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A SURVEY OF THE PROBLEMS OF THE RURAL-URBAN FRINGE

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A THESIS

Presented to

the Faculty of the Graduate Division
Georgia Institute of Technology

In Partial Fulfillment
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Master of City Planning

By
Robert Allen Clark
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A SURVEY OF THE PROBLEMS OF THE BURAL-URBAN FRINGE

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The solutions suggested in the final chapter are entirely the author's views and should not be considered as in any way reflecting the opinion of the faculty of the school.

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SUMMARY

A SURVEY OF THE PROBLEMS OF THE RURAL-URBAN FRINGE Robert Allen Clark, Author
Prof. Howard K. Menhinick, Thesis Advisor

The primary purpose of this thesis is to make the rural-urban fringe understandable to the planner so that the planner can formulate policies for action in matters concerning the fringe. To accomplish this purpose, it was deemed necessary: (a) to analyze the development of, and reasons for, the growth of the rural-urban fringe as the area of new metropolitan growth; (b) to present and analyze the definitions and delineations of the fringe and its subdivisions—the urban, intermediate, and extended fringes; (c) to refine the definitions of the subdivisions of the fringe by describing their physical and social characteristics; (d) to present and analyze the physical and social problems of the fringe from the viewpoints of the rural interests, the fringe dweller, and the central city; (e) to investigate the place of governmental reorganization in metropolitan areas as a solution to fringe problems; and (f) to suggest a role for planning in solving fringe problems.

A literature search was made in order to assemble, review, and interpret research achievements in the academic fields—sociology, geography and political science—which have only recently begun to study the fringe as a special area. Because the rural-urban fringe is a

relatively new concept, much material has been drawn upon that does not make use of the rural-urban fringe idea. The planner needs a knowledge of diverse viewpoints so that he can present choices for policy decisions; consequently, certain somewhat academic or theoretical controversies are discussed in order to (a) prepare the planner who desires to review primary sources, (b) illustrate the early stage in formulation of theory and gaps in knowledge, and (c) present basic issues in the interpretation of facts of which the planner should be aware.

Issues of particular interest to planners that are discussed include: (a) the uniqueness of fringe land use and social patterns; (b) the reasons for fringe location, such as dissatisfaction with city life, to discover the desires of fringe dwellers which can be translated into planning policies; (c) the role of planners in alleviating social conflict in the fringe; (d) the origin of fringe problems in the lack of planning control and governmental disorganization in metropolitan areas; (e) the place of agriculture in plans for metropolitan development; and (f) zoning as a means of restricting the location of urban residence in rural areas.

A planning policy of concentration of metropolitan growth in physical, urban communities is suggested as a possible solution to some fringe problems. The use of zoning, land subdivision regulations, and other planning devices in guiding metropolitan growth is analyzed for legal obstacles. Rural zoning and planning experiences are reviewed for application to the extended fringe.

Recommended research projects emphasize the following needs:
(a) studies of migration within metropolitan areas that would relate

personality, reasons for migration, and social characteristics to physical environment of residence areas and evaluate the relative weight of personal reasons and technological forces in fringe residence and the directions which planning policies should take; (b) a study of past and current experiences in metropolitan and fringe planning to discover what policies the professional planners have for fringe growth; (c) a comparison and evaluation of the physical and social patterns proposed for metropolitan areas by the theoretists in architecture-city planning (such as Wright) and other fields to discover what values they may have for professional planning; and (d) a study of the adequacy of planning controls to accomplish planning goals and to solve problems in the fringe.

CHAPTER I

THE NATURE AND IMPORTANCE OF THE RURAL-URBAN FRINGE

The fringe, in this thesis, means the geographic area around a metropolis or central city in which the physical and social characteristics change from urban to rural. Most fringe areas grade almost imperceptibly from urban to rural. The outer limit of the rural-urban fringe must be determined arbitrarily for each metropolitan area; usually at the point where daily commuting to the city substantially drops off. The inner boundry is usually the limits of incorporated communities—especially the central city—although this is not an inflexible rule. The area between these limits is characterized by an intermingling of urban and rural features. This general definition of the rural-urban fringe is adequate for this thesis; for other purposes, varying definitions would be necessary.

How Has the Fringe Developed(1)

A general consensus places the date of the contemporary fringe about 1920 at the time of the adoption of the automobile in great numbers as a means of private transportation in urban areas when the auto became cheaper and more reliable, and roads improved, although as early as 1910 the Census recognized the growth of the city outside the political boundaries of the central city by setting up the Standard Metropolitan District. The political scientists focused attention on the problems of metropolitan growth in <u>The Government of Metropolitan Areas</u>(2) by a

Metropolitan Community (3) by R. D. McKenzie appeared. It has provided a foundation for the subsequent work of sociologists and ecologists in the metropolitan area. The word "fringe" in connection with metropolitan growth apparently originated in 1937 with Smith, (4) a sociologist, in describing the location of the rural non-village, non-farm population as it clustered around cities. (5) The word has been widely used since then in several fields. Recognition of metropolitan and fringe growth in the literature (6) has kept pace with the emergence of distinguishable trends.

Prior to 1890, the city had depended on pedestrian movements, horse drawn vehicles, and horse and cable cars for internal circulation. This tended to cause great congestion in the downtown business areas. The steam railroad enabled some fortunate people to settle in the villages through which the railroad passed and generations of commuters have been spending a goodly part of their lives in motion ever since. But at this time the central city and the suburban or satellite city or village had made only very gradual intrusions into the surrounding countryside. The border line between built-up areas and farmers fields was clear and definite.

In the era from about 1890 to 1920, electric street railways and electric interurban railroads enabled the city population to spread out although the skyscrapers concentrated more and more people downtown during working hours. For each saving in time and increase in traveling distance, the city could spread into a geometrically increasing area. As the radius of travel grew, the periphery of contact with rural areas

greatly grew. In this period, the city has been characterized as having the shape of a star: the steam railroads radiated from the city and had nodes or clusters of suburban towns along its route like fruit on the limb of a tree. The interurban also radiated out but spread its patrons even more widely than the steam railroad because the old interurban could be flagged at any footpath or crossroad.

When the cheap, mass-produced auto appeared about 1920, a new force was let loose. Up to this time, the city had been able by a slow, gradual process to annex the contiguous areas as they built up. The suburbanites usually had incorporated their pleasant villages. Now though, the automobile, and the paved roads on which to drive it, began to leap-frog city people out from the city to every site where a farmer would sell his pasture. The urbanites crisscrossed the expanded zone of access with roads which filled in the interstices between the iron radials of the steam railroad and the electric interurban railroad. And the interurban disappeared almost overnight in the face of the mobile bus which could adjust its routes to provide service to each new subdivision.

Since 1920 urban land uses have spread into a country-side that was once remote from the city. The distances from which people who work in the city and live either in the suburbs or the open country will drive to the city have become as much as 60 miles or more for the larger city. (7)

An explanation for the somewhat sudden violence of the appearance of the fringe has been suggested. (8) By studying subdivision activity. a characterization of the period since 1920 was developed. During the

1920*s, there was a great deal of subdivision activity—far in excess of needs—and, despite the growing numbers and popularity of the automobile, building continued close to the city limits although annexation had virtually ceased. During the depression the feverish subdivision activity was stopped and the building world collapsed; peripheral growth of the city continued, as the Census figures show (some central cities actually lost population) but there were more than enough lots in the fringe to meet needs. The FHA and other government stimulants to building were just beginning to revive building when the war came.

Some building continued and increasing evidence of the preference for location in all areas of the fringe appeared, especially in the more rural portions of the fringe. During the depression, certain experiments such as the resettlement projects and the Greenbelt towns combined with the back-to-the-land movement foreshadowed some current developments such as part-time farming and subsistence gardening, and well-designed, large scale residential subdivisions (such as the Levittown suburbs). (9) The end of the war saw the fringe population skyrocket. The government housing agencies and their policies encouraged the development of the present combination of subdivider-builder in which the house and lot are sold in one package. The mass-produced subdivision brought the city to the country as never before. Thus, the fringe really appeared as a major factor in the metropolitan pattern only after the Second World War.

Growth rates in the more rural and unincorporated portions of the fringe began to exceed growth rates in the central city and satellite urban places in the fringe in the 1930-40 decade. (10) Since the war, the settlement of the fringe has proceeded in unincorporated territory,

in small incorporated villages, and in older urban places within the fringe.

Reasons for Fringe Growth

Both physical and technological capabilities and forces, and personal reasons account for fringe growth. Neither group of reasons is an adequate explanation standing alone. The two groups should be considered together.

Fringe studies. (11) ---Many of the studies made of the fringe are based on interviews which include questions designed to elicit reasons for location in the fringe. In the responses to interview questions on this topic, personal reasons are intermingled with evaluations of physical conditions leading to fringe location. The interview techniques used have raised problems of eliminating biases in the results because of the wording of questions and reporting of responses. Reasons have been reported in the studies usually by principal reason. There appears to be a need for a better means of rating value preferences in such studies. The motives for movement into the fringe require a careful socio-psychological approach and investigation because fringe growth represents a major population movement which should be understood and explained, (12)

Undoubtedly, a wide variety of personal reasons and necessary physical capabilities are combined in each individual decision to move to the fringe. Some attention has been given to previous residence locations and experiences, income levels, and occupations as there is some correlation between such factors and reasons for fringe location. As it now stands we know, roughly, why people live in the fringe but no

attempt has been made to relate them, in terms of personality and social characteristics, to the residential areas from which they came. From the studies so far reported, it appears that a large proportion of fringe dwellers come from the central city but their exact relationship to the central city from which they came is obscure. And we have fewer studies of internal migration and reaction to urban living conditions within the central city than we do of migration to the fringe. It would seem vital that much more research be done, especially in the matter of migration from within the central city to the fringe. The development of personal case histories along the line of the life history in industrial sociology might provide valuable information. General reasons for fringe growth, (13) -- The fringe does present certain basic conditions for settlement such as a place to live, a location for daily commuting to work, and a source of land for development. What are the forces which provide a partial explanation for fringe growth? One is the automobile -- and paved roads on which to drive it -- and other inexpensive transportation such as the bus. Another is higher real incomes permitting home and automobile buying. A third is the extension to fringe areas of urban services (such as electricity, telephones, and water) and the availability of other conveniences (such as bottled gas). The shorter work day and work week leave leisure time for recreation and gardening. The decentralization from the central city of employment opportunities--both offices and industries--and shopping facilities has encouraged further movement to the fringe as business followed residence. The appeal of the countryside and its converse--central city congestion -- are other reasons. Cheaper living in the fringe has been stressed.

A growing number of over-aged, retired, and other workers subject to periods of unemployment, seek greater security by gardening and home ownership in the fringe. No attempt has been made here to evaluate the validity (or fiction) and the importance of these reasons.

Basic forces in fringe growth, (14)—What can be considered a primary explanation for fringe growth? General population growth, and industrial expansion and decentralization with continuing concentration of population in metropolitan centers are basic factors in fringe growth. The national trend appears to be one of continuing industrial growth around, if not in, central cities as the population grows and the proportion of the population engaged in agriculture declines absolutely and relatively.

Industrial decentralization to the fringe as a protection measure against atomic attack is gathering momentum. (15) Many planned industrial districts are being located now at the periphery of the urbanizing fringe at distances greater than ten miles from city centers for small cities and fifteen to twenty miles for the larger cities. This influence gives added impetus to a trend which has been evident for some years, but results in a greater separation of the plant and central city than would otherwise be desired. Location of industry is directed by this factor to suburban communities which can furnish utilities. The generalization still applies, however, that modern industrialism and urbanism march hand-in-hand as industrial needs require location in urban concentrations.

Modern industrialism calls for--and current planning practice recognizes--the separation of residence from work place. With this

separation and the relative instability of industrial employment, labor has tended to select the best location relative to multiple sources of employment so that residence relocation is not required when the place of work changes. Living in family groups, and with an increasing number of families having more than one worker, optimum location becomes even more important. But the automobile has tended to liberate workers in their choice of residence location. And each improvement made in bringing urban living standards to rural areas, increases the desirability of fringe location.

Journey to work studies (16) have shown apparent discrepancies in generalizations which may be accounted for in the possibility that the former locational preferences of the blue-collar worker and the white-collar worker have been changed by the flexibility which the automobile offers. The concept of the labor pool located near the factory may be obsolete. Similarly, there may no longer exist strong reasons for residence location at the city center. The general location principle might be phrased like this: the worker today needs a position of mutual accessibility which requires a combination of minimum need for commuting with maximum opportunity for commuting. (17) Fringe location appears to satisfy this principle in many cases although the limits within which the individual fringe dweller recognizes the operation of such a principle are very broad. (18)

Analysis of reasons.—Let us analyze in greater detail reasons given for location in the fringe. The analysis of metropolitan growth gives some of the apparent behavior but not a full explanation because the full explanation probably is based on more than the impersonal forces

of population growth, industrial expansion, and technical improvements in transportation.

The choice of residence location in the fringe may be based on the attractiveness of physical surroundings. Interview studies have reported such reasons as: liked looks of subdivision, desirable lot size, close to school, public transportation available, close to work, and near major highway.

Considerable argument has revolved around the importance of the post-war shortage of housing in forcing location in the fringe. Typical responses on choice of house varied from "best buy at time" and "liked house" to "forced to move" and "only place available." A parallel dispute has arisen over the reality of economy in fringe living. Such reasons as cheaper land and lower cost of housing have been given. The basic argument here is that the fringe dweller loses in commuting costs, lack of urban facilities, and low levels of service whatever he may gain in lower land, housing, and tax costs.

The escape from city taxes is frequently advanced as a reason for fringe location. A person who is unaware of what his tax dollar buys him can see little reason to keep paying high city taxes. Of course, some fringe dwellers realize what they are losing and realize that they may be paying a great deal more in the fringe for fewer services.

Other people give as their reason for moving to the fringe the lack of restrictions such as zoning, subdivision regulations, and building and health codes. This deliberate attempt to escape from fundamental public protective devices represents an aberration in American thinking.

Another motive which always opens up arguments is the fear of the

atomic bomb. It appears that the movement to the fringe outdates the "bomb" by many years. This reason seldom is given consciously as a reason for fringe location.

An important reason for fringe location with many implications has been much discussed. Fringe housing patterns repeat the segregation by class or income group of older suburbs. (19) There seems to be a desire to associate with people of similar backgrounds and to avoid the unknown—and therefore undesirable—neighbors of the heterogeneous city. Supporting reasons are the influence of friends and realtors who point out the neighborliness of certain areas, the deed restrictions which protect the area, and the status and prestige of home ownership in particular residential locations. In the face of problems preserving residential areas, particularly in fringe areas unprotected by public controls, the realism of such motives can be questioned.

The fringe is often characterized as a good place to rear children and as healthier than the city. The complement of these reasons is the reaction against the city as being too congested, too noisy, too dirty, etc. Almost all writers on the fringe mention these reasons.

Numerous writers also have pointed out that these reasons are unrealistic because the urbanization of the near-in fringe proceeds very rapidly. Houses are crowded in as the area builds up. There is a lack of school facilities and recreation space. And the effect of living in such an area of land-use contrasts, social disorganization, and conflict of interests on the personality of the child and the adult has not been assessed as yet.

Additional reasons, such as the nostalgia of persons of rural

background for areas having similar associations, have been advanced. This reason has implications of particular interest. The movement into the fringe comes from both rural areas—the centralization of rural people seeking urban employment—and from the central city and other parts of the fringe—decentralization. (20) How do the motives differ between the two groups? What is the pattern of movement—i.e., does the person moving to the fringe come in one long move or a series of shorter moves?

The security motive in opportunities for gardening in the fringe is given as a reason. Only a few fringe residents garden--fewer still successfully--but the reason is mentioned frequently. The gardeners of urban background without previous barming experience are as eager to try as are people of rural origin and the urbanites are as successful, on the whole, as their rural neighbors.

Is the fringe a reaction against urban life, (21) -- To supplement the basic factor of metropolitan growth as an explanation of fringe growth, we should ask if the movement to the fringe expresses a basic dissatisfaction with urban life. (22) The studies of the fringe have not investigated this question directly; however, the question has been raised often.

Is the fringe dweller a marginal person who has not been able to adjust to urban life and has not accepted urban norms? The marginal character of the physical aspects of the fringe suggests this. (23) Is the fringe dweller tied to the city by job interest but not in his sentiments and values? Is the fringe dweller a person with initiative who is actively seeking a new environment, physically and socially?

Here again simple generalizations are dangerous, but on the basis of what knowledge is now available, this migration would appear not only as a demographic phenomenon but as one related to the failure of the modern urban industrial world to provide for its members the kinds of satisfactions which as human beings they want for themselves and their families. The widespread romantic notion of the security, simple virtues and pleasures, the stable and satisfying social relations of country living is widespread. These beliefs are perpetuated by newspapers, magazines and movies; and the real estate promoter does not overlook them in his selling arguments.

Demographically, the fringe may appear as a natural expansion of the urban center. Psychologically and sociologically, it is a much more significant manifestation of deep insecurities in urban life. The movement to the land is not only a searching for fulfillment of a romantic dream but a flight from reality. Programs of public or private agencies that touch on the lives of these people, to be successful, must be framed within this understanding. (24)

In order to support the above contentions, much greater refinement in research into motives for fringe location would appear necessary. The physical evidence of movement and reasons discussed above do indicate dissatisfaction with urban life to some degree, but no attempt has been made here, or elsewhere, to measure the weight of tax savings against a seventy foot frontage lot, or to weigh a hope for neighbor-liness against the impersonality of apartment life. Perhaps our research tools lack such precision.

In the fringe adjacent to the city, the speed of growth and density of the new population produce not only urban settlement patterns but also the repetition of an urban culture within a short period of time. Although the commuter in the open country-side appears to have fewer ties to the city than the close-in fringe dweller, the failure of the commuter to develop a new pattern of social organization and activities independent of rural or urban patterns existing elsewhere indicates the lack of a real creative urge for new social arrangements. The fringe dweller well may be fleeing from the city but he apparently

lacks the power to achieve a goal greater than simple physical removal.

If he has other social and physical goals, apparently he can not achieve them without group action which has not developed.

The planner is troubled by the slowness of people to realize that many of their expectations of the advantages of fringe living are unrealistic. The fringe dwellers also fail to realize how seriously the problems associated with fringe growth affect and frustrate the realization of their hopes and expectations. The planner's job may be to help fringe people realize the desires they seem to express in the movement to the fringe. In discovering and evaluating these desires, the planner will need the help of professional personnel from relevent fields.

The Importance of the Fringe

The fringe has become the habitat of a large proportion of metropolitan population. (25) An analysis of the 1950 Census shows that,
nationwide, 57.7 per cent of the population of Standard Metropolitan
Areas is in central cities and 42.3 in the fringe areas outside the central cities. (26) The population growth outside the political boundaries
of the central city has been accompanied by many problems for the central city, the incorporated suburbs, and the unincorporated areas.

