ZONING FOR MIXED USES IN URBAN AREAS

Submitted in Partial Fulfillment of the Requirements for the Master's Degree in City Planning

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Dear Professor Adams:

I submit with this letter my thesis on "Zoning for Mixed Uses in Urban Areas," as one of the requirements for the Master's degree in City Planning.

Sincerely yours,

Miriam Strong
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INTRODUCTION

In the planning literature, there is an increasing expression of the opinion that segregation of dwelling types and uses by use zoning has been carried too far, and more diversity of dwellings and a closer relation of residential and nonresidential uses is desirable. In most if not all of the schools of city planning design, where presumably the best and most advanced is taught, site plans designed by students are almost all of the "mixed" type.

And yet, under most of our zoning today, mixed developments, developments of diversified dwelling types, are impossible.

An attempt was made in Montgomery County, Maryland recently to build an unusually well planned development containing apartments, row houses, single-family houses, and a shopping area. Though the development was designed to fit harmoniously with the surrounding residences, and though it would have provided greater benefits and more wholesome living than if it had been built solidly in dwelling houses of one kind in exact conformity with the ordinance, it was refused a permit from the Board of
Appeals. This is only an example of the difficulties a development of this kind runs into when it comes up against most zoning.

PREMISE OF THE THESIS

This thesis starts with the premise based on opinions in the planning literature cited below, that diversified dwelling types and mixed uses are desirable, at least under certain conditions. No attempt is made to go into the pros and cons of segregation versus diversification. Several theses could be written on this subject.

PURPOSE

In broad terms, the purpose of the thesis is to explore, analyze, and evaluate the various possible means of zoning satisfactorily for diversified dwelling types and mixed uses in urban areas, or more precisely, of zoning for a more intimate relation of uses -- a closer mixture of uses -- than we have now in most of our urban areas. The objectives are thus relative ones.

SCOPE

No final answers can be given as to the extent or type of urban "mixture" that is best, nor the best means of providing for diversification or mixture in any community.

What this study does attempt to do is to present the various alternatives, their respective advantages and
disadvantages, problems and possibilities, for different conditions and types of communities. The final answer must come from the local community and will depend on local conditions, needs, and tastes.

Provision for mixed uses in zoning ordinances cannot in itself, of course, produce mixed development. Nor will mixed development always produce a more mixed population -- one of the objectives of such development. In the last analysis these will come only when people want them, and some people may never want them.

But such zoning may facilitate diversified development. For those who want to try it, it will provide a tool, for others it may be suggestive; and the actual building according to such zoning may be suggestive again even to those who are now opposed.

This is not a legal document but rather attempts to present the planner's point of view on this subject for any one preparing zoning ordinances. Its aim is to be a kind of planner's brief to the lawyer.

It may be that one of the reasons why mixed development may not be more frequently provided for in zoning ordinances is that those preparing ordinances may not have considered the possibility or may not be familiar with the various methods available and their respective advantages, disadvantages, and possibilities. It is in the attempt to throw some light on these points that the thesis is devoted.
OUTLINE OF THESIS

The next section, Part II, has two main parts. The first will present the reasons for the conviction that diversified uses and dwelling types are desirable: some sample opinions of those advocating such development; a brief summary of the advantages of mixed development as presented in the literature; and an outline of some of the reasons for the increasing interest in this subject.

The second part will spell out in more detail than in this introduction the specific objectives and some of the limitations of the thesis.

Part II will describe the various methods of providing for mixed uses in zoning. Part III will analyze and evaluate these methods. Part IV consists of a brief summary and conclusions.
A. WHY DIVERSIFIED DWELLING TYPES AND MIXED USES

First, then, why mixed uses?

After the advent of the industrial revolution and before zoning, our mushrooming cities were a senseless, patternless jumble of tenements, factories, houses, and laundries crowded together. Use regulations -- use zoning -- with which this study is particularly concerned, separated the home from the noisy factory, and low dwellings from high apartments which cut out their light and air.

1. SEGREGATION BY USE ZONING

As we have refined this legal tool for separating and grouping uses, we have carried the segregation process further and further -- both in terms of distance and in terms of increasing numbers and kinds of use districts. Residential, industrial, and business areas have been farther and farther separated from each other, and each has become larger and larger in size. Dwelling types are being separated from each other by greater and greater refinements.
We have divided our residential areas into tight classified compartments -- estates in one compartment; suburban homes, price $20,000, in another compartment; $5,000 detached in another; row houses with porches in this area; rows with marble steps further down; next, masses of apartments.

And in each area, whether it be the lawned and hedged-in houses in the suburbs, the identical row houses lined like sentinels down the street, or towering apartment hulks, there is sameness. In each area, the structures lined an even distance from the street, an even height, with equal yard space, if any. In each, the same size family, same size car, same labels in their clothes -- or lack of labels, same skin color and suffixes to their names. In the apartments, the aged, childless, and single. Industry and business separated out in another part of town.

All neatly sorted out, all carefully stratified.

a. HAS USE ZONING GONE TOO FAR?

Thus, through use zoning, have we produced order from disorder. And called it progress. And certainly there is improvement over the early confusion.

But have we carried this segregation and classification too far? Have we perverted the original purposes of use zoning -- abused this useful tool? With
the improvements we have made, have we created new problems?

There are those who feel that we have, and among them is a growing body of planners, housers, and architects. They feel that what we have created is artificial, sterile, monotonous -- both for living and for the eye to see. They point out that in this impersonal machine-like city of segregated zones, there is no longer the pride of community, no longer the feeling of belonging. In a democracy, we no longer see or care about any but our own kind. Mobility is encouraged; roots do not go deep. By pushing uses farther and farther apart, transportation problems have been created and convenience lessened.
2. DIVERSIFICATION ADVOCATED

This group advocates breaking down these "vast uniform stretches," drawing industry, business, residences, and community facilities closer together -- creating a closer relation between them, and bringing variety, diversity, "mixture" into residential areas.

This whole idea of diversification is closely tied up with the philosophy which would break up the amorphous city into subcommunities or neighborhood units -- though the two ideas are not necessarily identical. Each neighborhood unit would be to a considerable extent self-contained, with its own shopping center, community facilities and perhaps industry. Or at least neighborhoods would be served by shopping and industry close by.

Mixed residential areas are not necessarily included as part of the neighborhood philosophy, but many advocating this philosophy feel that not only are business, industry, and community facilities essential to the neighborhood, but also a cross section of dwelling types of different sizes and types.

For instance, in "Planning the Neighborhood," prepared by a subcommittee of the American Public Health Association, composed largely of planners, and chair-manned by Frederick J. Adams:
"The range of dwelling types for an entire neighborhood should provide for a normal cross section of the population." .... "The need for various kinds and sizes of dwellings to meet the needs of different families within a neighborhood cannot be too emphatically stressed."

Diversification is thus advocated as part of the concept of a cross section of uses in the neighborhood. Variety and diversification are also advocated for advantages they will bring in themselves.

Following are a few sample quotations from the growing body of opinion in favor of diversified uses in urban areas:

Again from "Planning the Neighborhood":

"It is essential in the development of a well balanced neighborhood that too great uniformity of building types be avoided. Predominantly single-family house developments have a place in outlying parts of metropolitan areas, in suburban sections and in small towns, but most urban neighborhoods should contain, in addition to freestanding single-family houses, row or groups houses and multiple dwellings of various types. Segregation of these types into vast uniform stretches within the city should be avoided insofar as possible, and each neighborhood should have its due proportion of each type.

"Most zoning ordinances and subdivision regulation force the building up of whole districts with only a single type of dwelling accommodations. While this might have been justified to control unplanned development

in older communities lacking city planning supervision or controls, revision of zoning ordinances to permit diversification of dwelling types in planned neighborhoods is strongly recommended by the Committee, especially where a master plan or other guiding official plan is in control.

Henry Churchill in the Journal of the American Institute of Planners:

"Looking at many old cities I am not at all convinced that mixed areas of residence and business, even light manufacturing, are in themselves undesirable. Such areas have life and variety, the fascination of many types of activity, of people, of mood.... I am not satisfied, for instance, with the generally approved... notion that land uses must be segregated. The cities of Europe and Latin America are extremely heterogeneous in character -- business, residence, mansions, tenements, all on the same street." 3

The same author in "Neighborhood Design":

"...cities should make every effort to establish balanced housing areas...to distribute housing around existing industry and to provide industry as an essential part of every residential area of any size.... Our zoning laws and other planning contrivances, including much of our thinking, are very antiquated in that respect." 4

Russell Black in "Planning for the Small American City":

"...it is the opinion of the author that the presence of well designed and well placed multiple-family dwellings in single family districts is much less objectionable than

2. Ibid., pp. 27,28.


is commonly supposed. It is important that the multiple-family dwelling should have proportionately greater surrounding open space, that it should provide privacy for its separate families and that it should not impose a disproportionate burden upon the traffic capacity of the street or upon underground services. But from the point of view of potential privacy, indoor and out, as well as in economy of construction, the two-, four- or eight-family semi-detached house or multiple-family dwelling has distinct advantages over a long row of small single houses placed eight or ten, or even fifteen or twenty feet apart."

"In zoning for special uses and for the preservation of residential districts, a careful distinction should be made between uses inherently objectionable and uses harmful to residential districts when improperly placed upon an insufficient area. It will be found that the principal objections to many special uses will disappear if they are properly designed and surrounded by sufficient well landscaped open space. This applies to such institutions as hospitals, schools, club-houses, and sometimes to apartment houses and hotels, as well as to multi-family dwellings in single-family districts." 5

Lawrence Orton in the AIP Journal:

"...it isn't so much what you do as how you do it, that counts. Houses and apartments, stores and even factories, can be mixed harmoniously and advantageously, provided the design is right." 6

Catherine Bauer in the issue of The Annals on "Building the Future City":


"For the past generation practically every effort in the field of city planning and housing, whether profit-minded or welfare-minded, has been pushing us toward enormous one-class dormitory developments as completely separated from one another and from work places as possible. In part, this is due to persistent birthmarks: the zoners' feudal ideal of subdividing the city map into a series of standardized watertight compartments, each serving a single function, family type, and economic class; the 'underprivileged' as a race apart; the housers' bleak idea of 'minimum standards.'

The net result, all too often, has been either snobbish exclusiveness or the monotonous sameness of a single economic level!"

"Zoning went as far as it could in this direction; indeed, it is difficult to see how the courts came to stretch thus far their interpretation of the 'public health and welfare.' Dwelling types and lot sizes were standardized over vast areas within which commerce and industry were forbidden altogether, while their overextension was encouraged in equally vast sections elsewhere ...."

a. ADVANTAGES OF DIVERSIFICATION

Following is a brief summary of the reasons for and advantages of diversified uses in urban areas, as covered in the literature. Many of the points overlap. Many are tied in with arguments for neighborhood development of cities. Most are based on the assumption that diversified dwelling types and uses bring a diversified population and a variety of activities. This


8. This summary has borrowed heavily from Catherine Bauer's article in The Annals referred to in (Continued on next page)
does not necessarily follow but is no more than saying that physical planning has its limitations.

1) Community Spirit -- Citizenship

A neighborhood which contains business, industry, community facilities, and dwellings of many kinds -- implying diversity of family types and population -- is more self-sufficient and self-contained, is more of an entity, has more feeling of unity and community than a neighborhood or area which is limited in uses or dwelling types.

Citizen interest and participation in public affairs will be greater in such a neighborhood. Democratic government -- not to mention planning -- will have a sounder and stronger base:

"It seems likely that a variety of family types and personalities, akin to that of a small town, would lend variety to the 'neighborhood community' and that this in turn would result in a stronger civic consciousness in the city as a whole." 9

2) "Neighborhood, a Representative of the Larger Social Whole"

Closely related to the first point, this point has been particularly stressed by Mumford: In the

Continued: Footnote 7. Her article summarizes much of the other literature on the subject, and contains the most comprehensive treatment of the case for diversification found anywhere.

neighborhood, we learn in a small scale how to handle
the large social problems. The neighborhood should
reflect the real world with its variety, its conflict,
and its problems.

"If we plan the city correctly, it will be a
ture sample of the world. There will be the
utmost variety of human life living side by
side, cooperating with each other, coming into
conflict with each other all the time."10

"A neighborhood should be an area within the
scope and interest of a pre-adolescent child...
that daily life can have unity and significance
for him, as a representative of the larger
social whole...a special effort should be made
in the design of neighborhoods to incorporate
in them those light industries which directly
subserve neighborhood life...examples of the
industrial process which the child at school
may not merely inspect and understand, but also,
perhaps, take part in as an educational ex-
perience."11

3) Social Stability -- Homes for "Whole Cycle of Family Occupancy"

A family cannot find a place to live at the various
stages of its development in many of our one-dwelling-type
residential neighborhoods. Every time the family changes
size it must change neighborhoods.

A young couple just starting out, for instance, or
an older couple whose children have moved away cannot find

of the Annual National Planning Conference held in New
York City, Oct. 11-13, 1948. Chicago, American Society
of Planning Officials. p. 6.

in many of our typical suburbs an apartment or house small enough to suit their purposes. They must perforce leave the area of their friends and relatives, taking with them their interest in the community and its welfare. They lose. The area loses good citizens and some of its social and economic stability.

A neighborhood of diversified dwelling types ranging from single-family houses to apartments can provide for a family in its whole cycle of development— for the couple just married, for families increasing in size at the child-rearing stage, and again for older people whose children have left home.

To quote again from "Planning the Neighborhood":

"Failure of many real estate developments to provide a reasonable variety of dwelling types within a neighborhood has undoubtedly contributed much to a costly and undesired mobility of urban families."12

Herbert Swan also describes this process at some length in the National Resources Committee report on zoning.13

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4) Convenience -- Transportation Problems Diminished

a) Proximity of Uses to Each Other

With a closer juxtaposition of residential and nonresidential uses -- or, with more self-contained neighborhoods -- much of our transportation problem would obviously be eased. To quote Henry Churchill once more:

"The character of the factory is changing -- and the method of planning residential areas is also changing. A new type of zoning must be evolved, which will permit, or rather insist, that the two get together or the transportation problem will remain unsolvable."\textsuperscript{14}

5) Economic and Fiscal Stability

Diversified uses and dwelling types make for a sounder economy and tax base. Low-cost or low-rental dwellings do not pay enough taxes to cover the costs of the municipal services they use. A sound fiscal base will require higher cost and higher rental houses, as well as some industry and business. Efforts to exclude low cost houses from high-cost house neighborhoods will result in greater ultimate social costs to the whole community including these latter neighborhoods.

To quote Miles Colean:

"There seems no sound reason why a neighborhood should contain exclusively one type of housing, one level of density, or one narrowly restricted group of residents. The tendency toward what FHA refers to as "homogeneity" may be overplayed, whether it be in the types of houses or the incomes of their occupants, to the disadvantage of neighborhood stability and a democratic way of life.... To see the advantages of a planned heterogeneity, planners might profitably pilgrimage to Houston where at River Oaks they may find a neighborhood with its commercial area, its apartment area and its detached dwellings serving families with incomes varying several hundred per cent. Here the balance of housing type and price has resulted in an economic stability unlikely where any single group is catered to exclusively." 15

And Churchill in "Neighborhood Design and Control":

"...in any investment program diversification is an essential element of safety for all concerned: the developer, the owner, the storekeeper, the municipality, the school system and our political system itself." 16

6) Democracy

A democratic variety of income, occupational, and even nationality and racial types is more likely in a mixed-dwelling type and mixed-use area.

