ESTABLISHMENT OF PLANNING REGIONS
IN THE STATE OF CONNECTICUT

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B.S., Pennsylvania State College, 1946

A thesis submitted in partial fulfillment of the requirements for the degree, MASTER IN CITY PLANNING at Massachusetts Institute of Technology, Cambridge, Massachusetts, September, 1948.

Submitted by:       

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..........................
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Dear Professor Adams:

I hereby submit this thesis, ESTABLISHMENT OF PLANNING REGIONS IN THE STATE OF CONNECTICUT, in fulfillment of the final requirement for the degree Master in City Planning.

Respectfully yours,

C. Gregory Bassett, Jr.
P R E F A C E

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FOREWORD

The viewpoints and opinions expressed in this thesis represent solely those of the author and in no manner are they to be otherwise interpreted.

Daily, newspaper headlines reflect the complex of problems existant in the world today. Political states have grown for the purpose of satisfying the needs of the people and problems relative to these needs through methods. This we know to be! What is oftentimes clothed in vagueness or difficult to discern due to the rapid pace of civilization are specifically some of these needs, objectives, and methods towards their attainment. One recognizes the fact that no singular pragmatic solution is a panacea for the ailments existing in this pluralistic world.
Existence is beyond the power of words
To define:
Terms may be used
But are none of them absolute
In the beginning of heaven and earth there were no words,
Words came out of the womb of matter;
And whether a man dispassionately
Sees to the core of life
Or passionately
Sees the surface,
The core and surface
Are essentially the same,
Words making them seem different
Only to express appearance.
If name be needed, wonder names them both:
From wonder into wonder
2 1
Existence opens.

1 Byrner, Wittner, THE WAY OF LIFE ACCORDING TO LAOTZU, John Day Company, New York; p. 25
2 ("Might be likened to the course of many rivers reaching the one sea"). Ibid., p. 46
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE PROBLEM</td>
</tr>
<tr>
<td>BACKGROUND OF THE PROBLEM</td>
</tr>
<tr>
<td>APPROACH TO THE PROBLEM</td>
</tr>
<tr>
<td>PROCEDURE</td>
</tr>
<tr>
<td>SURVEY</td>
</tr>
<tr>
<td>Historical Perspective</td>
</tr>
<tr>
<td>Areal Differences in Speech</td>
</tr>
<tr>
<td>PART I NATURAL ENVIRONMENT</td>
</tr>
<tr>
<td>PART II MAN</td>
</tr>
<tr>
<td>Density of Population</td>
</tr>
<tr>
<td>Population Growth</td>
</tr>
<tr>
<td>Population Characteristics</td>
</tr>
<tr>
<td>Population Composition</td>
</tr>
<tr>
<td>PART III MAN'S ACTIVITY &amp; RESULTS OF THAT ACTIVITY</td>
</tr>
<tr>
<td>Economic Classification of Municipalities</td>
</tr>
<tr>
<td>Business Activity</td>
</tr>
<tr>
<td>Newspaper Circulation</td>
</tr>
<tr>
<td>Telephones</td>
</tr>
<tr>
<td>Labor Areas</td>
</tr>
<tr>
<td>Transportation</td>
</tr>
<tr>
<td>Utilities</td>
</tr>
<tr>
<td>Other Activity</td>
</tr>
<tr>
<td>Hospital Service Areas</td>
</tr>
<tr>
<td>High Schools</td>
</tr>
<tr>
<td>Recreation</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS cont'd

Legislation .................................................. 62
Local Planning & Zoning Agencies ............. 62
Regional Planning & Zoning Organizations & Authorities .......... 63

PART IV CONCLUSIONS ...................................... 66

BIBLIOGRAPHY ............................................... 75
LIST OF PLATES

Plate

SETTLEMENT OF NEW NEW ENGLAND.......................... 1
CHRONOLOGY OF THE SETTLEMENT OF NEW ENGLAND........ 2
ELEVATION MAP.................................................. 3

OVERLAY 1: NATURAL WATERSHED AREAS
Source: Conn. State Planning Board, 1935

OVERLAY 2: POPULATION DISTRIBUTION IN STATE
Source: New England Regional Plan, 1936

TEMPERATURE AND RAINFALL VARIATION...................... 4
MUNICIPAL, COUNTY & STATE BOUNDARIES..................... 5

OVERLAY 3: URBAN AREAS
Source: Conn. State-Wide Highway Planning Survey & U.S. Bureau of Census

POPULATION...................................................... 6
DENSITY DISTRIBUTION......................................... 7
PROPOSED METROPOLITAN DISTRICTS - 1950................. 8
POPULATION SHIFTS IN NORTH-EASTERN STATES............. 9
POPULATION GROWTH 1900-1930............................... 10
POPULATION GROWTH 1930-1940............................... 11
POPULATION GROWTH 1940-1948............................... 12
NUMERICAL INCREASE 4-16 AGE GROUP....................... 13
DISTRIBUTION OF DOMINANT GROUPS IN TOTAL
FOREIGN-BORN POPULATION................................. 14
CLASSIFICATIONS OF CITIES.................................. 15
CLASSIFICATIONS OF TOWNS & CITIES BASED ON EMPLOYMENT OF RESIDENTS............................... 16
LIST OF PLATES cont'd

Plate

RETAIL TRADE AREAS.......................... 17
NEWSPAPER CIRCULATION........................ 18
LABOR AREAS AND THEIR CENTERS.............. 19
TRAFFIC FLOW.................................. 20

OVERLAY 4 HIGH TRAFFIC ROADS
Source: State High Department, 1942

RAILROAD LINES SERVING CONNECTICUT......... 21
AIRPORTS...................................... 22
MAJOR POWER LINES AND STATIONS.............. 23
WATER UTILITIES...(Not received from Photostat in time)
GENERAL HOSPITAL SERVICE.................... 25

OVERLAY 5 HOSPITAL AND HEALTH AREAS
Source: American Pediatric Society

TOWN OF RESIDENCE AND PLACE OF ATTENDANCE OF
HIGH SCHOOL STUDENTS 1946............... 26

OVERLAY 6 HIGH SCHOOLS SERVING MORE THAN
ONE COMMUNITY
Source: Department of Education, Conn.

CONNECTICUT STATE PARKS AND FORESTS........ 27

OVERLAY 7 AREAS AND LOCATIONS OF PARKS
Source: State Park & Forest Comm.

POLITICAL SUBDIVISIONS IN CONNECTICUT........ 28
LOCAL PLANNING & ZONING AGENCIES............ 29
REGIONAL PLANNING GROUPS..................... 30
PLANNING REGIONS & SUB-REGIONS............... 31
LIST OF TABLES

TABLE I  PERCENT DISTRIBUTION OF 4-16 AGE
    GROUP IN CONNECTICUT....................  43

TABLE II  ATTENDANCE IN PRINCIPLE CONNECTICUT
    PARKS, 1947..............................  61
THE PROBLEM

The territory concerned in this study is the land and water included within the boundaries of the State of Connecticut as prescribed by legislation.

The State of Connecticut, representative of an existing political unit is today faced with a multitude of problems relative to its natural growth and development.

Recognition of the problem, the objective, and method or methods of attaining this objective is possible at the state level; however, in many cases the carrying-out procedure creates more problems than are solved and is therefore not a practical solution. Solution of these problems on the county level is not possible due to the nature of these problems and the existing structure of county administration in the State. Adequate solution of these problems has not been found feasible on the local level due to the size and scope of these problems and the inability of local governments as administrative units to cope with them.

For this reason the State of Connecticut has passed laws granting powers to a duly authorized group or groups of individuals who represent "communities of interest". Moreover, as an extended means of effectively attaining desired objectives, the State wishes to know 'where' these communities of interests exist. That is the subject to be sought by this thesis.

1 See Appendix; Section 1051 - Section 431, Chapter 26A of the 1947 Supplement to the General Statutes
BACKGROUND OF THE PROBLEM

To justify any conclusions regarding the subject it is believed necessary to first investigate the underlying method of the subject, explore its objectives and give evidence 'why' attainment of these objectives is essential today.

It can be shown that there are as many definitions or concepts of region as there are writers to pen them. These definitions may be construed to the purpose for which they are written whether it be by an anthropologist, economist, geographer, political scientist, or sociologist. Robert E. Dickenson, Reader in Geography, University of London, offers explanation of this term in respect to the regional planner or geographer. "The term region is undoubtedly one of the catchwords of our day among both popular and scientific writers. To the practical man of affairs a region is just an area with certain characteristics (often mere size), in virtue of which it is a suitable unit for some particular purpose of business and administration. To the scientist and above all to the geographer, a region is an area which is homogeneous in respect to some particular set of associated conditions, whether of the land or of the people, such as industry, farm-

1 H. Odum and E. Moore in AMERICAN REGIONALISM list 28 varying concepts of the region from as many nationally recognized authorities. These "concepts indicate both diversity and a certain agreement with reference to the meanings of regionalism".
ing, the distribution of population, commerce, or the general sphere of influence of a city."  

It is quite apparent that what is in our grasp (the region) is like a chameleon, in that its definitive qualities concur with the use to which it is put. Thus, to define planning regions, some knowledge of the material is important so that the 'color' of this particular chameleon will be known. In other words, some insight regarding the objectives of regionalism is requisite in order to clarify the use of the term 'region' and justify later conclusions.

For the purposes of this study only the significant objectives will be surveyed. It is the opinion of the writer that these chief aims are: 1) economic balance, and 2) equilibrium of the cultural landscape. Lewis Mumford states in a paper entitled "The Theory and Practice of Regionalism" that, "Regionalism does not aim at the economic self-sufficiency of any region: that would be an absurdity in a civilization that is dependent upon such localized resources as rubber, iron, copper, and petroleum. What it does aim at is a state of economic balance; a state in which the population of a region will be distributed with respect to its fundamen-

1 Dickinson, Robert, CITY, REGION, AND REGIONALISM, New York, Oxford University Press, 1947
2 complete and thorough examination of all the aims and objectives is not possible or considered essential due to the fact that a certain phase of this thesis would be disproportionate to the subject itself
al resources, in which agriculture, the extractive industries, manufacturing and trade will be coordinated, in which the size of cities will be proportioned to open spaces and recreation areas are placed in sound working relation with the countryside itself."

The second main objective is an outgrowth of regionalism based on principles of human geography. The cultural landscape is the natural landscape as modified by man. "It is the concrete expression of a double process, man's effort to mould nature to his will and nature's modification of what would otherwise be unrestricted activity." Equilibrium or balance of the cultural landscape is a quantitative expression of the qualitative measure, economic balance.

As has been previously pointed out, it is necessary to understand 'why' attainment of these objectives by this method are essential.

The first significant reason why all of this is necessary is because unguided activity let loose is not practical. It is not practical economically, socially, or physically. Nonetheless, unguided growth and development is taking place today --is it good or bad? Is it positive or negative growth? Unfortunately, the vast majority is not positive development, it is negative development; and therefore almost worse than none.

1 Bryan, P. W., MAN'S ADAPTATION OF NATURE, Henry Holt and Co., N. Y., 1933; p. 14
2 Opinion derived from two week tour of Eastern Seaboard States during June, 1948
The second reason is to effectuate the workings of democracy. Democracy is not something concentrated in the marble halls of Washington, D.C.; it is scattered over all levels of government; however, the extent to which people utilize the opportunities afforded is strictly a personal affair. Thomas Harrison Reed, author, professor, and administrator, cautions: "If democracy at the local level dies, all democracy dies. It will die at the local level if local government cannot continuously supply essential services of high quality at reasonable cost. The greatest danger to American Democracy lies in its possible failure to 'deliver the goods'!" It follows that, the sum is no greater than the total of its parts. A key attribute of the region is that it must be a constituent unit in an aggregate whole or totality.

The next reason is another aspect of the former: to be realistic parts of this totality, justice must devolve equally from the top level to lower levels. William Allen White in 1937 wrote, "These regions are not merely colored places on the map. They represent different views of life. Justice for one region is not justice for the other. Yet a rough approximation of justice for each region must be worked out if all these regions are held together in the bonds of a continental commonwealth." Included in this reason is the viewpoint

2 Odum, H. and Moore, E., op. cit., p. 16
3 White, William Allen, Supreme Court, 'Rule by Impulses', "N. Y. Times Magazine", April 25, 1937; p. 3
of totality expressed by Professor John Gaus of Harvard University that: "regionalism is the basis for the encouragement of a richer and more varied life for the Nation, whereby the peculiar characteristics, resources, and contributions of the major sections of the country can be protected from invasion, exploitations, and suppressions by ill-considered and hasty national policies."

In summation, the accepted underlying method is regional planning. Its chief objectives are equilibrium of the cultural landscape and economic balance. The main reasons why attainment of these objectives are essential today are: 1) because unguided activity is not practical—economically, physically, or socially; 2) to effectuate the workings of democracy; and 3) to devolve justice from the national level to the local levels.

1 Odum, H. and Moore, E., op. cit., pp. 253-254; Quoted in PLANNING FOR CITY, STATE, REGION, AND NATION, p. 107
"The region will vary according to the approach taken by the student studying it."

If an organization such as insurance company, bank, etc. were to define regions, the results would undoubtedly not be similar to those defined by the writer. Emphasis is therefore laid on the fact that the areas concerned are for regional planning purposes, thus eliminating any arbitrary administrative, political, plant biological or similar approaches.

