GUIDELINES FOR STATE INVOLVEMENT IN THE DEVELOPMENT
OF NEW COMMUNITIES IN MASSACHUSETTS: TOWARD A STATE
URBAN GROWTH POLICY

by

LAWRENCE ELLIOTT SUSSKIND

B.A., Columbia University
(1968)

Submitted in Partial Fulfillment
of the Requirements for the
Degree of Master of
City Planning
at the
MASSACHUSETTS INSTITUTE OF TECHNOLOGY
June, 1970

Signature of Author.

Department of Urban Studies and Planning,
June 4, 1970

Certified by

Thesis Supervisor

Accepted by

Chairman, Departmental Committee on Graduate Students

MASS. INST. TECH.
AUG 13 1970
LIBRARIES
ABSTRACT

GUIDELINES FOR STATE INVOLVEMENT IN THE DEVELOPMENT OF NEW COMMUNITIES IN MASSACHUSETTS: TOWARD A STATE URBAN GROWTH POLICY

by

Lawrence Elliott Susskind

Submitted to the Department of Urban Studies and Planning on June 4, 1970 in partial fulfillment of the requirements for the degree of Master of City Planning.

This thesis is concerned with establishing guidelines for state involvement in the development of new communities in Massachusetts. State planning for urban growth, specifically state involvement in the planning and development of new communities must be undertaken within a systematic and carefully defined intergovernmental framework. State policies and plans expressed in the form of public works, the allocation of resources, the use of taxing and borrowing powers, the development of transportation linkages and the sum total of all actions taken by various state agencies can "make or break" new community development in the Commonwealth.

At present no state policy exists which can reconcile the competing interests which play a role in directing urban growth in the Commonwealth: 1) the developers worried about their ability to control, program, and profit from urban development, 2) the residents of urbanizing areas concerned about state intervention in local decisions relative to community and environmental development, and 3) the wider regional interests concerned about the quality, scope and phasing of development.

Chapter I offers a definition of new communities and establishes the theoretical rationale for the development of new communities in metropolitan urban areas as part of a state urban growth policy. Chapter II measures the potential for the development of new communities of approximately 50,000 persons each throughout Massachusetts, and indicates those areas which are ripe for such development. Chapter III examines three alternative new community development strategies indicating the political and financial feasibility as well as the public benefits of each strategy. Chapter IV concludes with a
discussion of alternative incentive-control systems for guiding urban growth, with an outline for an intergovernmental planning-implementation framework for new community development and a series of questions which need to be considered by state officials and the public at large prior to the implementation of a state program for new community development.

Thesis Supervisor: John T. Howard
Title: Professor of Urban Studies and Planning
Acknowledgments

There are several people to whom I owe special thanks for their interest and assistance in the preparation of this thesis. Professor John Howard, Professor Aaron Fleisher, Professor Lloyd Rodwin, Mr. Alexander Ganz, Professor Kevin Lynch, and Professor William Doebele all helped to focus my thinking and research either by offering constructive criticisms of earlier drafts of parts of this thesis or by pointing out new sources of information or new ways of approaching important issues.

Dr. Constance Williams of the Massachusetts Department of Community Affairs, Mr. Regis Harrington of the Massachusetts Department of Commerce and Development, and Mr. James Powers, of the Massachusetts Legislative Research Bureau provided me with valuable insights into the workings of Massachusetts government.

To my colleagues Steven Browning, Matthew Hobbs, and Thomas Nutt, with whom I spent many hours discussing and arguing the problems and merits of new community development, I am especially grateful.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF CHARTS</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF MAPS</td>
<td>xi</td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td></td>
</tr>
<tr>
<td>The Role of State Government in Guiding Urban Growth</td>
<td>1</td>
</tr>
<tr>
<td>Options for State Involvement in the Urban Development Process</td>
<td>5</td>
</tr>
<tr>
<td>Footnotes</td>
<td>12</td>
</tr>
<tr>
<td><strong>CHAPTER I</strong></td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>16</td>
</tr>
<tr>
<td>Major Problems of Planning and Developing A New Community</td>
<td>18</td>
</tr>
<tr>
<td>Recent Proposals Calling for the Development of New Communities in the New England Area</td>
<td>30</td>
</tr>
<tr>
<td>New Community Development in the Metropolitan Area: &quot;The Growth Point Theory&quot;</td>
<td>32</td>
</tr>
<tr>
<td>New Communities and the Planned Expansion of Existing Towns</td>
<td>38</td>
</tr>
<tr>
<td>New Communities As An Alternative to Suburban Sprawl</td>
<td>45</td>
</tr>
<tr>
<td>The Role of State Government in New Community Development</td>
<td>53</td>
</tr>
<tr>
<td>Considerations for State Involvement in Private Efforts to Build New Communities</td>
<td>54</td>
</tr>
<tr>
<td>Footnotes</td>
<td>61</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

(continued)

## CHAPTER II

- Introduction .............................................. 68
- The Regional Distribution of Economic Activity in Massachusetts .................................................. 72
- Data Analysis ............................................. 93
- The Process of Selecting Sites for New Community Development ..................................................... 95
- Conclusions .................................................. 110
- Footnotes ..................................................... 114

## CHAPTER III

- Introduction .................................................. 118
- Strategy #1 Providing Regional Planning Agencies with the Power to Act as Industrial and Economic Development Authorities .................................................. 123
- Strategy #2 Providing for the Creation of a State Chartered, Non-Profit New Community Development Corporation .................................................. 128
- Strategy #3 Providing for the Establishment of New Community Development Districts .......................... 132
- Conclusions ..................................................... 141
- Footnotes ..................................................... 144

## CHAPTER IV

- Introduction .................................................. 152
- Incentive-Control Systems for Land Use Guidance ................................................................. 153
- An Intergovernmental Planning Framework for New Community Development .................................. 161
- Postscript: Questions That Remain to be Answered ................................................................. 164
- Footnotes ..................................................... 166
**TABLE OF CONTENTS**

(continued)

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>A New Community of 50,000 People</td>
<td>169</td>
</tr>
<tr>
<td>B</td>
<td>Score on Set</td>
<td>173</td>
</tr>
<tr>
<td>C</td>
<td>Weight on Set</td>
<td>175</td>
</tr>
<tr>
<td>D</td>
<td>Proposed Legislation - An Act Providing for the Establishment of</td>
<td>176</td>
</tr>
<tr>
<td></td>
<td>Northern Middlesex Area Commission as a Regional Planning and Economic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development District</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>The Legal Basis for Regional Planning in Massachusetts</td>
<td>185</td>
</tr>
<tr>
<td>F</td>
<td>Bibliography</td>
<td>191</td>
</tr>
</tbody>
</table>
LIST OF CHARTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. LISTING OF STATE ECONOMIC AREAS</td>
<td>74</td>
</tr>
<tr>
<td>II. LISTING OF PLANNING REGIONS</td>
<td>76</td>
</tr>
<tr>
<td>III. SMSA's WITH POPULATIONS (1960)</td>
<td>78</td>
</tr>
<tr>
<td>IV. TOWNS SELECTED FOR ANALYSIS IN ROUND TWO</td>
<td>102</td>
</tr>
<tr>
<td>V. RANKING OF POTENTIAL SITES FOR NEW COMMUNITY DEVELOPMENT</td>
<td>109</td>
</tr>
<tr>
<td>VI. ALTERNATIVE NEW COMMUNITY DEVELOPMENT STRATEGIES</td>
<td>139</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>RESIDENT POPULATION</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>1.2</td>
<td>PERSONAL INCOME</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>1.3</td>
<td>PER CAPITA PERSONAL INCOME</td>
<td></td>
<td>85</td>
</tr>
<tr>
<td>1.4</td>
<td>TOTAL CIVILIAN EMPLOYMENT</td>
<td></td>
<td>86</td>
</tr>
<tr>
<td>1.4.A</td>
<td>NONAGRICULTURAL EMPLOYMENT</td>
<td></td>
<td>86</td>
</tr>
<tr>
<td>1.4.B</td>
<td>COMMODITY PRODUCING EMPLOYMENT</td>
<td></td>
<td>86</td>
</tr>
<tr>
<td>1.4.C</td>
<td>NON COMMODITY PRODUCING EMPLOYMENT</td>
<td></td>
<td>87</td>
</tr>
<tr>
<td>1.4.D</td>
<td>AGRICULTURE, FORESTRY AND FISHERIES EMPLOYMENT</td>
<td></td>
<td>87</td>
</tr>
<tr>
<td>1.4.F</td>
<td>CONSTRUCTION EMPLOYMENT</td>
<td></td>
<td>87</td>
</tr>
<tr>
<td>1.4.G</td>
<td>MANUFACTURING EMPLOYMENT</td>
<td></td>
<td>88</td>
</tr>
<tr>
<td>1.4.H</td>
<td>TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES EMPLOYMENT</td>
<td></td>
<td>88</td>
</tr>
<tr>
<td>1.4.I</td>
<td>WHOLESALE AND RETAIL TRADE EMPLOYMENT</td>
<td></td>
<td>88</td>
</tr>
<tr>
<td>1.4.J</td>
<td>FINANCE, INSURANCE, AND REAL ESTATE EMPLOYMENT</td>
<td></td>
<td>89</td>
</tr>
<tr>
<td>1.4.K</td>
<td>SERVICES EMPLOYMENT</td>
<td></td>
<td>89</td>
</tr>
<tr>
<td>1.4.L</td>
<td>GOVERNMENT EMPLOYMENT</td>
<td></td>
<td>89</td>
</tr>
<tr>
<td>2.1</td>
<td>AVERAGE ANNUAL RATE OF GROWTH OF RESIDENT POPULATION</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>2.2</td>
<td>AVERAGE ANNUAL RATE OF GROWTH OF PERSONAL INCOME</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>2.3</td>
<td>AVERAGE ANNUAL RATE OF GROWTH OF PER CAPITA PERSONAL INCOME</td>
<td></td>
<td>90</td>
</tr>
<tr>
<td>2.4</td>
<td>AVERAGE ANNUAL RATE OF GROWTH OF TOTAL CIVILIAN EMPLOYMENT</td>
<td></td>
<td>91</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>------------------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>2.4.A</td>
<td>Average annual rate of growth of nonagricultural employment</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Metropolitan shares of resident population</td>
<td>91</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Metropolitan shares of personal income</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Metropolitan shares of total civilian employment</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>Employment participation rate of population</td>
<td>92</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Estimated percentage of population and employment increment 1970-1985 new communities would be expected to capture</td>
<td>93</td>
<td></td>
</tr>
</tbody>
</table>
LIST OF MAPS

Page

1 - STATE ECONOMIC AREAS.......................................... 75
2 - PLANNING REGIONS IN MASSACHUSETTS......................... 77
3 - STANDARD METROPOLITAN STATISTICAL AREAS..................... 80
4 - MASSACHUSETTS HIGHWAYS........................................ 100-101
5 - CITIES AND TOWNS SELECTED FOR ROUND TWO ANALYSIS......... 103
The Role of State Government in Guiding Urban Growth and Development

Each of us pays for the inefficient and inequitable patterns of urban development that currently mar the landscape. As metropolitan areas throughout the United States continue to grow, the social and economic costs associated with poorly planned urban growth will come to represent extremely important political and governmental problems. There is no simple way of dealing with these mounting social and economic costs. Even though the rate of technological achievement has accelerated, the problems that beset our cities and towns still tend to proliferate. We must face up to the issues raised by unchecked and uncontrolled urban development:

As our population grows and our technology advances, the decisions about the use of land and of public revenue become increasingly complex. The governmental machinery to make these decisions and the governmental influences on private market decisions have not kept pace with this complexity. As a result, we are faced with traffic congestion, blight in our central cities, unequal burdens of suburban expansion, duplication of public facilities, and an inefficient use of public and private resources.1

At every level of government there are important actions to be taken if we are to confront these issues successfully. State
government, in particular, has an indispensable role to play in addressing the problems of urbanization; to a great extent the ability of local governments to cope with urban growth and development depends on the attitude and organization of state government (e.g. its willingness to allocate resources and decision making powers to lower levels of government). The tools available to localities, the money they spend, and the powers they exercise are to a great extent determined by a wide assortment of state constitutional, statutory, and administrative regulations. Even given the authority and the independence afforded localities by such provisions as home rule, the state government still controls and delimits local governmental functioning.  

Even if an overall urban growth policy had been formulated at the federal level, planning for future urban development would still be primarily the responsibility of state governments. It is unfortunate that the nation as a whole has not established a consistent policy with respect to the management of the country's land resources or with respect to the many federal programs designed to assist, influence, or regulate the process of urban development at the state, regional, and local levels. Increasingly there are instances where federal programs are in conflict with each other. Federal agencies involved in the preparation of highway plans, and air transportation plans, water resource development programs, and community facility improvement programs, plans to redevelop industrial areas and
depollute rivers are often found to be working at cross purposes. Most of the plans and programs are necessary and desirable. However, to date, these plans have not been synchronized, nor have they been analyzed to insure that they are consistent with each other or compatible with local goals and aspirations. Thus, because many agencies and departments at the federal level are pursuing separate programs without adequate coordination, state governments are in a difficult position. They are forced to deal with a variety of separate agencies, each with its own programs and priorities and each with its own needs and objectives.

Although several proposals have been made to impose a somewhat greater degree of organization on federal programs and agencies involved in planning for urban growth and development, support for these measures is far from assured in the near future. If a national urban growth policy is not adopted, state government will probably remain the only level of government sufficiently well structured to exert control over and bring order to conflicting local and private interests; or if one of the several national urban growth policies that has already been proposed is adopted, state government will still have a crucial role to play since most of the recent proposals rely heavily on state involvement. In any case, it seems that state governments will continue to bear most of the responsibility for guiding and directing urban growth.

State governments possess several critical qualifications that allow them to play a particularly constructive role in urban
development. States have the power and the financial resources to move broadly on several fronts simultaneously. States have had experience with far-ranging programs (highway, recreation, water resources development, and welfare programs, to name a few) that have had, and will continue to have, a significant impact on the development of urban areas.5 Moreover, "the state occupies a unique vantage point, broad enough to allow it to view the details of development within state boundaries as part of an interrelated system, yet close enough to enable it to treat urban problems individually and at first hand."6

In the past, the extent to which local governments, especially in metropolitan areas, have leapfrogged the state to seek federal assistance for urban renewal, planning and area redevelopment purposes, suggests that many state governments have been unable or unwilling to play a major role in guiding urban growth and development.7 It would probably be foolish to suggest that all state governments are presently equipped to deal with the complexities of the urban development process. However, because state governments already possess the legal, administrative, and political powers necessary to guide urban development, and because the political and financial problems of creating new institutional structures with powers equal to those of state governments are almost insurmountable, it is important to seek ways in which the leadership potential which state governments already possess can be realized.
Options for State Involvement in the Urban Development Process

Many recommendations have been made regarding the need for state action in the field of urban development. Most of the recommendations can be grouped under four general headings:

1. The state should provide local and regional governments with remedial services and assistance when called upon to do so.

2. The state, when it thinks it advisable, should undertake a variety of direct actions to assist and strengthen local governments in the exercise of their responsibilities.

3. The state should impose certain controls on the activities of local governments and private interests in those cases where localities acting independently of one another cannot reach agreement, or in those instances where private developers seem intent on taking actions which are not in the "public interest."

4. The state should assume an active role in the planning and implementation of new urban growth and/or the redevelopment of existing cities and towns through a far-ranging program of public investment and, where necessary, through the creation of new instrumentalities.

State involvement in the urban development process will necessarily vary from area to area within a state, as well as from state to state. In some instances it may be most appropriate for the state to delegate a wide assortment of permissive powers to
local governments which can be utilized as the need arises. In other cases, more direct assistance of a technical or financial nature may be warranted. In some instances, stringent state regulation or control coupled with the expansion of state assistance programs in such areas as housing, industrial development, transportation, recreation or open space preservation may be required.

The state's role vis a vis local and federal government is changeable. Actions and approaches will vary widely. In one sense the options available to state government can be viewed on a continuum extending from relatively indirect to markedly direct action. In another sense, the range of state actions can be arrayed on the basis of how permissive or how regulatory they are. Seven options available to state government in its dealings with municipalities and private developers are described below:

1. The state may enable existing cities and towns to plan, spend money, raise funds, acquire land, and construct projects for urban development purposes. The state has a responsibility to make certain that localities have the basic powers with which to move intelligently toward solutions to urban problems. In most instances, localities have these powers, although authority to plan or raise funds for a specific function may not always be included within the general statutory authorization.

2. The state may enable localities to collaborate, join together through cooperative arrangements, or consolidate to provide services that are difficult for any one town to handle independently.
This would encompass making provision for voluntary municipal mergers, the transfer of functions from city to special district or vice versa, the establishment of metropolitan study commissions or multi-purpose functional districts; the creation of metropolitan planning agencies, regional planning agencies, or metropolitan councils of government. The state's aim is usually to foster the enlargement or consolidation of local government so that municipalities become more capable of controlling metropolitan and regional growth. Local governments are usually responsible for taking the initiative themselves in these matters. 11

3. The state may provide technical assistance to localities to help them fulfill their development responsibilities. An arrangement whereby a state planning agency provides staff service to a local government to help prepare comprehensive physical plans or special planning studies is only one of the many ways in which such technical aid can be utilized. The state usually requires localities to meet minimum standards of performance as a condition for receiving technical aid. 12

4. The state may extend financial assistance to localities in the form of loans, grants-in-aid, or tax concessions, in order to broaden the fiscal base the localities may draw upon in their efforts to combat urban problems. Financial assistance takes various forms. New Jersey, for example, has a program of issuing grants-in-aid to communities over a five-year period to help carry out continuing planning. Several northeastern states, including Massachusetts, provide funds to cities to help them meet their
share of urban renewal costs. A growing number of states are taking a more active part in metropolitan open-space planning programs by authorizing funds which localities can use to purchase the fee or an interest in the fee on land. In most cases an adequate standard of local governmental performance is a quid pro quo for state financial aid. Grants-in-aid, therefore, provide state government with substantial bargaining power.

5. The state may regulate or administer certain local activities that have area-wide implications. The state may move directly to resolve disputes among local units of government in a metropolitan area, especially disputes that cannot be resolved at the local level by mutual agreement, or are of such moment as to impede the effective performance of governmental functioning in the area. Another form of direct state action includes the establishment of rigorous statutory standards for the creation of new municipal corporations within the geographical boundaries of metropolitan areas, and to provide further for the administrative review and approval of such proposed new incorporations by an appropriate state unit. This form of state action is based on the assumption that it is difficult for localities to take effective measures in these matters, and that the state must step in to protect the interests of the greater "regional community."

6. The state may expand the scope of its activities and subsume many of the responsibilities traditionally belonging to local governments. The acquisition of land or the purchase of easements
for open space are examples of this form of direct state action. Such measures may be precipitated primarily by the inability of localities to act quickly enough in the face of rapid growth. 16

7. The state may itself exercise local functions -- it might wish to do so if local resources are inadequate or if certain functions cannot be performed efficiently by the locality even with state financial aid. For example, the state might act as a developer of new low and moderate income housing or entire new communities. 17

How far and in what direction a state should go depends on several factors. One factor is the state government's past experience in dealing with urban development problems. Some state highway departments, for example, have traditionally left many decisions to the discretion of counties and cities. Since this pattern has been well established, the states continue this arrangement, rather than assert more direct control over highway development. The historical pattern of state financial aid to localities often is correlated with the degree to which local initiative has become a tradition. Some states have long standing policies of granting considerable funds to localities for general operations. Since state standards governing the use of these funds must be met, state control over local policy is often achieved through the distribution of funds to localities. In Massachusetts, the traditional strength and independence of cities and towns must be taken into account in the formulation of any public policy to deal
with urban growth. This is not to say that the state, if it wished, could not recoup much of the power that it has delegated to localities, but it is quite clear that any program designed to reduce the power and authority of local government in Massachusetts would face stiff opposition.

Another key factor in determining the appropriate course of state action in the area of urban development is the relative intensity of metropolitan urban problems. For example, if the supply of metropolitan open space were being devoured too quickly, or if the transportation system were not meeting area-wide needs for the distribution of people and goods, then the state might conclude that local government was responding too slowly, and that more direct state action was appropriate. In Massachusetts it may well be that the increased pressures of urban growth and development brought about by the recent development of Route 128, Route 495, Interstate 290, and the Massachusetts Turnpike may have become sufficiently severe to suggest that more direct state action is required than would otherwise be acceptable. State government, if it is to avoid permanently impairing local autonomy, must decide what the limits are beyond which it cannot go. At what point would state intervention be excessive? Under what circumstances can local governments be considered incapable of providing solutions to area-wide problems?

Each state, including Massachusetts, needs to adopt a set of development objectives which can unify the many supervisory and
regulatory actions of the administrative agencies and the state legislature. Too often state agencies work at cross purposes to one another and to local governments. But the growing number of states which have adopted comprehensive planning programs testifies to the heightened awareness of the need to provide some overall direction to the pattern of development in each state. Through the establishment of long-range development programs, the states can implement recommendations for orderly, coordinated growth. Policies thus established serve three purposes: local governments have a benchmark against which to chart the success of their own development programs, the work of many state agencies in development programming can be more effectively integrated; and federal programs can be utilized to maximize the benefits of public investment through efficient and equitable use of land to meet state priorities.

In exercising leadership, the state must decide how aggressive it is going to be in intervening to redirect the development policies of public agencies and private institutions. This thesis will examine the implications of an extremely vigorous state policy which calls for direct state intervention in the urban development process. Specifically, criteria for state investment and guidelines for state involvement in the development of new communities will be discussed.
FOOTNOTES

Introduction


3. In January, 1970, Senator Jackson introduced a bill in Congress to amend the Water Resources Planning Act (79 Stat. 244) to include provision for a national land use policy by broadening the authority of the Water Resources Council and river basin commissions and by providing financial assistance for statewide land use planning. In March 1970 a bill was introduced into the House of Representatives (H.R. 16647) by Mr. Ashley "to provide for the development of a national urban growth policy, and to encourage and support the rational, orderly, efficient and economic growth and development of our States, metropolitan areas, cities, counties, and towns, with emphasis upon the development of new communities and upon inner city development." In 1969 Florence Dwyer of New Jersey introduced a bill into the House of Representatives (H.R. 13217) to "provide for the balanced urban development and growth of the United States."


5. The impact of state agencies in Massachusetts on urban and regional development is described in State Agencies and Regional Development, a study prepared by the Area Development Center, Boston University, for the Massachusetts Department of Commerce and Development through the Massachusetts Regional Planning Project, October 1966. For an inventory of Massachusetts State Programs affecting urban development see Inventory of State Programs, Massachusetts Executive Office of Administration and Finance, October, 1968, 3 vols.

FOOTNOTES

(continued)

Introduction

7. The present degree of federal participation in state and local affairs reflects previous failures to anticipate needs. This failure in a sense created a vacuum into which the federal government moved. Since World War II, the growth of direct relationships between the federal government and cities, counties, and other units of local government has been of increasing concern to state governors and legislatures. The tendency of federal agencies and of local governments to bypass the states has been "deplored." On the other hand, the Congress has contended that inaction on the part of state governments should not be permitted to deprive a local government of federal aid. (Channelization of Federal Grant Programs for Urban Development, 1966 State Legislative Program of the Advisory Commission on Intergovernmental Relations, Washington, October, 1965.)


9. These options were presented in State Responsibility in Urban Regional Development, op. cit., pp. 19-20.

10. For an explanation of this situation relative to Massachusetts law, see memorandum from James Powers, principal research assistant to Daniel O'Sullivan, Director of the Legislative Research Bureau, on "Devolution of Powers: Features of Self-Executing Constitutional Home Rule in Massachusetts," June 26, 1968.

11. For an explanation of this situation relative to Massachusetts law, see report relative to Regional Government of the Massachusetts Legislative Research Council, January 26, 1970 and report relative to Voluntary Municipal Merger Procedures of the Massachusetts Legislative Research Council, March 11, 1970.

12. The Department of Community Affairs has responsibility for the administration of state-wide planning aid programs. Local planning groups collaborate with Community Affairs and 11 regions
Introduction

participate in regional planning programs. Through 1969 these cooperative planning projects had an aggregate project cost of about $6,000,000 of which the Federal Government was supplying about two-thirds.

13. On redevelopment projects for which contracts for federal capital grants have been signed, the Department of Community Affairs is authorized to make a grant from state funds up to one-half of the local share required by the federal contract. In 1969 the limit on aid authorized to be granted from state taxes was $40,000,000 with annual payments not exceeding $2,000,000. These limits will probably be doubled in the next few years. On projects to redevelop commercial or industrial areas for which no federal aid is available, state grants of 50% of the net cost to the community are authorized up to a limit of $20,000,000. There is little redevelopment in Massachusetts in this second limited class.

14. A unique example of this in Massachusetts is Chapter 774 of the Acts of 1969 (H 5581) which provides for the construction of low or moderate income housing in cities and towns in which local restrictions hamper such construction. Should a local zoning board of appeals deny a permit to build subsidized low or moderate income housing and such housing does not then exist in the community in minimum quantities established by the General Court, then after a hearing into the facts and a review of the local decision, the State Housing Appeals Committee can issue a permit. For a complete summary of the regulations see Department of Community Affairs Memorandum, Summary of 774, September 1969.

15. See Massachusetts General Laws, Chapter 121A, dealing with the establishment of Municipal Development Corporations.

16. See an act establishing a state land development agency submitted by the Department of Community Affairs to the General Court in 1969 and 1970.

17. See pending legislation relative to the proposed Replacement Housing and Community Development Corporation (discussed further in Chapter III of this thesis).
FOOTNOTES
(continued)

Introduction


CHAPTER 1
NEW COMMUNITIES AS PART OF A STATE URBAN GROWTH POLICY

Introduction

The objectives of this chapter are: 1) to offer definitions of the various types of new communities; 2) to outline many of the problems involved in planning and building new communities; and 3) to examine several critical assumptions about the feasibility and desirability of developing new communities as part of a state urban growth policy.

Exactly what are new communities? Planners and developers offer different definitions. Most seem to agree that a "complete" community is implied, but some projects, not intended to be complete communities, have also been dubbed new communities. To clarify matters, the National Association of Home Builders has adopted an umbrella term -- "Open Space Communities." Under this rubric they recognize three categories of development: clusters, planned units, and new communities. A large-scale residential development, because it includes no commercial or industrial property, is classified as a cluster development. Projects that combine residential uses with commercial facilities, and perhaps
some institutional uses, are termed planned unit developments. The simple definition then for a new community is that it has a full range of urban community uses: housing, industry, and institutions scaled within a reasonable balance of one another.¹

There are a variety of types of "new communities" or "new towns" as they are sometimes called.²

The real estate salesman's "new town." This is usually a sales gimmick, an attempt to capitalize on an increasingly popular term in order to help sell housing in a development which sometimes is a planned residential community (that is, a development which includes at least schools, recreation facilities, and shops for food and other everyday needs), but, too frequently, is merely a residential subdivision which includes no provision for neighborhood or community facilities.

The isolated "new town" or "new city." No area in Massachusetts is sufficiently isolated, in terms of distance or travel time, from other population centers for an isolated and quite independent new town or city to be possible.

The relatively self-sufficient new community with a diversified economic base. This should include provision for a variety of industries and offices, so that a high proportion of wage earners living in the town would have the opportunity to work there. In addition, this type of new community includes all needed educational, recreational, and commercial facilities; housing of various types and prices; some health facilities; and should include a public transportation system. This definition implies that the population size of a relatively self-sufficient new community is fairly large; it is unlikely to be less than 25,000 and probably would be 75,000 or more. The community may be self-governing, or may be within the jurisdiction of a local government.

The relatively self-sufficient new community based primarily on a single industry. This type of new community, also, would include job opportunities for many of the wage earners living in the town. It, too, would include the needed educational, recreational, commercial
and health facilities; housing varied in type and in price; some cultural facilities; and should include a public transportation system. A relatively self-sufficient new community with only one type of industry as its primary economic base is likely to have a smaller population than one with a more diversified economic base.

The satellite new community. This type of development contains many of the facilities of the relatively self-sufficient new town, but has strong ties (hopefully including rapid transit) with an existing city. It depends on the existing city for governmental functions and services as well as many of the employment opportunities needed by its inhabitants.

The planned expansion of an existing town, or group of towns. Expansion around small cities, towns, or a group of towns can be planned and built to provide all needed facilities and services for a much larger community; when such planned expansion equals or is larger than the original population, the community surely deserves to be included in the category of "new" communities.

The restructuring of existing suburban sprawl to create communities. With very careful planning for the location of needed new facilities -- such as schools, parks, recreation places, shops, and rapid transit stops -- some suburban areas could be reconstructed as satellite communities, with a minimum of urban renewal and the resulting economic and social costs.

The "new towns in town," through urban redevelopment. Harvey Perloff apparently was the first to articulate the concept of building "new towns in town" rather than urban renewal projects which have usually produced only one or a few portions of a community -- high, medium or upper-priced housing, for example.3

Major Problems of Planning and Developing A New Community

The problems of planning and building relatively self-sufficient new communities or new communities based on the expansion of
existing towns are numerous, complex, and intricately interrelated. For discussion's sake, these problems may be divided into four general categories: social, economic, physical, and political.

**Social Problems**

The first category concerns the social problems of planning and building new communities. In terms of social structure and social facilities, what is a self-sustaining new community? What are its components? How can a socially self-sustaining or self-sufficient new community be achieved?

External factors that need to be considered include:

- The problems engendered by exclusion of individuals and groups from the mainstream of society. How can this be alleviated in the new community?

- The "apartness" or separation of a new community from nearby older communities.

- The impact of the older communities on the social development of the new community and, on the other hand, the impact of the new community on nearby older communities.

Internal factors to be considered include the problems of planning for the inclusion of people having disparate backgrounds in such a manner that a feeling of "community" can be engendered....

- Is economic integration really desirable from the viewpoint of the more affluent and from the viewpoint of the poorer people? To what extent can people of very different income levels be mixed in one neighborhood, block, courtyard, cluster, and so forth, without creating feelings of deprivation and perhaps even hatred on the part of the lower income people? Are such problems alleviated when there is a nearly complete mix -- from fairly low to quite high incomes within a village or neighborhood units?
- Is integration of various age groups within a neighborhood or smaller unit of a new community desirable? Where do older people prefer to live, when they have a choice? What housing provisions need to be made for the elderly whose activities have become limited?

- If disabled younger people are not to be excluded from a new community, in what ways can special housing for them be arranged? Should they be grouped in one building, or should a part of each group of dwelling units be built in such a fashion that all except severely handicapped people can do their own housekeeping?

To put these points more simply, if stratification within the new community is not desirable, how can it be prevented? Stratification usually occurs according to one or more of the following patterns:

1. Ethnic origin, race, or religion.

2. Economic level or educational attainment.

3. Age.

Forces that can lead toward cohesion within the new community need to be stressed:

1. Educational forces. In particular, what different and/or additional educational services are needed for formerly underprivileged people before and after they move to a "new community"?

2. Cultural forces. A wide range of cultural facilities is a necessity.... How can these facilities and the cultural forces behind them lead toward a cohesive community rather than separate factions within it -- black vs. white, young vs. old, rich vs. poor?

3. Recreational forces....

4. Other opportunities to mix and mingle need to be provided if "community" rather than "apartness" is to be fostered. These include church and other religion-related activities, youth groups, and civic action groups.
There are many other points that should be considered.... Only those social problems which could be worsened by living in new communities unless care is taken to prevent them [are mentioned].

Economic Problems

The second major category of problems concerns the economic aspects of planning and constructing a new community.

Financing the general development costs of the community is an early and important problem the new community developer must consider. The general development costs include a number of specific factors; unless each of these is adequately financed, it would be economically unwise to start building a new community.

Land acquisition costs. One must be aware that when large-scale land acquisition is undertaken, there are additional problems of increasing costs per acre if many small parcels must be obtained.

Planning costs. These begin several years before construction commences, continue during construction, and should, to a lesser extent, be continued indefinitely as the community and its environs grow and change.

Costs for construction of the physical infrastructure. Streets, water and sewer facilities, underground installation of telephone and electric lines, and so forth, all must be provided. No matter who pays for the initial construction, it is useful for the State to keep in mind that the community's future inhabitants will ultimately pay the bill. Their interests need to be protected at least until they live in the community and can speak for themselves.