7) Variety, Interest, Excitement

A cross section of population and family types, and a variety of community functions makes for a more

interesting and stimulating life. See the quotation
of Henry Churchill on page 10.

And Mumford:

"...the city, if it is to function effectively, cannot be a segregated environment. The city
with a single class, with a single social
stratum, with a single type of industrial
activity, offers fewer possibilities for the
higher forms of human achievement than a
many-sided urban environment."17

8) Aesthetics

Many of the uniform areas in our cities are
monotonous and dull. Variety in form and space, in
height and bulk -- provided it is done under controlled
conditions -- is more pleasing and interesting aes-
thetically than sameness.

Quoting Jacob Crane:

"...zoning tends to produce monotonous development,
particularly in such matters as uniformity of front
building lines and lot sizes, and rows of buildings of
a similar type and class."18

And the architect Arthur Holden:

"When a whole neighborhood is planned and
built at one time, there is an opportunity
for placing the houses in such a way that
one house is a protection to others, and so
that the relation of the houses one to


18. Crane, Jacob L., Jr. Progress in the Science of
Zoning. In Zoning in the United States, May 1931,
another can be varied. A minimum setback line serves to line houses up with undesirable uniformity and practically without regard to the development of outdoor spaces, vistas, and enclosures, which can so greatly enhance the interrelation between the outdoors and the interior of the house."

"...similar difficulties are encountered when zoning regulations prescribe too explicitly both minimum width and depth of lots and also set a minimum area. Such provisions put a premium on rectilinear design of lots and consequently upon rectilinear street design, thus frustrating the designer who realizes that variety of frontage has both social and economic advantages...."

"Everyone realizes when he sees it that a neighborhood composed solely of small houses suffers because it lacks the satisfying effect of variation in mass. This can be overcome by intelligent groups of large and small units.... It is also possible to use row houses in combination with both single and two-family houses, and achieve results that would be impossible when uniform standards are imposed by the ordinary types of zoning legislation."

"...The task before us is to rephrase our legislation so that it may protect against violations of rights without setting up imaginary laws that become unreasonable barriers to the natural laws of design."

b. OBJECTIONS TO DIVERSIFICATION

There is of course a large group of persons who are or would be opposed to diversification, particularly of dwelling types. And this group includes not only real estate interest and property owners, but some within the ranks of planning. Witness, for example, the remarks of Max Wehrly in a recent issue of the AIP Journal

that "'heterogeneous neighborhoods' is not only a fanciful theory but is the juxtaposition of two words with completely divergent meaning." But, as said before, no attempt can be made here to present this side of the question.

3. WHY THE INCREASING EMPHASIS ON MIXED USES

But one might well ask, why this complete change in point of view on the merits of segregating uses by zoning by the very group -- the planners and housers -- which originally sponsored it, which has upheld it through many a court battle, and for whom it is one of the chief legal tools? Use zoning, in combination with height and area regulations, was established to bring some method out of the madness of prezoning cities -- to protect uses from each other. Then why mix them all up again?

There are several answers. It is pertinent to briefly suggest a few of them here.

In point of fact, though the viewpoint for mixed uses seems to be growing, it is not new. There have always been those that have objected to segregation of dwelling types, at least, on the grounds that it was undemocratic.

a. PERVERSION OF ORIGINAL ZONING PURPOSES

Secondly, many of the advocates of mixed uses feel that the original purposes of zoning -- and particularly the use zoning features -- have been perverted. Instead of being used only for broad social purposes to implement comprehensive planning for the city, zoning has become a tool of special interests and speculators.
-- a rationalization used primarily to protect exclusive residential neighborhoods and to uphold, or even increase, property values, or, as Mumford puts it, "to standardize and stabilize pecuniary values." 21

A report of the New York City Building Zone Resolution, written under the chairmanship of Clarence S. Stein, has this to say:

"...zoning...passed beyond the matter of conserving that which would accrue to the advantage of the common welfare and proceeded to utilize the principle and the power to conserve, stabilize and enhance property values... Now, pecuniary gains seldom rise out of withdrawing land from the possibility of industrial or business use. So resort is had to the creation of many residential categories so as to provide finely graded areas of differential exclusiveness. In this way property values are stabilized and enhanced." 22

b. CHANGED CONDITIONS

Moreover, conditions have changed, and the ways of planning have changed, and zoning needs to be adapted to conform.

The tremendous growth of cities and their increasingly unwieldy and inhuman character calls for modified


tools which will break them down into manageable, human size, rather than increasing their mechanized, systematized character.

Social and economic charges have also created a change in the demand for dwelling types. Demand for apartments, row houses, and other multi-family dwellings has increased with economies in large-scale multi-family development, and with the growing number of families wanting rental units -- small families with few or no children, older families, and families who cannot get servants and do not want the care of a large house and yard. According to "Planning the Neighborhood," 48% of the urban family units are without children.23 The increasing importance of the multi-family dwelling has led to an increased concern with the problem of fitting them properly into the urban pattern, more closely integrated with single-family houses.

The character of families living in multi-family dwellings is changing too. There is no longer the justification that there used to be for the feeling that persons living in apartments and other multi-family dwellings are a transient, irresponsible lot

who make undesirable neighbors. (Moreover, if multi-
family dwellings were integrated into a pleasant
home-like environment, as part of a unified neighbor-
hood, their occupants would be much more apt to show
some community pride -- more apt to be better neighbors
-- than in the usual present anonymous central-city
multi-family district.)
c. MIXING WITHOUT DETRIMENT

Perhaps most important is the growing realization
and evidence that mixing can be done without harm.

The character of a structure may change when com-
bined with other structures. An apartment which is
harmless in itself may be harmful when too close to a
house. The combination is greater than the sum of its
parts. This is the essence of planning. But, on the
other hand, if uses are combined in the right way,
there may be additional benefit rather than harm.
Separation of some kind there still must be but it
does not necessarily need to be a wide separation
either in terms of distance or of size of area sepa-
rated. Indiscriminate scrambling of uses is obviously
undesirable, but planned mixture is not.

1) Changing Industrial Plant and Apartment Design

Moreover, industries, business, and apartments
are becoming more fit companions for residences than
they used to be. Production methods and equipment are changing. Coal is being replaced by electricity and gas. New methods have been discovered to control sound, odor, dust, and vibration. The modern factory and shop can be pleasing in appearance, harmonious to adjacent residence. New methods of planning and design handle traffic loads with a minimum of congestion. Many of the new Sears-Roebuck stores are an example. And with rapid communication and new production methods, it is no longer as necessary as it used to be that industries and businesses be separated in groups from the rest of the city.

Some of the Johnson and Johnson plants and the RCA research laboratory in Princeton are examples of industries that would not be objectionable in residential districts. In Bristol, Tennessee-Virginia, an industry has recently been allowed in an area -- relatively small for a zoning district -- surrounded on three sides by residence. According to an eye witness, the large park-like grounds give a distinct advantage to any residence adjacent.

On the possibility of mixing apartments with other residences, Hugh Pomeroy said, at the hearing on the proposed mixed development in Maryland:
"There is nothing intelligent in sloganizing or getting horrified at the idea of 'apartment houses' in the open country. When we hear the term apartment house, we think of the stereotypes hulks that crowd out open space and dominate their surroundings, rather than visualizing additions to open space and amenity by the skillful variation in arrangement of dwelling types. To fear development because it proposed internal variation in dwelling types within the over-all density pattern would be on a par with disapproving it because it has streets, on the ground that streets in some communities are dirty, ugly, noisy, and dangerous."


The Wardman Park and Shoreham in Washington -- both of which have large surrounding green -- are examples of high bulky apartments successfully located adjacent to low houses.

2) Successful Mixture in Large-Scale Developments

Large-scale developments, built increasingly by both public and private developers, have demonstrated that with proper planning, residential and nonresidential uses and different residential types can be mixed in relatively close juxtaposition not only without detriment but with definite advantages to the community and the individual. The Greenbelt towns, built by the Federal Resettlement Administration, Fresh Meadows in Long Island, built by the New York Life Insurance Company, and River Oaks, Texas, are successful examples
of mixed residential and nonresidential uses and mixed
dwelling types. A few remaining mixed areas of old
cities and some of the New England towns will testify
further to the possibility of successful mixtures.
B. OBJECTIVES

1. RETAIN ADVANTAGES OF USE ZONING WHILE GAINING MIXTURE

Just because use zoning had been carried too far does not mean that it should be discarded or that the benefits it can give when properly used should be ignored. It is the argument of this paper that most, if not all, of the benefits of use zoning can be achieved while at the same time achieving a mixture of uses — either by a modification of the use zoning tool or by greater relative emphasis on other administrative and zoning tools. The original purposes of use zoning as they are conceived here, are as valid as they ever were, but may be attained in other ways than by a complete stratification and segregation of uses.

Zoning has been bitterly criticized by many. It may be that the only final answer to our land problems is public ownership of land or at least greater control than zoning can exert.25 Even if this is so, we are unlikely in America in this generation to discard this legal tool. It is the general belief of this paper that the shortcomings of zoning lie not so much in lack of

possibilities of the instrument itself as in failure of planners to use it to its full potential.

Each method of providing for mixed uses in zoning that is considered in the following sections of this paper is evaluated in light of whether it will produce those benefits of comprehensive planning which are gained by use zoning. Following is a list of what are judged here to be the justifiable objectives of use zoning in implementing comprehensive planning -- objectives which should be retained in any modification of the tool. The list, being subject to subjective judgment is of necessity arbitrary. (It contains, however, substantially the same list of benefits as those used to justify use zoning in the courts.)

Use regulations cannot of course be completely separated from regulations of area, height, population, etc. All are used in combination. The consideration of use zoning alone is again arbitrary.

a. OBJECTIVES OF USE ZONING

Insofar as they can be separated from height and area regulations, use regulations in zoning -- or what is termed use zoning -- operate essentially to (1) separate different uses from each other, or to protect uses of a more restricted nature from those of a less restricted nature; and at the same time to (2) group
together uses of a similar nature. It is from these
two complimentary functions of separation and grouping
that the benefits of use zoning are derived.

1) Benefits from Separation, or protection of "more
restricted" uses from "less restricted" uses in regard
to:

a) **Light, air, sun, general openness, protection of view.**
(Protection to health, comfort, and convenience.)
(Only as obtained from separation of uses, not area
regulations.) For example, protection of houses --
generally low and with low lot coverage -- from
apartments, factories, and other nonresidential
uses, usually high with high lot coverage.

b) **Population congestion.** (Protection to health
and safety, comfort and convenience.) Protection
from traffic, parking, and general population con-
gestion. Protection from contagion, fire, panic.
Protection of privacy.

c) **Nuisances.** (Protection to health and comfort.)
Protection from odors, noise, unsightliness.

2) Benefits from Grouping of Similar Uses Together.
Divides city into functional areas.

a) **Facilitates municipal administration.** (Promotes
general economy.) Makes more efficient delineation
of fire districts and police and postal beats;
facilitates valuation, etc.

b) **Facilitates functions associated with particular use.** (Promotes general economy and convenience.)

c) **Facilitates coordination of various uses and functions of city and adjustment of these to present and future needs.** (Promotes general social and economic welfare.) Aids in estimating proper size and location of utilities and streets, and facilities such as schools, recreation areas, etc.

3) **Benefit from Separation and Grouping -- General Stability, Order, Pattern.** (Promotes general economy, welfare, and amenity.) Leads to preservation of property values, protection from blight.
2. WHAT KIND OF MIXTURE?

As has been said, this thesis cannot attempt to answer the questions of just how much and what kind of mixture is desirable. The answer to these questions involves considerations of a social, psychological, economic, aesthetic, governmental and political nature.

Should we, for instance, work toward eventual mixed dwelling type and use in every neighborhood and residential area, whether suburban, central city or small town? How far out in the country -- in the rural-urban fringe -- should we carry such mixture? Would a city composed entirely of neighborhood all neatly mixed have a monotony and sameness of its own?

Though we may feel sure that for the average normal family -- and for the general welfare -- there are definite advantages to mixed neighborhoods, who is the planner to gainsay those who would live a la Corbusier in a neighborhood of steel cages piled to the sky -- as long as they are planned to do no detriment to the rest of the community? Or those whose psychological security rests on living on a street where the houses are all similar?

How far can we carry diversification? Can we mix all dwelling types together on a lot by lot basis -- high apartments with low bungalows, provided they are
adequately protected from each other? Which industries and business can be mixed with residences? What is the ideal distance between home, shop, and factory? Can we mix houses on 6,000 square feet lots with houses on one-acre lots? Or do "city dwellers apparently want to live among people whom they consider their own 'kind'?"? 26

a. ALTERNATIVES

The planner may feel that it is only the neurotic who wants to escape the responsible, face-to-face relations of the neighborhood community for the anonymous central city apartment. Or that when the central city becomes less noisy, hectic, and jarring, the harried male may not need to resort at night to a suburb that is peaceful to a point of monotony and unreality. But the planner cannot give the final answer. He can only present alternatives.

Nor, as pointed out above, can any final answer be given to these questions here. To some of them there is no final answer. To others there will be satisfactory answers only when we have experimented more with various combinations of diversified dwelling types and uses.

b. PEOPLE DON'T KNOW POSSIBILITIES

Segregation by use zoning is, to be sure, the result and expression of people's desires. But it is also a cause: for those who would like something different it is a handicap; for those who might try mixing, there is no incentive -- even an impediment.

This is one of the vicious circles in which one gets caught so commonly in planning. People may think they want segregation because it is all they know, and therefore they demand zoning which segregates, which means that as a result they know nothing else and therefore don't know whether they would like anything else. And round again. (This is a possible answer to, and explanation for the comments on diversification in the Bureau of Urban Research publication cited above.)

It is interesting that the Massachusetts State Housing Board has had difficulty in introducing row houses for veterans into several Boston suburbs because of local protest. Whereas in Baltimore developers insist they cannot build anything but the same old red brick row houses because that is the only kind of house the average Baltimorian likes -- the only kind that will sell.\(^{26}\) As a further comment it might be pointed out that in at least

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\(^{26}\) Lecture by Arthur McVay, Director, Baltimore Planning Commission, M.I.T., April 1949.
one of the Boston suburbs protests over proposed row houses were silenced by perspectives showing plainly their attractiveness.
PART II
METHODS OF PROVIDING FOR MIXED USES IN ZONING

A. THE PROBLEM

As has been said, the purpose of this thesis is to explore, analyze, and evaluate methods of providing satisfactorily in zoning for more intimate mixture than we have now of business, industry, community facilities -- or public and semi-public uses, and residence, including a more intimate mixing of the various dwelling types -- single and two-family dwellings, row and group houses, apartments and other multi-family dwellings with three or more families, and to provide for this mixture while retaining the benefits of use zoning outlined above.

The major problems revolve around zoning provisions that provide for diversified dwelling types and uses in neighborhoods, and the more specific problem of bringing business and particularly industry into residential areas.