Problems of land-use maladjustment and social conflict are appearing in the rural-urban fringe in areas up to 60 miles beyond city limits and often overlap fringe areas of neighboring cities. The rural-urban fringe has been characterized as an area of haphazard land-use patterns, speculative land values, poor tax resources and special assessments, unregulated subdivision, and string development along highways.

These have resulted in idle land, declining agriculture, and hazardous travel conditions; all problems facing local governments with inadequate resources to solve them.

The central cities also are faced with many problems resulting from movement of population to the fringe. As industry, commerce, and residence leave the central city for the fringe, the tax base for support of city services is lost and facilities are under-utilized. The blighted areas of the city are left behind for a poorer city to redevelop. The city must provide certain services—such as police protection—to a day—time population which pays little or nothing directly to support them. Unplanned fringe growth makes it very difficult for the city to plan and provide public works and improvements which serve the metro—politan area. And with the exodus of city citizens, much of the cultural and civic leadership of the city is lost to the fringe areas.

Summary and Conclusion

To the planner, the fringe movement is a continuation of older patterns of metropolitan growth by accretion at the periphery with changes in growth rates between the suburbs, close-in, and open country-side areas stemming from the increased area of growth made possible by the automobile. The importance of the fringe will continue and grow as long as present trends continue in metropolitan growth. The increased numbers of commuters have created problems that did not previously exist in rural areas and have intensified central city problems. The fringe today represents an accelerated diffusion of population into the commuting zone around the central city but the differences between today's

pattern--and the motives for migration--and that of earlier periods seem to be matters of degree and not of kind.

CHAPTER II

THE DELINEATION OF THE RURAL-URBAN FRINGE

In the preceeding chapter, a broad definition of the rural-urban fringe was given. However, for further discussion, the rural-urban fringe will be divided into three subdivisions: the urban fringe, the intermediate fringe, and the extended fringe. The previous chapter introduced the idea of differences between the close-in fringe adjacent to the central city and the open country-side portions of the fringe. These ideas were used in the discussions of the role of the automobile in opening up the commuting zone for settlement and discussions of dissatisfaction with city life as an explanation of fringe growth.

The Subdivisions of the Rural-Urban Fringe

The purposes of the subdivision of the rural-urban fringe into the urban, intermediate, and extended fringes are to account for differences in residential patterns and densities, for the presence of other types of urban land uses, for the apparent succession of stages in change or transition from rural to urban characteristics through time between subdivisions, and for differences in physical and social characteristics and problems between subdivisions. It is hoped that their usefulness will become increasingly evident as the thesis is developed.

The division of the rural-urban fringe into subdivisions is based on a modification of ecological theory. The concentric circle theory has been applied to the fringe. (27) The principal merit of such

a theoretical foundation for the subdivision of the fringe is as a thinking tool and as a means of bringing order into the seeming chaos of land-use and social patterns in the fringe. Of course, wide deviations from any such theoretical pattern are to be expected when the theory is applied to an actual situation. The research worker dealing with the fringe will find that the heterogeneous and mixed nature of physical and social characteristics in the fringe calls for close attention to variations from the theoretical patterns both within the rural-urban fringe of a particular city and between the fringes of different cities.

Two additional general remarks should be made on the definition and delineation of the fringe and its subdivisions before the subdivisions are discussed in detail. First, we should note that fringe definitions for sociological studies usually exclude all incorporated areas because incorporation tends to reduce and bring under control problems which are considered typical of the fringe. (28) For some purposes of the political scientist, the public administrator, and the planner, the exclusion of incorporated areas from the fringe may be useful. However, for other purposes, these professionals will be equally concerned with incorporated areas in the fringe and the relationship of the fringe areas to all forms of government in the metropolitan area.

The second point which should be discussed here is the complication of the delineation of fringe subdivisions by the presence of the isolated but compact development of an urban character within the extended and intermediate fringe. Usually, as in the Census definition of the urbanized area, boundary lines of the urban fringe have been

extended along the highways leading to such areas in order to bring them within the urban fringe or urbanized area but only if they are within a certain distance of the outer limit of the urban fringe or urbanized area. (29) Otherwise, they have been considered as a part of the fringe area in which they are located. In such a case, the isolated urban area should be carefully treated so that it does not confuse or bias study results.

The urban fringe, -- The urban fringe is virtually indistinguishable from the older portions of the metropolitan area. The principal differences are the recency of subdivision and development, and the lack of municipal government. The urban fringe is the area of new dense growth of the metropolis.

In the future, the Census definition and delineations for the urbanized area will probably be used by most researchers to delimit the urban fringe. The Census definition of the urban fringe is based on the definition of the urbanized area. The urbanized area is defined as "one or more cities of 50,000 or more and all the nearby closely-settled suburban territory, or urban fringe." (30) The urban fringe is defined as "that part of the urbanized area which is outside the central city or cities." (31)

Future studies can use the Census definition of the urban fringe because the Census definition closely parallels the concept of the urban fringe as used herein and elsewhere. The "urbanized area seems not to be an area where urban and rural life are mixed, but a relatively mature area with a dominant urban pattern of living, an *urban fringe,* just as they put it. The rural aspects of the fringe are thereby excluded."(32)

Delineations of the outer boundary of the urbanized area made by the Census and delineations made of the inner boundary of the intermediate fringe could be compared in order to test the validity of the above statement. The Census geographer has delineated urbanized areas for almost all cities with a population of 50,000 or more. Future studies will save time and money if these Census delineations can be used.

The urban fringe is the area of most acute fringe problems because of population density. However, the differences in problems and characteristics between the urban fringe and the intermediate fringe are differences of degree; and any decision on boundaries is a choice between marginal differences. Population density standards such as those used by the Census are particularly necessary for delineating the boundary between the urban and intermediate fringes in order to avoid wide variations of judgement in locating this boundary.

No separate studies have been made of the urban fringe; it has usually been included in studies covering both the urban and intermediate fringe. The Park Forest study (33) -- a study of a planned suburb of Chicago--is perhaps closest to an urban fringe study and indicates the highly urbanized nature of the urban fringe. Anderson (34) suggests that Martin*s study (35) may approximate a study of the urban fringe more than a study of the intermediate fringe. Parts of the urban fringe could be characterized by calling them Levittowns, unincorporated cities springing up in previously rural areas.

The intermediate fringe, -- In this thesis, the intermediate fringe has been designated in order to avoid the confusion of terminology surrounding the area next to the urban fringe which is in transition from rural

to urban. This area has been called the rural-urban, (36) limited, (37) urban, (38) and rurban fringe, (39) and the suburban zone, (40) by other authors. This author prefers to reserve the rural-urban fringe title for a broader idea because of the general understanding within the planning field of the rural-urban fringe as the commuting zone surrounding metropolitan cities which encompasses the urban, intermediate, and extended fringes.

The intermediate fringe is conceived of as an area in transition. The inner boundary would be the outer limits of the urban fringe, however it might be delimited. Urban land uses would predominate on this border. Between the inner and outer boundaries would be an area of mixed and intermingled urban and rural land uses. The outer limit would be at a point where rural land uses—including waste land and wooded areas—predominate. From the standpoint of a grouping of problems, the planner would lump together the urban and intermediate fringes although the intensity of such problems would grade from the city limits to the farm—rural border.

The extended fringe.—The idea of an area called the extended fringe is relatively recent. (41) A somewhat similar area has been described as an area of rural residences, (42) and as the outer limits of the commuting zone. This area is the outer area of penetration of the open country-side by the commuter using the automobile. The extended fringe presents problems of rural planning in the counties surrounding a metropolis.

Most cities probably have an extended fringe although the depth of the area will vary with commuting radius which seems to depend to

is based on the automobile at present although changes in transportation may change the limit. The area is not destined to become highly urbanized in the foreseeable future; the area will remain predominately agricultural with scattered rural residences of people having urban employment. The inner limit of the extended fringe would be the outer limit of the intermediate fringe.

Delineation Methods

The various methods of delineation that have been used were developed primarily by rural and urban sociologists. The sociologists' purpose has been to study the social characteristics of the population of the whole fringe or particular sub-areas. In order to segregate the population which he wished to study, the sociologist developed delineation methods based on land use and other characteristics. Most studies are based on interviews taken from a sample of the fringe population.

The land-use characteristics of the fringe are incidental to the sociologist except as he desires to relate them to social attributes. The planner is equally interested in the areal incidence of land-use characteristics and of population or social characteristics. The studies reported should help the planner to conceptualize and understand both aspects of the fringe.

At least five methods of delineation have been used by various researchers. They are: (a) choice of area by selected statistical measures derived for minor civil divisions—such as townships—or other geographic units—such as sections; (44) (b) delineation of the fringe on the basis of physical inspection and reconnaisance; (45) (c) selection

of particular areas considered as typical of the range of fringe characteristics (usually three or more areas are chosen); (46) (d) use of Census areas such as urbanized areas and standard metropolitan areas; and (e) choice of other areas such as a county. (47) Usually, more than one method is used; they are not considered exclusive.

Minor civil divisions.—Certain factors, such as land value per acre, population density, and percentage of population in the rural non-farm category, have been mapped by minor civil divisions. At a certain point at which the values of the factors seem to indicate a decisive break the boundary line is established. (48) The principal disadvantage is the lack of suitable units in some states which can be used for the purpose. With this method, study areas are not comparable from state to state. One consideration—which may or may not be a disadvantage—is the possible change in the boundaries of political units from time to time. On the one hand, such changes would affect comparability; on the other, they might reflect the changes in fringe conditions.

Field inspection.—This method is often used in combination with the above method which serves as a pilot study to make the cruder determinations of the general limits of the study area. Field inspection then proceeds to set exact boundaries. Such field inspection techniques are familiar to the planner as he is accustomed to land-use mapping. This method requires good base maps, selection of land-use characteristics, training of observor, and good and consistent judgment in field decisions. Aerial photographs are very helpful in field and office work when using this technique. Anderson's thesis (49) is virtually a manual for delineations and includes a list of information to be mapped as an

aid to field decisions.

The field reconnaissance method has been combined with delineation by minor civil divisions to aid in sampling the whole fringe with limited personnel and funds. The sample can be selected from each division. Reporting by minor civil divisions can help to point out differences between various areas within the fringe area being investigated. Typical areas. -- Much of the criticism of individual studies is based on the use of areas within a fringe that the investigator has chosen as typical of the fringe as a whole. Unless a clear method, using adequate sampling safeguards is set out, the results of such studies will be biased, and biased in unknown respects. However, for descriptive purposes, typical areas have some merit. Segregation in land use, settlement, and housing patterns are observable features of most fringe areas; social segregation is also evident when population characteristics for typical areas are compared. The use of typical areas might be of great value if the entire study area were delineated and then divided into more or less homogeneous subareas -- typical areas.

Census methods.—The ease in using the areas which the Census has delimited already, the urbanized areas and the standard metropolitan areas, may make other methods too costly and difficult by comparison. Supplementary interviews based on a sample selected from the Census areas could furnish any additional material required, without going through the process of applying other methods. However, as has been discussed, the urbanized area approximates the urban fringe only. And the standard metropolitan areas cover county-wide areas that very grossly approximate the limit of commuting (50) and therefore encompass the

whole rural-urban fringe. In order to make precise studies of the areas of the intermediate and extended fringes, the Census delineations are not applicable.

Specialized studies.—Special purpose studies that investigate particular aspects of metropolitan growth and change in rural areas have been reviewed for this thesis. The common preference in such studies is to use areas such as the county, New England town, or township in investigating particular topics. Such studies are not based explicitly on the fringe concept but examine such related phenomena as "suburbanization" and social participation in rural areas.

Delineation methods for planners, -- The planner is interested in both studies of the whole fringe (in which results are lumped together, obscuring differences) and studies of the three subdivisions and typical areas. In broad studies, the Census material would be the easiest to use, especially if special analyses can be obtained that give breakdowns within the county units. Census material recommends itself to the planner because of its availability. The presence of incorporated areas within the fringe can be eliminated by manipulating Census material.

For precise studies of the three subdivisions, it appears that field inspection supplemented by the use of minor civil divisions is necessary. The boundary line can be drawn wherever the phenomena under observation stops, not just at a political or land survey line. A fringe boundary as delineated one year will probably be invalid by the next year due to new development; a political boundary usually does not change to match population and land-use changes.

The planner will find studies of typical areas useful also; particularly if the area is not confused with an average area-supposedly typical of the whole fringe-but is considered as an area typical of a particular phenomenon. The typical area corresponds to the planner's use of the neighborhood area when referring to social or physical areas within the city. It can serve the same purpose by serving as an area for zoning study, school and playground planning, etc., when plans are being brought down to this scale for precising of details.

Summary

The rural-urban fringe and its three subdivisions—the urban, intermediate, and extended fringe—are useful explanatory devices and helpful ideas around which thinking can be organized. At this early stage in their development as thinking tools, the delineation methods are open to experimentation. For the planner, a knowledge of delineation methods will help in understanding the various studies and perhaps suggest techniques which he will find useful in his work, particularly if a fringe study is undertaken.

CHAPTER III

THE PHYSICAL AND SOCIAL CHARACTERISTICS AND PROBLEMS OF THE FRINGES

This chapter is largely descriptive of the physical and social characteristics of the fringe and its subdivisions. In order to help the reader visualize the fringe, its land-use features have been organized and roughly grouped into groupings considered typical of fringe areas. Eccause the planner should know with whom he is dealing in the fringe, the population characteristics, especially features considered by some as distinctive of the fringe, are described. Many of the studies of the fringe have indicated the relationships of population to housing and settlement patterns; this chapter reviews these relationships briefly.

The intermediate and extended fringes are areas in which rural people are mixing with urban people. We have an excellent opportunity to observe the process of urbanization of the rural person and to study the social processes of accommodation, acceptance, conflict, and cooperation. The planner has interest in these processes because of their importance in local government and the acceptance of planning. An understanding of people and land-use in the fringe furnishes a basis for analyzing fringe problems and may suggest ways to solve them. In the concluding section of this chapter, the effect of physical conditions on satisfaction with residence location in the fringe is discussed because of its importance as a guide to planning action.

Physical Characteristics of the Urban and Intermediate Fringes (51)

A list of land uses associated with the fringe reads like a planner's nightmare. Land uses considered typical are: "hot dog" stands, billboards, farmers' wayside stands, drive-in theatres, and filling stations; taverns and night clubs; tourist cabins, tourist "rooms", motels and trailer camps; platted and developed but unbuilt subdivisions, part-time farms, shack towns, country estates, summer colonies converted to year-round use, vacant farm land, speculative subdivisions, and vast areas of good new housing; nuisance industries such as slaughter houses and junk yards; cemeteries; public utility plants such as sewerage works, radio stations, and airports; and golf courses and country clubs, city parks, private camps and schools, religious institutions, and fair grounds and carnivals. Many of these uses have been pushed out of the city and may have moved one or more times before arriving at their present location.

On a metropolitan scale, the fringe appears to be in constant flux. Symptoms of this flux are: (a) the breakdown of the simple scheme of agricultural zones around the city, (b) the filling of the interstices between the radials of road and rail routes; (c) the decline of small rural centers and the widening of service and trade areas for remaining centers; (d) the concentration and congestion of traffic at centers; (e) the gradual absorption of satellites and suburbs into the urban agglomeration; (f) the spread of the urban mass which engulfs industrial areas located along the belt-lines and along the valleys and ridges which rail lines follow; and other changes in the broad land-use and transportation pattern (especially the construction of expressways).

The urban fringe. -- Physically the urban fringe is a part of the central city. In the urban fringe the new residential subidvisions, planned industrial districts and shopping centers, and other urban land-uses related in function to the central city are predominant. In some cities which have kept pace with fringe growth, the urban fringe may be entirely within the city limits and would therefore not be considered as an urban fringe for delineation purposes, unless it was desired to extend the intermediate fringe boundary into the city limits for a particular study purpose. The Census defines the urban fringe in this respect as the portion of the urbanized area lying outside the central city or cities. The age of structures and relatively dense settlement pattern are the main physical characteristics of the urban fringe. The intermediate fringe. -- In the intermediate fringe, the pattern of settlement usually follows principal access roads. The settlement of the intermediate fringe begins with string developments along the highways; the interstitial areas are filled later and gradually assume the characteristics of the urban fringe as open spaces are filled.

Extending for miles into the country-side, the "hitch-hike" land-uses along the roads and highways develop in the string or linear pattern. Commercial development in this string pattern cuts traffic carrying capacity by interfering with smooth traffic flow as cars enter and leave the highway in doing business with these land-uses. Growth also proceeds at each major intersection or crossroads because of the concentration of potential customers. Similarly, residential development strings out along highways, especially where water lines follow the highway, and groups at crossroads.

In the interstitial areas, the filling-in process proceeds slowly because residential subdivisions—the largest user of land—tends to skip over certain areas because of difficulties of topography, excessive land costs, and refusals to sell farm or other lands for subdivision purposes. This spotty pattern produces problems of providing public services; there is a danger that services will be either over— or under—utilized because of the unpredictability of the density of development and even land—use type.

Residential development tends to be segregated as in other urban areas. Typical residence areas are: (a) the well-designed subdivision of the upper income groups, with housing of substantial construction and advanced design, often with deed restrictions and a property owner s association to manage its affairs; (b) the moderate income, FMA subdivision, on a good site, fairly well-designed; (c) the low income areas, with some successful experiments in design but far more often butchered or made up of odd-shaped lots or metes-and-bounds lots from a farmer's road frontage fields, with no public utilities, and both good and bad housing including the self-built home, the cellar dwelling, and the conversions of trailers and trolley cars; (d) the tourist cabin and trailer camp type of development, often on a very poor site; (e) the shacktown or Hooverville with some substantial homes but often merely squatters tin-roof and packing case huts which often adjoin a railroad. nuisance industry, or a low income subdivision; and (f) the summer colony with its cottages converted to year-round-use, often on a waterfront, and subject to varying fates in terms of maintenance and improvement of housing conditions. Many of the farmsteads in this area

are being used for part-time farming operations.

It is in the intermediate fringe that small rural villages expand their shopping facilities as they develop into suburbs. Local shopping centers develop in some of the larger subdivisions. Here are located the markets for the stock and produce of the surrounding farms. Large commercial dairies, run by the big companies, operate in the intermediate fringe and consolidate the holdings of the small farmers. Certain businesses which serve the whole metropolitan area have relocated here from the central city and tend to choose a location at a road and rail center. In some cases, these commercial, wholesale, and industrial uses form planned industrial districts or regional shopping centers. These uses require large amounts of relatively cheap land. The sites are picked carefully and can greatly influence the highway needs.

The rural interests and suburbanites both react vigorously to the dumping of undesirable uses and nuisance industries in the intermediate fringe. These uses are forced out of the incorporated areas by zoning and seek the unprotected areas of the fringe. Slaughter houses, wholesale or bulk oil storage yards, junk yards, trailer camps, night clubs, and carnivals are typical of these unwelcome uses.