The approach, then, is through regional planning or existing or future problems relative to the growth and development of regions in the State of Connecticut. The question is: "What approach through regional planning can be taken?" Apparently, there are two possible approaches. The first is to analyze these problems relative to regional planning. But before this is done - are there any problems? Some dogmatists think not, and go to the trouble of trying to substantiate their claim. It is therefore thought necessary as a measure of clarity to 'prove' that problems exist. These problems are not tied up in a white ribbon and labeled "PROBLEM" in red letters, but they are almost as concrete; when the landlord comes around with an eviction notice, when one goes shopping and can't find a convenient place to shop, or when the youngsters can't go swimming on hot summer days because the

1 Odum and Moore, op. cit., p. 301
old millstream where the parents went swimming is polluted, etc.

These problems narrow down into three principle categories: 1) economic problems, 2) physical problems, and 3) social problems. However, individual problems predominately recognized as being in one category have significant implications concerning the others and therefore must be considered in the light of all three categories. For example, the economic aspect, rent; the social aspect, city, neighborhood, or street; are closely integrated with the physical problem of housing.

An analysis of even one segment of this totality of problems for the purpose of defining the regions in which they are a common problem, would, as a procedure, necessitate a full-time operating staff. The specialized results would conceivably be so difficult to integrate that sight of the purpose would be lost. In addition to these material factors that would invalidate this approach, is the philosophical aspect. If the region is based on these effectual complications it is a clear statement of reproach on the part of mankind in relation to his environment. Man, while influenced by (and in some respects definitely controlled by) his environment, should be regarded as the master and not the slave of circumstances. Therefore, it is concluded

Names of persons or places are not included due to the embarrassment that might be caused by individually singling them out. For reasons of brevity only, a few of the significant planning problems are indicated.
that this approach is not practical or philosophically valid.

The second possible approach is through the common denominator of all existing and future planning problems. That is, Man and the adaptation of his environment. The process of adaptation can be expressed as the 'cultural landscape' or namely: 1) human activity as organized for the production of commodities for the satisfaction of human wants, (2) the natural environmental complex which man adopts and modifies in the above processes, and which itself modifies and adopts the character and type of the activity, and 3) the time-period during which the adaptation process has been going on which involves the actual length of time during which the process has been going on, the stage of civilization or development reached by the community concerned, and degree to which the resources of human knowledge can be economically applied to the area concerned. Fundamental to a clear concept of this approach is the fact that all human activity takes place in response primarily to the demand for the satisfaction of human needs and desires, and not in response to the controlling influence of environment. This approach affords measurable facts of human distribution and activity. The method which necessarily proceeds this approach is to observe the predominant characteristics of these selective facts and by a process of synthesis weigh the concrete causal facts

1 Bryan, P. W., op. cit.; p. 14
2 Ibid., p. 32
3 Ibid., p. 13
together having the objective in mind.

This approach is not necessarily new. It was used by Herodatus, 5th Century B.C., to explain certain facts regarding people and their environment. (which was the meaning of geography at that time). The subject later came to be known as 'human geography'. Among its exponents since the middle of the 19th Century were Ritter, Videl de la Blanche, Ratzel, Brunhes, and of course P. W. Bryan in England.

There is one further point that should be brought out at this time regarding either or both approaches. That is the question of stability. The view is held that the natural region should be used because it is more 'stable' than (for example) the human occupancy of that region. Stability as such is purely relative. "Natural regions are changing and have changed all through geological history." At what stage, then, in this process of change is one to describe regions? The answer to this lies within the definition of region itself. That is, recognizing certain shortcomings, the definition and description of the region should, for purposes of this subject as far as possible, be based on existing facts. However, in construction it would be realistic to have variable components that, which beyond a reasonable period, could be shifted to meet changing needs. This will

1 Bryan, P. W., op. cit., p. 1
2 Ibid., p. 6
3 Ritter from Germany — contemporary exponent of the approach through natural regions
4 Bryan, P. W., Ibid., p. 367
5 reasonable in the sense of program planning
be illustrated concretely later in the Conclusions.

The approach that will be utilized in this study is the latter approach -- through man and the adaptation of his environment. The method consists: 1) of taking the actual complex of cultural landscapes regarded as a closely interrelated whole, 2) observe the predominant characteristics of this complex (in different parts) and 3) by a synthetic, rather than an analytic, method arrive at the determination of regions with common characteristics.

1 Odum & Moore, op. cit., p. 293
Before taking up the first step it is thought necessary to condense this term cultural landscape to concrete terms. In the previous chapter, three processes were given to express the cultural landscape: 1) human activity, 2) natural environmental complex, and 3) the time period. Elements of these processes may be regarded as: 1) **fixed structures**, 2) **movable units**, 3) **its activity**, and 4) **the results of that activity**. The 'fixed' structures include: barns, monuments, hospitals, churches, etc. The 'movable' units are: people, automobiles, airplanes, dogs, cows, etc. Its movable units operating in conjunction with the fixed structures, and modified by the natural setting, produce the activity. The results of that activity appear chiefly in the production of goods and the performance of services. Hence, these results are expressed as: manufactured goods, municipal and governmental services, health, amusement, recreation, aesthetic enjoyment. With this view of things one can observe innumerable cultural landscapes about them such as farms, industries, communities. However, this study is not concerned with each individual one as such, rather the hypothesis is that there exists a unique cultural landscape which has a composite variety and homogeneity of other types and can be defined by purposeful boundaries.

To observe this, one must look at things not from his window but literally to view things from a vantage point.
where all the State can be seen at one time. Of course, what one would see today would be the complex of cultural landscapes expressed as vast stretches of rolling Connecticut countryside cut into small pieces by white bands of highways. These highways radiate from places recognizable as cities, towns, and villages.

The first step in this procedure is to drop down from this vantage point and view at a close range the workings of this complex. But, first, one or two questions must be answered. How did villages, towns, and cities come to be? Why isn't there an even distribution of houses over the countryside? The answer to all these questions is that due to biological and social drives and motives, needs are created and are satisfied in accordance by personal rating of these drives and motives. The 'need' that this approach is particularly concerned with is the need for a central place to carry out group activity. The composite manner by which this need is satisfied is the complex of cultural landscapes.

The way this need was satisfied two generations past when grandfather-was-a-boy is fundamentally the same as today, but a picture of things then presents a clearer picture than today. For general purposes, there was the center and an outside to the picture. The center was the village green, around it were one or two stores, a church, and perhaps an inn or tavern. The outside of the picture consisted of expanses of natural vegetation. In between this focal point and expansive margin were scattered farm houses increasing
in number and intensity towards the center. The distance people lived from this nodal point was usually measured by the number of hours it would take to cover that mileage in a horse and buggy. Of course, most people would live within one-half-days travel although a few people would live beyond this range. Due to these limitations of travel there was little group activity between one sphere and another. The sphere of physical and human conditions was then very plain. The composite picture of these things was not much more complicated. It was merely duplication of these spheres joined by winding, dusty roads, and separated by expanses of natural plant forms. Some spheres were larger than others, but that didn't affect the individual much, one way or the other, as far as interaction between spheres was concerned.

In grandfather's lifetime, things began to happen and are still happening today, human and physical growth! The results are sorely visible today in many places. Three forces contributed to this growth, in proportion which it is impossible to determine: 1) the size and congestion of places themselves; 2) the progress of science and the arts; 3) the development of civic and social ideals.

But what happened to the nice simple picture of composite cultural landscapes? Of course that grew also. Growth is naturally a relative term; some spheres gained (in number) more human and physical conditions than others. No phenomenal change is evident regarding the individual need for a

1 Reed, T. H., op. cit., p. 7
central place to carry out group activities. How this need is individually satisfied is another point. It is important to see that there still exists the same pattern of nodality, graduating off to natural vegetation. What has been added over this network are bands of concrete and steel, joining these nodal points together in a composite unit. This has decreased the time-distance factor relatively to nothing (in Connecticut). This has set up central places where specialized activities are available for larger groups. Therefore, as specialized needs arose for a central place for specialized activities, these needs were met. The general picture, then of cultural landscape, is relatively much the same, but placed over this pattern is a network of communication and transportation joining all of these small spheres together to form the composite of cultural landscapes. The smaller central places satisfy definite local needs such as places of worship, schools, post office, banks, weekly newspaper, drug store, barber shop, and several other local services. However, the need for a new suit or dress of the latest style, hospital facilities, daily newspaper, University education, professional services, and many other specialized or large-clientel services are found within the larger centers.

It is quite plain, then, that there is a cultural landscape which engrosses the smaller places and the larger places. The elements of this cultural landscape though evident in all places are relative factors which differentiate one place
from another. In addition, there are different factors which constitute different elements. The words used to describe this are urban (or city), and rural (village or town). In between these two places is an area having the aspects of both, suburban or rural-urban fringe.

The general physical pattern is the central urban area, the suburban area around it or radiating our from it along the highways, and the rural areas on the periphery. Which brings up the next section of this method. What are the predominant characteristics of this cultural landscape in these three parts: the rural, the suburban, the urban?

Rural is such a broad general term that is is used with extreme caution here. What might be termed 'rural' by someone in Connecticut would be classified as suburban or urban by a mid-westerner. There are extremely few places in Connecticut which might be called rural in the sense it is generally understood as being "those sections of the people who are spread over the countryside and are engaged in the production of the primary necessities from the soil." This is due to the fact that "in Southern New England the social and economic institution which serve the farmer are urban in their general character. If farming ceases to be as remunerative as industrial or commercial, he can shift his employ-

1 See footnote 1 p. 48
2 Dickinson, Robert, op. cit.; p. 23
ment without changing his place of residence."

In 1940 there were only three of its 169 communities in Connecticut that had 12% or more of its employed residents engaged in agriculture although evidence of farm activity is ascertainable in every one.

It would seem purposeful that 'rural' not be concerned with any particular type of activity because of the above; rather, if viewed from the aspect of having few fixed structures and few movable units in relation to some other place in the cultural landscape a more realistic definition of rural is achieved.

On this premise it follows that in the rural area there are fewer activities and consequently fewer results. These activities and results may vary according to the manner in which man has adapted the natural environment. It can be observed that, due to the above, the predominant characteristics in this area are: similar land uses, low density of people per gross acre, houses placed far apart (over prescribed area), part-time farming, food producing animals and fowl, and small shopping center for local goods and services.

In this cultural environmental sphere those areas be-

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1 National Resources Committee, REGIONAL FACTORS IN NATIONAL PLANNING, December 1935; p. 121

2 Ibid., p. 121
   From: Wright, V. K., "The Changing Geography of New England"
tween the rural and urban are the suburban places. They can be purposefully defined as having more than rural, but not as many fixed structures, and more than rural but not as many movable units in relation to the urban area. Characteristic of this area is the fact that many of the land uses are in a state of flux. Most of the residents are employed other than in the suburbs, and more activities and results than in the rural area.

The center or urban area is the central place which has more fixed structures and more movable units than any other place in the cultural landscape. The activities and their results take many characteristic forms. But the chief characteristics of this urban place are that it is an economic, political, and cultural center. French advocates term this center the 'regional capital'. It is the integration with the other two parts that makes the center so significant.

"Cities do not grow up of themselves. Countrysides set them up to do tasks that must be performed in central places."  

The rural and the suburban are relative expressions of this center and vice versa. One expression is dependant upon the other - literally, economically, and socially. This has been better expressed in AMERICAN REGIONALISM: "It seems certain that the city cannot be too strictly limited in any

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1 This theory when applied to real situations will show in some instances more than one center close together.  
2 Dickinson, Robert E., op. cit., p. 21  
From: Jefferson, Mark, 'The Distribution of the World's City Folks', "Geographical Review", Vol. 21, 1931; p. 453
sociological interpretation; that the city and its hinterland form a unit in our society..., the parts of which may be separated for study, but that when and if the mutual interdependence of those parts is forgotten or left out of consideration the whole picture loses its essential perspective. Granted that the city is the dominant factor in the ecological organization of our life, it is necessary merely to point out that dominance necessarily implies subordination, the two combining to form a whole."

This cultural landscape, this geographical area with a considerable measure of unity in its services and organization, surrounding and including a focal settlement in which these services are integrated is an "area of common living".

The predominant characteristics in this area of common living are resultant effects of two things - the fixed elements and the movable elements.

For desired purposes the fixed elements can be gathered together and mapped, and the existence of the movable elements can be plotted at a certain time-period. In most cases significant activities and results of that activity are in the form of goods and services. All of this can be put together, and by a process of synthesis determine those

1 Odum & Moore, op. cit., p. 406
From: Gillette, J. M., 'The Drift to the City in Relation to the Farm Problem', "The American Journal of Sociology", XVL; p. 645
2 Dickinson, Robert E., op. cit., p. 4
areas with common characteristics.

To do this last step it is necessary and desirable to survey the situation in the State with the available significant facts of the elements and their results. It is, of course, not possible in a short period of time to gather all of the facts, furthermore that is not considered necessary. Selected, significant indices can point out relevant circumstances. If by any chance issue is varied concerning the validity of the significance of the index, other situations can be investigated; but (as will be shown later in the Conclusions) there is not a single conceivable chance that any further evidence than what is herein presented in the survey will invalidate the concept or structure of the region as learned from contemporary authorities. However, apprehension regarding a specific marginal case may arise and is expected by the writer. In cases such as that, only a thorough field investigation would bring out the truth. If any marginal case develops, it will be recognized in the Recommendations. It is believed that no amount of indices will disprove the existence of the cores of the individual regions.
SURVEY

In so far as this survey is concerned the detailed historical analysis of each community would add little to this study. However, as a means of orientating those unfamiliar with the State a brief perspective of early development and growth follows.

HISTORICAL PERSPECTIVE

Many centuries ago the face of the earth in northern United States and Canada had its face lifted by a tremendous sheet of ice for the first time, by nature. The results of this glacier had much to do with the settlement of the State of Connecticut. The predominant relief effects in Connecticut resultant from this glacier were highlands in the eastern and western portions of the State and lowlands through the center and along the coast. The fertile soils, located in these lowlands was a primary factor to the early settlement of these areas. When the glacier melted it deposited rocks and boulders which later was a serious handicap to early and present day agrarians.

