

7. Inc. 2: A&T  
Cage  
ConnDoc  
D49so  
soaL  
1966

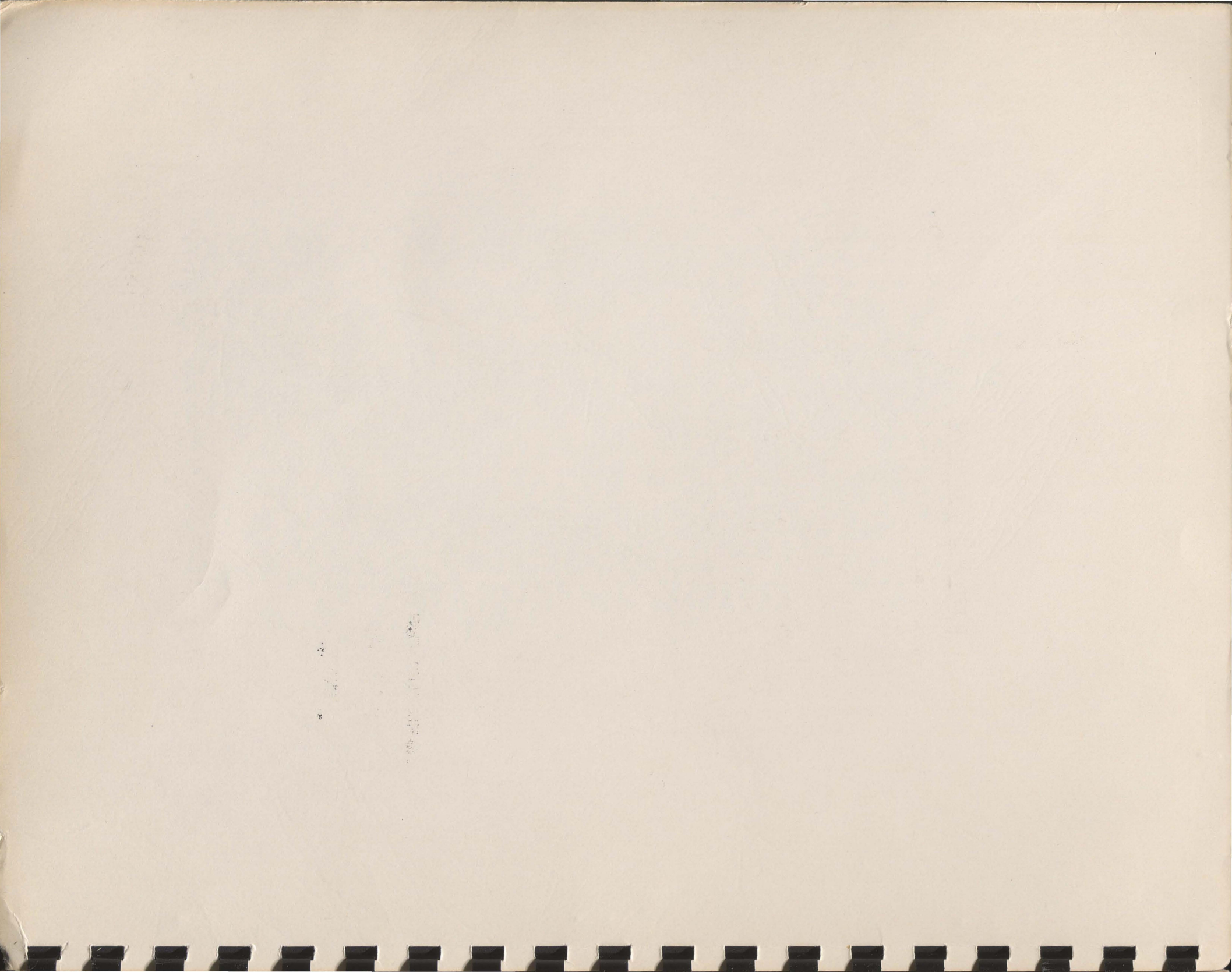
# ALTERNATIVE LAND USE PLANS



**1966**

**SOUTHEASTERN CONNECTICUT  
REGIONAL PLANNING AGENCY**









SOUTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY

DRY IDEAS, 1966

Phillip Clark, Chairman, Norwich

James J. ...

ALTERNATIVE LAND USE PLANS

Southeastern Connecticut Region

This report is part of a comprehensive planning program being carried out in part with an Urban Planning Grant from the Housing and Home Finance Agency, under the provisions of Section 701 of the Housing Act of 1954, as amended, and with the financial participation of a State Regional Planning Assistance Grant administered by the Connecticut Development Commission.

CONNECTICUT STATE LIBRARY

JAN 11 2018

HARTFORD

Southeastern Connecticut Regional Planning Agency  
139 Boswell Avenue, Norwich, Connecticut

March, 1966

Cape  
Conn Doc  
D480  
SOAL  
1966



TABLE OF CONTENTS

SOUTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY

OFFICERS, 1966

Philip Clark, Chairman, Norwich  
Mrs. Chase Going Woodhouse, Vice Chairman, Sprague  
Arthur Stout, Secretary, New London  
Joseph Capon, Treasurer, Ledyard

MUNICIPAL REPRESENTATIVES, 1966

Arthur Barrows, Waterford  
Alfred Bingham, Salem  
Anthony Carboni, Franklin  
J. Alfred Clark, Jr., Ledyard  
Richard DeNoia, Groton  
Edward Friedland, Lisbon  
Henry Gardiner, Waterford  
Benjamin Hislop, East Lyme  
William Kilburn, Norwich  
Frank Leigner, Groton  
Nathaniel Manning, Franklin  
Richard Martin, New London  
H. Paul McGee, Stonington  
Reginald Monty, Lisbon  
William Morgan, Jr., North Stonington  
William Mulvaney, Montville  
John O'Brien, Stonington  
Norman Peck, Jr., East Lyme  
Paul Pendorf, Groton  
J. Lawrence Peters, New London  
Henry Piszczek, Preston  
Harry Smullen, Preston  
Robert Stevens, Bozrah  
LeRoy Tennant, Norwich  
Arthur Thibeault, Sprague  
George Warner, Bozrah  
Aubrey Whitelaw, North Stonington  
David Wordell, Salem

AGENCY STAFF

Richard B. Erickson, Executive Director  
Gerhard J. Amt, Regional Planner  
Arlene Lewis, Secretary

CONSULTANT ON THE REGIONAL PLAN

Carl Feiss, Washington, D. C.



## TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	2
II. CONSIDERATIONS IN PREPARING ALTERNATIVE LAND USE PLANS	5
Introduction	6
Physical Considerations	7
Community Development Considerations	15
Goals For Southeastern Connecticut	19
III. ALTERNATIVE LAND USE PLANS	21
Development Concepts	22
Review of Alternatives	25
Staff Recommendations	32
The Next Steps	33

## LIST OF FIGURES AND TABLES

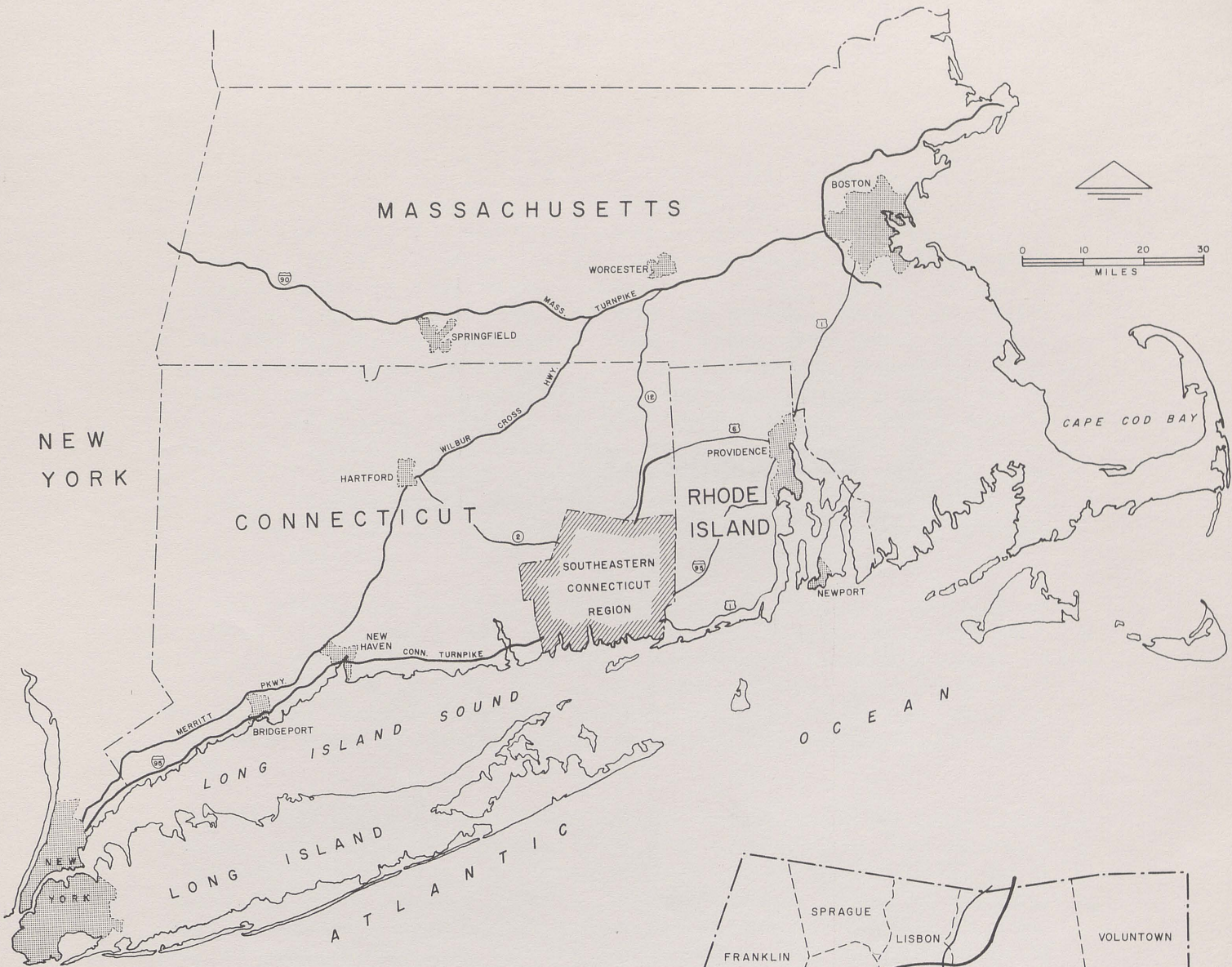
### FIGURE

1: Locational Map	1
2: Physical Factors Influencing Alternative Plans	9
3: Goals For Southeastern Connecticut	20
4: Development Concepts Influencing Alternative Plans	23
Alternative Land Use Plans	Inside Back Cover

### TABLE

1: Population Data For Alternative Plans	28
--	----





# LOCATIONAL MAP

## SOUTHEASTERN CONNECTICUT REGION

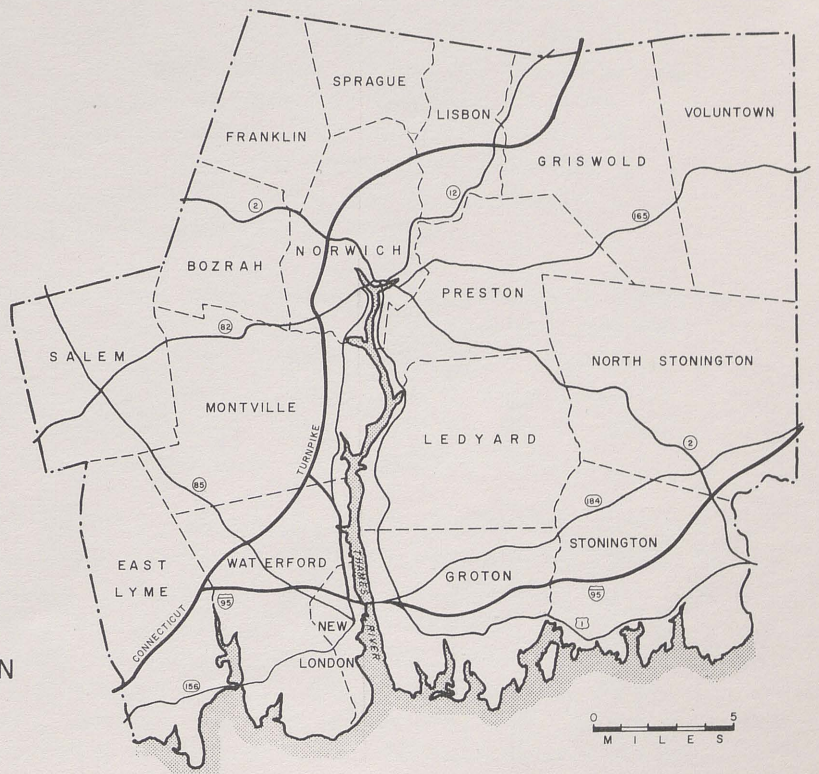


FIGURE I



Between now and the end of this century Southeastern Georgia will experience as much population growth and development as occurred during the first 100 years of the region's history. From its present population of about 200,000, the region is expected to rise to a population of 350,000 by the year 2000. The strains brought by this nearly two-fold increase in Southeastern Georgia's rate of growth will be more unsettling than any known experienced in the past. Housing of all types, schools, hospitals, new commercial and industrial areas, state highways and local roads, water and sewer facilities, and open space and recreation areas will be needed in a far greater quantity and at a far faster rate than ever before. Social strains will be felt as strong as physical strains as old communities expand and finally new communities are created. Our physical, economic, and historic heritage, its quality and quantity, must be protected, and to provide new communities of which future generations may be proud.

## I. INTRODUCTION

Successfully meeting the challenges implicit in our projected growth will call for a coordinated effort by both private and public individuals and groups. Decisions by the general public, by legislative bodies and municipal, state, and federal agencies, and by developers and individuals will ultimately determine the kind of region Southeastern Georgia is by the year 2000.

With so many diverse decisions being made by individuals and groups, comprehensive guidelines and objectives are necessary to guide development in order that the total development effort be likely to have as the area's development. Equally important, the responsibilities should be clearly delineated in the area of their own future progress. The preparation of overall guidelines and objectives to assist development in Southeastern Georgia is the responsibility of both local planning commissions and the Regional Planning Agency.

Local planning commissions are charged with state state-wide to prepare guidelines, plans of development, containing recommendations on the future use of land, the transportation system, open space and recreation areas, and public buildings and facilities. Each municipal plan of development must serve as a guide for future growth and provide within its boundaries.

Guidelines of the type physical, social, and economic development should be developed with guidelines, and objectives of development objectives and objectives of development in general. This information is necessary to provide a regional planning agency. Each regional planning agency should be prepared to provide an overall plan of development for the area included in its region, which is the task of the State system to provide a regional plan of development.



Between now and the end of this century Southeastern Connecticut can expect as much new population growth and development as occurred during the first 300 years of the region's history. From its present population of about 200,000, the region is expected to rise to a population of 350,000 by the year 2000. The strains created by this nearly ten-fold increase in Southeastern Connecticut's rate of growth will be more unsettling than anything experienced in the past. Housing of all types, schools, hospitals, new commercial and industrial areas, state highways and local roads, water and sewer facilities, and open space and recreation areas will be needed in a far greater quantity and at a far faster rate than ever before. Social strains will be fully as strong as physical strains as old communities change and totally new communities are created. With this rapid growth, our ingenuity will be taxed to preserve the quality of our physical and historic heritage, to replace what is worn out, shoddy, or obsolete, and to create new communities of which future generations can be proud.