The intermediate fringe is also the location for many of the recreational, public institutional, and public utility facilities that serve the central city. Among the recreational uses are forest preserves, public parks, resorts, amusement parks, and the golf and country clubs. The pressure on recreation space is usually so heavy that all riparian rights on existing bodies of water have been pre-empted by private ownership. The public agency often has to purchase land at

high prices and create a lake artificially in order to serve the general public. The farmer finds his property rights violated by the hunter and fisherman and the picnicker so he posts his land. The airport, sewerage and water plants, cemeteries, hospitals, and other public institutions are often found in the fringe where they create little islands of city property.

Social Characteristics of the Urban and Intermediate Fringes (52)

It has not been possible to separate clearly the social characteristics of the urban, intermediate, and extended fringes because of problems within the literature. However, generalizations made will be qualified as far as possible in the interests of precision. The materials drawn upon for this study are from varying sources and approaches. Fringe studies of both typical areas and the combined urban and intermediate fringe have been reviewed.

Martin*s criticisms (53) of both fringe and related studies indicate limitations on the usefulness of these studies. These criticisms are: (a) inadequate attempts to relate empirical findings to theory (particularly the theory of human ecology); (b) an absence of comparable study areas because of wide differences in delineation methods; (c) inadequate statement and treatment of hypotheses in studies which merely mass simple descriptive statistics and report surveys of typical areas; (d) inadequate sampling procedures at all levels of investigation—choice of fringe, subareas, and interviewees; and as a result, (e) there is an inadequate basis for making broad statements about the area studied.

The physical and social characteristics of the extended fringe will be treated together in a later section because no studies have been made of the extended fringe as such. Information has been gathered from studies of suburbanization, of part-time farming areas, of rural social organization, and of rural and urban participation in organizations in order to establish the physical and social characteristics of the extended fringe.

Can the planner benefit from the wide range of studies available if Martin's criticisms are valid? The weight of numerous studies—even though they may be unsophisticated methodologically—does support certain broad descriptive generalizations. Areas of disagreement and agreement will be pointed out here. The dangers in further generalization from the original sources are recognized, and avoided, it is hoped. Is the fringe demographically unique.—The sociologists have divided their field broadly into rural and urban sociology. The principal basis for this split is the use of an explanatory device, the rural—urban continuum or scale, which sets rural people and society at one end of the scale and urban culture at the other end. In an attempt to define the place of fringe society on this scale, three hypotheses have been advanced:

(1) The rural-urban fringe represents a position on a continuum within a single rural-urban distribution. (2) The rural-urban fringe represents an overlapping of two distinct distributions—the rural and the urban—providing a scrambled confusion within the area of overlap. (3) The rural-urban fringe represents a third distribution with some characteristics of both the rural and the urban, but with some new ones found only in the fringe. (54)

These hypotheses are really concerned with the intermediate fringe, and possibly the extended fringe. Although such a discussion may appear

to be completely academic, the planner would find that his approach to fringe problems would have to be changed if a new population group is developing in the fringes.

What are the unique factors that some sociologists see that would support the third hypothesis—the fringe as a third distribution? Within the overall heterogeneity of the fringe population, the following characteristics appear to be distinctive to the fringe: (a) the fringe population lives in family units with very few single people or non-family households; (b) the families are young with a higher number of school age children than either the urban or rural populations; (c) there is an unusually high percentage of home ownership; (d) the families are newcomers to existing communities; and (e) the family is filling roles and functions that vary from urban and rural experience. (55) At this point, the uniformity ends. The newcomers come from all levels of the economic, occupational and social scales and are of widely variant backgrounds, religious affiliation, and ethnic groups.

Are these unique factors explainable in a manner that relates them to previous experience and opens them to question as being unique historically and socially? The migration of family units, and the building and buying of homes seem to be related. Most single persons rely on conversions and apartments for shelter; therefore, in an area of new single-family homes—in an era when home ownership and the single-family home are eulogized and the government provides the means of acquisition—it seems obvious that fringe characteristics would result. Has this not been the pattern for many decades in suburban areas? The principal change from pre-war patterns has been the availability of new

housing for lower-income groups. The fringe is as popular with the blue-collar worker as it is with the executive today.

The pattern of single-family living with a mass of school age children is repeated as much in the Levittowns—which have been characterized as one-class urban communities of the stuffiest sort—as it is in the more open fringe. The settlement pattern in the urban and intermediate fringes segregates housing by classes just as in the city and incorporated suburbs.

That newcomers to the rural-urban fringe are settling in established communities—both rural and urban—is not argued; however, does
it not appear that the newcomers begin to dominate and soon replace the
established community with urban institutions instead of developing a
new set of institutional arrangements? Where a large subdivision is
developed in the country-side, it develops an urban pattern of life
largely independent of established communities; sometimes separate incorporation results. Only in the extended fringe may we have a unique
situation—one which will vary widely with the characteristics and relative numbers of the newcomers and the population of the established
community and one which has not been reported as developing any radical
changes in social arrangements.

Population and family characteristics.—Because of the difficulties in generalizing from the varying studies which are based on Census analysis, interviews, and observations, the information to be presented in this section has been limited greatly. The studies reported devote much attention to social characteristics and differentials between fringe dwellers including such information as: previous employment, residence

history, and background of the wife and husband; reported reasons for migration; income, occupation and general status; experience in housing, utility, transportation, and other costs of fringe location; religious affiliation and church activity; age, sex, birth and death rates, and other vital statistics; and family life and kinship patterns. Many studies attempt to correlate and to interrelate these factors.

The urban and intermediate fringes generally show a heterogeneity of population characteristics that is typical of urban populations. The age-sex pyramids of these two fringes closely resemble those of other new suburbs and newly developed areas within the city. The farm population in the urban and intermediate fringe is lost when statistics are generalized. The presence or absence of a sizeable number of industrial workers in the close-in fringe probably varies with the size and character of the city, and the location of industries in the fringe.

The age-sex distribution shows large groups of young parents in the 26-40 age group and young children in the 1-15 age group. Many of the families are "founding" families--newly formed--or "expanding" families--in the child-bearing stage. The fringe family may be developing a new family form; changes are appearing in reproduction and family roles, in the proximity of family members, in a greater number of functions for each family member, in a greater degree of courtship control, in the increase of influence of older members of the family, in a larger family size, and in high birth rates and birth orders, (56) The fringe family has been characterized as a matriarchy because the commuter-father spends so much time away from the family in travel and work, (57)

The newcomers moving into the fringe from rural areas are differ-

ent from decentralizing urban people. (58) Rural families are usually later in the family cycle when they move to the fringe and are of lower economic status. The rural in-migrants are a small proportion of fringe population.

Social characteristics by housing and settlement patterns.—Most studies make an attempt to relate housing cost and condition with the class or status of the residents. Housing costs and condition are especially important because there is a high rate of home ownership for all income groups. In evaluating housing and neighborhood conditions, future studies should make use of the APHA survey; present procedures are very crude.

Most groups in the fringe engage in gardening but the skill, results, and proportion vary by income group. It seems that the higher income groups are more successful, perhaps because of the advantages of better education which enables them to utilize effectively the advice of newspapers, books, and experts, (59)

The segregation of residential areas by class is not as precise in the fringe as it is in the city, probably because of the fluidity and high turnover of population, and the newness of areas which have not acquired particular prestige group symbols. In the extended fringe, and in the more open areas of the intermediate fringe, there are greater contrasts in housing quality because of the piece-meal development. A one room shack may be located across the road from an estate. It is the continuation of such contrasts into the period of full development that produces land-use problems for the planner.

What are some typical housing and social groupings? The local

business and professional group is usually of local origin, has a high income, and is a relatively stable resident group. They have newer homes, with inside toilets and baths, and keep the home and grounds in good condition.

Another group of high status families is relatively transient.

These are the young, white-collar families with modest incomes, of non-local origin. They live in good but modest homes and have two or three young children.

The skilled and semi-skilled workers in industrial employment live under varying housing conditions. Although their incomes may fluctuate, they are a fairly stable group of local origin. This group tends to have many young children too.

In the rural slums--fringe areas with poor housing--live many of the marginal workers--largely unskilled--or people newly arrived from rural areas. Many of the migrants to the metropolis settle in these areas in trailer camps and other makeshift housing and move into better quarters after finding employment and improving their skills. Many of these people try subsistence farming but lack the skill and flexibility to adapt to the demands and difficulties of intensive gardening.

These very broad generalizations will probably apply to most fringe areas. However, the planner will be as interested in the variations that the area he is studying demonstrates as he is in the similarities. Further studies of fringe areas should be able to demonstrate which variables and characteristics are related to such features of the central city as size, geographic location (regional differences), industrial base or function, and influence of governmental organization.

Physical and Social Characteristics of the Extended Fringe (60)

The first point of invasion of the rural areas by the commuter was the village. The seasonal resident might have been attracted to the village which was served by either road or rail lines that facilitated commuting. After establishing year-round residence, the urge developed to settle in the country. As the rural road network was improved with paving and after the coming of the gas station, the feasibility of rural living greatly increased for the urbanite. The commuter bought up old farmsteads and began converting barns and schoolhouses into living quarters. The switch to part-time farming by many rural-farm residents accompanied this process. Each of the small towns that had a local industry tried to capture other industry and local non-farm employment grew.

Each small town or city of under 50,000 has developed a fringe of its own that interrupts the extended fringe of the metropolis. The area is primarily an area of residential invasion of agricultural areas. Industrial, commercial, and other urban land uses are largely confined to the metropolis and the urban and intermediate fringes. Parks in the extended fringe are likely to be state parks rather than city or county owned. Agricultural land uses predominate and even part-time farming is usually on a commercial rather than subsistence basis. Some of the farms are run as show places or country estates where profit from production is not the major goal.

Of importance to the social organization of this area is the relative proportion of farmers, native villagers, local rural non-farm and commuter population. The commuter, if he is a large group propor-

tionately, will tend to accelerate the urbanization of rural life and probably generate conflict in local affairs. If the commuter family in the extended fringe has the same general age-sex pattern as the intermediate fringe family, the commuter family will contrast greatly with the rural people as the adults in the rural family tend to be older than the national average. The addition of the children of the commuter family to the rural school age population will have important effects in increasing size and changing requirements for rural school facilities. Future studies of the area here called the extended fringe should provide the types of information that other fringe studies have developed for the urban and intermediate fringe.

Physical Problems of the Urban and Intermediate Fringes

The physical problems of these areas of the fringe are problems of: land use; (61) land speculation; (62) facilities and services; (63) and declining agriculture, part-time farming and subsistence gardening. (64) Obviously, the problems overlap and are interrelated but they are treated separately in order to facilitate discussion.

Land use problems.—The confused land use pattern of the fringe is a major problem. Certain elementary segregations of land use occur between residential areas and industrial areas for example but this elemental segregation is deceptive. There is a substantial amount of undesirable intermingling of land uses. The presence of a single store in a residential block is sufficient to depress housing and land values along that frontage. Even when protected by deed restrictions, residential areas find poor developments located along their borders which reduce the value of the better development and slightly increase the value of the surrounding poorer development. Even the best of industrial

and commercial areas need some sort of buffer between them and other uses in order to preserve values. Poorer grade commercial and industrial developments present health and safety hazards for residential areas. The growth in the fringe of the so-called rural slum raises grave problems of replanning and redevelopment even in the newest areas of our metropolitan areas.

The confused land use pattern also makes the provision and planning of services and facilities virtually impossible. With no indication of future types and densities of development, problems of over or under capacity are sure to result in the provision of highways, public utilities, schools, and other facilities.

Land speculation.—The problem of land speculation is far from a dead issue. Although the excesses of pre-war periods have tended to be absorbed and not repeated, we still find vast areas of land blighted by obsolete platting, diversity of ownership, and deterioration of existing structures and site improvements. Presumably, there is still a large pool of undeveloped vacant land either in premature subdivisions or unplatted vacant land. Although the emphasis has changed in the postwar period to the development of lots for the purpose of building homes, a glance at county records will demonstrate a vast amount of subdividing in both lots and acreages. This activity is still far in advance of needs.

In the past, the periods of speculative activity were not closely related to other movements of the economy. The usual process of subdivision speculation was based on the speculator who performed the initial act of subdivision. He would either sell out to a promoter (who

might be either a developer or another speculator), or sell off the lots himself. The final step, if all went well, was the appearance of contractors and builders. Many of these older subdivisions obtained public improvements either from the city or from special districts. In either case, the lot buyer was faced with paying for these improvements through both general taxes and special assessments. During the busts which followed the booms, widespread tax delinquency and tax abandonment occurred. Owners lost their property, the governments lost part of their tax base, and the banks were faced with defaulted mortgages and municipal and district bonds. The cycle became more and more destructive when owners abandoned their land because the tax burden was shifted to those still trying to hold their land. Local governments and special districts suffered greatly; in New Jersey, for example, many townships simply dropped large areas from the tax rolls because the state required a certain yearly sum from pieces of property that had not yielded revenue to the townships for years. (65) Other illegal acts were performed by local governments in other states in order to relieve pressing situations when needed changes in legislation were not made.

The poor quality of the existing stock of subdivided land forces new subdivision. The available lots of suitable quality are consequently appearing farther from the city. Large areas, often with water, sewerage, streets, and other public improvements and both within and without the city limits, have been skipped over by building development. A large investment in municipal improvements has been lost in these areas and maintenance costs continue until the day when all hope of utilization is abandoned. Services to the areas of new subdivision beyond the

area of blighted vacant land are expensive because of the distances involved in extending them. Although utilization of building lots shows a more uniform pattern than the spotty and bunched pattern of subdivision activity, building development occurs at inappropriate places because dead subdivisions often occupy the most suitable and appropriate locations.

Besides the waste of existing improvements and increased costs of extending services to outlying new developments, fringe development causes general waste in the under-utilization of the facilities and services of the central city and the duplication of these in the fringe areas surrounding the central city. Past speculative activity and further fringe developments are partial causes of the long journey-to-work, the lack of suitable housing near town and near industry, and the lack of suitable sites for industry,

Services and facilities.—The growth of an urban population in previously rural areas creates a demand for new and vastly increased services and facilities. However, the fringe dweller does not seem to demand with consistency the same type or level of services that he had in the central city. This lack of demand for certain services is difficult to explain. Apparently, the average city dweller has very little idea or appreciation of the wide range of services available to him. Consequently, he does not miss them in the fringe. It is little wonder, therefore, that the fringe dweller resists governmental developments and improvements unless he has a pressing need for these services.

The health and sanitation problems of the fringe give the health, public works, and other public administrators their greatest source of

alarm. The fringe dweller, himself, very seldom seems to worry about open dumps, polluted streams, and overflowing septic tanks; probably because we have not had a major epidemic in recent years. The experts discuss these problems in the very gravest of tones.

In the fringe, water is probably the public utility which is the first supplied. Yet many areas have no public water supply despite relatively high densities. Coupled with the lack of public water is the lack of public sanitary and storm sewerage systems. The well-built septic tank is really an exception; all too often a privy serves the fringe family. The lack of sewerage is often combined with conditions of stream pollution and the inundation of low-lying areas in which housing has been built. In the fringe are also found the nuisance industries which have been forced out of the city by health, zoning, and building regulations. Such industries are often major contributors to air and stream pollution.

Other problems of public health exist. Open dumps and garbage are often found along the roadside in fringe areas. The overlapping boundaries of governmental units make such simple precautions as human and animal quarantine difficult. Where there is no one to support budget requests, such programs as a school health program are hard to establish and maintain.

The most disheartening facet of these problems for the planner is the certainty that some of these areas will become blighted—future slums—if they are not already. Although the housing may be new, there may be serious deficiencies. The costs of installing utilities in the future is a serious threat to the financial stability of the unit of

government that falls heir to the task of bringing these areas up to urban standards. A simple comparison of fringe area conditions with the "Basic Principles of Healthful Housing" of the American Public Health Association (66) should give the fringe dweller cause for reexamining his decision to leave the city. Although the fringe dweller escapes some undesirable city conditions, many of the fringe conditions are a greater menace to the individual. The municipality is specifically organized to meet the problems described above. Planning controls, especially subdivision regulations, have been devised specifically to control many of these problems before they arise. In certain sections of the city, similar slum problems exist which planners and other public agencies are only beginning to be able to rectify. With more such areas coming into being, the backlog of public problems grows.

Although the fringe is far from a nest of crime, the lack of police protection is a serious hazard. Conflicting jurisdictions provide ideal circumstances for the criminal. Fire protection is usually lacking or inadequate. Insurance for the fringe dwelling calls for a very high rate which might be equal to much of the city tax rate. Other such niceties as street lighting, traffic control, and street cleaning are missing.

Although the fringe dweller often expresses the idea that the fringe is a good place to raise children, this is true only if he is sending them to school in the city. Fringe school facilities are apt to be inadequate, teachers salaries low, and high school and adult education programs either lacking or below modern standards. This situation is largely due to the inability of the rural school systems to

keep up with fringe growth because of the lack of an adequate tax base and the unprepared and conservative school boards. Recreation and library facilities share the same fate unless the county or the city provides such services. A particular problem is the subsidization of rural high schools in the fringe by the city when the county uses city tax returns to support a separate county school system.

Another group of problems with which the planner is concerned is the provision of streets, highways, and expressways. The fringe areas require a new system of roadways: radial routes to provide access to the periphery and circumferential routes to provide circulation around, and between points in, the periphery. The cross-haul of cummuters adds to traffic flow and complicates the traffic pattern. In attempting to provide much needed facilities. all too frequently we find the central city, other local governments, the county, and the state engaged in a four-way struggle over routes and responsibilities. It hardly seems necessary to repeat the numerous discussions concerning the suffocation of arterial streets by uncontroled growth which dumps ever-increasing traffic loads into them at the same time that multiple access and roadside developments are cutting traffic capacity. At the same time, congestion increases downtown and mass transit can not serve the fringe because development is too scattered. The commuter now commutes by car instead of by train, thereby increasing traffic loads. The factories and stores of the downtown areas move to the fringe to escape congestion and to follow their labor and market. Each such move eases downtown congestion but increases traffic loads--especially trucking--on inadequate rural road systems.

Even the private public utility firms find it difficult to serve the fringe adequately. Telephone, electric, and gas lines all need a certain density of customers to make the extension of service possible. With fringe growth unpredictable and scattered, such services are withheld or are provided at greater expense than in the city.

Other professional and commercial services may be lacking. It is difficult for the small village store to stock the vast array of goods that the big city store does. A doctor may be hard to get even in an emergency. And when the pump for the well stops, the fringe dweller has the problem of obtaining service because servicemen dislike the loss of time in travel and often charge a premium.

