THE NEIGHBORHOOD UNIT CONCEPT

by

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# TABLE OF CONTENTS

List of Figures and Maps

Abstract

Introduction 1
Definition of the Neighborhood Unit 2
Social Aspects of the Design 5
Physical Aspects of the Design 7
Use of the Concept at S.E.W.R.P.C. 9
Germantown, Wisconsin 16
The Jefferson Park Neighborhood 18
The Belle Aire Neighborhood 23
Concluding Remarks 30
Conclusion 32

References Cited
Appendix 1
Appendix 2A
Appendix 2B
Appendix 3

Selected Bibliography
List of Figures and Maps

Map 1: Perry's Neighborhood 7
Map 2: The Region 9
Figure 1: Commission Structure 10
Map 3: Location of Germantown 16
Map 4: Land Use 16
Map 5: Land Use: 1990 17
Map 6: Model Neighborhood for Germantown 18
Map 7: Proposed Neighborhoods 18
Map 8: Jefferson Park Neighborhood 19
Map 9: Belle Aire Neighborhood A 23
Map 10: Belle Aire Neighborhood B 24
Map 11: Belle Aire Neighborhood C 25
Map 12: Belle Aire Neighborhood D 26
Map 13: Belle Aire Neighborhood E 26
Map 14: Belle Aire Neighborhood F 27
Abstract

The neighborhood unit has been used as a building block in forming an urban pattern since Clarence Perry introduced the idea in the 1920's. The Southeastern Wisconsin Regional Planning Commission in an attempt to implement its 1963 land use and transportation regional master plan embarked on a program of providing detailed neighborhood plans to the region's communities. To date, work has proceeded on approximately 38 of the several hundred neighborhoods within the region. The purpose of this report is to review the neighborhood planning procedure as it is practiced at S.E.W.R.P.C. and to analyze the idea of neighborhood units and their applicability as a planning tool. Specifically, the goals and objectives of the S.E.W.R.P.C. program will be compared with those developed by theorists involved with the concept. A comparison of previous Commission work with that done by the author as an intern at S.E.W.R.P.C. in the summer of 1974 will be made and criticism of both procedures offered. The paper will conclude by attempting to evaluate the significance of the neighborhood planning concept as it relates to the regional planning procedure as practiced at S.E.W.R.P.C.
Introduction

Neighborhood planning has traditionally been a physically oriented task with special emphasis placed on the location of "neighborhood" services, street design and other land use functions. Little, if any, attention has been given to the social consequences of various designs and if, in fact, the neighborhood unit concept accomplishes anything. It is assumed it does.

These remarks apply to the neighborhood planning program at the Southeastern Wisconsin Regional Planning Commission. Clarence Perry's principles are followed closely in the belief that the neighborhood unit is the solution to many of the problems which confront small towns in a rapid stage of development.

The author's position within the structure of the Commission was an assistant to the one individual who was concerned with the neighborhood planning program. The author's background as a landscape architect was invaluable in completing the assigned tasks, all of which dealt directly with the neighborhood. His planning background at the time of the internship did not benefit him in his work. However, since completion of the job several courses have enabled a reevaluation of the neighborhood unit concept and the planning process which develops it. Primarily among these are courses concerning people's perception of the physical environment. The purpose of the internship was to attempt to enhance the neighborhood's residents feelings of community through the development of a neighborhood center which included all of the services usually scattered throughout the neighborhood. It was theorized that this would accomplish the task. However, research into people's perception has shown that much more is involved in
the development of a community than land use. And many of the
factors involved are not within the providence of the planner to
control. So what role does physical planning play in satisfaction
with the city? And how can that role be used most effectively?
These are questions which can not be answered now but which
never would have been answered without work in the field of
perception.

The purpose of this paper is therefore, to present the theory
behind the neighborhood unit concept, how the concept fits in
the planning process at the Southeastern Wisconsin Regional
Planning Commission, how the concept can be improved within the
constraints of present theory and trends in planning and how the
study of perception can influence the final design and delineation
of the neighborhood.

Definition of the Neighborhood Unit

Throughout history urban conglomerations have been broken
down into segments or sectors to facilitate accessibility to
specific services, ethnic identity and other aspects of city life
which could be handled more easily at the small scale level than at
the municipal level. Certain sections, or quarters, of ancient and
medieval cities were devoted exclusively to one race, one religion
or one occupation with the result that people tended to identify
with their particular group instead of the city as a whole. People
were residents of the Jewish quarter of Cairo or the Armenian
section of Damascus instead of members of the metropolis.

The concept of compartmentalization of the city was often
fostered by the design that the city involved. Certain sections
were clearly delineated from their surroundings by major thoroughfares,
canals, or building types. This aspect of design, dividing the city into smaller units, was visible in many of America's first communities. Philadelphia was sectioned into quarters, Savannah was divided into residential districts which enclosed a park and L'Enfant's plan for the nation's capital called for segregating the city around the two major focal points, the Capitol and the White House.

The benefits of consciously dividing the city into smaller segments were expressed by Ebenezer Howard in his book Garden Cities of To-Morrow (Howard, 1965). Howard saw these sections of the city as one means of achieving urban cohesion, stability and identity. Through these segments he hoped to gain the advantage of combining the best of residential forms, both urban and rural, in the garden city.

Clarence Perry expounded on Howard's idea and gave it further justification in his writings on the neighborhood unit (Perry, 1929). Perry thought of the unit as that area which encompassed an elementary school site, small scale parks and playgrounds, shops serving day-to-day needs and a "residential environment." The last term Perry defined as:

the quality of architecture, the layout of streets, the planting along curbs and in yards, the arrangement and set-backs of buildings, and the relation of shops, filling stations and other commercial institutions to dwelling places - all the elements which go into the environment of a home and constitute its external atmosphere. (Perry, 1929)

His whole thesis was based on the assumption that smaller, more comprehensible units were needed in the metropolis.

The concept was given physical form by Clarence Stein and Henry Wright who attempted to embody Perry's idea into concrete shape in their designs for Radburn, N.J., Baldwin Hills, California
and other subdivisions. However, instead of evolving along the guidelines laid down by Wright and Stein in their designs, the neighborhood unit has come to mean, in many communities, the square mile residential development surrounding an elementary school and with commercial services located at the periphery of the development. Therefore, in attempting to define what a neighborhood unit is, many possibilities exist. It could be either: 1) the historical development known as neighborhood, 2) Perry's conception, or 3) the unit as it is envisioned today.

Charles Abrams defined the neighborhood as:

A local area whose residents are generally conscious of its existence as an entity and have informal face-to-face contacts and some social institutions they recognize as their own. They may or may not have a formal neighborhood organization. There is no clear line between a neighborhood and a community. Sociologists, however, say a community has a socially conscious population working together as a body to meet its common needs and objectives. Often the term 'neighborhood' is used to mean nothing more than the geographic area within which residents conveniently share the common services and facilities in the vicinity of their dwellings. (Abrams, 1971)

That definition adequately expresses the philosophy of many planners toward the neighborhood. However, studies have shown that in reality a hierarchy of neighborhoods exist. These include the social-acquaintance neighborhood, that area where people can identify their neighbors, the homogenous neighborhood, that space where similarities in structures, people, culture, etc. exist, and the service area neighborhood where people shop, go to school and carry on many other everyday activities. (Lee 1970)

Therefore, to include these diverse areas into one definition, I would alter Abrams statement to state that a neighborhood is that physical space that encompasses the physical characteristics
identifed by Lee and which is, in Abrams terms, a community. And the neighborhood design, through its expression in the neighborhood unit, must attempt to form a sense of community, a feeling of common interests and goals among the people who live in it.

Social Aspects of the Design

Clarence Perry's main points for stressing the neighborhood unit included both physical and social aspects. From a social perspective, Perry thought the concept could improve citizen participation in government, provide the proper environment for raising children, increase interest in local voluntary associations, and aid in promoting social progress. He wrote:

To afford greater safety in the street, to provide the conditions conducive to moral living, it is not enough to change the dwelling; its environs also must be modified. Only by replanning the district can the full values of sunlight, recreation spaces, and safe streets be realized in the congested sections of large cities. (Perry, 1929)

While many have pointed out the lack of success in directly affecting social behavior through physical design, some aspects of the neighborhood unit concept have been recognized as socially beneficial. These include creating a space that people can identify with, helping to form social interaction patterns and aiding in creating a suitable environment to facilitate home life for all the residents of the neighborhood.

Perception of the neighborhood as a distinct entity within the mass of the metropolis is seen as bringing the city into a more human scale thus allowing for more personal identity with the place. If people can feel a part of the neighborhood, instead
of just residing at a certain street number, then they should be more comfortable with their surroundings. Research by Lynch (Lynch, 1960) and others has revealed that residents of a city view their urban environment as a select portion of the conglomeration of points within the city. The neighborhood unit concept attempts to make the local area one of the points people identify and perceive.

The second social selling point of the neighborhood is the ability to guide social patterns through design. While a great deal of research has been carried on in low-income areas, much remains to be studied as to how site planning affects interaction generally. A few conclusions seem to be possible though. Typical neighborhood layouts do not extensively affect the social network of the middle and upper income groups who reside in them but that for these classes social and economic homogeneity are more important factors in determining who will be associated with whom than physical proximity. However, design can influence social interaction in some settings and thus may be partially determined by the layout of a neighborhood.

The third aspect of the neighborhood unit, creating a place where home life can be carried on comfortably, is more directly related to physical layout. Whether the neighborhood is family oriented, or activity centered, or based on the ease of movement, certain prerequisites should be met. These include safety in moving from one place to another by whatever means, foot, bicycle or automobile, convenient access to certain services and developing surroundings that people will feel at home with.
It is this last point that has resulted in much criticism of the neighborhood unit as a segregating force in the community. If units of homogeneous character are stressed then black and white, rich and poor, young and old will never be exposed to each other. And it is this exposure which may lead to acceptance. This is a valid claim against many of the neighborhood units that have been developed; they segregate along economic and racial lines. However, it is a criticism that can be alleviated.

Physical Aspects of the Concept

Perry stressed that the social benefits that could be achieved through use of the neighborhood unit concept could be gained by physical design and layout. Perry conceived the neighborhood as being made up of six components. They were (See Map 1):

1. Size - A residential unit development should provide housing for that population for which one elementary school is ordinarily required, its actual area depending upon population density.

2. Boundaries - The unit should be bounded on all sides by arterial streets, sufficiently wide to facilitate its by-passing by all through traffic.

3. Open Spaces - A system of small parks and recreation spaces, planned to meet the needs of the particular neighborhood, should be provided.

4. Institution Sites - Sites for the school and other institutions having service spheres coinciding with the limits of the unit should be suitably grouped about a central point, or common.

5. Local Shops - One or more shopping districts, adequate for the population to be served, should be laid out in the circumference of the unit, preferably at traffic junctions and adjacent to similar districts of adjoining neighborhoods.