Successfully meeting the challenges implicit in our expected growth will call for a considerable effort by both private and public individuals and groups. Decisions by the general public, by legislative bodies and municipal, state, and federal agencies, and by developers and industrialists will ultimately determine the kind of region Southeastern Connecticut is by the year 2000.

With so many diverse decisions being made by individuals and groups, some over-all guidelines and objectives are necessary to assist decision-makers in evaluating the effect their actions are likely to have on the area's development. Equally important, the decision-makers should know how anticipated growth in the area may affect their own future programs. The preparation of over-all guidelines and objectives to assist decision-makers in Southeastern Connecticut is the responsibility of both local planning commissions and the Regional Planning Agency.

Local planning commissions are obligated under state statutes to prepare municipal plans of development, containing recommendations on the future use of land, the transportation system, open space and recreation areas, and public buildings and facilities. Each municipal plan of development then serves as a guide for future public and private action within its community.

Because of the great physical, social, and economic interdependence among communities within Connecticut, some coordination of developmental objectives among groups of related communities is necessary. This intermunicipal coordination is achieved through regional planning programs. Each regional planning agency has a statutory charge to prepare an over-all plan of development for the area included in its region, which in the case of the Southeastern Connecticut Region consists of seventeen communities with



a land area of 513 square miles. The statutes state: "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 its area of operation and the general welfare and prosperity of its people." The chief purpose of the regional plan is coordination -- providing a basis for relating the developmental needs and objectives of each community to those of all communities making up the region. The function of the regional plan and of the regional planning program is not control but guidance.

Since its creation in 1961, SCRPA has been working to fulfill its obligation to prepare a regional plan for Southeastern Connecticut. Between 1962 and 1965 the Agency conducted a series of seven studies to form the factual base on which the regional plan will be built. These studies are: Land Use: Patterns and Policies, Land Characteristics, Population and Housing, Regional Economy, Open Space and Recreation, Potential Industrial Areas, and Sewerage Problems. The Agency also participated with the Connecticut Highway Department in the Southeast Area Traffic Study. In addition, a study of the potential surface water supplies of the region prepared for the Eastern Connecticut Industrial Fresh Water Development Commission by the engineering firm of Metcalf & Eddy, which also conducted our sewerage study, has been a very helpful addition to our store of information. Out of this analysis phase of the Agency's program grew information and conclusions regarding a wide range of problems and potentials facing Southeastern Connecticut. From this, we have created three alternative regional land use plans which indicate different ways in which the region could grow in the future. After evaluation by each of the region's communities and state and federal agencies, the Regional Planning Agency must select one alternative or modification thereof to be used as the basis for preparing a more detailed recommended regional plan.

This report is intended to provide a basis on which a review and evaluation of the alternatives can be made. Besides this introduction, the report contains two other chapters. Chapter II reviews the considerations that have gone into drafting the alternatives. Chapter III presents the alternative plans themselves, along with a staff evaluation of each plan, and the staff recommendations on a choice from among the alternatives.

We ask the reader to keep in mind that, unless otherwise noted, the plan proposals contained in this report are staff recommendations that have not yet been acted on by SCRPA. The Agency will not act on these proposals until each of the region's communities and interested state and federal agencies have had an opportunity to study and comment on the proposals. We anticipate that this review will be completed by May of 1966. After that date, the agency will proceed with the preparation of a more detailed recommended regional plan, reflecting suggestions made during the review of these alternative land use plans.



INTRODUCTION

The content of the regional plan is broad, covering all types of land use and community structure, various patterns of transportation, a range of open space and recreation uses, and several different kinds of public facilities. As a result, the number of interrelated factors that must be taken into account in creating a plan is large. Land use, for example, is directly affected by economic conditions and policies, the transportation system, topographic conditions, and the availability of public facilities. In turn, land use affects each of these elements throughout the region. For this reason, a holistic approach to the task of preparing the regional plan is essential. It is the purpose of this report to discuss the various factors that must be considered in the preparation of a regional plan.

II. CONSIDERATIONS IN PREPARING ALTERNATIVE LAND USE PLANS

INTRODUCTION

PHYSICAL CONSIDERATIONS

COMMUNITY DEVELOPMENT CONSIDERATIONS

GOALS FOR SOUTHEASTERN CONNECTICUT



## INTRODUCTION

The content of the regional plan is broad, covering all types of land use and community structure, various methods of transportation, a range of open space and recreation uses, and several different kinds of public facilities. As a result, the number of interrelated factors that must be taken into account in creating a plan is large. Land use, for example, is directly affected by economic conditions and policies, the transportation system, topographic conditions, and the availability of public facilities. In turn, land use affects each of these elements throughout the region. For this reason, a substantial amount of the time spent in preparing the regional plan has been devoted to research on the many facets that added together make up the region.

An important consideration in preparing the plan is the physical structure of the region. By "physical structure" we mean both the natural topographic features and the man-made structures presently existing. We must know intimately how man is now using the region before we begin to consider how he might use it in the future. We must know the potentials and the limitations of the physical base on which the region's present activities occur and on which its future growth will take place.

Not all problems or potentials are physical, some are social or economic. And social or economic conditions can affect or be affected by physical conditions. The relationship of slums and low-income groups is an obvious case in point. We must, then, be as familiar with the social and economic make-up of the region as we are with its physical structure. Of particular importance in the preparation of a regional plan is a forecast of the population anticipated in the year for which the plan is designed. Without such a projection or "target," planning becomes meaningless, for we lack the quantitative data required to estimate how much of everything will probably be needed. Without a population forecast we cannot plan for future water supply, sewage disposal, housing, schools, parks and recreation areas, or a highway system.

Finally, but perhaps most importantly, we must consider the less tangible "goals" of the region in preparing the plan. The goals of the region should be the broad aims toward which the plan will work. As much as possible, they should be a consensus of the more limited goals of the many communities and groups whose actions influence the development of Southeastern Connecticut. Since the goals of most communities and groups within the region are unstated, they must frequently be inferred from actions. Even when stated, goals are usually expressed imprecisely, and within a series of goals there is likely to be inconsistency, overlap, and mutual conflict. Thus, goals are much more difficult to work with than the facts and statistics used in analyzing physical, social, and economic considerations. But in spite of the difficulty they present, as clear a statement as possible of the over-all goals of



the region is necessary to provide direction for the plan and to point up areas of possible conflict between different goals.

The remainder of this chapter will review these major factors that were basic considerations in preparing alternative land use plans for Southeastern Connecticut.

## PHYSICAL CONSIDERATIONS

### OUR NATURAL ENVIRONMENT

Historically, man always has been closely related to, and influenced by, his physical environment. But in this century, and particularly in this country, man has broken away from his physical environment. In some instances this break has been made possible and justified by technological advances. In others, when the physical limitations imposed by the land's surface have been ignored, it has resulted in inconvenience, suffering, and financial loss.

Although the natural environment is no longer the limiting factor it once was, it is apparent that a knowledge of the environment in which we live is still important. It is important because the process of urbanization changes natural balances in the environment, because it results in a far more intensive use of our land and water resources than was common in the past, and because larger concentrations of people than ever before can be affected by a failure of the environment to withstand a change imposed on it by man.

As Southeastern Connecticut develops more fully in the future, its attractiveness and much of its environmental quality will be determined by how well we have understood, respected, and utilized the potentials and limitations of the land's surface.

In Southeastern Connecticut, three broad elements of the physical base influence the location and type of development within the region. The first is our maritime location, along Long Island Sound. Southeastern Connecticut's 64 miles of direct frontage on the Sound has already attracted considerable development and is expected to continue to attract industrial and residential uses as well as recreational facilities. A major challenge posed by this physical element is how to maintain open areas along the coast in the face of pressures for development. A second basic physical influence is exerted by the Thames River estuary. Flowing in a north-south direction for 14 miles between Norwich and New London, the Thames River is a natural physical spine for the region. Although its industrial potential is limited by rugged topography along its banks and its narrow, shallow channel, the river offers an unusually favorable setting for housing, recreation areas, and pleasure boating. Our third basic physical influence is the re-



gion's glaciated topography, which creates a wide range of physical settings, some suited for intensive development, some more suited for open space.

Southeastern Connecticut has a large physical potential for future growth. Of the region's 513-square-mile land area, only 40 square miles are presently occupied by urban and suburban development, while 65 square miles are in permanent open space and recreation areas. Fully four-fifths of the region's land area remain in an undeveloped state. This undeveloped land constitutes a reserve of space nearly four times the amount of land now occupied by development and permanent open space. Clearly, with some 408 square miles of undeveloped land, Southeastern Connecticut has more than enough room for the population growth it is likely to have in the next 35 years.

Due to its glaciation, the region has a varied topography. Although elevations rarely exceed 500 feet, the region's topography is rugged, with many steep-sided valleys. Soils are equally varied, ranging from well-drained sands and gravels to very wet or stony soils.

On the basis of soil characteristics and slope, we have identified three types of undeveloped land, each of which has different limitations and potentials for future use.

(1) Class A Undeveloped Land presents few physical obstacles to intensive development. It consists of well- to moderately-well-drained soils with slopes not exceeding 10%.

(2) Class B Undeveloped Land presents moderate difficulties for intensive development. Slopes range from 10% - 20% or the soil is only a thin covering over bedrock.

(3) Class C Undeveloped Land presents severe difficulties for intensive development. In the case of well-drained soils, slopes exceed 20%; other soils are unsuitable for intensive use because of their wetness or immediate proximity to bedrock.

We have grouped the first two land classes, A and B, together and termed these areas the "Prime Building Land" of Southeastern Connecticut. This better building land, which accounts for some 302 square miles of undeveloped land, is likely to receive most of the region's future development. Figure 2 on page 9 shows the location of this land.

The poorer building land, because of the substantial obstacles it presents for development, is better suited for some un-intensive use. These areas are logical sites for many of the region's future open space facilities, especially those requiring a large land area. If development occurs on the poorer land, it should be fully served with central water supply and sewage dis-



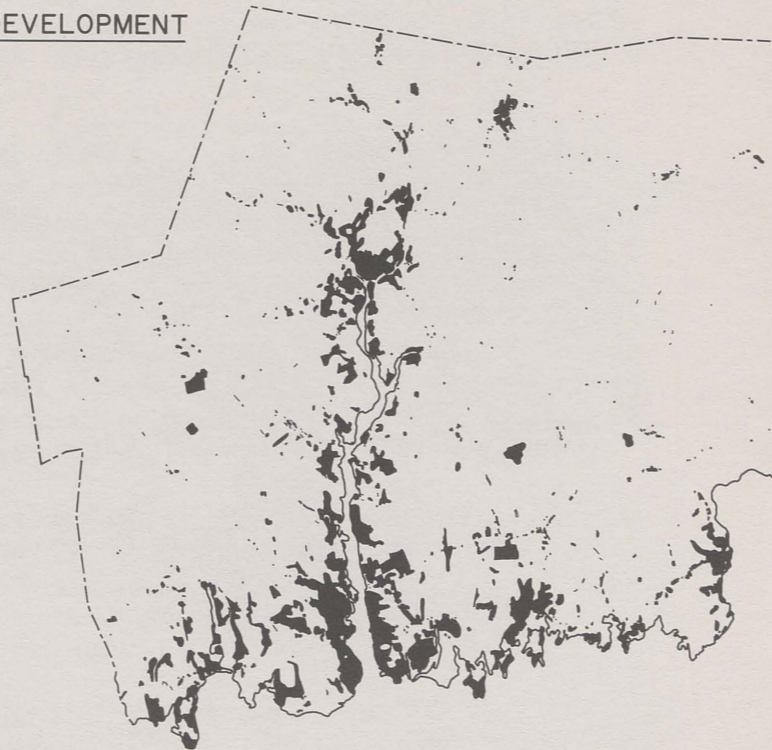
# PHYSICAL FACTORS INFLUENCING ALTERNATIVE PLANS

SOUTHEASTERN CONNECTICUT REGION

FIGURE 2

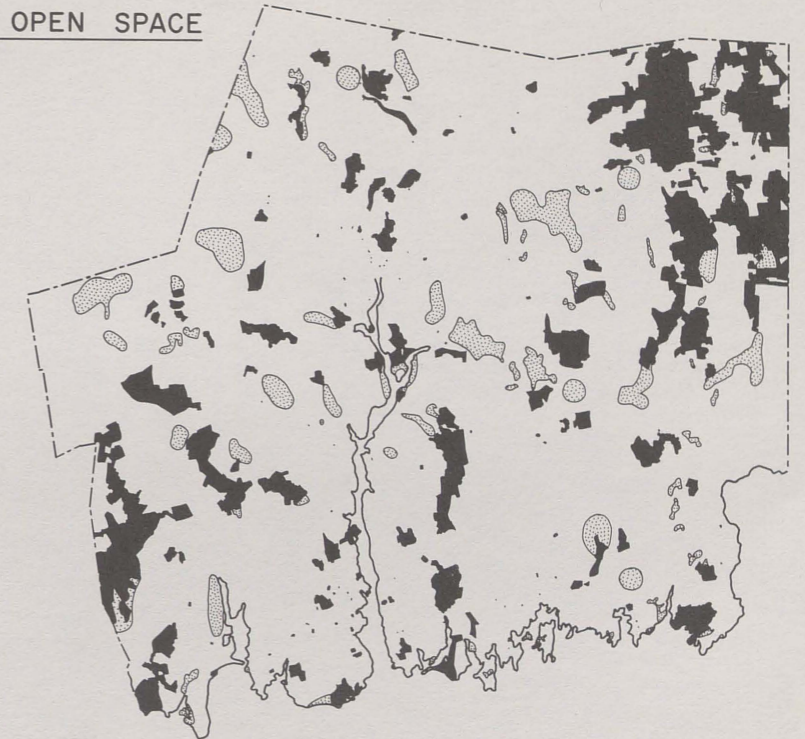
## EXISTING DEVELOPMENT

DEVELOPMENT INCLUDES EXISTING RESIDENTIAL, COMMERCIAL, INDUSTRIAL, INTENSIVE GOVERNMENTAL AND INSTITUTIONAL USES.