These problems should not be exaggerated but they are quite real, even within incorporated areas which are better equipped to handle them than the usual township or county government. In the urban fringe, many of the services and facilities of urban life may be available but from several different sources such as townships and special districts. Many fringe dwellers realize that fringe life may cost them much more than city life in terms of expenses and conveniences. Services and facilities always bear comparison of quality and costs. However, the growth of the fringe continues in the face of these problems which are only vaguely recognized by the residents of the fringe.

The decline of agriculture. -- Agriculture has not been able to maintain itself as a land use in the fringe. Agricultural land has been forced into idleness by farm assessment policies of county and rural governments. The entire commuter area is feeling the speculative rise in land values -- and assessments -- occassioned by scattered demands for land

for residential purposes. No one knows where the commuter will buy a single lot or where a subdivider will develop a large tract; but speculative values attach to all suitable farm properties even where no one knows that future development will justify such values. The British planners have called such values "floating" and "shifting" values. (67)

The commuter and subdivider have realized the attractiveness of rural life under modern advantages in the mechanized rural community. The rapid growth in rural areas, especially in a scattered and noncontiguous manner, has resulted in the necessity of providing public facilities and services above the level of rural demands. Rural governments have resorted to changing assessments and increasing tax rates to finance the new demands. With ordinary tax levels, the farmer is able to meet tax charges and support a rural level of services. But when the farm is excessively assessed or taxed, the farmer may be forced to sell.

The oft-suggested solution for the farmer of shifting into other crops which make more intensive use of the land is not as feasible a means of increasing farm income as it once was. Today the very crops to which the fringe farmer might shift are being brought to market from distant areas at competitive prices due to revolutionary changes in the transportation of farm crops.

The farmer also faces a shortage of farm labor due to the high wage rates obtainable in urban employment centers. Again, the shift to crops requiring less labor is denied. Some farmers can intensify production and keep their farms, especially if they are on the best lands. However, many are forced into retirement, part—time farming, or urban

employment. Few receive enough payment for their farms to buy farms in other locations.

This situation is considered particularly unfair to the farmers. Although it is difficult to justify farm assessment rates for farms isolated among subdivisions—especially where water and sewer lines are available—the situation is particularly unjust in the open country—side. The scattered subdivisions in the open country—side raise the assessments on neighboring farms even though these subdivisions may be years in reaching complete utilization and may represent only a small portion of land in the total land use pattern.

Many of the farms on the fringe of the urban areas have been owned for a long time by the same families. They do not wish to be denied the advantage of the increase in value of their farms that might be forthcoming if subdivisions with facilities should come within reach of their farms. (68)

However, when forced to sell prematurely, the speculative buyer reaps in a short time the harvest of increased values which, under normal growth in the metropolitan areas, represents a long period of waiting. In many cases, no speculator can afford to hold the land for development either. The tax charges are capitalized so that the farmer receives only a portion of the value of the land that will attach to it when development occurs.

The principal objections to policies with respect to agricultural land in the fringe are: (a) the destruction of the tax base and farm incomes by forcing agricultural land into idleness; (b) a loss of agricultural production which, while not serious from the standpoint of quantity, raises the price of agricultural products as efficient agricultural producers are forced out of production by artificial handicaps;

and (c) the disorganization of rural life and dislocation of farmers without any conscious effort to ease the transition and find new employment or farms for these people.

Part-time farming with limited commercial production is one means of transition for the farmer. The commuter is more likely to engage in subsistence gardening than to attempt commercial production. Part-time farming faces many difficulties because of the inability of the farmer to devote full-time to his farming; his primary responsibility is to his non-farm employment.

The experiences of the resettlement program (69) point up the problems of subsistence gardening and part-time farming. Small acreages of less than three acres are usually best. It has not been determined whether such plots should be located in communities or scattered among commercial farms. If scattered, problems of utility services, community life, management of project, and sharing of heavy equipment arise. Such developments should have enough population to form communities large enough to support a high school.

In the unplanned growth of the present, the principal shortcomings of individual attempts at part-time farming and gardening have been: (a) settlement of these people on poor land for agricultural production; (b) lack of knowledge about farming methods and resistance to aid programs by those who need it most—the lower income, unskilled industrial employees; (c) the willingness of urban people to gamble on subsistence farming without adequate resources or background; (d) the need for some outside income to meet needs other than food greatly limits the supposed security of such living; and (e) the prior claims

of non-farm employment on time and energy which causes instability in the scale of farm activities. The principal planning problem is finding a suitable location which provides soil of adequate fertility, ease of travel to urban employment, and low land costs. The planner should co-operate closely with the extension workers in developing programs to meet the needs of these people.

Physical Problems of the Extended Fringe

The differences between the extended fringe, and the urban and intermediate fringes, in terms of problems, are not great although physical problems in the close-in fringes affect a much greater number of people. The physical problems of the extended fringe are centered around particular facilities and services such as schools, recreation, and fire protection. However, the rapidity with which problems have appeared in the extended fringe and the slowness of rural and village people and institutions to adjust to changes have resulted in social problems and conflicts that overshadow the physical problems that are the cause. The growth of population in the extended fringe represents the reversal of a long decline of the village and rural populations and is consequently all the more difficult for these people to adjust to. If the rate of growth in the rural portions of the rural-urban fringe continues to increase and the extended fringe becomes more highly urbanized, the problems of the entire fringe area will become equally acute. With the constant increase in the use of the automobile, such a development is conceivable. The limit of the intermediate fringe would become then the commuting limit.

Social Problems and Conflict in the Fringe (70)

In general, this section will deal with the problems of the extended fringe and the intermediate fringe. The problems of the urban fringe are largely tied to questions of governmental organization and social organization in the one-class communities which are representative of the suburban areas. The urban fringe falls into the realm of urban sociology; we are concerned more in this section with the physical and social disorganization of the fringe in areas of mixed urban and rural features.

those of the extended fringe? In the intermediate fringe, rural communities are being submerged by urban development and the area is being turned into more suburbs. This thesis has assumed so far that the extended fringe does not face conversion into a dense urban mass. However, the extended fringe has been so little studied that its fate is not clear. It is not known whether 5,000 urban people spread over 500 square miles in the extended fringe will produce the changes that another 5,000 urban people spread over 50 square miles in the intermediate fringe seem to produce. Perhaps the difference between the two areas can be explained this way: in the intermediate fringe urban people dominate and have gained control of local institutions while in the extended fringe a conflict is taking place in which control may belong to either the rural or urban people, or a third arrangement may be developed—the issue is not yet resolved.

The breakdown of rural life. -- Traditionally, there has been a split between farm and village life. The farm people have been relatively homogeneous in religious orientation, ethnic origin, and social norms except for such differences as good and poor soils and farming success might make. The villager was more specialized and lived in a social structure with more complications. However, the farmers and villagers tended to form an integrated social system of old families which controlled a static social, economic, and political life.

Farm life was centered around the family size farm and the farm community. The rural community was idealized by security, neighborliness, and homogeneity. There was much sociability, centered around the rural church and school.

However, both the farm and village have been affected by fringe growth. In the rural areas, mechanized agriculture has forced changes in the traditional family farm. The self-sufficient farm has changed to commercial production. The poorer lands early became idle and the better lands were consolidated into larger holdings. The poorer lands have been sold to a growing number of non-farm residents. The new residents have tended to make the farmer feel crowded out and the old pattern of open country communities has collapsed with nothing to replace it except an increasing orientation to the village. In the intermediate fringe the invasion may have been so great that not even the farms on the best lands and on dirt roads far in the backreaches of the country-side can be farmed. High property taxes, the lack of farm labor, and the movement of young people and possible heirs out of farming can very quickly destroy farming.

The villages tend to disappear or to grow and change. Those that grow have become trade centers with gas stations, a few new stores and larger stocks in the old ones. The professional and other services

have become more prosperous. Urban people tend to settle first in the villages and then spread into the country-side. Coupled with the re-orientation of farm life to the village, the traditional differences and distances between the village and rural populations have tended to disappear. It has been suggested that this new centralization on the village offers an opportunity for the reorganization of rural areas facing fringe problems. With problems in the villages and rural areas now very similar, the two can be combined as a political unit and meet their problems together.

Areas of social conflict.—The change in population density and characteristics, and the decline of the traditional agriculture economy and community have upset the rural institutions which guided rural life. Rural interests have tried to resist changes in order to delay or discourage the influx of urban commuters. Rememberances of such past problems as depression time relief for the unemployed industrial workers reinforce rural opposition to a new population which will make demands resulting in tax increases.

One of the first points of conflict is the school system. In rural areas many school districts are too poor and small to support a modern school. Children are sent often into other school districts on tuition, particularly for high school education. When population grows in such rural districts, there is no way to meet the increase in school children because the local districts may never have handled their own affairs beyond the collection of taxes that were passed on to another district over which they had no control. In many rural areas, high schools fail to provide home economics, agricultural or other vocational

courses and provision for adult education is usually non-existent. However, there is an increasing demand for better programs, especially by the non-farm resident. Demands for the use of school plant for such purposes as public meetings and summer-time recreation lead to conflicts with the conservative-minded rural school boards. The consolidation of rural schools and the establishment of regional facilities are often resisted because such regional facilities are seen as an attack on local interests.

The churches of the fringe are also an area of conflict. Many rural churches have clung to a traditional theology. If they refuse to assimilate newcomers and change their theology and program to meet modern thought and needs, they face declining membership as the rural population declines. New churches often are built to serve the new fringe dwellers because of the resistance of the old churches to the newcomers.

In the political and community affairs of the villages, the old leadership group can ease or oppose the transition from rural to urban conditions. The old leaders see the newcomers as a threat to their status and prestige. The change in village life is often reflected in the formation of a chamber of commerce or a volunteer fire department. Entrance of newcomers into such organizations as the local Rotary and their election to offices are a sign of assimilation of the new group. The transition is usually painful for the established leaders and the old villagers but after the period of transition has been passed through, they find that their lives have been improved by the vigor of the newcomers who are often instrumental in obtaining such community improvements as playfields and swimming pools. As the fringe develops,

the suburban village often finds itself engaged in a two-way struggle to resist the encroachment of the city--in the form of unwanted industries for example--and to capture more land from the surrounding rural areas--which leads to annexation fight.

Group organization and participation. (71) -- In the fringe, there is a tendency for farmers and commuters to stay apart because there are few organizations in which both are interested. Rural organizations are based on community interests and social-educational purposes, and are rather inflexible. Urban organizations are based on special interests and purposes, largely socio-economic, fraternal, or social. Rural people are not interested in organizations formed for purely social or recreational purposes; their moral or value orientation is opposed to such non-utilitarian organizations. Rural people are also less interested than urban people in politics and problems. The urban person in the fringe does not feel accepted by the native population. He is not closely tied to either the city or the country and feels little connection with the local area. Participation in organizations is never very large in any area relative to the population but urban people tend to participate more than rural people. The part-time farmer, particularly, shows less participation than other groups, probably because of the heavy work demands on his time.

It appears that with the urbanization of rural people by changes in agriculture, improvement in rural living standards, and the influence of the automobile and improved means of communication such as radio and the telephone, the number of specialized organizations in the fringe and rural areas have been growing. The disruption of rural life has des-

troyed the old community of interest so that each new problem breeds a new organization to handle it. Urban people furnish most of the impetus for forming new organizations; rural people show little leadership. The growth of special interest organizations indicates the lack of consensus and mutual awareness of common values and problems that has developed. The urban person in the fringe has not adopted the rural pattern of neighborliness; urban patterns persist in such social relationships as sharing of gardening tools. (72)

Resolving social conflicts.—Through experience it has been found that people can be reached through the organizations which they establish. Anyone working in the fringe should learn the organizations that form channels for reaching fringe and rural leadership. There will be wide variations in social organization in any area, based on historical social patterns which in rural areas are greatly influenced by land and agricultural patterns.

It appears that village and rural leadership find it easier to accept the wealthy who settle in their area; probably because they bring their wealth to the area, rebuild old homes, and don*t attempt to participate in local affairs. On the other hand, the lower income in dustrial worker is resented and not understood by rural and village people. In the attempt to relieve conflict and tension, the middle income groups may be easier to merge with local groups.

Social conflict occurs and social organization is destroyed at the extremes of wide differences in values. Social organization can also be destroyed when there is little awareness of differences and apathy results. The former situation appears to be true of the fringe

areas. The newcomers in the middle income groups are eager for acceptance and have experience in leadership, more so than the high or low income groups of urban people. They will be willing to work hard to harmonize differences with established leadership and rural people.

The single-purpose groups, or groups with broad community purposes, that exist or can be formed in rural communities may serve to merge the two groups because agreement can be gotten on common values and programs of common interest. In the fringe, urban people living there will work with city people in single-purpose organizations better than will the rural people moving into the fringe.

Adjustment to Location in the Fringe

By adjustment to location in the fringe we mean satisfaction with fringe living conditions. Most studies report a high degree of satisfaction with location in the fringe and a desire to remain in the fringe. Satisfaction is influenced by good physical facilities such as bus transportation to city, nearness to schools and recreation sites, easy access to good shopping facilities, etc. Martin has made the most rigorous test of satisfaction with fringe residence. He derives the following conclusions from his study.

- (1) Although a wide variation of attitudes exist, in general the population of the rural-urban fringe is very well satisfied with residence in the fringe.
- (2) While the extent of accessibility of the residence location to the city center may be important in individual cases, in general it is not a crucial factor in satisfaction with residence location in the fringe.
- (3) The roles and statuses of the individual in the community are important factors in adjustment to residence location in the fringe. (4) Conditioning during earlier periods of life to non-urban residence is conducive to satisfactory adjustment to the rural-urban fringe, while lack of such conditioning tends to be associated with

unsatisfactory adjustment.

- (5) Adequate living facilities with modern conveniences tend to be associated with favorable attitudes toward the rural-urban fringe, while lack of such facilities tend to be associated with unfavorable attitudes.
- (6) The reactions of the individual fringe resident to a specific residence situation tend to become generalized as his attitude toward the entire fringe area as a place of residence. (73)

These conclusions are highly generalized and Martin is very careful to indicate the limitations of his tests for statistical validity.

The adjustment of the farmer to urban invasion has not been specifically recorded. It is presumed that farmers cling to farming as long as possible. If a good price can be obtained for the farm, the farmer may relocate and buy another farm. Others may retire. Part-time farming as a temporary adjustment has been discussed previously. Future studies should devote attention to the adjustment of the farmer; present studies lose the farmer in the mass of fringe dwellers.

Satisfaction and adjustment to fringe location are probably based on the degree to which the desires, expectations, and needs of relocated family are met. The discussion of the first chapter on the reasons for fringe location pointed out the question of dissatisfaction with urban life. Our review of the physical and social characteristics and problems in this chapter seems to indicate and support the conclusion that the fringe is not meeting satisfactorily either physical or social needs, at least in the eyes of the expert. Certainly the planner can hardly feel that the fringe is an improvement over the city in many physical respects. And the social desires for a sound home life, improved home relations, and a sense of belonging do not seem to be fulfilled if the above descriptions are correct. Yet the studies do show a large

measure of satisfaction with fringe conditions. Future studies should be directed at resolving these differences between the view of the expert and the individual. It may be the function of the planner in this situation to educate the fringe dweller to the problems around him, to help the fringe dweller formulate his goals, and to work towards the achievement of these goals and the resolving of these problems.

Summary and Conclusions

The urban and intermediate fringes do not appear to be unique historically in either land use development or social characteristics. The extended fringe may develop a new set of social arrangements but there is no sign yet that unique social characteristics are developing there. Instead, it appears likely that the extended fringe will tend to develop characteristics similar to those of intermediate fringe. The physical problems of new population growth in previously rural areas are understandable to the planner.

The social conflicts in fringe areas are solvable if local leadership is available and willing to cooperate with the newcomers to ease tensions in the period of transition. All persons working in the fringe areas should be aware of the channels by which rural people and fringe dwellers can be reached and influenced. They should encourage the development of organizations which will help assimilate rural and urban people.

High satisfaction with fringe living is not a sure indication that problems do not exist or that the hopes and expectations of fringe dwellers have been realized. Very competent investigation is needed to resolve this question.

CHAPTER IV

METROPOLITAN AND FRINGE GOVERNMENT

Government has been relied upon to meet problems involving the public welfare. In the fringe we have seen the failure of local governments to provide services and facilities, to control land use and subdivision, and to meet other emergent problems of population growth in rural areas. In addition, much of the fringe population is not represented by any local government. The lag in political adjustment to expanding urban ways of life is the root cause of fringe problems. (74) Because the fringe areas will become a part of the city eventually, fringe problems should be solved or prevented. With demands on all levels of government increasing, there is no indication that fringe problems will decrease or be alleviated in the near future.

Inefficiency in governmental arrangements can be as disastrous to prosperity as industrial waste. A particularly shocking thought of the dangers in the present disorganized state of fringe government occurs when the possible demands that an atomic attack on central cities would throw upon these weak governmental units are considered. We have had many examples of the breakdown which society experiences in unorganized or poorly organized areas from experiences with war plants located in previously rural areas and from the development of large subdivisions. (75)

Problems of Local Government in Metropolitan Areas (76)

The growth of unincorporated areas in the fringe has been

accompanied by demands for more services and for higher levels of service of existing functions. The standards of service provided by the county and other units in rural areas were not adequate to meet the demands of the unincorporated areas. The fringe areas require such municipal-type services as police and fire protection; street construction, maintenance, lighting, and sweeping; recreation facilities; schools; public health and hospital services; and many others. The fringe areas have turned to adjacent cities for such services as water and sewerage. In other cases, special districts were formed. Sometimes the county has been called upon to furnish municipal levels of service.

Defects in Existing Fringe and Rural Governments (77)

Rural governments can not provide the services. The rural forms were designed for specific and limited functions; not to meet the multiple demands of urban residents. The variety of forms of rural government varies from state to state but the rural areas are usually served by a combination of units such as townships, school districts, villages, counties, and rural special districts (such as drainage districts). With the invasion of urban people, the numbers of local units tend to multiply. A citizen of the unincorporated areas may find himself located within as many as a dozen governmental and taxing jurisdictions. He may be within one or two school districts, a water district, a fire protection district, a street lighting district, a township which takes care of the roads, and a county which provides parks.

No local legislation. -- Many of the fringe governments are hampered by a lack of legislative powers. Very few rural governments operate under

home rule charters and therefore can not adjust their charters or form of government to meet changing conditions. This lack of legislative powers is particularly unfortunate when limitations exist on the ability to enact police power ordinances such as health, building, zoning and other controls. The passing of special acts to aid these governments to meet fringe problems is not successful because such acts usually grant only a few additional powers to such units as the county and township.

Poor administration.—These local governments are also handicapped by poor administration. Such forms usually fail to provide for a central executive. There is seldom an integrated departmental organization. The small area of jurisdiction of such governments make for inefficiencies. The officials of these governments are usually elected amateurs with no special abilities or knowledge. Many illegal acts are performed by local officials through ignorance of their duties and of the limitations on their powers.