Most zoning ordinances do provide for a fairly close relationship between residence and community facilities, and between residence and shopping. (Though there is a tendency for exclusive neighborhoods to "shop in the next town" and not clutter up their streets with stores.) No one advocates introducing residence into business and industrial areas (though apartments have been successfully
built over stores in such places as Princeton, New Jersey and Jenkintown, Pennsylvania, a suburb of Philadelphia.)

Within the problem of providing for diversification in urban areas, there might also be such special problems as providing for community facilities like libraries, recreation centers, etc., in business areas or of bringing business and industry into closer juxtaposition, if this would be beneficial. These involve no special zoning problems and are not considered.

I. TWO PARTS OF THE PROBLEM

The problem of providing in zoning ordinances for diversified development will be taken up in two parts -- first, that of providing for mixed diversification in our usual piece-meal development where each building is planned and built separately and relatively independently of other buildings, and second, that of providing for diversification through large-scale development planned as a unit. The distinction is somewhat arbitrary since the two overlap at the boundary line. Several buildings are sometimes treated as one. And in at least one of the special provisions for large-scale development, a single multi-family building is included.

Part II will simply describe the various methods of providing for diversification, without regard to the problems or merits of each. Part III will evaluate the methods.
B. METHODS OF PROVIDING FOR MIXED PIECEMEAL DEVELOPMENT

1. DIVERSIFIED USE ZONING DISTRICTS

Of the various methods of providing for mixed uses under piecemeal development, the first to be considered will be that of setting up zoning districts for diversified dwelling types and for diversified uses, relying primarily on open space and density regulations to achieve desired objectives.

a. RESIDENTIAL MIXTURE

The possibilities of providing for districts of diversified residential types only will be taken up first; for districts of mixed residential and non-residential uses, following.

1) Existing Multi-family and General Residence Districts

All types of dwellings are, of course, allowed in multi-family residence districts. And in many existing ordinances, there are general residence districts which permit all dwelling types.

Practically no low density building goes on in multi-family districts (nor does anyone particularly intend that it should). And in most general residence districts, development tends to be limited to higher density buildings because densities allowed these structures are so high as to afford inadequate protection to single-family or other open type buildings. Developers
would also rather crowd the land for what the traffic will bear. Area requirements for multi-family structures in these districts are usually the same as in the respective multi-family districts -- that is, apartments have the same open space requirements as in apartment zones, row houses the same as in row house zones, and so on.

However, in some small towns where open space requirements are high even for multi-family dwellings, the general residence districts do contain a diversification of dwelling type which has great charm and is altogether livable.

2) Two Methods for Setting Up Diversified Residential Districts

a) Different Area and Density Requirements for Each Dwelling Type in District

The general residence district system of providing for diversified dwelling types is, then, satisfactory (at least in some circumstances) if multi-family dwellings are required to have high enough open-space requirements.

Under the usual general residence district system each dwelling type has different open space requirements -- the larger the number of families per unit, the smaller the area requirement per family. "Planning the Neighborhood,"27 gives density standards for different dwelling types in diversified neighborhoods.

of different sizes which should prove valuable in working out requirements for such districts in zoning ordinances.

This method can be used for one or more residential districts along with other types of residential districts, or for a single residential district to cover all residential areas of the city. The whole range of dwelling types may be permitted, or only a specified range of them.

(1) Example. Waukesha, Wisconsin, (1940 population 17,000) has established a General Residence District following the standards developed in "Planning the Neighborhood," though somewhat more liberal than the minimums arrived at there. This district is one of three residential districts, the other two being an agricultural zone of largely unplatted land, and a single-family residence zone. In the General Residence District any type of residence is permitted.

Besides yard and set-back regulations (based partly on height), the following requirements for lot area and width are established.

1. Area per family unit:

<table>
<thead>
<tr>
<th>Type of Structure</th>
<th>Agricultural Districts</th>
<th>Single-family Districts</th>
<th>Other Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family house</td>
<td>2 acres</td>
<td>8000 sq. ft.</td>
<td>6000 sq. ft.</td>
</tr>
<tr>
<td>Two family house</td>
<td>x</td>
<td>x</td>
<td>3750 sq. ft.</td>
</tr>
<tr>
<td>Row house, 1 story</td>
<td>x</td>
<td>x</td>
<td>2500 sq. ft.</td>
</tr>
<tr>
<td>Row house, 2 story</td>
<td>x</td>
<td>x</td>
<td>2000 sq. ft.</td>
</tr>
<tr>
<td>Apartment, 1 story</td>
<td>x</td>
<td>x</td>
<td>2500 sq. ft.</td>
</tr>
<tr>
<td>Apartment, 2 story</td>
<td>x</td>
<td>x</td>
<td>2000 sq. ft.</td>
</tr>
<tr>
<td>Apartment, 3 or more</td>
<td>x</td>
<td>x</td>
<td>1200 sq. ft.</td>
</tr>
<tr>
<td>stories</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Minimum lot widths:

<table>
<thead>
<tr>
<th>Type of Structure</th>
<th>Single family Districts</th>
<th>Other Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single family house</td>
<td>60 feet</td>
<td>50 feet</td>
</tr>
<tr>
<td>Two family or apartment house</td>
<td>x</td>
<td>50 feet</td>
</tr>
<tr>
<td>Row house, 1 story</td>
<td>x</td>
<td>25 feet</td>
</tr>
<tr>
<td>Row house, 2 story</td>
<td>x</td>
<td>20 feet</td>
</tr>
</tbody>
</table>

3. Coverage:

<table>
<thead>
<tr>
<th>Type of Use</th>
<th>Agricultural or Residential Districts</th>
<th>Other Districts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwellings</td>
<td>25%</td>
<td>25%</td>
</tr>
<tr>
<td>Non-dwelling, main building</td>
<td>50%</td>
<td>No limit</td>
</tr>
<tr>
<td>Accessory building</td>
<td>15%</td>
<td>No limit</td>
</tr>
</tbody>
</table>

(2) Other Types of Area Regulations. There are, of course, other ways of setting up area requirements under this type of system. A single-family house may be required to have a certain minimum yard size -- 6,000 square feet, for example; for each additional building unit over one that any dwelling contains, the lot size must be increased by a certain minimum amount -- 2,000 square feet, for example. Or there may be a requirement that yard sizes should increase by a certain number of feet for each foot increase in structure height.

Another scheme is to require the same number of square feet for each family for any structure under perhaps 10 families, then to scale off requirements per family. This last is based on the theory that with a group building or project, after a certain minimum yard size, there is common use of open space facilities.
b) Same Area and Density Requirements for Each Dwelling Type in Diversified District

A second method is to establish diversified dwelling districts in which area and density requirements are the same for all dwelling types. This type of setup can be used for a single residential district for the whole city. Or it can be used for each of several districts with varying requirements. As in the method above, all types of dwelling types can be allowed or only a limited range.

The latter is the method used in the ordinance of Elmira, New York (1940 population, 47,000), which handles the residential zones in a particularly deft and simple manner. In each of the three different residential districts A, B and C, any dwelling type is allowed. For each dwelling within any district, the same height, yard, lot area per family, and building coverage are required for each building. Thus District A allows $2\frac{1}{2}$ stories, 5,000 square feet per family, and 30% coverage for any dwelling type; District C, 5 stories, 800 square feet per family and 40% coverage.

28. Gilmore Clarke and Thomas MacKesey, consultants

29. Instead of naming all dwelling types, the ordinance, under uses allowed, lists laconically:

1. Dwelling
2. Churches, etc.

"Dwelling" is defined as "any building used wholly for habitation."
A special provision in the ordinance permits an additional foot of height for "each foot that each of the required yards is in excess of the maximum."

It is to be noted that under this ordinance it is unlikely that a full cross range of dwelling types would be built in any district, though there is considerable range for variation. For example, there would probably be a limit to the apartments or row houses that would be built at 5,000 square feet to the family in District A. Building in this district would probably be limited to single-family and some two-family -- possibly three or four-family -- dwellings of various types.

In District C, it would be impossible to build a single-family house which would pass any building code on an 800 square foot lot with only 40% coverage, though of course single-family houses could be built here on larger lots. The possibilities are that development in this district would be limited to multi-family structures of at least a fairly high density type. Variation in dwelling types would in all likelihood be similarly limited in District B which has a 3,000 square feet per family requirement. But, as said above, despite limitations, there is room for considerable range of dwelling types in each district.
(Incidentally, the area requirements all the way through this ordinance are low measured against minimum standards given by the American Public Health Association. For instance, "Planning the Neighborhood" gives 6000 square feet per family as a minimum for single-family detached dwellings; 800 square feet is considered adequate only for multi-family dwellings of more than three stories.30)

c) Districts with Limited Range of Dwelling Types with Other Types Permitted by Exception

With either of these two setups, if only a limited range of dwelling types is allowed, other dwelling types -- probably apartments or other multi-family types -- might be permitted as exceptions -- with the approval of the Board of Appeals and/or Planning Commission, and in conformance with certain standards or principles stated in the ordinance. (Business and industry might also be admitted in the same manner -- see below.)

d) Performance Standards

It may be possible eventually to set up performance standards for buildings rather than the usual rigid area, height, and density requirements.

One of the purposes of yard requirements, for instance, is to provide enough space between buildings

to give them adequate light. Another is to protect buildings from the noise of adjacent buildings. Standards might be set up stating that buildings must be far enough apart so that they get a certain specified amount of light, or so that noise from an adjacent building does not exceed a certain specified number of decibels, for instance.

The discussion of performance standards for adequate light and air, air circulation and quiet in "Planning the Neighborhood" are suggestive of the way the problem could be approached. For instance, the Committee sets up the following performance standard for daylight and sun: "at least half the habitable rooms of every dwelling unit receive direct sunlight for one hour or more during midday (between 10 a.m. and 2 p.m.) at the winter solstice." As a possible method of determining whether a room will receive sunlight, the publication cites the British Standard set up by the Codes of Practice Committee of the Ministry of Works, which specifies that "the sun shall be deemed not to penetrate a room if the angle between the window plane and the path of sun rays (as seen in plan) is less than 22\(^{1/2}\)\(^{0}\)." Thus, any yard, any distance between buildings, or any height combination which would give this angle would be acceptable.

31. op. cit. pp. 29-34.
An objective like adequate privacy would be more difficult to arrive at, but could probably be broken down into its elements -- quiet, adequate open space per family or person (overall ratios rather than yard sizes, etc), adequate parking space per family, etc.

This is, of course, essentially the same type of thing as the frequent suggestion that performance codes should be substituted for the rigid specifications of building codes.

Such an arrangement would, of course, provide much more flexibility than we have now, while still insuring adequate standards. It would provide for dynamic relationships rather than static conditions. It would naturally result in more variety than under our present system. And under it, a wider diversity could be more safely allowed than at present.

This is only suggestive of the type of thing that might be done. No real analysis of the subject can, of course, be given here.

b. RESIDENTIAL AND NON-RESIDENTIAL MIXTURE
1) Mixed-Use Districts

It might also be possible on an open space and density basis to allow certain non-noxious businesses and industries in such districts. For instance, a local shop, a research laboratory, or a small electrically
operated industry of attractive and appropriate architectural design might from many points of view be quite unobjectionable and even desirable located almost anywhere in a primarily residential zone provided it was surrounded by sufficient open space with well planned landscaping. The effect would be similar to a campus, park, or other pleasing open space (without the night noise). (See discussion on page 25.)

Certain conditions besides those of open space might also be required of these uses, such as separation from residences by walls or planting (as in the proposed Providence ordinance), special parking space requirements, location on a main road where suitable for servicing trucks (though uses allowed should not include those needing heavy trucking access), etc.

2) Diversified Residential Districts with Non-residential Uses Allowed as Exceptions

Another possibility would be to permit certain specified industries and businesses in mixed residential districts as exceptions. Essential conditions are stipulated in the ordinance, and the approving body can call for other conditions deemed necessary.

(Exceptions will be discussed at more length below.)
2. DIVERSIFIED USE DISTRICTS WITH AMOUNT OF EACH USE LIMITED

A variation of the schemes described above would be to establish either diversified residential or mixed residential and non-residential districts by any of the methods above, stipulating the amount of each dwelling type or use permitted in each district.

In present zoning ordinances, relatively exact areas are laid out for each use and dwelling type -- the amount of each to fit estimated needs. Instead of this, amounts could be stipulated either in acreage, percent of total acreage (practically the same thing), or in number of dwelling units or possibly (more difficult) number of industrial or business establishments within a given size range.

Exceptions of various types might also be granted in the same manner as described above, with or without limits as to amounts of each.
3. DIVERSIFICATION THROUGH EXCEPTIONS

Bringing about diversification of dwelling types and uses entirely through the device of exceptions is the third method which will be considered. Exceptions specifically enumerated in the ordinance are granted by the board of appeals and/or planning commission in conformance with stated rules, tests, or standards, and subject to any additional conditions or safeguards which the approving body may consider appropriate.

The possibility of granting special exceptions in diversified districts was discussed briefly above. The use of exceptions in providing for various types of group and large-scale developments will also be taken up below. Here only those exceptions which apply to individual buildings -- rather than groups of buildings -- are intended, though the two overlap since a dwelling group or "group dwelling" may consist of only one, or more than one structure, depending on how it is defined.

a. TYPES OF EXCEPTIONS

A certain amount of mixing is already carried out through exceptions in existing ordinances. Some ordinances allow multi-family structures in single-family or other open-type residential districts through exception clauses. Also commonly permitted are public and semi-public uses of various kinds. Less commonly industries and businesses are admitted into residential districts
by special permission of the board of appeals or planning commission.

1) Residential
   a) Row Houses

Row houses -- so called "garden apartment" -- and other multi-family structures are frequently allowed in single family or other residential districts at the approval of the planning commission or board of appeals.

Concord, Massachusetts, for instance, allows "garden-apartments" in the general and parts of the single residence district upon approval of the Planning Commission and Board of Appeals, provided certain specified requirements of height, area, and maximum dwelling units per structure are met. The Board of Appeals may prescribe "other restrictions in the interest of the town."

b) Apartments

In Irondequoit (Monroe County), New York, for example, apartments are permitted by special permit of the Board of Appeals in all three residential districts -- two single family, one two-family district -- if they fulfill certain listed lot size and area requirements based partly on height and floor area. "Apartments" include any building to be occupied by three or more families.

c) Conversions

In some ordinances, also, conversion of obsolescent

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large houses to two-family or other multi-family occupancy is allowed in certain districts by special exception. (Conversions are also allowed, of course, in the usual way, with essential conditions written in the ordinance.) In such cases, occupancy is usually limited and number of families per lot area. Minimum floor area per family may also be stated. The Burlington, Vermont ordinance has all three of these requisites.

2) Nonresidential

a) Public and Semi-public Uses

Commonly allowed in residential districts under exception provisions are public and semi-public uses such as educational institutions, government buildings, public utilities, libraries, welfare and philanthropic institutions, hospitals or sanitariums, clubs, golf courses and airports.

b) Commercial and Industrial Uses

More rarely ordinances admit as exceptions into residential areas purely commercial uses such as nurseries and greenhouses, dog kennels and hospitals, extraction of raw materials, filling stations, public garages, and of course, professional offices and the like. In some Massachusetts ordinances, business is permitted by exception in the ground floor of apartments.
And there are some ordinances which permit industries with residences -- usually research laboratories, chemical companies, or other non-nuisance industries.