6. Internal Street System - The unit should be provided with a special street system, each highway being proportioned to its probable traffic load, and the street net as a whole being designed to facilitate circulation within the unit and to discourage its use by through traffic.
Map I: Perry's Neighborhood

Source: Perry, 1929
The basic physical layout proposed by Perry has been copied, many times almost exactly, by many planners throughout the country. Specific aspects of the concept that have been sited as advantageous include:

A. Economics - By designing an overall plan for a large area, often one square mile, savings can be achieved in sewer connections, road layout, land savings by developing only large parcels of land and other economic benefits.

B. Environment - By developing large parcels of land, those areas that should not be built on because of soil restraints, slope restrictions or other limitations can be left undeveloped while those areas which are suitable for development can be used to their capacity.

C. Perception - By designing a uniform, comprehensible neighborhood, the residents perception of what is their neighborhood can be strengthened. This can be achieved through a variety of housing types, street layout or other design criteria which could be used to emphasize the individuality of that particular area.

D. Safety - By either segregating pedestrian and auto traffic or allowing through traffic on only the major streets running through the neighborhood movement within the area could be made fairly safe. This would allow children to walk to school without having to cross a busy street, a housewife to drive to a neighborhood grocery store without having to fight the traffic problems on major arterial streets and children to play in front of their homes without having to fear the automobile.
E. Convenience - By the location within the neighborhood of residential areas in proximity to an elementary school, park, small shopping center and other every-day needed facilities the designer can reduce movement by the automobile and the time spent in it fulfilling tasks within the neighborhood.

F. Reducing Sprawl - Instead of developing our cities by bits and pieces, neighborhood units could be used to increase the size of the metropolis in a rational and direct manner. One neighborhood unit could be completed and then development could proceed to the next one instead of the scattered and leap-frog method of spot development that is now the common practice. The savings in supplying utilities, services, etc. to a compressed area has been adequately pointed out in The Cost of Sprawl (Real Estate, 1974).

Use of the Concept at S.E.W.R.P.C.

The State of Wisconsin is a combination of comparisons: urban and rural settings existing side by side, rolling hills and flatlands, lakes, streams and snow. The southeastern portion of the state has been characterized as:

Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington and Waukesha counties (See Map 2)...

Exclusive of Lake Michigan, these seven counties have a total area of 2,689 square miles, and together comprise about 5 percent of the total area of the State of Wisconsin. About 40 percent of the state's population, however, resides within these seven counties, which contain three of the five and one-half standard metropolitan statistical areas in the state. The Region contains approximately one-half of all the tangible wealth in the State of Wisconsin as measured by equalized valuation and represents the greatest wealth producing area of the state, about 42% of the state's labor force being employed
within the Region. It contributes about twice as much in taxes than it receives in state aids. The seven county Region contains 153 local units of government exclusive of school and other special purpose districts and encompasses all or parts of 11 major watersheds. The Region has been subject to rapid population growth and urbanization; and from 1950 to 1960 accounted for 64 percent of the total population increase of the entire state. (S.E.W.R.P.C., 1963)

The Southeastern Wisconsin Regional Planning Commission was founded in 1960 under provision of Section 66.995 of general municipality law of the State of Wisconsin to coordinate planning activities within the seven counties listed above. Its duties include:

1. Area wide research; that is, the collection, analysis, and dissemination of basic planning and engineering data on a continuing, uniform, area-wide basis so that, in light of such data, the various levels and agencies of government, private enterprise, and interested citizens within the Region can better make decisions concerning community development.

2. 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 physical development of the Region. The permissible scope and content of this plan as outlined in the enabling legislation extends to all phases of regional development, implicitly emphasizing, however, the preparation of alternative spatial designs for the use of land and for the supporting transportation and utility facilities.

3. Provision of a center for the coordination of the many planning and plan implementation activities carried out by the various levels and agencies of government operating within the Region. (S.E.W.R.P.C., 1963)

To perform its duties, the Commission is organized into nine divisions which are under the leadership of the executive
Figure 2
ORGANIZATIONAL STRUCTURE OF THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION AND STAFF

Figure 1: Commission Structure

Source: SEWRPC 1963
director who is responsible for presenting the recommendations of the staff to the regional planning commission (See Figure 1). The commission itself is made up of the county boards of the seven counties in the region. Services offered by the commission include advisory service to local communities, transportation planning and park and recreation long range planning. Membership is on a completely voluntary basis by the local units of government and is purely an advisory agency.

To fulfill one of its tasks, the Commission in 1963 issued a regional land use and transportation plan which called for:

1. Establishment of the complete pattern of movement of people and goods within the Region by highway and transit.

2. Quantitative analysis of the existing and the probable future transportation supply and demand on both a local and regional basis and the quantitative assignment of future traffic to the developing regional freeway and major arterial street and highway and transit systems of the Region.

3. Establishment of a coordinated land uniform data collection and analysis system that will readily provide on a continuing basis summary data on population, employment, motor vehicle ownership, travel origins and destinations, transportation facilities, public utilities, and financial resources for the Region. These data are to be available in a form suitable to assist federal, state, and local agencies of government and private investors in making development decisions.

4. Promotion of better understanding by public officials, planners, and engineers of the interrelationships existing between land use and transportation and of the factors influencing residential, industrial, and commercial land development within the Region, thereby providing a better insight into local and regional growth patterns.
5. Establishment of an increased awareness of the effect of each local community's plans on surrounding communities and on the Region and promotion of the coordination of the land use and transportation planning efforts of all levels of government within the Region.

6. Collection and analysis of data that will permit forecasts and recommendations to be made regarding future patterns of economic activity, population distribution, land use development and long-term impacts of alternative transportation system arrangements; costs and benefits of alternative generalized transportation systems and specific transportation facility improvements; and programs for the best utilization of existing transportation facilities and for the construction of new transportation facilities may be dictated by needs. (S.E.W.R.P.C., 1963)

The regional plan was to be used as a guideline for determining growth and development patterns within the region. . .

However, implementation of the programs proposed did not all develop as anticipated and, therefore, the Commission in 1968 established a Neighborhood Planning Program within the Community Assistance Division of the Commission. The role of the neighborhood planning program was the:

preparation for member local units of government at their cost of detailed planning studies, plans, and plan implementation devices in those instances where such assistance:

a. Is specifically requested in writing by the local units of government;

b. Lies within the staff resources and capabilities of the Commission after giving priority to Commission approved regional planning activities and;

c. Will contribute to the implementation of regional plans and the achievement of the other objectives set forth in this policy statement. (S.E.W.R.P.C., 1968)

See Appendix 1.

The authority for this program is granted by the enabling legislation. It states:

In addition to the other powers specified in this section a regional planning commission may enter into a contract with any local unit within the
region under s. 66.30 to make studies and offer advice on:
1. Land use, thoroughfares, community facilities, and public improvements;
2. Encouragement of economic and other developments. (Wis., 1958)

The purpose of the program as outlined by the Commission was to aid in implementing the proposals of the regional land use plan, the coordination of local and regional plans and objectives and a unified planning process. These goals coincide with the duties of the planning commission and are a legitimate and allowable task under the enabling legislation.

The task of the program was the preparation of neighborhood plans for the communities within the region to achieve the goal of implementing the regional plan. Specifically, the Commission has recommended that local units of government in the Region prepare and adopt such plans so that the urban areas of the Region develop as a series of recognizable neighborhood units rather than a formless urban mass. These units should provide all of the facilities and services required by the family within the immediate vicinity of its dwelling unit. This is partly a matter of providing a quiet, safe, healthful, and attractive residential environment; partly a matter of providing convenience in living and travelling within the urban area; partly a matter of organizing and supplying public services and facilities more efficiently and economically; and partly a matter of bringing the size of an area in which a family lives into human scale, within which the individual can take a more active part in community affairs. (S.E.W.R.P.C., 1971)

Application of the concept resulted in the division of several of the local communities into neighborhood districts. This division usually occurred along the major arterial streets thus dividing the communities into a series of one square-mile areas. This is the area which Perry conceived as enclosing the population which would support an elementary school and which has traditionally
been used to define a neighborhood. The commission followed this tradition in almost all cases only departing from the procedure if the street pattern did not follow the grid system. In this situation other boundaries, such as rivers, railroads or lot lines, were selected for delineating the neighborhoods. While some of these districts had existing urban land uses, many were still rural in character and the majority contained large parcels of developable land. Each neighborhood unit was then analyzed (See Appendix 2 for the Procedure Followed) and a plan prepared for adoption. The plan was to be a specific land use map containing the location of all streets; residential, commercial and industrial uses; the siting of school, park and church sites and other neighborhood facilities which were to be located within the particular unit. This map was the basis for an official map and a zoning map which were also adopted by the local planning agency along with the general land use map.

The zoning map was used to insure the development of neighborhood land use along the lines suggested by the neighborhood plan. But it was the official map which was of special significance.

The Commission stated of the official map:

It designates right-of-way lines and site boundaries of all streets, highways, and park and open-space areas in the neighborhood. Under the Wisconsin official map law, construction of any buildings, structures, or other improvements on land that has been designated for current and future public use is prohibited. The adoption of official maps is an important plan implementation tool in developing areas of the Region, since it provides a common basis for understanding between land developers, property owners, and public officials for future development of land, and avoids spending public monies unnecessarily to purchase structures which have been placed on lands needed for future public uses. (S.E.W.R.P.C., 1971)
The adopted land use map was not binding on the municipality or the landowner but was merely a suggestion as to how development could and should occur. The zoning map, however, became public policy upon adoption and was required to be followed in all development schemes for the site unless amended.

An example of the procedure followed is Franklin, Wisconsin. In 1968 the City of Franklin was divided into neighborhood unit sized districts and a plan prepared for one of the neighborhoods. The division is an example of the Commission's attitude toward the neighborhood unit. It was to be defined whenever possible by the main arterial street system (See Appendix 3). The proposed plan was not the typical neighborhood because the area under study was determined to be the site of the new central business district of Franklin. The procedure followed in this determination is unknown. However, the plan does contain many of the elements of the traditional neighborhood. The commission wrote:

Each neighborhood unit should have its own elementary school site, park area, and local shopping area. Its size should be such to provide housing for that population for which one public elementary school is required. The size, therefore, will vary with the size of the school, the development density, the ratio of public elementary school population to total population, and the desirable maximum walking distance to school. Each neighborhood unit should have isolating boundaries such as arterial streets, major parks or parkways, streams, or lake shore lines to separate it from other such neighborhood units. Its internal street pattern should facilitate vehicular and pedestrian circulation within the unit, but discourage penetration of the unit by through traffic. There should be one central feature or focal point, such as the school or park site around which the design is built, so that a person entering the area realizes he is entering an integrated environment. Such an arrangement of urban development is not only good aesthetically, but promotes a stable community, reduces the gross demand for travel, and minimizes the cost of public services and facilities. (S.E.W.R.P.C., 1971)
It is to devise schemes which will satisfy these requirements that is the purpose of the neighborhood planning program at the Southeastern Wisconsin Regional Planning Commission.

