Town of Bristol					864					
City of Kenosha					No Minimum					
Village of Paddock Lake			600				Not Permitted[b]			
Town of Paris		1,000					Not Permitted[b]			
Town of Pleasant Prairie					1,000					
Town of Randall					800					
Town of Salem					1,100					
Village of Silver Lake					900					
Town of Somers	800	1,000	1,200	400	600	750	--[c]	400	600	750
Village of Twin Lakes			800				Not Permitted[b]			
Town of Wheatland					800					
Ozaukee County										
Town of Belgium		1,000					Not Permitted[b]			
Village of Belgium					1,000					
City of Cedarburg	800	1,000	1,200	400	800	1,000	350	400	800	1,000
Town of Cedarburg		1,200			Not Permitted[b]			1,200		
Town of Fredonia					1,000					
Village of Fredonia		1,000		775	900	1,100		Not Permitted[b]		
Town of Grafton	1,025	1,225	1,425	--[c]	1,025	1,225		850		
Village of Grafton	1,025	1,225	1,450	850	1,025	1,225	450	850	1,025	1,225
City of Mequon		1,200		800	1,000	1,200	--[c]	800	1,000	1,200
City of Port Washington	800	1,000	1,200	400	800	850	350	400	800	850
Town of Port Washington		1,200		750	850	1,000		Not Permitted[b]		
Town of Saukville		1,200					Not Permitted[b]			
Village of Saukville	--[c]	1,150	1,300	725	850	--[c]		1,000		
Village of Thiensville		No Minimum			1,000		650	700	950	1,150
Racine County										
City of Burlington			600					400		
Town of Burlington	440	540	640	340	440	540	240	340	440	540
Town of Caledonia	900	1,000	1,200	--[c]	900	1,000	--[c]	--[c]	900	1,000
Town of Dover					720					
Village of Elmwood Park		1,200					Not Permitted[b]			
Town of Mt. Pleasant	390	460	530	320	390	460	220	320	390	460
Village of North Bay		1,700					Not Permitted[b]			
Town of Norway					600					
City of Racine	420	520	620	310	420	520	220	310	420	520
Town of Raymond			900							1,050
Town of Rochester					650					
Village of Rochester					1,000					
Village of Sturtevant	1,100	1,100	1,200		No Minimum			600		
Village of Union Grove		1,000					900			
Town of Waterford					1,150					
Village of Waterford					1,000					
Village of Wind Point		1,200					Not Permitted[b]			
Town of Yorkville					1,200					