Financial problems.—The financial problems of these unincorporated areas and their governments are many. (78) Low debt limits and limitations on tax rates and sources are common. Through poor assessment procedures, much property escapes taxation. In the fragmentation of local areas into separate and overlapping districts, many inequalities exist in levels and taxable base so that revenue potentialities vary widely. Because of the indefiniteness of the fate of such units, it is difficult for them to obtain bond financing that is needed to provide capital improvements. There is a competition for funds between the units because the first agency to issue bonds may actually pre-empt the credit base

of the area.

When counties expanded and added functions to meet the demands of the residents of unincorporated fringe for new and higher levels of services, another problem arose. County tax bills were increased to provide financial support for the larger budgets. The rises in county taxes were passed on to city dwellers who were not only required to pay city taxes to provide themselves with municipal services but were required also to pay the higher county tax bills to provide municipal-type services to fringe residents. Rural dwellers similarly were required to pay higher county taxes to provide a level of county services for the unincorporated areas higher than the services required or received in rural areas. It was charged that city and rural taxpayers were subsidizing the fringe dwellers. This charge has resulted in several proposals for governmental changes in taxing and administrative arrangements.

<u>Citizen confusion.</u>—The confusion of government in the fringe affects the ability of the voter and taxpayer to play an effective part in local affairs. The taxpayer is confused by the many places he has to pay taxes or ask for services. Officials of varying titles and powers make local government difficult to understand. Governmental confusion aids bossism because it obscures activities and makes it difficult for the public to obtain information.

Lack of Planning by Local Government

Without planning controls and strong efforts to plan by the local governments, growth is largely fortuitous and unpredictable. There is

little or no coordination or cooperation between neighboring and overlapping units. The financial burden is unplanned. There is no overall consideration of the cumulative burden of multiple tax areas and the taxpayer's ability to pay. No attempt is made to determine priorities in the needs for services and facilities.

Problems of the Central City Government

The central city finds its problems aggravated by the movement to the fringe. There appears to be little hope of the central city solving the problems of decay and blight when the voluntary process of redevelopment stops and the entire burden falls on the weakened city. With part of the market and tax base removed to the fringe, business and industry tend to follow population and the renewal of facilities in the declining city center comes to a halt. The vacant areas within the city go undeveloped as new growth skips into the fringe; as a consequence, certain city services are under-utilized.

In such an atmosphere, city planning and public works programming becomes a highly speculative activity because demands and their location are both unpredictable. The suburbs and the county must duplicate city services and facilities. An enormous waste of effort and funds occurs. The city finds that a large portion of the people for which it is providing services contribute nothing (directly) to the support of these services. A constant struggle for new revenue sources, especially those which recapture a portion of the costs of central city government, takes place with conflict between the suburbs and the city, and the county and the city. Eventually the controversy spills over into the state legislatures as the central cities call for new powers.

The lack of control over fringe growth affects the city as well as the fringe areas. Health and nuisance problems know no political boundaries. Crime and fire also are no respectors of artificial distinctions between areas. Numerous subdivisions along the edge of the city have been blighted by poor standards of development in territory just across the city line.

Another problem which is causing concern is the movement from the city to the country of the groups in the population who are classified as civic leaders and as supporters of the cultural resources of the city. In some cases it appears that allegiance to the city is divided and participation in city affairs drops as new interests are found in the fringe. (79) In other cases, and potentially more serious for the metropolis, the leadership groups retire from participation in public life after making the move to the fringe. Another side of this problem of selective migration to the fringe is a growing segregation of population groups. The misunderstanding, mistrust, and suspicion occassioned by segregation severely handicaps the possibilities for cooperative activities to solve fringe problems.

Reorganization of Metropolitan Government (80)

Proposals for improvement in the government of the metropolitan and fringe areas are divided broadly into two groups: those calling for structural reorganization and those calling for the use of expedient approaches. The first group generally provides for fundamental changes leading to a basic solution for metropolitan governmental problems. The expedient proposals generally involve less thorough solutions and include solutions which will not arouse much opposition because of fewer changes in existing arrangements.

Structural Reorganization

Proposals for structural reorganization have been divided also into two groups—unification of government and strengthening of fringe government. The unification of the metropolitan areas under central governments calls for changes which have been stoutly resisted in the past but which present long-range solutions that adequately meet the problems. The strengthening of fringe governments is not a long-range solution and might be considered expedient; however, the changes involve reorganization to a greater degree than those to be discussed in the sections on expedient approaches.

Annexation (81)

Annexation of territory to the central city or to other large cities within the metropolitan complex has been considered the best solution to the problems of growth in unincorporated areas. For many years city growth was based on annexation. However, the change in growth patterns of the automobile age may be a cause for the virtual cessation of annexation since 1920. There have been a few large annexations but they are not typical.

Annexation has much to recommend it. However, the state legislatures have made annexation very difficult for the central city--if
the unincorporated areas do not wish to be annexed--by complicated
annexation procedures which usually call for an approval by voters of
both the annexing city and the territory to be annexed. There has been
almost universal resistance to annexation by the fringe dweller which
has made annexation virtually impossible in all states except Virginia
and Texas. In Virginia, the state constitution has made it possible to

annex territory to a central city by judicial review and, in Texas, by unilateral action by the central city. The state constitution is usually the stumbling block in moves for changing to easier procedures for action by the central city. Rural and suburban interests have been effective in preventing amendments.

The legal question of the validity of either the judicial review or unilateral annexation procedure appears fairly well settled. If the state constitution is amended to permit such actions, appropriate enabling ligislation will be upheld by the courts. It is generally pointed out that either of these two simplified procedures deprives the area to be annexed of the right to local self-determination. Etter (82) has replied that the concept of a necessary two-way majority for approval is a rather primitive political doctrine which has been discarded in connection with many other types of actions. He further points out that in annexation, the requirement for a two-way majority often gives a veto power to a group which is greatly in the minority numerically. The question of the desirability of local self-determination, especially in the light of current refusals to accept responsibility for local affairs by the people of the fringe, arises often in considering proposals for reorganization.

<u>Disadvantages</u>.—Let us review some of the reasons given for disapproving annexation. Many times the appeal for retention of local independence and local recognition by a place name has been used. However, this appears to be a particularly false argument for unincorporated places. In some cases the central city has been criticized for poor administration. The more prosperous areas are always afraid that they will con-

tribute more to the city than other areas. Some suburban areas, although unincorporated, may still be receiving a higher level of services from special districts and other units of government than the central city would provide. The argument that annexed areas will have to bear higher taxes and assume liabilities for the city's bonded indebtedness has frequently been used and uncritically accepted. In some cases it may be said that the policies of the central city are not suited to local needs. One very valid reason for objection to annexation is made by the areas left outside the area to be annexed. They argue their tax base will be taken from them, leaving them with heavy burdens to care for facilities used by the larger area. This can occur particularly in states with township governments that provide urban services. Advantages -- The advantages of annexation are many but depend, of course, on the quality of government in the annexing city. A wider range of services can be provided and some improvements can be made immediately while others can be provided over a period of time. Better administration should be expected from the larger city because of experience and centralized administration. Again, lower costs may be expected because of greater efficiency. Tax rates may actually be lower within the city because city taxes are often only a small portion of charges levied on property. One important appeal is the availability of police and fire protection. Annexation may serve to increase land values while it certainly offers much greater basis for protection of land values. Lower insurance rates follow annexation because of fire protection and water service. Utility rates may also be lowered if the city formerly was extending services at higher than city rates.

Annexation studies .-- In the annexation study--a study sometimes undertaken by the planner -- other considerations must receive attention. Perhaps foremost among them are considerations of the cost of annexation to the central city. Will income from taxes in the annexed areas eventually cover their costs or will the burden of new facilities and extended services be too great? The settlement pattern in the area to be annexed may already be so hopelessly confused, scattered, and blighted that the city can not afford to annex the area. The relative efficiencies and possible surplus capacities in old public works of the central city should be balanced against new facilities possible if the fringe area were to be handled in some other way (incorporation or special district). Can the city finance immediate demands from current funds or are bonds needed? And how is the city's credit standing? There is the possibility that new areas may divert badly needed funds and attention from other areas of the city such as blighted areas needing redevelopment. On the other hand, the fringe areas may be costing the city more outside the city limits than they will inside the city. Annexation may be the way to retrieve a lost tax base and to bring back leadership groups to the city. The general feeling on the matter of selective annexation is that the central city should annex all areas into the city so that the tax rich areas contribute to the support of tax poor areas which sorely need services. The fringe should be annexed early. before undesirable development occurs and industrial lands in particular should be annexed so that they can be protected as major tax contributors. Annexation policy, -- Above all, it is essential that the central city have a definite annexation policy. If it is desired to encourage annex-

ation, the central city should try to force annexation by withholding services and using such "encouragement" as city income taxes. However, more positive approaches should be used too. A good public relations program is necessary. But the program must have something to sell. The city can advertise the amenities of city life under sound city administration by an experienced and professional centralized administration. A long range plan for public works and financing of improvements coupled with informal agreements with fringe areas will demonstrate sincerity and ability to provide services. The equalization of assessments by reassessing property upon annexation may be a good selling point. One city, Pasadena, California, has charged an annexation fee to newly annexed areas to emphasize the advantages to the annexed area of coming under a city government. The principle which should dominate all dealings with fringe areas is to show leadership in urban affairs and to demonstrate responsiveness to the problems and desires of the fringe area to be annexed. The city should work to improve city government and work through the state to get adequate powers to handle annexation. The city should also encourage the fringe areas to control and direct their development until the time for annexation comes by encouraging county or township health, building, zoning, and subdivision regulations.

Reorganization of the County (83)

Just as annexation fails to answer all the questions and meet all the problems of fringe growth, so also does county reorganization suffer from inadequacies of approach. Both annexation and county reorganization present the problem of what to do with already incorporated areas—some of city size. The suggestions for county reorganization

presented in this section form a series of steps leading to the metropolitan county. At this ultimate step we find that either the cities
have been abolished or one big city has replaced the other cities and
the county. Immediately, the difficulties of county reorganization become apparent.

The county has long been considered as an arm of the state government for certain limited administrative purposes. In order for the county to assume the functions of a municipal-type government, three major revisions in traditional county government are needed. The first of these is the need for a single county executive, similar to the strong mayor or city manager. The second need is for a legislative body. And the third need is for the reallocation of functions from many independent boards and offices to departmental control under the executive.

In short, the county must become municipalized with a home rule charter of some sort. This would require amendment of the state constitution. In some states, such a move would virtually require the rewriting of the constitution because of complications in the court systems. In other cases, township officials form the county government which has lead to problems of "rotten boroughs." Even granted state constitutional change, state legislatures often have restricted enabling legislation to cover only certain functions and refused to enact broad acts—relying on special acts for each situation. In many areas, the county fails to encompass the fringe or metropolitan areas to the extent needed for a comprehensive solution. Rural areas object to any tampering with county organization on the grounds that rural areas do

not need reforms in county government. County reorganization faces great obstacles yet some headway has been made. As with annexation, state action is the key to the problem.

Functional consolidation.—Functional consolidation has been suggested as the first step to a new metropolitan government. Functions of city and county government are to be consolidated where overlapping occurs and assigned to either one unit or the other. Those services which are by tradition the county's or which are regional or metropolitan in nature should go to the county to administer. At this step, little attempt is made to reorganize county government. However, it appears that some reorganization and authorization is necessary from the state before new or expanded functions can be undertaken efficiently. A wide variety of special and general acts has given new powers and reorganized partially or completely county government in various states. How the courts would treat some of these acts, especially if there has been no constitutional revision, is an unresolved question.

City-county consolidation.—From this start, the second step is city-county consolidation in which the legislative and possible other branches of local government are combined to deal with common problems while administration of some functions still remains divided. Numerous variations are possible. The general aim is common consideration of metropolitan problems and centralized administration which can attract better men and reduce overhead administration and operation costs. Of the attempts to introduce such reforms in metropolitan government, several have failed because of excessive demands by the state legislature for local ratification. Separation into rural and urban counties.—A variation of the plan for

consolidation is city-county separation in which the urban areas form a new combined city-county government while the surrounding rural areas remain under the old county. As with consolidation, the difficulties of further annexation to the urban areas and the probability that not all areas that should be under urban government are under urban government call for a more flexible approach to metropolitan boundaries than state legislators are likely to grant. The separated rural county will also probably suffer from loss of tax base. Separation raises the question of the real differences, if any, between the needs for, and functions of, rural and urban government. Does not rural government also call for reform for reasons brought out previously? It appears that improved administration and control in rural areas will be increasingly needed as the movement to the extended fringe continues. The metropolitan county. -- In the metropolitan county the governments of all areas within the county would be merged into one central government. As with the scheme for the "Greater City" to be discussed below, many of the activities of the government could be administrated through decentralized offices and facilities. However, the principle of one and only one government and set of officials would still apply. It is doubtful whether the county can be legally abolished under most state constitutions. (84) Therefore, it appears likely that it would be the city governments that would disappear. The obvious political opposition to such reforms make this third step the one upon which reformers are sure to trip.

Combined Governments

In the three plans for metropolitan governments to be discussed

in this section, many refinements and variations are possible; only generalized and distinctive plans are presented. Again, a progression from most acceptable and least desirable reorganization to less acceptable and more desirable reorganization is presented. The first scheme is probably the most feasible of all proposed reorganizations because it preserves local governments virtually intact.

Federation.—The first scheme is described as a federation because of its similarity to our national government. A central regional government with its administrative, executive, and legislative organization would be superimposed upon local governments. As in functional consolidation, regional functions would be allocated to the metropolitan government. The plan is not really a merger of governments; only a consolidation of some functions. In many cases policies of the metropolitan government would be executed by the local officials. The plan does not offer full savings because of the difficulty of determining which functions are non-local; duplication of acitvities would not be eliminated. However, the plan will arouse much less opposition than other, more thorough reorganizations because local governments are retained.

Such a plan has recently been put into effect in Toronto. (85)

The provincial legislature passed the necessary act without trouble because rural interests are not in control in Canada as they are in the United States. The principal failings of the plan are those which might have been predicted. There is no flexibility in the enabling act for revision of legislative composition, reallocation of functions, or territorial expansion to a neighboring county within the metropolitan area or to other fringe communities not covered in the original act. Other

serious objections have been made to the allocation of functions—many activities which could be left with local governments have been made metropolitan functions and vice versa. The representation of local areas is on an area rather than a population basis which seems unfair. The council which sets policies for the metropolitan area is not full—time and its members are still members of local governments with dual loyal—ties. And it appears that too much administrative detail has been left to the council. However, the experiment is to be admired and we should hope for imitation in this country after evaluation of the Canadian experience. The problems of division of functions, area to be covered, methods of election and representation on the legislative body, powers and election of the executive, and contents and freedom from state control over charter are the principal points to be elaborated by any further discussions of federated forms.

Confederation.—In a confederated form, a term derived because of confusions in the literature, a strong central legislative and administrative government would direct the metropolitan area. Certain questions of local interest would be decided through local legislatures but local legislatures would not have any administrative agencies directly under their control. In general, the metropolitan organization would be of the manager-council type with a mayor. There is room for variations in these arrangements.

The Greater City. (86) -- The Greater City scheme represents a "climax" stage in metropolitan government. This scheme is comparable to the scheme for a metropolitan county described above and to the proposals for metropolitan super districts to be described below. The principal

advantage of this scheme over the other two is that the whole of a multicounty metropolis can be brought under its jurisdiction. Pre-existing
areas could serve as election, taxation and administrative districts for
decentralized administration. The cry of bureaucracy will be raised
against such a large scale government because control seems to be far
removed from local areas. However, if representation problems are wellthought out, this need not necessarily be true.

The problem is not: "How can I in my little neighborhood be best governed? By a large or small government?" Instead it is: "How can this huge urban area in which I live be best governed? By one government over the whole area or by hundreds of little independent, often over-lapping, governments?" (87)

The problems of local participation in government arise in England as well as this country. Cole (88) has reviewed the structure of English local government and proposed several interesting solutions. I wish only to mention in passing his recommendation that policy-making for the management of neighborhood facilities be placed in the hands of local people. Conscious effort and thought should be devoted to inventing means for local participation in local affairs.

The City-State

The city-state has also been suggested for the government of metropolitan areas. A metropolis would be separated from the one or more states in which it was located. Besides the practical difficulties of such a plan, a major objection is the separation of the metropolis from its hinterland and consequent dislocations and multiplication in state governments.

Strengthening Fringe Government

Fringe problems can also be partially solved by incorporation.

or by strengthening of other units of local government such as the town-ship. Incorporation is a simple and effective solution which has been popular. However, the proliferation of governmental units has hindered attempts to solve metropolitan problems on a comprehensive basis. Many of the incorporated villages of the fringe are faced with problems they can not handle alone. Inefficient and unskilled officials and the lack of adequate tax resources cripple such governments.

Although incorporation of territory does not in itself guarantee urban services, it does give government the responsibility for and provide the mechanisms for the extension of such services. Extensions of the political boundaries of cities tend to reduce and bring under control the types of disorganization which are typical of the fringe, (89)

The addition of municipal powers to township governments or other local units in the fringe is subject to the same objections of inadequacy to meet problems. However, as a temporary expedient, township zoning and other regulations can prevent the cumulation of problems.

Expedient Approaches

Expedient approaches are characterized by the ease with which they are accepted. "Expediency in meeting metropolitan problems involves using methods which have a greater chance for success than does structural reorganization." (90) Their feasibility is greater than other more complete solutions. Such short-term measures range from informal verbal arrangements to formal contracts. The flexibility which these approaches permit allows local autonomy and produces economies for small governmental units. Such approaches are fine but do not really solve the basic problem and may actually retard the search for more comprehensive solutions.

Cooperation

The cooperative measures adopted to solve certain fringe problems have given governments experience in working together. However, such experiences often turn out to be unpleasant for one or both parties. Extension of city services. -- The central city often extends services to fringe areas. Such arrangements serve the fringe efficiently but there is a conflict of interest because often the costs of extension exceed the revenue from them even when higher rates are charged outside the city than inside. If the prices of extended services are too high, the fringe areas may incorporate; if the prices are too low, there is no incentive to the fringe to be annexed or seek another solution. Contractual and mutual aid arrangements and joint undertakings .-- Such arrangements are usually made between two incorporated areas. an incorporated area and a special district, or between incorporated areas and the county. Many of the governmental units making such contracts are acting without statutory authorization. Mutual aid agreements are often used to cut excessive costs and protect fringe areas. Police radio and fringe fire protection arrangements are common examples.

Some of the joint undertakings are very much like special district or functional consolidation in their characteristics. Such functions as purchasing, recreation, bridges, buildings, hospitals, fire protection, police radio, airports, sewerage, library, personnel, public health, and inspection services have been furnished to cooperating units by such agreements. Combined ownership and direction can take several forms: (a) there may be coordination of activities; (b) there may be joint financing but operation by a single unit; or (c) there may be

joint financing with operation by a special agency, much like a special district.