Germantown, Wisconsin

Germantown, Wisconsin encompasses a 36 square mile township located approximately 25 miles north of Milwaukee in a rapidly expanding and metropolizing area (See Map 3). In June of 1974 the village had an estimated population of 7,500 but the regional master plan anticipated that by 1985 Germantown will have 35,000 residents. While this figure is probably an overstatement, the village is experiencing rapid development. The regional master plan also calls for medium density residential development to be concentrated in certain segments of the community with the rest of the township remaining as agricultural or 100 year flood-plane land or developing as an industrial park.

Germantown was originally founded as a service oriented community to serve the surrounding agricultural interests. It retained this rural character, which is expressed in the structures which line Main Street, until population pressures forced it to begin providing for, and anticipating, population growth in the 1960's. The compact nature of the village was originally shattered by the development of suburban tract housing in the southern section of the township (See Map 4). This growth was a result of the expansion of the Milwaukee metropolitan area out in the surrounding rural communities and was expected to continue and increase in the foreseeable future. The community was in a transitional stage and sought to ease the change from rural farm community to suburb by contracting for, and adopting, a general land use comprehensive
Map 3: Location of Germantown
The plan, prepared by Tec-Search Incorporated of Wilmette, Illinois, was the village's initial step in dealing with the expansion which was anticipated.

The plan called for the village to concentrate development in five neighborhood units while retaining the remaining areas within the village limits for industrial and agricultural uses (See Map 5). The village was to preserve the old-world setting which was represented in the village center while developing for the future. This policy is summarized in the village's master plan as:

1. Unbroken continuity and undiminished scope of the environmental corridor.
2. Preservation of all designated conservation areas.
3. Development of residential areas according to the neighborhood concept.
4. Development of one regional shopping center in the primary urban service area.
5. Preservation and expansion of the old village commercial area.
6. Active participation of the village in encouraging industrial development. (Tec-Search, 1969)

The neighborhood unit concept was a prime consideration of the plan and the means by which the physical and social character of the village was to be retained and improved. The authors of the plan stated that the concept should be developed in the following manner:

1. Major arterials and through traffic routes should not pass through the neighborhood but should define the boundaries of the neighborhood.
2. Interior street patterns should be designed to encourage local traffic to drive slowly and to keep through traffic out to preserve the residential atmosphere.
3. The population of a neighborhood should be that which is necessary to support one elementary school. A total of 5,000 persons in one of Germantown's neighborhood would support a large elementary school and neighborhood shopping center and would result in an over-all density of nearly eight persons per gross acre.
(4) The center of each neighborhood should be an elementary school and park complex, sheltered from the through traffic of the boundary arterials. The radius of the neighborhood should be a maximum of one-half mile so children can walk to school.

(5) A commercial center to serve the neighborhood should be located on the perimeter of the neighborhood accessible from both the perimeter arterials and interior collector streets. (Tec-Search, 1969).

The physical form of these neighborhoods was also suggested by the plan (See Map 6). While not, and not intending to be, binding, these plans reflected what Tec-Search thought the neighborhood unit should contain.

Certain modifications were suggested by the Commission to the neighborhood delineation plan including a slight shift in the neighborhood boundaries (See Map 7) and the relocation of the major commercial areas to be developed in the village. These changes were a result of developments since the plan’s inception in 1969 and took into consideration existing residential areas, the location of public facilities and other factors which Tec-Search had not anticipated. It was this framework which determined which areas should be delineated as neighborhoods. The location of the regional and local shopping centers was a result of traffic flow projections, land availability and access, soil condition and additional site characteristics. It was within this framework that the Commission’s neighborhood planning program was carried on in Germantown.

The Jefferson Park Neighborhood

The first neighborhood plan to be attempted by the Commission in Germantown was for the Jefferson Park area (See Map 7). This was
MODEL NEIGHBORHOOD FOR GERMANTOWN

Map 6

Source: Tec Search 1969
Source: Tec Search 1969

Map 7

PROPOSED NEIGHBORHOODS

- PRIMARY URBAN SERVICE AREA
- MEDIUM DENSITY RESIDENTIAL
- HIGH DENSITY RESIDENTIAL
- COMMERCIAL - REGIONAL
- COMMERCIAL - NEIGHBORHOOD
- SCHOOL - PARK
- RESEARCH OR LIGHT INDUSTRY
- HEAVY INDUSTRY
- EXPRESSWAY
- STANDARD ARTERIAL
selected because of the existing pressure on the area for development and the anticipated proposals for residential subdivisions within the neighborhood. Few physical structures existed when work progressed on the neighborhood but plans had been proposed for several large developments within the site. The Commission, therefore, proceeded to develop a neighborhood plan.

The Commission took the existing land ownership patterns, soil conditions, proposals of the regional and local master plans and other restrictions into account in formulating the plan.

Specifically, preliminary plats had previously been filed for the subdivision located along the eastern border of the neighborhood and a church site was already occupied. Additionally, other plans had been presented for the area by developers and these were taken into consideration. The location of certain soils which precluded development in the neighborhood necessitated outlining a large environmental corridor to protect this area. And the Commission's master plan had called for a regional shopping center to be located within the community of Germantown and the neighborhood planners decided that it would be advantageous to place it in the Jefferson Park neighborhood.

Taking into consideration the factors mentioned previously; soils, traffic, land availability, plus the desire to locate the shopping center in the general vicinity of the center of the developing city, the planners chose the Jefferson Park area as the most advantageous location.

The neighborhood plan (See Map 8), while not being typical of
the Commission's work in that it comprises more than a one square mile area, exemplified the Perry tradition in planning. The elementary school and park site are sited near the center of the area and other non-residential uses are placed at the periphery of the site. The Jefferson Park plan deviates from this standard by locating a regional and local shopping area outside of the primary residential area and by including office space in the plan. While the location of office parks next to multi-family and major commercial sites seems rational, the placing of the neighborhood retail and service area next to these uses seems unjustified. The market area for the common neighborhood shopping center, usually consisting of a grocery store, beauty parlor and other small scale services, is much more confined and can be drawn, usually, from a square mile development. But by placing it next to a regional shopping center, conflicts seem unavoidable. The neighborhood shopping center has, in this plan, been taken out of the neighborhood.

A second criticism of the plan would be the location of residential land uses. While some of the areas had already been granted specific zoning classifications and the plan was simply reflecting this, the segregation into two large clusters of single and multi-family with a ribbon of duplex running between seems unimaginative and aesthetically displeasing. Diversity in design can be achieved by mixing land uses in a coherent pattern; however, this plan would probably result in a rather typically unsatisfying appearance. Also, the use of the two-family sites is not needed. The use of zoning to shield the single family residences from compatible, but not necessarily attractive, uses
seems unjustified. Why should these residents be granted a pardon from living next to a shopping center or an apartment building? Because they live in detached single family houses is not enough reason. Either is the argument that because they have paid the price of a detached home, supposedly more than people living in duplex or multi-family units, they have purchased their location and have expressed the desire to live where they are located. But if all development occurs in the commercial-multi-family-duplex-single-family pattern, then no choice is given to anyone except within which larger section they will live. While the option remains open to build in a "lower" classification zone, in most instances the Commission's plan has resulted in segregating units to protect property values. Fairness would mean that this single-family zone could be located next to a "lower" classification without a strip of protection between them.

A final criticism of the plan is its reliance on the traditional Perry planning procedure. Basing the entire layout of the neighborhood on the school and park site may make that area accessible to school children. But it will not form a neighborhood community. People have more interests than just the activities of their children, if they have any children. Therefore, simply placing the elementary school in the center of a square mile residential area will not create a neighborhood. Other alternatives must be attempted. Among these could be the formation of a neighborhood center comprising the elementary school, the park site, the grocery store and other related non-residential uses. Or the formation of a neighborhood association to deal with the problems of the area.
These would certainly result in more community interaction than that generated only by the elementary school.

The neighborhood plan for the Jefferson Park area could have been improved in several ways:

(1) Segregating the neighborhood commercial area from the regional shopping center;

(2) Dispersing land uses into smaller units to create a more diverse pattern;

(3) Grouping several of the major land uses, school, park, church and commercial, to form a neighborhood center;

(4) Uniting the area with paths of open space; and

(5) Dividing it into two clearly distinct sections, residential and related uses and the future C.B.D. of Germantown with supporting functions.

The Commission's rationale for developing neighborhood plans was quoted earlier. It included the safety, convenience, economy and scale of the concept; however, the work done by the Commission has not matched the ideal. Instead of attempting to achieve their goal, they have merely used the standard form. However, this pattern is not safer for anyone, including the school children because in many cases they must cross major streets to reach the school. This pattern is not convenient for most people because it makes reliance on the automobile a necessity instead of a luxury in carrying out everyday business. This pattern is economic only in the sense that it can plan ahead for the delivery of services. And this pattern of development is not in a human scale anymore than any other development. Does the location of the elementary
school in the center of the neighborhood provide "a human scale, within which the family and its individual members can feel at home"? It seems doubtful.

The Belle Aire Neighborhood

In the summer of 1974 the author undertook to form a plan for the Belle Aire neighborhood (See Map 7) as part of his work with the Commission as an intern. The work completed and the procedure followed will be detailed in this section of the report.

The Belle Aire area is still predominantly farm land but the trend toward urbanization is apparent in the few new developments already existing or proposed for the section. It is not in the immediate path of development in Germantown but this fact means that a neighborhood unit plan could be devised for the area without forcing extraneous circumstances on the plan's final form.

The neighborhood area encloses several potential troublesome situations. Railroad tracks divide the area by crossing the section in its northeastern corner. Soils which present a severe limitation to urban development are scattered throughout the site. While generally the area is presently subdivided into large farm parcels, there are numerous single family homes within the section. And the existence of a state highway running through the site compounds the problem of unifying the area into a single concise neighborhood.

An earlier plan done by the Commission (See Map 9) had attempted to alleviate these problems with a traditional neighborhood development. The one concession to the site's limitations is the location
of the park site in an area of muck-like soils. Other than this, the plan is typical of the work done by the Commission.

In an attempt to present alternative schemes of development to the Germantown planning commission, four plans were prepared by the author for presentation to the board in August, 1974. This procedure would allow for a review of several planning strategies in the development of a neighborhood instead of just the traditional Perry approach.

The first scheme (See Map 10) was a fairly typical layout with the school site approximately in the middle of the area and the neighborhood commercial location at the corner of the section. This plan also contains duplex housing units used as buffers between single family residential areas and other uses. Additionally, the plan calls for the development of an industrial park in the northeastern segment of the section. This area was thought to be ideal for industry because of the proximity to transportation routes, both train and truck, the location of some poor soils on the site which would make large lots advantageous and the buffer from the residential part of the neighborhood created by the highway. The community's master plan had called for industrial use in this area and all four alternatives presented to the Germantown Planning Commission contained this recommendation.