Community	Minimum Floor Area Requirement[a] (Square Feet)									
	Single Family			Two Family			Multifamily			
	2 Bedroom	3 Bedroom	4 Bedroom	1 Bedroom	2 Bedroom	3 Bedroom	0 Bedroom	1 Bedroom	2 Bedroom	3 Bedroom
Milwaukee County										
Village of Bayside		1,500					Not Permitted[b]			
Village of Brown Deer		1,500		600	1,000	1,200	300	600	1,000	1,300
City of Cudahy	1,000	1,125	1,225	--[c]	1,000	1,125	600		800	900
Village of Fox Point		1,000					Not Permitted[b]			
City of Franklin	--[c]	1,250	1,300	--[c]	--[c]	1,150	--[c]	560	810	1,200
City of Glendale		1,000					Not Permitted[b]			
Village of Greendale			1,000				500	650	800	950
City of Greenfield			1,100				--[c]	700	950	1,150
Village of Hales Corners	1,000	1,100	1,200	900	1,000	1,100	--[c]	700	900	1,000
City of Milwaukee					No Minimum					
City of Oak Creek		850					242	342	442	542
Village of River Hills		No Minimum					Not Permitted[b]			
City of St. Francis			900					No Minimum		
Village of Shorewood	530	630	730	430	530	630	450	625	750	850
City of South Milwaukee		850			675			400		
City of Wauwatosa					No Minimum					
City of West Allis					No Minimum					
Village of West Milwaukee					No Minimum					
Village of Whitefish Bay			1,750[d]					650		
Walworth County										
Town of Bloomfield					576					
Town of Darien					No Minimum					
Village of Darien					No Minimum					
City of Delavan					No Minimum					
Town of Delavan					No Minimum					
Town of East Troy					900					
Village of East Troy					960					
City of Elkhorn	462	562	662	362	462	562	--[c]	362	462	562
Village of Fontana-on-Geneva Lake		1,000		600	800	--[c]	--[c]	600	800	--[c]
Town of Geneva					480					
Village of Genoa City					800					
Town of Lafayette					No Minimum					
Town of LaGrange					500					
City of Lake Geneva					No Minimum					
Town of Linn					750					
Town of Lyons					600					
Town of Richmond					600					
Town of Sharon					No Minimum					
Village of Sharon	800	--[c]	--[c]	600	800	--[c]	--[c]	600	800	--[c]
Town of Spring Prairie					600					
Town of Sugar Creek					576					
Town of Troy					No Minimum					
Town of Walworth					No Minimum					
Village of Walworth		800		600	800	--[c]	--[c]	600	800	--[c]
City of Whitewater		1,000			600		400	500	800	1,000
Town of Whitewater					800					
Village of Williams Bay			1,200					500		--[c]
Washington County										
Town of Addison		1,000				600				
Town of Barton	1,100	1,200	1,300		1,100			600		
Town of Erin		1,000				600				
Town of Farmington		1,000				600				
Town of Germantown		1,050					Not Permitted[b]			
Village of Germantown	1,300	1,300	1,500	800	1,000	1,300	500	650	850	--[c]
City of Hartford	410	505	680	340	410	505	--[c]	340	410	505
Town of Hartford		1,000				600				
Town of Jackson		1,000				600				
Village of Jackson					1,000					
Town of Kewaskum		1,000				600				
Village of Kewaskum			900				--[c]	500	650	800
Town of Polk		1,400					Not Permitted[b]			
Town of Richfield			1,200					700		
Village of Slinger					600					
Town of Trenton		1,000				600				
Town of Wayne		1,000				600				
City of West Bend		900			700			500		
Town of West Bend		1,000				600				

Community	Minimum Floor Area Requirement[a] (Square Feet)									
	Single Family			Two Family			Multifamily			
	2 Bedroom	3 Bedroom	4 Bedroom	1 Bedroom	2 Bedroom	3 Bedroom	0 Bedroom	1 Bedroom	2 Bedroom	3 Bedroom
Waukesha County										
Village of Big Bend	1,000			800						
City of Brookfield	1,400		1,600	800	1,000	1,300	--[c]	800	1,000	1,300
Town of Brookfield	1,000			900						
Village of Butler	1,200			500	900	1,200	350	500	900	1,200
Village of Chenequa	1,500			Not Permitted[b]			Not Permitted[b]			
City of Delafield	1,000			900			800			
Town of Delafield	1,200			Not Permitted[b]			400	500	900	1,100
Village of Dousman	750						--[c]	650	900	1,150
Town of Eagle	1,000			900						
Village of Eagle	1,000			800			--[c]	600	800	1,000
Village of Elm Grove	1,100			1,000						
Town of Genesee	1,000			900						
Village of Hartland	1,200			1,000			--[c]			
Village of Lac LaBelle	1,200						Not Permitted[b]			
Village of Lannon	1,100						300	400	600	1,000
Town of Lisbon	1,000			900						
Village of Menomonee Falls	1,000			800			400	500	900	1,000
Town of Merton	1,000			900			Not Permitted[b]			
Village of Merton	1,300			800	1,000	1,200	--[c]	800	1,000	1,200
Town of Mukwonago	1,000			900						
Village of Mukwonago	1,150			800						
City of Muskego	1,200			800						
Village of Nashotah	1,200			Not Permitted[b]						
City of New Berlin	No Minimum			--[c]	800	1,000	--[c]	560	810	1,200
Village of North Prairie				850						
City of Oconomowoc	462	562	662	362	462	562	--[c]	362	462	562
Town of Oconomowoc	1,000			900						
Village of Oconomowoc Lake	1,500			Not Permitted[b]						
Town of Ottawa	1,000			900						
Town of Pewaukee	1,200			Not Permitted[b]						
Village of Pewaukee	1,200			Not Permitted[b]			750	750	950	1,200
Town of Summit	1,200			1,000			Not Permitted[b]			
Village of Sussex	1,100			342	442	542	242	342	442	542
Town of Vernon	1,000			900						
Village of Wales	1,000			700	850	1,000	Not Permitted[b]			
City of Waukesha	No Minimum			800			300	500	700	850
Town of Waukesha	1,000			900						