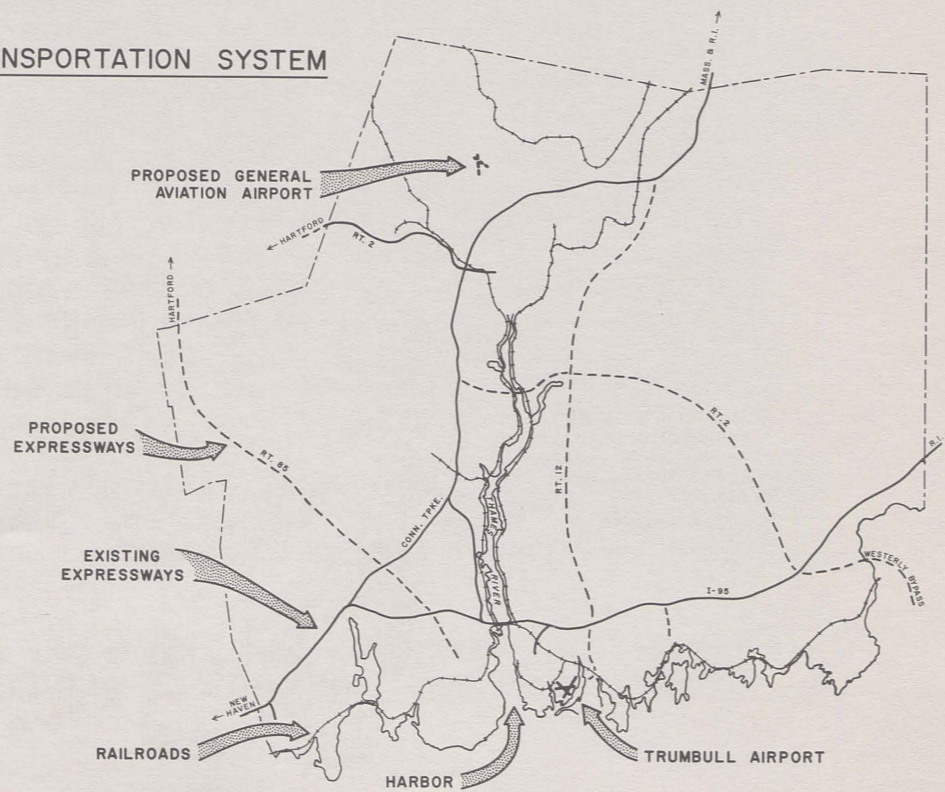
## RECREATION & OPEN SPACE

■ EXISTING AREAS  
 ▨ AREAS PREVIOUSLY PROPOSED BY SCRPA



## MAJOR TRANSPORTATION SYSTEM

NOTE: EXACT LOCATIONS OF PROPOSED EXPRESSWAYS NOT YET DETERMINED.



## PRIME BUILDING LAND

■ DEVELOPMENT, EXISTING AND PROPOSED OPEN SPACE AND RECREATION AREAS, INLAND WATER BODIES, VERY POOR BUILDING LAND  
 □ PRIME BUILDING LAND



SCRPA - 1966  
 701 PROJECT: CONN. P-47  
 FINANCED IN PART THROUGH REGIONAL PLANNING GRANTS FROM THE HOUSING AND HOME FINANCE AGENCY AND THE CONNECTICUT DEVELOPMENT COMMISSION



posal facilities or be on lots of at least three acres in the case of housing and on substantially larger lots for commercial or industrial purposes.

Much of Southeastern Connecticut's land surface also has a specialized potential for agriculture, water supply, conservation, or recreation. Particular consideration should be given to exploiting this potential.

Prime agricultural land, consisting of large concentrations of agriculture, out of the immediate path of development and on good quality agricultural soils, accounts for 33 square miles of the Class A land. Conversion of some of this land to house lots will continue. However, through a policy of concentrating, rather than scattering, future development, an effort can be made to encourage a continuation of agriculture in this region. A policy of encouraging a continuation of agriculture is important for aesthetic as well as economic reasons. Farm fields and pastures are key elements in Southeastern Connecticut's landscape.

Tidal marsh areas and interior wetlands present problems to development but have an exceptionally high conservation potential. These, along with several topographic features of geologic interest, merit consideration in an open space program, and they have previously been proposed for preservation by SCRPA.

Maintenance of an adequate water supply is the key to the future growth of Southeastern Connecticut. Unless the region can provide an assured supply of water for future residential and industrial use, it is not likely to attract new economic growth. By the year 2000 the region may require nearly 100 million gallons of fresh water per day, about 3.5 times the amount consumed in 1960. Present and planned reservoirs can only provide 27 million gallons of water per day. Fortunately, adequate potential reservoir sites, with an estimated combined yield of 115 million gallons per day, exist in this region to fill our needs, provided these potential sites are preserved for future water supply purposes rather than being built on or contaminated by pollution. The preservation of our most highly rated potential reservoir sites is essential to an adequate future water supply, and SCRPA has previously proposed that these sites be included in a regional open space program. We have also previously proposed that a regional water authority be created to develop on a comprehensive basis the water supply resources of this region.

The tidal marshes, interior wetlands, scientifically valuable topographic features, and the most valuable potential reservoir sites are included on Figure 2 on page 9 as open space proposals.

A long-standing and still unsolved problem in Southeastern Connecticut is water pollution. A study of sewerage problems



within the region by the engineering firm of Metcalf & Eddy found that substantial portions of our inland and coastal waters are polluted. Sewage collection systems serve only about half the region's population of 200,000, and not all of the sewage collected is treated. More than half of the liquid industrial wastes produced are not treated.

Our water pollution problems are chiefly of two types: (1) the direct discharge of untreated wastes into water bodies and (2) inadequate on-lot sewage disposal due to poor soil conditions, inadequate lot size, or improperly constructed or maintained septic systems. The answers to these problems are fairly clear from a technical point of view -- additional public sewage collection and treatment systems are required now and will be required in the future in areas of urban and suburban densities and higher standards governing septic systems will be needed in areas of rural density. But to date the general public has been extremely reluctant to accept the need for expanded public sewerage systems and effective, enforced sanitary regulations.

Water pollution problems and their solution affect the regional plan in several ways. First, it is clear from a review of present problems that public sewerage systems will be required in several of the already existing communities and should be planned for in any new communities with suburban and urban densities. Second, a regional land use pattern consisting primarily of contiguous development in compact settlements will be more easily and economically served with sewerage facilities than will a scattered pattern of development. Third, failure to solve our water pollution problems will inhibit future growth in the commercial, industrial, and tourism sectors of the region's economy. Finally, additional study should be undertaken after a regional land use plan is agreed upon to determine the most economical and politically feasible means of providing the sewerage facilities necessary.

#### LAND USE

In developing a plan for a region with more than 300 years of history, it is not possible to start with a clean slate. We must take stock of the activities here now, the variety of these activities, their densities, their spatial distribution, and their interrelationship.

In spite of its long history of settlement, only a small portion of Southeastern Connecticut is used for urban or suburban purposes. With a population currently estimated at about 200,000, the region has some 40 square miles of intensive development -- homes, stores, industries, governmental facilities, churches, and various institutional uses. This represents only 8% of the region's total land area. Another 65 square miles of land are given



over to permanent open space and recreation areas serving our population. Thus, about one-fifth of the region's land area is already taken up by intensive development and permanent open space.

The pattern of development within the region is very distinctive. Three-quarters of our urban and suburban development is concentrated along the coast and up both sides of the Thames River, in an area we have called the Development Core. This Core stands out sharply on Figure 2. Within the Development Core are our major communities of Norwich, New London, and Groton and a series of smaller communities such as Niantic, Mystic, Pawcatuck, Uncasville, Gales Ferry, Baltic, and Jewett City. Also within the Development Core are the region's major economic centers -- industrial, commercial, and governmental.

The Development Core has evolved over the years from the early settlements within this region, which were scattered along the coast and up the Thames River, where they could easily be reached by ship. This beginning of the Core was strengthened by topography and the use of water power for mills in the nineteenth century, which tended to make the valleys within the Core attractive locations for development. The existence of utilities in many parts of the Core further strengthened its position in this century.

Beyond the fairly compact Development Core lies the still primarily rural portion of the region. Development here has traditionally been scattered single-family homes along rural roads, with an occasional small crossroad hamlet. But the traditional picture is being shattered. Several large developments of 400 or more homes have located in remote rural surroundings within the last decade. These scattered developments pose very real service problems, for they are totally unrelated to existing utilities and often are far from existing schools. Scattered large-scale development in predominantly rural areas may be viewed as a trend which local and regional plans must try to incorporate into a more cohesive pattern of development.

The Development Core, with its concentration of intensive land uses at relatively high density, is a fact that cannot be ignored in preparing the regional plan. Any plan for Southeastern Connecticut must recognize and build on the existence of the Development Core. Indeed, the Core provides a dominant man-made feature in general harmony with the region's basic topographic structure, and as such it is a natural and quite suitable nucleus for the regional plan.

Permanent open space and recreation areas at first glance seem to follow no pattern at all, but study of Figure 2 will show that there is some general order to their location. The larger holdings, it will be noted, are located in the more rural portion of the region. For the most part, the Development Core contains the smaller reserves, usually local parks and playgrounds.



For the future, we propose that open space and recreation areas be more closely related to intensive development to assure the provision of an adequate amount of such areas close to our population centers. We also believe that as fully as possible specific permanent open space areas should be linked together. Several ways in which this could be done include the purchase of links between areas, the purchase of development rights, or the use of very low density zoning. Open space areas can also serve an important secondary function as separators between communities, when such separation is useful. Of particular concern is the fact that time is growing short for the preservation of key natural areas, such as wetlands, scenic topographic features, and reservoir sites. Unless a vigorous open space program is carried out over the next 35 years, most of these natural areas will be gone by the turn of the century.

A program of historic preservation should also be a part of the region's open space effort. Much of Southeastern Connecticut's distinction and charm is due to its heritage of historically and architecturally significant buildings. The accelerated rate of growth that the region can expect in the future will not be conducive to the preservation of this inheritance. A real effort will be necessary to save this important element of the region's character. A necessary first step is a detailed inventory of all historically and architecturally significant buildings and areas throughout the region. A start was made on this inventory in SCRPA's study, Open Space and Recreation, but the scope of that study was necessarily broad. Eventually, a more detailed inventory will be necessary, and upon its completion a specific preservation plan should be developed for Southeastern Connecticut in cooperation with the State Historical Commission and local historical societies.

## THE TRANSPORTATION SYSTEM

Regardless of the regional plan finally selected, Southeastern Connecticut must have a transportation system adequate to provide an efficient movement of goods and people within the region and to points outside the region. Four elements make up the region's transportation system -- highways, railroads, airports, and the harbor. Each of the major features of these elements is shown on Figure 2 on page 9.

Southeastern Connecticut is fortunate in having an exceptionally good expressway system at present, consisting of the Connecticut Turnpike, Interstate Route 95, and Connecticut Route 2. These existing expressways provide high speed access within the region's Development Core and between this region and major cities along the Atlantic Coast. With one exception, the north-south expressway east of the Thames River, the proposed future expressways shown on Figure 2 are short- and long-term objectives



of the State Highway Department, although the exact location and timing of most of these facilities has not yet been determined. SCRPA has proposed the Route 12 Expressway east of the Thames River as an ultimate replacement of the present two-lane Route 12. Such a location would also provide a complete circumferential expressway around Norwich and improved access to Trumbull Airport and Bluff Point State Park in Groton. The expressway network as laid down on Figure 2 would provide excellent communication within the region and between this region and other areas. It should be adequate past the year 2000.

Augmenting the expressway system, but not shown on Figure 2, is a system of secondary state highways. These are important as links between major communities and the expressways and as links between one minor community and another.

Several future transportation improvements outside the region are likely to have an impact on Southeastern Connecticut. Completion of the Route 2 and Route 85 expressways from this region to Hartford will make commuting to jobs in the Hartford area much more feasible for residents of this area and may well stimulate additional residential development within the region. The opening of Interstate Route 95 all the way to Providence is likely to make this region more attractive to workers commuting from Rhode Island. More tourists are likely to pass through Southeastern Connecticut when Narragansett Bay is bridged, improving the route to Cape Cod. And the proposed Long Island Sound bridge at Old Saybrook should bring more traffic, both commercial and vacation, through the region.

Southeastern Connecticut's railroad system consists of trackage of the New Haven Railroad along the coast and up the east bank of the Thames River and of the Central Vermont Railroad up the west bank of the Thames River. These locations provide service to the heart of the region's Development Core. While it is not anticipated that additional main trackage will be required, the present main tracks should be maintained and operated for at least freight service. It is not possible at this time to evaluate the impact that a possible high speed rail line between Boston and Washington would have on this region. Upon completion of studies at the national level the possibility of such a line passing through the region should be examined.

The region presently has only one commercial airport -- Trumbull Airport in Groton. Two smaller private airports do exist, one in Waterford and one in Griswold. As part of both the National Airport Plan and the statewide airport plan, the top of Plain Hill in Norwich is proposed as the location of a future General Aviation Airport. A General Aviation Airport serves small aircraft and would not be suitable for major traffic.

An evaluation of the long-term feasibility of the proposal that a major jet airport be located in eastern Connecticut is not



now possible in the absence of a truly long-range study of the nation's airport needs. Until such a study is conducted, this proposal is entirely speculative and cannot be viewed as a transportation element in the regional plan for Southeastern Connecticut. We believe that a study of the long-range feasibility of the jet port proposal by the Federal Government would be desirable to answer authoritatively whether such a facility is needed in this section of Megalopolis. If it is found that such a facility is desirable to serve the nation's air transportation needs, it would fall to the Regional Planning Agency to evaluate the impact, desirability, and possible location of such an airport in this region.

The port of New London plus specific installations and industries along the Thames River up to Norwich handle cargo arriving by ship. Improvement of harbor facilities and the maintenance of an adequate channel in the Thames River are essential elements of any economic development program for the region.

#### COMMUNITY DEVELOPMENT CONSIDERATIONS

Without doubt, people are the most basic consideration in preparing a regional plan. The number, type, and location of a region's residents will strongly affect the use of land and our public facility and service requirements. For this reason, an estimate of the anticipated population growth within the region is a necessary consideration in preparing the plan.

Southeastern Connecticut's population in 1960 was 174,412 and is now estimated to be about 200,000. It is estimated that by 2000 the region can reasonably expect a population of about 350,000. This estimate has been used for design purposes in preparing each of the alternative plans presented in this report. The impact of this population growth on public facilities and services will be tremendous. Water consumption is expected to increase about 3.5 times; we will need about 1,300 more elementary and secondary classrooms than at present; at least 800 more general hospital beds will be required than were available in 1960, and all other services and facilities will be similarly affected.

In addition to the total number of people to be served, their distribution within the region directly affects facility and service needs and problems. Until recently, the region's population has been concentrated in the Development Core, extending along the coast and Thames River. But, as we noted earlier, there has been a recent trend toward major subdivisions being located in the rural portion of the region. If this trend continues unabated, the distribution of population in the future will follow a very scattered pattern. Three physical planning problems are presented by a scattered population.

First, scattered housing over extensive areas of the region will have an adverse effect on Southeastern Connecticut's



appearance. While compact community areas can be made attractive focal points in our landscape, large amounts of scattered housing create a disorganized landscape which seems to contain much more development than it really does.

Second, the problem of where to locate new schools, fire houses, recreation areas, and other public facilities is made more complex with a scattered population. When settlement is concentrated in a compact area, site selection for public facilities is relatively simple. But when homes are scattered haphazardly over the landscape, it is difficult to find a single site that will adequately serve the entire population. It may even be necessary to duplicate facilities, thereby reducing efficiency and adding to the burdens of the taxpayers.

Third, a scattered population requires longer communication lines than does a more concentrated population. The road system must be more extensive. School bus routes must be longer and utility lines must be extended farther. Again, extended communication lines mean added cost to the municipality.

A goal of the regional plan will be to encourage the formation of compact communities, more likely to retain Southeastern Connecticut's aesthetic quality, more easily provided with utilities and services, and offering a broader social environment.

The most direct effect of a population growth of 150,000 persons will be a sharp rise in the demand for new housing. We can anticipate that close to 50,000 new homes will be needed by 2000, not counting the need to replace present structures that will be worn out by that date. This new housing will be needed in a variety of forms. The single-family home is expected to continue its popularity, but we anticipate a need for a greater variety of housing than presently is provided. In 1960, 68% of all housing units in the region were single-family homes, but evidence indicates that there is a growing demand for additional apartments. The reasons for this are: the area's high concentration of military personnel and their families, who total 17% of the region's population, the growing number of young families, and the growing number of older couples. All of these groups have a preference for apartments. It appears from all evidence now available that Southeastern Connecticut needs a greater variety of housing to permit a range of choice for our population. In 1967 SCRPA will conduct a more detailed study of short-range housing needs to provide a basis for an immediate action program.