While industrial uses are not normally located in neighborhood units, it was felt that the northeastern section of the area was sufficiently divided from the rest of the square mile section to allow industrial uses. The highway would act as a buffer between the two areas. While it was never considered that these two uses
were compatible, they were presented in one plan to retain the rationale behind the square mile concept. As will be pointed out later, this was a mistake.

The second layout tried to aid in forming interaction patterns in the hope of strengthening the feeling of community. (See Map 11) This was to be achieved by grouping many of the major land uses - neighborhood shopping center, elementary school, multi-family housing and a park site in one segment of the section in an attempt to form a neighborhood center. The role of this center would be to allow exposure of people to people in more circumstances than just a P.T.A. meeting. Since the grocery store would serve primarily the neighborhood in which it was located, neighbors would be provided a chance to meet and discuss common problems and interests outside of the home in the store, or in the local park, or at the school. But people would be encouraged to meet their neighbors.

Fredrick Gibberd has written of this type of planning:

> Probably the most effective method of generating community life is to use the shops as the basis, and place with them those buildings which serve the community needs, such as the hall, pub, library and health centre. To quote Miss Judith Ledehoer:
> The shops and the shopping center provide the most important elements in the design of the neighborhood. It is there that your communal relations really start. The school basis for the theory of the neighborhood unit has been built up round a children's community, and it affords an inadequate conception of a neighborhood in which adults are going to live. (Ledehoer, 1963)

A good shopping centre combined with other community buildings will, like the mediaeval market place, bring the inhabitants into social intercourse far more effectively than any number of community centres, however large and well organized. People meet over the shopping basket in the local cafe, milk bar, pub or library. If all these activities can be concentrated
at one point then there will be the greatest possible chance that different social groups, with different interests, will be brought into contact with each other, and the least possible chance of individuals becoming isolated and lonely. (Gibberd, 1967)

While this was written about England, the theory seems to be applicable here.

The third plan (See Map 12) was a compromise between the first two alternatives. The compatibility of a commercial use next to a school and park was questioned; therefore, a neighborhood center without the grocery store has been suggested as a possibility. While this plan had the advantage of being acceptable both to the Commission's full time staff and the author, it is not as satisfying a solution as the second proposal.

The final neighborhood alternative (See Map 13) was a return to the idea of the neighborhood center but contained other design methods — interior walkways leading to the center to separate automotive and pedestrian traffic, smaller lot size to conserve open space and other techniques — which are an attempt to unify an area.

The use of open space to link the components of a neighborhood is a common present day practice. However, it is questioned by many because of the seclusion of the spaces, the cost and upkeep of bike and walking trails, the advisability of these spaces in colder climates and the real need and desirability of the whole concept. For these reasons open space linkages were only suggested in one of the four alternatives.

While none of these proposals is revolutionary in concept they are an attempt to present various planning strategies for the
neighborhood unit. And they are an attempt to show the progression from the traditional approach to one that may be more acceptable to the residents of the area, who are the ones being planned for.

The presentation before the Planning Commission of Germantown followed the progression of plans presented here and emphasized the attempt to develop a neighborhood center in the hope of increasing community identity through the formation of the center. The Planning Commission, however, had been educated to the neighborhood planning concept by other employees of S.E.W.R.P.C. and indicated that they were not interested in the community center proposal. Specifically, they stated that they wanted:

(1) A commercial site located at the southeastern corner of the section. This site was zoned commercial but no development had occurred on the site and the need for a commercial area at this location seemed unnecessary to the planners at S.E.W.R.P.C.

(2) A gas station to be sited at the northwestern corner of the section.

(3) The area previously shown as industrial to be developed as a residential use.

(4) The school and park site to be located at the center of the neighborhood.

In response to these suggestions, the author prepared a new plan which tried to retain some of the characteristics of the earlier versions while satisfying the requirements of the Planning Commission. This plan (See Map 14) called for the major land uses to be located in the northern segment of the neighborhood but to separate the school-park site from the other uses. And the commercial area was to be completely segregated from this area and put in the southwestern corner of the area. The Planning Commission had stated that it thought that a neighborhood shopping center
should go at the southeastern corner but this area was reserved for other commercial activities because of the distribution of the market in the village and the plans for additional similar shopping centers in the area. Other slight alterations were made to the original proposals to make the plan acceptable. However, this work was completed at the end of the internship period and no further progress has been made on developing a neighborhood plan for the Belle Aire area. And the new design was never submitted to the Planning Commission for comments.

The procedure followed seemed to be a possible solution to incorporating a community's preferences in the neighborhood planning process. Instead of simply presenting a plan for approval without comprehension of or discussion about it by the Planning Commission, this procedure would allow their input from the first steps of the process. Unfortunately there was not enough time to complete the plan but a few comments and criticisms of the final preliminary plan are warranted.

The theory that neighborhood identity can be achieved through the development of a neighborhood center is unproven. However, it seems obvious that the typical plan for the neighborhood does not achieve, or even attempt, to accomplish this. The final plan, because of its compromise nature, was not radically different from previous Commission work and was too similar to traditional practices to suppose any improvement would be made in increasing the neighborhood residents' perception of their neighborhood as any different from other neighborhoods in Germantown, or in southeastern Wisconsin or in the United States.
Zoning was again used to buffer the single family residential area from other, supposedly "incompatible" uses. And the multi-family areas were grouped in one section of the neighborhood. Although this practice may be objectionable, by limiting the size of the areas and making them planned unit developments was an attempt to create some diversity in design and appearance.

The commercial area at the southeastern corner of the neighborhood was unnecessary. Germantown did not need a business district there because it was located off the main street in the future city and would not attract the needed clientele to support a large development. And it would mean an oversupply of commercial activities in the city.

Finally, the northeastern section of the Belle Aire area should have remained as an industrial site. By including it in the neighborhood boundaries, it was seen by the Germantown Planning Commission as being an integral and related part of the area. It would not have been and by excluding it from the plan and including it in a plan for industrial development in the city this would have been made clearer.

This final plan was not totally acceptable to the author but the supervisors at S.E.W.R.P.C. reasoned that it was the Germantown Planning Commission's plan and they should be given what they wanted. This does not seem a reasonable position for planning to take but the logic may have been that the neighborhood plans were not as important as other components of the Commission's work and that therefore, the local planning agency should not be alienated on this issue when their support would be required later for some other, more important plan.
Concluding Remarks

The neighborhood unit concept has been proposed as a viable means of reducing the city to a comprehensible scale. However, to achieve this end, physical planning must attempt to unite, to some degree, the physical and social networks of people. Reliance upon the activities of children is not enough. More interaction occurs in other areas than at the elementary school. Neighborhoods must be designed for all the residents of the area, not just the school children.

The part that physical planning can play in social response must be directed toward the creation of a sense of community in the neighborhood. While this is one of the expressed purposes of the neighborhood planning program at S.E.W.R.P.C. it has not actually been considered. Instead, acceptance of Clarence Perry's original theory has been assumed. And the neighborhood plans adopted by the local communities have indicated this acceptance.

The process of developing a neighborhood plan is a legitimate planning function. However, it may be reasonable to question a regional planning commission undertaking what has traditionally been a local planning function. The Southeastern Wisconsin Regional Planning Commission has chosen to undertake this task in an attempt to implement their regional plan. The Commission could have encouraged the local communities in the region to hire private consulting firms to do the plans and to pay for this planning either out of private funds or by applying for 701 monies. They chose not to probably because private planners may not have
given the implementation of the regional plan top priority in
developing a neighborhood plan, may not have been affordable by
the communities and thus no neighborhood planning would have
gone on and may not have been consistent with S.E.W.R.P.C.'s
planning philosophy. The Commission may have been attempting
to gather all planning power for the region under one agency and
may have disregarded the advantages of integrating as many people
into the planning process as possible. However, in deciding
which direction to follow other factors must be considered in­
cluding quality of product, time requirements and cost. S.E.W.R.P.C.
decided that it should offer a neighborhood planning service and
this decision seems to be acceptable in practice.

Neighborhood planning seems to be a reasonable task for
regional planning to pursue if the local communities indicate
a willingness to accept the program. It can aid in creating an
attractive residential environment. It can help in improving the
access to local services. It can increase community perception.
It can save money. And it can help to educate the local government
to the needs of their residents and to the distinction between
good and poor planning. It can do this but it must be carried on
with these ideals in mind. The program at S.E.W.R.P.C. at the
present time has forgotten what its original intention was. By
returning to these goals the program would be more beneficial and
relevant to the communities it is suppose to serve.
Conclusion

The object of arranging the town's housing in the form of neighborhoods is to enable the family unit to combine, if it so wishes, with other families into a community which has definite social contracts and a recognizable physical unity. The neighborhood is essentially a spontaneous social grouping, and it cannot be created by the planner. All he can do is to make provision for the necessary physical needs, by designing an area which gives the inhabitants a sense of living in one place distinct from all other places, and in which social equipment, like schools and playing fields, are conveniently located." (Gibberd, 196?)

The assumption that physical planning plays a significant role in determining social interaction patterns has been discounted. However, it is hypothesized that these patterns can be facilitated through design. In a pedestrian society this seems reasonable but with the mobile mass of citizens in this country the theory seems dubious. Can design affect the development of a community in a neighborhood? Do neighborhoods actually exist and if they do what role can they play? And is the Perry principle of neighborhood unit actually valid? These are questions which must be answered in determining the future of the neighborhood unit concept and neighborhood planning. Because if the theory does not exist in reality, if people don't get involved in their children's school activities, if people don't walk and won't, if children would rather play in the street than in a park, then the concept must be reevaluated. Has its use resulted in anything other than contributing to the monotonous repetitiveness of modern planning? Could a new model serve a more useful function?

While the theory of neighborhood as community has probably never been actively sought because of the limited control of the planner
over who lives in an area and what that person's characteristics are, the concept has been given lip service for the past fifty years. But has it achieved anything? Has the neighborhood unit concept accomplished its purpose or has it sought to do it? Is it really trying to create a neighborhood in the sense of communal feelings or is it just a simple and somewhat rational way of arranging land uses? It may be only a matter of semantics but the practice today at S.E.W.R.P.C. and many other planning agencies is square mile land planning not neighborhood planning. The question is, which do we want?

Obviously, my work as an intern was concerned primarily with the siting of land uses in a comprehensible and meaningful form. But will it be comprehensible and meaningful to the people who live in the "neighborhood" or is it only the planning theory without basis on which the decisions on what to do were based? Assuredly it was the latter. Neighborhood planning, to be successful, must be based on hypothesis, testing and conclusions. This has not been done and until it is, by someone, somewhere, the practice will remain the arrangement of land uses in a pattern that is only symbolic and beneficial for the planner and not for the people.
References Cited

Abrams, Charles.
The Language of Cities.
The Viking Press. New York. 1971

Gibberd, Fredrick.
Town Design

Howard, Ebenezer.
Garden Cities of To-Morrow.