Little more than three hundred years ago the surface had its face lifted for a second time, by man. The first
immigrants were from Great Britain. Settlement in Connecticut began in the fertile lowlands along the Connecticut River and started three groups or colonies. These people came from the Massachusetts Bay Colony in the middle of the 1630s for a variety of reasons. "Religious differences and 'straitness' of the territory available about the Bay made it difficult for them to secure sufficient pasturage for their cattle." The initial communities were Windsor (1633), Wethersfield (1634), and Hartford (1635). Farming was the chief means of existence.

In 1636, an ambitious project began at the mouth of the Connecticut River, Saybrook Colony. Planned and peopled from England, its objectives were fundamentally different from the groups to the North. Its object was trade; meadows meant nothing. "Great cities, it was argued, were located at the mouths of rivers, and therefore a great city would naturally arise where the Connecticut River emptied into the Sound." It is significant that this colony failed due to the fact that there was no hinterland to draw commerce and therefore no reason for being. Less than 3,000 people live in this community today.

In 1660 under the leadership of Reverend John Fitch, a

1 Kurath, Hans, HANDBOOK OF THE LINGUISTIC GEOGRAPHY OF NEW ENGLAND, Brown University, Providence, R. I., 1939, p. 93
2 Ibid., p. 94
PLATE I

THE SETTLEMENT OF NEW ENGLAND

SOURCE - HANDBOOK OF LINGUISTIC GEOGRAPHY OF NEW ENGLAND, BROWN UNIVERSITY 1939
large number of the inhabitants of Saybrook migrated to what is now Norwich. New London, another settlement center was at first transitory in character, but later agriculture became its base.

Middletown (1640), nearer these sources of commerce fell heir to the trade of which Saybrook had dreamed. "Until shortly before the American Revolution it was superior to all other Connecticut cities in wealth and population. About this time, colonists located themselves at a dozen points west of Saybrook to the dominions of the Dutch in New Netherland (New York City). Settlement began here due to the location of good farm land along the banks of many small rivers. The exception was New Haven. "Like Saybrook it planned a commercial future; but the disasters that attended the early ventures ruined these prospects, and finally its attention was drawn from commercial expansion upon the sea to agriculture expansion inward." From the Hartford Colony, Wallingford was settled and from which grew Meriden and Cheshire.

The strict land policy of holding 'reserves' for families and investment led to a pronounced provincialism in the State. Populations were not invited into established towns; and if it appeared, it was not encouraged to remain. The numbers steadily grew, but they grew from within, not without.

1 Kurath, op. cit., p. 82
2 Ibid., p. 95
3 Ibid., p. 95
Thus every community had a solidarity in families, religion, and culture which could trace a direct descent from the characteristics developed by the original founders.

The first third of the 19th Century was marked by a decline in agriculture, population, and prosperity; the second third by the foundation of numerous industries; and the last third by a large influx of immigrants from abroad.

1 Kurath, op. cit., p. 98
AREAL DIFFERENCES IN SPEECH

The results of this pattern of settlement has created fundamental differences of speech and language over extensive areas. Also, because of this fact the movement and migration of people can be traced. On this premise, a study was made in 1939 conducted by Dr. Hans Kurath of Brown University of the New England area. Strategic points were selected throughout the area and personal field surveys of the inhabitants' speech mannerisms were noted. Certain words commonly used were directly descendant from the interviewee's ancestors and peculiar to a specific center due to the way settlement took place.

These patterns can be indicated on a map and, in addition, those areas with fundamental differences can be distinguished from one another. Plates 1 and 2 illustrate this natural phenomena. Plate 1 illustrates the expansion from centers and the dividing lines which separate one dialect area from the other. Natural forms physically separating the valleys of the Connecticut and Thames Rivers has from its beginning been strikingly different from other portions of the State. This is made known not only by types of activity in that region, but also by characteristic linguistic terms and phrases. New England has two major dialect areas, an Eastern and a Western. The Eastern area corresponds roughly to the section of New England occupied in gradual expansion from the Atlantic Seaboard; the Western, the area settled from the lower
Connecticut Valley."

The original colony in Hartford grew up to be the Capital of the State. Ironically, most of the lowland area originally best adapted for agriculture became the most populated, and is now primarily industrial.

The tremendous immigration into the State during the last fifty years has brought great social change to the individual communities. Apparently, these measurable patterns will eventually mellow with intermarriage or totally die out.

However, of prime significance are the facts: 1) that the eastern portion of the State has underlying differences from the rest of the State, and 2) that growth expanded outward from certain centers, many of which today are established cities.

1 Kurath, op. cit., p. 8
PART I  NATURAL ENVIRONMENT

The natural environment could be best viewed from a single point where one could view the State as a whole and without distortion by perspective. This might be done by a composite airplane photograph of the State through an instrument that makes differences in elevation apparent. However, with such data not accessible it was necessary to record the major differences in elevation, as is shown on Plate 3, from previous ground surveys. A map of soil conditions was not presented because the pertinent information it would provide can be logically concluded from Plate 3, that the fertile, tillable soils are generally located in the river valleys and this further evidenced by the pattern of settlement shown in Plates 1 and 2.

Overlay 1, the Natural Watershed Areas, when placed over this base map show the lines which physically separated one early development from the other, particularly in the eastern portion of the State. In addition, because these rivers are essentially the 'drains' of the State, much of the polluted water, both surface and drain, reaches these rivers from places in these watershed areas, and is dumped into Long Island Sound. This problem of pollution is obviously a man-made situation limited to these watershed areas and only by cooperation among the communities in these individual areas can it be rectified.

Overlay 2 illustrates the relative distribution of man
throughout the State in 1940. It is recognized by the writer that the picture presented is subject to inaccuracies such as actual existing distribution and correct relative placement of spots thereof. But for all intensive purposes this overlay (due to the fact that no similar, more accurate information is available) is used merely to show where the centers have grown up in relation to the man's natural environment. One can observe that the majority of people live in the lowland section. Settlement in the higher elevations was brought about by the availability of inexpensive land for small farms and development of natural resources such as water, iron ore, and limestone.

In an effort to determine whether climatological factors are of sufficient degree in the three watershed areas to warrant recognition the graphs of their results over a number of years are presented on Plate 4. The State is such a small area geographically that the relative variations are of little or no consequence. For example, in the lowland areas the growing season is a few days longer than in the areas of higher altitudes. Having been graphed over a dissimilar number of years does not invalidate the information for purposes of this study. There are no significant variations to set off one watershed from the other, although the eastern watershed area shows minor variance in comparison with the other two areas.

Before continuing further with this procedure, cognizance should be made that the mapping of statistical information has certain shortcomings as representative of the
MONTHLY TEMPERATURE VARIATION
for periods ending in 1935

CONNECTICUT (Hartford) 48 years

HOUSATONIC (Waterbury) 38 years

THAMES (Storrs) 38 years

MONTHLY PRECIPITATION VARIATION
for periods ending in 1935

CONNECTICUT (Hartford) 74 years

HOUSATONIC (Waterbury) 48 years

THAMES (Storrs) 38 years

existing situation. This is due to the fundamental fact that the gathering of statistical information is a continuous process and its bases must be established. Many times this distorts the truth of the picture in specific parts, but does not mean that the information is valueless -- only, that its shortcomings need be noted. This is pointed out so that interpretation of the information to follow will be as clear as possible in the light of the above.

The farthest extent that these sources go are the municipal boundaries. Information on the county or State basis, obviously, is of little value to this study. Plate 5 indicates the municipal, county, and State boundaries. These boundaries are visible only on maps or in some instances official landmarks or signposts. Without these designations one would have great difficulty in presuming where one municipality ended and another began. As a means of narrowing down this factor as far as possible, Overlay 3 is introduced. This overlay indicates the "urban areas" as determined by the Connecticut State-wide Highway Planning Survey, conducted jointly by the State Highway Department and U.S. Public Roads Administration over the four-year period beginning in 1938 in cooperation with the U.S. Bureau of Census on the basis of property development and population density. According to Mr. K. Hooper of the State Highway Department, this survey was done

1 See Appendix Section 105 i, Chapter 26 of the 1947 Supplement to the General Statistics
"in the field" from personal observation of trained techni-
cians. From this survey it could be concluded that the lo-
cation and extent of built-up areas have significance in so
far as recognized urban areas are concerned, where most of
the people are concentrated, and man-made relationship be-
tween one or more communities. In some cases one can ob-
serve more than one built-up area in a municipality which in-
dicates that there exists more than one exterior influence in
that community (i.e. Milford, Plymouth, Groton). It can be
generally implied from this overlay that the population is
concentrated in a belt running from the southwest, along the
coast to New Haven, and northward up the Connecticut River
Valley. In the eastern portion, urban development is appar-
ently evenly dispersed along the Thames River.
Population

With this foregoing information in mind regarding the difference between the actual and statistical representation, the prime factor, Man, is surveyed. Of major importance is established existence of his being. Plate 6 is a map based on the 1948 Connecticut State Health Department Estimate of population. This estimate was used because the 1940 Federal Statistics is not, by any means, the picture of things today and the next Federal Census will not occur until 1950. The method used by the State Health Department to obtain an estimate is a new method but believed to be better than the old one. "The new 1948 estimates have utilized two sources of information: 1) the school census enumerations by towns to reflect the migration of population, and 2) births and deaths allocated to place of residence in Connecticut, which take account of the natural increase of the population. Estimates by this new method cannot be expected to be perfect, but it is hoped to predict population to within plus or minus three percent of the correct total for the state and to within plus or minus five percent for the larger towns."

The assumption made is that this information regarding

1 Connecticut State Health Department, S. H. Osborn, M.D., C.P.H., Release, Feb. 27, 1948
population is the valid information obtainable to the best knowledge of the writer.

At any rate, the reason for mapping these statistics is to see these facts relatively. This could not be accomplished by any number of tables, graphs, or charts. It is not thought necessary to this study to encumber the reader with a long list of population data. The composite picture, Plate 6, illustrates the fact that population is concentrated in three major centers: Hartford (170,300), Bridgeport (162,600), New Haven (160,500). Twenty-six percent of the 1948 estimated total population of the State (1,916,000) are in these three cities. Considering three other cities, Waterbury (109,500), New Britain (70,300), and Stamford (64,500), added to these former cities constitutes thirty-eight percent of the total population of the State.

One can also see from this picture of population that by far the majority of people live in the area previously discussed -- the belt that runs from Greenwich in the southwest to Enfield in the north-central part of the State. In addition to this striking belt or pattern, it is equally obvious that population centers are surrounded by many small towns of less than 4,500. A word might be added here concerning the basis differentiating one population group from another. The criteria used in this case was to review the list of population data and draw a line between two towns where extreme variance in number of persons occurred. Also, it was thought necessary to maintain some base or numerical proportinate scale
in accordance with these major groupings. It can be seen that the scale approximately doubles for each category. Those cases in which this is not so is to make these groupings as logical as possible (i.e. a few towns were close to the 5,000 persons number and it is therefore less arbitrary to select 4,500 which has fewer figures close to it than the former).
Density of Population

Towards an effort of gaining a clearer picture of the comparative distribution of population in the State as a whole with emphasis placed on regional centers and areas about them, the next survey item is taken up. Density, a measure of people per unit of land area, when mapped often brings out some aspects of population which are not readily ascertainable at first glance from lists of such data.

This information, Plate 7 - Density Distribution, was obtained from the Connecticut Health Department's 1948 Estimate of Population. It was thought necessary to reduce their statistics in terms of persons per square mile to persons per gross acre as a more human concept of space. It would be more desirable to have this data on even smaller areas, but unfortunately this is not available. Because of this fact it is not possible to present detailed evidence of the gradation of persons outward from a central place. The picture presented is similar to an early motion picture film in that the movement is 'jumpy' rather than gradual as the real picture of things.

Population by itself means very little or nothing at all without relationship to definite space or area. This is evident by comparing Plates 6 and 7 together. Although the scale of Plate 7, selected on a basis similar to that of Plate 6, is quite loose (considerable difference within each category, i.e. four persons per gross acre is four times as dense as
one person per gross acre, yet they are categorically the same, nevertheless a pattern stands much the same. However, it is worth pointing out that Darien (11,200) of noticeably smaller area than Stamford (64,500), nevertheless has (within recognized limits) the same density as Stamford and is therefore subject to similar problems of dense population. Much the same is true in Shelton, Derby, and Ansonia. In this case, these three communities have the same population (for all intensive purposes), but the density is quite another picture due to the large land area of Shelton. Other similar pictures of this sort could be pointed out, but that isn’t necessary. What is important is the fact that many small 'rural' communities, although they cannot boast of populations in five or six figures, do have similar problems of people and the land that are found in places having a larger population. What is true of physical problems is also valid from the standpoint of common economic and social purposes, considering municipalities as corporate units.

It is quite apparent from these two studies that population by municipalities is significant only if considered in the light of areal relationship. Knowledge of these things is known and efforts have been made to group together, for statistical and other purposes, those towns having like interests and common economic and social purposes. With the leadership of the Connecticut Development Commission and assistance of staff members of the United States Department of the Census, local meetings were arranged to define metropolitan
CONNECTICUT
DENSITY DISTRIBUTION

July 1, 1948

Source: Conn. Health Dep't. Estimate

CONNECTICUT

+ 10 persons per gross acre
5-9 persons per gross acre
1-4 persons per gross acre
1 person per 1 to 4 gross acres
1 person per 5 to 9 gross acres
1 person per 10 gross acres or more

STATE MAP
Source: Conn. Health Dep't.
areas for the 1950 Census. By definition this necessitated a density of 150 persons per square mile or sufficient evidence to show correlation. The results of this appear on Plate 8. The suggested metropolitan areas are: 1) Stamford-Norwalk, 2) Bridgeport, 3) New Haven, 4) Waterbury, 5) New Britain, and 6) Hartford.
Population Growth

It is presumed knowledge that population growth has taken place in Connecticut for many years. Furthermore, it is not thought necessary for reasons previously stated to present graphs and charts indicating the numerical growth by municipalities, counties or State. This would submerge the reader into fathoms of data which would not add up to purposeful conclusions. However, it is desired to know 'where' growth (and decline) took place and is taking place today, and whether or not this influence is areal. Before this survey is taken up, however, evidence of the dramatic population shift to Connecticut, primarily for economic reasons, is shown on Plate 9, Population Shifts in North-Eastern States -- 1940-1943. Enough civilian population came into the State to make at least three average size Connecticut communities.