Costs of constructing community facilities. Schools, libraries, health facilities, fire and police facilities, cultural facilities, recreation facilities, and transportation facilities. Who pays for what? How is it paid for? And when? Does the local government provide the needed facilities, or must the new community's developer provide money, sites, and buildings?
Costs of "selling" the development and each of its many segments, i.e. the industrial area, commercial facilities, as well as the housing, must be considered from the time planning for the new community begins.

The costs of taxes levied by existing local governments, and the State and Federal Governments also must be considered.

Financing the residential development. This includes construction loans for middle and upper income housing, home mortgages for middle income housing, and financing lower-middle and low-income housing. (In addition to 221.D.3 and other Federal housing programs, the availability of assistance from private and semipublic sources should be explored.) If public housing is included, how will it be paid for? Also, when will it be built and where will it be located?

Financing the commercial development. There are few problems in financing well-located, well-designed commercial facilities except when all money is tight. Methods used include: construction by the developer and sale to user; construction by developer and lease to user (this has two advantages -- (1) retaining control over the facilities, and (2) obtaining a relatively high and assured income over a long period of time); construction by other builder and lease to the community's developer; construction by other builder for sale or lease; and construction by or on behalf of a firm wishing to locate in the new community.

Financing the industrial development. This is relatively easy; any of the methods just listed can be applied. Another possibility to explore is State economic assistance to [attract new] employment opportunities.

Financing the development of offices. This also is relatively easy, although perhaps not as simple as acquiring construction loans for shops or industry, since the market usually is not as visible to financial backers.

Financing maintenance costs of the new community. This poses problems of choosing the best single method or combination of methods to pay for maintaining the
facilities, services, and grounds of the new community. Possibilities include:

- Taxes by existing local government.

- Taxes by a new unit of local government.

Can the new community be incorporated as a new municipality? If not, special districts with powers of taxation are another possibility.

The high cost of interest. The developer needs adequate, long-term, low-interest loans for planning, land acquisition, development of infrastructure and community facilities, and, perhaps, for construction of some of the housing, shops, and industrial facilities. The builders of various facilities in the community also need loans at reasonable interest rates in order to complete construction without incurring undue financial hardship.

The dangers inherent in the lack of adequate "front-end" money must be pointed out. The lack of enough money to permit the developer to exist until income flow is well underway is a principal reason for the failure of many reasonably well-planned new communities. If adequate "front-end" money is not available, unanticipated increases in costs or slowness in sales and rentals can make the difference between a financially successful new community and one that fails. The State, as well as private developers and the inhabitants of the new communities, has an interest here.

Can new communities be a financial success? No -- if they are not well located, planned, developed, and managed. No -- if they are inadequately financed. Yes -- if they are properly located, planned, designed, developed, managed, and adequately financed.5

The relationship of economics to site selection needs to be considered. This includes not only the cost of land for the new community, but also the cost of providing the physical infrastructure. It is usually less costly, for example, to tie into an existing water supply and treatment system than to build a new one.

Of course, the higher the land use intensity, the lower is the per-unit cost for the land. In a new
community, what densities, both overall and for various segments of the community, are desirable? Necessary?

How can the developer and the unit of government paying for so many of the services in or to the new community capture at least some of the increased value in the land developed for the new community and the adjacent land?

Who can afford to build a new community? Several developers of fairly large new communities have [indicated] recently that the costs of building an independent or relatively self-sufficient community are so high that few entrepreneurs can afford to undertake such development.

Is the public-private development corporation at the State level the best answer for building one or more new communities in [Massachusetts]?

Physical Problems

The third major category of problems concerns the physical aspects of planning and constructing a new community.

General location; regional analysis. The general areas where a new community might be located need to be considered in terms of their spatial relationships to existing central places. Regional analysis is needed in order to make logical decisions concerning the general location for the new community. Whether to locate the new community in a growth region or in a region that needs additional economic development is one example of the policy decisions which need regional physical analysis.

Basic resources in each general location must be considered.
1. Water. The availability of clean water in quantities large enough for all foreseeable needs for the population of the new community is of paramount importance. Water requirements for the proposed size and type of new community for at least the next 30 or 40 years (taking into account the fact that per-person use of water is increasing at a rapid rate) should be determined and all possible sources of water to meet such needs should be located.

2. Land. Availability of the land area needed for development is, of course, of great importance. In addition to the physical availability of adequate acreage, problems of assembly and of cost must be considered. One must remember that the average cost per acre and the difficulties of assembling a large tract increase when many small parcels must be acquired.

3. Air. This most important resource usually is ignored. But the meteorology of each possible site surely must be considered. It would be foolish, for example, to build a new community in an area where frequent air inversion conditions increase the possibility of health hazards caused by trapped pollutants.

Transportation. Regional and local transportation networks should be considered. Accessibility of the new community to existing communities and to recreation areas and other amenities in [Massachusetts], in other parts of the Northeastern corridor, and in other regions of the United States is very important.

1. Highways. [Massachusetts] already has a network of highways that should be easy to expand at relatively low cost, because of the short distance involved, to any place a new community might be located.

2. Rail. ... The possibility of providing rail rapid transit from any proposed new community site to [an existing] railroad line should be considered.
3. Air. If one or more new communities of moderate size were to be built, connections with [Logan] airport would be needed. If a large new city were to be constructed, access to Washington, [New York], Philadelphia, and other major mid-Atlantic State airports by short-takeoff and landing aircraft from one or more new airports established to serve that new city should be considered....

The Utilities. It seems unlikely that there is any area in [Massachusetts] so far from existing electric, gas or telephone lines that there would be difficulty in inducing the utilities companies to extend lines to a new community at little or no cost to the community's developer.

Site selection. When the general location for the new community has been determined, problems of selecting a specific site must be considered. These include:

- Land-acreage that is adequate to meet needs. The acreage needed depends on the type of new community to be built, that is, whether it is to be self-sustaining or a satellite, the population size, and the overall intensity of land use in the new community.

- Construction factors - including topography and soils. A tract of land is needed that contains no large areas having serious obstacles to development - such as excessive slopes...unstable soils, impervious soils, or marsh and other wetlands.

- Aesthetics also are important. Terrain, vegetation, watercourses, and bodies of water affect the appearance and livability of the new community, and, therefore, require attention.

- The availability or ease of providing basic public facilities is of great importance. These facilities include a water supply system, a sewage treatment and disposal system, and trash and garbage disposal systems that are safe and sanitary.
The plan for the new community should provide for:

- Efficient use of space....

Questions of overall density and of the intensity of land use in each sector of the new community are important.

Problems of retaining in open-space used those land and water areas that should not be built upon, drained, or otherwise destroyed also need to be thought through. As one example, how much of the open areas unusable for recreation should developers be permitted to claim as open space?

Good circulation of people and automobiles is imperative. The problem is, how can good circulation be achieved without excessive costs?

If we plan for people, some facilities must be within walking distance and most others within the new community should be readily accessible by a public transportation system.

Another part of this problem relates to space for automobiles. Is there any reason for permitting the construction of new communities that include provision for the automobile and not require a realistically adequate number of parking spaces for each house, apartment, office, industry, and commercial space? The planners for a new community should bear in mind that it is likely to serve a hinterland as well as its own inhabitants; therefore, even with an excellent public transportation system to serve the community, many parking spaces in the nonresidential areas will still be necessary.

Provision for all needed facilities in sound and tastefully designed structures surely is desirable. A new community's appearance depends quite a lot on the design of its buildings. There is little excuse for architecturally inferior housing and no excuse for badly designed public and semi-public buildings. How to achieve sensible and sensitive architectural control is one more problem that requires solution.

Room for future growth needs to be planned for and provided from the outset. There is a question of
how much space to provide for future expansion, where this space should be, and how it should be used and maintained in the interim.

Prevention of pollution is imperative. What provisions must be made to ensure that no heating, trash disposal, or other facilities in the new community contribute to further pollution of air or earth? This is a point I've not seen mentioned in any writings about "new towns," but it is one that needs serious consideration. It would be foolish for us to subsidize directly or indirectly the construction of any new community that will further decrease [Massachusetts'] or the Nation's well-being -- or add to the cost of cleaning up later.

Planning for future renewal needs to be included. What plans can be made to forestall as long as possible the need to rebuild all or parts of the new community? Can it be designed to facilitate renewal that may be necessary or desirable as technological changes make some of its facilities obsolete or seriously uneconomical?

The timing, or sequence of construction poses problems. What comes first -- or do you work on everything at once?

Facilities first. One new community developer built the commercial, industrial, and some recreational facilities before any housing was ready for occupancy.

Housing first. Others built housing first, which is satisfactory if the new community is near existing shops and employment areas. If not, the lack either slows housing sales or causes great problems for the inhabitants, and may create additional difficulties in bringing about a sense of "community" because there will be no place for the early inhabitants to meet one another.

Housing and facilities together -- in increments. Other new community developers try to build incrementally with some facilities open when housing is ready for sale and occupancy, others provided as the community grows and additional facilities, or new ones are needed.
Creating a new community's "image" by providing special facilities in advance of need for them. Some developers establish an "image" for their new community by building -- far before the number of inhabitants of the new community warrant it -- a special facility....

Preserving the environment includes very important problems. Among these are problems of earthmoving and construction of roads, housing, and all other buildings without leaving excessively large areas bare -- to add to air pollution and excessive runoff of rainwater with the resultant land erosion, and silting of streams and rivers downstream. Lesser problems include how to keep the trees, in areas where they exist; planting trees where none grew before; and designing landscapes that complement the climate, terrain, and buildings.

Political Problems

The fourth category of problems is related to the political aspects of developing a new community.

Federal. As reflected in reports, speeches, bills, and programs, the atmosphere during the past two years has been increasingly in favor of the construction of new communities. The major problem is lack of adequate funding to get a number of new communities underway. Important indications of interest in new communities were Title IV in the Housing Act of 1966, and in the Housing Act of 1968, Title X....

State. At the State level [there are] a few points to consider:

1. What additional enabling legislation [is needed]?

2. How can ... support for this type of development [be gained] from the many State agencies that need to be involved? How can the needed support be coordinated to maximize the utility of each agency's input?

3. Growth is occurring. It cannot be stopped. The question is how and where will that growth occur? Will it enhance the State of [Massachusetts] or harm it?...

4. An important factor is that [Massachusetts] has ample space for several new communities.
Local. Local political problems can be minimized if the local government officials and the general public are aware that well-planned growth can be very beneficial.

Recent Proposals Calling for the Development of New Communities in the New England Area

Proposals for the development of new communities in Massachusetts and the rest of the New England area have come from several sources. The New England Regional Commission in its recently released Regional Development Plan proposed to identify, develop, execute...four model demonstrations of new communities in New England. These demonstrations will meet housing needs in a form appropriate to the selected areas and will emphasize the development of communities within the fabric of existing metropolitan areas...

In a study undertaken for the New England Economic Research Foundation it was reported that a new community...in a suburban area of Springfield, and drawing on the Springfield area for a sizable measure of infrastructure facilities and services, might be plausible. This would be a new community with a sizable share of its own economic base and infrastructure. Similar cases could be made for the Bridgeport, New Haven and Worcester areas, and perhaps, one or two others.

Several legislative resolves have recently been introduced by members of the General Court calling for an investigation by a special commission relative to the establishment of new communities in Massachusetts. Thus, there is a significant and substantial
interest in the potential role new communities could play in meeting some of the current needs as well as anticipating many of the future needs of the Commonwealth.

In the past several years a variety of proposals to develop new communities in Massachusetts have been introduced:

There are proposals to create small, modern towns in depressed rural areas as a means of providing a superior urban infrastructure, facilities and services at an economic scale, to depressed rural populations, living in surrounding settlements too small, too dilapidated, too deficient in services to provide a base for growth and development. There are new resort communities, with second vacation homes, springing up with the boom in New England's greatest export industry -- recreation and tourism. There are large scale urban development projects, serving middle income families, under construction in the suburban cities and towns in some of the more rapidly growing metropolitan areas of the region. There are detailed proposals to create new towns-in-town on man made or newly cleared land in the harbors of some of the very large central cities of the region, to provide new industry and a new urban environment, in part for urban poverty neighborhood residents. There is an elaborate design for a full blown new town, with its own economic base, fashioned to give urban poverty neighborhood residents an opportunity for better jobs and a superior environment in a new city to be built on the outer fringes of an expanding metropolitan area.

The suburban cities and towns of New England's metropolitan areas may experience a population growth of three-fifths in 20 years time. Can new communities address some of the problems that can be expected to develop as urbanization continues?
New Community Development in Metropolitan Areas:
"The Growth Point Theory"

The issue is not whether metropolitan growth and expansion will occur, but rather how, where and when it will occur. Although some relatively isolated, semi-autonomous, or economically specialized new communities might be built in outlying rural areas (and certain arguments have been made in support of a few such developments in certain lagging regions of the country), the overwhelming orientation of new communities has been and probably will continue to be toward metropolitan locations where the major population gains and the primary economic growth are taking place. New communities stand a better chance of being economically feasible and socially and politically acceptable if they are developed as part of the "metropolitan regional system, related directly to the metropolitan social and cultural structure, its economy, its transportation system, its open space and land development patterns, and the full range of its market systems."

There are a number of important economic considerations that need to be considered in selecting sites for new communities. The hope is that it will be possible to identify growth points in communities and subregions. Available public funds would then be concentrated in those areas offering special promise for growth in order to bring about self-sustaining momentum for future development.
A growth point may be defined as the nucleus of sustained growth from which the impulses of development are transmitted to other places, especially the immediate surrounding area. It may be that impulses of growth transmitted by one nucleus to others get a feedback from other growing points. "The center should have one or more economic activities that have shown signs of sustained growth over a period of time, that could be reinforced to create capacity for further development in the region, and that might even provide the impetus for growth in the entire state, or for a major portion of it." A leading French advocate of this hypothesis, J.R. Boudeville, defines a regional "growth-pole" as "a set of expanding industries located in an urban area and including further development of economic activity throughout its zone of influence."  

In order to locate appropriate growth points, it is necessary to specify criteria that must be satisfied. These criteria help to determine whether a given area or subregion has sufficient potential for development to be classified as a nucleus. According to a study by Mirza Beg, these potential growth points should satisfy criteria pertaining to (1) sources of stability; (2) sources of reinforcement; and (3) possibilities of a breakthrough.  

(1) Sources of stability: There should be one or more industries or institutions that provide sources of stability to the economy of the general area and to the particular community. Employment should be free of pronounced seasonal fluctuations. Examples of industries or institutions providing stability to the local economy would be a large governmental administrative unit; a school, college, or university with several hundred persons
on the payroll; or a sizable manufacturing or commercial establishment. A steady and relatively large rate of population increase may foster economic stability in the area. Such a community may be already well developed and likely to grow at an above-average rate if development projects are located in the vicinity.

(2) Sources of reinforcement: To qualify as a potential growth point, the community or area should possess additional sources of strength. Superior means of communication, a major highway passing through the area, an intersection of interstate highways and toll roads, financial institutions, recreational and cultural attractions, a good public school system, freight terminals, available land for industrial parks, and many other factors provide reinforcement to the growth point. The traditional locational considerations such as availability of raw materials, nearness to markets, access to skilled labor, and agglomerative advantages due to urbanization, are also relevant and will provide some communities with a higher than average potential for growth.

(3) Possibilities of a breakthrough: There should be some potential in the area for a major breakthrough into rapid regional growth. Expansion in the volume of total opportunities must occur if steady growth is to be maintained. Aggressive leadership in the area may be the crucial variable here. Each growth point must be strategically located to consolidate the existing position of the community and to attain maximum returns from the developmental effort, in order to spread the stimulus into the surrounding regions. The selection of a relatively more progressive and better developed area, with a greater degree of stability and immediate possibilities for expansion, is rather important. Progress at the growth point may inspire confidence within the region and motivate surrounding areas to duplicate the development. The existence of local initiative on the part or responsible leaders in business, professional, and community circles seems to be a critical factor in the successful implementation of programs of development.
In theory, a regional economic growth point should serve a dual purpose. It should create the infrastructure for consolidating existing advantages and stabilizing the base from which to plan for sustained development; also, it should be integrated with smaller cities in the region to activate them to launch their own plans for development, if possible.

The concept of a growth center or a growth point is related to a notion, though difficult to define, of an optimum size production and population center at which maximum advantage is gained from scale and external economies without incurring serious diseconomies of agglomeration. Growth points have a critical minimum size which permits scale economies and promotes development over the growth area as a whole, and an optimum size beyond which net diseconomies occur.

New communities as growth points argue for centralizing economic resources at certain key locations rather than spreading them thinly over a whole region.

This case rests upon spatial differentiation in resources, a given uneven distribution of population and markets that can only be changed in the long run, indivisibilities in production plants and in public investment projects, scale economies in manufacturing, 'central services,' and public utilities and upon external economies of inter-industry linkages. But the growth point concept, particularly its justification as a policy tool, also involves the hypothesis that centers of agglomeration have zones of indifference around them and that income will be maximized in the growth areas as a whole by concentrating development at the growth point. This is the argument used to justify disproportionate allocations of public investment for infrastructure purposes at the growth point itself.
The existence of a growth point or a new community must involve a certain degree of structured imbalance over the region as a whole. If a new community means, among other things, a new industrial complex, then this complex will be heavily concentrated in or around the growth point itself. The growth point philosophy is that such areas are bound to stagnate in any event, and that the structural imbalance that results from concentrating expansion at the growth point will result in higher average income per capita for the region as a whole.

Secondly, the key industries emphasized in growth point discussions are, since their function is to accelerate growth within the region, probably export industries (i.e. industries serving a national market).

Thirdly, the growth point will, in time, service its surrounding area by providing the population of that area with supplies of goods and services that need a high minimum population threshold for viability. Such goods and services will include: physical commodities, such as consumer durables supplied by department stores or specialty stores; services supplied by the private sector such as the professional services of lawyers and accountants, or entertainment and leisure facilities; public services that lend themselves to economies of scale (technical colleges and special hospital services).

Finally, the growth point or new community has a socio-economic function to apply, that is to affect prevailing attitudes toward the desirability of economic growth. In regions with a slow growth record, one of the objectives of importing an advanced technological industrial complex to the growth point is to transform social attitudes and to make economic growth more likely in the future. This is achieved by the incentives of higher wages making local workers more productivity-minded and by the growth industries showing local entrepreneurs the possibilities of growth and highlighting the existence of investment opportunities.
In summary, agglomeration economies make concentrations of production and population more efficient than dispersal. These economies include increasing the return to scale within firms, external technological economies and economies of scale in the supply of urban services. Even in a free market economy there is unbalanced growth spatially. Industrial activity, establishments supplying public utilities and other services that require a high population threshold for viability, and population expansion itself will cluster around certain focal points. The operation of market forces will have selected these focal points because they have special locational advantages -- access to raw materials or markets, unique non-transportable facilities, or favorable topological features. These growth centers have influential effects on activity in the region where they are located. Their expansion may divert activity from peripheral areas which may lose population and fail to gain a proportionate share of capital and entrepreneurial talent, but from the point of view of the region as a whole this diversionary tendency will be more than offset by the induced economic expansion in the "zones of indifferences surrounding each center." These induced benefits will include

 provision of employment for the zone's population and markets for input-supply and primary industries. The assumption behind growth point analysis as a planning tool is that the agglomeration that proves profitable for the private investor and entrepreneur also results in benefits to society as a whole (especially in the sense that the region is better off than if economic activity were dispersed). This assumption is more reasonable if we recognize
that there are limits to the build up of activity at the focal points (i.e. that there is some optimum size beyond which net diseconomies emerge."

New Communities and the Planned Expansion of Existing Towns

This thesis is concerned with strategies for creating relatively self-sufficient new communities (with a diversified economic base) in presently sparsely developed areas within metropolitan urban regions and with strategies for the creation of new communities through the planned expansion of existing towns or groups of towns. Both options coincide with the growth point hypothesis. In Massachusetts the two options may in fact be one and the same. Since all land in the Commonwealth is incorporated into one of three hundred and fifty-one cities and towns, then a new community developed anywhere in the state is in fact really an expansion of an existing city or town. (There is another case where a new community can be developed within or across the borders of several existing towns.)

Across the state there are over 150 towns with a population of less than 6,000 people. Only 25 cities have a population of 50,000 or more people. So the creation of new communities expected to grow to an estimated 50,000 people will certainly alter the population distribution throughout the state in a significant way. A town that grows from less than 6,000 people to an estimated 50,000 people over a period of roughly 15 years will undoubtedly be changed
substantially; so much so that the planned "expansion" of existing
towns in Massachusetts is very much the same as creating relatively
self-sufficient new communities.

The centralization of metropolitan economic activities in urban
growth centers or new communities and the inevitable gravitation of
population to these centers will help to solve many urban problems.
The development of new communities will enhance the economic
development of entire metropolitan regions. They will create higher
average incomes per capita for entire regions, thus enhancing the
purchasing power of the areas and ultimately of the state. Secondly,
they will improve the level of productivity per worker by facilitat-
ing the use of more highly productive methods of production. Third,
ew growth centers will attract export-oriented industries which
draw on markets and sources of capital outside the area. Fourth,
they will allow for the provision of services which require a high
population threshold, and finally, the creation of new communities
will help create a more positive attitude toward growth throughout
the Commonwealth -- adding the incentives of higher wages and a
higher standard of living.20

The development of new communities as growth centers that are
integrated with the transportation and communication network of a
metropolitan area makes a great deal of sense.21 One proposal
which calls for the creation of new communities through the
expansion of existing towns on the fringes of our metropolitan
areas is based on the assumption that
Public funds may be integrated with actual or potential external economies to produce rapid growth in [existing towns] with a minimum of external diseconomies of congestion.22

As part of the program for expanding medium size cities, it has been suggested that formal channels of migration or commutation be developed through which workers living in depressed areas near-by could be guaranteed new employment opportunities.

In the past city planners have tended to draw heavily on the British "garden city" concept (adopting the idea that greenbelts should be developed around the periphery of a new community in order to protect it from the future onslaught of suburban sprawl).23 This has led to the belief that new communities must be physically divorced from other settlements. As a result, many developers have limited their purchases to "unspoiled" farm lands or natural areas beyond the fringe of suburban development. For several reasons, this approach has been unnecessarily expensive and has placed restrictions on the residents for whom housing and jobs in the new community would be available. New communities conceived and constructed as extensions of existing settlements and as integral parts of already well-developed regions can make a significant contribution to meeting the needs of the disadvantaged.

There are several reasons why it is more desirable to concentrate on the expansion of existing suburban communities (or the creation of expanded new communities) rather than on investments in entirely new, physically isolated new communities. The first
reason has to do with the fact that land located at a distance from existing settlements is generally unimproved and unserviced by infrastructure. The argument is usually made that this vacant land is more suited for new community development because of its low costs; however, the experience of all large-scale developers to date has shown that the initial purchase price of land is only a small percentage of the final sale price once the land has been fully improved or serviced for high density development. Thus it can be argued (purely in economic terms) that land close to an existing settlement will be more easily serviced through the extension of surplus capacity of available infrastructure. Another economic argument supporting the closer location rests on the fact that land values and the demand for vacant land is generally higher close to existing developments. Thus, buying land at a closer location, it will be possible to market the housing or sale of developed land at a faster rate than would be possible at a more remote location. This would help to eliminate many of the high front-end costs that currently plague private developers and reduce the time of exposure before a positive cash flow is achieved.24

Another set of arguments for selecting new community sites that are extensions of existing settlements is based on the belief that new communities should be planned within a regional framework and must directly address themselves to the opportunities for uplifting the economy of lagging areas. By locating close to an existing area, a new community can offer new jobs and housing for
residents in the surrounding area.

Planning new communities as extensions of existing towns will help the new community developer overcome many of the "chicken and egg" problems that have haunted several developments in the past. Imbalances in the initial attraction of either jobs or residents will be more easily absorbed by the existing employment and housing in the area. The problem of not being able to attract employers until there are people and not being able to attract homebuyers until there are jobs will be somewhat alleviated by the existence of both jobs and employees. Furthermore, churches, social institutions and community-serving facilities that the developer is usually unable to provide for the initial residents in an isolated new community are already available. This will help to cut the developer's costs and provide better services to initial residents. (There are, of course, the disadvantages of not being able to plan and nurture these new institutions according to more idealized goals or in ways that would be more responsive to the future needs of the new community's residents.)

Economic arguments for building new communities in open rural areas depend on the assumption that the difference between marginal per capita product and marginal cost in a new community will be greater than in existing urban areas. In fact, though, the opposite seems to be the case if we judge by existing cities that are comparable in size to proposed new communities. That is, the gross product per worker is higher in more densely developed cities than
it is in suburban areas.26

New communities in metropolitan areas can be designed to take advantage of 1) the existing employment opportunities in the suburbs, 2) the rapidly growing population potential, 3) the availability of existing physical and social infrastructure, 4) transportation access to a variety of urban and suburban centers, 5) the obvious economies of scale which accrue to large scale development.

A growth strategy based on the new community concept would seek to develop growth centers in metropolitan areas (where new urban gains are likely to occur) which will help to improve the overall pattern of urban development. "The role of the central city would remain strong. Rather than competing with central cities, in a rational redistribution of the region's activities in a high growth area, new communities would complement and relate to the central city."27

The feasibility of a new community depends on three general factors: accessibility, availability and developability. Accessibility is essentially a measure of the degree to which the proposed development will link into the transportation and communication network of the metropolitan region. Availability relates to the possibility of assembling a site at a competitive price with manageable financing. Developability deals with the geographic and topological suitability of a site and is closely related to the kinds of technologies (land fill techniques, bridge building capabilities) available.
New communities built in outlying rural areas would probably not serve to stimulate the economy in those lagging sections; a new community which seeks to achieve a self-contained economic market will find that seeking closure at such a scale will result in lower capital production. From the point of view of making a successful public investment it would be most sensible to build new communities in metropolitan areas where they could draw on neighboring and surrounding settlements for a substantial part of their economic base and infrastructure especially during the early stages of development. Not only would the initial capital investment in a new community in an outlying rural location have to be much greater (since there would be no existing infrastructure and job base to draw on), but the operating expenses would always be greater since a new community in an outlying area would have to be built at considerably larger scale if it were to succeed.

New communities developed as growth centers within metropolitan areas are probably more likely to succeed because of the immediate accessibility of existing settlements; although other difficulties arise in such situations because long-time residents are resistant to new large scale development which seems to threaten their style of life and the power they have over the political situation. These political issues are examined more fully in Chapter III.
New Communities as an Alternative to Suburban Sprawl

It is often argued that the development of new communities or large-scale planned urban growth will help to avoid a replication of past suburban development with all its attendant problems -- suburban sprawl, segregation of social groups, political balkanization, and municipal fiscal imbalance. The concept or strategy of planned urbanization seems to offer an opportunity for the development of completely organized environments with the most efficient, least wasteful uses of land and the most equitable provision of public services and facilities. Some of the public advantages which stand to be gained by planning for urban growth include:

1. Lower per capita costs to the resident because of the advantage of carefully planned uses designed to reduce unit costs (thereby achieving economies of scale).

2. The optimum development of open space and recreational areas through careful planned unit or cluster development within the new community.

3. Maximum choice of housing for a full range of income and racial groups because of lower development costs and avoidance of discriminatory zoning practices.

4. A comprehensive transportation system not only for internal circulation but also for travel to larger urban centers and outlying communities through comprehensive planning.
5. A high level of employment through the creation of new markets by coordinating housing and transportation programming with industrial relocation to the suburbs.

6. A wider range of cultural opportunities through higher density and more heterogeneous development of suburban areas.  

Existing patterns of urban growth and development are conditioned by an interrelated set of public and private decisions. "While the private market by and large sets the tone, scale and pace of development, public actions directly or indirectly affect, influence, and structure the shape of development." Thus, a critique of present urban development patterns must take into account the full range of political and economic forces at work.

What are the specific consequences of urban sprawl or unplanned urban growth? It has been shown that:

1. A sprawled or discontinuous suburban development is more costly and less efficient than a more compact one, each at the same density within settled areas. Many costs depend on maximum distance or maximum area; if these were reduced, costs would be lower per capita or per family served.

2. Sprawl wastes land since the intervening lands are typically not used for any purpose.
3. Sprawl encourages land speculation which is unproductive, absorbs capital, manpower and entrepreneurial skill without commensurate public gains. It destroys or impairs economic calculations that ideally lead to maximum general welfare.

4. It is inequitable to allow a system in which the new land occupier is required to shoulder such a heavy burden of capital charges and debt mainly for site costs -- costs which in large part are unnecessary and unavoidable.

Most of the problems of sprawl relate to density. Since there are fewer houses per acre in the suburbs than in the city, it follows that, with respect to infrastructure, there are fewer requirements per family for infrastructure in the city than in the suburbs. Thus, if the suburbs could be developed at higher, more urban densities, less money/family would have to be devoted to infrastructure costs. This assertion was recently given some support in a study undertaken for Fairfax County, Virginia which demonstrated that an expenditure of $20 million for sewers could support a new community population of 465,000 people -- twice as many people as under sprawl conditions. These savings accrue for other infrastructure items, such as streets: for example, a Baltimore study indicated that a new community development may require up to 200 fewer miles of streets -- a savings approaching $800 million.
In many cases a city dweller in his flight to the suburbs may build his house in the middle of a vacant one acre lot. In doing this, he will have unwittingly insured greater infrastructure costs for himself if the suburban development becomes sufficiently urban to require a central sewer system. Wilbur Thompson describes these hidden costs:

Then, what was gracious living on ex-urban lots becomes suburban sprawl, too densely populated to be rural and too sparsely populated to be efficiently urban, and property taxes rise to 'confiscatory' levels. For example, an assessment of $2,000 per acre for a storm drain trunk line comes to a staggering 14% of the value of a $15,000 home, with laterals and catch basins still to come and sanitary sewer to follow.39

In addition to the advantages listed above, new communities -- if government controlled and subsidized to some extent, hold out the prospect of 1) increasing the housing supply for low and moderate income people while reducing the costs of infrastructure, services, and facilities and 2) maximizing the employment potential of low and moderate income workers. It has been pointed out that new communities can provide unique opportunities for the construction of large quantities of new housing at moderate prices:

The economies of producing housing on a large scale in a single area reduce the cost considerably. The large staged market will enable builders to organize their time and work efficiently...and perhaps, of even greater significance, are the possibilities of experimenting with new technology in housing production; technologies that many large and exceedingly competent corporations have been investigating and which they are eager to put into practice. It is also possible that the
In addition, new community development may help to solve several other problems associated with providing sufficient housing for all groups of people. 41

First, new sources of investment funds--sources outside the traditional capital market--can be tapped. Second new communities can solve the problems of site assembly that so often frustrate housing entrepreneurs in already developed areas. Third, they can provide land for housing development at substantially lower costs (per acre through large lot acquisition)--and it is sharply rising costs of land that has priced many builders out of the market; this is especially true of the small builder, the characteristic unit of production in the industry. For new communities can provide a continuing supply of housing sites for smaller entrepreneurs at rates far below the $250,000 per acre paid for slum buildings to be razed in renewal areas or far out land that has risen in value as much as 2,000% in rapidly expanding urban centers...42

Another, and perhaps more important, argument made in favor of new community development is that large-scale planned urban growth can insure low and moderate income families (especially black families which have been confined to the inner city ghetto) a better opportunity to secure jobs and to achieve upward economic mobility. According to the U.S. Census Bureau only 5% of black Americans live in the suburbs. Yet suburbia is where nearly 80% of the nation's new jobs are. During the 1960's industries in increasing numbers chose to locate farther out in the metropolitan suburbs. 43 The blue-collar jobs created by industrial expansion outward remain
inaccessible to blacks trapped in the inner city. Several solutions to the "core-ring" (inner city-suburban) disparity in jobs and industrial growth have been proposed. Some suburbanites advocate improving the transportation system between urban ghettos in the inner city and suburban industry. This strategy has failed to provide positive results. Some politicians and many blacks favor moving industry back into the inner city. This scheme also has its drawbacks, and although the problem of providing jobs for inner city residents can possibly be handled in the short run by various schemes to redistribute governmental revenues and by writing down inner city property to make it more attractive for industrial development, a preferable long-run solution would involve a major dispersal of the low income population, particularly blacks. Attempts to "open" the suburbs to urban blacks have been unsuccessful. First, even though 200,000 middle class blacks are moving to the suburbs each year, white hostility tends to confine them to black suburbs. Legally, the suburbs are open to blacks. But while the Federal Government and twenty-seven states (including Massachusetts) have anti-discrimination laws on the books, they are often unenforced. Another obstacle to opening up the suburbs is that each municipality has the power to block any increase in its low and middle income population -- black or white -- through refraining from taking the positive steps of public interest and subsidy necessary to produce moderate and low rent new housing. Although attempts are currently being made
to break down the exclusionary tactics of existing suburbs, the chances of significant break-throughs do not seem particularly promising.\(^49\)

The one strategy, however, which does seem to offer a great deal of promise is the building of integrated new communities. John Kain points out that

> even in the face of continuing practices of residential segregation, the suburbanization of the Negro can still continue apace. The presence of Negroes in the suburbs does not necessarily imply Negro integration into white residential neighborhoods. Suburbanization of the Negro and housing integration are not synonymous. Many of the disadvantages of massive, central ghettos would be overcome if they were replaced or even augmented by smaller dispersed Negro communities. Such a pattern would remove the limitations on Negro employment opportunities attributable to the geography of the ghetto. Similarly, the reduced pressure on the central city housing markets would improve the prospects for the renewal of middle income neighborhoods through the operations of the private market.\(^50\)

Ghetto enrichment would accelerate programs aimed at up-grading the urban areas presently occupied by the Negro underclass. But since any program that significantly improves life in the ghetto also accelerates Negro migration to the same ghettos, this alternative is nothing more than another way of choosing a permanently divided country. There are two other options: the first calls for vigorous efforts to open the suburbs for Negroes, complemented by some fire fighting programs of ghetto enrichment. The second choice
includes ghetto improvement accompanied by a program to create new communities where Negroes can be masters of their own lives and shape their own environment. The creation of new communities in suburban areas in close proximity to existing job opportunities could be coordinated with the creating of new communities by black developers and black enterprise.