Ledehoer, Judith.
Journal of the Royal Institute of British Architects.
Vol. 55, No. 10.

Lee, Terrance
"Urban Neighborhood as a Socio-Spatial Schema"
in Environmental Psychology: Man and his Physical Setting.

Lynch, Kevin.
The Image of the City.

Perry, Clarence.
The Neighborhood Unit.

Real Estate Research Corporation.
The Costs of Sprawl

S.E.W.R.P.C.

Regional Land Use and Transportation Plan. 1963.

Revised Policy Statement on Local Community Assistance. 1968.

Tec-Search.

INTRODUCTION

Subsequent to the issuance of the first policy statement on local community assistance by the Commission on November 5, 1962, two events bearing significantly on the subject have occurred. First, the Commission has prepared and adopted several key elements of a comprehensive plan for the physical development of the Region, including a regional land use plan and a regional transportation plan. Second, the U. S. Department of Housing and Urban Development has, under Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966, directed that all federally funded development projects and programs within the Region except those relating to urban renewal and schools be reviewed by the Commission as a condition precedent to federal approval and funding. Thus, it now becomes necessary to review and revise the Commission's previously adopted community assistance policy statement to reflect the foregoing events.

An effective community assistance program is one of the best means available for implementing the adopted regional plan elements and achieving the regional development objectives expressed in these plan elements. In addition, such a program is essential for developing sound working relationships between the Commission and the local units of government within the Region, for extending the planning and engineering data collected in the regional planning program, and for coordinating federal, state, and local development proposals on an areawide basis.

PRESENT POLICY

The Commission has since September 1961 carried on a community assistance program which has included the preparation of local planning guides and model ordinances, publication of a bimonthly newsletter, sponsoring of planning workshops and conferences, and the extension to local units of government upon request of functional guidance and advice. This program was extended under an interim policy statement on local community assistance adopted by the Executive Committee of the Commission on November 5, 1962. This interim policy statement was to remain in effect during the period extending from its adoption to the completion of the first regional planning studies and was to be reevaluated and revised when a framework of regional plans became available.

NEED FOR REVISED POLICY STATEMENT

The completion of the Root River watershed planning program, the initial regional land use-transportation planning program, and the Kenosha District planning program have now provided the Commission with several important elements of a comprehensive plan for the physical development of the Region, as well as with a great deal of basic planning and engineering data pertinent to the resolution of areawide environmental and developmental problems within the Southeastern Wisconsin Region. Although additional plan elements will have to be prepared, emphasis in the Commission's work program must now shift from the collection of basic engineering and planning data and the preparation of plans to the extension of that data, to attainment of the regional plan elements adopted to date, and to the integration of local and regional plans.

Source: SEWRPC 1968
The completion of the first major planning programs of the Commission has increased the number of requests received by the Commission from constituent local units of government for services beyond the scope of the present policy of limited functional guidance and advice. Such requests have, for example, included requests for the preparation of a zoning ordinance and district map for Walworth County, the preparation of precise neighborhood unit development plans for the Village of Germantown, the preparation of a subdivision control ordinance for the Town of Cedarburg, and the preparation of a zoning ordinance and district map for the Town of Werton. In addition, the Commission has received a request that it provide resident planner service to Walworth County.

PURPOSE AND OBJECTIVE

It is the purpose and objective of this policy statement to define the type and extent of local planning advisory services to be offered by the Commission on a continuing basis.

STATUTORY AUTHORITY

The state planning enabling legislation, under which the Commission is organized, provides for the extension of advisory services by the Commission to local units of government within the Region on both regional and local planning problems. More specifically, the statutes provide the following powers and duties related to local community assistance:

1. Section 66.945(8)(a) (see copy attached) provides for the extension of advisory services on regional planning problems to the local units of government, designates the Commission as the center for the coordination of local planning programs and plan implementation activities within the Region, and generally grants to the Commission all of the powers necessary to enable it to perform its functions and to promote regional planning.

2. Section 66.945(11) (see copy attached) provides that the local units of government may authorize the Commission to review and approve subdivision plats for the local units of government.

3. Section 66.945(12)(b) (see copy attached) authorizes the Commission to contract with local units of government for the purpose of making local planning studies and preparing local development plans.

RECOMMENDATIONS

It is recommended that the Commission carry on a local community assistance program which is directed at the attainment of the following objectives:

1. Implementation of adopted regional plan elements.

2. Extension of the basic planning and engineering data accumulated by the Commission and the interpretation of that data to assist the local officials in reaching sound decisions concerning local and area-wide development.
3. Promotion of sound working relationships between the constituent local units of government and between those local units of government and the Commission.

4. Integration of regional and local development objectives, plans, and plan implementation programs.

5. Coordination of local planning and plan implementation programs on an areawide basis.

It is accordingly recommended that as a matter of Commission policy the Commission staff be authorized to provide the following types of services to local units of government within the Region upon specific request:

1. The extension of functional guidance and advice to all participating units of government within the Region without charge to the member local units of government. The term functional guidance and advice shall be defined as guidance and advice on matters of recommended procedures and practices, including model ordinances, administrative rules, and procedural forms.

2. The coordination of all planning programs and plan implementation actions of the constituent local units of government with those of federal, state, and areawide general and special purpose units of government, without charge to the member local units of government.

3. The preparation for member local units of government at their cost of detailed planning studies, plans, and plan implementation devices in those instances where such assistance:

   a. Is specifically requested in writing by the local units of government;

   b. Lies within the staff resources and capabilities of the Commission after giving priority to Commission approved regional planning activities; and

   c. Will contribute to the implementation of regional plans and the achievement of the other objectives set forth in this policy statement.

Such assistance shall be subject to the following limitations:

   d. The local unit of government requesting the planning services shall pay the Commission full cost including applicable share of overhead expenses of the planning services to be rendered.

   e. Regional, watershed, or district plans shall exist within which such detailed studies, plans, and plan implementation devices can be developed.
f. The local units of government requesting the detailed studies, plans, or plan implementation devices shall have adopted all completed applicable regional, watershed, or district development plans.

g. The Commission may, where appropriate, sublet all or portions of the detailed planning work to private consultants.

Detailed planning studies shall for the purpose of this policy statement be defined as including basic planning inventories, analyses and forecasts; assistance in goal formulation; preparation of broad land use and facilities plans, including planned development unit plans; plan evaluation; and preparation of plan implementation devices. Such studies shall not extend to the preparation of site development plans or to the preparation of preliminary or final architectural or engineering plans and specifications for buildings, structures, transportation facilities, public utility facilities or other community facilities.

4. The provision of part-time resident staff assistance to local units of government subject to the following limitations:

a. The Commission shall be paid its full cost, including applicable share of overhead expenses, for the planning services to be rendered.

b. The member local units of government requesting the service shall have formally adopted all applicable completed regional, watershed, or district plans.

It is recommended that part-time resident staff assistance by the Commission to local units of government be considered as an interim step to the eventual attainment of full-time local planning staffs, and wherever possible and applicable detailed planning studies will carry recommendations concerning the appropriate time for each unit of government to secure their own professional planning staff.

In the adoption of this policy statement, the Commission fully recognized the important role that private planning and engineering consulting firms play in all aspects of planning and plan implementation within the Region. The Commission itself intends to continue to utilize the services of private consultants in appropriate instances in the future, just as it has in the past, and the Commission will continue to recommend to the local units of government the use of such firms wherever appropriate and feasible. The first responsibility of the Commission is, in this respect, to the Region and to its constituent local units of government, and must be directed toward promoting the sound and economical development of the Region in accordance with adopted regional plans.
66.945 CREATION, ORGANIZATION, POWERS AND DUTIES OF
REGIONAL PLANNING COMMISSIONS

(8) Functions, general and special. (a) The regional planning commission
may conduct all types of research studies, collect and analyze data, prepare maps,
charts and tables, and conduct all necessary studies for the accomplishment of its
other duties; it may make plans for the physical, social and economic development
of the region, and may adopt by resolution any plan or the portion of any plan
so prepared as its official recommendation for the development of the region;
it may publicize and advertise its purposes, objectives and findings, and may dis-
tribute reports thereon; it may provide advisory services on regional planning
problems to the local government units within the region and to other public and
private agencies in matters relative to its functions and objectives, and may act
as a co-ordinating agency for programs and activities of such local units and
agencies as they relate to its objectives. All public officials shall, upon
request, furnish to the regional planning commission, within a reasonable time,
such available information as it requires for its work. In general, the regional
planning commission shall have all powers necessary to enable it to perform its
functions and promote regional planning. The functions of the regional planning
commission shall be solely advisory to the local governments and local government
officials comprising the region.

(11) Matters referred to regional planning commission. The officer or
public body of a local government unit within the region having final authority
thereon shall refer to the regional planning commission, for its consideration
and report the following matters: the location of or acquisition of land for any
of the items or facilities which are included in the adopted regional master plan.
Within 20 days after the matter is referred to the regional planning commission or
such longer period as may be stipulated by the referring officer or public body,
the commission shall report its recommendations to the referring officer or public
body. The report and recommendations of the commission shall be advisory only.
Local units and state agencies may authorize the regional planning commission with
the consent of the commission to act for such unit or agency in approving, examining,
or reviewing plans, pursuant to ss. 236.10(4) and 236.12(2)(e).

(12) Local adoption of plans of regional commission; contracts.

(b) In addition to the other powers specified in this section a regional
planning commission may enter into a contract with any local unit within the
region under s. 66.30 to make studies and offer advice on:

1. Land use, thoroughfares, community facilities, and public
improvements;

2. Encouragement of economic and other developments.
Adoption of the recommended regional land use and transportation plans by the seven county boards and by the communities within each of the counties is only the first step in a series of public and private steps toward the ultimate implementation of the regional plans. While the development of land use and transportation plans for a large urbanizing region, such as southeastern Wisconsin, is an arduous, important, and necessary task, the implementation of these plans is an even more arduous and important task. The Regional Planning Commission, being strictly an advisory body, cannot actually bring about the development of the Region in accordance with the plans. It remains the responsibility of the counties and local units of government which comprise the Region, as well as of certain state and federal agencies of government concerned, to utilize the available plan implementation devices and, where necessary, develop new implementation devices and action programs to bring about regional development in accordance with the recommended plans.

The following series of six illustrations graphically depict five major steps necessary to implement the regional land use plan through action by local units of government. Figure D-1 shows a small area of the Region as it appears on the Proposed Regional Land Use and Freeway Plan Map attached to the inside back cover of this volume. The area shown lies almost entirely within one community, and the first step toward plan implementation by this community is the adoption of the recommended regional generalized land use plan as a guide to future land use development within the community. Figure D-2 shows an approximately one square mile tract of land within the community selected as an example for the execution of the remaining four steps in the land use plan implementation procedure at the local level.