To map population growth is a difficult matter because it is a relative term. Due to this fact it will be necessary for the reader to observe Plates 10, 11, and 12 in the light of each other. The method used to describe growth is adapted from "Population Growth in Connecticut". Three periods of time were chosen to depict population increase: 1900-1930, 1930-1940, 1940-1948. The basis for selecting these periods was achieved by first plotting on semi-logarithmic graph pa-

POPULATION SHIFTS IN NORTH-EASTERN STATES
ONLY CONNECTICUT GAINS IN CIVILIAN POPULATION

1940-1947
NEW AREA POPULATION LOSS 7,030,691 OR 5.7 PERCENT

POPULATION INCREASE
POPULATION DECREASE

SOURCE: U.S. CENSUS DATA
per the population trends of twenty municipalities scattered throughout the State. From this sample of population trends it was apparent that there were three general periods of growth. The first, from 1900 to 1930, was a period marked by numerous individual up-and-down trends. The second period, from 1930 to 1940, was marked by a general trend upward. From 1940 to 1948 the population trends of most communities was remarkably upward in most cases with a leveling off or decline in urban communities. It did not seem logical to the writer to take the 1900-1948 pattern as a normal trend because of the tremendous post-war increase of children in the last eight years which is not a normal trend. Using a 1948 pattern with a 1900 would give the reader an unbalanced picture of things. The depression pattern of 1930-1940 is not a good period either due to conditions at that time. The early growth pattern, 1900-1930, is definitely not the normal pattern today. These trends are, however, most useful when compared with each other. With this in mind, the percent gain in population of each community as percent of the total State gain was mapped. The scale was chosen after listing all of the percentages and grouping them into four sections. A regular numerical grouping logically developed was maintained for all three periods.

Upon surveying these three periods of growth as a whole, the first general striking feature is the fact that during the last eighteen years or so population has been increasing in the smaller communities. Also, since 1900 the tremendous
WHERE POPULATION GROWTH TOOK PLACE 1900-1930

CONNECTICUT

Percent Gain in Population of the Community Expressed as Percent of Total State Gain

1% or more

0.5% - 0.9%

0.0% - 0.4%

Loss

SOURCE: Conn. Register 1947
WHERE POPULATION GROWTH TOOK PLACE

1930-1940

Percent Gain in Population of the Community Expressed as Percent of Total State Gain

- **1% or more**
- **0.5%-0.9%**
- **0.0%-0.4%**
- **Loss**

**CONNECTICUT**

*Source: Conn. Reg. & Man. 1947*
WHERE POPULATION GROWTH TOOK PLACE
1940-1948

Percent Gain In Population of The Community
Expressed As Percent Of Total State Gain

- **1% or more**
- **0.5%-0.9%**
- **0.0%-0.4%**
- **Loss**

Source: State Pub. Health, Estimate 1943
increases in population have been in the belt running from the southwest to the north-central part of the State. On closer inspection, this information indicated areal or regional expansion and contraction. This can be seen in the area about Hartford, Waterbury, New London, New Haven, Bridgeport and the group of municipalities in the southwest part of Connecticut. This latter group is particularly significant because continual growth has occurred in these places since 1900. Reflection back to Plate 8 reminds one that this pattern cannot continue very long due to the fact that space is being used up. Evidence of this can be seen in the 1940-1948 pattern which although not expressed as actual decline in population (Greenwich gained 1,890 during this period) there is a leveling off due primarily to the above. Far more important is the fact that many central places are on the decline not only as expressed on these maps, but numerical decline. Similar or more services are being demanded of these places whose tax base is declining. Thus, from this evidence it is apparent that suburban movement is taking place depleting the population of the central places. This is indicative not only of an interesting phenomena that is happening, but more important it is a real problem to the central places that warrants recognition from contiguous communities. Decentralization of people and industry, be it good or bad, will necessitate more than ever a central place for services that cannot be offered in smaller communities.

In summation of these studies, population growth and de-
cline is not confined to the boundary lines of municipalities, it is a group or regional affair. The population problems of one community in a region is the problem of another and any attempt to ignore the fact will have unsatisfactory, disharmonious results.

In an effort to gain further evidence of internal movement in the State caused by either economic or social conditions, a study of the numerical increase or decrease from 1940-1948 of the 4-16 age group was carried out. This data was obtained from School Enumeration Statistics (1940-1947) which allocated the information to the municipality of home residence. This information appears on Plate 13. The decision to use actual, instead of proportinate, figures on this map was a necessary compromise. However, it is not believed to be illogical with the previous fact of population distribution. This information appears to refine the information regarding Population Growth, and point specifically to places which otherwise do not show growth or decline. For example, compare Plate 12 and Plate 13 for a moment. Many urban centers which showed a gain expressed as percent of total State gain actually fell off in child population (4-16 age group). When expressed in figures of three digits or more this is conclusively not so much a factor caused by decline in birth rate, rather it is strong indicant of emigration. This is very evident in Stamford, Hartford, Waterbury, Bridgeport, and New Britain. In addition to pointing out the previously mentioned suburban trend, these facts point definitely to problem areas.
NUMERICAL INCREASE OR DECREASE OF 4-16 AGE GROUP 1940-1948

CONNECTICUT


Shaded communities show decrease in this group
Disregard now many of the minor increases or decreases as being 'normal' trends and just take only the extraordinarily large variances. For example, Darien, not a large community by any stretch of the imagination (11,200 persons -- approximately average-sized community in 1948), gained approximately 2,000 persons yet showed an increase of 1,009 children. Can these 2,000 additional tax payers afford one classroom per 100 persons (allowing an extreme maximum of 50 pupils per room)? Obviously not, and furthermore the immigrants have no intentions of such and the burden is placed equally over each taxpayer. But, Stamford lost some of this age group -- not much in relative comparison of other things it is true, and it follows that Darien gained some of this decrease. This evidence is another example of the interrelationship of communities in regard to population increase and decrease. It is not considered necessary to pursue other typical examples.

1 This community was used solely for purposes of illustration and for no other reason.
Population Characteristics

Composition

Summary investigation showed very little evidence of unique or comparative composition factors of population. One objective that might be sought (in regard to the subject) is the differentiation of rural and urban areas on the basis of the composition of the population, but preliminary investigation gave no indication of possible measurable factors. That is, the age-group composition of one community as compared with an adjoining community did not show sufficient variance to warrant presentation. However, mention is made of this because one sample investigation of this sort led to possibly more fruitful conclusions.

This particular investigation was made to determine whether there were more children (4-16 years) in the smaller towns than in the cities of Connecticut. The year chosen for this study was 1940 because present day information could be distorted by the tremendous post-war increase of children. The source of this information is the Federal Census. This sample investigation showed that 'urban' cannot be logically differentiated from 'rural' on this basis. In other words, the proportionate number of children expressed as percent of the population of a community does not determine whether that community is a rural place or urban place. The conclusion reached is that (plus or minus 3%) 19% of the population of community in the State are children from X4 to 16 years of age.
A brief table will illustrate this statement.

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Population (1940)</th>
<th>Percent of Pop. in 4-16 Age Group, 1940</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridgefield</td>
<td>3,900</td>
<td>16.3</td>
</tr>
<tr>
<td>Hartford</td>
<td>166,267</td>
<td>16.6</td>
</tr>
<tr>
<td>Salisbury</td>
<td>3,030</td>
<td>17.3</td>
</tr>
<tr>
<td>Ansonia</td>
<td>17,210</td>
<td>17.3</td>
</tr>
<tr>
<td>Danbury</td>
<td>27,921</td>
<td>19.2</td>
</tr>
<tr>
<td>Hartland</td>
<td>300</td>
<td>20.0</td>
</tr>
<tr>
<td>Bloomfield</td>
<td>4,309</td>
<td>21.0</td>
</tr>
</tbody>
</table>

Only a few communities are listed. Apparently, there is no justifiable basis in Connecticut to make the general statement that there are more children in small communities than there are in larger communities. This is not necessarily negative information; quite the contrary, it is very positive because if there are a similar proportion (within recognized degree) of children in all communities, then a strong argument differentiating rural or town from urban or city is eliminated. On this basis Connecticut is unique in the fact that city and town are relative factors of concentration of people. There is not a problem of smaller communities educating more than their per capita share of children.

**Foreign-Born**

In 1940, Connecticut ranked fourth among the forty-eight states in the relative size of its foreign-born population. "The proportion of foreign-born persons in Connecticut in 1940 was more than twice that for the United States as a whole and was greater than the average for the six New England States."
In that year, foreign-born white persons totaled 327,941 or 19.2 percent of the population of the State."

Connecticut is also characterized by diversity and variation in its foreign culture. More than thirty countries are represented in substantial numbers in its foreign-born population, although ten nationalities account for more than eighty percent of all its foreign-born. Most of the foreign-born are located in the band of towns along the southwestern coastline and in the central valley along the Connecticut River, and particular concentrations are found in Bridgeport, Hartford, New Haven, and Waterbury. In 1940, more than half the foreign-born were located in cities of 25,000 or more. (See Plate 6)

To survey all of the aspects of the foreign-born population would necessitate a comprehensive study similar to "The Foreign Born Population of Connecticut, 1940" by Nathan L. Whetten and Henry W. Riecken, Jr. Perhaps the most significant information from this study for purposes of this survey is a general picture of the Distribution of Dominant

2 Ibid.
3 Ibid.
4 Professor of Rural Sociology, University of Connecticut, and Storrs Agricultural Experiment Station, Storrs, Conn.; & Assistant Social Science Analyst, Bureau of Agricultural Economics, U.S. Department of Agriculture, respectively.
Groups in the Total Foreign-Born Population of each town, Plate 14. It is recognized that these dominant groups proportionately vary in each community to a degree, but for regional purposes it is considered more important to see where these dominant groups are located. Broadly speaking, the eastern portion of the State, east of the mouth of the Connecticut River, has apparent differences from the other part of the State. In addition, the dominant groups appear to be manifest in certain areas. The French-Canadian group in the northwest, the Italian group in the southwest and central, the Polish and Swedish about New Milford, the Lithuanians in the Windsors', all indicate regional significance. These areas having an average of one-fifth of their population in these dominant foreign-born groups are very logical areas to engender mutual cooperation.

These areas are also significant due to the fact that if a community appears marginal when the planning regions are delineated, these factors would be a strong indicant regarding the particular region in which the community in question should go. This natural heritage of foreign-born stock will undoubtedly constitute as culturally satisfactory, physically healthy and American, in the true sense of the word, State possible.
Note: Towns with colored stripes have two dominant groups.

MAP I
DOMINANT GROUPS IN THE TOTAL FOREIGN-BORN POPULATION OF EACH TOWN
CONNECTICUT 1940

(A dominant foreign-born group is one containing 18 percent or more of the foreign-born population of the town.)

SOURCE: Univ. of Conn., Bul. 246, 1943
Economic Classification of Municipalities

Before inspecting many of the related activities and their results, it would be desirable to first observe the composition of towns and cities as man has made them through economic activities.

In Part I, Plate 5 - Urban Areas illustrated the built-up areas; later, population concentrations and other aspects of communities were shown. What is not known is the major economic function of these communities. Unfortunately, information regarding this leaves much to be desired because: 1) very few studies have been carried out along lines of this sort, 2) there is no general recognized agreement concerning what information should be used to best describe the cities and towns, and 3) further insight into such a study could not be conceived in the available time. There are so many activities that go to make up the character of a community that it is difficult to weigh correctly these factors collectively.

However, it is believed that Plates 15 and 16 will give sufficient background to this picture of things to illustrate the point in mind. Plate 15 is the outgrowth of a method used by Chauncy Harris to functionally classify cities. His

1 Harris, Chauncy, "A Functional Classification of Cities in the United States", GEOGRAPHICAL REVIEW, January, 1943, pp. 86-99
method was adapted and revised to a degree by Louis Wirth and Herbert A. Simon in the 1948 MUNICIPAL YEAR BOOK for a survey of 'urban' areas having a population greater than 5,000 persons.

The 'cities' in Connecticut can be broken down into four main categories: 1) Manufacturing, 2) Industrial, 3) Diversified, and 4) Retail. The criteria used for these four categories are:

**Manufacturing:** employment in manufacturing was 50% or more of aggregate employment in manufactures, trade, and establishments, and employment in retail trade was less than 30% of aggregate employment.

**Industrial:** employment in manufacturing totals more than 50% by retail trade employment of at least 30%.

**Retail:** number employed in retail trade was greater than employment in any other category, and employment in manufacturing was less than 20%.

**Diversified:** employment in manufacturing is less than 50% of the aggregate employment but greater than employment in retail trade.

There are obviously many other activities in the cities.

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1 Wirth, Louis, Professor of Sociology and Associate Dean of the Division of Social Sciences, University of Chicago
2 Assistant Professor of Political Science, Illinois Institute of Technology
3 Ridley, Clarence E., and Nolting, Orin F., MUNICIPAL YEAR BOOK - 1948, International City Managers Association, Chicago, Ill., 1948
4 as defined by U.S. Bureau of the Census: a city or other incorporated place having 2,500 or more inhabitants or certain townships and other political subdivisions which are included under a special rule (classified as urban if they have populations of 10,000 or more and a population density of 1,000 or more per square mile)
represented on Plate 15, but the types described are the major functions of those cities.