The three major goals of a new community development program should be 1) to maximize regional productivity (by attracting private capital investment through increased efficiency); 2) to minimize public expenditures for capital improvements and services, 3) to maximize advancement opportunities for disadvantaged groups. Although the economic evidence is not conclusive, it would seem that these three goals are potentially realizable through the development of new communities because new communities allow for a greater degree of public coordination and control over the shape and pattern of urban development, allow for economies of scale in public expenditures, and allow for increased labor mobility by aggregating new industrial and commercial development. In addition, because new communities are typically built at a higher density than typical sprawled developments, they insure economies of scale in housing and infrastructure development, they reduce the number of miles of public highways and roads needed to link settlements, and they offer advantages to new industry through agglomeration.

Black new communities are only variant of the new community idea. The basic point is that new communities -- whether integrated or black run -- offer a wide range of opportunities for low and
middle income people because of the economies of scale, the possibilities of increased housing production, the linking of job possibilities with new urban development, and -- most important -- the potential for politically feasible direct action and massive subsidy by higher levels of government.

New communities, developed under the guidelines of a state urban growth policy, could provide the housing for low and middle income people within close range of jobs created by industrial relocation in the suburbs. The state government has a residue of as yet underutilized powers to influence the growth and structure of urban areas. Programming and development of public facilities can create an envelope within which more efficient and more equitable patterns of urban growth and development can take place. The timing, location, and scope of public investment decisions influence, if not control, the physical form of the region. New community development seems to hold out a very real alternative to urban sprawl, an alternative which is directed at helping to meet the critical housing shortage and at helping low and middle income people (especially inner city blacks) realize their full economic potential.

The Role of State Government in New Community Development

One reason that countries in Europe and elsewhere have gone so much further and been so much more successful than we have in the
development of new communities is the more active role played by government. To point this out is not to minimize the need for private involvement. Rather it is to stress the need for cooperative involvement of all levels of government and private industry.53 The risks in building a new community are tremendous for the private developer who must go it alone, and to date the record of achieving public objectives has not been too good.54 The enormousness of the undertaking, the lack of eminent domain power, the total lack of early return on a large initial investment and the inevitable uncertainty of doing something new are only a few of the considerations. The great risk is one of the primary reasons that large investors have been reluctant to back private efforts to build new communities. The private developer, though, is an essential partner without whom new communities probably could not be built at all. Government involvement is needed not to substitute for private action but to attract it.

**Considerations for State Involvement in Private Efforts to Build New Communities**

"The risks are high and the potential benefits minimal..." is the conclusion reached by Eichler and Kaplin in their comprehensive study of new communities currently being developed in the U.S.55 They consider the possible benefits and costs that could result from public involvement (through capital improvement programming, grants-in-aid, or direct subsidies) in the development of new
communities throughout the country. They present three arguments against the use of public funds for these purposes:

1. New communities only help the middle and upper income group in society

2. Public funds would only help to finance poor investments (i.e. ones for which a private developer would be unable to secure private financing)

3. New communities do not achieve any valuable social objective.

These conclusions may be justified in so far as they refer to privately developed new communities of the past. But strong arguments can be made to support the contention that a public-private partnership in new community development could overcome each of the three assertions made by Eichler and Kaplan.

Criticism #1: New communities only help the middle and upper income groups in society.

Certainly it is true that most new communities developed in the past have been directed toward the middle and upper income markets due to the financial constraints imposed on the private developer. But the addition of public funds for housing subsidies, job training programs, industrial location incentives or improved transportation facilities can vastly expand the income range of potential residents. Eichler and Kaplan tend to oversimplify the impact of new communities by disregarding the development's effects on surrounding areas. Strategically located new communities can have a significant impact on existing central city areas through the filtering process in housing, the attraction of new employment opportunities to the region,
and the development of prototypical solutions and technologies that can be applied in the inner city.

Criticism #2: Public funds would only go to help finance poor investments

To the private developer a "good" investment is one that produces a high rate of return (in relation to the degree of risk) during the development period which in the case of new communities may be anywhere from 10-20 years. The success of the project after that point is of little concern -- except in so far as the developer has an equity interest in leased properties. However, from the public point of view, an investment is considered over a longer time span because of the continual costs that must be borne in the provision of public services and facilities. Frequently public investments are made for their long-range or secondary effects rather than their short-range viability. If a public commitment to build new communities can lead to the prevention of a major transportation crisis in our central cities, then the decision would be justified in the eyes of a public agency or authority, even if the investment would be viewed as a poor one in the short run by a private developer.

Criticism #3: New communities do not achieve any valuable social objectives.

Privately developed new communities (There have not been any publicly developed new communities in recent years.58) have been able to achieve critical social goals (providing low income housing, increasing the job base of the region, maximizing open space) only
in so far as these goals coincide with the private developer's objective of making as high a profit as possible on his investment. Several new communities have been able to maximize public open space through careful planning, to increase the employment base in the area, as well as to improve the educational and cultural facilities. But these are often improved by sacrificing other equally significant objectives -- more lower income housing, greater income integration and innovations in housing and transport technology. Clearly the private developer is under a constraint to provide only what will be marketable or profitable. This is no reason, however, to condemn the entire concept of new communities as being incapable of achieving social goals. On the contrary, it merely indicates that the private market as it is currently structured is not capable of maximizing the broad range of social goals that could be achieved through increased public involvement.

The private community builders have traditionally begun their involvement with the purchase (or prior ownership) of large parcels of land. Then they have continued to plan their new community given the constraints of the market, their financial capabilities, and local governmental regulations on land use. There are two critical problems inherent in this traditional land-first approach. First, because the developer fails to clarify the goals of new community development through careful planning before he purchases the land, he is frequently forced to make many sacrifices to meet
the (political, financial, and social) constraints imposed on his site. The developer frequently finds that the final purchase price for the land is the critical factor in determining what types of uses and what types of densities will be possible regardless of what he might think is most appropriate.

The second problem with the land-first approach is its failure to complement the needs and growth potential of the entire region. The private developer is, essentially, given the right to determine the future growth pattern for the region in which he selects his site. His decision to build is based primarily on the anticipated marketability of the site and the ability of the surrounding area to service his project and provide the level of facilities he requires. He is generally not concerned with the following:

1. the impact of his development on the entire region's growth. (Is his site the most appropriate location to develop a new growth center?)

2. the employment and valuable cultural activities it will attract away from areas of greater need within the region, and

3. the changes in priorities in regional and state appropriations of funds that will be required to provide the community with the desired level of facilities.

The major criticism of new communities built thus far in the United States (and in England for that matter) rests on the argument that they are not conceived as part of a regional analysis and rarely occupy a coherent place or role as part of the regional plans or, indeed, of any regional planning framework.
The key factors in the success of a new community development are sufficient capital, a short development period, a location which is developable, accessible, and available, ownership of the land prior to starting, as few legal restrictions as possible and a competent administrative and marketing team. Each phase of the new community development process (regional analysis, hiring of staff/consultants, financing, site analysis, site planning, intergovernmental relations, land acquisition, management, infra-development, tract development, marketing, evaluation) involves certain requirements that can best be handled by a different level of government or by the private sector. The purchase of land might be handled by a public body with the power of eminent domain. At each stage a variety of public powers might be exercised to enhance the final outcome of the development. Different levels of government (agencies, instrumentalities) might perform different functions at each stage of the process: the federal government (HUD, HEW, Interior) might provide excess federal land and subsidies for land acquisition, housing development, open space and transportation and infrastructure planning. State agencies (DCA, DCD) could select the sites that make the most sense in light of state objectives and they could subsidize certain aspects of planning and development. A state corporation (with broad powers such as local override) might handle the intergovernmental relations. An independent development district with power to act in a particular area (like the Massachusetts Port or Turnpike Authority) might handle a
different aspect of the development process. Regional planning commissions, municipal agencies, municipal corporations (such as local planning agencies, or municipally created development corporations), and, of course, the private developer (who could best handle the building and marketing) would all ideally be involved.

State government has an important role to play in new community development. Just what that role should be depends on several things: what the potential for new communities in the state might be (how many new communities should be built, where, at what size); what kind of intergovernmental planning framework can be established; what financial resources are available and what monies can be obtained from different sources such as the federal government; what kinds of instrumentalities presently exist and what kinds can be developed in the legal, political and social context of state government. These and other questions will be considered in the next two chapters.
Chapter I

1. Craig Noren, "New Towns of the United States" (Washington, D.C., National Association of Home Builders Land Use and Development Department), 1967, mimeo, p. 4. An even more specific definition is provided by the Advisory Commission on Intergovernmental Relations: new communities are large scale developments constructed under single or unified management, following a fairly precise, inclusive plan and including different types of housing, commercial and cultural facilities, and amenities sufficient to serve the residents of the community. They may provide land for industry or are accessible to industry, offer other types of employment opportunities, and may eventually achieve a considerable measure of self-sufficiency. With few exceptions, new communities under development today are within commuting distance of existing employment centers.


3. The "New Southwest" in Washington, D.C., an example of public planning and private construction, and Universal City, in Los Angeles, an example of private planning and construction, might be considered as steps toward "new towns in town" but neither really meets the requirements of a new community.

4. This section is based on my editing of a transcription of the remarks made by Jeanne Davis, at the Newark, Delaware Symposium on New Towns, op. cit.

5. Examples of new communities that are financially successful include the British new towns in which construction is in an advanced state (public planning, finance and development) and Tapiola, Finland (privately planned, financed and built). Although development is not sufficiently advanced to be certain, it seems probable that among the financially successful new communities in the United States will be Litchfield Park, Arizona, Irvine Ranch, California, and Columbia, Maryland.
Chapter I

6. Including members of the General Court, State agencies, private developers, local officials, and even the federal government.


11. In response to this need, several of New England's states are already involved in some stage of planning, promotion and development of new communities. Connecticut's Interregional Planning Program outlines four alternative patterns of urban growth, emphasizes communities with a high degree of self sufficiency, and accommodates new community development. Rhode Island's Comprehensive Transportation and Land-Use Planning Program presents five alternative land-use plans, including two which lend themselves to new community development. Vermont is actively engaged in planning for new rural communities as well as resort communities. In Massachusetts, the Department of Administration and Finance, Office of Planning and Program Coordination has the question of new communities on its agenda, but as yet there has been no inter-agency effort made to consider the question carefully.


13. Ibid., p. 537.
FOOTNOTES
(continued)

Chapter I


18. Ibid., p. 425.


20. Ibid., Chapter 15, "The Strategy of Regional Policy."


22. Ibid.


26. Alexander Ganz, Our Large Cities: New Directions and Approaches, (M.I.T., Laboratory for Environmental Studies), December 1969, p. 46. (Table VI: Hypothetical Contribution of our Large Cities to National Growth and Welfare.)
FOOTNOTES
(continued)

Chapter I


32. This is not to say that new communities can provide a range of housing opportunities without government subsidy, because they can not. See M. B. Zuckerman, Zurban Report, prepared for President Johnson's Task Force on New Communities, 1968 for a full discussion of mechanisms for financing low and middle income housing in new communities.


34. Kaplan, op. cit., p. 3.


36. Two articles, "The Case for Scatteration" by Lessinger and "The Nature and Economics of Urban Sprawl" by Harvey and Clark are often cited to show that sprawl works effectively to withhold land from premature development at low densities. While sprawl does seem to have this effect the wasteful sprawl pattern is haphazard and uncontrolled. A public policy to create land banks or to channel suburban development by means of coordinated public programming of capital improvements or by offering incentives (tax abatements, etc.) to private developers would have the same effect but would be much more predictable and would also serve to capture the increase in land values that usually
FOOTNOTES
(continued)

Chapter I

accrues to the private developers (who artificially hold land off the market) and return it to the public coffers.

37. Cited by Professor Charles Harr in testimony presented before the Subcommittee on Banking and Currency, October 22, 1969, p. 7. The question of a break point is unanswerable because different services operate more efficiently at different levels -- the optimum point is unknown.

38. Ibid.


40. Harr, op. cit. The basic difficulties of building industrialized housing (presuming the production technology can be mastered) are "making a market" for new applications, transporting and stocking standard parts and pieces, and restrictive building regulations.


42. Haar, op. cit., p. 5.

43. With the new kinds of goods and services being produced in new growth industries and with the improvement in transport facilities, traditional plant criteria -- proximity to supplies and markets -- are becoming less important and the availability of urban amenities -- good water and sewer systems, schools -- more important. Land costs have driven the new mechanized industries to the suburbs and elsewhere, but these are the very industries offering the greatest potential source of jobs for semi-skilled urban dwellers. The new interstate highway system has made it easier to serve a large urban area from the rim of a circumferential highway in suburbia than from the congested hub of a metropolitan area. Substantial diseconomies of scale in public services in large cities encourage industry to relocate in suburban areas. (A.C.I.R. Urban and Rural America: Policies for Future Growth, p. 58.)
FOOTNOTES
(continued)

Chapter 1


47. Kain, op. cit., The Public Interest.

48. The U.S. Justice Department has assigned 13 lawyers to enforce the 1968 Fair Housing Act; they have brought 44 cases to court and have won 13 of those cases.

49. Paul Davidoff, of Suburban Action in Westchester, New York is attempting to test the legality of discriminatory zoning practices for the N.A.A.C.P.

50. Kain, op. cit., The Public Interest.


52. See Arnold Schuchter, White Power/Black Freedom (Boston, Beacon Press), 1968, Chapter VII. Also see Planners For Equal Opportunity position paper on New Communities, presented at the American Society of Planning Officials Conference, New York, April 1970.

53. This point is made by Samuel C. Jackson, Assistant Secretary for Metropolitan Development of Housing and Urban Development in a speech before the Annual Meeting of the Federation of Rocky Mountain States, September 1969.

Chapter I

55. This section is based on a study prepared by New Community Planning Associates, "New Communities: A Public or Private Venture?", December 1969, Boston, Mass., mimeo.

56. Eichler and Kaplan, op. cit.

57. The planning for several new communities in New York by the New York State Urban Development Corporation seems to indicate that this is the case.


59. For a full discussion of the problems faced by a private developer in building a new community, see "The Role of Private Enterprise in Developing New Towns," Harvard Business School, Intercollegiate Case Clearing House, ICH, 13645, PR 8A.

60. For an elaboration of these considerations see the case prepared by McKinsey and Co. on Soul City, the new community being planned and developed in North Carolina by Floyd McKissick Enterprises.

61. For a discussion of which phases can best be handled by which units of government, see New Community Planning Associates, op. cit.
CHAPTER 11

THE POTENTIAL FOR NEW COMMUNITIES IN MASSACHUSETTS

Introduction

Most of the important questions about urban development are what have been termed "how much?" questions and not "whether?" questions. Such issues as how fast will the population grow, how many jobs will be located in the suburbs and how many in the central city, and how much additional land will urban expansion require, underlie any attempt to measure the potential for new communities in Massachusetts.

The projected increase in Massachusetts' population from approximately 5 million to 7 million between 1960 and 1980 and to 13 million by 2020 implies virtually no change in the state's share of New England population during the next two decades. Massachusetts' urban population (that population which resides in urban metropolitan areas) is projected to increase from approximately 4 million to 12 million between 1960 and 2020, at which time the urban population will comprise approximately 90% of Massachusetts total population as compared with 83% in 1960.2

In addition, a significant change in the industrial structure of the state's labor force is forecast. The most dramatic changes
projected are embodied in the decrease in the proportion of manufacturing jobs from approximately 35% to 25% of the total employment between 1960 and 2020 and the rise in the share of service-industry employment from approximately 63% to 74% of the total employment over the same period. These structural transformations in the demand for labor can be attributed to two factors: the rapid rate of increase in the productivity of manufacturing and the continued tendency of consumers to spend a greater proportion of their income on services.

In light of these expected gains in population and employment it is important to determine what role state government should play in directing urban development. In a recent publication entitled "Discussion Goals for Massachusetts" it was noted that "the economic health of the Commonwealth is the key to the state's fiscal capability, in that it affects the tax base on which programs depend, and the employment and income levels which importantly shape the demands placed on the state's resources." The goal of all activities subsumed under the heading "economic development" becomes that of assuring sufficient growth in the economy to meet the job needs of the expanding population, and to provide in those jobs a quality of work and a remuneration level sufficient to offer a productive life and a decent living standard for every citizen. But, as the report goes on to say, state government is considerably restricted in its ability to effect changes in the complex internal economic structure which is comprised, in large part, of private
enterprise competing with similar enterprise in other regions for national and world markets.7 "State government lacks the massive fiscal powers of federal government, which through its spending policies can create considerable change simply by concentrating its spending in certain sectors or areas."8

Thus, the goal of state government should be to apply its limited resources in ways which will yield the greatest multiplication, both for short term and long term investments, through the creation of an environment in which private enterprise can flourish and which meets the social needs of all the citizens. If this is the broad goal of public investment in economic development, then the specific objectives are:

1. to make suitable land available in sufficient quantity;
2. to seek efficient use of land by channeling growth into a pattern which encourages the most productive outlay in public facilities and public utilities;
3. to improve and maintain a high quality labor pool;
4. to maintain the competitive position of the Commonwealth in both quality and numbers of scientific manpower available;
5. to create a supply of housing available to all people within reasonable commuting times and costs from employment sites.9

It is apparent that some areas are more amenable to growth than others: states and regions vary in their potential for growth. Some
areas may be expected to decline unless existing conditions and
trends are changed. The ability of a region to grow depends on
the quantity and quality of its natural resources, the quantity
and quality of its human resources, its stock of capital goods,
and the level of technology utilized in its industries. These
are all preconditions for sound regional growth. But a region will
actually grow only if it is successful in maintaining full or
nearly full employment of its natural, human and capital resources
over an extended period of time. In addition, this assumes that
these resources will be allocated efficiently and in a way that
will optimize regional growth potential. 10

Traditional economic growth theories suggest that the most
important indicators of future growth are (1) absolute and
relative change in the total population, (2) employment growth, and
(3) expectations regarding future levels of activity in specific
industries crucial to economic development in the region. 11
Specifically, it has been shown that new growth is most likely to
occur in urban areas with a population of at least 10,000, 12 that
is, in suburban areas of large metropolitan regions or cities of
medium size. This would suggest that building new communities
in existing metropolitan areas would be the most successful
strategy.

Three characteristics of metropolitan areas that are important
in relation to metropolitan growth are their size, their industrial
mix, and their geographic location. In the final analysis, it
appears that points at which high growth potential is concentrated can be identified by recent population and employment trends, the position of the area in the urban system of central places, and national growth projections for the area's leading industries. "Areas with a history of recent employment and population growth, a demonstrated ability to attract a diversified manufacturing and specialized tertiary activities are potentially viable centers of growth."13

The Regional Distribution of Economic Activity in Massachusetts

There is some confusion as to the best way of dividing up the state for purposes of economic and demographic analysis. Professor John Meyer of Harvard University has described three different approaches as follows:

The first stresses homogeneity with respect to some combination of physical, economic, social or other characteristics; the second emphasizes so-called nodality or polarization, usually around some central urban place; and the third is programming or policy-oriented, concerned mainly with administrative coherence or identity between the area being studied and available political institutions for effectuating policy decisions.14

The most helpful sub-regional system of classification would probably be based on economic development regions -- such a sub-regional breakdown would facilitate the development of policies and programs designed to move the region from where it is economically to some predetermined economic objective. However, data based
on the economic development areas that have been identified in Massachusetts (see Map 1 and Chart 1) is almost non-existent. A second classification system based on planning regions is also possible. Twelve planning regions are currently utilized in Massachusetts for overall regional planning purposes by the Department of Commerce and Development and other governmental agencies (see Chart II and Map 2). The quality of information on projected economic and population growth varies from region to region. Some regional planning agencies are well staffed and funded, others are not. A third sub-regional classification according to Standard Metropolitan Statistical Areas (SMSA) is also currently in use. A metropolitan area is "an integrated economic and social unit with a recognized large population nucleus." Each SMSA must contain at least one city of at least 50,000 inhabitants, or two cities having contiguous boundaries and constituting for general economic and social purposes, a single community with a combined population of at least 50,000. In Massachusetts the units comprising the SMSA are towns and cities rather than counties as in most states. Thus, the town or city is the basic statistical unit for assemblage of SMSA's in Massachusetts. The rationale for this approach is that the city and town are administratively more important than the county in New England. A population density criterion of at least 100 persons per square mile is used as the measure of metropolitan character.
LISTING OF STATE ECONOMIC AREAS

1. Berkshire-Monadnock Area
   Franklin County

2. Cape Cod Area
   Barnstable County
   Nantucket County
   Dukes County

A. Springfield-Holyoke Metropolitan Area
   Hampden County
   Hampshire County

B. Worcester Metropolitan Area
   Worcester County

C. Boston-Lawrence-Lowell Metropolitan Area
   Essex County
   Middlesex County
   Norfolk County
   Suffolk County

D. Brockton Metropolitan Area
   Plymouth County

E. Fall River-New Bedford Metropolitan Area
   Bristol County

F. Pittsfield Standard Metropolitan Area
   Berkshire County

CHART II

LISTING OF PLANNING REGIONS

1. Berkshire Regional Planning Commission
2. Cape Cod Planning and Economic Development Commission
3. Central Massachusetts Regional Planning Commission
4. Central Merrimack Valley Regional Planning Commission
5. Dukes County Planning and Economic Development Commission
6. Franklin County Department of Planning
7. Greater Lowell Area Planning Commission
8. Lower Pioneer Valley Regional Planning Commission
9. Metropolitan Area Planning Council (Boston)
10. Montachusett Regional Planning Commission
11. Old Colony Planning Council
12. Southeastern Massachusetts Regional Planning Commission
The Commonwealth of Massachusetts

Planning Regions in Massachusetts

1. Berkshire Regional Planning Commission
2. Franklin County Department of Planning
3. Lower Tufts Valley Regional Planning Commission
4. Metropolitan Regional Planning Commission
5. Central Massachusetts Regional Planning Commission
6. Greater Lawrence Area Planning Commission
7. Central Berkshire Valley Rural Planning Commission
8. Springfield Area Planning Council
9. Old Colony Planning Council
10. Southeastern Regional Planning & Economic Development District
11. Cape Cod Planning and Economic Development Commission
12. Pioneer Valley Planning and Economic Development Commission

Division of Planning - Massachusetts Department of Commerce & Development - Sept., 1968

MAP 2
CHART III

STANDARD METROPOLITAN STATISTICAL AREAS

WITH POPULATIONS

Boston 2,595,481
   Essex County (part) 308,051
   Middlesex County (part) 975,287
   Norfolk County (part) 446,524
   Plymouth County (part) 74,290
   Suffolk County 791,329

Brockton 149,458
   Bristol County (part) 9,078
   Norfolk County (part) 20,629
   Plymouth County (part) 119,751

Fall River - Massachusetts portion 128,695
   Bristol County (part) 128,695

Fitchburg-Leominster 90,158
   Middlesex County (part) 8,852
   Worcester County (part) 81,306

Lawrence-Haverhill - Massachusetts portion 185,592
   Essex County (part) 185,592

Lowell 164,243
   Middlesex County (part) 164,243

New Bedford 143,176
   Bristol County (part) 137,178
   Plymouth County (part) 5,998

Pittsfield 76,772
   Berkshire County (part) 76,772

(continued on the following page)
### CHART III
(continued)

<table>
<thead>
<tr>
<th>Area</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Springfield-Chicopee-Holyoke - Massachusetts portion</td>
<td>490,297</td>
</tr>
<tr>
<td>Hampden County (part)</td>
<td>422,254</td>
</tr>
<tr>
<td>Hampshire County (part)</td>
<td>64,660</td>
</tr>
<tr>
<td>Worcester County (part)</td>
<td>3,383</td>
</tr>
<tr>
<td>Worcester</td>
<td>328,898</td>
</tr>
<tr>
<td>Worcester County (part)</td>
<td>328,898</td>
</tr>
</tbody>
</table>

---

**Note:** Population figures are from the 1960 Census of Population.

The data presented in the remainder of this chapter describing the regional distribution of economic activity in Massachusetts is derived from the Regional Economic Projection Series prepared by the National Planning Association. Data on the distribution of economic activity and population in Massachusetts is presented by SMSA: data gathered by SMSA is more complete than data gathered according to any of the other sub-regional classification systems. Of the ten SMSA's included in the data on non-agricultural employment, only Pittsfield, Springfield-Holyoke, and Worcester are located in the Western and Central parts of the State. The remaining areas are restricted to the Eastern third of the Commonwealth. These 10 SMSA's account for more than 80% of the total state non-agricultural employment in every manufacturing category.

1. BOSTON

<table>
<thead>
<tr>
<th></th>
<th>50-57</th>
<th>57-62</th>
<th>62-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>1.4</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Population</td>
<td>0.6</td>
<td>1.3</td>
<td>0.9</td>
</tr>
<tr>
<td>Income</td>
<td>3.1</td>
<td>3.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.5</td>
<td>2.1</td>
<td>2.3</td>
</tr>
</tbody>
</table>

In 1959 eleven towns with 81,000 persons were added to the metropolitan area. Partly for this reason the projected population growth is slower than the increase since 1950. Also the population of Boston is projected to grow at a slower rate than the New England and Middle Atlantic regions, which comprise its major markets. This is related to Boston's relative loss in manufacturing activity.
2. BROCKTON

<table>
<thead>
<tr>
<th></th>
<th>50-57</th>
<th>57-62</th>
<th>50-62</th>
<th>62-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>1.5</td>
<td>-0.5</td>
<td>0.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Population</td>
<td>2.7</td>
<td>0.1</td>
<td>1.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Income</td>
<td>5.1</td>
<td>2.1</td>
<td>3.9</td>
<td>3.1</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.4</td>
<td>2.0</td>
<td>2.2</td>
<td>2.5</td>
</tr>
</tbody>
</table>

An addition of two towns and a deletion of one from the metropolitan area definition in 1959 resulted in a net loss of 20,000 persons. This is one reason for the slower projected increase in population than has occurred since 1950. The population of this metropolitan area is also projected to grow slower than Massachusetts, its major market area, even though employment is expected to grow at the same rate as in the State.

3. FALL RIVER

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>-1.6</td>
<td>0.3</td>
<td>-0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Population</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Income</td>
<td>2.5</td>
<td>2.1</td>
<td>2.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.4</td>
<td>2.0</td>
<td>2.2</td>
<td>2.7</td>
</tr>
</tbody>
</table>

This area is expected to increase its population, even though it has not grown in the past. However, the area is projected to continue to grow slower than Massachusetts, as manufacturing activity (particularly in textile mills) fails to increase.

4. FITCHBURG

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>2.7</td>
</tr>
<tr>
<td>Population</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>2.9</td>
</tr>
<tr>
<td>Income</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>5.4</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>2.4</td>
</tr>
</tbody>
</table>

This area became an SMSA in 1959, and two towns with 8,000 persons were added in 1962. As it has in the past, the area is expected to grow substantially faster than the State of Massachusetts. This relatively fast growth is related to the strong and diversified manufacturing base in the area.

5. LAWRENCE-HAVERHILL

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>-0.5</td>
<td>10.5</td>
<td>4.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Population</td>
<td>-0.0</td>
<td>9.8</td>
<td>4.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Income</td>
<td>2.8</td>
<td>12.5</td>
<td>6.8</td>
<td>5.5</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.8</td>
<td>2.4</td>
<td>2.7</td>
<td>3.1</td>
</tr>
</tbody>
</table>

In 1959 four towns and cities with 62,000 persons were added to the area definition, and in 1962 another four towns with 10,000 people were added. This is why the projected growth in population is substantially less than the growth since 1957. However, the area is expected to grow faster than Massachusetts, just as it has in the past. The projected rapid growth for this area is related
to its diversified manufacturing base, supported by expectations of rapid growth in the noncommodity sector.

6. LOWELL

<table>
<thead>
<tr>
<th></th>
<th>50-57</th>
<th>57-62</th>
<th>50-62</th>
<th>62-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>0.9</td>
<td>1.1</td>
<td>1.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Population</td>
<td>1.5</td>
<td>2.7</td>
<td>2.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Income</td>
<td>3.9</td>
<td>4.8</td>
<td>4.3</td>
<td>5.9</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.4</td>
<td>2.0</td>
<td>2.3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

One town was added to the metropolitan area in 1959, and another town in 1962, totaling to 10,000 persons.

In spite of this, the area's population is expected to increase at a faster pace than since 1957. This growth is not only faster than the Massachusetts increase but also faster than that projected for the average of all metropolitan U.S. This population growth is supported by the expectations for manufacturing and non-commodity activities in the area.

7. NEW BEDFORD

<table>
<thead>
<tr>
<th></th>
<th>50-57</th>
<th>57-62</th>
<th>50-62</th>
<th>62-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>-0.4</td>
<td>0.3</td>
<td>-0.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Population</td>
<td>-0.0</td>
<td>0.9</td>
<td>0.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Income</td>
<td>1.6</td>
<td>2.0</td>
<td>1.8</td>
<td>4.5</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>1.6</td>
<td>1.2</td>
<td>1.4</td>
<td>2.5</td>
</tr>
</tbody>
</table>

In 1959 two towns with 6,000 persons were added to the area. In spite of this, the projected population increase is faster than the growth since 1957, primarily because this area's growth is expected to keep pace with the growth in its major market area, i.e., Massachusetts.

8. PITTSFIELD

<table>
<thead>
<tr>
<th></th>
<th>50-57</th>
<th>57-62</th>
<th>50-62</th>
<th>62-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>-0.6</td>
<td>2.2</td>
<td>0.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Population</td>
<td>1.1</td>
<td>1.9</td>
<td>1.4</td>
<td>3.0</td>
</tr>
<tr>
<td>Income</td>
<td>3.3</td>
<td>3.7</td>
<td>3.5</td>
<td>5.2</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.3</td>
<td>1.9</td>
<td>2.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

One town with 3,000 persons was added to the area in 1962. However, Pittsfield is projected to increase at a much faster rate than it has since 1957. This rapid projected growth reflects a continuation of the accelerated increase in manufacturing activity in recent years, supported by fast growth in noncommodity activity as well.
9. SPRINGFIELD-CHICOPEE-HOLYOKE

<table>
<thead>
<tr>
<th></th>
<th>50-57</th>
<th>57-62</th>
<th>50-62</th>
<th>62-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>2.3</td>
<td>0.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Population</td>
<td>1.8</td>
<td>2.0</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Income</td>
<td>4.2</td>
<td>4.0</td>
<td>4.2</td>
<td>3.6</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.4</td>
<td>2.0</td>
<td>2.2</td>
<td>1.8</td>
</tr>
</tbody>
</table>

In 1959 there was a net decrease of 8,000 persons attributable to changes in area definition, while in 1962 there was an addition of three towns with 12,000 persons. The population increase is expected to be about the same pace as in the past and at the same rate projected for Massachusetts.