Special Districts and Authorities (91)

Special districts and authorities provide immediate solutions to urgent problems. However, they must be considered as short-term solutions. They are usually formed when it is desired to undertake a single-purpose project for a large area. Incorporation is not felt needed because only one or a few services are wanted.

The special district or authority is an independent public corporation formed under state law. State laws usually closely control the area, organization, and finances of such corporations. A wide variety of functions have been authorized but usually the corporation is authorized to undertake only one function. Such corporations may be controlled and managed by appointed officials, elected officials, the officers of some existing unit of government, or any combination of these. Control may devolve from state, county, or local levels to the officers of the district or authority. A general distinction has been made between the authority and the special district based on their revenue sources: an authority receives its revenue from service charges and fees while the special district may also have the power to tax. Because these two devices have proved so popular, let us review their advantages and disadvantages as a solution to metropolitan problems. Advantages -- One prime advantage of the district (for the purposes of the rest of the discussion "district" will be understood to include "authority") is its corporate form which allows for great flexibility in many aspects. The district is not hampered by political boundaries

and may therefore serve only a functional area. However, this also allows the district to refuse to extend services if it so chooses. Certain legal liabilities of municipal governments are avoided. Financially, the district may be handled in a variety of ways and has been used as a means to avoid debt limitations and tax rate ceilings. It does not disturb local governments in a political way so it is very popular and feasible. Supposedly the district is non-political because of its corporate form. It is also supposed to be efficient because unified management of a single function permits specialization and a unified treatment and program for problems. The corporate form is adaptable to the management of such enterprises as housing and transit which are on the borderline between public and private enterprises. A virtue which may prove very useful in many future problems is the ability of such corporations to operate on an interstate basis, an advantage which no other form of metropolitan government has been able to duplicate. Disadvantages. -- It is interesting that such public corporations display the same disadvantages that private corporations have sometimes exhibited. The special district has removed essential functions from public control to a greater degree than one can claim against other proposed solutions. Too often self-perpetuating political appointees have made use of the special district as sources for polite graft and a place for retirement. The confusing number of districts bewilders and confuses the voter, the taxpayer, and the consumer. There is often a serious lack of coordination between districts providing related services. Services are provided without any public regulation. Districts compete for public resources from a position of special advantage and utilize public

resources in an unplanned manner. Single-purpose districts can refuse to extend services and often refuse to assume multiple functions—thus compounding the number of districts. Although claims are made that districts service wide functional areas, many were formed precisely to service small, uneconomical areas. In other cases, districts encourage and generate dispersion by a misguided willingness to extend services in any direction without regard to costs because of financial independence and freedom from checks on rates and levels of service. If a monopoly on a particular service is granted to a district on the grounds of economy, some control should be available when competition is eliminated.

Planning and special districts.—One issue which particularly concerns the planner is the general lack of planning and planning controls in the areas under the jurisdiction of special districts. However, the giving of planning powers to a special district may also be a doubtful procedure when there is no popular control over the activities of such an agency. The Maryland-National Capital Parks and Planning Commission is an example of this problem. (92) The Commission is appointed by the governor of Maryland. Its jurisdiction extends over parts of two counties. The Commission exercises many legislative functions independently of any control by the counties or the electorate. Accountability to the governor is weak. Financial control is also very weak.

Hybrid districts. (93)—A hybrid district is a district that combines two or more functions with unusual administrative arrangements. In many cases such districts are not independent corporations but are really taxing and administrative areas. The proposals for such districts are

of particular interest because they were developed to meet the dual problems of subsidies to unincorporated areas by the county and cities, and of refusal of unincorporated areas to manage their own affairs. A number of variations were devised as a means of giving the county a choice in the provision of urban levels of services to unincorporated urban areas. Three principal plans were suggested.

The first plan is a mandatory classification of the unincorporated areas of the county into urban and rural areas. In the areas classified as urban, the county could segregate the costs of higher levels of services to such areas and tax each area for these services. A second plan would allow a city or the county to petition for a judicial review of the need for special urban service areas within the unincorporated parts of the county. The third plan would provide for petition by voters or property owners for a special area in which the county would provide services on a contract basis. The area would have a small legislative-executive body of five to make decisions and administer a few limited functions. Such areas would actually become municipalities with very limited powers.

The wide latitude in governmental arrangements which the state can authorize is demonstrated by these plans. Considerable debate over the question of permissive versus mandatory establishment of such districts took place. Graves, (94) both in the hearings before the legislative committees and in his articles, stated that fringe dwellers should be forced to participate in some form of municipal government in which they had to assume the responsibility of facing the problems they are causing. Compulsory annexation or incorporation for areas with a certain density of population has often been suggested. Such legislation

appears contrary to American tradition but can be justified when the problems which unincorporated growth brings are considered. Another broad policy question which these proposals brings up is the question of needs and the ability to pay. It has been suggested that many of the areas, which would become unincorporated urban districts under the plans discussed above, would be unable to pay for the level of services which the taxpayers of the city and county are now providing for them if the costs of those services were concentrated upon the beneficiaries. While recognizing that such districts may create greater inequities than exist through current subsidies, these districts might be used as means of forcing annexation or incorporation while providing interim protection and services to fringe areas. Certainly, these hybrid arrangements hold some promise as temporary expedients, especially if they are self-governing to some degree.

Comprehensive or super districts. —It has been suggested, that by consolidation of the single-purpose special districts in a metropolitan area, a super district suitable as a basis for metropolitan government might be developed. Such agencies as the Port of New York Authority are generally held up as prototypes. However, the super district or authority idea appears to be too optomistic considering the affection in which politicians hold the single-purpose district with its independence and jobs. The authority form has not proved to be a sound basis for representative government as the criticisms of the single-purpose district indicate. However, in metropolitan areas lying in two states, a great many functions could be coordinated through such a device if provisions for better control by the public are devised.

Extraterritorial Powers (95)

Statute law permits cities to exercise many of the perogatives of the city outside its limits. From the concept of the municipality as a bundle of jurisdictions and powers, certain powers have been extended over jurisdictions which do not coincide with city limits. Usually, the business powers (to operate an airport for example), the police power (to control subdivision), and eminent domain (when used with the business powers) can all be exercised extraterritorially over varying distances from the city. It is the business power that is used when services are extended to fringe areas. Precedents for these powers come from old charters. In the exercise of these powers the state's ability to give these powers to cities conflicts with the principle of local self-government. Usually, extraterritorial powers can not be exercised over other incorporated areas. The use of extraterritorial powers can lead to conflict with areas outside the city; the county government in particular should be handled with care.

The main virtues of such powers are three. First, the use of such powers helps ease conditions in the fringe during the transition from rural to urban. Secondly, many of the smaller cities can practically control the whole of the area of intensive fringe problems if subdivision control is authorized for the common five mile radius outside the city. And thirdly, the use of such powers does not conflict with other approaches such as special districts in unincorporated territory.

In some states, cities have been given extraterritorial powers of zoning as well as subdivision control. In general, the extension of these powers must be granted by specific legislation rather than from

charter interpretation. The exercise of such controls is usually limited to an area within five miles or less of the city limits. The principal arguments in favor of the exercise of such controls are: (a) if the fringe is urbanized, political boundaries are irrelevant; (b) the use of such controls prevents uncontrolled development in the unincorporated fringe from damaging the city; and (c) the controls will protect the unincorporated areas so that they will be suitable for annexation. The major difficulty with extraterritorial controls is administrative; violations are almost impossible to catch and control. Again, the use of such powers calls for consultation with the county and other municipalities when problems of jurisdiction arise. County representation on city planning commissions should be used when the county does not control the unincorporated fringe. Very little comprehensive planning can be done in the unincorporated areas; the zoning and subdivision controls serve only as checks against gross mistakes.

State Legislation

Because fringe problems appear to be out of control by county and local governments, state acts for basic regulations in such fields as zoning, subdivision, health, building codes, highway access control, and tourist and trailer courts have been called for. A few states have extended state control in one or more of these fields but their reluctance to undertake a full range of controls in fringe areas is understandable when the difficulties of administration are recognized. One area in which states could help solve fringe problems and in which they have failed heretofore for the most part is the joint planning or coordination of state public works, especially highways, with local govern-

ments. Of course, state assistance in the form of grants-in-aid and local planning assistance would also help alleviate fringe problems. But the real need is for state legislation and leadership leading to structural reorganization; a hope that appears far from fulfillment.

Federal Legislation

The federal government may be able to throw its weight and prestige into a campaign to attack metropolitan problems on a broad basis. There are signs of this in recent legislation for metropolitan planning and redevelopment in the Housing Act of 1954 (Section 701). However, great opposition at the state level and from rural and suburban interests in the national government dim this hope. The agencies of the national government can not pursue positive policies without specific directions from Congress and have betrayed a tendency to pursue the narrow interests of each agency without regard for broader considerations.

Planning in Metropolitan Government

At present, planning for the metropolitan region is being carried on by agencies which are largely advisory in nature. Most proposals for legislation and organization maintain the metropolitan agency as a co-ordinating agency with the function of preparing very broad schemes. (96) The acceptance of these schemes by participating local governments is voluntary. Execution is achieved by cooperative effort. At present, planning is probably the only governmental function which has been integrated to any degree in metropolitan areas. In this respect, planning leads the way.

However, metropolitan areas today present very spotty pictures of planning activity. Most states have enabling legislation which would permit the entire fringe area to be under the jurisdiction of planning agencies of some type--either municipal, township, or county. But very few areas have one hundred per cent coverage by planning agencies and still fewer have agencies which are completely effective for each jurisdiction and agencies which fully cooperate with each other. In some areas special planning districts have been set up. Some cities have extraterritorial planning powers. However, even with a metropolitan planning agency to coordinate the local agencies, metropolitan planning is far from a success. This situation is a result of: (a) failure of planning agencies to cooperate; (b) active opposition by the many governmental units involved to cooperation even where the planning agencies work together; (c) failure of many units empowered to plan to organize or staff planning agencies; and (d) the advisory nature of metropolitan planning agencies. How would the suggestions for metropolitan government affect this situation?

The three proposals for unified metropolitan government—the metropolitan county, the greater city, or super district—obviously would permit unified planning within the areas over which they had jurisdiction. However, the area of the jurisdiction would vary widely between the three, with the super district probably encompassing the larger area and coming closest to a functional planning area. It appears that in the matter of planning cooperation, where so many interests are involved, the rule should be to unify planning over the widest possible area in order to avoid a virtual veto by local areas whose interests

are contrary to those of the wider area. Of course, due consideration must be given to all legitimate local interests. However, metropolitan planning so far has been characterized by obstructionism by local interests.

Of the other forms of government which were reviewed in the preceeding chapter, the placing of planning responsibility in the hands of the county is one acceptable solution, especially if the county government has been modernized and the incorporated communities within the county cooperate. If the control of a special district could be democratized so that the public was represented, a special planning district over a large metropolitan area might prove a successful first step to metropolitan government and sound, regional planning for a metropolis, Such a district usually involves no conflict with county planning powers; the district has usually been given precedence. However, a legal conflict between incorporated areas and such a special district would have to be resolved. The possibility of giving planning powers to such agencies as the Port of New York Authority has been suggested. Many variations of such a special district arrangement are possible with selected powers being distributed between the district and other governmental units involved.

Why Solutions Are Not Forthcoming

Social Conflict

In the previous chapter, the conflict between old residents and newcomers was described. This complication has greatly retarded reform of government in the fringe. It has been suggested that the newcomers

have no ties to the local area and that they are disruptive of local government because of their attitudes and demands. On the other hand, the oldsters may be blamed for a localism of sentiment which prevents their seeing the needs of the whole area and which prevents cooperation with the city in solving common problems. Local pride and autonomy are factors causing a lag in adjustment to changed conditions. Rural resistance and distrust of city people and their ways are still prevalent. At any rate, there appears to be a lack of interest on any county-wide scale. This is particularly unfortunate because the county presents one of the big opportunities for solving fringe problems. The newcomers look to the city, incorporation, or a special district for solutions while the old-timers stick to their traditional arrangements.

The sentiments and lack of concern with problems of the fringe build a social inertia to adjustment.

Any proposed change in governmental structure must content with people's habitual ways of thinking, which are particularly rigid when it comes to government. Legal forms acquire a rightness and immovability stemming solely from long existence. (97)

Some effective and active opposition also exists to changes in the governmental arrangements in the fringe. One of the principal appeals of such interests is to the inertia of people to change.

Opposition to Reorganization

Opposition to reorganization comes from local officials. Although the central cities are not entirely free from graft and corruption, the pressures of a half-century of reform have pushed many of the politicians and their supporters into the county government. In some respects, this was to be expected because the link between party organi-

zation and government has always been strongest at the county level. The spoils of the county government consist largely of jobs and the complicated favors which maintain political parties. Special districts can also become sources of patronage and graft—of the polite variety—despite the oft—repeated formula that such specialized organizations are non-political. At the township and village level, the political opposition probably comes not from professional politicians and patronage officials but from the old and well—known local families who dominate local activities, including local elections. Reorganization probably appears to be a blow aimed at their prestige.

There are also other special private interests who oppose change in local government forms. Certain illegal enterprises find it easier to operate outside the cities. Industry may be driven out into the fringe by restrictive zoning and nuisance ordinances. They thereafter have a special interest in stabilizing their location by preventing forms of government which would uproot them again or impose regulations. Building firms and contractors may seek to retard the coming of governmental agencies which have powers to control them through building codes, zoning, and subdivision regulations.

One fear that reform in the fringe always raises is the fear of increased taxes. Both businesses and residents in the fringe will rally against reorganization on this point. However, as it has been pointed out again and again, the cost of community life can not be equated with tax costs. The lack of hospitals, street lighting, and special school services must be balanced against a low tax rate.

Need for State Action Major Obstacle

The difficulties of improving fringe government are compounded by the need to work through the state government for each change that must be made in existing legislation or for new legislation. Almost all proposals for solutions, whether they be proposals for reorganized local governments or for the more ambitious schemes of metropolitan government, must pass the state legislature's inspection. "Strong, positive state legislation. . . . is evidently unthinkable in the United States today." (98) Numerous legal obstacles stand in the way of some proposals, especially where constitutional revisions are necessary, The lack of local agreement and support of one particular scheme and the lack of willingness of local people to fight it through cripple most proposals from the start. Shifting alignments of county-state interests, political parties, and suburban or rural interests block urban or city moves for change. Bad election machinery and malapportionment of representation have been drawbacks to urban interests in state matters for a half-century at least. It would appear that attention must first be concentrated on improvement in state government before fringe government and metropolitan problems can be approached in more than a piece-meal and expedient manner.

Summary and Conclusions

The need for facilities and services in the fringe calls for municipal-type governments to provide them. However, two problems prevent the effective provision of facilities and services to fringe areas. The most troublesome problem is the refusal of certain unincorporated

areas in the fringe to recognize the desirability and the necessity of urban services.

In states like Michigan where experience with urban industrial living is comparatively short and where a high proportion of the population are rural migrants, there will be considerably less acceptance of metropolitan problems than in some of the older industrial states. (99)

The second problem is the tendency for areas to seek local and independent solutions to metropolitan problems which results in a multiplicity of overlapping and conflicting local governments.

Refusal of Local Responsibility

Areas which refuse to recognize the need for services do not refuse all services but rather seek to obtain certain services for which an urgent need is felt without developing a municipal-type government. Expedient solutions are sought because the fringe resident fears that local self-government will be more expensive and raise his taxes. The fringe resident also does not wish to accept responsibility for conducting his own affairs through local government.

Compulsory reorganization.—The expert watches the multiplication of fringe problems because of the refusal to manage local affairs efficiently. Because the fringe areas will become cities eventually and will become a burden upon the nation if their problems are not solved, it has been urged that fringe areas be made to accept responsibility for solving these problems by compulsory formation of adequate local governments.

It must not follow, however, that because mistakes have already been made we should not now require these areas to integrate themselves into the community plans of the neighboring city and of the metropolitan area of which they are a part; or, as separate cities, to place in their hands the tools they may not seek or even want but which experience dictates they should have and exercise.

In the second place, people in these unincorporated areas cannot divorce themselves from their environment; and the roots of the police power, if not of the local governments, lie deep in the proposition that the general welfare of the community transcends the minority or individual interest, (100)

This question has become critically important in California. (101) Both the state Assembly and Senate appointed committees to investigate this question which had been brought to a head by city-county controversy over the question of city subsidization of county services to unincorporated areas.

Many solutions including compulsory annexation or incorporation, new semi-municipal districts (hybrid districts), and incorporation of the county (or stripping the county of all municipal functions), were proposed. The compulsory organization of local governments raises questions about the effectiveness and interest that such governments would have, about the privilege of the voter not to vote, and other such relevant questions. Even the establishment of administrative districts over unincorporated areas have a touch of taxation without representation.

Role of citizen education.—Education of the public is the common proposal to awaken the people to their responsibilities and local problems because a problem may not exist if only the expert recognizes it. How long can one wait for education and how sure can one be that education will bring the mass of the people to the same conclusions and definitions of problems as those of the expert? This question of the forcing of participation in local affairs through involuntary incorporation or some other such scheme is paralleled in planning by the question of acceptance of

the planning process. If the people reject planning or its controls, should we or should we not have planning?

Multiplicity of Local Government

This thesis has largely been dealing with the unincorporated areas of the fringe. However, not all the fringe is unorganized governmentally. The complexity and overlapping of units in some fringe areas raises the problem of multiplicity and conflict in metropolitan area governments. The traditional concept of home rule and local autonomy has been carried to the extreme just as has the rejection of any local responsibility. The fractionation of areas and functions has produced waste and inefficiency. Many of the small units are unable to cope with fringe problems. This defeats both the theory of popular control and the government's ability to provide services.

However, it has been pointed out that many of the local governments are an expression of distrust of the rest of the metropolitan population and the inefficiencies of small size are accepted as the price to be paid for independence and attempted self-sufficiency. A need is felt to develop local leadership so that a pool of talent is developed upon which broader areas can draw for larger responsibilities.

An escape from the dilemma of need for local participation in public affairs and the over-riding pressure of metropolitan need has been suggested by dividing matters of local concern from matters of metropolitan concern in the same manner as the state has responsibilities different from those of the federal government. This suggestion is the basic principle in proposals for federated governments for metropolitan areas. It is difficult to find matters of local concern

that can be distinguished from matters of metropolitan concern. The metropolitan area is a functional unit and interdependent "in spite of the unfortunate and wasteful political separation." (102)

Prospects for Reorganization

What are the prospects for metropolitan reorganization? The past has been marked by failures. Political apathy in local governmental affairs except for short-lived reform movements has been considered as characteristic of this country by some.

Underlying the continuing frustration of all American local government is this constant: in the value systems of American individuals, the need to solve metropolitan local governmental problems does not rank high, (103)

However, to conclude the chapter on a more optomistic note, let us recall the progress made in the last half-century and the increasing attention being focused on metropolitan problems.