There are many other types of centers such as Dormitory, Education, Government, Mining, Transportation, Resort or Retirement, and Wholesale Trade; but dominant clear-cut types of this sort are not represented in Connecticut cities.

In addition, indication is made on Plate 15 classifying these cities either as central cities or suburbs.

Due to the fact that information is not readily available for all communities another study is included as an attempt to supplement this data. Plate 16, Classification of Cities and Towns in Connecticut, is based on a special survey made by the U.S. Bureau of the 1940 Census. This classification is believed to be very logical from a theoretical standpoint of weighing criteria and in addition the fact that the results shown are balanced by personal knowledge and understanding of the communities in the State on the part of those persons making the study. The method used in this study was that of listing the percentage of residents in each community employed in each type of occupation (from Census data) and then weighing these individual factors. A criteria for these

1 city lies in a metropolitan district, as defined by the census, but is not a central city of the district
2 Rural Sociology Department, University of Connecticut, Storrs, Connecticut
four major categories were:

1) Manufacturing -- 43% employed residents in mfg.
2) Industrial ------ 12% employed residents in mfg.
3) Agriculture ---- 12% employed residents in agr.
4) Local Service -- based on proportion of workers in domestic service, professional, trade, etc.

If this Plate 16 is compared with the former the results are apparently very similar. Plate 16 is more satisfactory because it shows the regional patterns of single type communities (i.e. N. W. area). Also this is further evidence of centers and outlying hinterland (i.e. Hartford, Waterbury, New Haven).

This information does not pointedly reflect the economic structure of individual communities, only the principle occupation of their residents. This implies common economic structure of residents in communities (located in groups) a basis for mutual cooperation and understanding.

1 Rural Sociology Department, University of Connecticut, Storrs, Connecticut
CLASSIFICATION OF CITIES AND TOWNS IN CONNECTICUT BASED ON EMPLOYMENT OF RESIDENTS 1940

SOURCE: Special Census Survey, 1940
Rural Sociology Department
University of Connecticut
BUSINESS ACTIVITY

Preliminary investigation of wholesale trade areas gave no evidence of being a useful factor describing regions. The extent of these many trade areas varies from time to time according to market fluctuations and the price the bearer will pay. Wholesale trade areas shed light on the needs of many groups and not any particular group. Heads of families don't care whether their fuel or foodstuffs come from New Haven or Bridgeport - however, they are particularly concerned in regarding to 'where' these items can be purchased inexpensively in their community. In other words, a smaller, less fluctuating trade area would be more significant. Thus, retail trade areas have been selected to give evidence of mutually agreed retail trading centers and the approximately the area they engross.

Retail Trade Areas

Plate 17, Retail Trade Areas in Connecticut (1940) shows trade areas and the purchasing centers. This information was obtained from the Connecticut Development Commission who supplemented U.S. Census information with staff investigation.

People go to these centers for goods and services that are not obtainable in their local communities and which can only be obtained in a central place. This picture is very realistic in that the boundaries of municipalities are disregarded when half of one community trades in one place and the
RETAIL TRADE AREAS IN CONNECTICUT

LEGEND: (RETAIL SALES IN MILLIONS OF DOLLARS)

- $100 AND OVER
- $50 TO $99
- $25 TO $49
- $10 TO $24
- $9 AND LESS

SYMBOLS APPLY TO UNDERLINED MUNICIPALITIES ONLY AND DO NOT INCLUDE SALES IN TOWNS NOT UNDERLINED. AREA OF MAP CIRCLES DRAWN IN PROPORTION TO VOLUME OF RETAIL SALES.

UNDERLINED NAMES INDICATE CENTERS OF TRADE AREA. UNSHADED TOWNS INDICATE MAJOR TRADING DONE OUT OF STATE.

SOURCE: U.S. CENSUS OF RETAIL TRADE 1940 & CONNECTICUT DEVELOPMENT COMMISSION
other half trades somewhere else. Many people, located in other communities than the center of their trade area, fail to realize that the center is actually part of their "area of common living". Shopping for many persons in the State is an all-day Saturday affair combining business with pleasure. Consequently, these centers are important socially as well as economically.

If goods cannot be obtained in these smaller centers (i.e. those places having less than $10,000,000 retail trade per year), then people go to a larger center nearby. But, personal shopping habits indicate that individuals obtain benefits from continual trading at the same store such as discounts and charge accounts, as well as the satisfaction of "knowing the people in the store" or not having to familiarize one's self with a new situation. Thus, the retail trade areas are significant factors of establishing not only the centers of regions, but interdependent communities about them. Further evidence of these facts can be seen on Plate 20, Vehicular Traffic Volume.

**Newspaper Circulation**

Contributing to and a test for the above, an investigation of newspaper circulation was made. (See Plate 18)

"Newspaper circulation gives "an excellent index of the zone

1 through the cooperation of The Connecticut Development Commission and several representative newspapers
of influence of a central city”. Moreover, this theory was tested by Robert E. Park and Charles Newcomb and used in a study abridged in the METROPOLITAN COMMUNITY.

The procedure for this investigation was: 1) selecting those newspapers which are large daily circulation newspapers representing all parts of the State; 2) sending out letters of inquiry to the respective business managers for information regarding adjoining communities that (a) comprise the regular daily average circulation area of the newspaper, (b) contribute local news regularly, and (c) contribute legal and church notices regularly; and 3) plotting this data on a map. The returns were about 80% complete, therefore leaving recognized gaps in the final result. Information regarding questions 2) (a) and (b) are not shown on Plate 18 because there was too much overlapping of the areas. The latter item, 2)(c) legal and church notices, is by its nature a more refined index than the other two as is shown on this map. Unfortunately, this information in Waterbury, Norwich, and New London was vague in definitely describing this latter point; however, data is recorded as it was received.

A few communities are influenced by more than one central city (i.e. Southington, Plainville, Coventry, Durham, Milford,

2 Odum & Moore, Ibid., p. 339
McKenzie, R. D., THE METROPOLITAN COMMUNITY, Chap. VIII
Westbrook, Ridgefield, and Darien) which is quite natural. Through the medium of newspapers many persons tend to become associated with one area or another, although undoubtedly one cannot overlook the human factor of selecting one newspaper or another depending on the quality of written material, viewpoint of editors, and whether or not it has a comic section.

This study could be carried further to the point of weighing this criteria by establishing the actual number of central newspapers sold in outlying communities. However, valid information of this sort is not always readily available for self-evident reasons of business practice.

**Telephones**

Request was made to proper sources for information regarding a very powerful index, telephone activity. Inasmuch that information of this activity has not been received at the time of writing, it will be necessarily excluded from this report.

Walther Christaller, a German scholar, developed a means of measuring centrality and outlying regions using telephone activity as an index. It would prove interesting to apply this theory in Connecticut for apparently it is valid reasoning.

1 Dickinson, op. cit., p. 30 and 53; Christeller published his thesis, "Die Zentralen Orte Suddeutschalands", Jena, in 1933
Labor Areas

Another areal study, carried out under the supervision of Mr. D. Darling is shown on Plate 19, Labor Areas and Their Centers. This comprehensive study was made before the last War, but unfortunately contents of this study are not available. The results express the location of residence in relation to employment centers. In the fact that not much is known regarding the background of this ten-year-old study, little emphasis will be placed upon it. The writer has no intentions of mitigating the validity of this study, but as a precautionary measure due to the circumstances mentioned, it is thought unwise to place emphasis on unknown methods of obtaining conclusions.

Transportation

With the advent of the machine, Man has extended his area of living. The three principle modes of transportation are the automobile, railroad train, and the airplane. These movable objects necessitate very definite fixed objects such as highways, railroads, and airports whose design is coordinated with the needs of people. If the latter is not done, not only irksome situations arise, but actual danger to life and limb is caused. The use of these fixed objects, described as needs, express the desire or will of Man.

Concretely this can be seen on Plate 20. Here are registered in black the vehicular traffic flow during an annual
average day in 1946. The patterns formed expressing these desires are so obvious that detailed written description is hardly necessary. However, the major points described are: 1) traffic flow to centers such as Winchester and Torrington, Danbury, Norwich, Willimantic, Hartford, Colchester, New London, and 2) the tremendous traffic draining into communities in the southwest portion of the State. These two points indicate very definite common problems including parking in the central area, congestion along the way and some communities getting an excessive amount of traffic requiring better than ordinary solution.

The regional significance of these patterns lies in the implications involved. From personal observation, one has witnessed the physical, economic, and social problems within central areas that are not as apparent in other places. Because of this and other factors the central area is condemned by all. But, as these patterns indicate, a good portion of people in their automobiles come from surrounding areas and contribute to the existence of these things. For example, situations and problems caused by large groups of people and their accessories in Torrington are not confined to the municipal boundaries - they extend into Goshen, Litchfield, Harwinton, and New Hartford.

Overlay 4 indicates roads that will carry 6,000 cars a day in 1955 according to the State Highway Program. Intra-state pleasure and commercial vehicles will be given the opportunity to pass rapidly and safely through communities in
High Traffic Roads
6,000 Cars per Day
in 1965
the State. Its particular usefulness to purpose of this study is that the large towns along these yellow routes will become more closely integrated and extension of the influence of the dominant centers such as Hartford, New Haven, Waterbury, and those places in the Southwest corner.

The next objects, the railroad trains, Plate 21, indicates a network tying communities together. Up-to-date information regarding the commuting pattern and freight volume was unobtainable. However, it is evident that either freight, passenger, or both services are available in almost every community in the State. The most frequent trains (almost hourly) run from New York to Boston along the shore or via Hartford and Springfield, Massachusetts.

The final mode of transportation to be discussed is communication by air. Plate 22 indicates the length of runway and other facilities which serve as an index of its use for intercommunication. The flight bureaus are generally located in downtown parts of central places where they will be most convenient. Therefore as far as this study is concerned, this data is significant only in the fact that an established service is provided in a central place. People from the surrounding area desiring this service must go to the central area. This facility is not yet extremely important to a majority of people in the State. (i.e. if one is taking a flight by plane, one must go either to New York, Boston, or Hartford) Therefore it is in the special central service category, and not a strong indicant of existing regional influence or desire.
AIRPORTS OF CONNECTICUT

LEGEND

Airport - Complete Facilities including Control Tower
Airport - Normal Facilities
Landing Field - Limited or No Facilities
Seaplane Facilities or Landing Field with Adjacent Seaplane Facilities
Major Highways

SCALE OF MILES

1947

SOURCE: AVIATION COMMITTEE OF THE NEW ENGLAND COUNCIL & STATE DEPT AERONAUTICS
Utilities

Investigation was made of the information pertaining to sewer, gas, electricity, and water in the State with the subject in mind. It was found that all of these utilities are provided in quantity and at relatively similar cost. Relative costs of these services are not normally an important factor when one is deciding where to live. From the facts gathered it was apparent that no strong index of regionality could be discerned.

The public utilities are controlled by State-granted franchises and what integration exists is largely due to ownership of holdings. This is particularly true of gas and electricity. Integration of the water services is particularly evident around the three larger cities; Hartford, New Haven, and Bridgeport. However, these effectual relations have little significance to residents of this area. Further integration of the utilities does not appear likely due to the necessary equipment is extremely difficult to purchase and very expensive.

The location of Major Power Lines and Stations, Plate 23, was found to have significance, assuming that industries using large amounts of power seeking plant location would establish as a criteria the factor of inexpensive power. Therefore, 1

1 Apparently, power could be bought in quantities at reduced rates near the power stations; from an interview with one of the engineers in the Public Utility Department Office, Hartford, Connecticut
from Plate 23, one can see that steam stations are generally located in established centers. The hydroelectric stations are located according to water sources. With transportation facilities and numerous other advantages, industries utilizing large amounts of power will not likely decentralize very far from these fixed stations and power resources.
Other Activities

Some of the other significant activities which are not easily characterized as Business Activities are included in the following pages.

Hospital Service Areas

Plate 25, General Hospital Service Map, is self-explanatory. Quite logically, boundaries of these areas show no respect for municipal boundaries, and consequently the areas include part of some communities.

Another study along similar lines was made by the American Pediatric Association, Overlay 5. The major criteria in this case was based on place of human birth and death (allocated to location of residence), and the area in which doctors and nurses lived in relation to the hospital where they worked. Other factors were also considered by this group. Municipal boundary lines are adhered to.

This latter study, by definition in particular, indicated the existence of "common areas of living and dying" with emphasis placed on health facilities.

High Schools

A great deal of integration among communities is found throughout the State as far as education of high school students is concerned. This can be observed from Plate 26 and Overlay 6. There is a noticeable admixture of types of schools attended by public school students including private, public
and regional. These types are represented symbolically on these two maps. There is only one regional school in existence to date and that is located in the northwest corner of the State.

The regional areas 2, 3, 4, 5, outlined are very tentative proposals. A survey in the Boston area showed that education accounts for 25-50 cents of the tax dollar. This is a principle reason for the integration in Connecticut - to cut expenditures without decreasing educational benefits to future citizens. There are a great many schools in Connecticut with less than the necessary 400 students. It can be seen from Plate 26 that more integration of school facilities would be of benefit to many towns.

The flow of high school students is significant in the fact that this integration represents mutual agreement among towns. This factor could be utilized advantageously for regional planning purposes. In addition, the communities in these integrated areas have distinctly formed a social pattern of associations for their young people which will bind the places of residence together. The students living in small places will take on the mannerisms and cultural effects of the larger or urban environment and thus in years to come make the 'gap' between small and large communities even less distinct than it is supposed to be.