10. WORCESTER

<table>
<thead>
<tr>
<th></th>
<th>50-57</th>
<th>57-62</th>
<th>50-62</th>
<th>62-75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>1.3</td>
<td>3.1</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Population</td>
<td>0.5</td>
<td>3.1</td>
<td>1.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Income</td>
<td>2.8</td>
<td>5.1</td>
<td>3.8</td>
<td>5.0</td>
</tr>
<tr>
<td>Per Cap. Inc.</td>
<td>2.3</td>
<td>1.9</td>
<td>2.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

In 1959 there was an addition of seven towns with 33,000 persons, and in 1962 two towns with 6,000 persons were added to the area. Therefore, the projected population growth is slower than since 1957. Worcester is expected to grow faster than Massachusetts, its major market area, as population growth is supported by a balanced industrial structure and strong trade and financial sectors.
### Table 1.1
**Resident Population (in Thousand Persons)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>4,686.0</td>
<td>5,154.0</td>
<td>5,383.0</td>
<td>5,678.6</td>
<td>5,990.1</td>
<td>6,124.0</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>3,791.3</td>
<td>4,333.8</td>
<td>4,596.8</td>
<td>5,038.1</td>
<td>5,308.4</td>
<td>5,568.4</td>
</tr>
<tr>
<td>Boston</td>
<td>2,273.8</td>
<td>2,585.0</td>
<td>2,693.4</td>
<td>2,914.4</td>
<td>3,027.5</td>
<td>3,059.2</td>
</tr>
<tr>
<td>Brockton</td>
<td>138.3</td>
<td>150.3</td>
<td>182.3</td>
<td>228.5</td>
<td>233.7</td>
<td>230.8</td>
</tr>
<tr>
<td>Fall River</td>
<td>137.2</td>
<td>134.2</td>
<td>144.1</td>
<td>151.7</td>
<td>115.9</td>
<td>122.5</td>
</tr>
<tr>
<td>Lawrence-Haverhill</td>
<td>125.9</td>
<td>127.7</td>
<td>120.3</td>
<td>221.7</td>
<td>223.0</td>
<td>224.1</td>
</tr>
<tr>
<td>Lowell</td>
<td>114.4</td>
<td>118.6</td>
<td>179.6</td>
<td>202.9</td>
<td>215.0</td>
<td>231.9</td>
</tr>
<tr>
<td>New Bedford</td>
<td>137.5</td>
<td>143.2</td>
<td>149.3</td>
<td>166.3</td>
<td>172.8</td>
<td>176.1</td>
</tr>
<tr>
<td>Pittsfield</td>
<td>60.7</td>
<td>74.0</td>
<td>81.3</td>
<td>96.7</td>
<td>101.9</td>
<td>102.9</td>
</tr>
<tr>
<td>Springfield-Chic-Holy.</td>
<td>409.1</td>
<td>480.4</td>
<td>554.4</td>
<td>565.9</td>
<td>610.6</td>
<td>610.6</td>
</tr>
<tr>
<td>Worcester</td>
<td>276.7</td>
<td>323.8</td>
<td>351.3</td>
<td>404.7</td>
<td>424.3</td>
<td>424.3</td>
</tr>
</tbody>
</table>

### Table 1.2
**Personal Income (in Millions of 1966 $)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>102,946.0</td>
<td>137,548.0</td>
<td>176,750.0</td>
<td>249,256.6</td>
<td>308,439.9</td>
<td>379,468.0</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>87,424.9</td>
<td>117,423.8</td>
<td>149,999.7</td>
<td>220,392.2</td>
<td>276,406.1</td>
<td>342,811.0</td>
</tr>
<tr>
<td>Boston</td>
<td>55,789.6</td>
<td>74,428.4</td>
<td>92,219.5</td>
<td>133,813.3</td>
<td>166,710.0</td>
<td>205,832.0</td>
</tr>
<tr>
<td>Brockton</td>
<td>276.8</td>
<td>375.1</td>
<td>556.3</td>
<td>861.2</td>
<td>1104.1</td>
<td>1390.4</td>
</tr>
<tr>
<td>Fall River</td>
<td>298.3</td>
<td>314.8</td>
<td>408.8</td>
<td>583.1</td>
<td>725.1</td>
<td>887.2</td>
</tr>
<tr>
<td>Lawrence-Haverhill</td>
<td>271.2</td>
<td>309.2</td>
<td>408.8</td>
<td>548.8</td>
<td>682.5</td>
<td>887.2</td>
</tr>
<tr>
<td>Lowell</td>
<td>276.2</td>
<td>330.3</td>
<td>423.5</td>
<td>512.9</td>
<td>612.4</td>
<td>765.1</td>
</tr>
<tr>
<td>New Bedford</td>
<td>153.1</td>
<td>195.5</td>
<td>278.6</td>
<td>384.1</td>
<td>462.2</td>
<td>540.2</td>
</tr>
<tr>
<td>Pittsfield</td>
<td>429.3</td>
<td>480.4</td>
<td>554.4</td>
<td>565.9</td>
<td>610.6</td>
<td>610.6</td>
</tr>
<tr>
<td>Springfield-Chic-Holy.</td>
<td>616.9</td>
<td>809.9</td>
<td>1,069.4</td>
<td>1,590.4</td>
<td>2,006.2</td>
<td>2,497.4</td>
</tr>
</tbody>
</table>

### Table 1.3
**Per Capita Personal Income (in 1966 Constant $)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>2196.8</td>
<td>2665.8</td>
<td>3283.4</td>
<td>4369.3</td>
<td>5231.2</td>
<td>6195.7</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>2306.0</td>
<td>2709.4</td>
<td>3263.0</td>
<td>4374.5</td>
<td>5209.0</td>
<td>6158.5</td>
</tr>
<tr>
<td>Boston</td>
<td>2350.3</td>
<td>2851.1</td>
<td>3422.9</td>
<td>4574.9</td>
<td>5431.1</td>
<td>6413.7</td>
</tr>
<tr>
<td>Brockton</td>
<td>2172.3</td>
<td>2695.6</td>
<td>301.5</td>
<td>4130.4</td>
<td>4940.0</td>
<td>5753.3</td>
</tr>
<tr>
<td>Fall River</td>
<td>2172.6</td>
<td>2677.8</td>
<td>3026.9</td>
<td>3941.7</td>
<td>4622.5</td>
<td>5492.6</td>
</tr>
<tr>
<td>Lawrence-Haverhill</td>
<td>2154.0</td>
<td>2614.7</td>
<td>3019.8</td>
<td>4026.6</td>
<td>4812.9</td>
<td>5700.4</td>
</tr>
<tr>
<td>Lowell</td>
<td>2204.9</td>
<td>2734.9</td>
<td>2962.4</td>
<td>3996.7</td>
<td>4780.7</td>
<td>5691.3</td>
</tr>
<tr>
<td>New Bedford</td>
<td>2374.0</td>
<td>2826.5</td>
<td>3261.5</td>
<td>3641.4</td>
<td>4060.4</td>
<td>4601.0</td>
</tr>
<tr>
<td>Pittsfield</td>
<td>2295.3</td>
<td>2614.8</td>
<td>3426.8</td>
<td>4555.2</td>
<td>5434.4</td>
<td>6262.0</td>
</tr>
<tr>
<td>Springfield-Chic-Holy.</td>
<td>2324.4</td>
<td>2567.8</td>
<td>3009.9</td>
<td>4086.4</td>
<td>4963.2</td>
<td>5807.5</td>
</tr>
<tr>
<td>Worcester</td>
<td>2224.4</td>
<td>2486.8</td>
<td>3107.8</td>
<td>4169.1</td>
<td>4968.5</td>
<td>5885.0</td>
</tr>
</tbody>
</table>
### TABLE 1.4
**TOTAL CIVILIAN EMPLOYMENT (IN THOUSANDS)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td>2372.6</td>
<td>2261.8</td>
<td>2441.4</td>
<td>2688.9</td>
<td>2912.1</td>
<td>2953.0</td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td>1145.3</td>
<td>1016.5</td>
<td>1126.2</td>
<td>1302.4</td>
<td>1539.2</td>
<td>1676.2</td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>923.1</td>
<td>1145.9</td>
<td>1306.0</td>
<td>1541.8</td>
<td>1699.6</td>
<td>1786.2</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>84.0</td>
<td>66.3</td>
<td>51.7</td>
<td>58.9</td>
<td>63.2</td>
<td>72.2</td>
</tr>
<tr>
<td><strong>PITTSBURGH-LEOMINSTER</strong></td>
<td>33.6</td>
<td>35.2</td>
<td>40.4</td>
<td>41.7</td>
<td>43.1</td>
<td></td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>54.3</td>
<td>74.0</td>
<td>82.8</td>
<td>114.0</td>
<td>111.1</td>
<td>117.7</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>56.2</td>
<td>46.5</td>
<td>53.9</td>
<td>62.8</td>
<td>67.4</td>
<td>71.7</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>153.1</td>
<td>191.1</td>
<td>205.7</td>
<td>231.9</td>
<td>245.0</td>
<td>256.1</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHICAGO</strong></td>
<td>109.6</td>
<td>127.0</td>
<td>135.7</td>
<td>156.7</td>
<td>167.3</td>
<td>175.0</td>
</tr>
</tbody>
</table>

### TABLE 1.5A
**NONAGRICULTURAL EMPLOYMENT (IN THOUSANDS)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td>2277.7</td>
<td>2215.1</td>
<td>2149.0</td>
<td>2672.5</td>
<td>2932.0</td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td>1228.3</td>
<td>1799.0</td>
<td>2026.2</td>
<td>2337.9</td>
<td>2540.2</td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>975.5</td>
<td>1140.6</td>
<td>1302.4</td>
<td>1539.2</td>
<td>1676.2</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>426.8</td>
<td>449.9</td>
<td>503.5</td>
<td>564.6</td>
<td></td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>57.9</td>
<td>52.8</td>
<td>49.6</td>
<td>51.6</td>
<td>53.3</td>
</tr>
<tr>
<td><strong>PITTSBURGH-LEOMINSTER</strong></td>
<td>93.6</td>
<td>77.7</td>
<td>81.1</td>
<td>100.1</td>
<td>109.2</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>44.4</td>
<td>49.7</td>
<td>53.5</td>
<td>62.9</td>
<td>67.2</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>55.5</td>
<td>56.1</td>
<td>57.6</td>
<td>62.6</td>
<td>64.3</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>31.7</td>
<td>33.0</td>
<td>34.5</td>
<td>37.3</td>
<td>39.5</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHICAGO</strong></td>
<td>15.1</td>
<td>18.6</td>
<td>20.4</td>
<td>23.1</td>
<td>24.4</td>
</tr>
<tr>
<td><strong>WORCESTER</strong></td>
<td>108.6</td>
<td>125.9</td>
<td>134.6</td>
<td>155.7</td>
<td>166.4</td>
</tr>
</tbody>
</table>

### TABLE 1.5B
**COMMODITY PRODUCING EMPLOYMENT (IN THOUSANDS)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td>773.0</td>
<td>757.4</td>
<td>729.5</td>
<td>701.6</td>
<td>680.5</td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td>603.9</td>
<td>626.9</td>
<td>594.9</td>
<td>592.5</td>
<td>583.4</td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>309.7</td>
<td>315.5</td>
<td>300.7</td>
<td>298.9</td>
<td>296.1</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>20.5</td>
<td>18.0</td>
<td>18.2</td>
<td>17.0</td>
<td>16.3</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>33.6</td>
<td>29.7</td>
<td>23.3</td>
<td>20.4</td>
<td>18.4</td>
</tr>
<tr>
<td><strong>PITTSBURGH-LEOMINSTER</strong></td>
<td>32.1</td>
<td>45.8</td>
<td>41.0</td>
<td>49.0</td>
<td>52.2</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>23.4</td>
<td>21.8</td>
<td>21.0</td>
<td>20.3</td>
<td>19.5</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>34.2</td>
<td>32.6</td>
<td>29.2</td>
<td>28.1</td>
<td>26.7</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>17.7</td>
<td>15.5</td>
<td>15.5</td>
<td>14.2</td>
<td>13.5</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHICAGO</strong></td>
<td>81.0</td>
<td>75.3</td>
<td>76.5</td>
<td>73.2</td>
<td>70.2</td>
</tr>
<tr>
<td><strong>WORCESTER</strong></td>
<td>51.5</td>
<td>53.7</td>
<td>52.0</td>
<td>52.6</td>
<td>51.4</td>
</tr>
</tbody>
</table>
### TABLE 1.4.C
**NONCOMMODITY PRODUCING EMPLOYMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>1232.5</td>
<td>1306.0</td>
<td>1447.7</td>
<td>1575.3</td>
<td>1713.0</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>23.6</td>
<td>31.2</td>
<td>35.5</td>
<td>44.9</td>
<td>47.6</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>33.7</td>
<td>40.8</td>
<td>51.0</td>
<td>55.8</td>
<td>57.6</td>
</tr>
<tr>
<td><strong>FITCHBURG-LEOMINSTER (1)</strong></td>
<td>25.4</td>
<td>28.2</td>
<td>33.2</td>
<td>24.7</td>
<td>17.7</td>
</tr>
<tr>
<td><strong>LAWRENCE-HAVERHILL</strong></td>
<td>25.4</td>
<td>33.2</td>
<td>24.7</td>
<td>17.7</td>
<td>11.7</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>14.1</td>
<td>17.1</td>
<td>23.2</td>
<td>25.1</td>
<td>19.7</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>9.1</td>
<td>11.9</td>
<td>12.9</td>
<td>13.7</td>
<td>13.7</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHIC-HOLYO</strong></td>
<td>7.7</td>
<td>7.3</td>
<td>8.0</td>
<td>10.4</td>
<td>11.9</td>
</tr>
<tr>
<td><strong>WORCESTER</strong></td>
<td>57.6</td>
<td>73.3</td>
<td>63.5</td>
<td>54.0</td>
<td>44.0</td>
</tr>
</tbody>
</table>

### TABLE 1.4.D
**AGRICULTURE FORESTRY AND FISHERIES EMPLOYMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>19.9</td>
<td>17.4</td>
<td>10.9</td>
<td>8.7</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>7.6</td>
<td>5.4</td>
<td>3.6</td>
<td>2.3</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>1.2</td>
<td>1.4</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>FITCHBURG-LEOMINSTER (1)</strong></td>
<td>0.9</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>LAWRENCE-HAVERHILL</strong></td>
<td>0.6</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>0.8</td>
<td>0.8</td>
<td>0.4</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>0.8</td>
<td>0.8</td>
<td>0.4</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>1.1</td>
<td>1.3</td>
<td>0.8</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHIC-HOLYO</strong></td>
<td>3.9</td>
<td>1.0</td>
<td>0.7</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>WORCESTER</strong></td>
<td>0.6</td>
<td>1.1</td>
<td>1.1</td>
<td>0.9</td>
<td>0.8</td>
</tr>
</tbody>
</table>

### TABLE 1.4.F
**CONSTRUCTION EMPLOYMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>106.3</td>
<td>103.2</td>
<td>116.9</td>
<td>130.2</td>
<td>135.3</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>76.8</td>
<td>91.2</td>
<td>102.7</td>
<td>118.9</td>
<td>127.0</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>54.9</td>
<td>64.3</td>
<td>70.2</td>
<td>78.9</td>
<td>83.6</td>
</tr>
<tr>
<td><strong>FITCHBURG-LEOMINSTER (1)</strong></td>
<td>2.0</td>
<td>2.4</td>
<td>2.8</td>
<td>3.5</td>
<td>3.8</td>
</tr>
<tr>
<td><strong>LAWRENCE-HAVERHILL</strong></td>
<td>1.8</td>
<td>2.1</td>
<td>2.0</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>1.4</td>
<td>1.4</td>
<td>1.7</td>
<td>2.2</td>
<td>2.4</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>1.9</td>
<td>2.6</td>
<td>3.0</td>
<td>3.9</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>1.3</td>
<td>2.2</td>
<td>3.1</td>
<td>4.3</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHIC-HOLYO</strong></td>
<td>2.2</td>
<td>2.0</td>
<td>2.4</td>
<td>2.6</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>WORCESTER</strong></td>
<td>7.2</td>
<td>7.6</td>
<td>9.8</td>
<td>11.3</td>
<td>11.9</td>
</tr>
<tr>
<td></td>
<td>4.0</td>
<td>5.5</td>
<td>6.4</td>
<td>8.2</td>
<td>9.1</td>
</tr>
</tbody>
</table>
### TABLE 1.4.6
MANUFACTURING EMPLOYMENT (IN THOUSANDS)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>726.3</td>
<td>708.3</td>
<td>706.1</td>
<td>685.0</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>503.1</td>
<td>608.2</td>
<td>584.9</td>
<td>582.1</td>
</tr>
<tr>
<td>BOSTON</td>
<td>301.6</td>
<td>309.4</td>
<td>295.8</td>
<td>294.0</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>19.3</td>
<td>16.7</td>
<td>17.3</td>
<td>16.3</td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>32.8</td>
<td>28.4</td>
<td>22.7</td>
<td>19.7</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER (1)</td>
<td>31.5</td>
<td>44.5</td>
<td>40.2</td>
<td>48.1</td>
</tr>
<tr>
<td>LAWRENCE-HAVERHILL</td>
<td>22.5</td>
<td>21.0</td>
<td>20.6</td>
<td>20.0</td>
</tr>
<tr>
<td>LOWELL</td>
<td>30.1</td>
<td>28.9</td>
<td>27.9</td>
<td>27.2</td>
</tr>
<tr>
<td>NEW Bedford</td>
<td>17.4</td>
<td>15.2</td>
<td>15.3</td>
<td>14.0</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>77.1</td>
<td>73.2</td>
<td>75.0</td>
<td>72.3</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLY*</td>
<td>50.9</td>
<td>52.6</td>
<td>50.9</td>
<td>51.5</td>
</tr>
<tr>
<td>WORCESTER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 1.4.7
TRANSPORTATION COMMUNICATION AND PUBLIC UTILITIES EMPLOYMENT (IN THOUSANDS)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>123.2</td>
<td>111.2</td>
<td>113.1</td>
<td>113.7</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>106.4</td>
<td>100.5</td>
<td>98.0</td>
<td>102.3</td>
</tr>
<tr>
<td>BOSTON</td>
<td>81.3</td>
<td>71.7</td>
<td>69.1</td>
<td>71.1</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>2.6</td>
<td>3.0</td>
<td>3.0</td>
<td>2.9</td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>2.7</td>
<td>1.9</td>
<td>1.8</td>
<td>1.9</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER (1)</td>
<td>1.4</td>
<td>1.4</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>LAWRENCE-HAVERHILL</td>
<td>1.5</td>
<td>2.6</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>LOWELL</td>
<td>2.9</td>
<td>2.5</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>NEW Bedford</td>
<td>2.4</td>
<td>2.4</td>
<td>2.8</td>
<td>3.2</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>1.4</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLY*</td>
<td>5.0</td>
<td>4.6</td>
<td>6.0</td>
<td>6.6</td>
</tr>
<tr>
<td>WORCESTER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 1.4.8
WHOLESALE AND RETAIL TRADE EMPLOYMENT (IN THOUSANDS)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>418.4</td>
<td>454.6</td>
<td>499.7</td>
<td>507.1</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>362.1</td>
<td>376.5</td>
<td>441.8</td>
<td>478.4</td>
</tr>
<tr>
<td>BOSTON</td>
<td>242.6</td>
<td>239.3</td>
<td>301.2</td>
<td>331.4</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>10.8</td>
<td>12.7</td>
<td>13.1</td>
<td>14.7</td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>11.1</td>
<td>10.7</td>
<td>10.1</td>
<td>10.2</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER (1)</td>
<td>10.5</td>
<td>6.1</td>
<td>6.8</td>
<td>7.3</td>
</tr>
<tr>
<td>LAWRENCE-HAVERHILL</td>
<td>10.5</td>
<td>14.1</td>
<td>15.7</td>
<td>16.2</td>
</tr>
<tr>
<td>LOWELL</td>
<td>9.7</td>
<td>10.7</td>
<td>10.6</td>
<td>11.6</td>
</tr>
<tr>
<td>NEW Bedford</td>
<td>11.5</td>
<td>10.7</td>
<td>11.4</td>
<td>11.6</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>5.9</td>
<td>6.5</td>
<td>6.6</td>
<td>7.0</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLY*</td>
<td>36.6</td>
<td>39.6</td>
<td>40.4</td>
<td>40.9</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>23.5</td>
<td>26.2</td>
<td>29.0</td>
<td>29.7</td>
</tr>
</tbody>
</table>
### TABLE 1.4.4J

**FINANCE INSURANCE AND REAL ESTATE EMPLOYMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td>86.5</td>
<td>109.9</td>
<td>122.7</td>
<td>133.0</td>
<td>135.0</td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td>74.4</td>
<td>98.5</td>
<td>115.6</td>
<td>126.3</td>
<td>131.3</td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>56.4</td>
<td>70.5</td>
<td>87.9</td>
<td>98.4</td>
<td>100.7</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>11.6</td>
<td>11.9</td>
<td>11.6</td>
<td>11.8</td>
<td>11.9</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>11.8</td>
<td>9.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>FITCHBURG-LEOMINSTER (1)</strong></td>
<td>1.3</td>
<td>2.5</td>
<td>2.4</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>LAWRENCE-HAVENHILL</strong></td>
<td>1.2</td>
<td>1.9</td>
<td>1.5</td>
<td>1.7</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>1.2</td>
<td>1.9</td>
<td>1.5</td>
<td>1.7</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>1.2</td>
<td>1.9</td>
<td>1.8</td>
<td>2.0</td>
<td>2.1</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>0.9</td>
<td>1.3</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHIC-HOLY</strong></td>
<td>6.7</td>
<td>9.6</td>
<td>9.6</td>
<td>10.0</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>WORCESTER</strong></td>
<td>4.0</td>
<td>6.2</td>
<td>6.5</td>
<td>7.4</td>
<td>7.7</td>
</tr>
</tbody>
</table>

### TABLE 1.4.4K

**SERVICES EMPLOYMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td>349.0</td>
<td>467.9</td>
<td>570.7</td>
<td>717.2</td>
<td>816.6</td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td>185.2</td>
<td>337.1</td>
<td>416.9</td>
<td>565.6</td>
<td>655.9</td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>133.1</td>
<td>252.0</td>
<td>306.4</td>
<td>420.7</td>
<td>488.7</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>3.4</td>
<td>3.8</td>
<td>6.3</td>
<td>8.1</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>5.7</td>
<td>5.1</td>
<td>6.5</td>
<td>8.9</td>
<td>10.6</td>
</tr>
<tr>
<td><strong>FITCHBURG-LEOMINSTER (1)</strong></td>
<td>4.8</td>
<td>7.2</td>
<td>10.6</td>
<td>14.0</td>
<td>16.3</td>
</tr>
<tr>
<td><strong>LAWRENCE-HAVENHILL</strong></td>
<td>3.7</td>
<td>3.6</td>
<td>9.1</td>
<td>12.9</td>
<td>15.2</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>4.9</td>
<td>6.8</td>
<td>7.9</td>
<td>10.2</td>
<td>11.6</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>3.6</td>
<td>5.1</td>
<td>5.9</td>
<td>7.4</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>12.8</td>
<td>11.8</td>
<td>36.0</td>
<td>40.0</td>
<td>52.3</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHIC-HOLY</strong></td>
<td>13.3</td>
<td>18.2</td>
<td>23.9</td>
<td>31.2</td>
<td>36.0</td>
</tr>
<tr>
<td><strong>WORCESTER</strong></td>
<td>7.8</td>
<td>12.6</td>
<td>14.8</td>
<td>22.5</td>
<td>27.7</td>
</tr>
</tbody>
</table>

### TABLE 1.4.4L

**GOVERNMENT EMPLOYMENT**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MASSACHUSETTS</strong></td>
<td>216.6</td>
<td>258.3</td>
<td>289.0</td>
<td>385.5</td>
<td>426.5</td>
</tr>
<tr>
<td><strong>METROPOLITAN</strong></td>
<td>138.8</td>
<td>185.1</td>
<td>244.2</td>
<td>359.9</td>
<td>430.7</td>
</tr>
<tr>
<td><strong>BOSTON</strong></td>
<td>105.0</td>
<td>132.3</td>
<td>170.5</td>
<td>243.0</td>
<td>288.9</td>
</tr>
<tr>
<td><strong>BROCKTON</strong></td>
<td>3.0</td>
<td>3.5</td>
<td>6.8</td>
<td>10.5</td>
<td>13.0</td>
</tr>
<tr>
<td><strong>FALL RIVER</strong></td>
<td>2.6</td>
<td>3.0</td>
<td>4.3</td>
<td>6.4</td>
<td>8.2</td>
</tr>
<tr>
<td><strong>FITCHBURG-LEOMINSTER (1)</strong></td>
<td>2.2</td>
<td>4.2</td>
<td>7.9</td>
<td>13.1</td>
<td>16.0</td>
</tr>
<tr>
<td><strong>LAWRENCE-HAVENHILL</strong></td>
<td>3.3</td>
<td>3.8</td>
<td>6.3</td>
<td>9.8</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>LOWELL</strong></td>
<td>3.1</td>
<td>3.8</td>
<td>4.3</td>
<td>5.7</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>NEW BEDFORD</strong></td>
<td>1.2</td>
<td>2.1</td>
<td>2.9</td>
<td>4.1</td>
<td>5.1</td>
</tr>
<tr>
<td><strong>PITTSFIELD</strong></td>
<td>10.7</td>
<td>18.2</td>
<td>24.5</td>
<td>40.8</td>
<td>49.6</td>
</tr>
<tr>
<td><strong>SPRINGFIELD-CHIC-HOLY</strong></td>
<td>7.8</td>
<td>12.6</td>
<td>14.8</td>
<td>22.5</td>
<td>27.7</td>
</tr>
</tbody>
</table>
### Table 2.1

**Average Annual Rate of Growth (in Percent) Resident Population**

<table>
<thead>
<tr>
<th></th>
<th>1950-60</th>
<th>60-66</th>
<th>50-66</th>
<th>66-75</th>
<th>75-80</th>
<th>80-85</th>
<th>66-80</th>
<th>66-85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>0.9</td>
<td>0.7</td>
<td>0.8</td>
<td>0.5</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>1.3</td>
<td>1.2</td>
<td>1.0</td>
<td>1.0</td>
<td>0.9</td>
<td>1.0</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>Boston</td>
<td>0.8</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
<td>0.8</td>
<td>0.9</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>Brockton</td>
<td>1.4</td>
<td>2.1</td>
<td>1.5</td>
<td>1.3</td>
<td>1.4</td>
<td>1.4</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Fall River</td>
<td>0.0</td>
<td>0.3</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Fitchburg-Leominster</td>
<td>2.2</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>Lowell</td>
<td>1.0</td>
<td>1.7</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.3</td>
<td></td>
</tr>
<tr>
<td>New Bedford</td>
<td>0.0</td>
<td>0.5</td>
<td>0.7</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Pittsfield</td>
<td>1.0</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>Springfield-Chicopee</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>0.9</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>Worcester</td>
<td>1.0</td>
<td>1.3</td>
<td>1.1</td>
<td>1.1</td>
<td>1.0</td>
<td>1.0</td>
<td>1.1</td>
<td></td>
</tr>
</tbody>
</table>

### Table 2.2

**Average Annual Rate of Growth (in Percent) Personal Income**

<table>
<thead>
<tr>
<th></th>
<th>1950-60</th>
<th>60-66</th>
<th>50-66</th>
<th>66-75</th>
<th>75-80</th>
<th>80-85</th>
<th>66-80</th>
<th>66-85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>2.9</td>
<td>4.2</td>
<td>3.4</td>
<td>3.8</td>
<td>4.3</td>
<td>4.2</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>2.9</td>
<td>4.1</td>
<td>3.4</td>
<td>4.3</td>
<td>4.6</td>
<td>4.4</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Boston</td>
<td>2.9</td>
<td>3.6</td>
<td>3.1</td>
<td>4.2</td>
<td>4.4</td>
<td>4.3</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Brockton</td>
<td>3.0</td>
<td>4.4</td>
<td>4.4</td>
<td>4.9</td>
<td>5.0</td>
<td>4.7</td>
<td>4.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Fall River</td>
<td>0.5</td>
<td>1.4</td>
<td>1.9</td>
<td>4.0</td>
<td>4.4</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Fitchburg-Leominster</td>
<td>6.1</td>
<td>5.7</td>
<td>5.9</td>
<td>5.0</td>
<td>5.6</td>
<td>4.9</td>
<td>5.1</td>
<td>5.1</td>
</tr>
<tr>
<td>Lowell</td>
<td>3.3</td>
<td>5.7</td>
<td>4.9</td>
<td>4.9</td>
<td>5.1</td>
<td>4.7</td>
<td>4.9</td>
<td>4.9</td>
</tr>
<tr>
<td>New Bedford</td>
<td>4.2</td>
<td>1.6</td>
<td>4.1</td>
<td>4.5</td>
<td>4.2</td>
<td>4.3</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>Pittsfield</td>
<td>2.4</td>
<td>3.9</td>
<td>3.8</td>
<td>4.4</td>
<td>4.4</td>
<td>4.6</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Springfield-Chicopee</td>
<td>3.7</td>
<td>3.9</td>
<td>3.1</td>
<td>4.4</td>
<td>4.4</td>
<td>4.3</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>Worcester</td>
<td>3.7</td>
<td>4.8</td>
<td>3.4</td>
<td>4.5</td>
<td>4.7</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
</tbody>
</table>

### Table 2.3

**Average Annual Rate of Growth (in Percent) Per Capita Personal Income**

<table>
<thead>
<tr>
<th></th>
<th>1950-60</th>
<th>60-66</th>
<th>50-66</th>
<th>66-75</th>
<th>75-80</th>
<th>80-85</th>
<th>66-80</th>
<th>66-85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>1.9</td>
<td>3.5</td>
<td>2.5</td>
<td>3.2</td>
<td>3.5</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>1.5</td>
<td>3.1</td>
<td>2.1</td>
<td>3.3</td>
<td>3.5</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Boston</td>
<td>1.9</td>
<td>3.0</td>
<td>2.3</td>
<td>3.2</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Brockton</td>
<td>1.6</td>
<td>3.4</td>
<td>2.2</td>
<td>3.4</td>
<td>3.6</td>
<td>3.4</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Fall River</td>
<td>0.4</td>
<td>3.7</td>
<td>1.6</td>
<td>3.4</td>
<td>3.7</td>
<td>3.4</td>
<td>3.4</td>
<td>3.5</td>
</tr>
<tr>
<td>Fitchburg-Leominster</td>
<td>3.7</td>
<td>3.2</td>
<td>3.3</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Lowell</td>
<td>1.9</td>
<td>3.2</td>
<td>2.4</td>
<td>3.2</td>
<td>3.3</td>
<td>3.4</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>New Bedford</td>
<td>0.3</td>
<td>3.5</td>
<td>1.1</td>
<td>3.4</td>
<td>3.6</td>
<td>3.4</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Pittsfield</td>
<td>1.4</td>
<td>4.4</td>
<td>2.5</td>
<td>3.2</td>
<td>3.5</td>
<td>3.5</td>
<td>3.3</td>
<td>3.3</td>
</tr>
<tr>
<td>Springfield-Chicopee</td>
<td>0.9</td>
<td>2.7</td>
<td>1.6</td>
<td>3.4</td>
<td>3.6</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Worcester</td>
<td>1.1</td>
<td>3.7</td>
<td>2.0</td>
<td>3.3</td>
<td>3.5</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
</tbody>
</table>
TABLE 2.4
AVERAGE ANNUAL RATE OF GROWTH (IN PERCENT)  
TOTAL CIVILIAN EMPLOYMENT