Not all housing in Southeastern Connecticut presently provides a safe and attractive living environment. Nearly one out of every five housing units in the region was in poor condition in 1960. This unsatisfactory housing totaled nearly 9,500 units, many of which are likely to need replacement before the end of this century. As might be expected, the major concentra-



tion of substandard housing is in the larger communities of Norwich, New London, and Groton. A combination of urban renewal action and the adoption and enforcement of local housing and building codes seems needed.

Economically, Southeastern Connecticut's greatest need is a more diversified employment base. Nearly two-thirds of the region's employment is now related directly or indirectly to the nation's defense industry. To obtain a more diversified economy, the region must seek: (1) to expand its present non-defense manufacturing activities, (2) to attract new non-defense manufacturing activities, and (3) to expand its tourist industry. The regional plan by itself cannot achieve these objectives, but in preparing the plan we can and must consider these aims in determining our land use, transportation, and facility proposals.

Five specific physical aspects of the plan will affect efforts at economic diversification. First, there is clearly a need for designating and preserving selected areas for future industrial use. Second, public water and sewer facility proposals must reflect industrial and commercial needs. Third, areas to be used for industrial purposes must be served by adequate transportation facilities. Fourth, a variety of housing must be available for an expanded work force. Finally, the amenities which attract tourists to Southeastern Connecticut and which provide a pleasant living environment must be preserved and enhanced. If we fail to provide adequately for these physical elements in the plan and to follow-up the plan proposals with an action program, no amount of promotional effort by area Development Commissions or Chambers of Commerce will balance the deficit.

A second, but very important, economic consideration is our retail trade structure. With shifts in population, the geographic structure of retail trade in Southeastern Connecticut has been changing and will continue to change.

Of the urban towns, New London and Norwich face two major obstacles to future retail expansion. First, population -- and potential customers -- are moving farther and farther away from the central business districts of New London and Norwich. Second, traffic congestion and parking problems in these CBD's are increasing. Both of these problems tend to lengthen the time it takes a shopper to travel from the suburbs to the CBD. Since we have found that nearly 81% of all shopping trips in this region require a one-way travel time of less than ten minutes, the conclusion that the two older CBD's of the region are at a competitive disadvantage is inescapable.

Does this mean total decline for the older CBD's? It need not, if access and parking can be improved and if the CBD's concentrate their efforts into shopping goods and specialty goods. These are the retail areas where the CBD's are now strongest.



Customers are also willing to travel much farther for specialized goods than for food. Even with a successful CBD promotion of shopping goods, it is likely that the New London and Norwich CBD's will command a smaller portion of the region's total retail sales than they have in the past.

Groton, although it is classed as an urban town along with New London and Norwich, presents an altogether different picture. Groton is still growing rapidly and should continue to do so for some time. This means that Groton is the one urban town with the advantage of a rapidly expanding pool of potential customers. We can look for an expansion of retail outlets and sales in Groton. Groton is now considering the creation of a major highway-oriented CBD in the Long Hill area, between U. S. Route 1 and Interstate Route 95. If developed, this new center can be expected to improve sharply Groton's retail sales and to create three rather than two major subregional shopping centers.

The suburban towns face a retail future quite a bit different from that facing the urban towns. The two main forces operating on the future of retailing in the suburban towns are their rapid growth of population and their present low state of retail development. Each of these factors will encourage an expansion of retail activity in the suburban towns, first in food, automotive, and building supplies and ultimately into the shopping goods now heavily concentrated in the urban towns. When a significant expansion into shopping goods will occur is uncertain, but it now appears that a population of at least 15,000 - 20,000 persons is needed to trigger this type of development. Waterford is now at this population level. Stonington is somewhat farther behind, and the remaining seven suburban towns of East Lyme, Griswold, Ledyard, Lisbon, Montville, Preston, and Sprague are considerably farther behind. From a community development standpoint, it appears desirable that future major commercial development in the suburban towns be encouraged to locate in well-designed community shopping centers rather than in scattered or strip commercial sites throughout the towns.

The rural towns now have a small population and an even smaller retail volume. As these towns suburbanize, an expansion of retail activity can be expected. In North Stonington and Salem, which are proposed as possible sites for substantial future population growth, community shopping centers could be needed. But it is unlikely that even by the year 2000 the remaining rural towns of Bozrah, Franklin, and Voluntown will be sufficiently large to support more than convenience goods stores handling food, automotive, and building supplies.

Let us turn, now, from our review of physical and economic considerations in the plan to the less tangible but equally vital matter of regional goals underlying the plan.



## GOALS FOR SOUTHEASTERN CONNECTICUT

Most people have a set of personal goals toward which they strive. Included on the list are likely to be such aspirations as: "to be respected," "to be popular," "to give my children a good education," or "to earn enough money to live comfortably." Usually our personal goals are pretty hazy and seldom are set forth in a logical, written form. But taken together, our personal goals do provide a certain degree of direction to our actions. Without a set of goals, even though they may only be implied, our lives would tend to be purposeless and our efforts uncoordinated and contradictory.

In a similar way, a local or regional plan prepared without a set of guiding goals is likely to wander and to contain conflicting proposals. With a precise set of goals for the region, we have a measuring stick against which to judge the plan. If, for example, one of the region's goals is "to assure an adequate supply of fresh water for future residents and businesses," but the plan contains no proposals regarding the preservation of future reservoir sites, we know that the plan is not complete. Similarly, a set of goals can point up possible areas of conflict. One goal, for example, might call for "a lessening of municipal expenditures," while another proposes "the development of attractive, fully equipped industrial parks." Obviously, it will be hard to achieve both a reduction in municipal expenditures and, at the same time, make the capital expenditures necessary to create an industrial park. Here is a potential conflict among goals that may require a re-examination and revision of the goals statement.

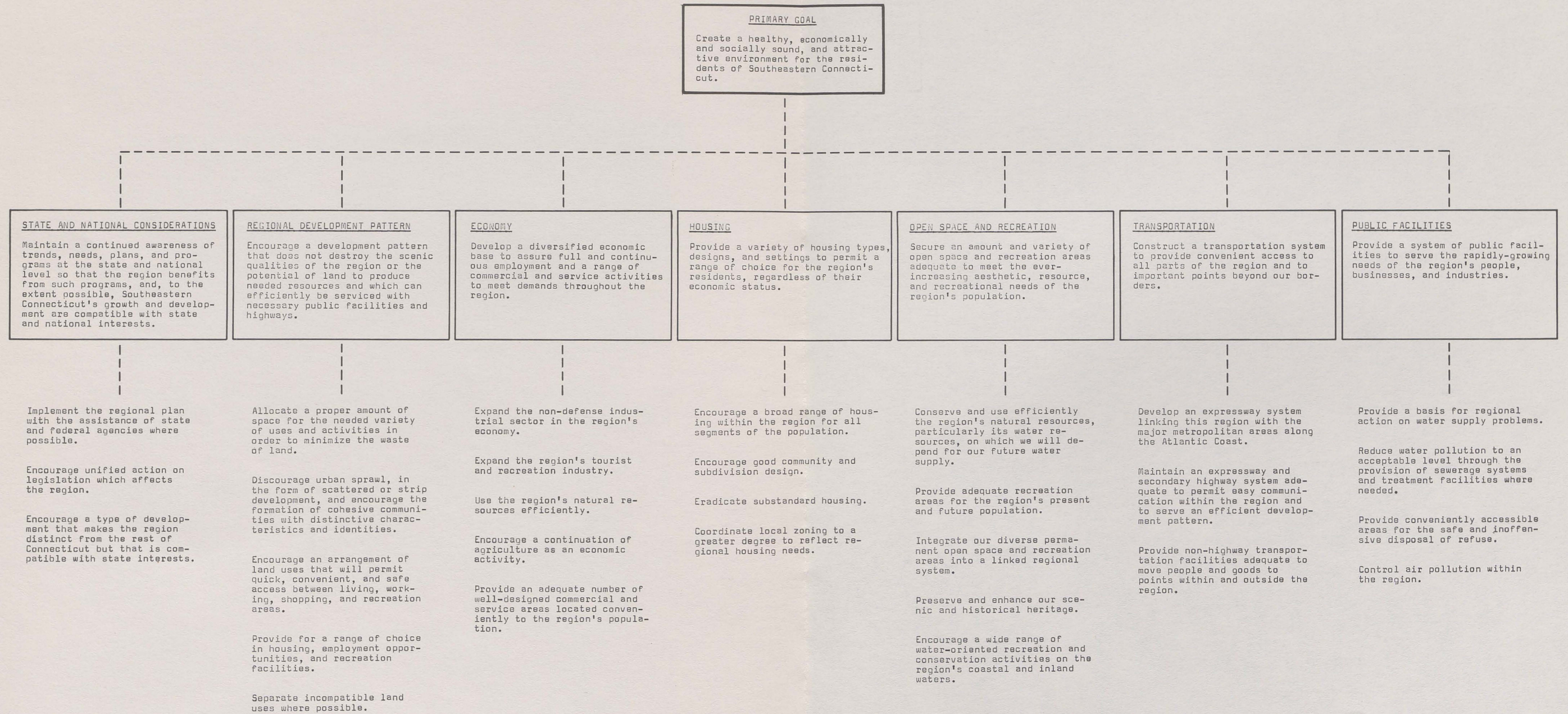
Goals are not all of the same magnitude. Thinking again in terms of personal goals, the most important would be "to live," while under this primary goal we could list a rather extensive number of secondary and subgoals qualifying the manner in which we wanted "to live." Similarly, in preparing a set of goals to serve as a guide for a plan, one must begin with a very broad, all-encompassing primary goal which may then be broken down into a series of component secondary goals, each of which, in turn, can probably be divided into additional subgoals.

On Figure 3 we present a set of goals for Southeastern Connecticut. These goals have previously been reviewed by local planning and zoning commissions and reflect suggestions made by them. We begin with a very broad primary goal. This is then subdivided into seven secondary goals, each of which covers one area of concern in the regional plan. Each of the secondary goals is further subdivided into component subgoals. The goals reflect the findings of SCRPA's previous studies and the views of the citizens serving on local planning and zoning commissions and the Regional Planning Agency. Together, the goals are a major consideration in preparing both the alternative land use plans and the regional plan which will finally be recommended by SCRPA. The goals also are the aims against which we will measure both the alternatives and the recommended plan.



# GOALS FOR SOUTHEASTERN CONNECTICUT

FIGURE 3





## DEVELOPMENT CONCEPTS

Southeastern Connecticut could be encouraged to develop this means of a rather wide variety of land use patterns in the future. To cite two extremes, we could encourage concentration of all new development along the Thames River, giving the region an extremely high density urban core, as we have seen elsewhere all over the world. Or we could encourage all new growth to take place at low density and in a scattered pattern, giving the region a violent case of urban sprawl. Between these extremes are a number of other possible land use patterns that had to be considered in preparing the alternatives. Land use changes, in all, as found here involve different land use patterns or "development concepts," into which the region in future could grow.

### III. ALTERNATIVE LAND USE PLANS

- DEVELOPMENT CONCEPTS
- REVIEW OF ALTERNATIVES
- STAFF RECOMMENDATIONS
- THE NEXT STEPS

It was not possible to prepare a separate report for each of the development concepts presented in the previous chapters. Some were not suitable for separate reports, and some could not be related to the region's present development, some would require reduced resources, others would require additional resources, and some were greatly deficient in meeting the region's overall goals. The final five development concepts to five, each of which contains features that offer some practical advantages to the region.

The final five concepts illustrating the alternative land use plans are shown on Figure 4 on page 23. A brief discussion of each will provide a background for our analysis of the alternative plans.

**Linear Concept:** The Linear Concept most closely reflects the region's existing pattern of development, in which most of the land use development is located in the coastal region and in the Thames River Valley as far north as South Old Saybrook. Under this concept, intensive development in the future would concentrate within these same corridors, leaving the hinterland for low density development and open space.

A development pattern based on this concept would strengthen the political and social unity of the region. The major new growth centers of the region could be concentrated in a fairly compact area, and urban development and growth would be highly compatible from all parts of the region. Major employment activities would be located along the Thames River and the Connecticut River. A truly regional approach would be encouraged, since most of the needs of the region could be met in a centralized manner. The major transportation corridors oriented toward major watercourses. The major transportation



## DEVELOPMENT CONCEPTS

Southeastern Connecticut could be encouraged to develop into any one of a rather wide variety of land use patterns in the future. To cite two extremes, we could endeavor to concentrate all new development along the Thames River, giving the region an extremely high density urban core, or we could encourage all new growth to take place at low density and in a widely scattered pattern, giving the region a violent case of urban sprawl. Between these extremes are a number of other possible land use patterns that had to be considered in preparing the alternative land use plans. In all, we found some twelve different land use patterns, or "development concepts," into which the region in theory could grow.

It was not possible to prepare detailed alternative land use plans for all twelve theoretical concepts, but each of the concepts was evaluated against the planning considerations and goals presented in the previous chapter. In the course of our review, concepts were dropped from further study for a number of reasons. Some were not suitable to the region's topographic character, some could not be related satisfactorily to the region's present development, some would not provide protection for our natural resources, others would have encouraged aesthetic problems, and some were grossly deficient in providing a basis for meeting the region's overall goals. This evaluation reduced the development concepts to five, each of which contains features that offer some practical advantages to the region.

The final five concepts influencing the alternative land use plans are shown on Figure 4 on page 23. A brief discussion of each will provide a background for our analysis of the alternative plans.

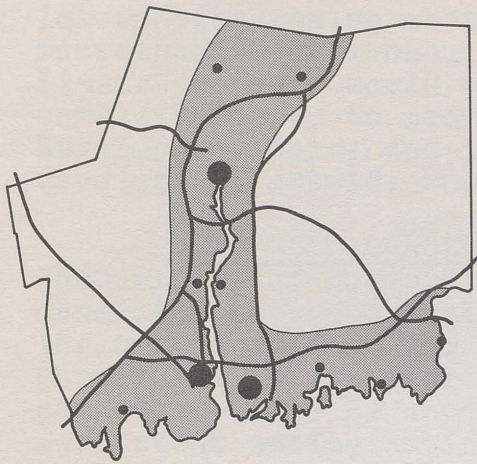
LINEAR CONCEPT: The Linear Concept most closely reflects the region's existing pattern of development, in which most intensive development is located in the coastal margin and up the Thames River Valley as far north as Jewett City. Under this concept, intensive development in the future would concentrate within these same corridors, leaving the hinterland for low density development and open space.