1 Boston Herald, July 11, 1948
2 Dr. Baer, State Department of Education, states that at least 400 students are needed to provide efficient, up-to-date, educational facilities.
Recreation

Plate 27 and Overlay 7 represent pictorially the Connecticut State Public Parks and Forests. In addition, 1947 attendance is recorded in those places having a seasonal attendance of 22,000 persons or more. Only those recreational areas in the extreme western portion of the State are influenced by out-of-State attendance.

Attendance in these principle parks in 1947 was as follows:

TABLE II: ATTENDANCE IN PRINCIPLE CONNECTICUT PARKS, 1947
Source: Connecticut State Park & Forest Comm., 1948

<table>
<thead>
<tr>
<th>Park</th>
<th>Acres</th>
<th>Attendance in Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hammonassett Beach</td>
<td>966</td>
<td>830</td>
</tr>
<tr>
<td>Indian Well</td>
<td>189</td>
<td>192</td>
</tr>
<tr>
<td>Black Rock</td>
<td>713</td>
<td>149</td>
</tr>
<tr>
<td>Housatonic Meadows</td>
<td>1,060</td>
<td>106</td>
</tr>
<tr>
<td>Lake Waramaug</td>
<td>95</td>
<td>61</td>
</tr>
<tr>
<td>Kent Falls</td>
<td>275</td>
<td>53</td>
</tr>
<tr>
<td>Devil's Hopyard</td>
<td>860</td>
<td>52</td>
</tr>
<tr>
<td>Gillette Castle</td>
<td>122</td>
<td>51</td>
</tr>
<tr>
<td>Mt. Tom</td>
<td>223</td>
<td>38</td>
</tr>
<tr>
<td>Hurd Park</td>
<td>543</td>
<td>36</td>
</tr>
<tr>
<td>Macedonia Brook</td>
<td>1,830</td>
<td>22</td>
</tr>
<tr>
<td>All other Parks</td>
<td></td>
<td>163</td>
</tr>
</tbody>
</table>

Total Attendance 1947 2,338

A special study of individual parks was not possible in the available time. However, there are two interesting facts ascertainable from the data presented that are significant from an areal standpoint. The first is that few parks are located in areas where the majority of people are located. This type of recreation, as it exists, necessarily extends the area of common living for the majority of people in the State. The second follows from the first; that there is need for parks in these places. For example, Indian Well (189 acres) near An-
Attendance In Thousands

Source: State Park and Forest Commission, 1947
sonia had an attendance of 192,000 whereas Black Rock (713 acres) had an attendance of 149,000 last year. It is impossible to state whether the facilities are better at one place or the other, but if size is any factor, it appears that demand is a factor of population and density of population.

In summation, for recreational purposes the area of common living is in most cases extremely extensive. Further discussion of this point will follow in the Results and Conclusions.

Legislation

To those not acquainted with the State of Connecticut and its political structure (borough, town, village, etc.) things appear quite simple. Quite the contrary is true upon investigation of the Legislative Acts authorizing these political entities. For instance, no legislative criteria or words describe what constitutes a city, village, borough, etc. The best information regarding this is described as "by virtue of the legislation". The resultant hodge-podge of the history of these legislative acts authorizing the units is shown on Plate 28, and unfortunately the writer cannot add a word to further describe these places other than the terminology used in the legend.

Local Planning and Zoning Agencies

Plate 29, Local Planning and Zoning Agencies in the State

1 See Appendix, Sec. 1051-1141 and 1211-431, Zoning and Planning Commissions
of Connecticut, 1948, as prepared by the Connecticut Development Commission represents the extent of growth of local zoning and planning agencies to date. The vast majority of large municipalities in Connecticut recognize the need for solution of their problems relative to sound development. This growth has not been explosive by any stretch of the imagination, it has been a long, hard pull on the part of earnest individuals and organizations in the State. At present, the Connecticut Development Commission is fostering guidance along these lines for the benefit of all communities in the State. The extent that these agencies are utilized by local communities varies. This matter will be discussed further in the next chapter.

As far as this survey is concerned, the pattern of communities utilizing planning zoning are in a belt from the southwest corner of the State to the north-central part. These agencies are particularly active in and around Hartford, New Haven, Fairfield, and other communities in the southwest corner.

Regional Planning and Zoning Organizations and Authorities

On the last map of this survey, Plate 30, is shown groups of communities which have, for one reason or another, organizations of their own. Those agencies that are fostered by

1 See Appendix, Section 1151-1201, Chapter 26A of 1947 General Statutes
the State as shown on Plate 30 are as follows:

1. Regional Zoning Authority
   House Bill #616, Special Acts, 1947 Session of the General Session

2. Metropolitan District of Hartford
   Special Acts, 1929 - #511
   Amended 1931 - - - #325
   Amended 1933 - - - #348

The other organizations are (to the best knowledge of the writer) privately sponsored regional planning organizations.

The Regional Planning Commission of South-Central Connecticut has been the most active. These organizations represent "communities of interest" in solving some of their common problems.

The two most recent organizations in the State are The Housatonic Valley Planning Association, and The Naugatuck Valley Industrial Council, Inc. Information regarding the area covered by these two organizations does not appear on Plate 29 because they cover much the same territory.

The former organization was suggested in 1948 and is sponsored by Charles Downing Ley. The purpose of this body is to retain the physical amenities and natural environment of the Housatonic Valley.

The Naugatuck Valley Industrial Council was incorporated in March, 1947. It was formed by the manufacturers of Litchfield County and the Naugatuck Valley, because "they felt there was a need for a welding together of the industrial interests

1 This information received from staff members of the Conn. Development Commission.
in the Valley." 1 The objective of the Council "is to safeguard and promote the interests and welfare of the manufacturers of the area". 2

These regional organizations, although channelized to a certain extent by nature of their being, are concerned with the welfare of certain areas. The areas they include do not in all cases validly reflect planning regions. It is logical that these organizations be utilized as far as possible in the process of synthesis to form similar or other planning regions.

1 "The Naugatuck Valley Industrial Council and its By-Laws" C. L. Eyanson, President, Waterbury 89, Conn.; p. 3
2 Ibid., p. 4
PART IV CONCLUSIONS

These indices represent the existence of Man and evidence of his cultural landscapes. First, the composite of these indices will be observed. The mental picture of this is a confluence of lines enclosing areas of varying size. Inspection of these areas, whether they be General Hospital Areas, Newspaper (legal and church notices) Areas, Metropolitan Areas, or others, will show one portion of that area fixed in predominantly all cases - the nucleus or center. This fact is the key to the concept of the regions as they will be described. It is not a new revelation. This view or the region was taken by Charles Brun, a French regionalist half a century ago. Later, Professors Fawcett and Taylor, English geographers and Robert E. Dickinson, Reader in Geography, University of London, and Lewis Mumford came to the same or similar conclusions.

Municipal boundary lines split these nodal areas in some cases, thus prescribing them as being more than place (i.e. the Hartford group). Accordingly, it can be seen that there are variations on the nuclear structure of this concept, as might be expected of any natural phenomena.

1 Dickinson, Robert E., op. cit., p. 266
2 Ibid., p. 286
3 Ibid., p. 8
4 Ibid., p. 242
5 Mumford, Lewis, op. cit., p. 314
Regard for a moment the confluence of lines enclosing and defining these areas. Which lines define the area as being a planning region? Of course, most all of them do. But for administrative purposes it is desirous to utilize a line of definition that will not cross existing city or town boundary lines. Furthermore, from the very beginning it was decided that all territory included within the State of Connecticut to be considered the large regional unit in which to inscribe constituent parts. This was determined valid because: 1) between the southern and northern New England Region "there are differences - geographic, economic, and social"; the Regional Planning Legislation offered in the State is not similar to that of the three adjoining States; and 3) statistical information is limited to the established boundaries and to be most useful these boundaries are adhered to. Sight of the fact is not lost that some communities (i.e. those places in the southwest corner and other margins of the State) are in the spheres of influence of places outside the State. However, solution of the problems relative to the development and growth of communities in the State is not expected to come from

1 See Plates 1 and 2, p. 22

neighboring states or higher echelons.

It was also concluded necessary to take an area large enough to embrace a sufficient range of interests, and small enough to keep these interests in focus and to make them a subject of direct collective concern. In addition, the State desires that "Districts should be large enough to command instant recognition and within which a reputation may be established which might bring further reknown to the area." 2

It is felt necessary to invoke one other condition to this list, in order to make final conclusions as conceivably rational as possible. It was evident from the factors mentioned that a certain homogeneity or similarity of things was a fundamental feature of these areas. One can observe in these areas complementary elements of variety - large, small; Yankee, foreign-born; farmer, white-collar; supermarket, country store. This brings about "the meeting and mingling of diverse types and interchange of diverse environments" which is essential to a sound regional life. The diverse elements are ascertainable from homogeneous circumstances pointed out in the survey (as well as others from common knowledge). The additional condition is that an attempt be made to maintain a balance of these things. Specifically, it would obviously not be realistic to partition

1 Mumford, op. cit., p. 314
2 Memorandum from Elmer R. Coburn, Director of Research and Planning Division, Connecticut Development Commission, June 17, 1948; p. 2
3 Mumford, Ibid.;
off 'urban areas' from other areas for regional planning purposes. It would be realistic to include the two together according to the framework formed from survey information. In summation, these conditions are:

1. all municipalities and their established boundaries thereof are to be included in the delineation of regions in the State of Connecticut, but they must be included in only one region

2. the regions must be large enough to command instant recognition, yet small enough to keep common interests in focus

3. the structure of the region will be such that a semblance of balance of the cultural environment is evident

Having recognized these conditions and with some knowledge of the concept, the first step towards describing the regions can be taken; that of searching out the nuclei or predominant centers. This necessarily connotes concentration of population. This concentration appears in boroughs, villages, towns, and cities in the State; but, these nuclei offer goods and services that are not found in satellites around it. This eliminates all but those that have significance to the functional purpose.

In most cases it appears that a nucleus exists as the center of an area; but there are, in addition, variations of the same. One type of variation is that of Greenwich - Stamford - Darien with the built-up areas clustered together as one and their hinterland to the north. Another type is that of Bristol - New Britain, or Putnam - Danielson. The

1 See Overlay 3, p. 29
first type indicates a great amount of integration of activities, and municipal boundary lines lose their significance in daily life. The whole is treated as one. The latter type is also not a clear-cut situation like the former, except that slightly less integration exists. However, in either case, the use or recognition by title of one as a means of convenience relays equal significance to parts of it. Thus, in the central part of the State, Hartford as a nucleus actually consists of the aforementioned places which go to make it a nucleus.

It follows from the above that these centers are:

<table>
<thead>
<tr>
<th>Winsted</th>
<th>Middleton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Torrington</td>
<td>Meriden</td>
</tr>
<tr>
<td>New Milford</td>
<td>Waterbury</td>
</tr>
<tr>
<td>Hartford</td>
<td>Ansonia</td>
</tr>
<tr>
<td>New Britain</td>
<td>New Haven</td>
</tr>
<tr>
<td>Danielson</td>
<td>Danbury</td>
</tr>
<tr>
<td>Willimantic</td>
<td>Bridgeport</td>
</tr>
<tr>
<td>Norwich</td>
<td>Norwalk</td>
</tr>
<tr>
<td>New London</td>
<td>Stamford</td>
</tr>
</tbody>
</table>

The second step is to eliminate the 'vacuums' that exist and treat them with special care. These places are part of the State territory but the environmental influence is from outside the State or there is very little integration of activities evident to and from a singular nucleus. The first area which meets this description is the group of communities in the northwest corner of the State: Salisbury, North
Canaan, Canaan, and Sharon. The spheres of influence as far as common interest is concerned apparently does not extend from nearby nuclei in the State. However, on some bases there is significant interactivity among them to warrant consideration of the group as a special case in line with the conditions. There are two other such cases. The group of towns along the shore from Old Saybrook to Guilford and bounded on the north by Chester. The integration that does take place is between these towns and New Haven, Middletown, or New London. But, the character and local interest is sufficient to consider this group as another special case. The last group of this sort is to be found along the northern margin of the State. To say that the interest lies towards one sphere of influence or another would be chancing a guess. From all appearances this group appears as a buffer between the influence of Hartford, Putnam, or Springfield, Massachusetts. The chances are that Tolland will come into the Hartford sphere more and more due to the parkway. But unless the demand be made from residents of these places to go one way or the other, it appears that for the present the group should remain intact and not related definitely to one place or another.

The final step, having the centers in mind, is to construct the communities about it that show evidence of being more in the sphere of influence of one place than another. To do this constructively, the previously mentioned conditions must be foremost.
The foregoing survey gave evidence of interdependence around the nucleus and those places follow the pattern quite normally. However, there are situations when it is an "either-or" circumstance. Two examples of this are Milford and Montville. In either case the communities are juxtaposed between two centers. It is evident from the fore-going information that such places are in the unique position of being more-than-normally in the spheres of influence of two places. Milford has two built-up areas, one related distinctly to New London and the other towards New Haven. It is understood Milford is integrated to the west principally for economic reasons and to the east for other phases of daily activity. This community is participating with the New Haven group in the Regional Planning Commission of South Central Connecticut which is ample justification for including it in that area. Montville has strong economic tendencies towards New London, but other indices indicate it to be in the Norwich sphere of influence (i.e. majority of high school students, health services, foreign-born). No amount of weighing these informative factors would conclusively justify this decision more than a thorough inquiry or field survey in the community. A survey that caught the personal feeling of identity among the residents would be extremely useful. However, on the basis of information available it appears that the stronger 'pull' is towards Norwich. Other towns that come in this sphere of duo-influence are Ashford, Salem, Colchester, and Marlborough. This is recognition of the fact
that in the final analysis there is on the periphery of these areas, in all reality, a certain looseness and vagueness. "All boundaries in black and white are, in one degree or another, arbitrary."  