<table>
<thead>
<tr>
<th></th>
<th>1950-60</th>
<th>60-66</th>
<th>50-66</th>
<th>66-75</th>
<th>75-80</th>
<th>80-85</th>
<th>66-80</th>
<th>66-85</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>0.7</td>
<td>1.4</td>
<td>1.6</td>
<td>1.6</td>
<td>0.9</td>
<td>0.6</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>1.5</td>
<td>1.7</td>
<td>1.6</td>
<td>1.7</td>
<td>1.4</td>
<td>1.2</td>
<td>1.6</td>
<td>1.5</td>
</tr>
<tr>
<td>BOSTON</td>
<td>1.5</td>
<td>2.2</td>
<td>1.7</td>
<td>1.8</td>
<td>1.6</td>
<td>1.3</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>2.8</td>
<td>1.9</td>
<td>1.6</td>
<td>1.4</td>
<td>1.3</td>
<td>1.2</td>
<td>1.4</td>
<td>1.3</td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>-0.8</td>
<td>-1.4</td>
<td>-1.8</td>
<td>-0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER</td>
<td>1.1</td>
<td>1.1</td>
<td>0.8</td>
<td>0.6</td>
<td>0.6</td>
<td>0.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAURENCE-HAVERHILL</td>
<td>3.2</td>
<td>2.6</td>
<td>2.2</td>
<td>1.7</td>
<td>1.3</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>LOWELL</td>
<td>0.2</td>
<td>2.4</td>
<td>1.1</td>
<td>1.7</td>
<td>1.4</td>
<td>1.1</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>NEW BEDFORD</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>0.3</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
<td>0.7</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLY</td>
<td>1.6</td>
<td>1.2</td>
<td>1.4</td>
<td>1.3</td>
<td>1.1</td>
<td>0.8</td>
<td>1.2</td>
<td>1.1</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>1.7</td>
<td>1.1</td>
<td>1.5</td>
<td>1.6</td>
<td>1.3</td>
<td>0.9</td>
<td>1.9</td>
<td>1.9</td>
</tr>
</tbody>
</table>

TABLE 2.4A
AVERAGE ANNUAL RATE OF GROWTH (IN PERCENT)  
NONAGRICULTURAL EMPLOYMENT

<table>
<thead>
<tr>
<th></th>
<th>1950-60</th>
<th>60-66</th>
<th>50-66</th>
<th>66-75</th>
<th>75-80</th>
<th>80-85</th>
<th>66-80</th>
<th>66-85</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>0.8</td>
<td>1.4</td>
<td>1.1</td>
<td>1.1</td>
<td>0.9</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>1.5</td>
<td>1.8</td>
<td>1.7</td>
<td>1.7</td>
<td>1.4</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>BOSTON</td>
<td>1.5</td>
<td>2.2</td>
<td>1.8</td>
<td>1.8</td>
<td>1.4</td>
<td>1.6</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>0.4</td>
<td>2.0</td>
<td>1.0</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>-0.9</td>
<td>-1.2</td>
<td>-1.0</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
<td>0.8</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LAURENCE-HAVERHILL</td>
<td>3.7</td>
<td>3.6</td>
<td>3.2</td>
<td>1.7</td>
<td>1.7</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>LOWELL</td>
<td>0.2</td>
<td>2.6</td>
<td>1.1</td>
<td>1.7</td>
<td>1.4</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>NEW BEDFORD</td>
<td>0.1</td>
<td>0.7</td>
<td>0.3</td>
<td>0.7</td>
<td>0.4</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>0.3</td>
<td>0.7</td>
<td>0.5</td>
<td>0.8</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLY</td>
<td>1.7</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>1.4</td>
<td>1.1</td>
<td>1.3</td>
<td>1.6</td>
<td>1.3</td>
<td>1.5</td>
<td>1.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>

TABLE 3.1
METROPOLITAN SHARES (IN PERCENT)  
RESIDENT POPULATION

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>80.9</td>
<td>84.0</td>
<td>85.3</td>
<td>88.7</td>
<td>90.0</td>
<td>90.3</td>
</tr>
<tr>
<td>BOSTON</td>
<td>90.6</td>
<td>90.3</td>
<td>90.0</td>
<td>91.5</td>
<td>92.0</td>
<td>92.3</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>2.7</td>
<td>2.9</td>
<td>3.3</td>
<td>3.6</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td>FALL RIVER</td>
<td>2.9</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td>1.9</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>LAURENCE-HAVERHILL</td>
<td>2.6</td>
<td>3.0</td>
<td>3.9</td>
<td>4.4</td>
<td>4.6</td>
<td>4.6</td>
</tr>
<tr>
<td>LOWELL</td>
<td>2.8</td>
<td>3.0</td>
<td>3.4</td>
<td>3.6</td>
<td>3.6</td>
<td>3.7</td>
</tr>
<tr>
<td>NEW BEDFORD</td>
<td>2.9</td>
<td>2.7</td>
<td>2.7</td>
<td>2.8</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>1.4</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLY</td>
<td>8.7</td>
<td>9.3</td>
<td>9.5</td>
<td>9.8</td>
<td>9.9</td>
<td>9.9</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>5.9</td>
<td>6.2</td>
<td>6.3</td>
<td>6.7</td>
<td>6.8</td>
<td>6.9</td>
</tr>
</tbody>
</table>
### TABLE 3.2

METROPOLITAN SHARES (IN PERCENT) PERSONAL INCOME

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>84.9</td>
<td>85.4</td>
<td>84.8</td>
<td>88.4</td>
<td>89.6</td>
<td>90.3</td>
</tr>
<tr>
<td>BOSTON</td>
<td>54.1</td>
<td>54.0</td>
<td>52.1</td>
<td>53.6</td>
<td>54.0</td>
<td>54.2</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>2.0</td>
<td>2.7</td>
<td>3.1</td>
<td>3.4</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>FALL RIVER *</td>
<td>2.9</td>
<td>2.2</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER (1)</td>
<td>1.4</td>
<td>1.6</td>
<td>1.7</td>
<td>1.8</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>LAWRENCE-HAVERHILL *</td>
<td>2.6</td>
<td>3.5</td>
<td>3.8</td>
<td>4.2</td>
<td>4.4</td>
<td>4.6</td>
</tr>
<tr>
<td>LOWELL</td>
<td>2.6</td>
<td>2.7</td>
<td>2.9</td>
<td>3.2</td>
<td>3.3</td>
<td>3.4</td>
</tr>
<tr>
<td>NEW BEDFORD</td>
<td>3.1</td>
<td>2.4</td>
<td>2.3</td>
<td>2.6</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>1.4</td>
<td>1.4</td>
<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLYO*</td>
<td>9.2</td>
<td>8.9</td>
<td>8.7</td>
<td>9.1</td>
<td>9.2</td>
<td>9.3</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>5.9</td>
<td>5.8</td>
<td>6.0</td>
<td>6.3</td>
<td>6.5</td>
<td>6.5</td>
</tr>
</tbody>
</table>

### TABLE 3.3

METROPOLITAN SHARES (IN PERCENT) TOTAL CIVILIAN EMPLOYMENT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>1.642</td>
<td>43.4</td>
<td>45.3</td>
<td>47.3</td>
<td>47.7</td>
<td>47.4</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>43.4</td>
<td>43.3</td>
<td>43.8</td>
<td>46.5</td>
<td>47.5</td>
<td>48.1</td>
</tr>
<tr>
<td>BOSTON</td>
<td>41.4</td>
<td>44.2</td>
<td>46.6</td>
<td>52.7</td>
<td>54.3</td>
<td>55.6</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>33.7</td>
<td>35.6</td>
<td>36.3</td>
<td>38.2</td>
<td>38.2</td>
<td>38.3</td>
</tr>
<tr>
<td>FALL RIVER *</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER (1)</td>
<td>2.9</td>
<td>3.5</td>
<td>3.3</td>
<td>3.7</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>LAWRENCE-HAVERHILL *</td>
<td>2.4</td>
<td>3.5</td>
<td>3.3</td>
<td>3.7</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>LOWELL</td>
<td>2.4</td>
<td>2.7</td>
<td>2.7</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>NEW BEDFORD</td>
<td>2.4</td>
<td>2.6</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLYO*</td>
<td>3.7</td>
<td>3.5</td>
<td>3.4</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>2.2</td>
<td>2.6</td>
<td>3.5</td>
<td>3.8</td>
<td>3.9</td>
<td>4.0</td>
</tr>
</tbody>
</table>

### TABLE 4.1

EMPLOYMENT PARTICIPATION RATE OF POPULATION (EMPLOYMENT / POPULATION IN PERCENT)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSACHUSETTS</td>
<td>44.2</td>
<td>43.4</td>
<td>45.3</td>
<td>47.3</td>
<td>47.7</td>
<td>47.4</td>
</tr>
<tr>
<td>METROPOLITAN</td>
<td>44.6</td>
<td>44.9</td>
<td>43.3</td>
<td>46.5</td>
<td>47.5</td>
<td>48.1</td>
</tr>
<tr>
<td>BOSTON</td>
<td>41.4</td>
<td>44.1</td>
<td>46.4</td>
<td>52.7</td>
<td>54.3</td>
<td>55.6</td>
</tr>
<tr>
<td>BROCKTON</td>
<td>33.7</td>
<td>35.6</td>
<td>36.3</td>
<td>38.2</td>
<td>38.2</td>
<td>38.3</td>
</tr>
<tr>
<td>FALL RIVER *</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>FITCHBURG-LEOMINSTER (1)</td>
<td>2.9</td>
<td>3.5</td>
<td>3.3</td>
<td>3.7</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>LAWRENCE-HAVERHILL *</td>
<td>2.4</td>
<td>3.5</td>
<td>3.3</td>
<td>3.7</td>
<td>3.9</td>
<td>4.0</td>
</tr>
<tr>
<td>LOWELL</td>
<td>2.4</td>
<td>2.7</td>
<td>2.7</td>
<td>2.3</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td>NEW BEDFORD</td>
<td>2.4</td>
<td>2.6</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
<td>3.4</td>
</tr>
<tr>
<td>PITTSFIELD</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>SPRINGFIELD-CHIC-HOLYO*</td>
<td>3.7</td>
<td>3.5</td>
<td>3.4</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>WORCESTER</td>
<td>2.2</td>
<td>2.6</td>
<td>3.5</td>
<td>3.8</td>
<td>3.9</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Data Analysis

The preceding tables indicate that three SMSA's are growing particularly rapidly: Lawrence-Haverhill, Lowell, and Worcester. A fourth SMSA, Springfield, will achieve a greater absolute increase in population and jobs between 1970 and 1985 than any other SMSA except Boston. These four areas seem well suited for new community development. The potential for developing new communities which can grow to an estimated 50,000 people by 1985 in these four metropolitan areas is calculated below:

TABLE 5.1

<table>
<thead>
<tr>
<th></th>
<th>Estimated % of Projected Population Increment That Would Have To Be Captured By A New Community of 50,000 in Each SMSA</th>
<th>Estimated % of Projected Employment Increment That Would Have To Be Captured By A New Community of 50,000 (i.e. 20,000 Jobs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lawrence-Haverhill</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Lowell</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Worcester</td>
<td>80%</td>
<td>65%</td>
</tr>
<tr>
<td>Springfield-Holyoke</td>
<td>65%</td>
<td>65%</td>
</tr>
</tbody>
</table>
There seems to be a maximum potential for one new community of 50,000 people in the Lawrence-Haverhill metropolitan area, one in the Lowell area, one in the Worcester area, and perhaps two in the Springfield-Holyoke area. Five new communities in these rapidly growing metropolitan areas would account for over 80% of the projected population increment between 1970 and 1985. Two other metropolitan areas might also accommodate somewhat smaller new communities (perhaps 25,000 people): Brockton and Fitchburg. In the Brockton area a new community of 25,000 people would have to capture 50% of the increment in population and 80% of the increment in employment between 1970 and 1985. In the Fitchburg metropolitan area the percentages would be 100% and 100%.

In summary, it seems as if there is an optimum potential (in the rapidly growing metropolitan areas of the Commonwealth) for roughly seven new communities. The potential population and economic growth projected for the Boston SMSA is, of course, substantial; however, present densities throughout the metropolitan areas are probably too high to permit the development of a new community. The other three SMSA's (Fall River, New Bedford and Pittsfield) are not expected to grow sufficiently in the next fifteen years to permit the development of a new community of even 20,000 people.

Since it is unrealistic to expect a new community to capture 100% of the new growth in a given SMSA, it is necessary to scale down the estimate of the potential for new communities. A reason-
able estimate of the potential for new communities in Massachusetts would be closer to three or four: one new community of 50,000 people in the Lowell-Haverhill-Lawrence area, one of 50,000 people in the Worcester area, one of 50,000 people in the Springfield-Holyoke area, and one of 25,000 people in the Brockton area. Each new community would be expected to capture close to 75% of the anticipated population increase in the metropolitan area and close to 75% of the job increase expected between 1970 and 1985.

The Process of Selecting Sites of New Community Development

In order to be more specific about the selection of sites, that is, in an effort to go beyond merely designating those metropolitan areas with a high growth potential, an information system for evaluating the potential for new community development in each of the 351 cities and towns in Massachusetts was developed. Several assumptions were made in setting up this information system:

1. New communities which could serve as regional growth centers would have to be located in those metropolitan areas experiencing recent gains in population and employment.

2. New communities would best be developed under state guidance in close cooperation with private entrepreneurs and planning and development agencies on the local level.
3. Political feasibility is highly important and there is no point in locating "ideal" regional centers for new growth that are politically unacceptable.

4. Although the size of a new community depends on the specifics of the region in which it is located, a hypothetical new community of approximately 50,000 people was assumed. (See Appendix A for the land-use implications of a 50,000 person new community.)

All the towns were run through a rough initial sorting process and then only the top ranking 10% of the towns were subjected to a more detailed analysis.

**Round One** involved all 351 towns. These were weighted and rank ordered according to four criteria developed in a basic computer program. The top 10% of the towns were then placed in **Round Two** and the necessary data gathered. From this analysis and a series of different weightings of the variables employed, the "best" sites were selected.

**Round One**

Round One involved an evaluation of all 351 towns in Massachusetts in an effort to determine in which towns a new community could be successfully developed with a minimal investment from the State. The criteria used to eliminate towns were based on the two assumptions that only minimal State investment would be avail-
able for a new community program within the next few years and that the most appropriate sites would be those where the community would clearly be successful financially. (This ruled out rural poverty areas or depressed ghetto sections where aid is badly needed but where an investment would be more speculative.) Thus, Round One eliminated those towns in which growth has not been taking place.

For the process of elimination, four indicators of growth areas were used:

1. Population growth
2. Employment increase
3. Increase in assessed valuation
4. Proximity to an interstate highway

The first three variables were selected because they reveal areas that are clearly growing at rapid rates and because they are statistically independent.¹⁹

A. POPULATION GROWTH (Absolute increase in a town's population, 1956-65 / the square miles of land within the town)

This indicator shows which areas within the State have been experiencing the most rapid growth since the mid 1950's.²⁰ The assumption is that this indicator isolates those towns which are potential sites for new communities by indicating towns which:

1. are growing rapidly in response to new employment opportunities
2. are the most attractive residential areas
3. will have the greatest future demand for new housing
4. are or will be experiencing many of the problems accompanying rapid growth and will be more receptive to State assistance
5. have low enough land and construction costs for new housing to be constructed in large quantities.

B. EMPLOYMENT INCREASE (Absolute change in total jobs filled 1958-66 / the square miles of land within the town)

This indicator reveals those towns which have been most successful in the past in increasing the gross number of jobs available. 21

C. ASSESSED VALUATION (Absolute change in equalized assessed valuation, 1959-68 / the square miles of land within the town)

This third indicator is an attempt to measure the actual physical growth or improvements within each town: new housing, new utilities, town-wide improvements, etc. The assumption with this indicator is two-fold. First, it grossly approximates the "value added" in a particular town through new improvements which increase the taxable base. Second, and perhaps more important, a rapid change in assessed value indicates a town's need to collect a higher level of taxes in order to pay for the costs of growth (new roads, sewers, schools, etc.) This is an important factor because towns that are having difficulty providing the necessary
services to a growing population will be more receptive to State assistance in the form of balanced planning for growth through the development of new communities.

D. INTERSTATE HIGHWAYS (Is the town adjacent to a major limited-access interstate or free expressway?)

Good access to transportation is perhaps the most important factor in selecting sites for new communities. Without excellent road access to major cities, it will be very difficult to attract the broad employment base that will support the community. Also, while much of the new community will probably be self-contained, it will have to maintain an active interdependence with surrounding cities. (See Map 4.)

Application of these indicators yields a list of thirty-three towns with both good ratings (2 or 3 variables in the top 10%) and good locations. This list is found below. (Two towns were eliminated because they are too close to the center of Boston.)
CHART IV

TOWNS SELECTED FOR ANALYSIS IN ROUND TWO

(See Map 5)

1. Acton 18. Longmeadow
2. Andover 19. Marlborough
3. Ashland 20. Medway
5. Barnstable 22. North Andover
9. Chelmsford 26. Reading
10. Chicopee 27. Shrewsbury
11. Danvers 28. Southborough
12. Foxborough 29. Stockbridge
13. Framingham 30. Swansea
14. Franklin 31. Tewksbury
15. Holliston 32. Westborough
16. Hudson 33. Wilmington
17. Littleton
THE COMMONWEALTH OF MASSACHUSETTS

CITIES, TOWNS AND COUNTIES

ROUND TWO TOWNS

NOTE: NORFOLK COUNTY INCLUDES BOSTON AND CONNERS.
Round Two

For a closer analysis of each of the thirty-three towns selected in Round One, three broad categories were selected which are most important to the feasibility of developing a new community: the socio-political climate within the town, the town's economic conditions, and the physical characteristics of the area. For each of these categories a series of indicators was developed to measure the desirability of the thirty-three towns. These are listed below.

A. THE SOCIAL-POLITICAL CLIMATE

One important measure of the social-political climate is how involved each town is in planning rationally for its future growth. This involves finding towns that have eliminated their exclusive suburban restraints on low income housing, that are encouraging new employment to locate in their area, that have been involved in dealings with the State and Federal government in obtaining funds for planning and financing new projects, and that are actively planning now for their future growth by developing a better planning staff or instituting new zoning techniques. In most of these cases, what is actually instituted is of less importance than that the town has taken the initiative to plan rationally for its growth.

In addition to the prevailing political conditions, the enlightenment of the town's residents, their involvement in local political activity (as a potential threat to implementing
innovative planning solutions) and the social attractiveness of
the community are all important.

**Cluster Zoning** (Does the town's current zoning provide
for planned unit developments or cluster zoning?)

**Planning Budget** (Amount of the town's budget going to
"planning" in recent years/1965 population.)

**Industrial Acreage** (How many acres of industrial land
were advertised in the Department of Commerce and
Development's recent edition of "Latest Listings of
Industrial Sites"?)

**Workable Program** (Has the town developed a workable
program, as required in the application for several
federal grants?)

**Housing Authority** (Does the town have a housing authority
as of September 1969?)

**Industrial Development Financing Commission** (Does the
town currently have a Commission or has it expressed
plans to DCD to develop one as of January 1, 1970?)

**Units of Public Housing** (What is the total number of
public housing units constructed to date within the
town?)
Master Plan (Has the town developed a master plan?)

School Expenditures (Operating expenditures per pupil in elementary schools for the year ending June 1967.)

Voter Turnout (Percentage of all registered voters in a town who voted in the local elections in 1967.)

B. THE ECONOMIC CONDITIONS

There are several other economic factors relative to industrial growth that also need to be considered. Is there vacant land and areas of low enough density for industrial expansion? Is the town growing rapidly to form a good employment base for new job openings? Is the town an attractive place for employees to live? How are the taxes? What are the prospects for increasing taxes? How is the town's financial condition? Will it be able to carry the added financial burdens of growth?

Population Density (1965 population per square mile of land within each town)

New Dwelling Units/Capita (Average new dwelling units, 1965-69, as indicated in new building permits / 1965 population.)

Tax Rate (What was the equalized tax rate for the town in 1969?)

Moody Rating (What is the town's Moody credit rating for 1969?)
C. THE PHYSICAL CHARACTERISTICS

Towns which can attract industrial development stand the best chance of guaranteeing new community development. Without a strong employment base in the early stages of planning, a new community will not be successful. An area must currently have the necessary factors which will bring new industry in the near future. This calls for the immediate availability of industrial parks or vacant land, proximity to major means of transportation (inter-state highways, freight and passenger rail, airports), and the availability of a public sewer system.

- **Public Sewers** (Is part of all of the town included within a public sewer district?)
- **Freight Rail** (Is there a rail line for freight service anywhere within the town?)
- **Passenger Rail** (Is there a rail line for passenger service anywhere within the town?)

D. ROUND TWO EVALUATION

In order to evaluate the thirty-three towns in Round Two, the relative importance of the seventeen variables for the selection of a new community location was formulated by giving them different numerical weights.\(^{22}\)

The first set of ratings gives high importance to variables which indicate that 1) the market for residential housing is strong
(new dwelling units, population density, tax rate, public sewers, and planning budget), 2) undeveloped land is probably available (population density, and acres in industrial sites), and 3) the opportunities for immediate industrial development are good (acres in industrial sites, tax rate, railroad facilities for freight, sewers, and workable program).

The second set of ratings is the same as the first, except that the important variables are collectively weighted considerably higher than those of less importance.

The third set of weights emphasizes the residential attractiveness and marketability of the town to private developers. The tax rate, new dwelling units and elementary school expenditures per pupil are given the highest weights.

The fourth set only gives consideration to variables related to economic development. Since it is essential that a new community site attract a broad employment base, this set of weights emphasizes the variables related to the potential for this type of development.

The fifth set of weights gives consideration to those variables related to the political atmosphere of the town. This can be used if it is assumed that the final site selection should be made on political grounds.

Given these different weightings, it is possible to calculate the total scores for each of the thirty-three towns in Round Two. The "best" ten towns are then selected.
### CHART V

**RANKING OF POTENTIAL SITES FOR NEW COMMUNITY DEVELOPMENT**

<table>
<thead>
<tr>
<th>RANK</th>
<th>WEIGHTING SET</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PLYMOUTH</td>
</tr>
<tr>
<td></td>
<td>PLYMOUTH</td>
</tr>
<tr>
<td></td>
<td>N. ANDOVER</td>
</tr>
<tr>
<td></td>
<td>MARLBOROUGH</td>
</tr>
<tr>
<td></td>
<td>PLYMOUTH</td>
</tr>
<tr>
<td>2</td>
<td>N. ANDOVER</td>
</tr>
<tr>
<td></td>
<td>ANDOVER</td>
</tr>
<tr>
<td></td>
<td>FRAMINGHAM</td>
</tr>
<tr>
<td></td>
<td>PLYMOUTH</td>
</tr>
<tr>
<td></td>
<td>FRAMINGHAM</td>
</tr>
<tr>
<td>3</td>
<td>ANDOVER</td>
</tr>
<tr>
<td></td>
<td>N. ANDOVER</td>
</tr>
<tr>
<td></td>
<td>ANDOVER</td>
</tr>
<tr>
<td></td>
<td>ANDOVER*</td>
</tr>
<tr>
<td></td>
<td>FRANKLIN</td>
</tr>
<tr>
<td>4</td>
<td>FRAMINGHAM</td>
</tr>
<tr>
<td></td>
<td>FRAMINGHAM</td>
</tr>
<tr>
<td></td>
<td>BARNSTABLE</td>
</tr>
<tr>
<td></td>
<td>FRAMINGHAM*</td>
</tr>
<tr>
<td></td>
<td>MILFORD</td>
</tr>
<tr>
<td>5</td>
<td>MARLBOROUGH</td>
</tr>
<tr>
<td></td>
<td>MARLBOROUGH</td>
</tr>
<tr>
<td></td>
<td>MARLBOROUGH</td>
</tr>
<tr>
<td></td>
<td>HUDSON*</td>
</tr>
<tr>
<td></td>
<td>SHREWSBURY</td>
</tr>
<tr>
<td>6</td>
<td>WILMINGTON</td>
</tr>
<tr>
<td></td>
<td>WILMINGTON</td>
</tr>
<tr>
<td></td>
<td>FRANKLIN</td>
</tr>
<tr>
<td></td>
<td>WESTBOROUGH*</td>
</tr>
<tr>
<td></td>
<td>HUDSON</td>
</tr>
<tr>
<td>7</td>
<td>FRANKLIN</td>
</tr>
<tr>
<td></td>
<td>BARNSTABLE</td>
</tr>
<tr>
<td></td>
<td>STOCKBRIDGE</td>
</tr>
<tr>
<td></td>
<td>N. ANDOVER</td>
</tr>
<tr>
<td></td>
<td>N. ANDOVER</td>
</tr>
<tr>
<td>8</td>
<td>BARNSTABLE</td>
</tr>
<tr>
<td></td>
<td>FRANKLIN</td>
</tr>
<tr>
<td></td>
<td>PLYMOUTH</td>
</tr>
<tr>
<td></td>
<td>ACTON**</td>
</tr>
<tr>
<td></td>
<td>READING</td>
</tr>
<tr>
<td>9</td>
<td>SHREWSBURY</td>
</tr>
<tr>
<td></td>
<td>FOXBOROUGH</td>
</tr>
<tr>
<td></td>
<td>ACTON</td>
</tr>
<tr>
<td></td>
<td>BARNSTABLE**</td>
</tr>
<tr>
<td></td>
<td>SWANSEA</td>
</tr>
<tr>
<td>10</td>
<td>FOXBOROUGH</td>
</tr>
<tr>
<td></td>
<td>SWANSEA</td>
</tr>
<tr>
<td></td>
<td>SHREWSBURY</td>
</tr>
<tr>
<td></td>
<td>SHREWSBURY**</td>
</tr>
<tr>
<td></td>
<td>MARLBOROUGH</td>
</tr>
</tbody>
</table>

* indicates same score
** indicates same score

### COMPOSITE RANK

*1 PLYMOUTH
*2 FRAMINGHAM
*3 N. ANDOVER
*4 ANDOVER
*5 MARLBOROUGH
*6 FRANKLIN
*7 BARNSTABLE
*8 HUDSON
*9 SHREWSBURY
*10 WILMINGTON

Conclusions

The development of new communities in metropolitan areas of Massachusetts could contribute to the revitalization of central cities by facilitating the relocation of urban poverty neighborhood households and the urban redevelopment of slum neighborhoods. Future urbanization will be substantial and new communities offer a beneficial way of channeling urban growth.

Ten potential sites for new communities have been identified, but it is quite clear that new community development in all ten sites would be financially unfeasible at this time even with substantial support from the federal government. The "market" for new communities in Massachusetts is limited. Based on the analysis of projected growth in metropolitan areas throughout the Commonwealth it seems that three or four new communities averaging 50,000 people could be developed in Massachusetts: one new community of 50,000 people in the Lawrence-Haverhill-Lowell area (Andover; or North Andover); one of 50,000 people in the Worcester area (Framingham; Marlborough; Hudson; Shrewsbury; or Franklin); one of 50,000 people in the Springfield-Holyoke area (Chicopee or Longmeadow) and one of 25,000 in the Brockton area (Foxborough or Plymouth).

Jerome Pickard has devised a possible model for the geographic distribution of an anticipated 30 million people in new communities throughout the United States from 1970 - 2000. He allocates .2 of the projected 2000 population growth (or 200,000 people) to the
Eastern Massachusetts region and suggests the creation of two new communities of 100,000 people each in this area. This seems unrealistic in light of the existing system of urban settlements. Perhaps, as has been shown in this Chapter, three or four new communities averaging an estimated 50,000 people would make more sense. New communities of 100,000 each would probably be too large to fit within the boundaries of any existing city or town. However, it does not seem unrealistic to anticipate that the estimated 6,700 acres required to build a new community of 50,000 people could be found in three or four of the towns selected, especially if new communities are thought of in terms of the planned expansion of existing towns rather than the development of open, totally undeveloped acreage. (See Appendix A.)

Several preconditions should be satisfied prior to state action or investment in new community development. Major planning efforts must be undertaken to insure that the basic objectives of new community development will be served:

1. Housing choices should be broadened through efforts to provide low-income housing and high density housing for all income groups in the metropolitan suburban rings around the central cities.

2. Regional and local efforts should be made to engender more industrial and commercial development in the area to strengthen the central cities as well as to enhance the balanced economic development of the entire region.
3. High intensity development such as commercial and apartments should take place near interchanges and some land near most interchanges should be reserved for such development.

4. Industrial and commercial development should take place in relatively few, relatively large areas, rather than through scatteration. Efforts should be made to encourage industries that are mutually reinforcing (input-output-linked) to relocate in the same area.

5. Usual fundamentals of sound local planning should be observed, open space and key landmarks should be preserved, sharp socio-economic discontinuities should be avoided, and disruption of low income and minority groups should be avoided.26

Given the primary importance of establishing a solid employment base for any new community, the growth sectors in the Massachusetts economy were analyzed and estimates were made of the types of industries and economic activity that might be attracted to new communities. Recent trends indicate that growth will most likely occur in light manufacturing electronics and transportation equipment companies and in research and development firms.27 While it would be possible to develop a new community without taking many of these factors into account (perhaps centering development around non-growth industries) the likelihood of success is increased
by capitalizing on current trends.

If new communities are to be successful they must be built with full recognition of the political, social, and economic, and environmental context in which they will be embedded. Thus, potential sites for new community development may not be the ideal growth points for regional economic development, but nonetheless, the sites identified in this Chapter are selected on the basis of optimizing and not maximizing the chances of success given the existing resources and constraints.
Chapter II


3. Ibid.


5. Discussion Goals For Massachusetts, Office of Planning and Program Coordination, Massachusetts Department of Administration and Finance, A Report to the New England Regional Commission, February, 1970.

6. Ibid., p. 15


8. Ibid.

9. Ibid.

10. Profile and Analysis of Economic Data for Massachusetts, Office of Planning and Program Coordination, Massachusetts Department of Administration and Finance, October, 1968.

11. Two major theories advanced in recent years relative to the regional economic growth are: (1) the export-base theory which hypothesizes that the factor initiating growth and determining its extent is the demand for a region's exports and (2) the development stage theory which hypothesizes that as per capita income increases the agricultural labor force declines while the proportion of the labor force in secondary and later tertiary industries increases.

12. Profile and Analysis, op. cit., p. 57.

13. Ibid., p. 61.
FOOTNOTES
(continued)

Chapter II


15. Profile and Analysis, op. cit., p. 62.

16. Ibid.


To derive the employment projections, the SMSA study first projects the employment for those industries that have significant exports out of the metropolitan area. These industries are of two types: (1) base industries; and (2) localized industries having significant exports (for example, an electric utility which is generally thought of as serving only its metropolitan area.)

The base industry employment is derived by trend extrapolation of the metropolitan area's share of its analytical region's employment. The export component of the localized industry employment is derived by the trend extrapolation of the ratio of localized industry export employment to the region's employment in that industry, exclusive of the metropolitan area's employment in that industry. The industrial breakdown is on an SIC single digit classification. The residentiary component of each localized industry employment was projected as a function of its relationship to total export base employment. This is a variant of the well-known export-base multiplier.

The NPA study's population projection is derived from its projective of employment. Future population growth is related to (1) changes in employment levels within the metropolitan area,
(2) the ratio between population and employment in the analytical region, and (3) a parameter relating the ratio of population to employment in the metropolitan area to the ratio of population to employment in its analytical region.

As population was made dependent on employment, personal income in turn is based upon population and employment. However, here the area of reference is not the analytical region, but the United States as a whole. Personal income in SMSA is correlated with several independent variables; United States personal income; the ratio of population to employment and the ratio of major industrial employment to total employment.

18. This section is based on a study prepared for the Massachusetts Department of Community Affairs by New Community Planning Associates, "An Information System to Select Potential Sites for New Communities in Massachusetts," January 1970.

19. A simple correlation run among the three variables found that their independence is statistically significant at the .01 level.

20. The absolute number of people is used because they are concerned with the gross increase in population for marketing new housing in a new community, not the proportional increase (which would give greater weight to towns just beginning to experience growth). The change in population was divided by the land area in each town in order to equalize for town size.

21. The assumption is that this indicator will good sites for new communities by isolating those towns where the following can be expected:
   a) many jobs presently available
   b) new employment to be attracted for similar locational reasons
   c) local conditions to be most favorable to overall growth
   d) the emergence of new problems which accompany rapid growth and thus a greater receptiveness to state assistance
   e) increase in population in response to new job opportunities
Chapter II

Ideally job increases over shorter and more recent intervals should have been measured in order to detect more subtle changes in recent years. Using figures from 1958-1966 indicates those changes primarily taking place around Route 128 and very little growth around the newer Route 495 which was still being constructed in 1966. The figures only deal with covered employed (jobs covered by Commonwealth social security). While this represents about 80% of all employees, it is satisfactory because only the relative changes in employment between different municipalities are of interest in this case.