[a] *It should be noted that the floor area requirements of each zoning ordinance or building code were liberally construed; that is, the smallest, least stringent floor area specification, dependent upon the number of bedrooms, was used.*

[b] *The structure type was considered "not permitted" for purposes of analysis if it was not specified in any zoning district or if it was in a special use or conditional district which had no land allotted to that structure type.*

[c] *Minimum floor area not specified.*

[d] *Minimum floor area requirement in the Village of Whitefish Bay, expressed as 17,500 cubic feet for single- and two-family structures, is interpreted as 1,750 square feet for purposes of analysis.*

Source: SEWRPC.

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Appendix I

MODEL RESOLUTION FOR PLAN ENDORSEMENT

WHEREAS, the Southeastern Wisconsin Regional Planning Commission, which was duly created by the Governor of the State of Wisconsin in accordance with Section 66.945 of the Wisconsin Statutes on the 8th day of August 1960, upon petition of the Counties of Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha, has the function and duty of making and adopting a master plan for the physical development of the Region; and

WHEREAS, the Southeastern Wisconsin Regional Planning Commission has:

1. Collected, processed, and analyzed various types of data pertaining to the demographic and economic base, the natural resource base, the man-made physical environment, the existing housing stock, the tax structure, the trends in the cost of buying and occupying new housing, technology in the housing industry, land use controls, and government activity in the housing field within the Region;

2. Prepared objectives, principles, and standards for regional housing development;

3. Forecast regional growth and change as related to population, housing production requirements, and level of housing need;

4. Developed, compared, and evaluated three alternative strategies of spatial distribution for the provision of housing necessary to remedy the physical deficiency in the regional housing stock; and

5. Selected and adopted on the _____ day of _____, 1975, an allocation strategy and implementing recommendations, which together comprise the regional housing plan for reduction and eventual elimination of existing as well as future housing need; and

WHEREAS, the aforementioned inventories, analyses, objectives, principles, standards, forecasts, alternative strategies, and recommended plan are set forth in a report entitled, SEWRPC Planning Report No. 20, A Regional Housing Plan for Southeastern Wisconsin, published in February 1975; and

WHEREAS, the Commission has transmitted a certified copy of the resolution adopting such regional housing plan, together with the aforementioned SEWRPC Planning Report No. 20, to the local units of government; and

WHEREAS, the (name of local governing body) has supported, participated in the financing of, and generally concurred in the regional planning programs undertaken by the Southeastern Wisconsin Regional Planning Commission and believes that the recommended allocation and implementation elements of the regional housing plan prepared by the Commission are sound and valuable guides by which local level housing policies and programs may resolve regional housing problems, and which contribute not only to the development of the Region, but also of the community, and the endorsement of such plan by the (name of local governing body) will assure a common understanding by the several governmental levels and agencies concerned and enable these levels and agencies of government to program the necessary areawide and local plan implementation work.

THEREFORE, BE IT HEREBY RESOLVED that, pursuant to Section 66.945(12) of the Wisconsin Statutes, the (name of the local governing body) on the _____day of _____, 19__, hereby endorses the regional housing plan previously adopted by the Southeastern Wisconsin Regional Planning Commission as set forth in SEWRPC Planning Report No. 20 as a guide for regional and community development.

BE IT FURTHER HEREBY RESOLVED that the _____ clerk transmit a certified copy of this resolution to the Southeastern Wisconsin Regional Planning Commission.

_____

(President, Mayor, or Chairman of the local governing body)

ATTESTATION

_____

(Clerk of local governing body)