Figure D-2 shows the selected approximately one square mile tract, comprising 634 acres, as it presently exists. A perennial and navigable stream flows in and out of the northwest quarter of the tract. Adjacent to the stream and within the tract boundaries are delineated the soils which have severe limitation for urban development as determined and mapped in the regional operational soil survey. The 10- and 100-year recurrence interval flood hazard lines have also been shown as determined and mapped in the regional watershed studies. Almost all of the land within the 634-acre tract is presently being used for agricultural and agriculture-related purposes with the exception of two non-farm residences. Some woodland area exists within the tract; but these areas have been used for pasturing purposes, reducing their value for commercial and aesthetic use purposes.

A major drainage basin divides the tract in a north-south direction, and slopes within the tract average approximately 4 percent. On the regional land use plan, the 634-acre tract is delineated as a planned residential development unit bounded on the north, east, and south by standard arterial streets and on the west by a regional environmental corridor. The regional land use plan recommends that the unit be developed for medium-density residential use.

The second step in the regional land use plan implementation procedure is illustrated in Figure D-3 and constitutes the interim zoning of the tract by the local unit of government as a holding action. All of the 634-acre tract would be placed initially in a zoning district in which no urban development would be allowed until a more precise plan for the tract is developed. More specifically, those areas of the tract covered by soils having severe limitations for urban development and those areas of the tract lying within the 100-year recurrence interval flood hazard line would be placed in a conservancy zone in which no urban development would be permitted. The remainder of the tract would be placed in an exclusive agricultural zone in which only agricultural uses would be permitted. Under this interim agricultural zoning, only the two non-farm dwellings would constitute nonconforming uses.

The third step in the regional land use plan implementation procedure would consist of the preparation by the community of a long-range community
LEGEND

- Low density residential (0.5-7.2 persons per res. acre)
- Medium density residential (7.3-22.8 persons per res. acre)
- Major retail and service
- Public airport
- Major public outdoor recreational site
- Primary environmental corridor
- Freeway
- Standard arterial street
- Park drive
- Neighborhood boundary
- Selected sample neighborhood (see figures D-2 through D-6)
Figure D-2
EXISTING CONDITIONS

LEGEND
- SECTION LINE
- QUARTER SECTION LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- 10 YEAR FLOOD WADERS LINE
- 50 YEAR FLOOD WADERS LINE
- MAJOR RIVER
- MAJOR WATERSHED BOUNDARY
- TOPOGRAPHY
- SECTION OR QUARTER SECTION MONUMENT
- STATE PLANE COORDINATE SYSTEM GRID TICK
- PAVED STREET

EXISTING DWELLING
EXISTING ACCESSORY STRUCTURE
WOODLAND
SOILS WITH SEVERE LIMITATIONS FOR URBAN DEVELOPMENT
Figure D-3
INTERIM COMMUNITY ZONING 1967

ZONING DISTRICTS

CONSERVANCY

CONSERVANCY
WITH FLOODPLAIN DEVELOPMENT RESTRICTIONS

EXCLUSIVE AGRICULTURE
land use plan as part of an overall community comprehensive planning program. This plan would seek to detail and refine the regional plan, integrating local and regional development objectives. Figure D-4 illustrates how future development of the 634-acre tract might be designated on the community land use plan. As indicated, the community plan designates the general areas within the tract to be developed for predominantly medium-density residential use and predominantly high-density residential use, as well as the general location of the park-school site and the neighborhood retail and service center. Also designated on the community plan are the community parkway proposals and the location of major streets. All of these uses are compatible with, and complemen-
tary to, the recommended regional land use and transportation plans.

Following the preparation and adoption by the community of a general land use plan, a precise neighborhood development plan should be prepared for each designated neighborhood within the community. The preparation and eventual adoption of such a precise plan becomes the fourth step in the regional land use plan implementation procedure and one of the first steps in the local land use plan implementation. Figure D-5 shows a precise neighborhood unit plan for the 634-acre tract prepared in accordance with the regional and community general land use plans (as illustrated in Figures D-1 and D-4). Table D-1 sets forth the

<table>
<thead>
<tr>
<th>Table D-1</th>
<th>LAND USE SUMMARY OF PRECISE NEIGHBORHOOD DEVELOPMENT PLAN</th>
</tr>
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<table>
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<tr>
<th>Medium-Density Neighborhood Development</th>
<th>Number</th>
<th>Acres</th>
<th>Percent of Total</th>
<th>Acres</th>
<th>Percent</th>
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<tr>
<td>GROSS AREA</td>
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<td>---</td>
<td>---</td>
<td>634.0</td>
<td>100.0</td>
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<tr>
<td>Persons/Acre</td>
<td>---</td>
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<tr>
<td>Dwelling Units/Acre</td>
<td>10.0</td>
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<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Persons/Square Mile</td>
<td>3.0</td>
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</tr>
<tr>
<td>Public Elementary School (K-6) Area</td>
<td>---</td>
<td>6.3</td>
<td>1.0</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Number of Classrooms</td>
<td>19.0</td>
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<tr>
<td>Number of Pupils</td>
<td>534.0</td>
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<tr>
<td>Public Park Area</td>
<td>---</td>
<td>45.0</td>
<td>7.1</td>
<td>---</td>
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<tr>
<td>Street Area</td>
<td>---</td>
<td>140.0</td>
<td>22.1</td>
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<tr>
<td>Minor Streets</td>
<td>---</td>
<td>(97.0)</td>
<td>(15.3)</td>
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</tr>
<tr>
<td>Collector Streets</td>
<td>---</td>
<td>(14.0)</td>
<td>(2.2)</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Arterial Streets</td>
<td>---</td>
<td>(29.0)</td>
<td>(4.6)</td>
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<tr>
<td>Other Public &amp; Semi-Public Area</td>
<td>---</td>
<td>5.1</td>
<td>0.8</td>
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<tr>
<td>Subtotal (Public Use Area)</td>
<td>---</td>
<td>196.4</td>
<td>31.0</td>
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<tr>
<td>Neighborhood Commercial Area</td>
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<td>8.9</td>
<td>1.4</td>
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</tr>
<tr>
<td>Private Park Area (Cluster Development)</td>
<td>---</td>
<td>23.5</td>
<td>3.7</td>
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<tr>
<td>Subtotal (Private Use Area)</td>
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<td>32.4</td>
<td>5.1</td>
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<tr>
<td>NET RESIDENTIAL AREA</td>
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<td>---</td>
<td>405.2</td>
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<td>Single-Family Area (Residential Acres)</td>
<td>---</td>
<td>383.0</td>
<td>60.4</td>
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<tr>
<td>Population</td>
<td>5,477.0</td>
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<tr>
<td>Number of Dwelling Units</td>
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<td>Residential Acres/1,000 Population</td>
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</tr>
<tr>
<td>Persons/Acre</td>
<td>14.3</td>
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<td>Dwelling Units/Acre</td>
<td>4.3</td>
<td>---</td>
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</tr>
<tr>
<td>Multi-Family Area (Residential Acres)</td>
<td>---</td>
<td>22.2</td>
<td>3.5</td>
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<tr>
<td>Population</td>
<td>877.0</td>
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<tr>
<td>Number of Dwelling Units</td>
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<tr>
<td>Residential Acres/1,000 Population</td>
<td>25.3</td>
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<tr>
<td>Dwelling Units/Acre</td>
<td>11.9</td>
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</tr>
</tbody>
</table>

* Represents 8.4 percent of total population.

Source: SHARP.
amounts of land within the tract allocated to each land use category by the proposed neighborhood unit plan shown in Figure D-5. Included in the table is an estimate of the population expected to reside within the neighborhood unit when fully developed.

The table shown compares closely with the standards for medium-density neighborhood development as shown in Table A-2, page 218, Volume 2 of this report, and restated in Table D-2. Two major differences in the recommended land use standards exist. Due to the presence of a major stream and attendant flood plain area within the boundary of the tract, the area devoted to public park land is greater than would normally be the case. Most of this public park land area would serve both the community and the Region; and, consequently, the total area would not normally be ascribed to purely neighborhood use. The second major difference between the standards and the proposed development is the addition of private park lands brought about by the proposed cluster development.

The additional public park land is the major reason for the reduction in total residential land within the tract. In order to maintain lot yields, this reduction necessitated, in turn, a reduction in lot area per dwelling unit within the proposed development from the recommended regional average of about 10,000 square feet per dwelling unit to an average of approximately 9,160 square feet per

<table>
<thead>
<tr>
<th>Table D-2</th>
<th>RESIDENTIAL PLANNING UNIT DEVELOPMENT STANDARDS FOR MEDIUM-DENSITY DEVELOPMENT</th>
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<td><strong>Medium-Density Neighborhood Development</strong></td>
<td><strong>Number</strong></td>
</tr>
<tr>
<td>GROSS AREA</td>
<td>---</td>
</tr>
<tr>
<td>Persons/Acre</td>
<td>10.2</td>
</tr>
<tr>
<td>Dwelling Units/Acre</td>
<td>3.1</td>
</tr>
<tr>
<td>Persons/Square Mile</td>
<td>6,550.0</td>
</tr>
<tr>
<td>Public Elementary School (K-6) Area</td>
<td>---</td>
</tr>
<tr>
<td>Number of Classrooms</td>
<td>20.0</td>
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<tr>
<td>Number of Pupils</td>
<td>546.0</td>
</tr>
<tr>
<td>Public Park Area</td>
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</tr>
<tr>
<td>Street Area</td>
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<td>Minor Streets</td>
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<td>Collector Streets</td>
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<tr>
<td>Arterial Streets</td>
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<tr>
<td>Other Public and Semi-Public Area</td>
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<tr>
<td>Subtotal (Public Use Area)</td>
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<tr>
<td>Neighborhood Commercial Area</td>
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</tr>
<tr>
<td>Private Park Area (Cluster Development)</td>
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</tr>
<tr>
<td>Subtotal (Private Use Area)</td>
<td>---</td>
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<tr>
<td>NET RESIDENTIAL AREA</td>
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<tr>
<td>Single-Family Area (Residential Acres)</td>
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<td>Population</td>
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<td>Number of Dwelling Units</td>
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<td>Residential Acres/1,000 Population</td>
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<tr>
<td>Persons/Acre</td>
<td>12.8</td>
</tr>
<tr>
<td>Dwelling Units/Acre</td>
<td>3.9</td>
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<tr>
<td>Multi-Family Area (Residential Acres)</td>
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<tr>
<td>Population</td>
<td>---</td>
</tr>
<tr>
<td>Number of Dwelling Units</td>
<td>355.0</td>
</tr>
<tr>
<td>Residential Acres/1,000 Population</td>
<td>32.0</td>
</tr>
<tr>
<td>Persons/Acre</td>
<td>30.2</td>
</tr>
<tr>
<td>Dwelling Units/Acre</td>
<td>9.2</td>
</tr>
</tbody>
</table>

* Represents 8.4 percent of total population.