A development pattern based on this concept would strengthen the political and social unity of the region. The major economic centers of the region would be connected by a fairly continuous band of urban development and would be easily accessible from all parts of the region. Major employment activities would be located within or on the fringes of the coastal and Thames River Valley corridors. A truly regional approach toward providing facilities would be encouraged, since most of the areas needing public water or sewerage would be concentrated in a continuous corridor oriented toward major watercourses. The major expressway

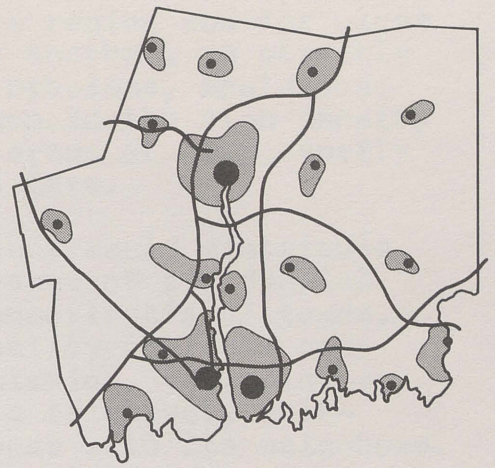


# DEVELOPMENT CONCEPTS INFLUENCING ALTERNATIVE PLANS

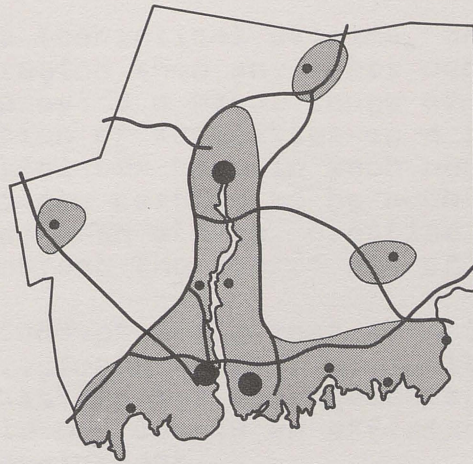
## SOUTHEASTERN CONNECTICUT REGION



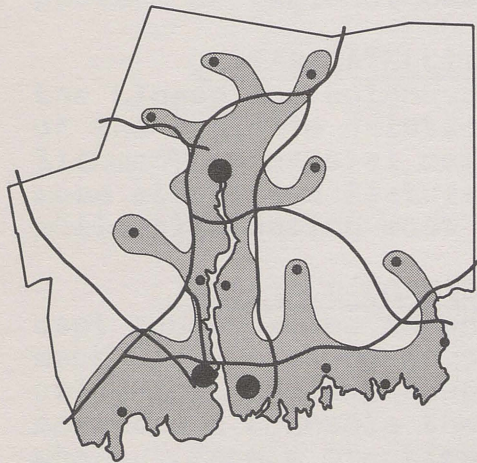
LINEAR



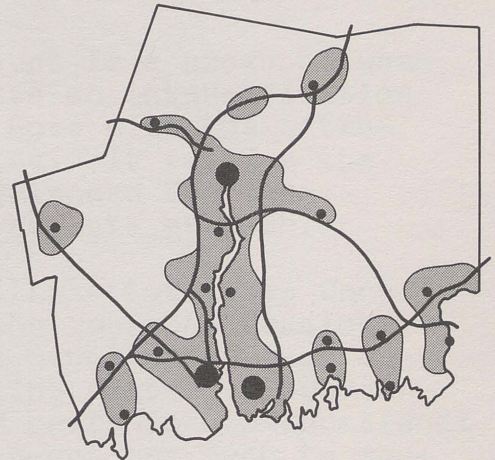
BALANCED



LINEAR-SATELLITE



MULTIPLE CORRIDORS



EXPRESSWAY-ORIENTED

SCRPA - 1966

701 PROJECT: CONN. P-47

FINANCED IN PART THROUGH REGIONAL PLANNING GRANTS FROM THE HOUSING AND HOME FINANCE AGENCY AND THE CONNECTICUT DEVELOPMENT COMMISSION

### LEGEND

- HIGH DENSITY CENTERS
- MEDIUM DENSITY DEVELOPMENT
- LOW DENSITY DEVELOPMENT & OPEN SPACE
- FUTURE EXPRESSWAY SYSTEM

FIGURE 4



system for a linear form of development already exists to a large extent.

Implementation of the Linear Concept would call for very low density zoning over major portions of the region and for close coordination of zoning from one community to another. A strictly linear approach would encounter topographic problems, would pose some difficulty to providing needed open space in the high density Development Core, and ignores some existing areas of high density development outside the region's Development Core.

BALANCED CONCEPT: The Balanced Concept would distribute industrial and commercial activities and a range of residential densities throughout all of Southeastern Connecticut's 17 towns. The amount of land for each use in a municipality would be proportionate to its share of the region's population. In this way, each town would be encouraged to develop as a relatively self-sufficient entity having little interdependence with its neighbors.

Carried to its theoretical extreme, this approach does more to fragment the region than any other concept. Each municipality would have to provide a broad range of facilities and services. Costly duplication of facilities on a regional scale would necessitate a substantial tax base in each municipality. Furthermore, some communities are certain to be much more attractive to new economic activities than others, creating a decided economic imbalance that would defeat the entire aim of the Balanced Concept.

The Balanced Concept would most effectively retain the individuality of the region's several communities and is a convenient form under our existing tax arrangements. But in its pure form this concept would not create an efficient and economical pattern of regional development.

LINEAR-SATELLITE CONCEPT: This concept is a cross between the Linear and Balanced Concepts. It combines an intensification of the region's existing linear Development Core with the establishment of several completely new communities. It retains the more attractive features of the Linear and Balanced Concepts, while eliminating most of the objectionable aspects of each.

MULTIPLE CORRIDORS CONCEPT: The Multiple Corridors Concept concentrates intensive development in the region's Development Core, with fingers extending outward to minor centers of development. This concept builds on the existing pattern of development and connects the presently fragmented parts into a functional whole. From a practical standpoint, this concept has much to recommend it: it could be serviced without major difficulty, it recognizes development trends, and it attempts to integrate presently scattered development into the Development Core. The major deficiency of this concept is that, basically, the pattern is controlled sprawl, which would consume more land than the other concepts and



would be more likely to create a poor aesthetic environment because of continuous development over broad areas of the region.

EXPRESSWAY-ORIENTED CONCEPT: This concept recognizes the strong influence the expressway system will exert on future land use in Southeastern Connecticut and distributes higher density activities in close proximity to key expressway interchanges. Areas remote from expressways would be retained for low density development and open space. This concept may also be considered to be "practical," building, as it does, on the natural ability of expressways to attract intensive land uses. In its pure form, however, the Expressway-Oriented Concept ignores some existing areas of higher density development. Good implementation of this concept would call for the preparation and execution of carefully designed plans for the future development of the major interchange areas, but such plans would be needed in the other concepts as well.

Each of these five development concepts is attractive for different reasons: the Linear for its adherence to the existing Development Core; the Balanced for its fostering of community identity; the Linear-Satellite for its ability to combine the reality of the Development Core with local desires for greater community balance and identity; the Multiple Corridors for its recognition of the existing development pattern and trends; and the Expressway-Oriented for its exploitation of the natural effect of our expressway system on development. But, as we have seen, there also are drawbacks to each of the concepts in its pure form. For this reason, in preparing our three alternative land use plans, we have combined features from each of the five development concepts rather than clinging completely to any single concept. In this way, the major advantages of each development concept can be utilized while its disadvantages are minimized. The result is not a series of theoretically pure alternative land use plans, but we believe it is a series of practical alternatives.

## REVIEW OF ALTERNATIVES

### DESCRIPTION OF ALTERNATIVE PLANS

Because of the combination of elements from each of the five development concepts, there are not wide differences among the three alternative land use plans presented on the map at the rear of this report. Where they were appropriate to solving a problem or achieving a goal, elements from each of the development concepts were used in producing the alternatives. The Linear Concept is embodied in all three plans in a strengthened Development Core. The Balanced Concept can be found on the Linear-Minor Satellite Plan, while the Linear-Major Satellite Plan and the Expressway-Oriented Plan reflect the Linear-Satellite Concept. All three plans show some influence from the Multiple Corridors Con-



cept, but this concept is most strongly seen on the Expressway-Oriented Plan. And finally, there is an obvious link between the Expressway-Oriented Concept and Plan.

In addition to having broadly similar land use patterns, each of the alternative plans has the same basic expressway and secondary highway network. This highway system should be adequate to serve the land use distribution under any of the three alternatives. A further uniformity from plan to plan is the assumption that all medium through very high density areas will be served by public water and sewerage facilities. Although the geographic location of these areas varies from plan to plan, this service assumption is held constant.

Each of the three alternative plans -- the Linear-Minor Satellite, the Linear-Major Satellite, and the Expressway-Oriented -- has been successfully tested in detail against the region's goals and could more than accommodate the region's expected population of 350,000 at the end of this century. We believe that any one of the three alternatives could be used successfully as the basis for guiding future regional growth. There are, however, differences in the way each alternative does the job, and these differences may be of paramount interest to the region's communities and to state and federal agencies. The key differences among the plans will become apparent in the discussion which follows.

LINEAR-MINOR SATELLITE PLAN: This plan envisions a region in which the most intensive development would be concentrated in our already existing Development Core, extending from Norwich south along both sides of the Thames River and along the coast. Norwich, New London-Waterford, and Groton would remain as major regional centers, with secondary centers in Niantic, Mystic, Stonington Village, Pawcatuck, Uncasville, Gales Ferry, and Jewett City. Minor satellite communities of medium density, with primarily single-family housing and little industry, would be encouraged in several parts of the region. Specific areas for such satellites are: North Stonington, the Chesterfield portion of East Lyme and Montville, Salem, Ledyard Center, Bozrah, Preston, Voluntown, and Sprague. Additionally, a corridor of medium density development is proposed, extending out of the region's Development Core and up the ridgeline south of the Oxoboxo River in Montville.

The Linear-Minor Satellite Plan would be capable of serving more than 378,000 residents, or some 28,000 more people than are expected by our target year of 2000. Thus the development areas could be reduced somewhat in size or one or more of the satellite communities could possibly be eliminated after additional evaluation. The bulk of the region's population, some 86%, would be located in the linear Development Core under this plan. The satellite communities as presently shown on this plan could absorb nearly 53,000 people. Most of the individual satellites



would range in population size from 6,000 to 12,000 residents. A review of the probable population in each of the region's towns is presented on Table 1 on page 28.

Because of their small size, most of the minor satellite communities would require only limited commercial and service centers. These should, however, be planned specifically as small community centers, generally in conjunction with governmental and cultural facilities, rather than being allowed to evolve in a widely scattered pattern. Most of the minor satellite communities would not contain regionally significant concentrations of industry. But each might contain smaller, locally significant industrial areas.

The pattern of open space and low density development areas shown on the map is a refinement of the Tentative Open Space and Recreation Plan contained in SCRPA's 1964 report, Open Space and Recreation. The pattern proposed would accomplish several purposes. (1) It would set aside approximately an additional 30 square miles of land and water for necessary permanent open space and recreation areas of regional significance. (Presently, 65 square miles of all types of open space and recreation areas are reserved.) The regionally significant areas proposed for permanent reservation include potential reservoir sites, major tidal marsh areas, interior wetlands with a high conservation potential, outstanding topographic features, and additional state parks. Necessary local open space and recreation areas would be in addition to this regionally significant total. (2) The proposed pattern would link together the major permanent open space areas. (3) The open space and low density development areas would be used to help shape the future pattern of development in the region.

LINEAR-MAJOR SATELLITE PLAN: The major difference between this plan and the Minor Satellite Plan is in the number and character of satellite communities proposed. The strengthening of the region's Development Core and the extension of a corridor of development up the ridgeline south of the Oxoboxo River, as proposed in the Minor Satellite Plan, would be retained. But in place of the eight small satellite communities recommended in the Minor Satellite Plan, this plan proposes the creation of five major satellites. These communities would be located in North Stonington, Ledyard Center, Salem, Preston, and Jewett City. Two of these -- Ledyard Center and Jewett City -- could build on fairly substantial existing development, and the satellite in North Stonington would be related to a smaller existing village. But the satellites proposed for Salem and Preston would represent entirely new communities.

A total population of 386,000 could be absorbed under this plan, or 36,000 more than our anticipated year 2000 population. Of the total, about 61,000 people could be accommodated in the satellite communities. Some 84% of the population capable of



TABLE ONE

## POPULATION DATA FOR ALTERNATIVE PLANS

## Southeastern Connecticut Region

<u>TOWN</u>	ANTICIPATED POPULATION UNDER			
	<u>1960 POPULATION</u>	<u>MINOR SATELLITE PLAN</u>	<u>MAJOR SATELLITE PLAN</u>	<u>EXPRESSWAY- ORIENTED PLAN</u>
Bozrah	1,590	4,300	4,600	4,000
East Lyme	6,782	26,100	22,700	19,000
Franklin	974	3,900	3,900	3,900
Griswold	6,472	11,500	11,600	13,100
Groton	29,937	59,900	62,400	61,600
Ledyard	5,395	27,200	29,400	29,300
Lisbon	2,019	4,100	8,300	4,100
Montville	7,759	35,100	32,500	31,800
New London	34,182	41,200	40,400	40,100
North Stonington	1,982	13,800	15,700	10,600
Norwich	38,506	50,300	52,700	56,300
Preston	4,992	8,600	13,800	16,200
Salem	925	9,600	13,200	12,500
Sprague	2,509	5,100	4,100	4,500
Stonington	13,969	33,500	30,600	31,100
Voluntown	1,028	4,600	2,000	2,000
Waterford	<u>15,391</u>	<u>39,500</u>	<u>38,100</u>	<u>43,500</u>
TOTAL:	174,412	378,300	386,000	383,600



being housed under this plan would be located in the linear Development Core, including its extension south of the Oxoboxo River in Montville. Each of the satellite communities would range from about 11,000 to 14,000 residents, and all of these would be capable of substantial expansion beyond the size shown on the plan.

Because of their larger size, the major satellites would be designed differently from the minor satellites. Major satellite communities would provide a broader range of housing, including apartments at high density, than would the minor satellite communities. With the exception of Ledyard Center, each of the major satellites would contain a regionally significant industrial area. Commercial facilities would also be broader than those under the Minor Satellite Plan. And in general, the major satellites should be able to provide a broader physical, economic, and cultural environment than the minor satellites.

The open space and low density development areas would be substantially the same as under the Linear-Minor Satellite Plan.

EXPRESSWAY-ORIENTED PLAN: In basic layout, this plan is very similar to the Linear-Major Satellite Plan just discussed. There are, however, significant differences between the two. As is implied by its name, the Expressway-Oriented Plan is designed to capitalize on the natural tendency of intensive land uses to locate close to major expressway interchanges. This is achieved by locating higher density residential areas, important community commercial areas, and major industrial areas close to expressway access points. Thus, although the location of communities within the region is basically the same as under the Linear-Major Satellite Plan, the location of land uses within most communities is shifted to give them an expressway orientation. In two cases, Preston and North Stonington, new development would be linked with the Development Core rather than being in the form of isolated satellite communities. Another variation occurs at the intersection of Interstate Route 95 and the proposed Route 2 Expressway, where on this plan a small satellite community is envisioned.

This plan could accommodate nearly 384,000 people, 91% of whom would be located in the Development Core or its extensions. Only 34,000 people would be located in outlying satellite communities.

A bolder open space plan is possible under the Expressway-Oriented Plan. Through a shift in developed land uses from the coast to Interstate Route 95 east of the Thames River, it would be possible to preserve more of the still undeveloped areas along the coast. These open areas along the coast are among the most important scenic resources of the region and will be obliterated by development unless they are included in an open space preservation program. Preservation could be by a combination of state, local, and private acquisition, the purchase of scenic easements,



and low density zoning where appropriate. Three additional areas of regional significance are proposed by the SCRPA staff for preservation under this plan. These are the eastern coastal portion of Wamphassuck Neck in Stonington; an area in Groton on the western bank of the Mystic River south of Interstate Route 95, which is an important element in the Mystic River landscape; and the exceptionally scenic coastal margin along Palmer Cove, at the foot of Fort Hill, in Groton.

## EVALUATION OF ALTERNATIVE PLANS

As a basis for evaluating the alternative land use plans, we have selected nine points on which to compare each plan. Each of these points is a prime concern in the plan and reflects the basic planning considerations and regional goals presented in the previous chapter. We should reiterate, the basic regional goals could be achieved under any of the alternatives. The main differences among the alternatives are the degree to which each would work toward realizing the region's goals and the methods by which they would accomplish this.

1. Regional Land Use Pattern: Here, our aim is a land use pattern which maintains the region's scenic and historic heritage, protects our natural resources and can be efficiently serviced by public facilities and highways. The Linear-Minor Satellite Plan is the least successful of the three alternatives in meeting this goal. The larger number and smaller size of the satellites under this plan will pose greater servicing problems than will the larger communities proposed under the other two plans. Of the three plans, the Expressway-Oriented Plan rates highest in promoting the general land use pattern we desire. The fairly contiguous Development Core would contain nine-tenths of the region's population under this plan, which should make the provision of needed facilities economically more feasible than under the satellite plans. Communication within the region should be easier, with intensive land uses oriented to the expressway access points. Finally, the more extensive open space element of the Expressway-Oriented Plan would promote the preservation of a greater amount of our scenic and historic heritage than either of the other plans.

2. Community Development: Under this general heading, our objectives are communities with distinctive identities, well-designed centers, and a high quality living environment. While all three alternatives could generally meet this goal, the Expressway-Oriented and Linear-Major Satellite Plans, because they propose larger communities with a greater range of housing and economic activities, are more likely to encourage the type of communities we seek than would the Minor Satellite Plan.

3. Housing: The major housing goal is to provide a variety of housing choice for all economic levels of the population.



To achieve this, a broad range of housing densities and types will be needed. Each of the plans provides for a range of housing within the total region. But the Linear-Minor Satellite Plan, under which the satellites would provide only medium density housing, does not provide quite as broad a range of housing choice as the other two alternatives. Both the Linear-Major Satellite and Expressway-Oriented Plans would encourage the development of a broader range of housing in both existing and proposed community centers than would the Minor Satellite Plan.

4. Economic Activity: A more diversified economic base is the most important economic goal for Southeastern Connecticut. Industrial diversification would be possible under all three plans, although the Expressway-Oriented and Major Satellite Plans have a slight advantage in providing a greater choice in industrial locations and greater ease of utility installation. Of these two plans, the Expressway-Oriented, with its greater integration of economic activities with the highway system, seems more desirable. Expansion of the region's tourist and recreation industry would be stimulated most under the Expressway-Oriented Plan, which proposes more extensive preservation of open space in the coastal sector. In total, then, the Expressway-Oriented Plan appears to offer a more favorable environment for economic diversification than the other two alternatives.

5. Commercial Centers: Our goal here is to provide an adequate number of well-designed commercial centers located conveniently to the region's population. This objective is most likely to be achieved under the Major Satellite and Expressway-Oriented Plans, because they propose larger, more diversified communities than does the Minor Satellite Plan. A real advantage afforded by the Expressway-Oriented Plan is that the attractive power of the expressway on commercial location is recognized and becomes a basis for a new orientation for each community.

6. Open Space and Recreation: The provision of necessary open space and recreation areas and the preservation of our scenic and historic heritage should be major goals of the region. These goals are deemed to be so important that each of the three alternative plans has been designed to meet at least our minimum open space needs. There is little difference between the ability of the Minor and Major Satellite Plans to satisfy our basic open space and recreation area needs. However, the Expressway-Oriented Plan proposes a more ambitious open space system that would do more toward expanding our water-oriented recreation facilities and preserving the region's scenic and historic resources.

7. Transportation: The overall aim here is a transportation system capable of moving people and goods efficiently within the region and to points outside the region. While the transportation system is basically the same from plan to plan, the closer relationship between major expressway interchanges and intensive



land use on the Expressway-Oriented Plan should encourage a more efficient use of the highway system. Communication between one community center and another should be easier if these centers are situated close to the expressways.

8. Public Facilities: Public water and sewerage facilities should be provided in areas of intensive development. This would include medium to very high density residential areas, industrial and commercial areas, and major institutional centers. The more scattered these areas are, the greater will be the number of systems required, the longer will be the length of utility lines, and the greater will be the duplication of operating staffs. For this reason, a plan which encourages contiguous development and reduces the number of scattered settlements will most successfully encourage the provision of public facilities on an efficient basis. Of our three alternative plans, the Minor Satellite is least successful in promoting this type of land use pattern, while the Expressway-Oriented Plan is most successful. The Development Core and its extensions under the Expressway-Oriented Plan would contain nine-tenths of the region's population.

9. Exploitation of Trends: The degree to which any plan for Southeastern Connecticut is likely to be carried out will be strongly influenced by how well the plan recognizes and takes advantage of the forces shaping our development. In particular, a plan which totally ignores the economic pressures encouraging development in highly accessible locations is likely to fail in implementation. Of our three alternatives, the Expressway-Oriented Plan quite obviously seeks to exploit natural trends by using expressway interchanges as focal points for the region's future community structure. The other two plans only partially achieve this. All three plans recognize the trend toward development locating at some distance from the present Development Core and attempt to channel this trend into new, more compact settlements in presently rural portions of the region. In total, the Expressway-Oriented Plan is superior in building on natural development forces and, in this sense, is probably the most "marketable" of the three plans.

#### STAFF RECOMMENDATIONS

Our analysis of the preceding nine points indicates that although all three alternative land use plans will generally meet the region's over-all goals, there is a difference in the degree to which each would be likely to achieve this. On all nine points the Linear-Minor Satellite Plan ranked lowest, and on this basis appears to be the poorest choice for a regional plan. The Linear-Major Satellite Plan clearly is superior to the Minor Satellite Plan in meeting our nine-point test, but it does not have a clear-cut superiority over the Expressway-Oriented Plan on any point. On seven of the nine points -- (1) the regional land use pattern,



(2) economic activity, (3) commercial centers, (4) open space and recreation, (5) transportation, (6) public facilities, and (7) exploitation of trends -- the Expressway-Oriented Plan ranked first. On two points, community development and housing, it tied with the Major Satellite Plan. On the basis of this analysis, the staff believes that there are clear-cut advantages to the Expressway-Oriented Plan and recommends that this alternative land use plan be selected by the Southeastern Connecticut Regional Planning Agency as the basis for a more detailed regional plan of development.

### THE NEXT STEPS

Between now and the end of this century Southeastern Connecticut can expect as much new population growth and development as occurred during the first 300 years of the region's history. The tremendous increase in the region's rate of growth represented by this lends a sense of urgency to the completion of the regional plan.

While this report brings Southeastern Connecticut considerably closer to having a regional plan, there are several additional steps before this objective will be reached. The first step is a review of this report by each of the region's seventeen communities and by appropriate state and federal agencies. Each community and agency will be given an opportunity to comment on the report and to offer any suggestions it may have. This review process is expected to take until May of this year. In May, the Regional Planning Agency must reach a decision on which alternative plan or modified alternative plan seems most likely to meet the region's physical needs and is most acceptable to the region's communities. Upon the selection of an alternative as being most suitable for this region, the agency will begin the preparation of a more detailed recommended regional plan of development. This recommended regional plan will then be subjected to a series of both informal discussions and formal hearings before being adopted by the Regional Planning Agency. It is expected that the recommended regional plan will be completed by the end of 1966, although it may not be adopted by SCRPA until 1967.

The outlook for implementing the regional plan, once it is adopted, is far brighter than it would have been a few years ago. In addition to local zoning and subdivision regulations, which in the future should be coordinated more than they have been in the past, highway location, open space acquisitions, water and sewer facility programs, and urban renewal programs can all contribute to the implementation of the regional plan. Of particular importance is the federal requirement that highway construction, open space acquisition and development, and water and sewer facility construction be coordinated with local and regional plans to be eligible for a federal grant. This requirement and the



additional federal funds now available increase tremendously the likelihood that local and regional plans will be implemented rather than being filed away to gather dust.

Not all implementation of the regional plan will be achieved at the local level. Future actions by state and federal agencies will be equally significant in determining the fate of the plan. Planning coordination, which should lead to coordination in implementation, is carried on between the regional planning agencies throughout the state and major state agencies through the Connecticut Interregional Planning Program. This is a statewide program of land use, highway, and natural resource planning conducted by the Connecticut Development Commission, Highway Department, and Department of Agriculture and Natural Resources in cooperation with the regional planning agencies.

All in all, the number of tools available for implementing a regional plan is growing and is likely to increase even more in the years ahead.



*Includes 2 maps*

# **IVE PLANS**

**CONNECTICUT**

**PLANNING AGENCY**



# ALTERNATIVE LAND USE PLANS

FOR

## SOUTHEASTERN CONNECTICUT

PREPARED BY THE

SOUTHEASTERN CONNECTICUT REGIONAL PLANNING AGENCY

Southeastern Connecticut  
Regional Planning Agency  
139 Boswell Avenue  
Norwich, Conn. 06360

CAGE  
ConnDoc  
D4950  
3026  
1986  
map of 2  
CONNECTICUT STATE LIBRARY  
JAN 1 1 2018  
HARTFORD

### BACKGROUND

Between now and the end of this century Southeastern Connecticut can expect as much new population growth and development as occurred during the first 300 years of the region's history. From its present population of about 200,000, the region is expected to rise to a population of 350,000 by the year 2000. The strains created by this nearly ten-fold increase in Southeastern Connecticut's rate of growth will be more unsettling than anything experienced in the past. Housing of all types, schools, hospitals, new commercial and industrial areas, state highways and local roads, water and sewer facilities, and open space and recreation areas will be needed in a far greater quantity and at a far faster rate than ever before. Social strains will be fully as strong as physical strains as old communities change and totally new communities are created. With this rapid growth, our ingenuity will be taxed to preserve the quality of our physical and historic heritage, to replace what is worn out, shoddy, or obsolete, and to create new communities of which future generations can be proud.

Since its creation in 1961, SCRPA has been working to fulfill its obligation to prepare a regional plan to coordinate the future development of Southeastern Connecticut. Between 1962 and 1965 the Agency conducted a series of seven studies to form the factual base on which the regional plan will be built. Out of this analysis phase of the Agency's program grew information and conclusions regarding a wide range of problems and potentials facing Southeastern Connecticut. From this, we have created three alternative regional land use plans which indicate different ways in which the region could grow in the future. After evaluation by each of the region's communities and state and federal agencies, the Regional Planning Agency must select one alternative or modification thereof to be used as the basis for preparing a more detailed recommended regional plan.

We ask the reader to keep in mind that, unless otherwise noted, the plan proposals are staff recommendations that have not yet been acted on by SCRPA. The Agency will not act on these proposals until each of the region's communities and interested state and federal agencies have had an opportunity to study and comment on the proposals.

### CONSIDERATIONS

The content of the regional plan is broad, covering all types of land use and community structure, various methods of transportation, a range of open space and recreation uses, and several different kinds of public facilities. As a result, the number of inter-related factors that must be taken into account in creating a plan is large.

#### Our Natural Environment

As Southeastern Connecticut develops more fully in the future, its attractiveness and much of its environmental quality will be determined by how well we have understood, respected, and utilized the potentials and limitations of the land's surface.

In Southeastern Connecticut, three broad elements of the physical base influence the location and type of development within the region. The first is our maritime location, along Long Island Sound. A second basic physical influence is exerted by the Thames River estuary, which forms a natural physical spine for the region. Our third basic influence is the region's glaciated topography, which creates a wide range of physical settings, some suited for intensive development, some more suited for open space.

Southeastern Connecticut has a large physical potential for future growth. Of the region's 513-square-mile land area, only 40 square miles are presently occupied by urban and suburban development, while 65 square miles are in permanent open space and recreation areas. Fully four-fifths of the region's land area remain in an undeveloped state. This undeveloped land constitutes a reserve of space nearly four times the amount of land now occupied by development and permanent open space. Clearly, with some 408 square miles of undeveloped land, 302 square miles of which are good building land, Southeastern Connecticut has more than enough room for the population growth it is likely to have in the next 35 years.

Much of Southeastern Connecticut's land surface also has a specialized potential for agriculture, water supply, conservation, or recreation. Particular consideration should be given to exploiting this potential.

Maintenance of an adequate water supply is the key to the future growth of Southeastern Connecticut. Unless the region can provide an assured supply of water for future residential and industrial use, it is not likely to attract new economic generators. By the year 2000, the region will require about 3.5 times the amount of fresh water consumed in 1960. The preservation of our most highly rated potential reservoir sites is essential to an adequate future water supply. A regional water authority must be created to develop on a comprehensive basis the water supply resources of this region.

A long-standing and still unsolved problem in Southeastern Connecticut is water pollution. Sewage collection systems serve only about half the region's population of 200,000, and not all of the sewage collected is treated. More than half of the liquid industrial wastes produced are not treated. Additional study should be undertaken after a regional land use plan is agreed upon to determine the most economical and politically feasible means of providing the sewerage facilities necessary.

#### Land Use

The pattern of development within the region is very distinctive. Three-quarters of the 40 square miles of our urban and suburban development is concentrated along the coast and up both sides of the Thames River, in an area we have called the Development Core. The Development Core provides a dominant man-made feature in general harmony with the region's basic topographic structure, and as such it is a natural and quite suitable nucleus for the regional plan.

Beyond the fairly compact Development Core lies the still primarily rural portion of the region. Development here has traditionally been scattered single-family homes along rural roads, with an occasional small crossroad hamlet. But the traditional picture is being shattered. Several large developments of 400 or more homes have located in remote rural surroundings within the last decade. These scattered developments pose very real service problems, for they are totally unrelated to existing utilities and often are far from existing schools. Scattered large-scale development in predominantly rural areas may be viewed as a trend which local and regional plans must try to incorporate into a more cohesive pattern of development.

At present the region has an abundant supply of open space. For the future, we propose that open space and recreation areas be more closely related to intensive development to assure the provision of an adequate amount of such areas close to our population centers. We also believe that as fully as possible specific permanent open space areas should be linked together. Finally, time is growing short for the preservation of historically significant buildings and key natural areas, such as wetlands, scenic topographic features, and reservoir sites. Unless a vigorous, historic preservation and open space program is carried out over the next 35 years, most of our historical and natural heritage will be gone by the turn of the century.

#### The Transportation System

Regardless of the regional plan finally selected, Southeastern Connecticut must have a transportation system adequate to provide an efficient movement of goods and people within the region and to points outside the region.

The region is fortunate in having an exceptionally good expressway system at present, providing high speed access within the region's Development Core and between the region and major cities along the Atlantic Coast. Augmenting the expressway system is a network of secondary state highways which are important as links between major communities and the expressways and as links between one minor community and another.

Existing railroads provide service to the heart of the region's Development Core. While it is not anticipated that additional main trackage will be required, the present main tracks should be maintained and operated for at least freight service.

The region presently has only one commercial airport—Trumbull Airport in Groton. As part of both the National Airport Plan and the statewide airport plan, the top of Plain Hill in Norwich is proposed as the location of a future General Aviation Airport.

The port of New London plus specific installations and industries along the Thames River up to Norwich handle cargo arriving by ship. Improvement of harbor facilities and the maintenance of an adequate channel in the Thames River are essential elements of any economic development program for the region.

#### Community Development

Without doubt, people are the most basic consideration in preparing a regional plan. The number, type, and location of a region's residents will strongly affect the use of land and our public facility and service requirements. A goal of the regional plan will be to encourage the formation of compact communities, more likely to retain Southeastern Connecticut's aesthetic quality, more easily provided with utilities and services, and offering a broader social environment.

The most direct effect of a population growth of 150,000 persons will be a sharp rise in the demand for new housing. We can anticipate that close to 50,000 new homes will be needed by 2000, not counting the need to replace present structures that will be worn out by that date. This new housing will be needed in a variety of forms. The single-family home is expected to continue its popularity, but because of the area's high concentration of military personnel and their families, the growing number of young families, and the growing number of older couples, it appears that Southeastern Connecticut needs a greater variety of housing to permit a range of choice for our population.

Not all housing in Southeastern Connecticut presently provides a safe and attractive living environment. Nearly one out of every five housing units, or approximately 9,500 dwellings, in the region was in poor condition in 1960. A combination of urban renewal action and the adoption and enforcement of local housing and building codes seems needed to deal with this problem.

Economically, Southeastern Connecticut's greatest need is a more diversified employment base. Nearly two-thirds of the region's employment is now related directly or indirectly to the nation's defense industry. To obtain a more diversified economy, the region must seek: (1) to expand its present non-defense manufacturing activities, (2) to attract new non-defense manufacturing activities, and (3) to expand its tourist industry.

Five specific physical aspects of the plan will affect efforts at economic diversification. First, there is clearly a need for designating and preserving selected areas for future industrial use. Second, public water and sewer facility proposals must reflect industrial and commercial needs. Third, areas to be used for industrial purposes must be served by adequate transportation facilities. Fourth, a variety of housing must be available for an expanded work force. Finally, the amenities which attract tourists to Southeastern Connecticut and which provide a pleasant living environment must be preserved and enhanced.

A second, but very important, economic consideration is our retail trade structure. With shifts in population, the geographic structure of retail trade in Southeastern Connecticut has been changing and will continue to change.

Even with improved access and parking, it is likely that the New London and Norwich central business districts will command a smaller portion of the region's total retail sales than they have in the past. Groton is now considering the creation of a major highway-oriented central business district. If developed, this new center can be expected to improve sharply Groton's retail sales and to create three rather than two major subregional shopping centers. From a community development standpoint, it appears desirable that future major commercial development in the suburban towns be encouraged to locate in well-designed community shopping centers rather than in scattered or strip commercial sites throughout the towns.

### Goals for the Region

A local or regional plan prepared without a set of guiding goals is likely to wander and to contain conflicting proposals. In preparing a set of goals to serve as a guide for our regional plan, we have begun with a very broad all-encompassing primary goal which is then broken down into a series of seven component secondary goals, each of which, in turn, can be divided into additional subgoals. The goals reflect the findings of SCRPA's previous studies and the views of the citizens serving on local planning and zoning commissions and the Regional Planning Agency.

#### Primary Goal

Create a healthy, economically and socially sound, and attractive environment for the residents of Southeastern Connecticut.

#### Secondary Goals

1. Maintain a continued awareness of trends, needs, plans, and programs at the state and national level so that the region benefits from such programs, and, to the extent possible, Southeastern Connecticut's growth and development are compatible with state and national interests.
2. Encourage a development pattern that does not destroy the scenic qualities of the region or the potential of land to produce needed resources and which can efficiently be serviced with necessary public facilities and highways.
3. Develop a diversified economic base to assure full and continuous employment and a range of commercial and service activities to meet demands throughout the region.
4. Provide a variety of housing types, designs, and settings to permit a range of choice for the region's residents, regardless of their economic status.
5. Secure an amount and variety of open space and recreation areas adequate to meet the ever-increasing aesthetic, resource, and recreational needs of the region's population.
6. Construct a transportation system to provide convenient access to all parts of the region and to important points beyond our borders.
7. Provide a system of public facilities to serve the rapidly-growing needs of the region's people, businesses, and industries.

### REVIEW OF ALTERNATIVE LAND USE PLANS

Because of the limitations posed by the region's physical structure and potential, there are not wide differences among our three alternative land use plans.

In addition to having broadly similar land use patterns, each of the alternative plans has the same basic expressway and secondary highway network. This highway system should be adequate to serve the land use distribution under any of the three alternatives. A further uniformity from plan to plan is the assumption that all medium through very high density areas will be served by public water and sewerage facilities. Although the geographic location of these areas varies from plan to plan, this service assumption is held constant.

Each of the three alternative plans has been successfully tested in detail against the region's goals and could more than accommodate the region's expected population of 350,000 at the end of this century. We believe that any one of the three alternatives could be used successfully as the basis for guiding future regional growth. The key differences among the plans will become apparent in the discussion which follows:

#### Linear-Minor Satellite Plan

This plan envisions a region in which the most intensive development would be concentrated in our already existing Development Core. Minor satellite communities of medium density, with primarily single-family housing and little industry, would be encouraged in other parts of the region. Additionally, a corridor of medium density development is proposed, extending out of the region's Development Core and up the ridgeline south of the Oxoboxo River in Montville.

The pattern of open space and low density development proposed would accomplish several purposes. (1) It would set aside approximately an additional 30 square miles of land and water areas for necessary permanent open space and recreation areas of regional significance. The regionally significant areas proposed for permanent reservation include potential reservoir sites, major tidal marsh areas, interior wetlands with a high conservation potential, outstanding topographic features, and additional state parks. Necessary local open space and recreation areas would be in addition to this regionally significant total. (2) The proposed pattern would link together the major permanent open space areas. (3) The open space and low density development areas would be used to help shape the future pattern of development in the region.

#### Linear-Major Satellite Plan

The major difference between this plan and the Minor Satellite Plan is in the number and character of satellite communities proposed. The strengthening of the region's Development Core and the extension of a corridor of development up the ridgeline south of the Oxoboxo River, as proposed in the Minor Satellite Plan, would be retained. But in place of the eight small satellite communities recommended in the Minor Satellite Plan, this plan proposes the creation of five major satellites. These communities would be located in North Stonington, Ledyard Center, Salem, Preston, and Jewett City.

Because of their larger size, the major satellites should be able to provide a broader physical, economic, and cultural environment than the minor satellites. The open space and low density development areas would be substantially the same as under the Linear-Minor Satellite Plan.

#### Expressway-Oriented Plan

In basic layout, this plan is very similar to the Linear-Major Satellite Plan. There are, however, significant differences between the two. As is implied by its name, the Expressway-Oriented Plan is designed to capitalize on the natural tendency of intensive land uses to locate close to major expressway interchanges. This is achieved by locating higher density residential areas, important community commercial areas, and major industrial areas close to expressway access points.

A bolder open space plan is possible under the Expressway-Oriented Plan. Through a shift in developed land uses from the coast to Interstate 95 east of the Thames River, it would be possible to preserve more of the still undeveloped areas along the coast. These open areas along the coast are among the most important scenic resources of the region and will be obliterated by development unless they are included in an open space preservation program.

#### Evaluation of Alternatives

As a basis for evaluating the alternative land use plans, we have selected nine points on which to compare each plan. Each of these points is a prime concern in the plan and reflects our basic planning considerations and the region's goals.

1. REGIONAL LAND USE PATTERN: Here, our aim is a land use pattern which maintains the region's scenic and historic heritage, protects our natural resources and can be efficiently serviced by public facilities and highways. Of the three plans, the Expressway-Oriented Plan rates highest in promoting the general land use pattern we desire. The fairly contiguous Development Core would contain nine-tenths of the region's population under this plan, which would make the provision of needed facilities economically more feasible than under the satellite plans. Communication within the region should be easier, with intensive land uses oriented to the expressway access points. Finally, the more extensive open space element of the Expressway-Oriented Plan would promote the preservation of a greater amount of our scenic and historic heritage than either of the other plans.

2. COMMUNITY DEVELOPMENT: Under this general heading, our objectives are communities with distinctive identities, well-designed centers, and a high quality living environment. The Expressway-Oriented and Linear-Major Satellite Plans, because they propose larger communities with a greater range of housing and economic activities, are more likely to encourage the type of communities we seek than would the Minor Satellite Plan.

3. HOUSING: The major housing goal is to provide a variety of housing choice for all economic levels of the population. Both the Linear-Major Satellite and Expressway-Oriented Plans would encourage the development of a broader range of housing in both existing and proposed community centers than would the Minor Satellite Plan, which provides for only medium density housing in the satellites.

4. ECONOMIC ACTIVITY: A more diversified economic base is the most important economic goal for Southeastern Connecticut. The Expressway-Oriented Plan, with its greater integration of economic activities with the highway system, its greater choice of industrial locations, its greater ease of utility installation, and its more extensive preservation of open space, seems most likely to achieve this goal.

5. COMMERCIAL CENTERS: Our goal here is to provide an adequate number of well-designed commercial centers located conveniently to the region's population. This objective is most likely to be achieved under the Major Satellite and Expressway-Oriented Plans, because they propose larger, more diversified communities than does the Minor Satellite Plan. A real advantage afforded by the Expressway-Oriented Plan is that the attractive power of the expressway on commercial location is recognized and becomes a basis for a new orientation for each community.

6. OPEN SPACE AND RECREATION: The provision of necessary open space and recreation areas and the preservation of our scenic and historic heritage should be major goals of the region. The Expressway-Oriented Plan proposes the most ambitious open space system and would do most toward expanding our water-oriented recreation facilities and preserving the region's scenic and historic resources.

7. TRANSPORTATION: The overall aim here is a transportation system capable of moving people and goods efficiently within the region and to points outside the region. Because of the closer relationship between major expressway interchanges and intensive land use on the Expressway-Oriented Plan, this plan should encourage a more efficient use of the highway system.

8. PUBLIC FACILITIES: Public water and sewerage facilities should be provided in areas of intensive development. For this reason, a plan which encourages contiguous development and reduces the number of scattered settlements will most successfully encourage the provision of public facilities on an efficient basis. Of our three alternative plans, the Expressway-Oriented Plan is most successful in encouraging contiguous development.

9. EXPLOITATION OF TRENDS: Of our three alternatives, the Expressway-Oriented Plan quite obviously seeks to exploit natural trends by using expressway interchanges as focal points for the region's future community structure. The other two plans only partially achieve this. All three plans recognize the trend toward development locating at some distance from the present Development Core and attempt to channel this trend into new, more compact settlements in presently rural portions of the region. In total, the Expressway-Oriented Plan is superior in building on natural development forces and, in this sense, is probably the most "marketable" of the three plans.

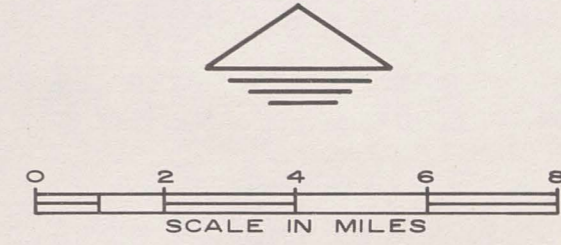
#### Staff Recommendations

The SCRPA staff believes that there are clear-cut advantages to the Expressway-Oriented Plan and recommends that this alternative land use plan be selected by the Southeastern Connecticut Regional Planning Agency as the basis for a more detailed regional plan of development. These alternatives are now being reviewed by the region's 17 communities and state and federal agencies. After this review, the Regional Planning Agency must reach a decision on which alternative plan or modified alternative plan seems most likely to meet the region's physical needs and is most acceptable to the region's communities. Upon the selection of an alternative as being most suitable for this region, the agency will begin the preparation of a more detailed recommended regional plan of development.

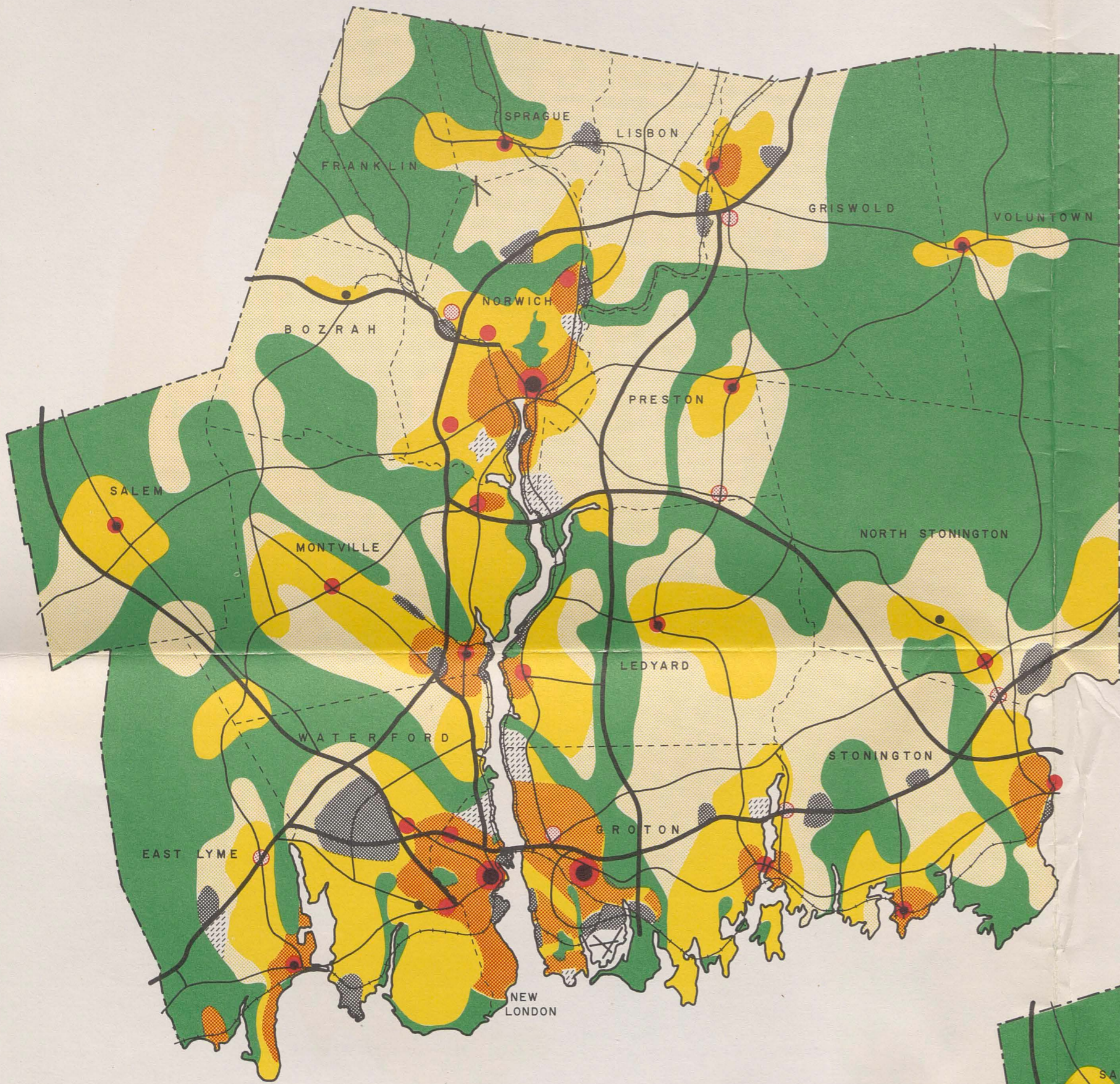


# ALTERNATIVE LAND USE PLANS

SOUTHEASTERN CONNECTICUT REGION



SCRPA - 1966



**LINEAR-MINOR SATELLITE**

701 PROJECT, CONN. P-47  
FINANCED IN PART THROUGH REGIONAL  
PLANNING GRANTS FROM THE HOUSING  
AND HOME FINANCE AGENCY AND THE  
CONNECTICUT DEVELOPMENT COMMISSION

NOTE: NOT SHOWN, BUT INCLUDED IN THE  
RESIDENTIAL AREAS ARE LOCAL  
STREETS, SCHOOLS, INSTITUTIONS  
AND RECREATION AREAS, NEIGHBOR-  
HOOD SHOPPING AREAS, AND SMALL  
INDUSTRIAL AREAS.



**LINEAR-MAJOR SATELLITE**



**EXPRESSWAY-ORIENTED**

## LEGEND

- VERY HIGH AND HIGH DENSITY RESIDENTIAL  
MORE THAN 4 FAMILIES PER ACRE
- MEDIUM DENSITY RESIDENTIAL  
1.1 TO 4 FAMILIES PER ACRE
- LOW DENSITY RESIDENTIAL  
1 OR LESS FAMILIES PER ACRE
- OPEN SPACE AND  
VERY LOW DENSITY DEVELOPMENT  
SCATTERED RESIDENTIAL AT 3 OR MORE ACRES  
PER FAMILY, RECREATION, CONSERVATION, AND  
AGRICULTURAL USES
- SUBREGIONAL AND MAJOR COMMUNITY  
COMMERCIAL CENTERS
- EXPRESSWAY-ORIENTED COMMERCIAL AREAS
- LOCAL GOVERNMENTAL CENTERS
- INDUSTRIAL AREAS OF REGIONAL SIGNIFICANCE
- EXISTING MAJOR INSTITUTIONS
- EXPRESSWAYS
- MAJOR SECONDARY HIGHWAYS



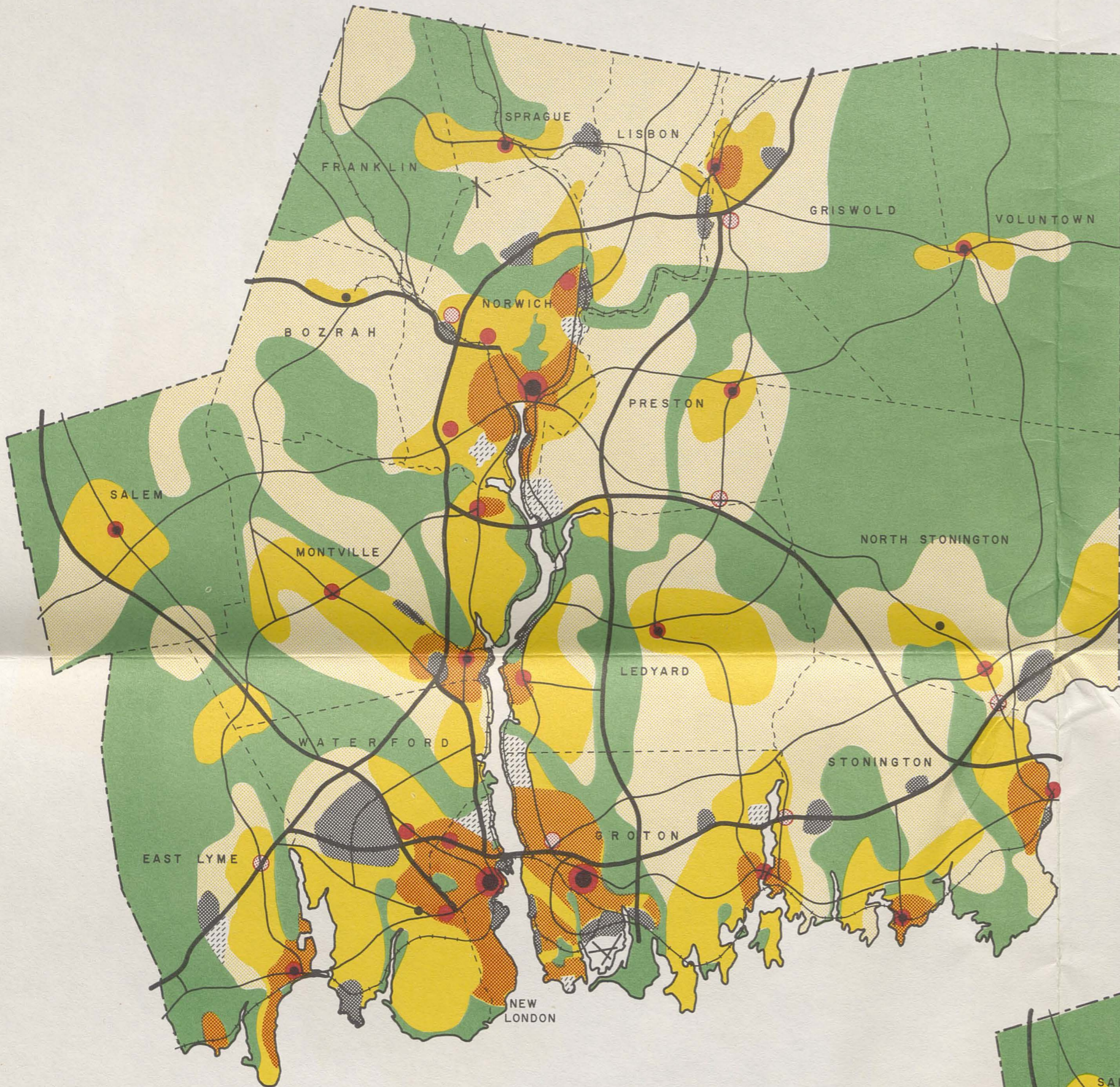
# ALTERNATIVE LAND USE PLANS

SOUTHEASTERN CONNECTICUT REGION

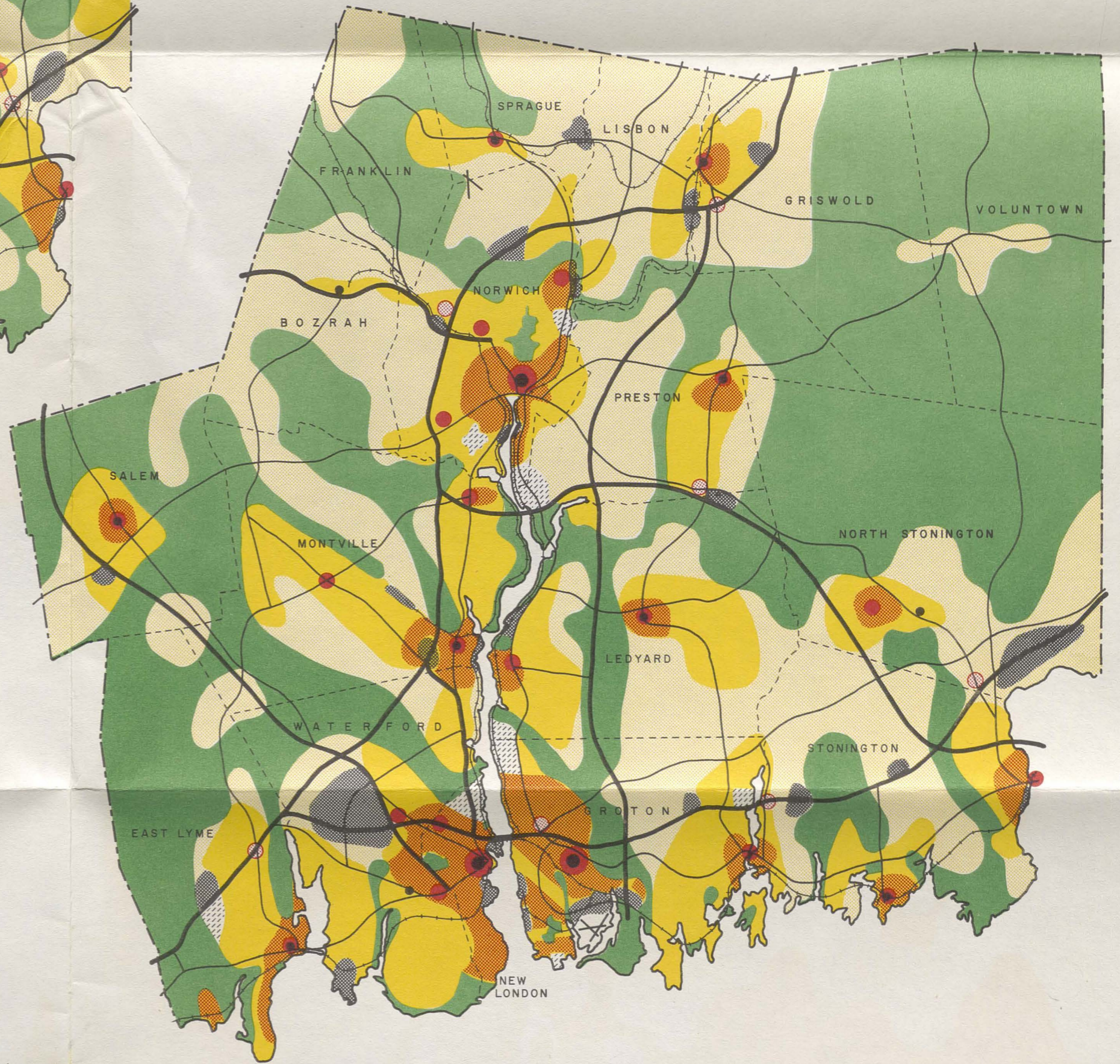


0 2 4 6 8  
SCALE IN MILES

SCRPA - 1966



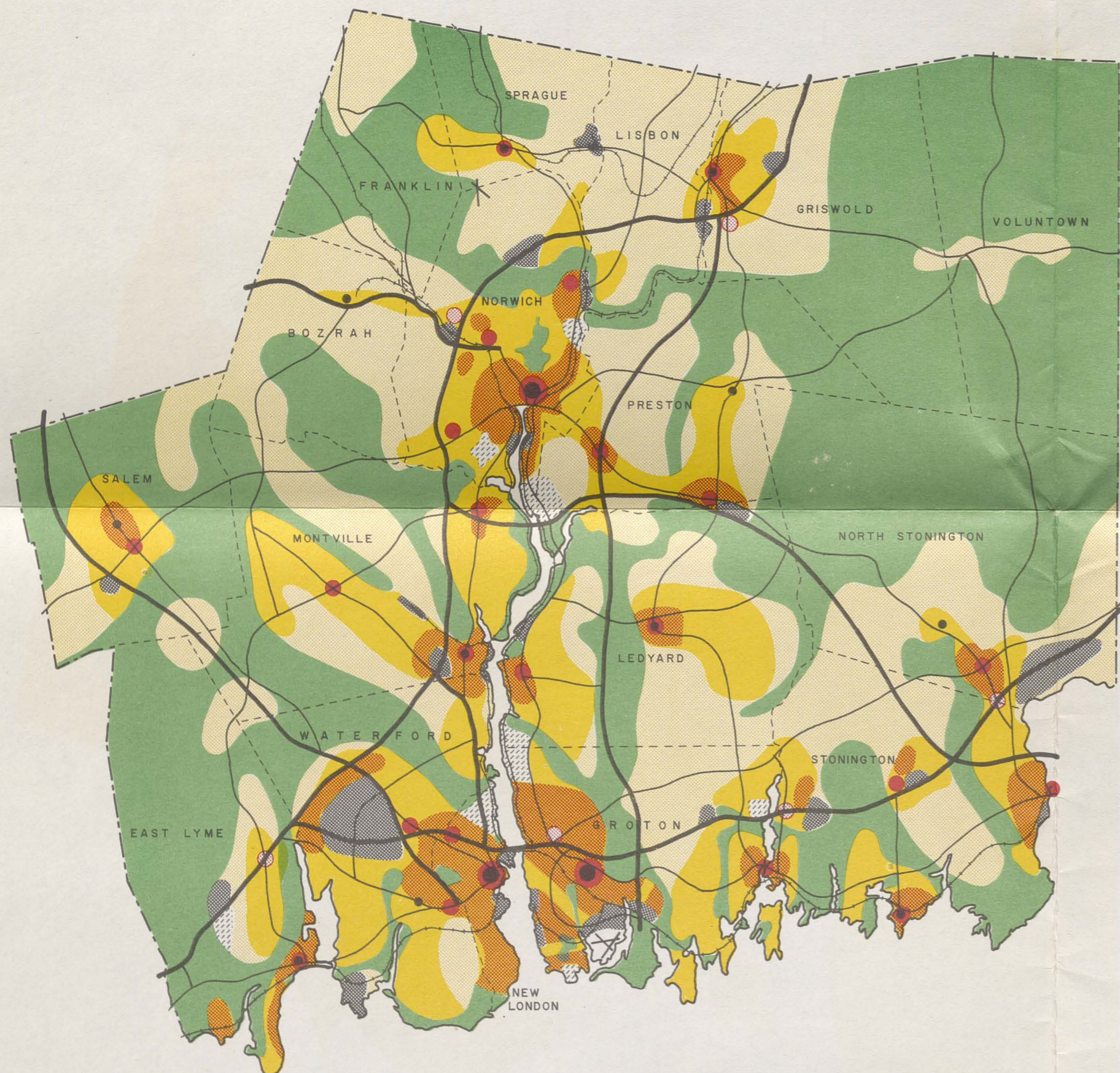
**LINEAR-MINOR SATELLITE**



**LINEAR-MAJOR SATELLITE**

701 PROJECT, CONN. P-47  
FINANCED IN PART THROUGH REGIONAL  
PLANNING GRANTS FROM THE HOUSING  
AND HOME FINANCE AGENCY AND THE  
CONNECTICUT DEVELOPMENT COMMISSION

NOTE: NOT SHOWN, BUT INCLUDED IN THE  
RESIDENTIAL AREAS ARE LOCAL  
STREETS, SCHOOLS, INSTITUTIONS  
AND RECREATION AREAS, NEIGHBOR-  
HOOD SHOPPING AREAS, AND SMALL  
INDUSTRIAL AREAS.



**EXPRESSWAY-ORIENTED**

## LEGEND

- VERY HIGH AND HIGH DENSITY RESIDENTIAL  
MORE THAN 4 FAMILIES PER ACRE
- MEDIUM DENSITY RESIDENTIAL  
1.1 TO 4 FAMILIES PER ACRE
- LOW DENSITY RESIDENTIAL  
1 OR LESS FAMILIES PER ACRE
- OPEN SPACE AND  
VERY LOW DENSITY DEVELOPMENT  
SCATTERED RESIDENTIAL AT 3 OR MORE  
ACRES PER FAMILY, RECREATION, CONSERVATION, AND  
AGRICULTURAL USES
- SUBREGIONAL AND MAJOR COMMUNITY  
COMMERCIAL CENTERS
- EXPRESSWAY-ORIENTED COMMERCIAL AREAS
- LOCAL GOVERNMENTAL CENTERS
- INDUSTRIAL AREAS OF REGIONAL SIGNIFICANCE
- EXISTING MAJOR INSTITUTIONS
- EXPRESSWAYS
- MAJOR SECONDARY HIGHWAYS