The Pawtucket, Rhode Island ordinance gives the Board of Review wide powers to grant exceptions. Under this ordinance, the Board may "approve in any district an application for any use or building deemed by said Board to be in harmony with the character of the neighborhood and appropriate to the users or buildings permitted in such district."33 (Properly this seems to be more of -- or at least borders on -- an amendment power rather than a power to grant exceptions.)

b. CONDITIONS FOR ADMISSION OF EXCEPTIONS

Standards enunciated for exceptions to safeguard surrounding residences may vary from very general rules or principles -- for instance, that the proposed use shall be consistent with the public welfare or master plan or in no way cut out light and air from other buildings, or they may be quite specific requirements for height, area, bulk or minimum distance from other uses, or may control the size of signs. To protect residences from the exceptional uses, requirements can be included for

such factors as adequate parking and loading space, and protection from traffic congestion and hazards -- proper relation of use to street capacity.

1) **Performance Standards**

As standards are developed, and techniques for measuring nuisances, it may be possible to discriminate between industries and businesses which can be admitted to residential zones on the basis of performance standards -- such as maximum amount of decibels of noise produced, etc. 34

2) **Conditions Added by the Board**

The board has an almost unlimited opportunity to assure that a use exception shall be congenial to the neighborhood, in its power to specify additional requirements to those already laid down in the ordinance. These are usually drawn up in the form of a written agreement between the applicant for exception and the city, and have a particular effectiveness for that reason.

These additional stipulations may include such items as type of architecture, number of persons employed in the establishment, control against noise, dust, vibrations, or other nuisances, and screening or planting.

It is interesting to note that at least three ordinances discovered have provisions written in the ordinance -- either in the main body or under exceptions -- for walls, fences, or hedges as a screening device. The proposed ordinances of Providence, Rhode Island, and Prince George County, Maryland have such clauses. That of Somers, New York contains the following stipulation for commercial dog kennels or similar animal quarters:

"Completely surrounding the area used for housing such animals a proper fence shall be erected to prevent straying, which fence shall be permanently maintained in proper condition and with a presentable appearance."
4. DIVERSIFICATION THROUGH AMENDMENT

It is always possible through amendment to bring diversified single uses into uniform use districts.

The powers granted Connecticut Zoning Commissions can be used in this way. In towns in Connecticut, under the Zoning Enabling Act, zoning "regulations and boundaries may, from time to time, be amended, changed or repealed by (such) zoning commission." (In Connecticut the zoning commission is often also the planning commission.) In this case, then, an amendment does not need to go through the legislative body.
5. SMALLER ZONING DISTRICTS THAN AT PRESENT

The most obvious of all possibilities is, of course, to set up smaller zoning districts, and to put districts of different uses and dwelling types in closer juxtaposition to each other -- to form a cross section of uses and dwelling types in one neighborhood, or at least to obtain more variety than now.

This is relatively simple on new land, more difficult in built up areas. In the latter, the attempt would be to break down large uniform and often unrelated districts into smaller, more varied uses.

This type of approach is closely related to the one following but bears at least mentioning as a separate point.
6. ZONING BASED ON SITE OR "RESUBDIVISION" DESIGN

Another possibility then is to base zoning on site planning - a more detailed site planning than the relatively crude master planning or neighborhood on which it is at present based (when it is based on a plan). With more detailed planning, uses could be mixed in a more intimate way than is possible under present procedures. Zoning districts could be smaller, more precisely related to each other, to utilities, and to the topography than now. A cross section of uses could be provided in any neighborhood, and residential districts particularly could be small enough to effect a real diversification of dwelling types on a desirably intimate scale. In other words, zoning would become a more precise rather than a "blunt" instrument.

a. PLANNING COMMISSION GIVEN SUBDIVISION POWERS

There are at least two possibilities for carrying out such a procedure. Under the first, the planning commission would be given subdivision powers. It would be enabled in undeveloped land to lay out the streets and lot lines in a neighborhood or subneighborhood, would determine the sites for major community facilities (as at present) and define boundaries of industrial, business and residential districts as at present but in a more detailed, precise manner, based on the site plan.
Building would be by private developers, probably with provision for changes in lot lines or other aspects of the plan for large-scale development or under other appropriate circumstances, and at the discretion of the planning commission.

b. ZONING CHANGES WITH PLAT APPROVAL

The other possibility is that now used in New York State and Rhode Island whereby the planning commissions have the power to change or amend zoning when approving subdivisions. This effectively gives planning commissions the power to base their zoning on subdivision plans in undeveloped areas -- in this case, not plans of their own but plans of private developers, subject to suggested changes by the commission. Both of these methods are possible only in new land or in redevelopment areas.

c. RESUBDIVISION POWERS

Their application to developed land could be effected by some kind of resubdivision powers. There has been discussion in New York State of giving planning commissions the power to "resubdivide" developed areas. Combined with the powers to change zoning when approving plots, planning commissions could rezone developed areas on the basis of subdivision plans.

35. Conversation with Mr. C. McKim Norton, Executive Vice President, Regional Plan Association, New York
The New York State provision as applied in New York City and Rye will be discussed further in the section on diversification through large-scale development. In fact, this section is closely related to the section following on large-scale developments.
C. PROVIDING FOR MIXED LARGE-SCALE
UNIT DEVELOPMENT

1. ADVANTAGES OF LARGE-SCALE UNIT PLANNING

As pointed out above, zoning based on site or resubdivision planning would have advantages over our present zoning based on broad overall master planning because it would take account of more of the elements involved. But in this case, development could still be largely piecemeal -- building by building. Where an entire area could be planned and developed as a unit -- where all elements involved could be considered, there would be a still greater advantage.

When uses are planned in relation to each other and to the natural features of the site, the best can be made of the potential of each. Better use can be made of natural elements -- sun, prevailing winds, topographical features, views, and so on. Open space, especially in the provision of common open or recreation areas, can be used more effectively. Streets and utilities can be planned most efficiently, not only in their adaptation to different types of uses, but in their relation to each other. Lastly, and most pertinent to this discussion, different uses can be mixed -- freedom can be taken in mixing -- in a way not possible in piecemeal development.
For example an apartment can have relative close proximity to a lower dwelling if account is taken of such factors as the way the shadows fall or the way the wind will carry apartment noise or odors; if the two are separated by space, or some means as planting, a street, a slope, the relative orientation of the buildings and their entrances to each other; and if each is planned in relation to streets and utilities, and the dwelling is protected from apartment traffic congestion.

These points are illustrated in the accompanying illustrations showing a model and plan of a hypothetical site designed by Vernon de Mars for the Museum of Modern Art, in which not only business and community facilities are closely mixed with residence, but residential units of very different types are brought together in relatively close intimacy.

Actually, then, there is a certain advantage to be gained when only two buildings are planned together over when they are planned and built separately. From the point of view under discussion the larger the area and the amount of development covered, the greater the advantage. But "large-scale" does not mean here necessarily a very large area or a very great number of buildings. The word may seem somewhat arbitrary but is used for want of a better substitute.
Model of a mixed development on a hypothetical site designed by Vernon de Mars for the Museum of Modern Art in New York. Contains detached and row houses, high apartments, shopping and community center.
1. Detached Houses
2. Row Houses
3. 10 Story Apartments
4. Nursery School
5. Elementary School
6. Gymnasium and Public Hall
7. Gas Station (Above Offices)
8. Clubrooms
9. Specialty Shops
10. Movie & Terrace Café (Above Sky-room Restaurant)
11. Super Market
12. Bowling Alley
13. Church
14. Swimming Pool
15. Balcony Dining Rooms
16. (Below Drugstore, Bar, Bowling)

Scale: 1 unit = 50 feet

Location: All around view with streets and buildings marked.

V.D.3.48
2. ZONING ORDINANCE PROVISIONS ALLOWING DIVERSIFIED DWELLING TYPES AND MIXED USES IN LARGE-SCALE DEVELOPMENTS PLANNED AS A UNIT

It is on the premise that certain freedoms can be permitted when a development is planned as a unit that a number of zoning ordinances allow, under certain specified conditions, for variations from the usual regulations in the ordinance in the case of "group housing," "unit developments," or "planned neighborhoods."

Variations allowed range from minor area or height variations to wide use variations. Most of the provisions were probably not set up to encourage diversified dwelling types or mixed uses. The intention of some has apparently been to provide primarily for public housing projects which are usually anything but diversified. But all such provisions could be used to achieve some diversification -- some of them much more than others.

A description of some of the typical provisions for large-scale or group development will illustrate the various possibilities.

The accompanying table shows the principal features of provisions of this kind in a number of ordinances of towns and cities in different parts of the country.
<table>
<thead>
<tr>
<th>Zoning Ordinance</th>
<th>Variations Allowed</th>
<th>General Requirements</th>
<th>Administrative Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) All Dwelling Types</td>
<td>(b) Business</td>
<td>(c) In-Country</td>
<td>(d) Parking</td>
</tr>
<tr>
<td>(1) Docktor, Ala.</td>
<td>Zoned Housing Project²</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>(2) Richmond, Calif.</td>
<td>Large-Scale Neighborhood Housing Project</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(3) Green Point, Calif.</td>
<td>&quot;Development Plan&quot;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(4) Cincinnati, Ohio</td>
<td>Proposed &quot;Group Residential Development&quot;</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>(5) Richmond, Va.</td>
<td>&quot;Community Unit Plan Regulations&quot;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(6) New York, N.Y.</td>
<td>&quot;Site Plan for Large Residential Developments&quot;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(7) Anchorage, Alaska</td>
<td>Proposed &quot;Planned Communities - R-P-C Zone&quot;</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(8) Prince George, Va.</td>
<td>&quot;Province Development Plan&quot;</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

²/ See text of each provision in Appendix.
"/ Similar to this: Lenoir City, Tenn., other Tennessee Valley cities; Princeton, N.J., etc.
"/ Similar: West Hartford, Conn., Las Vegas, N.Y., etc.
"/ Under which planning commission, etc. according to conditions given, change zoning to conform to plan. Many points noted on table taken from Section 37.
The table summarizes the salient features of each, but does not attempt to go into fine points of difference.

Almost all of the provisions have certain similar features but vary widely in other respects. Besides differences in use and area variations allowed, there are other wide differences in general requirements and administrative features.

The provisions vary in the size of area they apply to from a group of two or more buildings or even a single multi-family building to developments with a minimum of twenty acres. Some are allowed only in certain types of residential districts, others are allowed anywhere in the city. Some are written in the main body of the ordinance and operate as any zoning regulation through the building inspector. Some operate as exceptions, others as what might be called conditional amendments. Of these, some stipulate elaborate conditions and requirements -- either general rules or principles, or specific regulations; others list only the barest requirements, leave wide discretion to the approving body or bodies.

a. AREA VARIATIONS ONLY

Some ordinances allow for area variations only, some for use and area variations.
The mildest type of variation allows for group or row housing, certain modifications in requirements -- particularly yards -- according to specifications enumerated in the ordinance. Ordinances of White Plains, New York, South Central Connecticut (proposed) and Sanford, Florida have examples of this rather common type of provision. (None of these is included on the chart.) In Concord, Massachusetts, garden apartments of certain minimum specifications are allowed only at the approval of the Planning Board and Board of Appeals, after public hearing. Some of these provisions allow variations by treating any group of houses or apartments as a single building on a single lot.

Allowing somewhat more leeway are provisions like those in the Decatur, Alabama and Cleveland, Ohio ordinances which permit any modifications in yards provided a certain overall average space per family is retained. In Decatur, modifications must meet the approval of the appeal board; in Cleveland, this is not required.

Modifications for group or row housing are allowed only in multi-family districts in White Plains, in two-family and multi-family districts in the South Central Connecticut region, in the general and parts of the

36. See Appendix, pages 131-33.
single-family district in Concord, Massachusetts, and in any district in Decatur, Alabama.

(Some cities set up separate districts for "row houses," or "garden apartments." This is just one more step in the continual process of severing of dwelling types from each other and is quite the opposite from what is being advocated in this thesis.)

b. AREA AND USE VARIATIONS

Use variations permitted range from simply type of dwelling to the whole range of community uses. Richmond, Crown Point, and Cincinnati allow variations in residential and accessory uses only. Cincinnati specifies parking requirements. Wichita, New York, Rye, and Manchester admit variations in residential uses and also business even though contrary to the regulations in the district in which the development is proposed.

Prince George not only allows these variations, but specifies that there must be a "range of dwelling types, necessary local shopping" and parking, adequate recreation and reservation for education facilities where necessary, and business and industry to provide local employment -- the elements of a "complete community or neighborhood."
All ordinances granting use variations also permit variations in area regulations applying in the district, providing average density of the district is retained, though Richmond and New York set up specifications for distance between buildings.

Prince George leaves little discretion to the administering body in the matter. Each use allowed is subject to the regulations which apply to it in the zone in which it is normally allowed -- i.e., "medium-density" apartments would be subject to regulations applying in the "medium-density" apartment zone, etc. (This is the same procedure as in most general residence zones.) The overall density figure of eight dwelling units per acre sets limits on the relative amounts of close higher density building, with leeway in overall space possibilities depending on the dwelling types used.

c. GENERAL REQUIREMENTS AND SAFEGUARDS

Area requirements are very similar in all provisions. Almost every provision includes the following six requirements in one form or another:

1) Single ownership or plan (all except Richmond and Decatur, though this is implied.)

2) Minimum area size. This varies greatly from the Rye single multi-family building or "group of buildings" and New York 75,000 square feet, to the
5 acres of Cincinnati and 20 acres of Richmond, Crown Point and Wichita. (It is to be noted that 75,000 square feet in New York at any reasonable density for that city, would hold a great many more dwelling units than the same amount of space in Richmond, for example.)

3) **Protection to surrounding area.** All but Manchester have a requirement of this kind. Richmond stipulates a specific protective border in which the yards of the lots bordering the "project" shall comply with regulations in the district in which the project is located.

4) **Average density** same as in district in which development is located, in all but Prince George's and Manchester. The former sets up the overall eight dwelling units per acre figure. Manchester leaves the matter again up to the discretion of the zoning commission (which is also the planning commission in this town), though the plan must indicate maximum families per lot or building unit and minimum yards.

a. **ADMINISTRATIVE PROCEDURE**

In four of the provisions -- Richmond, Crown Point, Rye, and Manchester -- the development needs the approval of only the planning commission or
planning commission and board of appeals. The provisions in these cases are in the nature of exceptions (though not so specified except in the case of Richmond, and the administering body is given wide discretion, particularly in the case of Manchester which sets down the fewest conditions. (As pointed out earlier, the Connecticut enabling law allows wide latitude in this respect; in towns the local legislative body may give to the zoning commission -- which may also be the planning commission -- power to change or amend the ordinance, a power usually considered to be legislative.)

In the other four -- Cincinnati, Wichita, New York, and Prince George, action by the governing body is required as well as that by the planning commission. These provisions, then, are in the nature of amendments requiring legislative action, but are like exceptions in that conditions are laid down in the ordinance which must be met before the variations enumerated can be approved -- conditions different from those of an ordinary amendment.