Source: SEMIC.
dwellings for the development plan shown in Figure D-5. If the area devoted to private park
land were added to the total residential area as an integral part of the cluster development, the aver-
age land area per dwelling unit would be raised to about 9,690 square feet.

Shown in the development plan is an example of density buffering, with multi-family and two-
family dwellings serving as a buffer between single-family dwellings and retail and service
uses. The theory relating to such buffers is that multi-family residential structures adjacent to
retail and service uses can be rented or leased more readily than can single-family dwellings
adjacent to such areas and that two-family dwellings are compatible with both single- and multi-
family dwellings. It should be noted that residential blocks adjacent to arterial streets have been
designed so that residential buildings will face interior land access streets.

Also shown on the precise development plan is a neighborhood park-elementary school site located
within walking distance of every resident of the neighborhood. Collector streets, which provide
major access between the neighborhood and the community and the regional street and highway
network, are also shown. The street layout has been adjusted to the topography to provide proper
adjacent building site grades, as well as to facili-
tate storm water drainage and provision of gravity
drainage sanitary sewer service. Street grades
do not exceed 10 percent and average approxi-
mately 3 percent.

Figure D-6 depicts the final public step in the land
use plan implementation procedure by the com-
munity. Each property within the tract has been
zoned as development occurs in accordance with
the neighborhood, general community, and regional
land use plans. Further plan implementation
would, from this point on, rest with private devel-
opers proposing preliminary subdivision plats for
local review and approval prior to actual land
development in accordance with the plans.

In conclusion, it is important to note that, until
the land is actually developed and used in the
manner described, the plans cannot be considered
to be implemented. It is also important to note
that, while zoning is probably the best known
method of land use plan implementation, other
implementation devices, such as official map-
ing, subdivision regulations, community capital
improvement programs, surface and ground water
resource protection ordinances, sanitary sewer
and building codes, are also important elements
implementing regional and community land use
plans and should be utilized by the community.
ZONING DISTRICTS

- SINGLE FAMILY RESIDENTIAL
- TWO FAMILY RESIDENTIAL
- MULTI-FAMILY RESIDENTIAL
- CLUSTER MULTI-FAMILY RESIDENTIAL
- NEIGHBORHOOD BUSINESS
- PUBLIC PARK OR PARKWAY
- PUBLIC PARK OR PARKWAY (WITH FLOOD PLAIN DEVELOPMENT RESTRICTIONS)
- PRIVATE PARK OR PARKWAY
Soils Demonstration Site: In order to demonstrate the use of the detailed soil survey and interpretive analyses in local development practice, a soils educational program utilizing a demonstration site was jointly prepared and sponsored by the U. S. Department of Agriculture, Soil Conservation Service; the University of Wisconsin; the Waukesha County Extension Service, County Institutions, and County Park and Planning Commission; and the Southeastern Wisconsin Regional Planning Commission. This site is located on the Waukesha County Institutions grounds. Map 15 is a combined topographic base and soils map of the demonstration site modified by the removal of certain cultural features and the addition of hypothetical topographic and control survey data as necessary to make the map conform to good engineering practice. Five hypothetical alternative development plans were prepared for this demonstration site, two of which are presented in this chapter. Later chapters will examine three additional development plans. It is important to note that the illustrative examples in this Guide relating to the soils demonstration site are not intended to demonstrate the use of soils data in site selection, for some of the soils on the site are clearly not well suited to the illustrated uses. Rather, the use of these examples is intended to show that any particular given site may have soil limitations for any given land use and that these limitations should be recognized in the design process. Furthermore, it is recognized that nearly all soil limitations can be overcome in order to develop a parcel for a given land use, if there is the desire and the financial ability to do so.

Map 16 shows the soil limitations of the demonstration site for residential development served by public sanitary sewer. Less than one-fourth of the site is covered by soils having severe or very severe limitations for sewer residential development. The Ehler (212 and 213), Brookston (231), and Pistakee (328) silt loams have high water tables, frost heave hazards, poor drainage, and low bearing capacity characteristics and, if used extensively for residential development, would tend to result in wet basements and foundation problems. For these reasons, these soil types should be avoided, if possible, in the creation of lots during the subdivision design process.

A suggested sewer residential development for the soils demonstration site, along with appropriate neighborhood shopping, park and open space, and school sites, is shown on Map 17. This development plan recognizes the existence of the poor soil areas noted in the foregoing soil limitations map. Although many of the residential lots created contain some areas covered by unsuitable soils, nearly every lot contains enough area covered by suitable soils to permit proper building placement. One relatively large area of unsuitable soils has been accommodated by including it in a larger area designated for multi-family residential development. In this way, the residential structures can be grouped or clustered on the suitable soils; and the unsuitable soils can be retained in open-space use, while at the same time achieving the overall desired density pattern. A second large area of unsuitable soils has been suggested for use as a private recreation area. A third large area of unsuitable soils has been recommended for inclusion in a parkway and in an adjoining school site. It should be noted that there is sufficient suitable soil area on the school site to permit building placement.

The limitations of the soils of the demonstration site for light industrial and commercial development are shown on Map 18. About one-fourth of the site is covered by soils having severe or very severe limitations for such development. The Tichigan (42), Ehler (212 and 213), Brookston (231), and Pistakee (328) silt loams have a high water table, a high shrink–swell potential, and a low-bearing capacity. Several other soil types on the site have slopes in excess of 12 percent. Such slopes become a limiting factor for development of modern one-story industrial plant layouts.

Map 19 shows a suggested industrial-commercial development layout for the soils demonstration site that has been designed, in part, upon recognition of the soil limitations. The lots have been so sized and laid out as to provide a sufficient area covered by suitable soils on each lot for proper structure placement. Very large lots are suggested for areas of unsuitable soils. That portion of a lot covered by unsuitable

---

2 Further information about the soils demonstration site is presented in Appendix 1 of this Guide.

Source: SEWRPC Soil Guide

3 The development plans presented in this Guide differ slightly from those originally prepared under the educational program in Appendix 1.
Acting under an Interagency Soils Agreement, an educational program dealing with soils data and utilizing a demonstration site was established for southeastern Wisconsin. The detailed soil mapping unit boundary lines and soil code numbers have been placed on the topographic base map of the soils demonstration site shown above.
Map 16
SOIL INTERPRETATIONS FOR SEWERED RESIDENTIAL DEVELOPMENT
SOILS DEMONSTRATION SITE

Most of the soils demonstration site is covered by soils having only moderate, slight, and very slight limitations for normal residential development. The soils having severe limitations generally have problems associated with high water tables and may be carefully considered in the subdivision design process.
The above residential subdivision design for the soils demonstration site recognizes the existence of pockets of soils that have severe and very severe limitations for development even with public sanitary sewer service. In most instances, it is possible to design a subdivision layout that will result in the avoidance of the placement of structures on unsuitable soils.
About one-fourth of the soils demonstration site is covered by soils having severe limitations for light industrial and commercial development. Most of the problems of these soil types are due to such soil characteristics as high water table, high shrink-swell potential, and low bearing capacity. In addition, slopes in excess of 12 percent become a limiting factor when industrial and commercial development is proposed.
Suggested industrial-commercial development layout for the soils demonstration site is shown on the above map. Design considerations relating to soil conditions in this instance included the proper sizing of lots and the construction of a pond. In addition, steep slope limitations could be overcome through cutting, grading, and terracing.
The Commission has urged local communities to develop as a series of neighborhood units, with each unit being centered around an elementary school and park and being relatively self-contained with respect to the day-to-day needs of the family. The need to develop urban communities as a number of recognizable, individual cellular units rather than as a formless mass is partly a matter of aesthetics; partly a matter of good design; partly a matter of convenience in living and traveling within the urban area; partly a matter of efficiency in organizing and supplying public facilities and services; and partly a matter of bringing the size of the area in which a family lives into a scale within which the human individual can feel at home and within which he may take an active part in community affairs. The above map shows the preliminary recommendations for the development of neighborhood units within the City of Franklin, Milwaukee County.

Source: SEWRPC Annual Report 1969
The City of Franklin has adopted its first precise neighborhood unit development plan. This plan, the first in a series of such plans being prepared for the City by the Commission staff, was adopted by the City Plan Commission of the City of Franklin on November 12, 1970, and is shown on Map 1. The Commission has recommended that local units of government in the Region prepare and adopt such plans so that the urban areas of the Region develop as a series of recognizable neighborhood units rather than a formless urban mass. These units should provide all of the facilities and services required by the family within the immediate vicinity of its dwelling unit. This is partly a matter of providing a quiet, safe, healthful, and attractive residential environment; partly a matter of providing convenience in living and traveling within the urban area; partly a matter of organizing and supplying public services and facilities more efficiently and economically; and partly a matter of bringing the size of an area in which a family lives into a human scale, within which the family and its individual members can feel at home, and within which the individual can take a more active part in community affairs. In addition, the preparation and adoption of precise neighborhood unit development plans are considered essential to the proper design of individual land subdivisions so that these subdivisions can be properly related to features of community-wide concern, such as arterial streets and highways; to the internal requirements of the neighborhood unit itself; and to other land subdivisions.

Each neighborhood unit should have its own elementary school site, park area, church sites, and local shopping area. Its size should be such to provide housing for that population for which one public elementary school is required. The size, therefore, will vary with the size of the school, the development density, the ratio of public elementary school population to total population, and the desirable maximum walking distance to school. Each neighborhood unit should have isolating boundaries such as arterial streets, major parks or parkways, streams, or lake shore lines to separate it from other such neighborhood units. Its internal street pattern should facilitate vehicular and pedestrian circulation within the unit, but discourage penetration of the unit by through Source: SEWRPC 1971
CITY OF FRANKLIN—continued

Traffic. There should be one central feature or focal point, such as the school or park site around which the design is built, so that a person entering the area realizes he is entering an integrated environment. Such an arrangement of urban development is not only good aesthetically, but promotes a stable community, reduces the gross demand for travel, and minimizes the cost of public services and facilities.