22. Five different sets of weights were used. The value of the quantitative variables for each town was translated into a decile value (ranging from 1 to 10) by dividing the value range of the actual values into ten equal parts. Each town received a score on each variable from 1 to 10. For each of the qualitative variables each town received a score of 10 for each "yes" and a score of 0 for each "no." To evaluate the towns’ potential for the location of a new community, scores for each variable in each town were multiplied by the five different sets of weights. For each set of weights the towns were given a total score and a rank order. The ten highest scoring towns for each set of weights was included in Chart V. Appendix B lists the scores for all the towns. This evaluation procedure permits the towns to be compared on the basis for an aggregate indicator score. The procedure is flexible since different sets of weights can be considered. The five sets of weights which were selected reflect different decision criteria. Appendix C indicates the weights for each variable in the five different sets.


24. 1 § 404 (3) of Title IV, 1968 Housing Act.


27. Ganz, op. cit.
CHAPTER III

NEW COMMUNITY DEVELOPMENT STRATEGIES

Introduction

Constitutionally, the states are the ultimate holders of the police power and "are the legal masters of local governments and far superior to localities in their ability to raise revenues." Politically, state governments are at least one step removed from the inter-jurisdictional conflicts which so often impede area-wide planning for metropolitan growth. For these and numerous other reasons, any rational policy allocating responsibility for the development of new communities would more than likely assign a wide range of powers to the state government.

Unfortunately, direct state involvement in land use planning, development control, and the creation of new communities has tended to be minimal. On occasion there have been recommendations made for greater state action in promoting local development; part of a recent report to the National Governor's Conference contains a section entitled, "The Challenge of Orderly Growth," which spells out the kinds of state policies needed in the areas of zoning, land use, planned unit development, and new community development. Various states have already taken steps to insure a
greater degree of state involvement in overall planning for urban
growth.  

Increasing dissatisfaction with the pattern of metropolitan
development has generated still more proposals for modifying
existing arrangements and creating new concepts and instrumentali-
ties. This chapter does not deal with proposals that call for the
abolition of local governments, but rather with various supplements
to local action on issues of urban development proposed; and in
particular with the issue of new community development.\(^5\) Proposals
to 1) facilitate metropolitan area planning for regional develop-
ment, 2) create new agencies, short of metropolitan government,
3) generate private development incentives (all of which would
provide for greater state control over the new community develop-
ment process) have been suggested in a report for the National
Commission on Urban Problems.\(^6\)

A proposal to integrate the planning and regional development
processes has been offered by F. Stuart Chapin.\(^7\) For each metropo-
lan area he proposes that a Metropolitan Area General Plan be
developed.\(^8\) Under Chapin's scheme, the general plan and a develop-
ment "instrumentality" of some kind would be made operational
through a Metropolitan Area Public Works Program and Urban Develop-
ment Code covering zoning, subdivision, and housing regulations.

This program would take into account the fact that

...the provisions of public services in strategic
locations can be used to divert growth into cer-
tain predetermined areas, and the withholding of
public services can have the effect of dissuading
development in other areas. The programming of public works and improvements and the budgeting and building of public facilities in particular locations, of course, is a related and a very fundamental lever in the follow-through on plans and policies for shaping growth. 9

His plan would provide for different mixes of regulations and public investments in areas at different stages of urban development. In Massachusetts, the annual budget of the Commonwealth is close to one billion dollars per year and the carefully planned investment of these funds in public improvement could have a substantial impact on the pattern of urban growth. 10

A second proposal calls for the establishment of metropolitan special districts that could plan and install certain critical components of the urban infrastructure. These would include transportation facilities, open space and utilities. This presumes that metropolitan expansion is largely determined by the location of capital facilities, both public and private. By controlling the critical investments, growth could be diverted without the need for a new agency to assume the responsibility for traditional zoning and subdivision controls. 11

In 1960 a suggestion was made that a new type of special district -- a suburban development district -- be established. The basic power of the suburban development district would be an authorization from the state to acquire all land within its boundaries through purchase or option. The power of eminent domain would not be granted. 12 Another similar proposal designed primarily to preserve open space in metropolitan areas was proposed in 1961 by Jan Krasnowiecki and James Paul. 13 They proposed that
"metropolitan development commissions" be established which would operate through an adaptation of the British system of nationalization of development rights.\textsuperscript{14} Another proposal, made by William Slayton, calls for the establishment of state chartered, public development corporations with the authority to acquire land, prepare plans, install community facilities, and dispose of land by lease or sale to private developers.\textsuperscript{15} The power of eminent domain is included in the powers granted to such a development corporation. Slayton points out that "the public development corporation must be able to control land development and the appreciation of land values should accrue to the public -- not to the private land owner merely because he happened to own land at the time of adjacent development."\textsuperscript{16} It has already been noted that a substantial portion of the capital investments made within a metropolitan area results from decisions of individuals functioning as consumers or corporate officials.\textsuperscript{17} Any realistic system of incentives and development controls must take the private decision making process into account. Land banks, mortgage guarantees, and other types of incentives-controls systems have been suggested. A variety of such mechanisms will be considered in Chapter IV.

One of the most viable incentive-control systems for encouraging orderly development within the private sector is state investment in new community development. Investments in transportation, health, education, and welfare are all part of a state investment
program. A public investment program focused on new community development would be aimed at economic development as it relates to social and political objectives. The creation of totally new communities would permit large-scale social and economic planning as well as the establishment of the "proper relationships among land uses" from the earliest stages of development. The commitment to ongoing guidance of development but also the inclusion of a mix of social classes and commercial-industrial activities would differentiate new communities from more familiar suburban sprawl. At present, the U.S. Department of Housing and Urban Development authorizes FHA loans for land purchase and development subject to the requirement that new communities house low income people and conform to metropolitan development plans. New legislation is currently under consideration that would provide further subsidies for public agencies (as well as private investors) interested in developing new communities.

State governments need to decide what strategy they will adopt to insure balanced regional development and what types of incentive-control systems they will employ. Should the Commonwealth establish a state-chartered, non-profit corporation empowered to acquire land and plan and develop new communities? Should the State authorize groups of cities and towns to acquire, purchase, or take by eminent domain non-contiguous tracts of land for open space, transportation corridors, utility purposes or for privately developed new communities? Should the exercise of such powers be subject to the approval of a regional planning and development
agency? Should the state (through the Department of Community Affairs, Commerce and Development and/or the Department of Natural Resources) designate land areas in which the state has a special interest? Could the state planning agencies prepare and administer direct land use and development controls which would insure that new community development would meet State objectives?

In this chapter three new community development strategies are evaluated. Each strategy is considered in terms of its political and financial feasibility and the public benefits it is likely to offer. The first strategy would authorize existing regional planning agencies to assume some of the powers of a regional development authority and to plan for new community development in their region. The second strategy calls for the establishment of a state development corporation to build new communities. The third strategy provides for the establishment of new community development districts which would be financed by the state but run by a board of directors made up of community representatives.

Strategy #1

Providing regional planning agencies with the power to act as industrial and economic development authorities.

Description

Legislation presently exists which provides for the industrial development of cities and towns through the establishment of Industrial Development Finance Authorities. The creation of these
authorities must be preceded by the finding that 1) unemployment or the threat of unemployment exists in the municipality or
2) security against future unemployment and lack of business opportunity is required in the municipality. By attracting new industry to the municipality or by substantially expanding existing industry, it is assumed that the Industrial Development Finance Authorities can help to combat these problems. Two or more contiguous municipalities may agree to consolidate their respective Industrial Development Financing Authorities into a single authority. These authorities can acquire and sell land but they do not have the power of eminent domain. The general laws of Massachusetts provide for the creation of a State Industrial Finance Board which on the request of any city or town can establish a local Industrial Development Finance Authority.

In 1966, 1967, and 1968 the Massachusetts Department of Commerce and Development proposed enabling legislation that would allow all regional planning agencies to act as industrial or economic development authorities. In other words, the idea of municipal industrial finance commission was extended to encompass all the cities and towns in a given regional planning area. (See Map 2 in Chapter 2 for outline of regional planning areas in Massachusetts.) The proposed legislation failed to receive the necessary support and ultimately it failed to pass. However, in 1969 one regional planning agency, the Southeastern Massachusetts
Regional Planning Agency, did succeed in getting special legislation passed which empowered them to assume the responsibilities and powers of an economic and industrial development authority. Such an economic development authority is authorized to assume the duties, obligations and responsibilities of a Title IV Redevelopment Area designated pursuant to the Public Works and Economic Development Act of 1965.

If enabling legislation such as that proposed by the Department of Commerce and Development could be passed, most of the state would be subsumed under one or another regional, economic development authority. New community development proposed within an agency's jurisdiction would be planned and coordinated by the regional planning and economic development authority. (Sample legislation is provided in Appendix D.)

**Political Feasibility**

Past experience seems to indicate that there is not much support for the establishment of regional planning and economic development authorities. However, the experience of the Southeastern Massachusetts Regional Planning Agency indicates that giving such powers to Regional Planning Agencies is politically feasible. The passage of enabling legislation (as opposed to the special legislation which was passed in the case of Southeastern Massachusetts) would be possible if an effort was made to educate the public. The Department of Commerce and Development has no explanation of why
the proposed enabling legislation failed to receive the widespread support in the past.

Financial Feasibility

Regional planning agencies are currently functioning in Massachusetts (See Appendix E for a discussion of the legal basis for regional planning in Massachusetts.). They are funded by per capita assessments on each member locality. Legislation which would alter existing regional planning agencies and bestow upon them the powers of a regional development authority would not empower these agencies to issue bonds. At present the State does not offer tax incentives to industry, in the usual sense of the term, nor does it authorize local governmental units to do so. Local governments are not authorized to issue either revenue or general obligation bonds for industrial development purposes in Massachusetts. 25 It is not proposed as part of this strategy to empower regional planning and development authorities to issue bonds. Thus, this strategy would cost no more and accomplish slightly more than the present approach to regional planning.

Public Benefits

New community development under the control of regional planning and development authorities would at least be coordinated to a greater extent than at present. The selection of sites for new community development would be the responsibility of the
development authorities. This would insure that efforts to attract new industry in the area could be coordinated so that new community development would strengthen the entire regional fabric.

This strategy does not provide for direct state subsidy for new community development nor even for a pledge of state credit behind the issuance of bonds to support industrial development. The regional planning development authority would be responsible for insuring flexible enough zoning arrangements to allow new community development at a higher density than would otherwise be permitted.26 A provision requiring the approval or disapproval by a majority vote of the regional planning commission on all local zoning and subdivision ordinances (and variances) related to proposed new community development would insure a greater opportunity to work for the needs of the whole region. Regional agencies might also work with state planning and development agencies to see that transportation, health, education, and welfare expenditures were diverted to coincide with the needs of new communities being planned. The regional authority, since it would have no money to build housing, could work with the Massachusetts Home Finance Agency (MHFA) or other non-profit corporations (or the State) to build a wide range of housing types for families of all incomes.

Under this strategy new communities would, more than likely, be privately developed but they would at least be planned to some degree by the regional authority. It is assumed that this strategy would enhance the possibility of meeting state urban growth
objectives. State government could maintain some degree of control over the new community development process by contributing funds (under certain conditions) to the work of the regional agencies. This strategy would probably be politically feasible and financially possible since new communities under this strategy would almost certainly be privately financed and developed. The regional authority (through the state) would be involved in the planning of the new community, but only in a minimal way.

Strategy #2

Providing for the creation of a State chartered, non-profit new community development corporation

Description

A variety of model new community development corporations have been proposed.27 Recently the governor of Massachusetts proposed the establishment of a Replacement Housing and Community Development Corporation. As described in the Governor's proposal, such a corporation would have the power to replace housing demolished by public action and it would also have the power of eminent domain to accomplish its objectives. It would have the capacity to develop new communities anywhere in the Commonwealth. This is not to say that it would be empowered to create new municipalities. Rather, it would work within existing boundaries to guarantee that population and economic growth would be carefully planned to coincide with state objectives. The proposed corporation would be empowered
to promote industrial development projects relating to residential expansion (for federal tax benefits unavailable now to exclusively industrial developments are still available to projects related to residential development). This new entity could act only after the community has formulated a new community plan. Lacking such a plan, the Corporation could act when a local governmental body designated a given location as a new community area. And lacking such a designation, the Corporation itself with the Governor's approval could make such a designation and begin development.

The agency as proposed would be permitted to borrow at least $500 million at relatively low interest rates through the sale of tax-exempt bonds. In turn it could buy land and lend money to developers at relatively low interest rates to build housing and industry and community facilities. Developers would pay back the loans from income they made on property.

Political Feasibility

The corporation would put together sites, insure development, and arrange for financing. No project could be undertaken without local approval -- or, failing such approval, a two thirds affirmative vote of the corporation board of directors and the approval of the governor. The prime difference between the Governor's proposed corporation and the New York State Development Corporation, which serves as the only model of a state development corporation,
is that there are more checks and balances on the powers of eminent domain in the Massachusetts model. No project area can be less than 100 acres -- and no project can be developed in any town with less than 500 acres of vacant land. The corporation would also be empowered to over-ride local zoning codes and building codes. This would be a direct challenge to the recently passed home rule amendment in Massachusetts. The Governor's proposal is perhaps not the most impressive proposal for a state development corporation that could have been made, but since it has already been proposed and since it has received some support from municipal officials, it is the model that should be considered at this point in time. It is not yet clear whether or not the proposal will be accepted, but the careful system of checks and balances certainly enhances its political acceptability.

Financial Feasibility

The Governor of Massachusetts has set as his goal the creation of 230,000 units of housing in the next ten years. Many of these units will be included in the development of new communities throughout the Commonwealth. At present construction prices (about $20,000 per unit) that much housing would cost about $4.6 billion. That does not include all the costs of developing complete new communities (e.g. infrastructure, industrial development, commercial development, recreation, and open space) which would probably total an additional $5 billion. The initial cost to the Commonwealth of
the Governor's proposal is estimated at $2 million yearly -- most of that money would go to finance the agency itself. Additional money would be available for housing loans if the legislature agreed to raise the $50 million borrowing limit on the Massachusetts Housing and Finance Agency (at least 25% of the housing built through the housing agency must be low income and it has so far committed $22 million). The new corporation would be in a good position to push for the full utilization of existing state and federal subsidy programs. New communities would be developed by the state development corporation, although residential and commercial development could be sub-contracted out to private developers. Ultimately the new communities would be subsumed by the existing municipalities in which they were located.

Coordinated state investment in capital improvements could reduce the actual costs of a new community (i.e. transportation planning could be coordinated with new community development to eliminate the need for additional costs for roads). Federal, state, regional, and local monies could be pooled under this strategy. The program seems to be financially feasible.

Public Benefits

Along with the problems of finance and land assembly, existing building codes, development standards and land use controls pose substantial barriers to a program that has as its general goal the successful development of new communities with a full range of
housing, facilities and jobs. Short of complete, new, state-wide enabling acts, the creation of a Development Corporation with local override powers is the best way of insuring that local standards will not impede the development of balanced new communities. The development corporation strategy insures coordination of planning and investment decisions at the state level. It insures a wide range of housing types and (as compared with Strategy #1) gives the state government a greater measure of control over comprehensive planning for urban growth in the Commonwealth.

Strategy #3

Providing for the establishment of new community development districts

Description

This third strategy is derived directly from a proposal made by Marion Clawson to establish "suburban development districts."33 District boundaries would follow "natural features," and the size would vary from one to ten square miles. The basic power of the new community development district would be an authorization from the state to acquire all land within its boundaries through purchase or option. However, the power of eminent domain would only be granted once the development district had acquired 70% of the land it needed by direct purchase or by purchase of options. The governing board of the new community development district would be composed of members from several interest groups:
municipalities, other special districts, real estate developers, present land owners, citizens, state government and regional planning agencies. Each of these groups would be permitted to purchase stock in the development district. The new community development district would be empowered to plan, to acquire and control land, to contract with private developers for the development of the area, and to supply necessary governmental services.

The immediate objective of the new community development district would be to channel and coordinate private and public development activities to insure the development of compact new communities. A further objective would be to assist in the preservation of open space by providing an ample supply of well located land that is ready for development, thereby accommodating development pressures that might otherwise overwhelm the defenses erected to protect the open space.34

The new community development district is a means of carrying out a staged development process in which development occurs in a limited number of areas at a given time, and most of the unbuilt land is reserved for later development or permanently retained as open space. Each new community development district would cover an area large enough for a new community, but small enough to permit detailed design of the whole community, efficient coordination of all development activities and completion of development within a span of several years.35

Two kinds of actions would need to be taken to secure
development of the new community by private enterprise. Owners of sizable tracts of land designated for development at lower and medium densities would be encouraged to submit application for planned unit zoning, and all remaining land in this category would be rezoned. Land designated for interim development, and other land not developed within a reasonable time would be acquired by the development district for sale or lease to developers (subject to specific conditions as to the character and timing of development).

Political Feasibility

A state agency (possibly the Department of Community Affairs) would establish all development districts with the approval of the Governor and perhaps the General Court. This agency would designate the boundaries of the development district and elections would be held for the board of directors. The district would be established as a semi-public corporation which would be independent but manned by a board of directors directly responsible to the state government. The development district would be dissolved as a managerial unit when the new community development was substantially completed. However, the new community would remain as a separate fiscal unit in the state's accounts until all of the capital advanced for development was repaid. Initially, only one or a few development districts would be established in those
areas where the potential for new community development is greatest. Much development would continue to occur outside these development districts in a traditional manner. However, after experience was gained through the use of this instrumentality, the building of new construction might be concentrated in such districts.37

This proposal would provide each new community development district with authority over zoning and subdivision control in the development district during the initial planning stages. Since new communities will be planned initially in those areas where new growth is most likely to occur, resistance should be minimal to this strategy. That is, new communities will be planned in areas where the pressures created by high growth potential will already be felt by the citizens. The alternative of suburban sprawl and haphazard growth will be very real to them. The development district would include representatives of all levels of government. This is an improvement over the regional planning and development authority described in Strategy #1. Resistance to Strategy #3 would probably be less than that to the State development corporation. Development districts would be established only as needed and would be controlled in part by members of the local cities and towns. Since the development district would not have the power of eminent domain it would be less offensive to the localities involved. It is likely that political resistance to this proposal will come from the undeveloped areas of the Commonwealth, while highly urbanized areas would probably support this
strategy as a way of building more low and middle income housing outside the central city.

Financial Feasibility

Each new community development district would constitute a separate fiscal unit. The development district can help to achieve four important financial objectives. First, it can provide the large amount of capital that is needed for public facilities early in the development process, and for acquisition of land for high density development; and it can recover this capital during and after development. Second, it can capture for the public treasury the increases in land value that are due to public decisions to concentrate intensive development at certain locations. Third, it can employ special assessments, taxes and user charges to assure that the residents and property owners of a new community pay the full costs of the facilities provided for them. Finally, the staging of the development process in districts would make possible a more equitable treatment of landowners in acquiring land for public purposes and in assessing land for taxation.38

The capital needed by the development district agency (or corporation) can be raised by the state sale of bonds, which should be placed at the disposal of the agency from time to time for definite purposes stated and justified by the agency. Much of this capital would have to be raised by state bonds and local bonds even if development were to proceed in the conventional manner. A small amount of additional capital might also be needed to finance
the agency's operating costs, including the detailed planning and
urban design work, site preparation, promotional activities, and
administration. The capital advanced for construction of public
facilities would be recovered from the public agencies responsible
for the provision of such facilities when money is available
from their usual sources of funds. The payment might come in a
lump sum from an agency capital budget, or in annual installment
payments, or in rental payments. The initial capital investment
in the district and the agency's operating expense might be
recaptured completely by a combination of the existing sources of
funds from the various public agencies and profits from the sale
and lease of land. However, the establishment of the development
district would offer a good opportunity to inaugurate an improved
method of paying for public improvements.

All taxes collected in the district would be shared with the
towns which comprise the district. Services might be purchased
from towns prior to the new community's completion. The sale of
stock to all interested public and private agencies and individuals
would also provide considerable revenue. These development
districts would be eligible for federal funds (e.g. Title IV New
Community Development) as well as for state subventions. MHFA
could become involved as easily under this strategy as under
Strategy #2.
Public Benefits

The benefits accruing under this strategy are the same as those that would accrue under Strategy #2. The comprehensive nature of the planning for future growth is sacrificed somewhat, since the Development Corporation would be responsible for planning for the entire state at all times. But, perhaps, this third strategy is more realistic and more politically acceptable. The state would still be responsible for formulating a coordinated and synchronized overall public improvements program and it would be the state government that identified what high growth areas in which new community development districts should be established.
<table>
<thead>
<tr>
<th>Strategy #1</th>
<th>Political Feasibility</th>
<th>Financial Feasibility</th>
<th>Public Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing regional planning agencies with the power to act as industrial and economic development authorities</td>
<td>Politically feasible as demonstrated by the passage of special legislation empowering the Southeast Planning Agency to assume the powers of a regional industrial and economic development authority. Wide-spread public support not seen at present.</td>
<td>Involves no use of state credit to issue bonds. Financed by per capita assessment on member cities and towns just as at present. Would not provide money for specific projects -- but be responsible for planning and coordination mostly. Extremely feasible financially.</td>
<td>Would gain public coordination over the selection of sites for new community development and the programming and investment in public improvements. Would not be able to insure either industrial development or the building of low and middle income housing.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategy #2</th>
<th>Political Feasibility</th>
<th>Financial Feasibility</th>
<th>Public Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing for the creation of a state chartered non-profit development corporation</td>
<td>Politically unacceptable to a great extent because of the power of eminent domain. Also the power to override local building and zoning codes creates hostility to this strategy. Exclusion of local residents from membership and control over the corporation also</td>
<td>Because this corporation would be responsible for development throughout the entire State the resources required would be substantial. Must rely on bonds and on increase in MHFA debt limit. Financially very difficult.</td>
<td>Would offer the greatest public benefits. Direct state involvement in new development; coordination of public experience with new development. Guarantee of breaking down exclusionary development practices through state override. Good chance of building low and</td>
</tr>
<tr>
<td>Strategy #2</td>
<td>Political Feasibility</td>
<td>Financial Feasibility</td>
<td>Public Benefits</td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------</td>
<td>----------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>(continued)</td>
<td>makes this politically unrealistic.</td>
<td>moderate income housing when jobs are available.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategy #3</th>
<th>Political Feasibility</th>
<th>Financial Feasibility</th>
<th>Public Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing for the establishment of the new community development districts</td>
<td>Politically feasible because of direct participation of communities affected by new development and lack of eminent domain power. Would gain political support from urban areas which probably wouldn't be affected.</td>
<td>Financially feasible because restricted to a limited area. Direct involvement of private money, as well as the credit of the state behind bonds.</td>
<td>Less comprehensive than Strategy #2, but would provide for balanced and equitable development in high potential growth areas.</td>
</tr>
</tbody>
</table>
Conclusions

In Massachusetts it is fairly obvious that the multiplicity of localities (351 cities and towns) creates financial hardships and political fragmentation. A strong county system or metropolitan council of governments might provide a more efficient government. These possibilities have been discussed elsewhere. Given the strong tradition of local government in Massachusetts, however, it seems unlikely that governmental reorganization will occur in the near future. Urban expansion, though, is occurring now and will continue at a vigorous pace. The new community development strategies proposed in this Chapter offer possibilities for channeling and coordinating urban development. Each of the three strategies is politically and financially acceptable, although the third strategy seems most desirable.

The state development corporation holds out the greatest promise for meeting public development objectives (e.g. providing more low and middle income housing in locations which correspond to job opportunities, preserving open space) yet the new community development districts are a reasonably good second choice. Empowering regional planning agencies to act as industrial and economic development authorities is a third possibility -- although regional planning as it is currently structured in Massachusetts is less efficient than it might be.

The two most critical problems facing any attempt to create
new communities in Massachusetts are 1) finding ways of financing the operating costs of a new community during the development period (assuming that capital construction can be paid for by state bonds and state agency programs), and 2) overcoming the political opposition offered by long-time residents to the creation of a new community expected to grow to 50,000 people within the boundaries of an existing town. The first problem can be dealt with rather efficiently by staging and managing the development process in order to keep a positive cash flow from the sale of housing and land, and the rental of commercial and industrial property. Some services can be purchased from the existing municipalities (e.g. school and health) until the new community reaches a size sufficient to support the building of their own facilities. In addition, taxes can be collected from the new community residents as they move in (just as in any other municipality) although some of the tax revenue will revert to the new community development district agency and some will be used to pay the surrounding municipalities for services purchased. If necessary, federal loans can be obtained at very low interest rates to cover costs during the early stages of development.

The second problem, political opposition, is much more difficult to deal with. One principle that ought to be observed is to involve long-time residents in the planning and development of any new community. Present residents of any area that is included in a new community development district should be given
representation on the board of the agency as well as options to buy stock in the development district corporation. One good argument that can be made is that the new community, once completed, will certainly offer many benefits to the present residents that they could not possibly provide for themselves--improved schools, improved health care, additional community services and facilities. In addition, the development of a new community will certainly enhance the value of their investment in a home in the area. Long-time residents are obviously going to be afraid of being taxed to pay for newcomers' services and afraid of being politically submerged, but both of these fears can be allayed through the development district strategy. In the long run, if the state assumed the costs of education and the federal government assumed the costs of welfare programs, property owners would be less resistant to new development (in any form) since property taxes would not have to be so severe (to pay for the costs of education). However, until such a shift in fiscal responsibilities is made, the third strategy seems to present the best means of coping with these two serious problems.
FOOTNOTES

Chapter III


2. The exception to this statement is, of course, New York where the New York State Urban Development Corporation is very much involved in the development and planning of new communities.


4. Some states have already taken steps to control certain types of land. Wisconsin, for example, in 1962 began a major open-space acquisition program. Since then, such states as New York, New Jersey, Pennsylvania, Connecticut, and California have also adopted laws to preserve recreational areas. In Colorado, a county must submit any proposed zoning ordinance to the state planning director for advice and recommendation. Similarly, Michigan counties are required to refer an adopted ordinance to the Michigan department of economic expansion. Substantial attention has been given in Connecticut to the development of regional planning agencies covering the entire state and to the integration of state and local development activities. (Fragmentation in Land Use Planning and Control, prepared for the consideration of the National Commission on Urban Problems, Research Report No. 18, by James Coke and John Gargan, Washington, D.C., 1969, p. 57.)

5. For a discussion of proposals calling for substantial reorganization of metropolitan government see, A.C.I.R. Alternative Approaches to Governmental Reorganization in Metropolitan Areas, June 1962.

6. Fragmentation in Land Use Planning, op. cit.


8. Ibid.

9. Ibid., p. 224.
FOOTNOTES
(continued)

Chapter III


14. That system has been described as follows:
a) when the area to be preserved or developed for open space purposes has been chosen, through procedures and within a governmental structure which best assure maximum benefit to the community, the properties in the area are valued;
b) the valuation is based on the same principles and is accomplished under the same procedure as is the valuation of property for purposes of just compensation in condemnation;
c) the values thus established for each property in the area are guaranteed to the owner by the government authority;
d) the aggregate of those guarantees for the whole area is equal to the compensation which would be payable if the whole area were condemned in fee on the date when the open space program goes into effect;
the fee, of course, is not condemned;
instead, detailed regulations controlling the uses of the property for open space purposes are imposed against the guarantees;
to the extent that such controls depress the value of the land for uses actually being made of it at the time they are being imposed, the owner is permitted to draw on his guarantee for damages;
to the extent that such controls depress the value of the property for other than existing uses -- depress or eliminate the development worth -- the owner may draw on his guarantee through an administratively supervised public sale of his property;
the guarantee established for any property in the area is reduced by each payment of damages or compensation. Thus the damages and compensation payable by the community cannot exceed the guarantee established for each tract. What this means, in effect, is that development values not existing on the date when open space controls are imposed are not compensated. ("New Techniques for Shaping
Chapter III


16. Ibid.

17. For further elaboration and statistics on this point see William L.C. Wheaton, "Public and Private Agents of Change" in Urban Expansion, Problems and Needs, op. cit., p. 65.


21. The Nixon administration is currently preparing legislation that would amend Title IV of the 1968 Housing Act to allow public development corporations to apply for money presently restricted under Title IV to private developers. Money would be made available for the planning of new communities, in addition to the funds available for land and development.

22. Massachusetts General Laws, Section 772, Chapter 40D.

23. Ibid.

24. House Bill #48, 1967, General Court of Massachusetts.

Chapter III

26. See, for example, Howard County 1985, technical report prepared by the Comprehensive Planning Section of The Howard County Planning Commission, April 1967.


28. One of the problems facing the Massachusetts Replacement Housing and Community Development Corporation bill is its direct challenge under section 8 of the Home Rule Amendment to the Massachusetts Constitution (HRA 8). Under HRA 8 the General Court may act "in relation to cities and towns either by general law or special law in enumerated circumstances." The findings of the proposed bill emphasize certain points to meet the challenge of HRA 8. First to assure its reading as a general law, and not just as a special law, the Bill stresses the statewide breadth of the Commonwealth's urban problems, and need for at least several community development efforts to meet the problems. Second, the emphasis on statewide aspects of the Commonwealth's urban problems anticipates and hopefully overcomes the challenge that development within a single municipality is activity only in relation to that city or town, and therefore is not proper activity for the Corporation.

29. A superior proposal has been prepared by a group of students at the Harvard Law School, December 1969: "Proposed Legislation to Establish a Massachusetts New Communities Development Corporation" (Browning, Herfel, Scott, Silberman, and Susskind).

30. Remarks made by Governor Sargeant at the Annual Meeting of the Citizens Housing and Planning Association of Metropolitan Boston, 12/8/69.


33. Clawson, op. cit.
Chapter III


35. Ibid.

36. When the development plan for the district is completed, landowners and prospective developers should be given an opportunity to apply for planned-unit zoning in areas which are designated for development at the lower densities (single-family housing, row housing and small apartment groupings). Approval of such requests should be subject to strict criteria to assure that the planned-unit developments will fulfill the development plan, and should also be subject to the requirement that development proceed in accordance with a schedule. After ample opportunity has been provided for planned-unit proposals, the rest of the land in this category should be rezoned by a sectional map amendment initiated by the Agency.

This pair of regulatory techniques provides a simple and effective means of securing private development of the large single-family residential areas of a new community. There is a great gain for all concerned, in terms of certainty and procedural simplicity, and a great strengthening of government's ability to secure development in accordance with plan.

Initiative is first placed in the hands of the larger landowners and developers, who are in a position to perform detailed planning and design and to finance development at a sizable scale. The planned-unit zone gives them broad latitude in proposing new developments, while vesting in government the power to control development features that affect the public interest.

Initiative then passes to government, which completes the rezoning in a systematic manner rather than awaiting applications from individual landowners, each intent on increasing the density of his tract. The sectional zoning map amendment initiated by a public agency is a convenient way to effect the regulatory action that is a prerequisite to development, in areas where numerous landowners would otherwise be put to the trouble and expense of individually filing applications for rezoning. This
Chapter III

This technique has the further advantage of placing initiative in the agency that is designing and coordinating development, instead of permitting it to remain indefinitely with the individual landowners who would be tempted to apply for more intensive zoning categories and thus necessitate time-consuming and costly administrative and judicial proceedings. (Henry Bain, The Development District, Washington Center for Metropolitan Studies, 1968, p. 68.)

37. Bain, op. cit.

38. Ibid., p. 77.

39. Ibid.

40. "Three closely related devices are now employed in various circumstances in the two counties. Special assessments are used to finance the extension of local water and sewer lines, and the paving of streets and construction of sidewalks in areas that were developed or subdivided without these amenities. The construction of streets and sidewalks by homebuilders who add the cost to the price of the houses in a similar and common financial arrangement. The compulsory dedication of park and school sites (or payment of a fee in lieu thereof), which is likewise reflected in the cost of new houses, is another such device.

Use of special assessments to finance most or all of the other public facilities, including schools, libraries, and community centers, would have the advantage of confronting the home buyer (or renter) with the full cost of the facilities that will be needed to serve him, thereby enabling him to make a wise decision on the amount that he can afford to spend for housing. This system would help residents to avoid the plight of all too many suburbanites, who become overcommitted by failing to allow for the tax increases that will be necessary to provide the full complement of public facilities needed as the community matures.