The discretion of a planning commission is less under these four provisions than under the four above, but it is still considerable, especially where the legislative body relies on the commission's judgment in matters on this kind.
PART III

EVALUATION OF METHODS -- ADVANTAGES, DISADVANTAGES, POSSIBILITIES, LIMITATIONS

In general, the various methods will be analyzed for their advantages, disadvantages, possibilities and limitations in relation to:

Achieving a desirable mixture of dwelling types and/or nonresidential uses,

Carrying out the objectives of zoning to effectuate planning, and particularly the objective of use zoning as outlined in Part I (pages 29 to 31),

Probable ease and effectiveness of administration,

Probable legality,

Any other aspects that seem noteworthy.

Each will also be analyzed for its adaptability to:

Towns and cities of different size and character,

Different types of areas within cities, as

Built up areas, redevelopment areas, or vacant areas, etc.

A. METHODS OF PROVIDING FOR PIECEMEAL DEVELOPMENT

1. DIVERSIFIED USE ZONING DISTRICTS

Diversified residential districts will be considered first, then mixed residential and nonresidential districts.
a. DIVERSIFIED RESIDENTIAL DISTRICTS

1) Desirable Mixture

Diversified use districts produce the most intimate mixture of dwelling types of any of the piece-meal methods. Different dwelling types can be mixed one next to the other in any combination arrived at by the individual builders -- separated by adequate space and any other conditions included in the ordinance.

a) Desirability of Intimate Mixture of Wide Range of Dwelling Types

There is, however, the question as to how wide a range of dwelling types can be beneficially mixed up without any grouping together of similar types. To take an extreme example, it is questionable whether a street of alternating 12-story apartments and single-family houses would be a good thing, no matter how much space surrounded the apartments.

As pointed out below, this type of district, where it is feasible in big cities, will not often attract the denser family dwellings, and in smaller towns and cities, the range of dwelling types is not apt to be too wide. There would probably not be many very high apartments. A few scattered ones, assuming they have adequate surrounding open space,
should not be harmful. In the larger cities where the probable number of different dwelling types might be too large, the range allowed could be limited, with other types perhaps being admitted by exceptions.
b) Possibility of Achieving Mixture

Even though intimate mixture is possible with these methods, how much is likely?

If adequate space is required for protection, apartments and other multi-family buildings may be discouraged from the district if there are other districts in which they can build with lower space requirements. Unless, of course, land is cheap enough in the diversified district to make up the difference. Or, perhaps, unless rents are high.

If the diversified district is the only residential district in town, this problem would not occur. Nor would it occur if other districts with multi-family structures have the same area and density requirements as in the diversified district (adaptable only in the Waukesha type of district, not the Elmira type). (In any case, if all multi-family structures of the same kind in one city have the same space requirements, it would be administratively simpler and legally more consistent.)
In small cities it may be feasible to require all multi-family structures throughout the city to have space adequate to afford protection to low density dwellings in the diversified district. But in larger cities, where multi-family districts are already built up at high densities, this will at least at present be very difficult if not impossible. (Though eminently desirable and even mandatory from the point of view of general planning objectives.)

(1) Land Value Question. Getting into this problem, one finds oneself running around the perennial vicious circle of the whole problem of land crowding and inflated land values, which will be met again in this thesis.

If high density districts are zoned for lower densities, there is the legal and political difficulty of taking property without compensation from the landowners who have paid high prices and taxes for the land, based on the high density building permitted by the past zoning, and who at lower densities will not get their "just returns." And yet as long as the land is zoned for high densities, the land will continue crowded and land values high, with landlords profiting in effect, from unsanitary congested conditions, and from paying less per family for taxes than is paid in lower density areas. At the same time the city tax structure, based
on the high land values is also inflated out of proportion, and dependent on high density zoning.

This is, of course, not the place to discuss solutions to this problem. Zoning densities may be gradually lowered (as in the proposed Providence ordinance), or lowered coincident with a lowering of taxes (the city taking part of the rap). 37

c) Relative Merits of Waukesha and Elmira Systems

Of the two methods of providing for diversified residences, the Waukesha system (under which each dwelling type has different area requirements) will probably produce a greater range of mixture than the Elmira system (of the same area requirements per family for each type). This is because of the difficulty of finding a least common denominator area requirement per family appropriate for a wide range of types (see page 45).

Especially where the Elmira system is used in a single residential district for the whole community, there are distinct values to having the same area requirements per family for every dwelling. There would then be no advantage or monopoly by

owners of high density land, or profit purely from crowding the land. Speculation (as far as dwelling types is concerned) is reduced: land is more apt to be developed for its best use and according to the needs of the community. There is also the advantage that all families have equal open space -- in no matter what dwelling type they live in.

On the other hand, no advantage is taken of common use of recreation, laundry drying, and other open spaces in multi-family structures. Where land costs are low and dwelling ranges not too great, this is probably not too important. However, in cases of high apartments, it is important. If this system is applied to high apartments, there might even be a possibility of requiring too much space -- from the point of view of maintenance, extra street and utility lengths required, and from the fact that space, beyond a certain adequate amount, has no merit in itself in a city.

2) Use Zoning Objectives

a) Separation

Assuming that adequate open space is provided through density and area regulations, all the benefits from separation that are obtained through conventional
use zoning are gained by diversified use districts with both methods. Separation is achieved not by herding dwellings of the same kind off by themselves, but by space (or any other type of separation required in the ordinance).

b) Grouping.

The greatest disadvantage and drawback of the first method is the difficulty under it of fitting the various elements of the neighborhood or community to each other and to present and anticipated needs -- in general the advantages gained from grouping of similar dwelling types and uses under use zoning.

If apartments and single-family dwellings are, for instance, allowed on the same street, the street and utilities will have to be large enough to supply the apartment even though most of the street may contain only single-family dwellings. Because it will be more difficult to predict the number of families in any district than when there is only one dwelling type, it will be more difficult to plan size and location of facilities such as schools and recreation areas.

However, where the dwelling type range is not too large, estimates can probably be accurate enough
for all practical purposes.

Under the second methods, where each dwelling must have the same area per family, there would be no such difficulty -- even with the widest range of dwelling types.

c) Stability

There are those who feel the whole idea of diversified districts is dangerous. Once you have allowed multi-family dwellings in any district, it will be easier to lower standards.

In the Waukesha method, there is the possibility of lowering area standards of low density buildings to those of multi-family dwellings on the grounds that "if my neighbor must have only 3000 square feet per family, why should I have to have 6,000, and so on." In the second type, the argument would run that if a dwelling of such and such type -- especially a multi-family dwelling -- has to have only 3000 square feet in the next district, why should mine in this district have to have 6,000?

It would seem that this argument could apply to any zoning system where the appeal body is incompetent or unreliable. As pointed out in more detail below,

you cannot build a sound zoning system on the assumption of poor government.

3) Administration -- legality

There would be no special administrative problem with all conditions written in the ordinance. Nor any question of legality, since there is ample precedent for both methods.

More flexibility could be gained by allowing additional dwelling types or uses in diversified districts as exceptions.

b. RESIDENTIAL AND NONRESIDENTIAL MIXTURE

Certain non-noxious businesses and industries might be allowed anywhere in residential districts provided adequate open space and other additional safeguards were required. But there would seem to be definite advantages in permitting them only under exception clauses where the approving body would have an opportunity to check on their fitness, proper location, etc., and could require additional conditions where necessary.

There is some question, too, as to the legality of writing in the main body of the ordinance requirements for such things as planting or location of the use on a main road, etc. And the checking of such provisions by a building inspector might be burdensome.
or difficult.

The arguments against exceptions are possible poor administration. (The question of exceptions will be discussed at more length later.)

2. DIVERSIFIED USE DISTRICTS WITH AMOUNT OF EACH LIMITED

a. USE ZONING OBJECTIVES

Some of the principal disadvantages of diversified use districts could be alleviated if the amount of each use and dwelling type were limited in some way. There would still be the problem of adjusting utilities and streets to scattered rather than grouped mixture. But expected overall population of each district could be calculated, and thus the need and best location for community facilities. Proportion of each use and dwelling type could be adjusted to population needs, and the balance of dwelling types in any district could be adjusted to desirable proportions.

b. DESIRABLE MIXTURE

If the higher density dwelling types could be limited in number, it might be possible to have a wider range of dwelling types in any district than would be possible without this limitation.

If business and industry were allowed as regular uses in such areas, their amount could be
limited to needs, but there would still be no
control over location; nor would there be the op-
portunity of providing safeguards for special con-
ditions. To permit such uses only as exceptions
would probably still be the best policy.
c. ADMINISTRATION AND LEGALITY

The major disadvantages of this type of ar-
rangement would probably be administrative and legal
ones. Present zoning limits the amount of each de-
velopment by laying out districts on the ground.
This system which would limit amounts by overall
acreage or other system, would actually apply with
more uniformity to every landowner in the district
than does the present system.

But there would probably be a scramble by each
landowner to develop his land with high density
buildings -- which would cause administrative dif-
ficulties. And there might be the question of dis-
'crimination if one landowner, for instance, "used
up" all available amount of acreage for high density
development.

There would probably also be complications in
figuring just how much land had been developed in
each use, when the quota had been reached, of keeping
the public informed of the status of things at any
one time, and in general of explaining to applicants
for permits the way the system works. There would,
too, be problems connected with the wearing out of
buildings.

Though the system has great theoretical ad-
vantages, it is probably not feasible.
3. DIVERSIFICATION THROUGH EXCEPTIONS

a. DESIRABLE MIXTURE

It would be hard to imagine arriving at any wide range of dwelling types through exceptions alone. If a great many exceptions for multi-family structures, for instance, were permitted in single and two-family districts, two results would occur:

First, there would be very great administrative complications on attempting to pass on all the appeals for exceptions, not to mention continually checking to see if all mandatory conditions were being kept up. Second, many exceptions of many different kinds in any one district would create instability and an undermining of zoning. No one would know what was coming next.

Such provisions, then, are best suited, not unstrangely, for uses which are "exceptional" in the common sense of the word -- uses quite different from the usual ones in the district, such as business and industry in residential zones, or apartments or group houses in low density residential districts. Exception provisions are used best in combination with other devices for bringing about mixture -- such as diversified use districts, as
b. PLANNING AND USE ZONING OBJECTIVES

If properly set up and administered, exception provisions should not interfere with the separation objectives of use zoning. If administration is competent, exceptions can also be required to fit in with the comprehensive plan for the neighborhood or city -- to fit in with other elements of the community, and to properly fill community needs. If there are not too many of them, they should not create instability.

c. ADMINISTRATION

Even with a small number of exceptions, there is the problem of enforcement of the special requirements set up for the particular use. In some cases this would be negligible, but in others -- such as that of seeing that a screening hedge was maintained -- there would be a good possibility of snags.

The administration problems that are most likely to come up, however, are those arising out of the discretion given the board of appeals or planning commission in passing on exceptions. This is a problem which is of interest not only here, but in connection with a number of points to be discussed later. It is,
in fact, a problem basic to several of the methods for achieving diversification which are taken up in this thesis. For this reason, it is touched on in a more than cursory fashion. Though obviously this is not the place to go into a thorough discussion of the governmental theory of the amount of discretion that should be given administrative officers, nor of the reasons for separation of legislative and administrative powers, nor of the dividing line between the two.

1) Advantages of Administrative Discretion

With a competent board or commission of integrity, it is possible that use exceptions may be fitted into the neighborhood -- may be brought to harmonize with surrounding uses -- more successfully and with a greater degree of refinement than when built according to standardized regulations written in the ordinance. Such an arrangement allows a greater degree of flexibility and greater possibilities for varying conditions and requirements according to the character and needs of the individual use.

The written law is safe but of necessity cumbersome and blunt -- operating on a basis of averages with little regard for individual differences.
2) Possible Dangers

On the other hand, there is the possibility that real damage may be done if uses incompatible in character or location or other qualities are permitted by an appeal body which is either incompetent, lacking in judgment or knowledge; or subject to political pressure, favoritism, or the demands of special interests; or lacking in time or adequate staff to do the job properly. Adequate judgment and skill in the exercise of discretion in granting exceptions or considerable variations from the letter of the law demands not only integrity but technical knowledge and a thorough understanding of city planning principles -- qualities not possessed by all of our boards of appeal or planning commissions.

The danger is greater with an appointed body than with an elected one because the former is one step removed from the electorate.

On the other hand, even when a board is judicious and has the interests of the public genuinely at heart, lack of understanding or opposition by citizens or pressure groups may produce just as bad results as when the board is incompetent or
unscrupulous.

In other words, the more discretion given to administrators, the more opportunity for the best, and for the worst, in design and in planning. The possibilities for good and for bad are limited largely by the qualities of the individual builder or developer, the administrator -- the board in this case, and the state of enlightenment of the public. With discretion, or without it, there are the disadvantages of the advantages, and vice versa, as in most things.

But only when government is given responsibility does it attract responsible officials and the interest and backing of responsible citizens. In attempting to establish the most effective set up for zoning the assumption must be made that we will have capable and fit administrators and officials.

d. PROBABLE LEGALITY

There is little question of the legality of the exception device in zoning. But there is more danger of litigation over cases granted exception permits than over the ordinary building permits through regular ordinance provisions.
Though there may theoretically be no objection to certain types of industry in residential areas, for instance, there may be practical difficulties. In at least two cases discovered, citizens opposed and eventually defeated the "intrusion" of industry into residential districts though recommended by the planning commission in both cases. One was an application for a research laboratory on a large tract of land in New Castle, Westchester County, New York, to house about 25 professional men and their staff. Another, in New York City, was for an electric research laboratory with a small housing development for the workers -- also with large grounds. Application for row houses are, of course, frequently opposed.

39. Correspondence with Irving Hand, County of Westchester Department of Planning.
4. DIVERSIFICATION THROUGH AMENDMENT

Many cities are at a rapid rate bringing about a diversification of a kind in their residential -- and other -- districts through amendments. Occasionally such an amendment is based on the public welfare, and even though small in size of area, is not objectionable from the physical point of view at least. But most of them are "spot zoning" in all its worst forms, based not on an overall plan or the public good, but on the particular interests of the individual landowner. They succeed in undermining zoning, and in fact, legalizing special privilege for the few. (Amendments for large-scale projects is quite another thing. They will be taken up below.)

Even where individual "spot" amendments are based on the public welfare and are unobjectionable from the community or planning point of view, they make for instability and undermining of the ordinance. If the ordinance is sound in the first place, there would seem to be little excuse for them.

The Connecticut clause which gives the zoning commission powers to amend zoning ordinances allows wide latitude for constructive action, and for abuse. The power it gives could be used to bring about mixed uses
in the creation of diversified districts, or through use exceptions of large scale. But it would not be satisfactory for achieving diversification with piecemeal development.
5. SMALL ZONE DISTRICTS AND
6. ZONING BASED ON SITE OR RESUBDIVISION DESIGN

a. DESIRABLE MIXTURE -- PLANNING AND USE
   ZONING OBJECTIVES

1) Flexible Mixture -- Wide Range of Dwelling
   Types and Uses

These two ways of obtaining diversification are, of

course, different from the present system only in
degree. They involve simply a more refined and detailed
zoning plan.

However, the more nearly an area is planned as a
unit, the more nearly all the elements involved are taken
into account, the more detailed the planning -- the more
flexible can be the combination of uses and dwelling
types. In relating uses more nicely to each other and
to the other elements of the site or community, more
adaptability can be made for individual differences.

Therefore, with both of these arrangements it is
possible to achieve a better planned and more intimate
mixture than under our usual present system where a sort
of gross average must prevail in combining uses and set-
ting up regulations.

Compared with the methods described above, too,
these two ways of obtaining mixture have certain advan-
tages from the design point of view. Though different
uses and dwelling types can be mixed together with
adequate closeness, there will be some grouping of
similar uses and types which might in many circum-
stances be more satisfactory from a living, aesthetic,
and economic point of view than the scattered mixture
resulting from the diversified use district. Though
mixture may not be quite as intimate -- or because it
is not -- a wider range of uses is also possible in
any one district.

2) Integration of Plan Elements

Uses can not only be better related to each other
than in other methods, but they can be better adjusted
to streets and utilities and to estimated population
needs.

3) Example

As pointed out above, in the DeMars design (page
62), there is a wide range of dwelling types -- from
high apartments to small single-family houses -- within
a small area. Yet dwelling types and uses fit utilities
and streets. Apartments and business, for example, are
on major streets; row houses on one side of the street
are served by different utilities than single-family
houses on the other side of the street. Zoning
districts based on such a design plan would have the
same characteristics.
4) Relation Between Subdividing and Zoning

Basing zoning on site designs would also have the advantage of relating subdivision of land to zoning -- something which is very much needed. To quote Thomas Adams in "The Design of Residential Areas": "A complete and satisfactory neighborhood plan is a coordinated subdivision and zoning plan." 40 Or Robert Whitten, in "Model Planning Laws": "It is particularly important in the unbuilt areas to secure an intimate combination and correlation of all the police power controls." 41

5) Differences Where Subdivider or Planning Commission Makes Plan

There might be some differences in design results when the planning commission makes the site plan on which zoning is based, and under some arrangement like that in New York State where the private developer makes the plan (changed to meet suggestions of the planning commission) and the zoning is changed to fit this plan. Results would depend on the relative competence of the planning commission and private designers. The commission's plan would be more apt to be based on the merits

of the case and the general public welfare, the developer's on profit and speculative considerations.

b. ADMINISTRATION

1) Undeveloped Land

To a certain extent, undeveloped land is now zoned according to neighborhood plans. However, if this is done in more detail, certain rather thorny administrative problems will arise. Where land is ripe for urban development, it will very likely have been already subdivided. Where this is not the case, there will be the problem of possible discrimination and of interfering with individual property rights.

For instance, will it be considered arbitrary to put one man's land in apartments or business, another's in single-family development, another's in public uses? Though this is done to a certain extent now, a more refined division of uses and dwelling types will present added problems.

If the area plans are soundly conceived and there are valid reasons for use of land, it should be possible to support them legally but there is more possibility of legal and administrative difficulties than now.

A process similar to that described here is carried on by the Indianapolis redevelopment agency, which redesigns redevelopment areas but leaves development and
building up to private builders. The parallel is not exact, of course, because in the Indianapolis case the city owns the land.

Another difficulty might rise if part of new land zoned on a site plan basis is developed, the rest held for some time undeveloped by the owners. In this case, the balance of land uses might be upset.

These difficulties are mitigated in the New York type of arrangement where the private developer takes the initiative and does the subdividing, the planning commission approving and suggesting changes and rezoning on the basis of the subdivision.

2) Developed Areas

In the case of simply attempting to zone built-up areas with smaller districts and more detailed planning, existing development will prevent much being done along this line -- and this applies, of course, to much of our cities today. Until such areas can be completely redeveloped, about the best thing that can be done in this case is to try to introduce different uses and dwelling types into large uniform zoning districts, either through exceptions or by changing these districts to mixed-use districts.

When built up areas can be redeveloped or resubdivided and rezoned, and changes are made to any extent in existing cases, the whole problem of land values is confronted (see pages 75 - 77).
Probably fewest difficulties would be encountered in rezoning or resubdividing and rezoning land which has already been plotted but has only scattered development -- the large areas of prematurely subdivided land in many cities, for example.

c. PROBABLE LEGALITY

1) Spot Zoning

It may be contended that zoning districts of small areas is "spot" zoning -- therefore illegal. But there seems to be a growing feeling expressed in zoning literature and in court decisions that the criteria for so-called "spot" zoning should be not so much size of area as arbitrariness or discrimination in zoning the area, or lack of any relations of the "spot" to the community welfare or a comprehensive plan.

The January 1949 issue of the ASPO News Letter, reporting the case of Edgewood Civic Club v. Blaisdell et al, says: 42 "The mere fact that the amendment zoned a small area at the request of a single owner does not of itself make the result spot zoning. 'The invalidity of spot zoning depends on more than the size of the spot.'"

Where the zone plan is sound, the small district integrally related to it, and the district has been set up in the original ordinance and not added later only to suit some individual's interest, difficulties in the court should not be too great.

2) New Powers

To lay out minor streets and lot lines, etc., the planning commission will have to be given new powers, and here again there might be substantial difficulty. It is interesting that in 1935, Robert Whitten suggested in "Model Planning Laws" that such powers be given planning commissions:

"It is suggested that the planning commission, in addition to the exercise of control through the approval of the subdivision plat, should have the power in proper cases to establish a land development plan. This development plan might include the area of a single proposed subdivision only, or all the area deemed suitable for a neighborhood unit. The development plan, in addition to including the layout of a building lots, streets, and community facilities, would include a building plan and setback and building regulations. These regulations would not necessarily be included in deed restrictions or indicated on the recorded plat, but would be police power regulations and subject to modification from time to time by the planning commission acting under general rules established by the municipal council. These development plan regulations might supersede the general zoning regulations for the area included in such development district."

B. PROVISIONS FOR LARGE-SCALE UNIT DEVELOPMENT

It would be impossible within the scope of this paper to analyze the merits of each type of provision exemplified in the table, or the pros and cons of all the different features of each type. An attempt will be made to evaluate this type of provision for large-scale development generally, and to consider briefly the significance of some of the more important features of the various provisions.

1. GENERAL ADVANTAGES

The advantages of large-scale development over piecemeal development have been outlined above (pp. 60-1). Zoning for piecemeal development must be a law of averages -- a least common denominator -- to cover safely probable conditions and possibilities of abuse. It can make no allowances for individual differences or give special dispensation to development which is better planned than other development. All types of development are treated alike. It is, therefore, a "blunt" instrument.

Special zoning provisions for large-scale development have the advantage of being able to allow flexibility -- leeway from the letter of the law, adjustment to individual differences, dispensation for better designed and planned development.
2. DESIRABLE MIXTURE

Under these provisions a better type of design is thus possible. Under them, it is possible to achieve the best in mixed design either of diversified types of mixed business and residence, or -- in the case of Prince George -- of all necessary community uses. Use zoning and planning objectives can be accomplished.

a. FLEXIBILITY

But flexibility has latitude in both directions. There is also the possibility of achieving the worst in design, poorly conceived and inadequate from the planning point of view. And since development is planned as a unit, by one designer or group of designers, there is the possibility of same monotonous development more deadly than what we have now by piecemeal development. Witness most of our public housing projects, or such private developments as Stuyvesant Town by the Metropolitan Life in New York, or some (not all) of the Arlington, Virginia garden apartment developments -- among many.

The amount of flexibility varies, of course, with the features in the various ordinance provisions. The greatest possibilities of desirable use of variations allowed and the greatest possibilities of their abuse lie in general with those ordinances which
leave the greatest discretion to their administering or legislative bodies -- require the fewest conditions,

allow the greatest variations in area requirements, dwelling type and use,

specify the largest minimum areas for development.

b. EXAMPLES

The Manchester and Prince George ordinances illustrate most of these points. Manchester, for instance, allows the widest discretion of any of the ordinances covered on the chart, sets up the fewest restrictions on development and not only allows but suggests in the ordinance the greatest number of use variations outside of Prince George County. Prince George's, while not only allowing but requiring the greatest number of use variations, subjects them to the most exact regulations. At the same time, it permits the least variations in area regulations.

Manchester has greater possibilities for extreme variation, and for imaginative and perhaps exciting community design than Prince George County; more possibilities of abuse of freedom. Prince George is more assured of a complete diversification of uses, and under safer controls no matter what the administration or designer, but there is less room for variety and creative play.
The least opportunity for diversification is presented by provisions for row or group housing with only minor and very specific yard variations permitted. This is especially true of ordinances like that of White Plains (not shown in chart) where such dwellings are allowed only in multi-family districts. Where they are allowed in single-family districts as in Concord, Massachusetts, more variety can be achieved. In any case, they do provide for introducing a new dwelling type into residential districts, with some variety of yard and building arrangements, and presumably adapted to a somewhat different type of family than in the existing district.

And provided requirements are adequate, they are certainly a safe way of mixing different kinds of dwellings, presenting no specific administrative problem.

Ordinances like that of Decatur allow somewhat more leeway for diversification since yards can be varied in any way provided coverage, height, and overall density remain the same, and since group housing projects are admitted in any residential district. However, the height limitation will prevent very much diversification of dwelling type.

44. See Appendix, page 131.
It might be pointed out that though a larger development area has advantages over a smaller one from the planning point of view, it will probably also be less frequently carried out because of its very size. More frequent smaller areas differing from surrounding development might achieve more diversity than a few large ones. Such a complete community as that provided for in the Prince George ordinance would probably not be built every day, whereas a development of 5 acres might not be too rare.

3. PLANNING AND USE ZONING OBJECTIVES

As said before, it is possible to fit together the various elements within a large-scale development, to meet the highest planning standards. Because of the overall density requirements in most provisions, it will also be possible to estimate population needs of the development accurately.

Adjustments might be necessary, however, where demands for utilities or streets of any parts of the new development do not fit capacities of existing utilities and streets. On new land, which has not been serviced, this would not occur. Almost all provisions stipulate that development be in harmony with surrounding development.
A more important problem is that of fitting any such large development itself into the master plan, particularly where this has been laid out on a neighborhood basis.

Suppose, for instance, that the community, including vacant areas, has been carefully planned and neighborhood shopping districts laid out on a zoning plan in each neighborhood according to needs. Will not a development which provides more of its own shopping upset the balance?

In the case of the Prince Georges type of development, the community would be complete in itself. Business, schools and other community facilities, for instance, would supposedly be just about adequate to serve the new community. But what if such a community did not coincide with planned neighborhoods in the county? Or what if two such communities were built fairly near each other, leaving a space in between them inadequate in size to be a complete neighborhood, too large to be a greenbelt, -- what of this in-between strip of land?

Since the planning commission, which makes the community plans must pass on large-scale development proposals, there is opportunity for adjustment of the development to the master plan. Also the advantages of such planned developments may be so great as to make it
worth while to adjust the community plan to some extent to them. For some time, at least, they will probably not be frequent enough to cause much difficulty along these lines. But in the event of future widespread large-scale development, the possibility of such problems must be kept in mind.

4. ADMINISTRATION

The problems and opportunities of administrative discretion were discussed under exceptions of single buildings (pp. 85-88). Where exceptions are large-scale, still greater problems and opportunity exist. In the case of the exception type of large-scale provision, resulting success will depend on the planning administration, the designer, and the public: in the case of the amendment type of provision, on not only these three, but the legislature.

In the last analysis, the standard of development will depend on the public -- its understanding of planning principles, and interest in seeing them applied, and for purposes of this paper, its feeling about mixed uses.

In provisions where wide latitude in variation is allowed, there is the possibility of completely undermining zoning and planning, and of creating economic instability in the community, unless such provisions
are very carefully administered. If a home owner feels he can't be sure of what goes up next to him -- unless he can be sure of the judgment and integrity of the planning commission in safeguarding him in these large-scale cases -- instability will result.

a. POWERS NOT USED

In some cases, also, boards of appeal or zoning commissions are reluctant to take the responsibility of making decisions on controversial zoning changes such as may be involved in providing for large-scale developments. Or there may be jealousy on the part of other local officials or legislative bodies in giving away so much power to planning commissions.

No study has been made of experience in the application of zoning provisions for large-scale unit development. Such a study would be very valuable though as yet experience along this line has, of course, been limited.

However, information on the use of sections 32, 33, and 37 of the New York State Laws (see Appendix, page 125) in Westchester County\(^45\) would indicate that even where such powers exist they may not be used extensively. Only nine out of 46 municipalities in the county have been given the powers of changing zoning when passing on plats, as provided for in the Acts.

\(^{45}\) Correspondence with Irving Hand, Westchester County Department of Planning.
In one of the nine cities, White Plains, the power was rescinded, to the apparent relief of the planning commission. In five of the cities, the power has never been used to date.

In Rye, the provision was used to permit a subdivision of single-family homes of odd lot sizes and shapes. In Pelham Manor, it was used to permit a small subdivision of four single-family lots of unconventional design. In Dobbs Ferry, a row-type garden apartment development was permitted in a single-family district. The ordinance was later amended to set up a new garden apartment district with the same boundaries as those of the new subdivision.

These examples indicate only cautious use of powers to change zoning to provide for large-scale unit developments. But of course the power has been in existence only a short time.

b. SMALL CONCENTRATED DENSE DEVELOPMENT ON LARGE SITE

There are one or two special problems which may come up under some of these provisions. One is the possibility of concentrated dense developments of apartments, for instance, in one small section of a large development area -- the rest being left vacant to meet overall density requirements. The density of this small development might be higher than for desirable standards,
the type of development inappropriate for the neighborhood. But the greatest danger would be that in the tendency to lower standards and allow the large surrounding vacant area to be built up in the same high density as in the original development.

Again there is the safeguard of having to meet planning commission approval. But it might be desirable, at least in some cases, to limit maximum density for any portion of a development area. (The Prince George's County provision takes care of this.)

c. WEARING OUT OF BUILDINGS -- CHANGE OF OWNERSHIP

Problems may also come up in connection with wearing out of buildings, change of ownership, or the breaking down of the development into smaller ownerships. "If the man next door can build an apartment on his lot, why can't I?" would be the gist of this difficulty.

In New York, if any part of the plan is abandoned, the original zoning prevails. In Rye and Prince George's, changes are subject to the same conditions as original adoption. These safeguards still leave some unanswered problems, however, and this seems to be one of the weakest links in the large-scale type of provision. In New York, for instance, suppose the "original zoning" requirement of say 40 dwelling units per acre, prevails if the plan is abandoned. But some of the large-scale unit
has been developed at 20 dwelling units per acre, some at 85. The low density area can now be built at 40 dwelling units per acre, but it will be difficult to force the 85 unit development down even when rebuilt.

In Prince George's County, for instance, how can individual changes be submitted to such requirements as an overall development density of 8 dwelling units per acre or "a range of dwelling types"?

5. LEGALITY

There might be litigation in connection with wearing out of buildings (as described above). And there may be some question as to whether in some of these provisions legislative powers are not being given to administration bodies. However, as Whitten says:

"We are realizing more and more in this country that a large legislative body is not well qualified to handle the detailed application and adjustment of regulatory measures. More and more the legislature is limiting itself to the laying down of general rules. It then grants broad powers of adjustment within these general rules to some department or authority. ...Only in this way can the complicated social controls essential to modern conditions be effectively administered."46

SUMMARY AND CONCLUSIONS

METHODS FOR ACHIEVING DIVERSIFICATION

Zoning methods for achieving diversified dwelling types and mixed uses are of two main types:

1. those which provide for mixture through the usual piecemeal development -- building by building, including
   a. diversified-use zoning districts in which
      1) each dwelling type has different open-space requirements,
      2) each dwelling type has same area and same density requirements per family,
      3) range of dwelling types may be limited, other types and/or uses are admitted by exception.
   b. diversified-use districts with amount of each dwelling type or use limited by percent of total area, total acreage, or number of units
   c. diversification entirely through exceptions
   d. diversification through amendments
   e. diversification through smaller zoning districts than at present, or closely related:
   f. zoning based on detailed site and resubdivision planning, through which streets and lots
are laid out in the zoning or land-use plan, and zoning districts more refined and smaller than is possible under the rough master planning on which zoning plans are now based.

2. those which make special provision for diversification and variation from the usual regulations of the ordinance in large-scale developments. These vary in the amount of flexibility they allow through

a. variations in
   1) area requirements
   2) dwelling types
   3) nonresidential uses

b. their general requirements for
   1) single ownership or plan
   2) minimum area size
   3) development character
   4) protection of surrounding area
   5) overall density requirements
   6) districts to which development is limited

c. their required administrative procedure, including
   1) bodies which must approve development -- city planning commission and/or board of appeals and/or legislative body
2) requirements for plan presentation
3) requirements for public hearing
4) requirements for change of plan

ADVANTAGES AND DISADVANTAGES OF EACH METHOD

Diversified residential districts permit an intimate mixture of dwelling types. From the point of view both of feasibility and design, they are probably most successful in low land value areas or in areas where the range of dwelling types is not too extreme.

Such districts can also provide adequate protection of types and uses from each other.

Under the system where area requirements per family are different for different dwelling types, the main disadvantage is in complicating the process of adjusting utilities, streets, and community facilities to use needs. Here again a limited range of dwelling types will cause least maladjustment.

Where the same amount of space per family is required for every dwelling type, there is no such difficulty. This system also has the advantage of eliminating profit from land crowding. Dwelling range under this system is apt to be even lower than under the other because of the difficulty of finding a common denominator area
requirement per family which will protect low dwellings and at the same time not discourage multi-family structures. This system, unlike the other, takes no advantage of common use of grounds in multi-family dwellings, but does have the advantage of giving every family in any district the same amount of open space -- no matter what the dwelling types.

The diversified residential district has the advantage of easy administration. There is no question of its legality.

Diversified Districts with Amount of Each Type Limited

If amount of each dwelling type in diversified districts could be limited by total acreage or percent of total acreage, they could be better planned in relation to population needs and other elements of the city such as community facilities and utilities. Despite its advantages, this system is probably too complicated to be administratively feasible.

Diversification Through Amendments

Diversification through amendments which make changes in the use of a single building or lot can be discarded as an unsound method.

Zoning Based on Site Planning

The most obvious way of obtaining diversification is through zoning as we have it now, but with smaller varied districts in close relation to each other Preferably
the districts should be based on fairly detailed site plans, and should be integrated with subdivision platting.

Ideally the planning commission should be given powers to subdivide and resubdivide the land. Until this is possible, the next best thing is an arrangement like that in New York State where the planning commission when approving subdivision plats, can change the zoning to conform to the plat. Actually there is a two-way process of adjustment here: zoning is not only adjusted to conform to the plat, but the plat can be made to conform to the zoning and plans for the community. The plat need not be approved until it does thus conform.

The big advantage of this type of mixture over the diversified use district is that which comes from grouping of uses and dwelling types, which can thus be better planned in relation to each other, to natural features, and to the other elements of the community.

Exceptions

Either diversified use districts or zoning districts based on site plans can be further varied by the use of exceptions. It is felt that exceptions for single uses should be only for uses quite different from those ordinarily allowed in the district, such as business, industry, or community facilities in residential areas or high density apartments in residential areas of
relatively lower density dwellings.

Provisions for Large-Scale Unit Development

Provisions in zoning ordinances which permit variations in use and area regulations for large-scale unit development offer wide flexibility for the most varied type of well planned mixed development. Flexibility possible is greatest where such development is allowed under exception rather than amendment clauses, where the widest variations are permitted, and where requirements written in the ordinance are fewest.

Since, however, flexibility means latitude for the worst as well as the best, its extent should depend on the competence and integrity of the planning commission, but most particularly on the understanding and support of planning by the community to whom the commission is in the last analysis responsible.

THREE PRINCIPAL METHODS

The three principal methods, then, that are found by this analysis to be most appropriate and feasible for bringing about mixed uses and diversified dwelling types in urban areas are 1) diversified residential districts; 2) zoning based on fairly detailed site plans, preferably combined with subdivision platting; and 3) exception or amendment type provisions for mixed uses and dwelling types, or for variations from the usual area and use regulations, in large-scale developments planned as a unit.
The first two can be further "varied" by the use of exceptions. (Performance standards rather than our usual area, height, and density standards might be used with any one of the methods.)

Zoning based on site plans might also include diversified residential districts, and diversified residential districts might have provisions for large-scale unit developments.

For the most part these methods are all in use now. The second might involve new powers, but is essentially an adaptation of -- or even only a change in emphasis in -- present zoning methods.

MOST APPROPRIATE CONDITIONS FOR EACH METHOD

Which of these three two types of provisions will be most appropriate in any case will depend on the community -- the type of building now in existence, the type of development that is expected, anticipated population needs, local desires, the understanding of planning principles on the part of local citizens, and other factors.

Diversified residential districts are probably best adapted to small towns and cities, suburban, unbuilt or low density areas where range of dwelling types likely to be built is not large, where land values are low, and where an informal pattern of dwellings is appropriate. Where the range of dwellings permitted in a district is
limited, this method can be used in large cities, particularly where land values are not too high and space requirements can be adequate. It might be adapted to existing areas of cities where there is already some variety of dwelling type.

Zoning based on site planning and large-scale unit provisions has all the advantages that come from detailed planning of an area. Particularly under the large-scale provisions, it is possible to build communities as ideal as our present state of knowledge and design skill are able to create.

But there is sometimes a stultifying quality in "ideal communities," a certain charm and warmth to neighborhoods that grow up piece-by-piece -- provided the growth is subject to some control. There is certain charm to imperfection -- the reflection of many kinds of people and many times. What we lose in piece-meal development we can gain in large-scale development. But this is also true the other way around.

Large-scale developments of considerable size are obviously only possible in outlying areas where there are large tracts of vacant land, or in central redevelopment areas. Smaller group developments can be fitted in almost anywhere, and might be one way of introducing variety into central areas, insofar as that is possible at all.
Zoning on a more detailed or site plan basis would be best adapted to partially built up areas (especially if the planning commission is given resubdivision powers), new land, or redevelopment areas.

As is to be expected, not much can probably be done directly to break down large densely populated built up areas in central cities unless they are redeveloped or unless land values are lowered in these areas through raised zoning standards or other means. However, if more apartments and densely populated dwellings are distributed in less dense areas in more outlying sections, there will be a pull of apartments away from central areas and thus a gradual breaking down of these areas. Apartments will not always be considered synonymous with the central city.

The best chances for bringing about successful mixed development through zoning is in small cities and towns, in suburban, outlying, vacant, low density or low-land-value areas, and in redevelopment areas.
### VARIATIONS ALLOWED

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<tr>
<th>Zoning Ordinance</th>
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<th>(b) Business</th>
<th>(c) Industry</th>
<th>(d) Parking</th>
<th>(e) Other</th>
<th>(f) Variations in All Area Regulations</th>
<th>(g) Single Ownership or Plan</th>
<th>(h) Min. Area</th>
<th>(i) Development Character</th>
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<th>(l) District Permitted In</th>
<th>(m) Administering &amp; Authorizing Bodies</th>
<th>(n) Plan</th>
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### GENERAL REQUIREMENTS

- **Uses Permitted or Required**
- **Plans**
- **Public Notice Hearing**
- **Changes in Plan**

### ADMINISTRATIVE PROCEDURE

- **Zoning Ordinance**
- **Plan**
- **Public Notice Hearing**
- **Changes in Plan**

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### Notes
- **See text of each provision in Appendix.**
- **Similar to this:ические: Leesburg, Va., other Tennessee Valley cities; Princeton, N.J., etc.**
- **See text of each provision in Appendix.**
- **Similar to this: Grand Rapids, Mich., etc.**
- **Information from letter of May, 1948, from Lawrence Graf, M.N., City Planning Commissioner.**
- **Similar to this: Los Angeles, which permits any variation in "self-contained community," provided "open space and municipal facilities, utilities and services" are adequate.**

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### Summary of Essential Features

- **X** - provided for, either specifically or by implication
- **B** - ordinance implies use allowed under conditions given, even though contrary to regulations, usually by general statement that "use regulations" may be varied.
ZONING PROVISIONS FOR LARGE-SCALE DEVELOPMENTS


Section 115. Group Housing Projects

In the case of a housing project consisting of a group of two or more buildings to be constructed on a plot of ground of at least four (4) acres not subdivided into the customary streets and lots and which will not be so subdivided or where the existing or contemplated street and lot layout make it impracticable to apply the requirements of this ordinance to the individual buildings in such housing projects, the application of such requirements to such housing project shall be done by the Board of Zoning Adjustment in a manner that will be in harmony with the character of the neighborhood, will insure substantially the same character of occupancy, and a density of land use no higher and a standard of open space at least as high as required by this ordinance in the district in which the proposed project is to be located.

In no case shall the Board of Zoning Adjustment authorize a use or a building height or coverage prohibited in the district in which the housing project is to be located.


E. Additional Uses Permitted

16. Large-scale neighborhood housing projects having a minimum gross area of twenty (20) acres provided:

(a) that the lot area per dwelling unit complies with the requirements of the district in which the project is located;

(b) that the character of development on the lots on the border of said project harmonizes with that on the surrounding lots or property;

(c) that all yards on the lots on the border of said project conform to the regulations of the district in which the property is located; and
(d) that the minimum distances between the main buildings within the site area (excluding lots on the border), shall be as follows: (1) front to front, front to rear, or rear to rear -- two (2) times the height of the taller building, but not less than seventy (70) feet; (2) side to side -- one-half (1/2) the height of the taller building, but not less than ten (10) feet; (3) front to side or rear to side -- one (1) times the height of the taller building, but not less than fifty (50) feet.

C. Procedure. Written applications for the approval of the uses referred to in this section shall be filed in the Planning Commission's office upon forms prescribed for that purpose by the Commission. A fee of fifteen dollars ($15.00) shall be paid upon the filing of each application for a special use permit. The procedure for holding public hearings shall be the same as that required in Section 22. The Commission shall make its findings and determination in writing within forty (40) days from the date of filing of an application and shall forthwith transmit copy thereof to the applicant. No decision of the Commission under this Section shall become effective until after an elapsed period of ten (10) days from the date the written determination is made, during which time the applicant, or any other person aggrieved, may appeal therefrom to the City Council in the same manner as provided for in Section 17. In approving the uses referred to in this section, the Commission shall have authority to impose such conditions as it deems necessary to protect the best interests of the surrounding property or neighborhood and the Comprehensive Plan.

CROWN POINT, ILLINOIS. Zoning Ordinance.

Section 23. Approval of Development Plot.

The owner or owners of any tract of land not less than 20 acres in area may submit to the Board of Zoning Appeals a plan for the use and development of such tract of land primarily for residential purposes and if such development plan is approved by the Board of Zoning Appeals and by the City Plan Commission after public notice and hearing, the application of the use, height, area and yard regulations established herein shall be modified as required by such development plan, providing that for the tract as a whole,
excluding street area but including area to be devoted to parts, parkways or other permanent open spaces there will be not less than the required area per family for the area district in which such tract of land is located for each family which, under such development plan, may be housed on such tract. And provided further, that under such development plan, the appropriate use of property adjacent to the area included in such plan is fully safeguarded.


Group Residential Development

The owner or owners of any tract of land comprising not less than five acres, in any except Residence "A" Districts, or of an entire block of land bounded on all sides by streets, or by one or more streets and by waterways, parks, playgrounds or other public grounds or business or industrial districts, may submit to the City Council a plan for the development of all such tract of land for residential purposes, or for the reconditioning or alteration of any existing residential development on such tract.

The City Council may approve such plan and authorize the issuance of a building permit, even though the use of the land and the location of the buildings to be erected and the yards and other open spaces contemplated by the plan do not conform in all respects to the regulations stipulated in other parts of this ordinance for the district in which the proposed development is to be located, provided the City Council finds that under the proposed residence development plan the appropriate use of property adjacent to the proposed development is safeguarded and that the proposed development will serve or be consistent with the purposes of this ordinance to promote the public health, safety and general welfare. Provided, however, that the City Council shall not take action on such plan or authorize a building permit until after having (a) first referred said plan to the City Planning Commission for study and report, and (b) on receipt of such report from the Planning Commission has held a public hearing, notice of the time and place of which has been given in a manner required in connection with proposed ordinances.
It shall be the duty of the City Planning Commission to investigate and ascertain whether the proposed group residential development plan complies with the following conditions:

(a) That the buildings are to be used solely for residential purposes and the customary accessory uses, such as private garages, storage spaces, and for religious, recreational, educational, social and community activities.

(b) That the average lot area per family or dwelling unit on the site will not be less than the minimum lot area per family or dwelling unit required in the district in which the proposed development is to be located.

(c) That there is to be provided within the site of the development or immediately adjacent thereto parking space in private garages or off-street parking areas at the rate of one automobile space for each family or dwelling unit in the proposed development.

(d) That there are to be provided as a part of such development recreation areas adequate to serve the needs of the anticipated population to be housed therein. In case the area of the development is twenty acres or more, at least five per cent of the area shall be set aside and developed as a neighborhood playground or playyard.

In case the area of the development is less than twenty acres and contains not more than fifty dwelling units with two or more bedrooms each, a suitably located play-lot or lots for children of pre-school age shall be provided at the rate of 600 square feet plus 40 square feet for each dwelling unit in excess of fifteen. In case there are more than fifty such two-bedroom dwelling units, the required area of play lots shall be 200 square feet plus 30 square feet for each such dwelling unit in excess of fifty.

These requirements for provision of recreation areas may be modified or waived by the City Planning Commission where, in its opinion, adequate public recreation areas are available nearby, or where justified in view of the availability of private yard spaces or the type of occupancy the development is designed to accommodate.
(e) That the proposed development will constitute a residential environment of sustained desirability and stability; that it will be in harmony with the character of the surrounding neighborhood and will insure substantially the same type of occupancy as obtains or may be expected to obtain in said neighborhood; that it will result in intensity of land utilization no higher, and standard of open space at least as high, as permitted or specified under this ordinance in the district in which the proposed development is to be located.

(f) That the property adjacent to the proposed development will not be adversely affected.

(g) That the proposed development will be consistent with the intent and purpose of this ordinance to promote public health, safety and general welfare.

A report of its findings shall be furnished by the City Planning Commission to the City Council.

WICHITA, KANSAS. Revised Zoning Ordinance passed by the Board of Commissioners of the City of Wichita, Kansas, August 20, 1946.

Section 29. Community Unit Plan Regulations

1. The owner or owners of any tract of land comprising an area of not less than twenty (20) acres may submit to the Building Inspector of the City of Wichita a plan for the use and development of all such tract of land for residential purposes. Such development plan shall be referred to the City Planning Commission for study, public hearing and report to the governing body, and the governing body may approve or disapprove the development plan. If the governing body approves the development plan, the governing body may authorize the issuance of building permits and certificates of occupancy therefor even though the use of land and the use and location of structures, including the yards and open spaces required by this ordinance, do not conform in all respects to the regulations contained in other sections of this ordinance. The City Planning Commission shall make a report to the governing body setting forth its reasons for approval of the application and specific evidence and facts showing that the proposed community unit plan meets the following conditions:
(a) That the values of buildings and the character of the property adjoining the area included in said plan will not be adversely affected.

(b) That said plan is consistent with the intent and purpose of this ordinance to promote public health, safety, morals and general welfare.

(c) That the buildings shall be used only for residential purposes and the usual accessory uses such as automobile parking areas, garages, and community activities, including churches, and provided that an "LC" District can be established through the regular channels.

(d) That the average lot area per family contained in the site, exclusive of the area occupied by streets, shall be not less than the lot area per family required for the district in which the development is located.

1) "LC" -- Light Commercial District. "All purely retail business," filling stations, garage, storage, offices, bakeries, laundry, restaurants, theatre, banks, shoe shop, studios, tailor shop, etc.


4.5. Residence "AA" Districts. (Multi-family residence district).

e) Group Residences. Within any Residence "AA" District no building housing more than 10 families and no group of buildings shall be erected on any lot unless a development plan for the entire lot has been approved by the Planning Commission in the same manner as prescribed for the approval of Subdivisions in Sections 32, 33, and 37 of Chapter 21 of the Consolidated Laws of the State. Subsequent to issuance of such approval, no building permit shall be issued except for building in conformity with the approved development plan.
4.6. Residence "C" Districts. (Multi-family residence district).

b) Apartments. A residence for three or more families, or a group of buildings on one lot will be permitted only subject to the same provisions as prescribed for Residence "AA" Districts in Section 4.5e (Group Residences) above.

1) Definition of lot: A parcel of land in one recorded ownership devoted or to be devoted to one main building or, where permitted under Sections 4.5 and 4.6 of this Ordinance, to an integrated group of buildings, with its accessory buildings and the required open spaces.

2) Article 37 of Chapter 21 of the Laws:

37. Planning board, changes in zoning regulations. The body creating said planning board is hereby authorized by ordinances or resolution applicable to the zoning regulations of such city or any portion of such zoning regulations, to empower it, simultaneously with the approval of any such plot either to confirm the zoning regulations of the land so plotted as shown on the official zoning maps of the city or to make any reasonable change therein, and such board is hereby empowered to make such change. The owner of the land shown on the plot may submit with the plot a proposed building plan indicating lots where group houses for residences or apartment houses or local stores and shops are proposed to be built. Such building shall indicate for each lot or proposed building unit the maximum density of population that may exist thereon and the minimum yard requirements. Such plan, if approved by the planning board, shall modify, change or supplement the zoning regulations of the land shown on the plot within the limitations prescribed by such legislative body in said ordinance or resolution. Provided that for such land so shown there shall not be a greater average density of population or cover of the land with buildings than is permitted in the district wherein such land lies as shown on the official zoning map. Such building plan shall not be approved by the planning board unless in its judgment the appropriate use of adjoining land is reasonably safeguarded and such plan is consistent with the public welfare. Before the board shall make any change in the zoning regulations there shall be a public hearing preceded by the same notice as in the case of the
approval of the plot itself. On the filing of the plot in the office of the county clerk or registrar such changes, subject, however, to review by court as hereinafter provided shall be, and become part of the zoning regulations of the city, shall take the place of any regulations established by the board of estimate or other legislative authority of the city, shall be enforced in the same manner and shall be similarly subject to change.

NEW YORK, NEW YORK. Zoning Resolution of the City of New York, as amended to June 2, 1947, together with Charter Excerpts, Rules, Forms, etc. City Planning Commission.

Article V. General and Administrative.

21-C. Site Plans for Large Residential Developments.

Upon presentation to the Board of Standards and Appeals of a site plan showing the locations of dwellings and open spaces on an area not less than 75,000 square feet in extent, the Board, after public notice and hearing and after a favorable report from the City Planning Commission, may grant a variance from the use, height and area provisions of this resolution; provided that the ratio of the floor area of the building or buildings to the area of the lot does not exceed that permitted by this resolution; and further provided that the Board is satisfied that the provision of light and air is in all respects adequate to the special circumstances of the particular case and at least equivalent to the requirements of this resolution; and further provided that the minimum distance between any two buildings is not less than 6 inches per foot and in no case less than 20 feet.

PRINCE GEORGE'S COUNTY, MARYLAND. Proposed Zoning Ordinance for the Maryland-Washington Regional District in Prince George's County, Maryland. July 22, 1948.

Section 22.0 R-P-C Zone (Planned Community)

22.1 Application

In areas where large-scale, complete community development is planned, the owner or owners
may file applications for inclusion of the area within the R-P-C Zone. Such applications shall be accepted for consideration under the following conditions.

22.2 Conditions General

22.21 The area proposed shall be in one (1) ownership or, if in several ownerships, the proposal for zoning map amendment shall be filed jointly by all of the owners of the properties included in the plan.

22.22 The area shall be large enough to permit the development of a complete community or neighborhood having a range of dwelling types; necessary local shopping facilities and off-street parking compounds; parks, playgrounds, or reservation of area therefor; and reservation for educational facilities, wherever these are deemed necessary, and for business and industry to provide local employment opportunities, if appropriately located and in harmony with the General Plan.

22.23 The area shall be adaptable to complete community development, being bounded by major thoroughfares, streets, railroads, or other external barriers and shall have within or through it no major thoroughfare or other physical feature which will tend to destroy the neighborhood or community cohesiveness.

22.3 Data to Accompany Application

Together with the application for zoning reclassification of the area, there shall be submitted a tentative, over-all development plan which shall show:

(a) Topography

(b) Proposed street system

(c) Proposed lot layout

(d) Proposed reservations for parks, parkways, playgrounds, school sites, and other open spaces

(e) Proposed location of neighborhood business area and offstreet parking space
(f) Types of dwellings and portions of the area proposed therefor

(g) Proposed location of dwellings, garages, and/or parking spaces

(h) A tabulation of the total number of acres in the proposed project and the percentage thereof designated for each of the proposed dwelling types, neighborhood retail business, off-street parking, streets, parks, schools, and other reservations

(i) A tabulation of over-all density per gross acre

(j) Preliminary plans and elevations of the several dwelling types

22.4 Specific Requirements

Large-scale community developments shall be subject to the following requirements:

(a) The over-all density shall not exceed eight (8) dwelling units per gross acre

(b) The area proposed development shall be of sufficient size to provide living space for a minimum of approximately five hundred (500) families at the permissible gross density when fully developed

22.41 For the purpose of this section, the gross area shall include all land within the area intended for use for residence, local neighborhood business, parking space, reservation for community recreational and educational facilities, interior streets and to the center line of bounding streets but not over fifty (50) feet from the property lines abutting such streets.

Areas used or reserved for large regional parks or parkways, land subject to recurring flood, swamp or marsh land shall be excluded in computing the gross area.

22.5 Commission Consideration

22.51 Upon receipt of application for zoning map amendment and accompanying plan meeting the foregoing requirements, the same shall be taken under consideration by the Commission. The Commission shall consider the general plan for the community,
location, arrangement, and size of lots, parks, school sites, and other reservations of open space; the location, width, and grade of streets; the location and arrangement of parking spaces; the location, arrangement, and height of buildings; the location, arrangement, and design of neighborhood business areas and accessory parking spaces; the gross densities proposed for the entire area; and such other features as will contribute to the orderly and harmonious development of the area, with due regard to the character of the neighborhood and its peculiar suitability for any one or more of the proposed uses.

22.52 The Commission may approve the tentative plan as submitted, or, before approval, may require that the applicatn modify, alter, adjust, or amend the plan.

22.53 Upon approval of a tentative plan, the Commission shall transmit the same, together with the application for Zoning Map Amendment, to the Clerk to the District Council who shall, in accordance with the provisions of Section 33.0, advertise the proposed amendment for public hearing.

22.54 If the proposed amendment is approved by the District Council and the land placed in the R-P-C Zone, the owner or owners, before beginning development, shall submit a final plan to the Commission.

22.55 The final plan, after adoption by the Commission, shall be deemed an Official Plan. The Official Plan shall be signed by the Commission's Chairman and Secretary-Treasurer and by the property owner, who by formal agreement shall certify to the District Council his willingness to abide by the conditions and terms of the adopted plan. The Commission shall file with the District Council a certified copy of the Official Plan for each development included in an R-P-C Zone.

22.56 An Official Plan for an area included in the R-P-C Zone may be amended, the procedure therefor to be the same as in the case of the original plan (See Sections 22.1 to 22.55, inclusive).
22.6 Uses Permitted

No building, structure, or land shall be used and no building or structure shall be hereafter erected, structurally altered, enlarged, or maintained, except for one or more of the following uses:

22.61 All uses permitted in the R-A, R-R, R-75, R-55, R-35, R-20A, R-20, R-18, R-10, C-1, C-2, I-1, and I-2 Zones, subject to the regulations set forth for the Zone in which such uses are permitted and in accordance with any additional regulations and restrictions imposed by this Section.

22.7 Area, Height, and Other Requirements

As specified for the Zones in which such uses are permitted and in accordance with any additional regulations imposed by this Section.

1) Includes all residential, business, and industrial zones.


Article V. Administration and Enforcement.

Section III. Subdivision Development Plan.

The owner or owners of any unsubdivided or unbuilt land not less than five (5) acres in area may submit to the Zoning Commission a complete development plan for such area showing proposed streets, building lines, parks and other public or private permanent open spaces, together with a proposed building plan indicating lots for single-family or two-family houses and areas where group houses or apartment houses or local stores and shops are proposed to be built. Such building plan shall indicate for each lot or proposed building unit the maximum number of families that may be housed thereon; the minimum yard requirements; water and sewer conditions. Such subdivision development plan, if approved by the Zoning Commission, shall be construed to modify and supplement these regulations as related to the land included in such subdivision.
Section 6. Exceptions and Modifications.

I. Grouped Multifamily Structures.

In lieu of a single principal building designed and intended for multifamily occupancy, there may be erected in any R-4, R-5, or R-6 Residency District on a lot as defined herein, groups of multifamily structures sharing common access driveways, required garage and off-street parking areas, recreation areas and other required joint facilities provided:

1. Such group of multifamily structures and their accessories shall be taken and considered collectively and for all purposes of this ordinance shall constitute a single indivisible principal structure.

2. The minimum distances separating such multiple dwelling structures shall not be less than the following:

   (a) Twice the minimum front yard depth required in the schedule plus fifty (50) feet between the fronts of structures facing each other across an access driveway, mall, park or green.

   (b) Twice the minimum side yard width as required in the schedule between the ends, sides, front and end or rear and end of structures.

   (c) Twice the minimum rear yard depth as required in the schedule between the rears or front and rear or structures.

3. The location, width, drainage and pavement design of service roadways and parking areas shall meet the requirements of the Commissioner of Public-Works as to design and materials and the requirements of the Commissioner of Public Safety as to adequacy for the access of fire fighting equipment, other emergency equipment and other vehicles.

1) R-4, R-5, and R-6 are multi-family districts.
2) Lot - A recorded piece, plot or parcel of land or assemblage of recorded contiguous parcels of land, occupied or to be occupied by a single principal building or use and its accessory buildings and uses, and including the open space required under these regulations, except that in lieu of a single multi-family structure in R-4, R-5, and R-6 districts, groups of multi-family structures under a single ownership shall be considered as a single principal building. All lots shall abut on a suitably improved street shown on the official map.

CLEVELAND, OHIO. Building Zone Ordinance of Cleveland, Ohio. Issued by the City Planning Commission, July 1, 1946.

Area Regulations.

(j) In a large-scale housing development on a single lot or parcel of land under one control and to be made up of dwelling houses in a "B" area district, or of multi-family houses or other kinds of houses or any combination of them in an apartment house district, the required minimum lot area per family may be calculated from the area of the entire development, in which are included community open spaces, parking spaces and drives other than public streets within the same development parcel and accessible to all occupants of the parcel group, as well as the private yards accessory directly to individual buildings, but excluding any areas proposed to be dedicated for public purposes. The private yards adjacent to the individual buildings for the use and care of each family in a dwelling house or row house development shall not be less than 1000 sq. ft. exclusive of the space occupied by the house itself and subject to the requirements of paragraph (i) of this subsection.

(i) No yard or other open space provided about any building for the purpose of complying with the provisions of these regulations shall again be considered as the yard or other open space of any other building.

"B" area district permits "dwelling houses (residence designed for and exclusively occupied by not more than two families)" and remodeled dwellings for more than two families, not more than six.
Lot is a "parcel of land occupied or intended to be occupied by one main building and the accessory building and uses customarily incident to such main building and including such open spaces as are provided, or as are intended to be used in connection therewith, or as are required by this Subdivision. This may or may not coincide with a lot of a recorded subdivision."


Permitted in the general and parts of the single residence districts:

9. Limited dwelling structure, or "garden apartment," provided that the Planning Board shall find and certify to the Board of Appeals that such structures, including the site, plans, and building design, constitute a desirable development in the area; and provided further that the Board of Appeals, after notice and a public hearing, shall find and rule that such structures will not be injurious or detrimental to the neighborhood; and subject further to the following conditions, that such structures shall not exceed 2 1/2 stories or be more than 30 feet in height, that no living quarters shall be located below the first floor or above the second floor, that there be a total of not less than 3,500 square feet of lot area per dwelling unit, that no building be erected within 15 feet of any property or street line, and that no building include more than 8 dwelling units; and subject further to such conditions respecting site, plans, building design, and other restrictions as the Board of Appeals may prescribe in the interests of the Town.
SOURCES

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New York City Building Zone Resolution. Report to the Fifty-Seventh Annual Convention of the American Institute of Architects. Quoted in the City Is the People. p. 92.


Unpublished material furnished by Vernon DeMars.

Zoning Ordinances

Arlington, Virginia
Baltimore, Maryland
Cincinnati, Ohio (Proposed)
Cleveland, Ohio
Decatur, Alabama
Elmira, New York
Greenwich, Connecticut
Irondequoit, New York
Irvington, New York
Kingston, Tennessee
Los Angeles, California
Manchester, Connecticut
Montclair, New Jersey
New York, New York
Princeton, New Jersey
Providence, Rhode Island
Richmond, California
Rye, New York
Schenectady, New York (Proposed)
Somers, New York
South Central Connecticut
St. Petersburg, Florida
Waukesha, Wisconsin
Wichita, Kansas
White Plains, New York (Proposed)

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FURTHER RESEARCH NEEDED

Pros and cons of mixed development.

What type of mixed uses are desirable.
Extent and kind of mixture desirable.
Standards for mixing different types of dwellings and uses.

Critical study of existing mixed developments -- in small towns or old areas of cities; elements that make them desirable or undesirable.

Study of possible types of provisions for mixed large-scale development.

Experience in administering and building large-scale development.

Experience in administering and building large-scale mixed developments planned as a unit (further study of experience like that in Westchester County, New York, as described on pages 106-7). How successful have they been.

Study of utility problems and costs with mixed developments of various kinds. What kinds and what extent of mixture are economical from the utility point of view.

Study of the problems of administrative discretion in zoning.

Combining subdivision planning and control zoning.