The first neighborhood unit development plan adopted by the City of Franklin is for Mission Hills East located just west of the new Franklin Civic Center. Map 1 also shows a portion of the preliminary neighborhood plan for the Forest Hills Neighborhood, which contains the Civic Center. A variety of residential structure types are provided for in the Mission Hills East Neighborhood, including single-family and two-family or duplex dwelling units, low-rise or garden apartments, and row or town houses. The multi-family housing sites have been located in areas which have substantial concentrations of soils poorly suited to urban development even with public sanitary sewer service. The existence of these soils was recognized in the design of the neighborhood plan through the incorporation of areas covered by these soils into a network of open-space areas for the neighborhood. The plan also designates sites for a future elementary school and adjacent neighborhood park. The southern tip of the neighborhood is bounded by the proposed Belt Freeway. The needed right-of-way for this Freeway, together with an interchange of the Freeway with STH 100 and STH 36, is provided for on the neighborhood unit plan. This plan was adopted by the City Plan Commission after a public hearing on October 29, 1970, when residents and landowners in the area were given a chance to review and comment on the plan. Although not located within the Mission Hills East Neighborhood, the preliminary plan for the adjacent Forest Hills Neighborhood contains a reservation of land for a major retail and service center located at the future intersection of the Belt Freeway and STH 36. The precise mapping of this major retail and service center site reflects a location refinement of the major retail and service center recommended for development in this general area on the adopted regional land use plan.
CITY OF FRANKLIN—continued

Following adoption of the precise neighborhood unit development plan for Mission Hills East, the Common Council of the City of Franklin took two significant steps toward implementing that plan. The first step was to rezone land within the neighborhood to reflect land uses as designated on the neighborhood plan. The new zoning district map for Mission Hills East is shown on Map 2. This was adopted by the Common Council on April 7, 1971.

The second step was to prepare and adopt an official map for Mission Hills East. A portion of this map is shown on Map 3. It designates right-of-way lines and site boundaries of all streets, highways, and park and open-space areas in the neighborhood. Under the Wisconsin official map law, construction of any buildings, structures, or other improvements on land that has been designated for current and future public use is prohibited. The adoption of official maps is an important plan implementation tool in developing areas of the Region, since it provides a common basis for understanding between land developers, property owners, and public officials for future development of land, and avoids spending public monies unnecessarily to purchase structures which have been placed on lands needed for future public uses. The official map for the Mission Hills East Neighborhood was also adopted by the Common Council on April 7, 1971.

It is important to note in conjunction with the adoption of precise neighborhood unit plans and official maps, that all future development need not precisely conform with such plans or maps. If a land developer can show that an alternate design for a proposed subdivision will fit equally well, or better, into the overall neighborhood unit development plan, there is no reason why such development cannot proceed in accordance with the alternate design. Indeed, the Wisconsin Statutes provide that filing an approved subdivision plat automatically amends an adopted official map. Thus, if a developer in the Mission Hills East Neighborhood can show that his proposed subdivision design will fit into the overall neighborhood unit development in terms of land use, density, and collector and arterial street patterns, he may proceed under the normal
Map I
PRECISE NEIGHBORHOOD
UNIT DEVELOPMENT PLAN
MISSION HILLS EAST
NEIGHBORHOOD
CITY OF FRANKLIN

LEGEND

- SINGLE FAMILY RESIDENTIAL
- TWO-FAMILY RESIDENTIAL
- MULTI-FAMILY RESIDENTIAL
  (8 UNITS MAXIMUM PER NET ACRE)
- MULTI-FAMILY RESIDENTIAL
  (16 UNITS MAXIMUM PER NET ACRE)
- COMMUNITY RETAIL AND SERVICE
- MAJOR RETAIL AND SERVICE
- GOVERNMENTAL AND INSTITUTIONAL
- WATER (INCLUDING POTENTIAL STORM
  WATER RETENTION AREAS)
- RECREATIONAL, OPEN SPACE, OR
  DRAINAGE WAY (PUBLIC OR PRIVATE)
- PUBLIC RECREATIONAL
- NEIGHBORHOOD BOUNDARY

SOILS HAVING SEVERE OR VERY
SEVERE LIMITATIONS FOR URBAN
DEVELOPMENT WITH PUBLIC SANI-
TARY SEWER SERVICE

Source: City of Franklin and SEWRPC.
Map 2
ZONING DISTRICT MAP
MISSION HILLS EAST - NEIGHBORHOOD
CITY OF FRANKLIN

LEGEND

R - 6  SINGLE FAMILY RESIDENCE
R - 7  TWO FAMILY RESIDENCE
R - 8  GENERAL RESIDENCE UNITS
B - 3  BUSINESS

- CONSERVANCY AND OPEN SPACE AREAS - BUILDING RESTRICTED BUT AREA CAN BE USED FOR DWELLING UNIT DENSITY CALCULATION
- ZONING DISTRICT BOUNDARY
- - - DIVISION LINE IN R-8 DISTRICT FOR PURPOSES OF ESTABLISHING MORE RESTRICTIVE DENSITY LIMIT

Source: City of Franklin and SEWRPC
Map 3
PORTION OF THE OFFICIAL MAP FOR THE
MISSION HILLS EAST NEIGHBORHOOD
CITY OF FRANKLIN

Source: City of Franklin and SEHFC.
subdivision plat procedures, seek plat approval, and develop the land accordingly. The adoption of precise neighborhood unit development plans and official maps, then, provides a flexible guide which can be used by local plan commissions and governing bodies in making day to day development decisions. Without such precise planning and mapping, plan commissions and local governing bodies have no reference, or "point of departure," against which to measure the worth of individual land development proposals.

SEWRPC NOTES

1970 ANNUAL REPORT PUBLISHED

Publication and distribution of the Commission's 1970 Annual Report has recently been completed. The preparation of an annual report by the Commission is required by state law, and the report is intended to provide state and local public officials and interested citizens with a comprehensive overview of the Commission's work. The annual report also documents findings and recommendations of the continuing regional land use-transportation study pursuant to areawide planning requirements of federal highway aid legislation, and serves as an annual report to the sustaining funding agencies of the Commission, including the seven County Boards and such federal agencies as the U. S. Department of Housing and Urban Development and the state and federal Departments of Transportation.

The Commission's 1970 Annual Report indicates the full scope of the Commission work program. Because 1970 was a year for a federal decennial census, several significant inventories were conducted in that year to provide planning data compatible with and comparable to the census data. These included a new regional land use inventory and a new inventory of the location, capacity, and utilization of the existing arterial street and highway system. Significantly, the Commission during 1970 adopted two additional plan elements: a jurisdictional highway system
A Selected Bibliography

Abrams, Charles.
The Language of Cities. The Viking Press, New York. 1971

Allaire, Jerrold.

Argan, Guillio C.

Athanasiou, Robert and Yoshioka, Gary.

Bauer, Kurt W.

Bell, Wendell.

Berry, Richard.

Buttimer, Anne.

Caplow, Theodore and Forman, Robert.

Castogroli, Ferdinando.

Choay, Francoise.

Clark, W.A.V. and Cadwallader, N.

Columbus Neighborhoods.
Columbus Planning Department. 1973.
Crothers, R.J.
"Factors Related to the Community Index of Satisfactoriness."

Cunningham, James V.

De Jonge, Derk.
"Images of Urban Areas."

Dennis, N.
"The Popularity of the Neighborhood Community Idea." Readings in

Dewey, Richard.
"The Neighborhood, Urban Ecology, and City Planners." American

Feldman, Arnold and "Ijly, Charles.
"The Interaction of Social and Physical Space." American Sociological

Festinger, Leon.

Flowerden, R.T.N.
"Preference Rankings on Several Attributes: Application in
Residential Site Selection." Environment and Planning. Vol. 5,

Form, William H.
"Status Stratification in a Planned Community." American Socio-

Fraser, Douglas.
Village Planning in the Primitive World.

Fried, Marc and Gleicher, Peggy.
"Some Sources of Residential Satisfaction in an Urban Slum."

Freilich, Morris.
"Toward an Operational Definition of Community."

Fromm, Erich.
Humanistic Planning.
Gans, Herbert.  
"Planning and Social Life: Friendship and Neighbor Relations in Suburban Communities."  

Gibberd, Fredrick.  
Town Design.  

Giedion, Sigfried.  
Space, Time and Architecture.  

Goodman, Paul and Percival.  
Communitas.  

Greer, Scott.  
"Urbanism Reconsidered: A Comparative Study of Local Areas in a Metropolis."  

Hardoy, Jorge.  
Urban Planning in Pre-Columbian America.  

Harrison, James and Howard, William.  
"The Role of Meaning in the Urban Image."  

Hinshaw, Mark and Allott, Kathryn.  
"Environmental Preferences of Future Housing Consumers."  

Hiorns, Frederick R.  
Town Building in History.  
George S. Harrap and Co. 1956.

Howard, Ebenezer.  
Garden Cities of To-Morrow.  

Hunter, Albert.  
Symbolic Communities.  

Isaac, Reginald  
"The Neighborhood Theory - An Analysis of its Adequacy."  

"Notes on the Neighborhood Concept."  
inston, R.V.

Activity Spaces and Residential Preferences: Some Tests of the Hypothesis of Sectoral Mental Maps.


ller, Suzanne.

Urban Neighborhood.


owles, Eric.

oundaries Around Social Space.


mpl, Paul.

eties and Planning in the Ancient Near East.

ansing, John and Marans, Robert.

valuation of Neighborhood Quality.


 Corbusier.

he Radiant City.

ee, Terrence.

Urban Neighborhood as a Socio-Spatial Schema.

vironmental Psychology: Man and His Physical Setting.


ynch, Kevin.

he Image of the City.

aurer, Robert and Baxter, James.

Images of the Neighborhood and City Among Black-, Anglo-, and Mexican-American Children.


ead, Margaret.

'Neighborhoods and Human Needs."


ichelson, William.

'Urban Sociology as an Aid to Urban Physical Development: Some Research Strategies."


Mumford, Lewis.

From the Ground Up.
Harcourt, Brace. 1956.
Perry, Clarence.
The Neighborhood Unit.

Peterson, George.

Pyron, Bernard.
"Form and Space Diversity in Human Habitats - Perceptual Responses."

Reps, John W.
The Making of Urban America.

Town Planning in Frontier America.

Rosow, Irving.
"The Social Effects of the Physical Environment."

Saalman, Howard.
Medieval Cities.

Sanoff, Henry.
"Social Perception of the Ecological Neighborhood."

Schneider, Wolf.
Babylon is Everywhere.
Hodder and Stoughton. 1963.

Soleri, Paolo,
The Bridge Between Matter and Spirit is Matter Becoming Spirit.

S.E.W.R.P.C.


Revised Policy Statement on Local Community Assistance. 1968.

Spreiregen, Paul D.
Stein, Clarence.
Towards New Towns for America.
Reinhold Publishing Corp. 1957.

Steinitz, Carl.
"Meaning and Congruence of Urban Form and Activity."

Sweetser, Frank.
"A New Emphasis for Neighborhood Research."

Tannenbaum, Judith.
"The Neighborhood: A Socio-Psychological Analysis."

Tec-Search.

Wallin, Paul.
"A Guttman Scale for Measuring Women's Neighborliness."

Webber, Melvin and Carolyn.
"Culture, Territoriality, and the Elastic Mile."

Wisconsin. General Municipality Law. Section 66.945.
Creation, organization, powers and duties of regional planning commissions.

Wright, Frank Lloyd.
The Living City.

Yeates, M.
"The Congruence Between Housing Space, Social Space, and Community Space, and Some Experiments Concerning its Implications."