Separate assessments would have to be levied for facilities that are of direct and sole benefit to a given property, and facilities that generate wide benefits. Two important considerations dictate this distinction. Assessments for water and sewer lines, frontage streets, and a few other facilities needed to make a tract of land usable, can properly be levied against tax-
Chapter III

exempt institutions, since such assessments are similar to the prices that any user must pay for any facility or service, public or private. Furthermore, these assessments are not deductible in computing taxable income, since they are more akin to an investment in the property that is benefited than to a general tax (which is deductible).

By separating the two kinds of assessment, it will be possible to charge non-profit organizations for the facilities directly appurtenant to their property, and to assure the tax deductibility of all other assessments. To make the distinction abundantly clear, the second kind of assessment should be given a new and more accurate name, such as "lump-sum tax for community facilities."

The two kinds of assessment could be spread over the properties in the development district in any of several ways. The cost of streets, water mains and sewers might be assessed, as is now usually the case, in proportion to the length of the street frontage of the properties served. The cost of other facilities might well be assessed on an ad valorem basis. In some cases, the cost of facilities serving residential areas might be paid by the assessment of equal amounts against all dwelling units, but this basis would have a regressive tendency that would probably be unacceptable in most cases.

The use of special assessments would necessitate a careful estimate of the cost of all facilities to be provided in the new community, and determination of the value of each assessable property as of the time that the assessment is imposed upon it. While these calculations would not be easy, the Agency would have sufficient information on the public improvements program to permit reasonably accurate cost estimates, and data on property values would be readily available if the assessment is not imposed until the time that the developed property goes on the tax rolls. Since the development process would be completed within a few years, the possibility of error would be limited." (Bain, op. cit., pp. 78-80.)
Chapter III

41. For example, see Massachusetts Legislative Research Bureau report on Regional Government and Report on Sub-state Regionalization, Office of Planning and Program Coordination, Massachusetts Department of Administration and Finance, 1969.

42. See Regional Planning in Massachusetts Re-examined, a report prepared for the Massachusetts Department of Community Affairs by R. Stephen Browning and Lawrence Susskind, April 1970.
CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

Introduction

An essential characteristic of new large-scale urban development should be its reliance on effective land use planning and development guidance regulations. Even though large scale planned urban development when accompanied by strong and effective land use planning and regulation at the state level stands a good chance of being effective, the evidence available seems to indicate that the establishment of large, new, planned communities with a balanced composition is not economically feasible without significant governmental subsidy. This infeasibility stems from the investment costs resulting from the long period required for land assembly and improvement and the construction of infrastructure and utilities before revenue from the sale of sites or structures is sufficient to provide a net profit.

A number of strategies which could facilitate new community development by easing the problems of assembling and improving land were outlined in Chapter III. Additional methods for removing some of the land use and development constraints impeding new community development and for enhancing the possibility of meeting public
development objectives will be discussed in this Chapter. Incentives to encourage individuals and industries to locate in new communities will also be outlined.

Urban development grants, loans and other federal assistance programs are available and probably necessary for successful new community developments -- even new community development undertaken by state government. But conscious state efforts to pursue a new community development program can significantly assist private developers and investors while at the same time insuring a more efficient and equitable pattern of urban development:

State urban development plans related to a national urbanization policy could identify appropriate sites for new community development through the use of planning techniques and application of market analysis approaches. Detailed site identification and additional analyses [could] be incorporated into local and regional plans.

The state government through any one of a number of instrumentalities it might create could acquire land and make it available either by competitive bid or negotiated purchase at reasonable market rates as it is needed for development, thus relieving the developer of the risk of inflated land prices and heavy carrying costs. Different mechanisms or strategies could be utilized by the state to insure the installation of water and sewer lines and roads as required.

Incentive-Control Systems for Land Use Guidance

New techniques and new ways of using existing techniques for guiding urban growth are needed to insure more equitable and more
efficient patterns of urban development. Guiding the use of land in urbanizing areas to achieve the planned expansion of existing towns or the development of relatively self-sufficient new communities involves the following major problems: 1) shaping regional and community growth; 2) curbing urban sprawl; 3) assuring an adequate supply of land for certain kinds of private developments; 4) acquiring land for public purposes; 5) protecting land with unique characteristics; 6) lowering the cost of public improvements; and 7) regulating the relationships between landowners.

The process of new community development spans a period of at least fifteen years. During that time effective controls and techniques for guiding land use in a new community as well as in areas surrounding a new community are required. Zoning, subdivision control, the use of eminent domain, the purchase of development rights and scenic easements, taxation and economic incentives, the use of holding zones and planned unit development are land use guidance techniques that vary in effectiveness.

1. Effectiveness of zoning as a control

Local zoning regulations are ineffective for several reasons:

a) In most cases, these ordinances do not emanate out of the planning process. In some instances, zoning regulations and zoning administrators substitute for the plan and the planning process.

b) Zoning ordinances were framed to regulate the development of individual lots by individual interests. They are presently not adequate to offer a prescriptive or regulatory envelope for newer design and development techniques.
c) Zoning ordinances concentrate on individual uses, rather than the linkages between and among uses. Thus, they are difficult to utilize in an overall public planning and development strategy.

d) Present zoning ordinances do not take into consideration overriding metropolitan and regional goals. Each city and town is an island unto itself with relatively little coordination between cities and towns in either the construction of zoning ordinances or overall land development policy.

e) In the often indiscriminate use of low intensity zoning, "sprawl" and speculation appear to be encouraged.

f) Because zoning generally does not emanate out of a planning framework and almost always is unrelated to market behavior, it creates at times "artificial" limitations on surpluses in certain use categories restricting private choices which, if made, would be in the public interest, and result in public benefits.

2. Effectiveness of subdivision control

Like zoning, subdivision regulations are directed more at controlling incremental lot development rather than providing a solid basis for evaluating and setting standards for regional development practices.5

a) Subdivision costs vary from town to town. These differences...apparently reflect not the choices of citizens but different skills and concerns of technicians. Efforts of the members of the building industry to operate in more than one jurisdiction are impeded. Complexities appear to have increased development costs.

b) In many localities, subdivision codes do not agree with zoning bylaws, again adding to the frustration and cost of local developers as well as thwarting the implementation of public policy.
c) Throughout the region, subdivision control is generally a 'one shot' affair, with no appropriate public overview of continuing development.

3. **Effectiveness of eminent domain**

Mel Scott has pointed out that:

as the scale of government activity increases so does its need for land on which to locate public facilities, such as schools, parks, offices, hospitals....Similarly, governmental participation in urban redevelopment is becoming a larger and more important public activity... with the broadening responsibility of government and the increasing complexity of problems facing urban areas, the power of eminent domain has become an exceedingly important means by which government can guide physical development. Public activities such as the highway and urban renewal program have been made possible through the use of eminent domain. 6

The extension of eminent domain powers to include the taking of open land has not been evaluated by the courts in Massachusetts. It appears as if the constitutionality of enabling legislation allowing public entities to acquire open land for future development purposes or for "structuring" urban regions would be upheld by the courts. 7

4. **The effectiveness of development rights and scenic easements**

Constrained by the relative ineffectiveness of zoning and subdivision codes, many states have adopted an additional control: the right to restrict the development of land through the purchase of land development rights. In effect, what this means is that in return for compensation, private owners accept a diminished version of their former fee simple title. 8
There are some difficulties with this approach:

a) Legal difficulties in ascertaining public purpose justifying expenditure of public funds and use of the police power.

b) Difficulties in determining the value of the rights taken (a diminished title is still left in the hands of the private individual) by the public entity.

c) Public costs associated with acquisition of development rights approach costs associated with 'taking' land through eminent domain procedures.

d) Securing of development rights does not usually permit unrestricted public use of land.

5. Effectiveness of taxation and economic incentives as land use controls

Manipulation of tax policy, credit programs and subventions are rather important mechanisms public decision makers have to affect basic land development. Effectuation of a coordinated strategy relative to the use of these economic incentives is a difficult task. "To achieve fine grain effects by economic controls requires highly sensitive management and close attention to relative shifts in the magnitude of effects." 10

a) The property tax is the most important tax affecting the course of land development. 11 Reliance on the property tax leads to noticeable differences in the ability of cities and towns to provide urban services. This fact is somewhat related to noticeable disparities in the tax base and the regressive tendencies in the State tax structure. 12 Flexible use of this tax as a strategic tool for affecting land use, is impeded by legal requirements necessitating uniformity of taxation within specific areas and assessments of property at market value. 13

b) Preferential assessment indicates a break with a rigid legal criterion for assessing at market value. A preferential assessment law is designed to preserve open space and agricultural land. Agricultural assessments may be valuable, too, in implementing certain public policies for
structuring growth, if combined with a state and regional development plan and program of implementation to guide the urbanization process.  

c) **Capital gains tax:** "Perhaps the tax provisions with the most influence on the land development pattern in suburban and ex-urban areas is the federal capital gains tax and the deductibility features with respect to property taxes of the Federal income tax. Both these provisions seemingly unrelated to any national land policy encourages the withholding of land from development on the part of those playing the optimization of income game."  

The treatment of land areas as capital gains allows owners (especially those with large financial resources) to retain land with relatively little holding costs. No income tax is collected until the land is sold. Upon sale the return from the transaction is taxed up to 25% rather than at ordinary income tax rates. Elimination of capital gains benefits might cause large land owners to revert to long-term leases, thus freezing land in its present use.  

6. **The effectiveness of holding zones**  

Several recent reports on land use policy suggest the possibility of authorizing local or state government to designate holding zones in which development would have to be delayed for several years.  

Holding zones are a form of police power regulation. They differ from land banks in that they do not involve governmental acquisition of land, although they might entail the payment of compensation under some circumstances.  

The Douglas Commission suggests making provision for the establishment of holding zones in order to postpone development in areas that are inappropriate for development within the next three to five years. Local governments should be authorized to limit development within such zones to houses on only large lots (e.g. 10 to 20 acres) agricultural and open space uses. The State legislature would require that localities review holding zones designations at least every five years.
Such a device would allow the state to postpone urban development when financial or other legitimate considerations made it impossible to provide services for more intensive use of an area.

7. The effectiveness of planned unit development

The planned development of land, especially of large tracts, offers a promising device for dealing with many of the problems associated with present development procedures and patterns. Planned development, as distinct from new communities, can be applied to small scale development.

The Douglas Commission recommends that:

State governments enact enabling legislation for, and local governments adopt provisions establishing regulatory process for planned unit developments. Such legislation should authorize provisions to vary according to the size of the property (e.g. to permit high rise buildings of light industry only in projects of more than a specific size).

Contrary to the usual practice of not mapping planned unit development districts until a project is approved, a more effective technique would be to enable the localities to "classify undeveloped land in planned development districts within which development would be allowed to occur only at a specific minimum scale. If a community were unwilling to purchase land for development, provision could be made to require that new development in specified undeveloped areas take place at a fairly large scale."

When a specific development proposal of modest scope is announced by a property owner somewhere in the undeveloped sections of
Commonwealth, the burden of proof naturally lies upon those who would restrict the use of land by its owner. That burden can rarely be overcome, except in cases where there is an exceptionally clear and immediate public interest in prohibiting development. Therefore, a steady progression of scattered development appears to be inevitable, as long as the long-run public interest in preserving a given area as open space for example, must undergo re-evaluation time after time, in competition with immediate pressures generated by each proposal for private development. This scattered development in turn sets the precedent for more development by destroying some of the open space values which have helped to justify public control, and by siphoning off development that would otherwise create compact centers in more appropriate locations. The most effective technique for dealing with this problem is "land banking."

The land bank provides a community with an effective means of controlling the character and timing of urban development. Fundamentally, the local government acquires land and holds it until conditions are appropriate for public use or sale on the private market for purposes that are included in the community's comprehensive plan. This idea has not been used widely, although it seems as if it would work quite effectively.

In order to achieve the seven objectives mentioned at the beginning of this discussion of incentive-control systems for land use guidance, the State government needs to enact legislation enabling State, regional, and/or local development authorities or
agencies to acquire land in advance of the development for the following purposes: a) assuring the continuing availability of sites needed for development; b) controlling the timing, location, type and scale of development, c) preventing urban sprawl, d) reserving for the public gains in land values resulting from the action of government in promotion and securing development.

At such time as the development of such land is deemed to be appropriate and in the interests of the region, such land could be sold or leased at no less than its fair market value for private development or public development in accordance with approved state and regional urban growth plans. Wherever feasible, long term leases should be the preferred method of disposing of any public land, and leases should be set so as to permit reassembly of properties for future planning and development. Legislation should specify maximum period that such land may be held by the public before lease or sale. 24

An Intergovernmental Planning Framework for New Community Development

Implicit in any decision to provide for state control over the development of new communities is a coordinated public decision making and planning process. To implement the development of new communities requires the full and coordinated use of existing and proposed public powers to guide and structure the urban development
process. Any implementation strategy should be based on a state-
wide development plan and planning process as well as an accepted,
ordered set of goals. In essence, consistency and conformity
with area-wide plans will be the most important criteria in
evaluating the desirability of expending public as well as
private resources.25

Responsibility for planning and implementation has to be
shared among all levels of government.26 Planning would include
1) the completion of a state wide urban development plan, 2)
completion of area-wide development plans by regional planning
agencies, 3) acceptance of regional plans by state and local
public bodies, 4) widespread dissemination of the plan throughout
the region. Implementation of a new community development
program would require:

1. Review of all public and private actions of regional
importance for consistency with area-wide plan.

2. Utilization of public works, public facility and trans-
portation planning to structure and direct growth.

3. Complementary use of land use controls and regulatory
mechanisms with public works and facility programming and develop-
ment.

4. Coordination of tax and assessment policies with area-
wide plans.

5. Regional review of those federal programs (implemented by
the public and private sectors) affecting the regional development
pattern.
6. Creation by the state of a state development corporation or new community development districts empowered to coordinate and regulate public and private development actions to insure the development of balanced new communities.

7. Encouragement of private participation in new community development through the selected and careful application of land use controls, public provision of water and sewer facilities, as well as transportation.

8. Immediate acquisition of strategic high potential growth areas by existing state agencies or new instrumentalities.

9. Reservation of land intended for future development through the combined use of low intensity zoning, control and development rights, compensatory zoning, and the programming of public facilities and improvements.

The present land use planning and regulatory system fails to protect adequately the interests and issues which transcend local governmental boundaries. In addition, in most instances they are not sufficiently strong nor sufficiently flexible to permit and sustain the planned development of a new large scale community. To rectify this, it has been suggested that a state planning and review agency be created to promote and protect extra-local interests and resolve disputes. The state should assume an active role in applying land use guidance and control techniques in an effort to insure the successful development of new communities. The state agency should have the authority to
1) prepare and effectuate state and regional land use policies and plans, 28 2) review local plans and ordinances for compliance with state legislation and state plans and policies, 29 and 3) directly regulate the use of land and public facilities in those areas in which there is a state-wide interest. 30

Postscript:
Questions That Remain To Be Answered

Many assumptions have been made in the course of this exposition. The questions which underlie these assumptions need to be discussed publicly. This thesis concludes with a series of questions which need to be considered by public officials and private citizens alike prior to the implementation of a state new community development strategy:

1. Can we set specific goals for state urban development? Who should set goals? What kinds of citizen participation can there be in the goal setting process?

2. Can we move quickly enough once we have established a clear set of development objectives? Can we overcome the bureaucratic sluggishness of the governmental bureaucracy?

3. What mix of incentives and controls makes the most sense, given the political realities of Massachusetts?

4. What rate of urban growth does it make the most sense to
try to sustain? Who should set that rate? Should it be a constant rate?

5. Should a disproportionate amount of state funds be spent to meet the needs of low income families since their level of need is highest?

6. Should growth occur evenly throughout the Commonwealth, or should new developments be concentrated in only a few areas?

Answers to these questions have been assumed throughout this thesis. Whether or not they are the "right" answers remains to be seen.
Chapter IV

1. In light of this ACIR concludes that the states have a significant role to play in planning for and assisting in new large-scale urban and new community development. The state should be empowered to 1) acquire land by negotiation and through the exercise of eminent domain; 2) arrange for site development and construct or contract for the construction of utilities, streets and other related improvements, 3) hold land for later use, 4) sell, lease, or otherwise dispose of land or right thereto to private developers or public agencies; and 5) charter local, regional or state land development agencies. All such powers should be exercised in accordance with, and in furtherance of, the State's urbanization plan.

These activities could be financed as appropriate, through direct appropriations, charges and rents, grants, sales of land, and borrowing, if authorized. Borrowing authority should be granted on a revenue basis in anticipation of land sales and rents. Revenue from land sales and rents could provide a major source of income and a significant part of the operations of state land development instrumentalities could be on a revolving fund basis after an initial appropriation of working capital.

State assistance in making credit more readily available for business and industrial location in certain areas by establishing State and regional industrial credit agencies; placement of State and local procurement contracts and construction projects to foster urban growth in certain areas; and assistance and guidance for urban growth through State property tax deferral for new community development are all possible options. (A.C.I.R., Urban and Rural America, op. cit.)

2. Ibid., p. 156.

3. Ibid.


5. Ibid., p. 27.
FOOTNOTES
(continued)

Chapter IV


9. Ibid.


12. Ibid.

13. Ibid.

14. Ibid.

15. Ibid.

16. Ibid.


18. Ibid.


20. Ibid.

21. Ibid., p. 246.
FOOTNOTES
(continued)

Chapter IV

22. Bain, op. cit., p. 43.
23. Kaplan, op. cit.
26. Ibid., p. 56.
27. Heeter, op. cit., p. 46.
28. Ibid.
APPENDIX A

A NEW COMMUNITY OF 50,000 PEOPLE

The first step is to begin to sketch the character of a city of 50,000 people. To do this 11 surrogate cities with populations close to 50,000 were studied. Cities that lie on the outer borders of the metropolitan regions of major cities (within a distance of 30 to 60 miles from the downtown area) were selected. An effort was made not to select purely residential communities or areas of either extreme of wealth or poverty.

From the analysis of the 11 cities, it was possible to determine that the labor force needed to sustain a population of approximately 50,000 varies from 18,000 to 23,000. The median stands at 20,000 jobs or 40% of the population. Dividing this into basic types of employment we find the following:

<table>
<thead>
<tr>
<th></th>
<th>% of Workers</th>
<th>Median %</th>
<th>Median # Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>16-56%</td>
<td>38%</td>
<td>7600</td>
</tr>
<tr>
<td>Retail/Wholesale</td>
<td>14-24%</td>
<td>18%</td>
<td>3600</td>
</tr>
<tr>
<td>White Collar</td>
<td>27-56%</td>
<td>44%</td>
<td>8800</td>
</tr>
</tbody>
</table>

Breaking this down further, we can find that a labor force of 20,000 will be divided into the following employment categories:
<table>
<thead>
<tr>
<th>Employment Category</th>
<th>Median %</th>
<th>Median # Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>3.36</td>
<td>662</td>
</tr>
<tr>
<td>All manufacturing</td>
<td>35.26</td>
<td>6956</td>
</tr>
<tr>
<td>Transportation</td>
<td>2.33</td>
<td>459</td>
</tr>
<tr>
<td>Communications / Utilities</td>
<td>3.30</td>
<td>651</td>
</tr>
<tr>
<td>Wholesale / Retail</td>
<td>17.26</td>
<td>3405</td>
</tr>
<tr>
<td>Finance, Insurance, R.E.</td>
<td>2.73</td>
<td>538</td>
</tr>
<tr>
<td>Educational Services</td>
<td>5.06</td>
<td>988</td>
</tr>
<tr>
<td>Public Administration</td>
<td>2.80</td>
<td>552</td>
</tr>
<tr>
<td></td>
<td>72.10%</td>
<td>14211 Jobs</td>
</tr>
</tbody>
</table>

The same procedure can be followed for housing. The 11 cities which were studied have a median population density of 5207 persons per square mile in a median area of 10 square miles (approximately 6400 acres). The number of dwelling units required to house this population varies only slightly, with a median at 16,139. The median 1960 rent was recorded at $73/month including utilities. With a median family income in 1960 of $6422/year, this means that families were paying approximately 15% of their income before taxes for rent.

**LAND USAGE:**

It is difficult to draw any generalizations about land use from the 11 cities because they vary so widely. One approach is to consider the land requirements for the uses already specified. A survey conducted by the developers of Columbia, Maryland, indicates the following requirements of employees per acre:
Manufacturing (18)
Research and Development (20)
Wholesale and Distribution (10)

This leads to the following acreage requirements:

<table>
<thead>
<tr>
<th>Use</th>
<th>Density</th>
<th>Jobs</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>18/acre</td>
<td>7600</td>
<td>442 acres plus</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>expansion 600</td>
</tr>
<tr>
<td>White Collar</td>
<td>20/acre</td>
<td>8800</td>
<td>440</td>
</tr>
<tr>
<td>Retail/Wholesale</td>
<td>10/acre</td>
<td>3600</td>
<td>360</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>total acreage required ... 1400</td>
</tr>
</tbody>
</table>

Clearly there is no simple rule of thumb for residential land use or open space. It has been suggested that a minimal average density of 5 units/residential acre is a reasonable figure based on existing densities in cities and the experience of several new town developments. This adds the following acreage requirements.

<table>
<thead>
<tr>
<th>Use</th>
<th>Density</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>5 units/acre</td>
<td>3200</td>
</tr>
<tr>
<td>Open Space and Recreational (Estimate)</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>Total acreage required ..........</td>
<td></td>
<td>4200</td>
</tr>
</tbody>
</table>

Another predictable land use requirement comes from institutions. For schools it is estimated that the requirement in acreage from the anticipated number of school-age children is:
Combining this with several other institutional uses (churches, hospitals, community centers, etc.), 500 acres are required for institutional usage.

This provides a preliminary total of:

- Employment 1400
- Housing 3200
- Open Space 1000
- Institutional 500

6100 acres

Finally, an additional 10% of the acreage for transportation and communication must be added, providing a total necessary land area of approximately 6700 acres for a population of 50,000 people.
## Appendix B

### Score on Set

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>ACTON</td>
<td>394</td>
<td>412</td>
<td>418</td>
<td>300</td>
<td>125</td>
</tr>
<tr>
<td>2.</td>
<td>ANDOVER</td>
<td>534</td>
<td>620</td>
<td>511</td>
<td>340</td>
<td>215</td>
</tr>
<tr>
<td>3.</td>
<td>ASHLAND</td>
<td>348</td>
<td>416</td>
<td>320</td>
<td>290</td>
<td>130</td>
</tr>
<tr>
<td>4.</td>
<td>AUBURN</td>
<td>284</td>
<td>334</td>
<td>311</td>
<td>280</td>
<td>115</td>
</tr>
<tr>
<td>5.</td>
<td>BARNSTABLE</td>
<td>446</td>
<td>553</td>
<td>507</td>
<td>300</td>
<td>115</td>
</tr>
<tr>
<td>6.</td>
<td>BRAINTREE</td>
<td>367</td>
<td>430</td>
<td>400</td>
<td>280</td>
<td>165</td>
</tr>
<tr>
<td>7.</td>
<td>BROCKTON</td>
<td>309</td>
<td>368</td>
<td>280</td>
<td>140</td>
<td>225</td>
</tr>
<tr>
<td>8.</td>
<td>BURLINGTON</td>
<td>307</td>
<td>362</td>
<td>324</td>
<td>170</td>
<td>155</td>
</tr>
<tr>
<td>9.</td>
<td>CHELMSFORD</td>
<td>301</td>
<td>338</td>
<td>288</td>
<td>220</td>
<td>125</td>
</tr>
<tr>
<td>10.</td>
<td>CHICOPEE</td>
<td>366</td>
<td>404</td>
<td>312</td>
<td>230</td>
<td>200</td>
</tr>
<tr>
<td>11.</td>
<td>DANVERS</td>
<td>377</td>
<td>434</td>
<td>400</td>
<td>250</td>
<td>190</td>
</tr>
<tr>
<td>12.</td>
<td>FOXBOROUGH</td>
<td>415</td>
<td>506</td>
<td>437</td>
<td>280</td>
<td>195</td>
</tr>
<tr>
<td>13.</td>
<td>FRAMINGHAM</td>
<td>528</td>
<td>598</td>
<td>526</td>
<td>340</td>
<td>295</td>
</tr>
<tr>
<td>14.</td>
<td>FRANKLIN</td>
<td>486</td>
<td>546</td>
<td>411</td>
<td>230</td>
<td>285</td>
</tr>
<tr>
<td>15.</td>
<td>HOLLISTON</td>
<td>345</td>
<td>396</td>
<td>344</td>
<td>250</td>
<td>125</td>
</tr>
<tr>
<td>16.</td>
<td>HUDSON</td>
<td>397</td>
<td>460</td>
<td>357</td>
<td>340</td>
<td>235</td>
</tr>
<tr>
<td>17.</td>
<td>LITTLETON</td>
<td>321</td>
<td>310</td>
<td>337</td>
<td>290</td>
<td>95</td>
</tr>
<tr>
<td>18.</td>
<td>LONGMEADOW</td>
<td>343</td>
<td>374</td>
<td>404</td>
<td>240</td>
<td>135</td>
</tr>
<tr>
<td>19.</td>
<td>MARLBOROUGH</td>
<td>519</td>
<td>594</td>
<td>455</td>
<td>460</td>
<td>225</td>
</tr>
<tr>
<td>20.</td>
<td>MEDWAY</td>
<td>363</td>
<td>412</td>
<td>339</td>
<td>260</td>
<td>155</td>
</tr>
</tbody>
</table>
APPENDIX B
(continued)

SCORE ON SET

<table>
<thead>
<tr>
<th></th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. MILFORD</td>
<td>409</td>
<td>460</td>
<td>360</td>
<td>250</td>
<td>265</td>
</tr>
<tr>
<td>22. N. ANDOVER</td>
<td>537</td>
<td>614</td>
<td>526</td>
<td>330</td>
<td>235</td>
</tr>
<tr>
<td>23. NORWOOD</td>
<td>351</td>
<td>404</td>
<td>351</td>
<td>230</td>
<td>160</td>
</tr>
<tr>
<td>24. PLYMOUTH</td>
<td>558</td>
<td>636</td>
<td>433</td>
<td>360</td>
<td>325</td>
</tr>
<tr>
<td>25. RANDOLPH</td>
<td>342</td>
<td>396</td>
<td>334</td>
<td>240</td>
<td>155</td>
</tr>
<tr>
<td>26. READING</td>
<td>365</td>
<td>424</td>
<td>404</td>
<td>240</td>
<td>235</td>
</tr>
<tr>
<td>27. SHREWSBURY</td>
<td>434</td>
<td>488</td>
<td>417</td>
<td>300</td>
<td>245</td>
</tr>
<tr>
<td>28. SOUTHBOROUGH</td>
<td>359</td>
<td>424</td>
<td>381</td>
<td>290</td>
<td>135</td>
</tr>
<tr>
<td>29. STOCKBRIDGE</td>
<td>411</td>
<td>462</td>
<td>436</td>
<td>290</td>
<td>65</td>
</tr>
<tr>
<td>30. SWANSEA</td>
<td>356</td>
<td>500</td>
<td>324</td>
<td>300</td>
<td>230</td>
</tr>
<tr>
<td>31. TEWKSBURY</td>
<td>356</td>
<td>412</td>
<td>324</td>
<td>300</td>
<td>155</td>
</tr>
<tr>
<td>32. WESTBOROUGH</td>
<td>414</td>
<td>474</td>
<td>387</td>
<td>340</td>
<td>190</td>
</tr>
<tr>
<td>33. WILMINGTON</td>
<td>508</td>
<td>580</td>
<td>456</td>
<td>270</td>
<td>220</td>
</tr>
</tbody>
</table>

APPENDIX C

WEIGHT ON SET

<table>
<thead>
<tr>
<th>QUANTITATIVE VARIABLE</th>
<th>#1</th>
<th>#2</th>
<th>#3</th>
<th>#4</th>
<th>#5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Density</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>New Dwelling Units/Capita</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Moody Rating</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Planning Budget/Capita</td>
<td>8</td>
<td>10</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Industrial Acreage</td>
<td>8</td>
<td>10</td>
<td>5</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Public Housing Units</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>School Expenditures/Pupil</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Voter Turnout</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QUALITATIVE VARIABLE</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Development Auth.</td>
<td>4</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Cluster Zoning</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Workable Program</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Housing Authority</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Master Plan</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Public Sewers</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Freight Railroad</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Passenger Railroad</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

THE COMMONWEALTH OF MASSACHUSETTS
In The Year One Thousand Nine Hundred and Sixty-Nine

AN ACT PROVIDING FOR THE ESTABLISHMENT OF NORTHERN MIDDLESEX AREA
COMMISSION (FORMERLY GREATER-LOWELL AREA PLANNING COMMISSION)
AS A REGIONAL PLANNING AND ECONOMIC DEVELOPMENT DISTRICT.

Be it enacted by the Senate and House of Representatives in
General Court assembled, and by the authority of the same, as follows:

Chapter 40B of the General Laws is hereby amended by inserting
after section 8 the following eleven sections under the caption --
NORTHERN MIDDLESEX AREA COMMISSION, A REGIONAL PLANNING AND ECONOMIC
DEVELOPMENT DISTRICT:

Section 9. The commissioner of the department of commerce
and development, hereinafter in this section and sections ten to
nineteen, inclusive, called the commissioner, shall establish a
regional planning and economic development district consisting of
all the cities and towns in the Greater-Lowell Area Planning Com-
mission District (Northern Middlesex Area Commission) established
under this chapter and to continue to be known as the Northern
Middlesex Area Commission. Said district shall constitute a public
body politic and corporate.

Section 10. Upon the designation of the regional planning
and economic development district by the commissioner, all cities
and towns within the boundaries of the district shall become
members of the district. Upon the request of the mayor of a city
or the selectmen of a town that is a member of a regional or
metropolitan area planning district established pursuant either
to chapter forty B or to any other General or Special Law, the
commissioner shall designate such city or town as a member of a
regional planning and economic development district. The com-
missioner may from time to time review the boundaries of the
district so established and, if he deems it in the best interest
of the district, he may with approval of a majority of the members
of the regional planning and economic development commission in-
clude additional cities and towns, or he may exclude cities and
towns from said district; provided, however, that prior to such
increase or decrease in the membership of the district, the com-
missioner shall consult with the mayor of a city, or the select-
men of a town to be included or excluded from such district.

The city or town may, after it has been a member of a
regional planning and economic development district for a period
of not less than five consecutive calendar years, terminate its
membership in the district by a two-thirds vote of the city council
or by vote of a town meeting of town in favor of terminating such
membership. Said termination shall become effective at the end
of the calendar year within which said termination is voted.

Section 11. If the district boundary of the regional
planning and economic development district established in accordance
with section nine includes a majority of cities and towns
organized as a regional planning district pursuant to this
chapter, said regional planning district shall be dissolved
upon the organization of a regional planning and economic
development district in accordance with the provisions of
section 9, and the jurisdiction and responsibility of the
regional planning district shall be transferred to the successor
regional planning and economic development district, and all
records, reports, studies, documents, plans and property includ-
ing all assets and liabilities of said district or commission
shall be transferred forthwith to the custody, control and
responsibility of the regional planning and economic develop-
ment commission. Upon the effective date of any such dissolution,
all of the permanent or temporary employees of such district or
commission shall be transferred to the regional planning and
economic development district without impairment of retirement
rights and without reduction in compensation or salary grade;
provided, however, that nothing in this section shall be con-
strued to confer upon any employee any tenure of office or em-
ployment or any rights not held prior to such transfer. The
adopted plans and policies of said district so dissolved per-
taining to regional planning considerations shall be deemed to
be and shall continue to have full force and effect until
modified by the commission of the successor district. No such
dissolution of a previously established district and no estab-
ishment of a district in accordance with section nine shall
become effective except in compliance with the following
procedure; upon receipt of notification from the commissioner
that he intends to establish a district in accordance with sec-
ton nine, the mayor, the board of selectmen, and the planning
board of each city and town therein shall not later than twenty
days from the date of notification appoint or designate the
respective commission members to serve in the interim period
until March thirty-first next, provided, however, that in the
case of a planning board which had previously appointed a
member of a regional planning commission established in ac-
cordance with this chapter, each such planning board shall
appoint the same member to the commission established in
accordance with section nine for said interim period if said
member is willing to accept said appointment, but shall other-
wise appoint in accordance with this section. The commission
members so designated shall not later than thirty-five days from
the date of said notification, elect officers in accordance with
section fifteen. Upon receipt of notification from the commis-
sion so established, that there has been compliance with the
foregoing procedures, the commissioner shall forthwith notify
the state secretary who shall issue a certificate of organiza-
tion to said district which shall be conclusive evidence of the
establishment and organization of said district, and, the com-
missoner shall forthwith dissolve the previously established
regional planning district.