In spite of the difficulties to be surmounted in solving the governmental problems of metropolitan areas, there is no reason for being pessimistic regarding the ultimate outcome. Sooner or later something will have to be done to improve the conditions of life in these areas, and as the average individual becomes aware of the seriousness of the situation and its effect on his wellbeing, the forces which so far have blocked a satisfactory solution probably will be overpowered. (104)

CHAPTER V

TOWARD A SOLUTION

The manner in which fringe areas have developed in the past and the attendant problems have been described. The next step will be to set objectives for planning in the metropolitan area and the fringe. (105) When the objectives have been discussed, the final task will be to identify what must be done to achieve these objectives and what instruments are available through planning.

Objectives

The basic objective of a plan for the fringes of our metropolitan cities should be to prevent the recurrence of past problems and to provide the fringe dweller with an environment which will meet his needs, desires, and expectations as far as possible. Planning can partially solve the physical problems of the fringe which were grouped under the headings of land use, land speculation, facilities and services, and the decline of agriculture. The planning process is also peculiarly aimed at shaping to the needs of the people the physical environment in which they live.

Proposed Solution

In order to meet the physical problems of the fringe, the concentration of metropolitan growth in integrated physical communities is proposed. There are two underlying premises behind this proposal which should be brought out for discussion because both are open to question.

First premise: concentration.—The first premise is that concentration of urban population is essential for the provisions of urban services. (106) A scattered population demanding urban services has grown in all areas of the fringe. Not only do urban subdivisions present demands for urban services, especially roads, water lines, and sewers, but acreage developments in part—time farms and country estates also present problems of increased demands for such services as fire protection, improved school facilities, and better health services. In order to provide these services with reasonable economy, it seems necessary to concentrate urban populations around urban centers which can supply them.

Consequently, the spread of population into the extended fringe and portions of the intermediate fringe must largely be halted and redirected to existing or new urban centers which can provide the services and facilities of an urban way of life. Each urban center, including the central city, and each satellite city of whatever size and type, should have an urban perimeter delimited around it which will allow controlled growth within that perimeter and forbid growth outside it.

Such a suggestion does not specify the densities or types of development which may take place within the perimeter. Wherever planning investigations indicate the desirability of urban development in such extensive urban uses as country estates, part-time farming areas, or resort and summer cottage uses, these areas too would be delimited as urban areas within an urban perimeter. All areas to be subjected to the invasion of urban land uses and people should be recognized as

transitional zones so that concentrated attention can be devoted to them by the jurisdictions in which they are located.

We know relatively little about the relationship of urban densities of development to the costs of services. (107) However, public facilities and services can probably be provided efficiently to a wide range of densities if the location and timing of development are controlled. It is believed that the concentration and control of development will meet the problems of land speculation and facilities and services.

The defined urban perimeter will also help to solve land-use problems. The lack of relationship of home to work, shopping, recreation, and other activities is based on the lack of an overall pattern for the metropolitan area. In a metropolitan area, three scales of analysis of physical or land-use patterns suggest themselves. (108)

They are: (a) the pattern of open (rural) and urban areas; (b) the organization of the open and urbanized areas as physical communities within the broad pattern; and (c) the individual segregated areas of land use within communities.

Of these three broad categories of relationships to be considered in studying the metropolis, the metropolitan area as a whole is the largest. A pattern of large open, rural areas with clusters of suburbs and satellites around the metropolis appears at this scale. The intermediate fringe is the area surrounding the urban clusters which is in transition from open country to urban or suburban development and should be restricted; the extended fringe also needs control.

On another scale is the analysis of the interrelationships between the specialized and segregated activities and areas within the urban clusters. This is the field of city planning in a narrow sense. On this scale, the urban perimeter will set the area in which relationships between residential, commercial, and industrial areas and the transportation system must be rationalized. The urban center will supply services to the physical community developed within the perimeter.

On a smaller scale is the study of the various segregated areas such as the internal design of the residential subdivision. Both new building and redevelopment procede on this scale. It is at this scale that the person who has moved to the fringe must be pleased. Specific physical design solutions have been developed for these areas in recent years. (109) The planned shopping center illustrates the development of these small-area designs as the building-block units upon which the community is organized.

Let us start with this small unit, the residential neighborhood, and discuss the adequacy of the second premise of concentration in communities from the standpoint of the needs, desires, and expectations of the fringe dweller. Although there has been much debate about the neighborhood as a social, physical, school, or administrative unit, it is a handy unit for discussing residential growth. (110) Some sort of physical unit of organization is required at this scale in order to plan and the neighborhood idea fills the requirement adequately. A large portion of fringe dwellers live in subdivisions, some of neighborhood size, which repeat urban densities but without urban facilities.

However, the attraction for the fringe dweller seems to be the improvement in design, or amenity, and the availability of decent new

housing. There does not seem to be anything inherent in these attractions which should cause problems if high levels of subdivision design are maintained and facilities are provided. There does not seem to be any inherent defect in the demand for the private house with its freedom, privacy, casual living, and lack of overcrowding. The defect has appeared in the failure to relate the vast new areas of free-standing or detached single-family houses in the fringe to the larger physical community.

open pattern of living, and who may be the group which reacts strongly against urban life, the one or more acre plot appears to be desirable. In the case of this group, it is their scatter in the extended fringe which disrupts rural government services and contributes to the decline of agriculture. If these people could also be concentrated, at the densities they desired, these problems could be alleviated too. Again, the key to solving the land-use problems occassioned by this group is the concentration of these people and relating them to the community to which they will look for services and facilities.

Second premise: community.—The second premise—that a community is needed for urban life—has been questioned: do we, can we, should we, and will we have urban communities in the sense of social, political, economic, and physical units? The neighborhood has already been questioned in many of these senses and, because of the seeming willingness of the fringe dweller to do without neighborhood or community, the community too can be questioned.

However, the physical community seems needed to meet the desires of the fringe dweller.

The implications of this study for the planners whose task it is to plan for the rural-urban fringe are, it would seem, clear. The dweller in this area is seeking a cleaner, less congested community in which he can live an urban way of life. Only in a very limited sense is it a manifestation of return to a rural life; if rural social characteristics arise, they will be incidental phenomena.

. . If the people's desires are to be met, the planners should bend their efforts to encourage, by every means known to them, the building of subdivisions of no smaller than three hundred homes. Persons living in neighborhoods smaller than this will of necessity be deprived of some of the desired services and utilities. (111)

The goal of the use of the urban perimeter is to insure the development of an efficient metropolitan pattern, the sound relationship of the neighborhood to the community, and a pattern of internal neighborhood design which meets the wants of the people.

Open spaces. -- In the preceeding paragraphs, attention has been concentrated on the unit area of urban development, the neighborhood. Let us now work back to the metropolitan. In the internal structure of the neighborhood the planner calls for open spaces such as parks, planting strips, and playgrounds. One reason for fringe residence has been that the fringe dweller, when he lived in old city, was deprived of such open spaces because of the obsolete pattern of development of the old city.

On the community scale, additional open spaces such as playfields and parkways are required. These open spaces, when added to the
open spaces furnished in the neighborhood, provide two of the three
scales of open areas with which the citizen of the future city will
come in contact. Our decision to forbid development outside the urban
perimeter can be better defended if we provide more of the openness and
freedom from congestion that the fringe dweller is seeking. The central cities and satellites will have to provide these open areas in

old areas through redevelopment if strong pressures to decontrol the whole commuting zone are to be avoided.

On the metropolitan scale, the urban perimeter will preserve the sense of wild areas and agricultural surroundings that the fringe dweller seeks to recover by settling in the middle of that environment. The urban perimeter is not a greenbelt proposal however. Although a city should preserve large open areas within the city, they should be used for urban purposes, such as parks or settings for public buildings. Optimum size. -- (112) To clarify the idea of the urban perimeter, a few additional remarks should be made. The urban perimeter is not an attempt to restrict the size of any urban concentration. Such an attempt would be unrealistic. Planning has not yet developed its techniques to the point at which it can designate the optimum size of an urban community unless there is some obvious restriction such as a lack of water supply. The idea of an optimum size city may be useful at a time when more information is available and when a limitation on city size has been tested and accepted. It now appears that growth can be continued and that the planning of development may so increase the efficiency of development of new areas that considerable expansion beyond present ideas of optimum size may be feasible.

Flexible boundary. -- There is no intention to make the urban perimeter a static boundary. Rather, it should be periodically adjusted to account for increased growth inside the perimeter. The unpopularity of the greenbelt idea is partially based on its proposal to limit growth in all directions. The urban perimeter will guide and direct growth to desirable directions. Cities should not be allowed to grow in all

directions into their fringes as they do now. Not all sectors of the fringe of a city are equally suitable for urban growth.

Making the land use plan.—Those sectors of a city's fringe suitable for urban growth can be discovered by using the principles of land use planning. The first step in making a land use plan for the fringe should be to consider the existing character of the land and its uses. Next, the peculiar suitability of land for future uses must be investigated. Finally, the most appropriate future use is decided. If future metropolitan development is to be concentrated in the urban perimeter, city growth should proceed only in areas where municipal services can be provided efficiently.

In the provision of urban services, the watershed patterns are very important because water and sewerage systems are the foundations upon which urban concentrations are built. The other principal component in a metropolitan master plan would be the transportation pattern. Under today's conditions, a city which found its potentiality for further growth restricted by utility problems can develop satellites at considerable distances because current transportation capabilities may open up sites that can be developed at savings in utility costs that more than balance transportation cost increases.

The effect of the restriction of diffusion into the extended fringe might be to increase the attractiveness of satellite cities, suburban communities, and villages. These urban centers should have urban perimeters delimited too. Widely varying patterns of development and community size would be available within the metropolitan area to meet individual needs and desires. The burden of improving

highway and other transportation facilities would be concentrated, therefore, on the routes between urban centers within the metropolitan area; this solution should be cheaper than meeting the costs of continuing scattered development.

Future forces. -- Admittedly, this suggested pattern for the metropolitan areas deals only with current problems. What additional forces may influence the metropolitan area in the future? Perhaps the helicopter is the next major force which will appear. Again, the helicopter, like the automobile, may open up vast new areas for potential urban demands, Therefore, the solution suggested above seems to be valid for even the helicopter age. One typical problem of scattered development will serve to illustrate the insistence herein on concentration. Although the helicopter might offer the businessman an opportunity to cover great distances to his office from his home quickly, how would his children get to school in a rural area? Would we add more school buses to handle them? Of course, the time may come when the home may become a virtually self-contained urban center with school lessons taught by television, heat supplied by the sun, and wastes disposed of chemically. However, such a life in the future does not signal an immediate end to fringe problems.

The Place of Agriculture (113)

We have not yet discussed the place to be assigned to agriculture in the land use plan for the metropolitan area. The decision to protect agricultural areas from invasion is based on a sound planning approach and is not intended to give special weight to agricultural interests. Events in the fringe have been destructive, not only of agriculture economically, but also of rural life and social organization. Any plan which is comprehensive must take into account these factors. The economic and land-use aspects of the problem have been considered in this section while attention will be devoted to the problems of changing rural life in the following section.

What are the considerations which call for the establishment and protection of agricultural districts? Many sources call for such districts.

Good farm land should be conserved for farming. It is not imperative for a residential community to occupy such land. (114)

Lands that can economically be used for agriculture and are suitable for agricultural pursuits should be zoned for agriculture. (115)

One particular characteristic of agricultural land is fertility.

(116) If good or the best agricultural land goes into urban uses, the loss of production does not matter as more production is still possible because only a small quantity of land is pre-empted by urban uses. However, the economic costs of production will rise. As fertility is not needed for urban purposes, why should the best lands be removed from production if alternative sites are available? The question of availability of alternative sites is all important.

Fertility is not the only characteristic of land quality. Also to be considered is the market for products raised on the land and the suitability of the land for crops in demand. The comparative productivity of land from the standpoint of the ability of urban uses to pay higher prices for farm land must not be weighed too heavily because planning methods can be used to prevent capricious land price factors

from taking land out of appropriate use prematurely.

Of particular interest are factors of location. (117) The loss of dairying land close to the city through subdivision activity may disrupt a sizable industry. A site may have greater advantages in agricultural uses than subdivision uses from a locational standpoint.

We have emphasized the disruptive and blighting effects of scattered residential development in farm areas. Agricultural zones would prevent idle lands and separate incompatible land uses. The premature subdivision of rural lands would be greatly limited by the development of the concentrated urban perimeter. An estimate of the demand for new urban land would have to be made periodically with generous margins in terms of area set aside for urban development. However, the area in which pressures of transition would be felt, would be small in comparison with the present commuting area.

This question of where and when to allow development requires the estimate of probable demand for land. With restriction on area, it is possible that land prices would rise because of decreased supply. However, we have no evidence that this would occur. A solution to rising prices, it has been often suggested, would be the buying of land by the government as a part of a land policy in which the government would release land for sale when the price levels began to rise above normal. This solution may not be feasible in the United States today.

Another aim of the policy of agricultural zoning is to protect the tax base. The indeterminate nature of appreciation in values under present conditions has led to the idleness of farm land and possible delinquency and loss from the tax base besides the loss by the farmer of his means for a livelihood. (118) The tax assessors have appeared to pre-empt the planner's job of estimating future demand. Assessors apparently believe that the entire fringe is potential land for subdivision and that subdivision is the highest and best use to which all lands in the fringe can be put. Obviously, this problem can be helped by cooperation between the assessors and the planners. However, additional measures and close attention to assessment law changes may be needed.

Should tax officials fail to develop a reasonable and equitable farm assessment technique there are two alternative courses of action that taxpayers might explore. One would be to seek coordination of assessment policy with land use zoning of the areas. Another would be to ask for legislation that would define a farm or require assessors to determine those properties which are to be classified as farms for tax purposes. Furthermore, methods or techniques of assessment could be specified for fringe areas. Requiring assessors to classify acreage property as farm or nonfarm establishes the basis from which one may proceed to apply assessment techniques. Without this separation of such property classes, assessors are free to exercise their individual interpretation of the immediate use of acreage properties or their anticipated future use if that is allowable under the law. (119)

The policy of establishing the urban perimeter and using agricultural zones would end assessment doubts. That assessments can be tied to zoning seems to be established; however, assessments can not be based solely or directly on zoning. (120)

The concentration of settlements having urban demands is a legitimate goal of zoning. The tax burden of scattered urban settlement would be ended to the benefit of both rural and urban taxpayers. Our discussion of subsidies has indicated the difficult nature of this problem under present conditions of uncontrolled growth. Public economies will be effected in the rural areas because rural road systems and other public services can be designed to serve a predictable need.

Planning Action and Control Measures

The land policy proposed herein has been based on the use of planning action and controls to achieve a goal of concentration of future metropolitan growth in physical communities. The restriction of growth to certain sectors of the fringe and the prohibition of urban settlement in the extended fringe, require a discussion of the planning controls to be exercised in the fringe. In any attempt to prohibit development, a struggle is to be expected. There will be judicial question about the extension of police power measures to control development through zoning, subdivision, and other regulations. The greatest difficulty will be political; the ideas and objectives of the plan must be sold to the public. And in the course of exercising new controls, certain compromises may be worked out. The land policy must be the first step however; only when it has been accepted can the needed land controls and land administration agency be developed.

Control over location of urban development and the establishment of the urban perimeter is largely a matter of zoning control. Zoning regulations within the perimeter would generally limit the location of urban subdivisions to areas where topography and nearness of public utility connections indicate the feasibility of urban development without interference with agricultural areas that are to be protected. Present zoning ordinances have not been applied to fringe conditions because of the early stage in which we find planning for the fringe and the lack of experience with zoning control over developing areas. These remarks are not intended to ignore the advancements which have been made in the design of zoning ordinances but to call attention to

the lag in adapting them to fringe problems.

Subdivision regulations have primarily been used to control the internal design of subdivisions and consequently have not been used to control the location and timing of subdivisions. However, new developments in subdivision regulations help control the location and timing of subdivision activity.

Certain positive forces in achieving a new pattern for the metropolis are public expenditures for planned public works. The mapped
streets ordinance, building codes, and limited access highway controls
can also be used to help relate new development to transportation and
public facilities.

Zoning questions.——(121) The task of establishing the urban perimeter zones within the urban area should not be new to the planner. He has faced similar land classification problems within the city. And within the city he has faced also the ramifications of his decisions.

When land classification sets forth uses of land that are best, that is, best for people or for society, it ceases to be merely a technical process and becomes a problem in social philosophy and political economy, (122)

It is perhaps understandable that planners have not yet shown much initiative in attacking fringe zoning problems because they must develop a new body of knowledge about the fringe and its people and problems. The land-use plan for the fringe is a plan of recommended uses. The zoning ordinance and map which follow it acknowledge the purposes of land-use planning and zoning and establish controls on the basis of the justifications outlined above. The concept of the urban perimeter has here been used as a device to underscore the importance of a comprehensive plan for establishing the physical pattern of metropolitan growth

before development occurs.

Fringe zoning is based on the experiences in rural zoning because of the similarity in problems of idle lands and the desire to control settlement. (123)

The situation which exists in the suburban areas where subdivision has been carried to the greatest extremes more nearly resembles that in the cutover counties of Wisconsin where rural zoning developed, than it does the situation in New York City, which urban zoning was designed to correct. The principles invoked in the control of harmful land uses in Wisconsin would seem, therefore, to provide a basis for the development of adequate controls in the suburban and semi-rural areas of this state. The task of the pioneers in that field will be one of merging the principles, the practices and the procedures now used in urban and in rural zoning, for the purpose of developing a composite type suited to the needs which are peculiar to suburban areas. (124)

In short, the gradation of uses which had been worked out for, and applied successfully in, the central cores of metropolitan districts, proved to be quite inadequate for the control of land uses in suburban areas, because the classification developed as the basis for control in urban centers had not been extended down the scale far enough to reach the uses which pre-dominated in those areas. This fact no doubt explains why some of the suburban towns in this state in which large areas were given over to rural uses, and why some villages where country estates predominated, were compelled to devise methods not needed, and therefore not provided, in the type of ordinance suitable for urban centers, (125)

The relationship between rural zoning practice and fringe problems will be further explored.

Let us now look at the type of fringe zoning we are considering and its relation to our aims for control in the fringe.

Prohibition of nonfarm residences in agricultural zones, plus the imposition of large-tract minimums, would tend to retard parcellation for nonfarm uses. The destruction on the urban fringe of the agricultural character of rural communities often begins by the sale of a few small tracts for residential uses. Such parcellation and nonfarm uses are permitted by prevailing farm zoning district regulations. The process continues, bringing with it school and sanitation problems, higher taxes, and, finally, economic and political submergence of the rural community. By adequate zoning, suburban expansion in many communities could probably

be directed toward the less fertile agricultural lands, (126)

Other goals might be to prevent wasteful scattering of population, to obtain economy in government, to conserve the tax base, and to prevent the creation of new areas of blight, depreciation, and tax delinquency. Such a plan could also aim to reduce the waste of excessive mileage in roads and eliminate traffic hazards, to protect the scenic attractiveness of the landscape and prevent unsightly development, to promote sustained stability of neighborhoods, and to promote a wholesome home environment and increase the amenities of the community. Each of these objectives appears in one or more of the State rural-zoning enabling laws among the declared purposes for the attainment of which rural zoning powers may be exercised. (127)

The older type of urban zoning does not meet all of the needs of the suburban regions. The newer rural zoning provides some of the elements which have been lacking. A conscious and intelligent effort to merge the two systems into one would therefore seem to be a prerequisite to the effective use either of planning or of zoning in the suburban and semi-rural fringes of our cities and metropolitan areas. (128)

Little additional comment seems needed.

However, the legality of the blend of rural and urban zoning has been doubted. I believe the urban perimeter and fringe zoning are defensible. The principal question is the ability to exclude residence from agricultural areas. The early experiments aimed at forbidding settlement in the cutover lands of the north-central states. However, the approach to settlement control has now changed to use control involving the exclusion of residence use instead of forbidding settlement. I believe that the definition of residence and agricultural uses can be devised so that the exclusion of urban residence or part-time farming residence is clearly differentiated from residence incidental to agricultural use of the land. In other words, we would use the familiar zoning device of differentiating principal from incidental use of the land.

Wertheimer (129) suggests that the exclusion of primarily residential use of the land from agricultural zones can be defended if the control is aimed at the evils of premature subdivision and land speculation. The compact settlement idea has already been supported for the cutover lands. We might also reason that residential uses of land can be excluded from agricultural areas on a basis similar to the exclusion of residential uses from industrial areas.

Under present conditions the courts might be reluctant to deny a man the right to subdivide but given adequate facts and strong support on the basis of common welfare, such protection should be just as feasible as protection for industry, residences, etc. . . . (130)

The best defense for fringe zoning and planning is simply sound planning and a good case. The fringe zoning idea calls for planners with determination.

Two minor notes should be added here. Urban settlement has sometimes been controlled in the fringe by the requiring of large acreage lot sizes. This is not considered good practice but it has been successful. Another matter of concern in defending fringe zoning is the dependence on the accuracy and convincingness of estimates for future land uses for supporting control over spread.

Subdivision control. (131) -- The other half of the urban perimeter concept is control over subdivision within the urban area. Having limited the area, but not attempting to prevent growth within the area, the planner can probably rely on subdivision regulations which require the installation of utilities before approval to meet the problems of timing of urban subdivisions. In areas within the perimeter that would be used for country estates and part-time farming, timing and utilities are

not crucial. Another suggested device for controlling the rate of subdivision is the requirement of a market analysis to prove the need for subdivision. The public works program could also be used as a positive force in guiding location and timing of subdivision activity. Similarly, it has been suggested that land be made a public utility in which case a certificate of convenience and necessity would be required before subdivision would be approved. Monchow (132) feels that our subdivision requirements are already so complex that public utility control is a relatively minor step. This ignores the difference in public attitudes toward the control of property under the general police power and under the special status of a public utility.

Many fringe areas are probably still plagued by the excesses of past waves of subdivision activity and speculation. Although no recent studies have been made of the number of such blighted lots and areas, we can suppose that the building activity of the past few years has not yet utilized the stock. (133) Much of the stock requires replatting.

Numerous remedies, including redevelopment, state acquisition, and laws designed to improve procedures for tax reversion and replatting, have been suggested. (134) Some sort of land agency, closely tied to planning, is needed to handle these problems. These idle lands indicate a lack of time for the real estate market to absorb and to change in order to use these lands and also indicates a need for a change in use of these lands.

Subdivision control which forces the development costs of subdivision upon the subdivider will have the effect of cutting speculative value from such activities. The speculative values of the past have come from the city or county assuming development costs when market prices are based on the development costs plus building costs plus the cost of the land (usually the price of buying a farm). In using the urban perimeter as a limit to land suitable for subdivision, the planner must see that the price of acquiring the raw land does not rise unreasonably. His estimates of future demand must attempt to account for this factor. Market imperfections are the major problem here.

Planning for Areas outside the Urban Perimeter

The separation of the agricultural areas from urban areas calls for rural planning and zoning to insure the effectiveness of the establishment of urban perimeters. Past experience in rural planning and zoning is reviewed here in order to tie together the two areas. The parallel between the Wisconsin and Minnesota experiences, and zoning for the fringe have already been discussed. As a first step in planning for the rural areas, the planner should develop ways of working with rural people.

Rural social problems and the planner.—The changes in rural life because of increasing commercialization and industrialization of agriculture can not all be eased by the planner and others interested in such problems. However, the planner can aid in some respects. The urban perimeter is not designed to segregate rural life from urban life. Rather it is designed to focus urban impacts in certain areas so that attention can be concentrated on those areas. The village has been serving as a place for the meeting of the two ways of life and as a place for mutual adjustment. The planner and other interested officials can work to get cooperation on such matters as taxation.

reorganization of local government, and provision of schools to meet urban pressures. One of the most fruitful areas for cooperation is in the provision of recreation through community organization and with the support of the planner. The planner and extension official should work together to show rural people how to recognize their needs and work for solutions.

There are needed adjustments in attitudes of the rural and village people. In the coming of urban influences we find specialized organizations. These organizations need symbols of respectability so that the rural person can join them without feelings of disloyalty to his old associations and without antagonism to new members in the organizations. Techniques are needed to expand group identity and interest in local problems. If some way could be found to capitalize on informal rural organization to build rural participation in the more formal organizations, the farmer and rural person would perhaps learn to accept new experiences and change more easily.

Rural zoning experience, (135) -- Many of these problems have shown up in experiences in rural zoning. Rural people have failed to understand zoning because it seemed too complicated. They hesitate to accept restrictions on the use of private property. The misconception that population growth means prosperity and more taxpayers is common. Too often rural zoning has started by freezing all development and issuing permits on the basis of special permits or spot zoning amendments. Often the zoning or planning commission has acted as the board of adjustment or appeals. Consequently cries of special privilege have destroyed rural zoning and given the feeling of instability and uncertainty to

zoning districts. There has been a failure to request people who know the area to participate in the drawing of zoning boundaries. Often the zones are not drawn on the broad scale that zoning requires so that the ordinance becomes virtually impossible to administer because there are so many tiny districts to watch. Where the township must approve county zoning, single townships have often vetoed the ordinance for a whole county by their refusal to adopt the ordinance. Other townships have used this power to exclude all undesirable development and thereby dump it into unprotected areas. Apparently, the individual interests of small units such as the township prevent zoning and planning from achieving a broad, comprehensive plan.

Rural planning problems.—The experiences during the depression with the county land use planning program have shown (136) that people have no clear idea of the goals of planning or the planning process. Planning without extensive explanation and some popular appeal fails to continue to draw interest. The county land use planning program might have stressed, for example, the idea of self-help in raising standards of living. People have to be taught to look for problems and educated in means of meeting and solving them together.

In order to insure a broad overall view of the problem, the county unit has been suggested as the logical unit of present day government to handle planning. The ultimate goal in metropolitan areas would be regional planning under a reorganized metropolitan government. However, in advocating the county as a planning unit, this should not exclude close attention and work with small units such as townships and villages. One disadvantage of working with rural political units is

that rural communities in the sense of social areas do not correspond with political boundaries. And of course, very few problems are limited to any one political jurisdiction. In the county land use planning program it was found that those areas in which the program was carried on with local rural social communities rather than political subdivisions had much greater success. When such activities are purely advisory, there is no danger that the number of administrative or political or governmental areas will be increased. However, as has been found in the soil conservation district program, soil conservation district boundaries usually do not coincide with any existing political subdivisions and in effect constitute separate local governments set up for special purposes; that is, the soil conservation district is the rural equivalent of the urban special district and is subject to the same criticisms. There has been considerable interest in consolidation of agencies working with rural areas so that one county office would serve several specialized agencies. (137) It seems desirable that a county should be served by only one soil conservation district and one planning agency. for example.

The soil conservation district has been emphasized here because it is essentially a planning body. In a few states soil conservation districts have greater police power control over land use than has been given to any planning agency; however, only in a few scattered instances has the land-use ordinance power of these districts been used because of general rural opposition to such controls. (138) Where districts have enacted land-use ordinances, they have had to stand court tests on bases remarkably similar to zoning cases. The administrative problems

of these land-use ordinances also parallel experience in rural zoning.

Why has rural planning been short of success? One difficulty has been the inability to find leadership by citizens who can carry a difficult technical program. A staff of experts is needed to assist the citizens. Without a staff to maintain interest and organization, too often the citizen planning group melts away. In the Wisconsin experience with rural zoning in the last twenty years, the administration and support of zoning in a township or county has often devolved on one person who has carried the program as best he could. Obviously, this is unsound. Perhaps a program of local assistance by the state could serve to provide needed technical advice and also, perhaps more importantly, to maintain interest in the planning and zoning programs.

Another difficulty which all planning must face is the lack of coordination between state, local, and national governments in administering related programs. In the rural areas this situation is especially bad because of the numerous independent federal government agencies working with rural people and because of the poor organization of most county and township governments in rural areas. This difficulty is tied to the insistence of local groups on special favors and programs. These narrow interests fail to see how their demands complicate the structure of government as special agencies are brought into being to meet their demands.

Perhaps the greatest difficulty that planning faces in rural areas is the opposition of the farm organizations. It has been charged that the Farm Bureau and other farm organizations played a major role in ending the county land-use planning program. (139) This opposition

has been explained on the grounds that a new and competing government was threatening the farm organization. In order to maintain their importance in rural and farm areas, the farm organizations asked for the end of the county land-use planning programs.

In rural areas, it may take from five to ten years to gain acceptance of the basic principles of planning without any attempt to impose or develop plans or controls. Rural leaders must be convinced and they must be reached through a knowledge of rural social organization.

The planning agency should make special attempts to coordinate and use the programs of all agencies interested in rural problems. In this role, the planning agency can serve as a research and information organization. In many respects, broader land policies and programs are needed in rural areas than in urban areas. In order to meet the problems of continuity in the program, a staff is needed along with well-trained administrative help such as a building inspector. The farmer has a great aversion to all controls and such a simple step as explaining to him that a building permit is only a once-in-a-life-time requirement is very important. The urbanite accepts without question procedures which the rural person regards with deepest suspicion.

Summary and Conclusions

The suggested policy of concentration of metropolitan growth in physical communities delimited by an urban perimeter is based on conclusions developed in preceding chapters. The first chapter related fringe growth to metropolitan development and stressed the importance

in recent fringe growth of commuting by automobile and the location of new subdivision activity in rural areas. The extended fringe will probably become increasingly urbanized and intensify fringe problems. Present trends point to continuing growth of all areas of the fringe.

A discussion of reasons for fringe growth and study, in the third chapter, of fringe characteristics emphasized the point that most fringe dwellers continue to live an urban pattern of life. Urban life under fringe conditions is often poor from objective standards of public health, services, and facilities, but the aesthetics or amenities and the social values attached to suburban or rural residence draw city people to the fringe. The planner must seek to reconcile the desires of the fringe dweller with the difficulties created by the fringe movement.

The difficulties and problems created by the fringe movement are problems which should be met and controlled by local governments. However, many local governments can not meet them: reorganization of governments in metropolitan areas is suggested as the action which is required for comprehensive solutions to metropolitan and fringe problems.

The exercise of planning controls in fringe areas can bring certain fringe and metropolitan problems under control. The solution proposed by this thesis is intended to provide an urban physical pattern which will avoid present problems yet provide an environment which will be as attractive to the fringe dweller as the open country-side and suburban areas with their present disorganization.

The suggested physical pattern can be achieved without waiting

for the reorganization of government if the planning activities in metropolitan areas were to be oriented to its achievement. Admittedly,
many complete solutions and efficiencies can not be achieved, even in
planning efforts, without revised metropolitan governmental organization,

What opportunities exist for planning action in the fringe? The county appears to be the best unit for planning under present conditions. From experience, it appears that the township can not handle fringe problems. The jurisdiction of the central city does not cover enough area to reach fringe problems. Although extraterritorial planning and zoning can temporarily meet some fringe problems, it is not a satisfactory long-term solution. There is merit in some regional or metropolitan planning activities today but they have not been related to the governmental agencies which must carry out their recommendations unless strong planning organizations exist within the local governments. The regional planning agencies established under Tennessee law are interesting attempts to meet fringe problems; however, they deviate from planning doctrine in that they do not parallel and are not integrated into the structure of existing governmental units. New York state has attempted to control subdivision through the state department of health but has found that there are large problems of administration, (140) Such steps toward state zoning and subdivision control need to be considered carefully because of the distance of state government from local problems and the expense of effective administration.

Between the efforts of the central city, the county, and the major satellite towns, fringe problems could be brought under control.

At this time, the advisory metropolitan planning organization can serve a very valuable role in coordination of local planning activities and in stimulating and sustaining interest in local planning. The ultimate goal should be reorganization of government in both the metropolitan and rural areas to meet the changes in modern society. Planning, in particular, faces great difficulties under present rural governmental organization. While pressing for adaptation and revision, the planner must attempt to meet fringe problems because he appears to have the basic powers required to solve some fringe problems. The problems of metropolitan areas are very serious and can not wait for the perfect solution: planners must try to provide an interim solution through concerted effort to rechannel fringe growth.

APPENDIX

APPENDIX

RESEARCH RECOMMENDATIONS

The planner should be amazed when he discovers the extent to which the generalizations he uses every day in making policy recommendations are <u>not</u> based on facts. It is very common for generalizations about principles of urban growth, land-use patterns, and urban populations to be based on untested observation. This situation is particularly true of the fringe studies in which procedures have not been adequate, generally, to warrant generalizations applicable beyond the area studied.

Fortunately, the fields which supply planners with information and theory have recognized that the time has come for testing of the whole body of fact and theory about urban and metropolitan phenomena. The state of urban and metropolitan research has been assessed by a highly qualified group of experts under the leadership of Bogue. The studies suggested below sometimes duplicate studies listed by Bogue; however, only the general idea is suggested here while Bogue's report often outlines possible study procedures. The scope of the suggested studies varies widely: the planning field needs studies of both broad and narrow scope. Many of the studies suggested fall within the area of fields other than planning: the suggestions should help the other fields orient their work to the requirements of the planner in these

¹Bogue, Donald J., (Editor), <u>Needed Urban and Metropolitan</u>
<u>Research</u>, Oxford, Ohio: Scripps Foundation, Miami University, 1953.

cases.

Studies of the movement to the fringe. -- The city planner's function in society seems to include a responsibility for aiding the adjustment of urban people to physical environment and vice versa. The fringe movement in particular has been considered a symptom of maladjustment within the city. The causes of a reaction against city life and the desires, needs, and aspirations of the fringe dweller need to be investigated from the viewpoint of discovering guides for planning policies.

There are many ways to approach this problem. The studies which have been made to date can be statistically compared and their methodology copied and improved upon in making new studies. Studies of fringe growth should aim to evaluate the relative weight of personal reasons and technological forces in fringe growth.

Studies of migration in metropolitan areas are needed: they would be useful in fringe and redevelopment studies. The reasons for migration should be related to personality, social characteristics, and physical environmental conditions in the residence area. Case histories of migrants might furnish valuable data on the number of moves over the life of the family group, significant trends in the direction of migration, etc.

The above group of studies can also be tied into studies of the journey to work. From the studies already made, it appears that certain generalizations in ecological theory, which planners have been using as policy guides, are not consistent with reported facts.

An appraisal needs to be made of the value to planning of the community surveys made by sociologists. The usefulness and application

of a knowledge of social characteristics and settlement patterns by residence areas for land-use planning should be evaluated. The planner needs more definitive information and opinions about the social effects of residential segregation, especially in the one-class developments characteristic of the fringe, and its relationship to land-use planning. Studies of planning for fringe and metropolitan areas.—In studying the metropolitan area, and the fringe, many people in many fields have proposed both social and physical patterns for the future. The group of architect-social philosophers (the term is used to describe the approach, not to stigmatize), such as LeCorbusier and Saarinen, have contributed a vast literature which has not been evaluated by the professional planners for its usefulness. The premises of these writers should be examined carefully. The proposed patterns need comparison in a single work which treats the material objectively.

Similarly, the work and experience of professional planners in metropolitan planning and in solving fringe problems has not been gathered and analyzed. Research on this topic would require analysis of the publications of planning agencies and correspondence or interviews with such agencies. The place of planning and its functions in present and proposed schemes for planning and government in metropolitan areas needs investigation.

Studies of the effect of various densities of residential development on fringe problems are needed. Such studies are needed to test the validity of the premises of this thesis: that urban concentration in physical communities is the most feasible solution for the physical problems of fringe growth.

Attention also needs to be given to technological possibilities that may affect metropolitan growth and produce new or intensified fringe problems. Past growth of fringes and metropolitan areas should be studied to verify generalizations on metropolitan growth. Such studies would confirm or refute the contention that the fringe is not a new land-use or social phenomena.

Studies of the urban fringe are needed to test the validity of the urban fringe concept. The extended fringe should also be studied especially to determine if growth trends in the extended fringe will lead to a degree of urbanization approaching that of the intermediate fringe. The various delineation methods should be tested and compared in several regions of the country and for different city sizes. The Census delineations of urbanized areas should be field-checked against delineations made using the various other methods.

An analysis of the problems of decentralization and dispersal as a protection against atomic attack is needed to bring planning policies up-to-date with new information.

Studies leading to a program for rural areas.—Village and rural life and agricultural problems in the extended and intermediate fringes need studies which are pointed toward providing policy suggestions relevant to planning. The adjustment of rural people to urban invasion needs study. The Extension Service has a program for aid to fringe areas; planners should be informed of the program so that extension officials and planners can work together.

Special programs of rural and agricultural planning such as the watershed program of the Soil Conservation Service should be analyzed

for their relationship to city planning. The application of rural land classification techniques to metropolitan land-use planning should be investigated and brought to the attention of planners if they seem useful. The experiences with Soil Conservation Districts and their land-use ordinances, with the county land-use planning program, and rural planning and zoning in several states need review.

Planners need information on public relations and education programs for reaching fringe and rural people. The studies of participation are first steps in providing such information. The planner needs a specialized program including reports on the relative merits of various media and suggestions on conducting public meetings.

Special studies.—There are a number of specialized studies which should be made. The studies of land subdivision and land speculation problems are now obsolete and should be brought up-to-date. A review of annexation studies for techniques and policy suggestions is needed. Experiences with special planning districts and extraterritorial planning powers should be gathered and evaluated as a guide to future use.

The application and combination of rural and urban zoning to fringe areas, and the adequacy and use of land subdivision and other planning controls to solve problems of the fringe need special study. Of particular importance are questions to be resolved such as the prohibition of urban residences in rural or agricultural zones, and the development of subdivision regulations to control the location and timing of subdivision activity.

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