The result of this investigation appears on Plate 31. It can be noted that the description of the term 'region' as this study has shown applies to the smaller areas. The larger areas incorporating groups of the smaller bodies would be more useful for means of identification within the State. That is, an administrative device with practical conveniences not only to meet the requirements of Condition 2, but a basis on which regional planning activity can be coordinated within an area of greater-than-local-interest.

For lack of better expression, the larger areas incorporating the many groups will be called 'Regions' and the individual groups will be called 'Sub-regions'. This device, if put into practice could secure inter-regional and inter subregional coordination as well as promote flexibility of boundaries.

On Plate 31 are shown, in almost all cases, the nucleus of the sub-region and region. In some instances location of the regional center was dominated not by circumstances, but for practical conveniences such as 1) active planning groups

1 Mumford, Lewis, op.cit., p. 315
2 One further implication of this device is that by joining together the (existing and future) inter sub-region planning commissions fiscally, they can economically maintain continuously a well equipped planning staff to serve the area. These groups can then coordinate their activities with other sub-regional and regional groups.
operating in a particular place, and 2) geographical locus of area. However, this is not a hard and fast rule. It might well be that location of headquarters be based upon more intimate circumstances such as available office space, proximity to residence of planning group or interested parties.

The sub-region can be defined and delimited in thought. In practical application with assigned conditions, activity of certain municipalities are marginal and grade into more than one nucleus. Areas exist where, due to the minor concentration of people, there is little integration evident with centers. But, the predominant pattern resultant from the approach through Man and his cultural environment is that the sub-region has a nucleus or center and an outlying area about it. The extent and demarkation of that area is confined to the conditions imposed.
BIBLIOGRAPHY

Adams, Thomas, OUTLINE OF TOWN AND CITY PLANNING, Russell Sage Foundation, New York, 1935


Bryan, P. W., MAN'S ADAPTATION OF NATURE, Henry Holt and Co., New York, 1933

Dickinson, Robert E., CITY, REGION AND REGIONALISM, Oxford University Press, N. Y., 1947


Geddes, Patrick, CITIES IN EVOLUTION: An Introduction to the Town Planning Movement and to the Study of Civics, Williams and Norgate, London, 1915


Jones, Victor, METROPOLITAN GOVERNMENT, University of Chicago Press, Chicago, Ill., 1942

Kurath, Hans, HANDBOOK OF THE LINGUISTIC GEOGRAPHY OF NEW ENGLAND, Brown University, Providence, R. I., 1939


Mumford, Lewis, TECHNICS AND CIVILIZATION, Harcourt, Brace and Co., New York, 1934


Odum, Howard W., SOUTHERN REGIONS OF THE UNITED STATES, Univ. of N. C. Press, Chapel Hill, N. C., 1936

Redick, Francis Burke, Secretary of the State, CONNECTICUT STATE REGISTER AND MANUAL 1947, Hartford, Conn., 1947

Reed, Thomas Harrison, MUNICIPAL MANAGEMENT, McCraw-Hill Book Co., Inc., N. Y. and London, 1941


Ridley, Clarence E., and Nolting, Orin R., MUNICIPAL YEAR BOOK 1948, The International City Manager's Assoc., Chicago, Ill., 1948

Ruch, Floyd L., PSYCHOLOGY AND LIFE, A Study of the Thinking, Feeling, and Doing of People, Scott, Foresman and Co., New York, 1941


Wehrwein, George S. "The Rural Urban Fringe", ECONOMIC GEOGRAPHY, Vol. 18, #3, July, 1942


Directive Commission on Regional Planning - Yale University, THE CASE FOR REGIONAL PLANNING WITH SPECIAL REFERENCE TO NEW ENGLAND, Yale Univ. Press, New Haven, 1947
PLANNING COMMISSIONS
State Enabling Legislation
Chapter 26 of the 1947 Supplement to the General Statutes

Sec. 105i. Definitions. As used in this chapter: “Commission” shall mean a planning commission; “municipality” shall include a city, town or borough; “subdivision” shall mean the division of a tract or parcel of land into three or more lots for the purpose, whether immediate or future, of sale or building development expressly excluding development for agricultural purposes, and shall include resubdivision.

Sec. 106i. Cities, towns and boroughs may create planning commissions. Membership; how chosen. Any municipality may create by ordinance a planning commission, which shall consist of five members who shall be electors holding no salaried municipal office and whose terms of office and method of election or appointment shall be fixed in the ordinance. The chief executive officer of the municipality and the city, borough or town engineer or commissioner of public works, if any, shall be ex-officio members of the commission. The terms of office shall be so arranged that not more than one-third of such terms shall expire in any one year. Vacancies shall be filled by the commission for the unexpired portion of the term. Upon the adoption of this section by ordinance as herein provided, and the appointment or election of a commission thereunder, any planning commission in the municipality established under any previous act of the general assembly shall cease to exist and its books and records shall be turned over to the commission established under this section, provided all regulations promulgated by such planning commission prior to that time shall continue in full force and effect until modified, repealed or superseded in accordance with the provisions of this chapter. Any city or borough in which a planning commission has been previously established may, by ordinance, designate the commission established under this section in the town in which such city or borough is situated to be the planning commission of said city or borough and such commission shall supersede the planning commission previously established in such city or borough. The commission shall elect a chairman and a secretary from its members, shall adopt rules for the transaction of business and shall keep a public record of its activities.

Sec. 107i. Contracts and expenditures. The commission may engage such employees as may be necessary for its work and may contract with professional consultants.
The commission may accept gifts but all of its expenditures, exclusive of such gifts, shall be within the amounts appropriated for its purposes. Action of the commission shall be taken only upon the vote of a majority of its members.

Sec. 108i. Plan of development. The commission shall prepare, adopt and amend a plan of development for the municipality. Such plan may show the commission's recommendation for the most desirable use of land within the municipality for residential, recreational, commercial, industrial and other purposes; for the most desirable density of population in the several parts of the municipality; for a system of principal thoroughfares, parkways, bridges, streets and other public ways; for airports, parks, playgrounds and other public grounds; for general location, relocation and improvement of public buildings; for the general location and extent of public utilities and terminals, whether publicly or privately owned, for water, sewerage, light, power, transit and other purposes; and for the extent and location of public housing projects. Such other recommendations may be made by the commission and included in the plan as will, in its judgment, be beneficial to the municipality. The plan shall be based on studies of physical, social, economic and governmental conditions and trends and shall be designed to promote with the greatest efficiency and economy the coordinated development of the municipality and the general welfare and prosperity of its people. The planning commission of each municipality shall file an annual report with the legislative body thereof. The commission may prepare and adopt plans for the redevelopment and improvement of districts or neighborhoods which, in its judgment, contain special problems or show a trend toward lower land values. Such commission may adopt the plan by a single resolution or may, by successive resolutions, adopt parts of the plan, whether geographical or functional, and amendments thereto. Prior to adopting the development plan or any part thereof or amendment thereto, the commission shall file in the office of the town clerk a copy of such plan or part thereof or amendment thereto and shall hold at least one public hearing thereon, notice of the time and place of which shall be published in a newspaper having general circulation in the municipality at least seven days prior to the date of each such hearing, which notice shall make reference to the filing of such records in the office of the town clerk. Any plan or part thereof or amendment thereto shall, upon adoption by the commission, be filed in the office of the town clerk and shall become effective at a time established by the commission, provided notice thereof shall be published in a newspaper having general circulation in the municipality prior to such effective date.
Sec. 109i. Municipal improvements. No action shall be taken by any municipal agency on any proposal involving the location, acceptance, widening, narrowing or extension of streets, bridges, parkways and other public ways, the location, relocation, acquisition of land for, or the abandonment, sale or lease of, airports, parks, playgrounds and other municipally owned properties and public buildings, the extent and location of public utilities and terminals, whether publicly or privately owned, for water, sewerage, light, power, transit and other purposes, and for the extent and location of public housing projects and the redevelopment, reconditioning or improvement of specific areas until it has been referred to the commission for a report. The failure of the commission to report within thirty days after the date of official submission to it shall be taken as approval of the proposal. In the case of the disapproval of the proposal by the commission the reasons therefor shall be recorded and transmitted to the town council, where one exists, or to the board of selectmen in towns, to the warden and burgesses in boroughs, or to the legislative body in cities, as the case may be. A proposal disapproved by the commission shall be adopted by the municipality only after (a) a two-thirds vote of the town council where one exists, or a majority vote of those present and voting in an annual or special town meeting, or (b) by a two-thirds vote of the city council or the warden and burgesses, as the case may be.

Sec. 110i. Subdivision of land. No subdivision of land shall be made until a plan for such subdivision has been approved by the commission. Any person, firm or corporation making any subdivision of land without the approval of the commission shall be fined not more than two hundred dollars for each lot sold or offered for sale or so subdivided. All plans for subdivision shall, upon approval, be filed or recorded in the office of the town clerk and any plan, not so filed or recorded within ninety days following its approval by the commission or within ninety days of the date upon which such plan is taken as approved by reason of the failure of the commission to act, shall become null and void. No such plan shall be recorded or filed by the town clerk or other officer duly authorized to record or file plans until its approval has been endorsed thereon, and the filing or recording of a subdivision plan without such approval shall be void. Before exercising the powers granted in this section, the commission shall adopt regulations covering the subdivision of land. No such regulations shall become effective until after a public hearing, notice of the time, place and purpose of which shall be given by publication in a newspaper of general circulation in the municipality at least seven days prior to the date of such hearing. Such regula-
tions shall provide that the land to be subdivided shall be of such character that it can be used for building purposes without danger to health, that proper provision shall be made for water, drainage and sewerage, that the proposed streets are in harmony with existing or proposed principal thoroughfares shown in the plan of development as described in section 108i, especially in regard to safe intersections with such thoroughfares, and so arranged and of such width as to provide an adequate and convenient system for present and prospective traffic needs and that in places deemed proper by the planning commission open spaces for parks and playgrounds shall be shown on the subdivision plan. The commission may also prescribe the extent to which and the manner in which streets shall be graded and improved and public utilities and services provided and in lieu of the completion of such work and installations previous to the final approval of a plan, the commission may accept a bond in an amount and with surety and conditions satisfactory to it securing to the municipality the actual construction and installation of such improvements and utilities within a period specified in the bond. Such regulations may provide, in lieu of the completion of the work and installations above referred to, previous to the final approval of a plan, for an assessment or other method whereby the municipality is put in an assured position to do such work and make such installations at the expense of the owners of the property within the subdivision.

Sec. 111i. Approval of subdivision plan. All plans for subdivisions shall be submitted to the commission with an application in a form to be prescribed by it. The commission may hold a public hearing regarding any subdivision proposal if, in its judgment, the specific circumstances require such action. No plan of resubdivision shall be acted upon by the commission without a public hearing. Notice of the public hearing shall be given not less than seven days before the date of the hearing by publication once in a newspaper of general circulation in the municipality and by sending a copy thereof by registered mail to the applicant. The commission shall approve, modify and approve, or disapprove a subdivision plan within sixty days after the submission thereof. The failure of the commission to act thereon shall be considered as an approval and a certificate to that effect shall be issued by the commission on demand, provided an extension of this period may be had with the consent of the applicant. The grounds for disapproval shall be stated in the records of the commission.
Sec. 112i. Building on unaccepted streets or unapproved subdivisions. No building permit shall be issued and no building or structure shall be erected in an unapproved subdivision or on an unaccepted street except in the case of lots of record in the office of the town clerk or other officer authorized to record or file plans or in the case of streets which are open for vehicular travel at the time of adoption of this chapter by the municipality. Any building erected in violation of this chapter shall be deemed an unlawful structure, and the municipality through the appropriate officer may bring action to enjoin the erection of such structure or cause it to be vacated or removed. Any person, firm or corporation erecting a building or structure in an unapproved subdivision or on an unaccepted street, except as provided in this section, may be fined not more than two hundred dollars for each building or structure or part thereof so erected in addition to the relief herein otherwise granted to the municipality.

Sec. 113i. Appeals. Any person aggrieved by an official action of a planning commission may appeal therefrom within fifteen days of such official action to the court of common pleas for the county in which the municipality with such planning commission lies.

Sec. 114i. Sections 404, 405, 83c, 407 as amended by 47f, 408 and 409 are repealed, but any planning commission established thereunder shall continue in office and its powers, duties and regulations shall remain in effect until modified under the provisions of sections 105i to 113i, inclusive.
Sec. 115i. Regional planning authorities. Any two or more contiguous towns, cities or boroughs having planning commissions may by by-law, ordinance, rule or regulation adopted by the respective legislative bodies of such towns, cities or boroughs join in the formation of a regional planning authority. The area of jurisdiction of such authority shall be coterminous with the area of the respective towns, cities or boroughs comprising such regional planning authority.

Sec. 116i. Withdrawal from regional planning authority. Any town, city or borough which has adopted the provisions of this chapter may withdraw from such regional planning authority, but only six months after the legislative body of such town, city or borough shall have declared its intent to so withdraw by enactment of a by-law, ordinance, rule or regulation.

Sec. 117i. Membership of planning authority board. Each town, city or borough which adopts the provisions of this chapter shall be entitled to two representatives on the board of such authority and shall be entitled to additional representation on such board at the ratio of one member for each fifty thousand of population or fraction thereof over and above a population of twenty-five thousand as determined by the last-completed federal census. The appointment of such members of the board shall be made by the planning commission of each participating town, city or borough for such terms as shall be determined by each planning commission, but each member shall be an elector of the town, city or borough which he represents.

Sec. 118i. Officers of board. Meetings. The board of each such authority shall annually elect from among its members a chairman, a treasurer, who shall be bonded, and such other officers as the board shall determine. All meetings of the board shall be held at the call of the chairman and at such other times as said board may determine. The treasurer shall receive all funds and moneys of the authority and shall pay out the same only upon the order of the board of such authority within the limits of such receipts. The board shall keep minutes of all its proceedings and official actions, showing the vote of each member or, if absent or failing to vote, indicating such fact, which minutes shall be filed in the office of the board and shall be a public record.
Sec. 119i. Funds. Employees and consultants. Any regional planning authority established under the provisions of this chapter is authorized to receive for its own uses and purposes any funds or moneys from any source, including bequests, gifts or contributions, made by any individual, corporation or association. Any participating town, city or borough is authorized to appropriate funds for the expenses of such authority in the performance of its purposes. Within the amounts so received by an authority, the board of the authority may engage employees and contract with professional consultants.

Sec. 120i. Plans. Each regional planning authority shall make a plan of development for the region within its jurisdiction, showing its recommendations for the general use of the area including principal highways and freeways, bridges, airports, parks, playgrounds, recreational areas, schools, public institutions, public utilities and such other matters as, in the opinion of the authority, will be beneficial to the area. Any regional plan so developed shall be based on studies of physical, social, economic and governmental conditions and trends and shall be designed to promote with the greatest efficiency and economy the coordinated development of the region within its jurisdiction and the general welfare and prosperity of its people. It shall assist the planning commissions of the several towns, cities or boroughs within the area of its jurisdiction in carrying out any regional plan or plans developed by such authority.
Sec. 121i. Zoning commissions. Any town, city or borough may by vote of its legislative body adopt the provisions of this chapter, and exercise through a zoning commission the powers granted hereunder. In each town, except as otherwise provided by special act, the zoning commission shall consist of five members who shall be electors of said town and whose terms of office shall be determined by by-law adopted by the town or ordinance, rule or regulation of the local body having power to adopt ordinances, rules or regulations for the government of such town except that in towns having a population of less than five thousand the selectmen may be empowered by such by-law, ordinance, rule or regulation to act as such zoning commission. In each city or borough, except as otherwise provided by special act, the board of aldermen, council or other duly constituted board or authority having power to adopt ordinances, rules or regulations for the government of such city or borough shall act as such zoning commission. The zoning commission of any town shall have jurisdiction over that part of the town outside of any city or borough contained therein.

Sec. 122i. Powers of commission. The zoning commission of each city, town or borough is authorized to regulate the height, number of stories and size of buildings and other structures; the percentage of the area of the lot that may be occupied; the size of yards, courts and other open spaces; the density of population and the location and use of buildings, structures and land for trade, industry, residence or other purposes; and the height, size and location of advertising signs and billboards within the limits of such city, town or borough. Such zoning commission may divide the municipality into districts of such number, shape and area as may be best suited to carry out the purposes of this chapter; and, within such districts, it may regulate the erection, construction, reconstruction, alteration or use of buildings or structures and the use of land. All such regulations shall be uniform for each class or kind of buildings or structures throughout each district, but the regulations in one district may differ from those in another district. Such regulations shall be made in accordance with a comprehensive plan and shall be designed to lessen congestion in the streets; to secure safety from fire, panic and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population and to facilitate
the adequate provision for transportation, water, sewerage, schools, parks and other public requirements. Such regulations shall be made with reasonable consideration as to the character of the district and its peculiar suitability for particular uses, and with a view to conserving the value of buildings and encouraging the most appropriate use of land throughout such municipality.

Sec. 123i. Regulations and boundaries; hearings; amendments. Such zoning commission shall provide for the manner in which such regulations and the boundaries of zoning districts shall be respectively enforced and established and amended or changed. No such regulation or boundary shall become effective or be established until after a public hearing in relation thereto held by the zoning commission or a committee thereof appointed for that purpose consisting of at least five members at which parties in interest and citizens shall have an opportunity to be heard. Notice of the time and place of such hearing shall be published in a newspaper having a substantial circulation in such municipality at least twice at intervals of not less than two days, the first not more than fifteen days and the last not less than two days before such hearing, and a copy of such proposed regulation or boundary shall be filed in the office of the town clerk in such municipality for public inspection at least fifteen days before such hearing, and may be published in full in such paper. Such regulations and boundaries may, from time to time, be amended, changed or repealed by such zoning commission. In towns governed by town meeting, if a majority of those present at such hearing oppose such regulations or the boundaries of zoning districts or any amendments or changes therein, such regulations or boundaries or changes or amendments thereto shall not become effective unless they have been approved by a majority of those present at a town meeting warned and held for that purpose. If a protest is filed with the zoning commission against such change signed by the owners of twenty per cent or more of the area of the lots included in such proposed change, or of the lots within two hundred feet in any direction of the property included in the proposed change, such change shall not be adopted except by unanimous vote of the zoning commission of any town or a vote of three-fourths of all the members of the zoning commission of each city or borough. The provisions of this section relative to public hearings and official notice shall apply to all changes or amendments. Zoning regulations or boundaries or changes therein shall become effective at such time as may be fixed by the zoning commission, provided notice thereof shall have been published in a newspaper having a substantial circulation in the municipality at least seven days before such effective date.
Whenever a zoning commission shall make any change in a zoning regulation or the boundaries of a zoning district it shall state upon its records the reason why such change is made.

Sec. 124i. Zoning commission may be planning and zoning commission. Any town, unless otherwise provided by special act, may by ordinance designate its zoning commission as the planning and zoning commission for such town and such commission shall thereupon have all the powers and duties of both a zoning commission and a planning commission and shall supersede any planning commission in such town.

Sec. 125i. Zoning board of appeals. In each town, city or borough having a zoning commission there shall be a zoning board of appeals consisting of five members, unless otherwise provided by special act, who shall be electors and shall not be members of the zoning commission. In towns such board shall, unless otherwise provided by special act, be elected, one of the original members to serve for one year, one for two years, one for three years, one for four years, and one for five years, and thereafter each new member shall be elected for a term of five years at the regular municipal election. In cities and boroughs, unless otherwise provided by special act, the members of said board shall be appointed by the chief executive officer for terms similar to those provided for towns under this section and may be removed for cause by the same authority, but before removal, charges shall be presented to such member in writing and he shall be given reasonable opportunity to be heard in his own defense. Any vacancy in said board, unless otherwise provided by special act, may be filled for the unexpired portion of the term by the board of selectmen of towns or the chief executive officer of cities and boroughs. Said board shall elect a chairman from among its members, unless otherwise provided by special act, and all meetings of said board shall be held at the call of the chairman and at such other times as said board may determine and shall be open to the public. Such chairman or in his absence the acting chairman may administer oaths and compel the attendance of witnesses. The board shall keep minutes of its proceedings showing the vote of each member upon each question, or if absent or failing to vote indicating such fact; and shall also keep records of its examinations and other official actions. Each rule or regulation and each amendment or repeal thereof and each order, requirement or decision of the board shall immediately be filed in the office of the board and shall be a public record.
Sec. 126i. Powers and duties of board of appeals. The zoning board of appeals shall have the following powers and duties: (1) To hear and decide appeals where it is alleged that there is an error in any order, requirement or decision made by the official charged with the enforcement of this chapter or any by-law, ordinance or regulation adopted hereunder; (2) to hear and decide all matters including special exceptions upon which it is required to pass by the specific terms of the zoning by-law, ordinance or regulation; and (3) to determine and vary the application of the zoning by-laws, ordinances or regulations in harmony with their general purpose and intent and with due consideration for conserving the public health, safety, convenience, welfare and property values solely with respect to a parcel of land where owing to conditions especially affecting such parcel but not affecting generally the district in which it is situated a literal enforcement of such by-laws, ordinances or regulations would result in exceptional difficulty or unusual hardship so that substantial justice will be done and the public safety and welfare secured.

Sec. 127i. Appeals to board of appeals. The concurring vote of four members of the zoning board of appeals shall be necessary to reverse any order, requirement or decision of the official charged with the enforcement thereof or to decide in favor of the appellant any matter upon which it shall be required to pass under any such by-law, ordinance, rule or regulation or to effect any variation in such by-law, ordinance, rule or regulation. An appeal may be taken to the zoning board of appeals by any person aggrieved or by any officer, department, board or bureau of any municipality aggrieved and shall be taken within such time as shall be prescribed by a rule adopted by said board by filing with the zoning commission or the officer from whom the appeal has been taken and with said board a notice of appeal specifying the grounds thereof. The officer from whom the appeal has been taken shall forthwith transmit to said board all the papers constituting the record upon which the action appealed from was taken. An appeal shall stay all proceedings in the action appealed from unless the zoning commission or the officer from whom the appeal has been taken shall certify to the zoning board of appeals after the notice of appeal has been filed that by reason of facts stated in the certificate a stay would cause imminent peril to life or property in which case proceedings shall not be stayed, except by a restraining order which may be granted by the court of record on application, on notice to the zoning commission or the officer from whom the appeal shall have been taken and on due cause shown. Said board shall fix a reasonable time for the hearing of any appeal and give due notice.
thereof to the parties and to the public and decide the same within a reasonable time. At such hearing any party may appear in person and may be represented by agent or by attorney. Said board may reverse or affirm wholly or partly or may modify any order, requirement or decision appealed from and shall make such order, requirement or decision as in its opinion should be made in the premises and shall have all the powers of the officer from whom the appeal has been taken but only in accordance with the provisions of this section. Whenever a zoning board of appeals makes any change in a zoning regulation or the boundaries of a zoning district or reverses wholly or partly any order, requirement or decision appealed from it shall state upon its records the reason why such change was made or why such reversal was made.

Sec. 128i. Appeals to court of common pleas. Appeals from zoning commissions may be taken to the court of common pleas in the manner provided in section 429 as amended by section 50f.

Sec. 129i. Regulations and boundaries previously adopted. All zoning regulations and zoning districts or boundaries heretofore legally adopted by any town, city or borough under the provisions of sections 88c, 132e, 423, 424, 425 and 426 or any special act shall remain in full force and effect, subject to change or amendment under the provisions of section 123i.

Sec. 130i. Sections 88c, 424, 132e, 426, 427 and 428 are repealed.
The authority issuing the citation in such appeal shall take from the appellant, unless such appellant be an official of the municipality, a bond or recognizance to said board, with surety, to prosecute such appeal to effect and comply with the orders and decrees of the court. Said board shall be required to return either the original papers acted upon by it, and constituting the record of the case appealed from, or certified copies thereof. The court, upon such appeal, shall review the proceedings of said board and, if, upon the hearing upon such appeal, it shall appear to the court that testimony is necessary for the equitable disposition of the appeal, it may take evidence or appoint a referee or committee to take such evidence as it may direct and report the same to the court, with his or its findings of facts and conclusions of law, which report shall constitute a part of the proceedings upon which the determination of the court shall be made. The court, upon such appeal, and after a hearing thereon, may reverse or affirm, wholly or partly, or may modify or revise the decision appealed from. Costs shall not be allowed against said board unless it shall appear to the court that it acted with gross negligence or in bad faith or with malice in making the decision appealed from. Appeals from decisions of said board shall be privileged cases to be heard by the court, unless cause shall be shown to the contrary, as soon after the return day as shall be practicable.

Procedure When Regulations Are Violated

Sec. 430. If any building or structure shall have been erected, constructed, altered, converted or maintained, or any building, structure or land shall have been used, in violation of any provision of this chapter or of any by-law, ordinance, rule or regulation made under authority conferred hereby, any official having jurisdiction, in addition to other remedies, may institute an action or proceeding to prevent such unlawful erection, construction, alteration, conversion, maintenance or use or to restrain, correct or abate such violation or to prevent the occupancy of such building, structure or land or to prevent any illegal act, conduct, business or use in or about such premises. Such regulations shall be enforced by the officer or official board or authority designated therein, who shall be authorized to cause any building, structure, place or premises to be inspected and examined and to order in writing the remedying of any condition found to exist therein or thereon in violation of any provision of the regulations made under authority of the provisions of this chapter. The owner or agent of any building or premises where a violation of any provision of such regulations shall have been committed or shall exist, or the lessee or tenant of an entire building or entire premises where such violation shall have been committed or shall exist, or the owner, agent, lessee or tenant of any part of the building or premises in which such violation shall have been committed or shall exist, or the agent, architect, builder, contractor or any other person who shall commit, take part or assist in any such violation or who shall maintain any building or premises in which any such violation shall exist, shall be fined not less than ten nor more than one hundred dollars for each day that such violation shall continue; but, if the offense be wilful, the person convicted thereof shall be fined not less than one hundred dollars nor more than two hundred and fifty dollars for each day that such violation shall continue, or imprisoned not more than ten days for each day such violation shall continue or both; and the local police court or other similar criminal courts shall have jurisdiction of all such offenses, subject to appeal as in other cases. Any person who, having been served with an order to discontinue any such violation, shall fail to comply with such order within ten days after such service or shall continue to violate any provision of the regulations made under authority of the provisions of this chapter specified in such order, shall be subject to a civil penalty of two hundred and fifty dollars, payable to the treasurer of the municipality.
Controlling Requirement in Case of Variation

Sec. 431. If the regulations made under authority of the provisions of this chapter shall require a greater width or size of yards, courts or other open spaces or a lower height of building or a fewer number of stories or a greater percentage of lot area to be left unoccupied or shall impose other and higher standards than shall be required in any other statute, by-law, ordinance or regulation, the provisions of the regulations made under the provisions of this chapter shall govern. If the provisions of any other statute, by-law, ordinance or regulation shall require a greater width or size of yards, courts or other open spaces or a lower height of building or a fewer number of stories or a greater percentage of lot area to be left unoccupied or impose other and higher standards than shall be required by the regulations made under authority of the provisions of this chapter, the provisions of such statute, by-law, ordinance or regulation shall govern.