Section 12. In the regional planning and economic
development district established pursuant to section nine,
there shall be a regional planning and economic development
commission which shall consist of the mayor of each city, or
his designee who shall be a member of the City Council, a member appointed by the board of selectmen of each town included within said district who shall be a member of the board of selectmen, a member appointed by the planning board of each such city or town who shall be a member of the planning board. Each member shall be appointed for a term of one year commencing April first of the year appointed to March thirty-first of the succeeding year, and the appointment or reappointment of each member shall be certified annually to the commission by the appointing authority in the month of April.

Section 13. Twenty-one persons residing within the district shall be appointed to an advisory committee for the purpose of providing advice and guidance to said commission and said persons shall be representative of business, labor, professional and civic organizations and other economic interests within the district. Nine members shall be appointed by the commissioner with the approval of the governor, and twelve members shall be appointed by the commission. Of the initial appointees of the commissioner, three shall be appointed for a term of one year, three for a term of two years and three for a term of three years. Of the initial appointees of said commission, four shall be appointed for a term of one year, four for a term of two years and four for a term of three years. Upon the expiration of a term of a member of the advisory committee, his successor shall be appointed in like manner for a term of three years. In the event of a vacancy, a new member of the advisory committee shall be appointed in like manner to serve for the remainder of the unexpired term. Each member of said advisory committee shall continue to serve as such until his successor is appointed and qualified. The commission shall, in its by-laws, provide appropriate procedures for the referral of problems, issues and policies for deliberation by the advisory committee.

Section 14. The regional planning and economic development district established under the provisions of section nine shall have the following powers and duties:

(a) to adopt a corporate seal;

(b) to sue and be sued, but only to the same extent and upon the same conditions that a town may sue or be sued;

(c) to rent, lease or otherwise acquire quarters for the housing of the commission and the staff thereof;

(d) to receive and disburse funds from any public or private sources for any district purposes.

In addition to the foregoing, the district, acting through the commission or any committees thereof, shall have the following additional powers and duties:

(e) to conduct studies of the resources, problems and needs of
the district, and, on the basis of such studies, to prepare
and, from time to time, revise both comprehensive regional
plans and comprehensive economic development programs for
the district and for such part or parts thereof as the com-
mision may deem advisable, including recommendations for
the physical, social and economic improvement of the dis-
trict. Such plans and recommendations shall be adopted and
may be changed or supplemented from time to time by a
majority vote of the commission and shall be a public record;
and to conduct feasibility and implementation studies for
public facilities and programs and for public and private
development projects which are consistent with and which
would tend to implement the objectives and recommendations
of the commission;

(f) to conduct research, surveys, analyses and compile such
data, maps, charts and tables and other pertinent or neces-
sary information for the purpose of formulating regional
and subregional goals, objectives, policies, plans and
programs and for project proposals related to the comprehen-
sive physical, social and economic development and re-
development of the resources and facilities of the district
and its subdistricts;

(g) to cooperate with and to assist each city and town in the
district to coordinate its planning and economic development
activities with the district so as to obtain maximum benefits
for the district and for each city and town from such
activities;

(h) to cooperate with and to assist agencies of the commonwealth
and the United States government in fulfilling the purposes
and objectives of the district;

(i) to recommend appropriate action by public and private organi-
zations and agencies to implement the recommendations pre-
pared by the commission;

(j) to provide technical advice, assistance and guidance to
cities and towns, to other public agencies and to develop-
ment organizations and to private businesses in the district
implementing the objectives and recommendations of the
commission, in undertaking planning and economic development
programs, and in making application for federal financial
assistance;

(k) to compile and maintain a system for the collection and dis-
semination of information and statistics relevant to the
district, and to make such information available to public
agencies and to private organizations and individuals en-
gaged in activities which tend to implement the objectives
and recommendations of the commission;

(l) to approve or disapprove by majority vote such plans for
the development and redevelopment of the district or parts
thereof, as may be laid before it. The approval or disap-
approval of any such plan or any such recommendation of the
commission shall be advisory only; provided, however, that
the commission shall have the power to exercise such ap-
proval or disapproval as a regional or metropolitan planning
or development agency acting pursuant to the requirements
of any publicly aided program applicable to the district or
to any part thereof;

(m) to advertise and otherwise to promote the implementation of
the plans and recommendations of the commission and the
economic and industrial development of the district;

(n) to sponsor conferences, institutes, seminars and training
programs on behalf of the district and the cities and towns
therein for the purpose of developing the capabilities of
commission members, commission staff, other public officials
and employees and development organizations, to assist in
preparing and implementing the plans and recommendations of
the commission;

(o) to undertake comprehensive and special planning and economic
development programs and projects for any part or parts of
the district, and, for such purpose to assist intermunicipal
cooperation and to delineate, establish and administer sub-
regional district organizations as administrative subdivi-
sions of the district and commission, and to construct such
projects and provide such services to the district or por-
tions thereof as may be necessary to implement the recom-
mendations prepared by the commission, in accordance with
applicable local, state and federal laws.

Except as otherwise prohibited by law said district and
commission is further authorized to act as and to assume the
duties, obligations and responsibilities of a Title IV Redevelop-
ment Area designated pursuant to the Public Works and Economic
Development Act of 1965.

The commission shall report annually on or before February
first to the city councils and town meetings of the cities and
towns in the district as to the plans and recommendations of
the commission and the status thereof. The commission shall
make and publish such reports as the commission shall deem ap-
propriate for the purpose of accomplishing, promoting and ex-
plaining the objectives and recommendations of the district.

Section 15. The commission shall elect annually at its
meeting held in the month of April by and from its members a
chairman, a vice-chairman, a secretary, and a treasurer, each
of whom shall hold office until his successor is elected and
qualified. The commission shall from time to time fill any
vacancy in such an office for the unexpired term thereof.

The commission may also elect an assistant treasurer who
may exercise all the powers and duties of the treasurer in the
absence of the treasurer.
The commission shall meet during the months of April, July, October and January and at such other times as the commission shall determine.

The commission shall establish rules of procedure for its activities and the activities of all committees, and shall keep a complete and accurate record of the substance of its meetings, transactions, resolutions, findings and determinations, all of which shall be a public record.

The treasurer and the assistant treasurer shall give the commission a bond, with a surety company authorized to transact business in the commonwealth as surety for the faithful performance of their duties in such sum and upon such conditions as the commission may require.

There may be an executive committee, elected annually, consisting of (1) the officers of the commission who shall serve as the officers of the executive committee, (2) two members of the commission who shall be elected by a majority vote of the commission and who shall be selectmen, (3) two members of the commission who shall be elected by a majority vote of the commission and who shall be representatives of the planning boards, and (4) the mayor or his designee of each city serving as a member of the commission; provided, however, that each redevelopment area within the district as designated by the Secretary of Commerce of the United States pursuant to the Public Works and Economic Development Act of 1965, shall be entitled to have at least one member on the executive committee among the members who are either mayors or their designees or the selectmen.

The commission may appoint from among its members such other special and standing committees as it shall deem necessary and all such committees shall exercise such powers, discharge such responsibilities, and perform such duties as the commission may delegate thereto by vote or by its by-laws.

The officers of the commission and members of committees shall serve without compensation, but shall receive payment for necessary expenses, including travel incurred in the performance of their duties. The commission shall establish such technical advisory committees as may be needed to assist the executive director in planning and developing the programs and projects of the commission. The chairman, commissioner or head of any state, county or municipal agency, and any public authority operating within the district if permitted by its trust indentures to do so, shall delegate one or more well-qualified representatives from the agency or authority to serve on any of the said technical advisory committees when so requested by the commission.

Section 16. The commission shall employ, and may remove, an executive director, who shall be qualified by education, training, and experience in economic development,
regional and program planning, and community relations. The
executive director, on behalf of and with the approval of the
commission, shall employ and appoint all other employees of
the commission, including temporary or part-time personnel.
The executive director and other employees of the commission
shall not be subject to chapter thirty-one nor to section
nine A of chapter thirty. The commission shall determine and
establish the compensation and other terms, conditions and
benefits of employment for all employees of the commission.

Section 17. The commission is authorized to enter into
contracts and agreements with any department, agency or sub-
division of federal or state government and any individual,
corporation, association or public authority to provide or to
receive services, facilities, staff assistance or money pay-
ments in connection with the work of the commission, and the
commission may contribute or receive services, facilities,
staff assistance or money payments as consideration in such
contracts or agreements. The commission shall approve all
contracts which shall be signed by the chairman and treasurer.

The commission may make expenditures and incur obliga-
tions for services and other expenses, subject to the follow-
ing conditions and limitations: The commission may expend
such amounts in addition to its annual assessment upon the
cities and towns in the district as the commission may re-
ceive under any federal or state law, or by gift, grant,
contract or agreement from any source, including grants, the
issue of revenue or general obligation bonds, bequests, gifts
or contributions made by any individual, corporation, as-
association, public authority or department, agency or sub-
division of the federal or state government.

Section 18. The commission so established shall not
later than fifty days from the issuance of a certificate of
organization by the state secretary prepare an estimate of
the amount of money required to pay the costs and expenses of
the district for the current fiscal year and, in the case of
the district being dissolved for the purpose of organizing a
district in accordance with section nine, the costs and ex-
penses of said predecessor district incurred during the cur-
rent calendar year for which funds are not otherwise available,
and, after first subtracting from such estimate of costs the
amount of unexpended monies in the custody of the commission
which were previously received by the predecessor district
from member cities and towns for the expenses of the current
calendar year, the commission shall apportion, assess and
certify for payment the amount so determined in accordance
with this section.

Each city and town treasurer shall not later than
thirty days from the receipt of said certification pay the
amount so apportioned and certified from any monies available
in the treasury of each such city or town, and the board of
assessors of each such city or town shall include said amount
in the assessment for the annual tax levy if such tax levy
has not been assessed, but otherwise shall include said amount
in the next annual tax levy in addition to any amount to be
raised for the purposes of the commission for the next fiscal
year in accordance with this section.

The commission shall operate on a fiscal year running
from January first to December thirty-first of each calendar
year. The commission shall, annually, in the month of November,
estimate the amount of money required to be assessed upon the
cities and towns in the district necessary to pay the cost and
expenses of the district for the following fiscal year. The
amount so determined for the district shall not exceed a sum
equivalent to thirty cents per capita of the population of the
district and said amount shall be apportioned and assessed
upon each city and town in the district in the proportion
which the population of each such city or town bears to the
total population of the district, provided, however, that the
population of the district and of each city and town shall be
the population as determined by the most recent state or
national decennial census exclusive of the population in any
county, state or federal institutions otherwise included in
such census. The amounts so apportioned for each city and
town shall, prior to December thirty-first of each year, be
certified by the district treasurer to the treasurers of each
city and town within the district. Each city and town
treasurer shall forthwith pay the amount so apportioned by
the district treasurer not later than January tenth of the
fiscal year for which the apportionment is made, and shall
make such payment from any monies available in the treasury
of each such city or town. The district treasurer shall
submit a duplicate copy of the aforementioned certification
to the board of assessors of each city and town, and each
such board of assessors shall include said amounts in the
assessment for the annual tax levy according to the procedures
specified in section twenty-one of chapter fifty-nine; pro-
vided, however, that if the annual tax levy is determined by
any such board of assessors prior to receiving a copy of
said certification, the board of assessors shall include as
money to be raised in the tax levy an amount equal to thirty
cents per capita of the population of the city or town as
determined aforesaid, and, if said amount is less than the
amount actually certified by the district treasurer, the
difference shall be included as money to be raised in the
next annual tax levy.

Payments for the expenses of the district shall be
made by the treasurer or assistant treasurer only upon a war-
rant for such payment approved by a majority of the commission
or, if so delegated, by a majority of the executive committee
or by a majority of such other committee as the commission
may delegate by its by-laws to exercise such approval.

Said regional planning and economic development district
may accumulate reserve funds for, but not limited to, the
purposes of funding the purchase and replacement of capital
equipment and participating in state and federal programs, provided that such accumulated reserve funds may not exceed the estimated portion of the district commission's costs and expenses to be paid by the member cities and towns during the next fiscal year.

The director of accounts in the department of corporations and taxation shall annually cause an audit to be made of the accounts of the commission. A report thereon shall be made to the chairman of the commission and a copy thereof shall be sent to the mayor of each city, the board of selectmen of each town, and to each planning board in the district.

**Section 19.** There shall be a mutual exchange between the commission and all agencies of the commonwealth and of each political subdivision thereof within the district, of data, records, and information within their knowledge and control pertaining to the district, or to parts thereof, which may be required for the preparation of programs designed to achieve the purposes of this chapter.
APPENDIX E

THE LEGAL BASIS FOR REGIONAL PLANNING IN MASSACHUSETTS

The problems which obtain in urban areas throughout the Commonwealth include economic development, fiscal solvency, transportation, public open space and recreation, housing, social welfare, and a host of political and social-psychological problems such as alienation, delinquency, crime, etc. A regional approach to solving these problems has been suggested. This regional approach has been defined as an effort to coordinate plans and thinking of local municipalities with the overall needs and objectives of larger metropolitan areas -- taking into account the general welfare and the prosperity of all the citizens. Ideally, the regional planning process should include:

1. Setting the goals and objectives of the region's population. (What should be accomplished? By what values should one plan be judged against another?)

2. Surveying and analyzing the facts and trends. (Which trends are most salient? What goals are achievable given current and projected needs and resources?)

3. Planning -- the design of futures which will achieve these goals. (For many regional plans this includes a graphic design, showing the locational arrangements of land, water and open space, residences, circulation and utility systems.)
It is also in part a design in terms of levels of economic development or other unmappable proposals.)

4. Programming -- the working out of a practical course of action to move from the present to a planned future; including priorities for various specific actions which may involve spending for public works, or the enactment of new codes or regulations, or the offering of inducements or incentives for private development.

In Massachusetts, the State Law authorizes regional planning. Under the General Laws of Massachusetts, counties have planning functions relative to county public works only. However, by special law, certain county-wide planning powers, primarily of a research and advisory character have been accorded to three counties (Barnstable - 1965; Dukes - 1966; Franklin - 1963). No county has zoning power. Regional planning on a non-county basis has been established on three separate bases:

1) the general regional planning law of 1955 (G.L. c 40B)
2) the Metropolitan Planning Council Act of 1963
3) special statutes.

The regional planning agencies perform research and advisory functions, and do not have the power of approval over the plans, zoning ordinances, and by-laws or subdivision control regulations of communities belonging to the regional planning districts. In the order they were established eight such non-county regional
planning agencies had been organized by the end of 1967 as follows:

<table>
<thead>
<tr>
<th>Regional Planning Commissions</th>
<th>Year Estab.</th>
<th>Statutory Basis</th>
<th>1967 Member Communities</th>
<th>Agency Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeastern Massachusetts</td>
<td>1957</td>
<td>G.L. c. 40B</td>
<td>21</td>
<td>3</td>
</tr>
<tr>
<td>Central Merrimack Valley</td>
<td>1959</td>
<td>G.L. c. 40B</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Lower Pioneer Valley</td>
<td>1962</td>
<td>G.L. c. 40B</td>
<td>31</td>
<td>5</td>
</tr>
<tr>
<td>Greater Lowell Area</td>
<td>1963</td>
<td>G.L. c. 40B</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Central Massachusetts</td>
<td>1963</td>
<td>G.L. c. 40B</td>
<td>32</td>
<td>5</td>
</tr>
<tr>
<td>Metropolitan Area Planning Council</td>
<td>1963</td>
<td>G.L. c. ss. 109-114</td>
<td>87</td>
<td>25</td>
</tr>
<tr>
<td>Berkshire</td>
<td>1966</td>
<td>G.L. c. 40B</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Old Colony Planning Council</td>
<td>1967</td>
<td>Acts 1967, c. 332</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>

The Power of Regional Planning Districts under the Regional Planning Law of 1955.

The general enabling law (Regional Planning Law of 1955) authorizing the formation of regional planning districts on the initiative of local communities acting voluntarily together, was enacted by the 1955 General Court and, as Chapter 40B of the General Laws has been amended many times since. Its stated purpose is "to permit a city or town to plan jointly with cities or towns to promote with the
greatest efficiency and economy the coordinated and orderly development of the areas within their jurisdictions and the general welfare and prosperity of their citizens."

By vote of the local legislative bodies any group of municipalities may vote to form a regional planning district, which constitutes a "public body corporate." By a two-thirds vote of the representatives of the member communities, other cities and towns may be admitted to the district on request of their city council or town meeting. However, the formation of such districts is subject to the approval of the Department of Community Affairs which has the duty to determine whether the proposed regional area will be "effective for regional planning purposes."

Each regional planning district is administered by a district planning commission consisting of one member of the planning board of each constituent municipality. If a member town has no planning board, its selectmen must appoint a member to sit on the district planning commission. Alternatively, a community may arrange to have its representative on the commission named by the mayor with city council approval, or by the city manager, or by the board of selectmen, rather than by the local planning board. In any event, all their local appointments are made annually. The commission is empowered to elect its own officers and to employ staff and consultants.

Regional district planning commissions are required to make studies of the resources, possibilities and needs of their planning
regions, and to "prepare a comprehensive or study plan of such district" or "portions thereof as they deem advisable." They must make recommendations for the physical, social and economic improvements of their districts which concern, among other matters, existing and proposed highways, public places, bridges, tunnels, parks, recreation sites, public buildings and structures, land use areas, building and zoning districts, waterways and routes of common carriers, the location of water, sewer, and other public utilities, and other "pertinent features." These plans take effect and may be amended by majority vote of the district planning Commission. However, such plans and recommendations "shall be advisory only."

The district planning commissions must assist the planning agencies of the member communities of the regional planning district, and must report annually to the city councils and town meetings of such communities. Such commissions may also enter into agreements with the State Water Resource Commission. On its request, state and municipal agencies must make available to such a district planning commission whatever information they possess pertaining to the commission's territory. A district planning commission may also contract with the federal government and with municipalities of the district for the performance of planning studies and services.

Annually in December, each district planning commission must establish its budget for the upcoming calendar year and determine on a per capita basis the share to be assessed on its member cities
and towns. However, no community may be assessed at a per capita rate in excess of that ceiling which its city council or town meeting may fix when the community elects to join the district. A district planning commission may borrow in anticipation of annual revenue to a point not exceeding such revenue. It may also accept governmental and private grants, gifts, and contributions in aid of its work.

The Powers of the Metropolitan Area Planning Council under the Act of 1963

The Metropolitan Area Planning Council Act of 1963 was developed from a report by a special legislative study commission of 1953 which stressed the need for a new type of regional planning agency for the Boston area. Subsequently, to meet these needs, the General Court created the Metropolitan Area Planning Council (MAPC) as one of the state agencies serving directly under the Governor and Executive Council. MAPC's powers parallel those granted to regional planning districts created under the general enabling law described above. (MAPC embraces 99 member communities and its representation, governor's appointments (21) and the head of ten state agencies or the designees serving ex officio.)

Special law regional planning agencies established by the Acts of 1967 such as the Old Colony Planning Council and District have the same powers as those conferred on MAPC.
NEW COMMUNITY DEVELOPMENT IN THE UNITED STATES


Transportation planning for new communities must incorporate flexibility to accommodate future growth. Much of current U.S. new community planning is neglecting this consideration.


Chapter IV includes a history of U.S. and European new town development from the 19th century to the present, and surveys recent public and private efforts in the United States. Chapter VI treats some of the governmental problems of public-private joint ventures in community development.


An examination of the historic and recent development of new communities in the United States; a survey of planning and development, controls for large-scale development, and the shaping of urban growth.


Suggestions for a national settlement policy, and creation of a Federal agency to build satellite communities. Recommendations for a Federal system of block grants for new communities and an urban development bank to make loans to State and local agencies for the development of new communities.


A proposal for the creation of a new government unit to carry out urban development within a county. The study was prepared in anticipation of further new community development.

A hierarchical concept for new community building. The metrotowns would be regional employment centers separated by open space and dependent upon the central city for some services.


A report on the General Electric Company's study of the feasibility of large-scale city building incorporating advanced mechanical and social concepts.


A discussion of the legal issues involved in three land-use control measures: planned development zones (intensive development on a small scale), compensative regulations (payments to owners of restricted-use properties), public land assembly (use of eminent domain).


Chapter IV, "Cooperative Housing," describes Federal program experience and the advantages of the cooperative approach. Pages 178-179 describe briefly the HUD-administered "New Communities Act of 1968."


Presents a mathematical model for financing.


A series of papers for the National Committee on Urban Growth Policy covering the process of urbanization, future patterns of urban growth,
historic new towns in America, new towns in Britain, and proposals for new cities in the U.S., with recommendations for a system of Federal subsidies.


A call for stronger regional planning and a range of Federal financial assistance for the private development of new communities.


Part I: Analysis of zoning and planning practice; Part II: Review of recent Federal and private sector new community assumptions; Part III: Types of zoning in use, recent court decisions, and precedents for new community zoning. The appendix includes a model ordinance for a new community district.


The story of the construction of about 100 small communities during the 1930's, a program that culminated in the Greenbelt towns.


Exploration of the applicability of technological innovations for a 300-acre in-city community project in the National Capital.


The results of a questionnaire to new town developers. The survey includes tabulation of selected amenities and a discussion of planning objectives.


A study of the home owners' associations of Reston and Columbia, suggested as models for other new communities. Examination of pertinent court decisions involving public function and equal protection. The author suggests that the H.O.A., using real property as the only basis for political participation, may conflict with constitutional equal protection clauses.


An attempt to compute a rate of return for community building.


This essay concentrates on certain California postwar new towns as promotional phenomena not superior to sprawl development, dismissing the new towns movement as rather irrelevant for complex social and economic patterns.

A comprehensive and often critical analysis of large-scale and new community development, with emphasis on the California experience in the mid 1960's, Columbia, Maryland, and Reston, Virginia.


Volume 2, titled: How to Manage An Urbanized World, contains a chapter on "The New Towns Concept," with articles by:


Steps taken in highway traffic planning with special reference to Mountain Park and Irvine Ranch in California.


A portion of this chapter, p. 304-309, examines the major urban concentrations of the U.S. The conclusion is that, considering the high projected costs of new cities, they are unlikely to be built on a scale that would significantly alter the projected pattern of urban settlement.


A study of the home owners' associations of Reston and Columbia as models for other communities. Examination of pertinent court
decisions, suggesting that home owners' associations, using real property as a basis for political participation, may violate constitutional equal protection clauses.


Suggestions for the establishment of a development bank for financing nonprofit new community development corporations with issuances of obligations guaranteed by the Federal government; building of twelve new towns in Appalachia is advocated.


A proposal for new towns for Negroes to shape an environment that they would control.


A survey of the residents of Willingboro, New Jersey, disclosing their satisfaction with their living environment.


A survey of the new towns movement in Europe and the U.S.A., with brief discussion of several U.S. projects. Some of the most recent new town ideas, such as the Minnesota Experimental City Project, are cited.


The argument that new communities can make economic sense and meet many urgent problems. Critical to economic feasibility is the cost of land and cost of developing public facilities.


Examination of some of the public policy issues of new communities, including State and Federal roles. Comments on the article are given by Carl F. Stover and Melvin F. Levine.

A brief survey of recent new town development, with a critique on the master plan of Columbia, Maryland, and discussion of desirable new towns objectives.


A discussion of current planning, and a description of some new towns and ideal communities.


The case for a national program to build 20 new cities of about one half million population each to accommodate one third of the expected urban growth over the next two decades.


Site selection of a prototype new community development in the Greater Boston metropolitan area with discussions of applicable design and building techniques.


A report on Columbia's decision-making process and the coordinating of the social, financial, engineering and architectural development with other variables to produce a viable, balanced community.


Articles by:
Kirk, C.W.G.T. "NEW TOWNS In Great Britain."
Weaver, Robert C. "Federal Proposals May Solve City Problems." Thompson, Wayne E. "Prototype City-Design for Tomorrow."
Arnold, David S. "What New Towns Ought To Be."

The introduction, particularly p. 17-25, contains comments on the influence of Ebenezer Howard and Le Corbusier on the new towns movement and city planning.

The report, prepared for the Regional Planning Council of Baltimore, includes a discussion of Columbia, Maryland, p. 52-57. It refers to "metrotowns," and calls for a State development corporation to assist private new community development, p. 61-67.

Discussion of the nature of the new communities movement in the 1960's, the motives of developers, and the popularity of the new community idea in the planning profession.

A model is presented to contrast rent costs between a new community and a conventional major urban area.

An analysis of the Federal financial guarantee program for private developers. Some discussion of the role of State and local government and the balance of low and moderate income housing requirement of the New Communities Act.

Suggestions on the Federal role and requirements for a new towns program.


A pessimistic view of four projects in the United States: Clear Lake City, El Dorado Hills, Reston and Columbia. Diagrams of master plans are included.


A discussion of land loans for State development agencies, proposed in the Administration's housing bill for 1964.


The issue of optimum city size is traced from the garden city movement through the greenbelt towns, Levittown, Park Forest, Oak Ridge, and others.


In this chapter on the changing metropolis, some innovations are listed as possible for experimental communities. Whole new cities, however, are thought to be more feasible outside the U.S.


Three major elements are cited to facilitate new communities as proposed by the President in his message to the Congress: Urban Planning Assistance Grants, Public Facilities Loans, and FHA insured private mortgage loans for land acquisition and development.


Discusses the relation between new town development and land-use problem, emphasizing the need for strong controls on site selection by government. The author wants to see new towns constructed only as a facet in a comprehensive land policy.
The necessity of some kind of land development corporation as a vehicle for planning and building new towns is asserted. The experience with such corporations in Europe, Canada, and America is detailed and possible alternatives for use in the region around Washington, D.C., are pointed out.


Examples of regional planning with new towns in several countries. Elements for an American policy.


An outline of the key elements considered needed to achieve economically and socially balanced new communities in America.


Present and alternative tax policies in Maryland studied as a means to determine the role of tax policy in development.


An evaluation of the Federal atomic energy and greenbelt town projects, leading to a discussion of problems of implementing home rule in Federally assisted projects. Joint State-Federal control is advocated. A model incorporation and local government act is offered.


A survey of several proposals, public and private, calling for new town development. The New Jersey Municipal Planned Unit Development Act is seen as a potential stimulant for new towns.


Report on three models developed by the Howard County Planning Department for projecting savings on new communities.


A study of 28 outstanding open space projects featuring cluster development principles, ranging from a few to several thousand acres.


A very good history and description of American new towns, exploring the role of the developer, planning problems, housing, open space, and many other aspects of new towns. Also includes the arguments for and against and prospects for the future.


Studies of Fairless Hills and Levittown, Pennsylvania.


An editorial on the failure of current large-scale developments to become new towns, and the need for balance of uses and size limitation.


The creation of non-profit community development corporations could enlist private enterprise to build new towns, with superior features and low-cost housing making them desirable for both black and white.

A proposal for the new town-in-town as a means to transform the physical environment of the city in order to meet social objectives and human resources needs within the existing urban area.


An analysis of the trend toward large-scale planning with respect to the financial position of the developer, the effect of corporate adventures into community development, and the regulatory response from government.


The growth of urbanized areas in the United States both in terms of population and land area from 1920 to 1960 is described in individual statistical detail and projections are made for 1980 and 2000.


An examination of public land planning policy with respect to a surplus penal farm in Shelby County, Tennessee, proposed for private development as a new community. Relevant local and State legal authority are reviewed, and several urban renewal court decisions cited to support precedent for a dual price system for public land sales to developers.


Discussion of new community building since 1925, with some analysis of the failure of recent Federal legislative efforts and a list of major problems.


Jurisdictional conflicts, inadequacy of governmental services, and other effects of the sudden increased demands on nearby communities.
Various plans for utopian communities proposed in the past century.

Chapter III, "The Visionary Planner for Urban Utopia," deals with plans for ideal cities, citing Ebenezer Howard, Frank Lloyd Wright, and Lewis Mumford.

Chapter 7, p. 346-414, discusses the successes and failures of postwar new town development. A quasi-public "land development corporation" is proposed to improve the management of Federal lands, the creation of cities upon them, and a system of national "urban-grant universities."

A series on new communities, with emphasis on the recent California experience, including a discussion of land policies, and new governmental arrangements, A new public investment, new fiscal policies, and more councils of government, are advocated.

The absence of goals for urban growth is viewed as the primary cause of weakness in present new communities development. Direction is sought from State and Federal governments.

A British planner distinguishes between suburb and new town, summarizes post-war new towns aims, and suggests that California adopt a statewide plan.

The concept of land as a national resource and the advocacy of large new cities developed through State-chartered public corporations.


First published in 1950, revised in 1955, this study has descriptions of Radburn, Sunneyside Apts., Baldwin Hills Village, Chatham Village, and the Federal "greenbelt" communities.


Articles by:
Mandelker, David R. "Some Policy Considerations in the Drafting of New Towns Legislation."
"Administration of the English New Towns Program."
Thomas, Wyndham. "New Towns Development."
Woods, Shadrach. "Le Mirail, A New Quarter for the City of Toulouse."


Title X: Mortgage Insurance for Land Development, p. 169-175.


Includes testimony of several groups and individuals on the proposal to extend Title X mortgage insurance.


Testimony from Government and other witnesses on the Federal proposal for mortgage insurance for large subdivisions and new communities.


Includes testimony on new towns.


Testimony from Government and other witnesses on the various housing bills; includes testimony and discussion on Title IV, the New Communities Act of 1968.


Testimony from Government and other witnesses, including testimony on the Federal proposal for mortgage insurance for large subdivisions and new communities.


An examination of subdivision design holds lessons for the planning of efficient new communities.


Discussion of planned unit development, cluster development, zoning and improved subdivision regulations, applicable to new communities.


A study of 28 residential communities, including several "new towns," scattered around the country, to determine how successful open space planning and related amenities have been.


Application of Europe's new town policies to the building of enough towns in the U.S. to accommodate much of the expected population increase over the next twenty years.


A collection of essays on urban planning dealing with the Federal responsibility, work and quality of urban life, responsive physical planning, and urban services. Of particular interest in regard to new communities are John R. James' essay on "Regional Planning in Britain" and Daniel R. Mandelher's on "A Legal Strategy for Urban Development."


Outline of objectives focused on citizen participation, racial and economic integration, and community facilities and services.

The need for a Federal urban land policy that is nondoctrinaire, flexible, many faceted, and responsive to the problems and life style of residents is the main point of this book based on the 1965 Godkin Lectures at Harvard. Urbanization, new communities, urban renewal, and the dilemmas of race in relation to housing and urban renewal are discussed.


Summary of research undertaken at the University of North Carolina. Survey of recent development, performance of the private sector, and proposals for a national new community building program. The Federal New Communities Act of 1968 is also discussed.


A bold 10-year program proposed for mass relocation of Negroes residing in the center city ghettos to integrated new towns tied to metropolitan transit systems. Recommendation to limit all Federal loans and grants to metropolitan areas with desegregated new town plans.


An analysis of the difficulties of financing new towns.


Determinants of cash flow and rate of return in a new community, and description of a large-scale new community computer model. Analysis of the types of corporations now engaged in community development.


An analysis of market research problems in large-scale residential
development; a definition and illustration of the cash flow technique. Federal financing role in new communities.


Chapter VIII, "Super Developments," describes several new communities planned around the cluster design.


A commentary on the shortcomings of British and U.S. new town experience in the postwar era in the chapter on "New Towns."


An essay on factors of urban decentralization, with emphasis on the new community concepts of E.A. Gutkind, Ludwig Hilberseimer, and others.


An analysis of trends in the urban form, with suggested alternatives, including super-cities and smaller independent communities.


This study, primarily directed at assisting in the determination of the future use of public lands, includes a discussion of the concepts of new towns and their opportunities to provide open space.
Additional listings can be found in the following annotated bibliographies from which many of the preceding entries were selected:


