

Department of Economic and Social Affairs

**URBAN LAND POLICIES AND
LAND-USE CONTROL MEASURES**

Volume VI. Northern America



UNITED NATIONS

New York, 1973

EXPLANATORY NOTES

The study entitled *Urban Land Policies and Land-use Control Measures* is published in seven volumes, as follows:

Volume I	Africa (ST/ECA/167)
Volume II	Asia and the Far East (ST/ECA/167/Add.1)
Volume III	Western Europe (ST/ECA/167/Add.2)
Volume IV	Latin America (ST/ECA/167/Add.3)
Volume V	Middle East (ST/ECA/167/Add.4)
Volume VI	Northern America (ST/ECA/167/Add.5)
Volume VII	Global review (ST/ECA/167/Add.6)

*

* *

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

ST/ECA/167/Add.5

UNITED NATIONS PUBLICATION

Sales No.: E.73. IV.10

Price: \$U.S. 4.00
(or equivalent in other currencies)

PREFACE

The Committee on Housing, Building and Planning, at its second session decided that one of the most important problems created by the processes of rapid urbanization taking place in most countries of the world, was the frustration of the rational use of urban land through land misuse and rampant speculation. It concluded that "there was a need for urban land reform providing for suitable land policies to facilitate the implementation of urban and regional development plans, including such measures as may be necessary to build up land reserves, speed acquisition, and prevent speculation". 1/

On the basis of the Committee's recommendation, a series of regional surveys and selected country case studies were undertaken in close co-ordination and co-operation with the regional economic commissions and the United Nations Economic and Social Office in Beirut. In addition, the Secretary-General developed the study in conjunction with the work of a number of private research institutions. In several cases, extensive contributions were made by private consultants. After completion, a meeting of experts was held at United Nations Headquarters (30 November to 4 December 1970) to analyse the regional reports, advise on the structure of the final report, review basic policy issues, and formulate recommendations for national and international action (E/C.6/118).

The regional reports vary owing to a number of factors, including the approach of the researchers involved, the availability of data and the characteristics of the region. However, in spite of these variables, each study does contain a regional description of the important aspects of urban land problems, and each is enriched by country analyses and examples of the important aspects of the urban land problem. Generally, each report deals with at least the following topics:

Factors influencing urban land supply and demand;

Patterns of urban form and structure;

Systems of land ownership and tenure, including expropriation procedures;

Urban policy systems and land control measures;

Obstacles preventing the development and implementation of more appropriate land control techniques; and

The role and importance of comprehensive planning in controlling land development.

In view of the increasing interest of developing countries in urban land development problems and on the recommendation of the Committee on Housing, Building and Planning at its sixth session, 2/ the United Nations sponsored an

1/ Official Records of the Economic and Social Council, Thirty-seventh Session, Supplement No. 12, para. 114.

2/ Ibid., Forty-eighth Session, Supplement No. 2, paras. 117-126.

Interregional Seminar on Urban Land Policies and Land Use Control Measures, which was held at Madrid from 1 to 13 November 1971. A substantial part of these reports were issued in mimeographed form as background documentation for the Seminar. The conclusions and recommendations of the Seminar will be issued as a United Nations publication.

Although the global review of trends and the main issues on urban land policy, land use and land control is the topic of the last volume (ST/ECA/167/Add.6) the following are some interesting central tendencies that emerge from the regional surveys.

First, as the world has become more and more urbanized, the effective control of urban land resources has become critical. The magnitude and physical scale of the urbanization process has clearly shown that urban land is a scarce resource that must be carefully and wisely allocated if the environment of man is to be improved. The increased demand for urban land is not only attributed to increased urban population but to changes in social and cultural habits, changes in transportation and communication systems, changes in how people spend their leisure time and the changing needs of production processes. The relationship between land policies and differing social and economic systems is, of course, examined. Although this is only a partial list of the elements affecting land demand, as treated in the regional reports, one point is clear in every region examined: cities are experiencing and will experience acute problems in providing an adequate supply of land at the right place and at the right time. Indeed, the problems of urban land are found everywhere, regardless of the level of development or existing social, cultural and economic systems.

The demand for urban land is growing, yet the supply is both genuinely and artificially limited. This situation radically increases land costs and in turn, consumes scarce investment capital better used elsewhere. It also irrationally distorts patterns of urban growth and development. This latter fact leads directly to a third round of undesirable consequences; as the urban infrastructure becomes more costly and inefficient and institutions and facilities fail to provide adequate services to their populations, urban social and economic imbalances and injustices are intensified, the quality of the total urban environment erodes and it becomes difficult to harmonize man's activities with the components of the natural environment. Thus, pollution, noise and other hazards all increase. The issue now is no longer the economic value of the land as determined by market processes, but the social value as determined by the goals and needs of urban society.

Secondly, as one examines a general problem shared by various regions and particular countries within a region, it becomes clear that problem dimensions differ throughout the world. For example, the African report states that choices may well hinge on the prevailing political climate, the awareness of the Government of its social obligation, the dominant land tenure system, and the attitude of families towards home ownership.

Local circumstances determine not only how a problem is defined, but also the appropriate course of corrective action. Thus, each country must fashion its own response. The experience of others, although useful in suggesting alternatives, must always be evaluated in the light of local conditions. The regional studies sharply illustrate this point.

Thirdly, a theme that runs through the regional studies is the tension between the momentum of the past and the needs of the present and the future. As mentioned in a number of the reports, land in general - and urban land in particular - is a very special kind of commodity. Hence, all sorts of institutions have been invented for defining and prescribing the relationship between man - individually and collectively - and his land resources. These concepts have been codified and considerable attention is devoted to such matters, as the property rights and responsibilities of the individual and society. In institutions, customs, mores and laws all mature slowly. As they do, they develop considerable force and momentum, and their directions are not easily changed. Nevertheless, urban society has changed very significantly in a relatively short period of time. Today, as noted in the report on the Middle East, countries are faced with the twin problem of designing a contemporary land policy and simultaneously harmonizing that policy with inherited land institutions. The problem then, is how does one go about changing a cluster of concepts that have very deep social and cultural roots?

Although changing broad cultural values may lie at the heart of the problem, there are also other more concrete impediments which frustrate the development and implementation of an effective urban land strategy. Such obstacles vary from country to country, but some of the more important include the failure of nations to define and adopt urban land objectives and policies; a lack of planning; the organizational and decision-making distance between the planning process and the regular governmental structure; the non-involvement of the public in the planning process; the utilization of planning methods unsuited to the problems; the belief that doing nothing is the best course of action; various technical inadequacies such as deficiencies in experience, procedures and data, and above all, the inability to administer planning and land use controls.

Fourthly, changing, powerful historic forces require very sensitive strategies for change. Although the regional reports tend to present a series of holistic views derived from cross-sectional analyses of country land systems, the prefatory remarks about the evolution of these systems must not be overlooked. The nature of the man-land relationship is dynamic, and thus perhaps the most effective strategy for change is to modify this relationship incrementally. The regional and country statements were not primarily intended to be models of "incrementalism", but the historical context does give one a feel for the incremental way in which some countries have fashioned their techniques through time. Therefore, the choice of a strategy for change must be deliberate and as thoroughly conceived as are decisions about goals and objectives.

Fifthly, the regional analysis point convincingly to interdependence between the land question and a host of other considerations. Indeed, there is general agreement that the matter of urban land is a component of a very dynamic and complex system in which components are interrelated both functionally and spatially. The reports stress the need for a comprehensive approach that includes social, economic and physical sectors, linked together at national, regional and local levels. The need for both vertical and horizontal integration is echoed in the regional studies. In those on Western Europe and Latin America, considerable attention is paid to the comprehensive planning system. But beyond this, the regional reports mention that planning and land use controls alone do not ensure effective urban development. Moreover, it is noted that even with comprehensive planning, financial resources have to be available to

construct the necessary facilities. The timing of construction is critical and appropriate political decisions are required. Thus, the regional reports do not represent an inventory of all that is necessary in order to bring about an optimum urban environment, but rather they are descriptions of one element which is examined within a multisectoral and multigeographical context.

Finally, the regional studies describe a variety of urban policy approaches and land control techniques. Unfortunately, though some countries have used some land control measures more than others, empirical research findings on the effectiveness of specific measures are not available. Therefore, the adoption of a technique used by another country, given the present state of knowledge, involves a calculated risk. Land control and development devices may be divided into two groups: negative measures, which are aimed at preventing or sanctioning behaviour, and positive measures, which encourage and reward behaviour. At least some 25 measures are described and analysed, but only when clear policies are established as the basis of the control, and when strong enforcement procedures are put into effect can any control achieve its purpose.

CONTENTS

	<u>Page</u>
INTRODUCTION	1
I. HISTORY OF LAND DEVELOPMENT IN NORTHERN AMERICA	3
America's first colonizing experiences	3
Colonial city planning	4
Post colonial period	6
II. URBAN LAND-USE POLICY AND CONTROL MEASURES	11
The rise of zoning	11
The Standard City Planning Enabling Act	15
Present urban planning policies and land control measures	16
Governmental framework for guiding development	22
III. SOCIAL AND ECONOMIC ASPECTS OF URBANIZATION	26
Urbanization trends in North America	26
General urban land requirements	36
Land-use and land requirements in selected urban areas	41
New community development	49
IV. CONSTITUTIONAL AND LEGAL ASPECTS OF LAND-USE AND DEVELOPMENT	55
Origins of rights to real property	55
Public land acquisition as a control mechanism	60
Public land acquisition in the United States	62
Public land acquisition in Canada	69
V. LAND COSTS AND LAND VALUE	80
An overview	80
The land development process	85
Supply-demand interaction and land costs: case studies	97
VI. LAND TAXATION	108
An overview	108
History of the property tax in the United States	110

CONTENTS (continued)

	<u>Page</u>
History of the property tax in Canada - (Province of Ontario)	111
Land taxation and land development policy	112
Taxes and land-use control policy	114
VII. FUTURE OUTLOOK AND RECOMMENDATIONS	117
The problems	117
Techniques for guiding urban development and land-use policies . . .	118
Future needs and directions for guiding development	120
Proposed changes in governmental relationships	124
A national-provincial urbanization and land-use policy	125
Annex I Supplementary tables	129
Annex II The cities of Red Deer and Saskatoon, Saskatchewan	147
Annex III Changes in land values in Westchester County, New York	156

List of tables

	<u>Page</u>
<u>Chapter III</u>	
Table 1. Doubling period of United States population, 1805-2036, showing mean annual growth rate	27
Table 2. Population of large urban regions of the United States, 2000 (projected), showing land area and population density	30
Table 3. Population and its components, Canada and the provinces	35
Table 4. Population in metropolitan areas and percentage changes	37
Table 5. Distribution of urbanized land, by type of use, Montreal metropolitan area, 1952-1964	47
Table 6. Regional form, trends plan 2000	48
Table 7. Population and employment, industrial and residential areas 2000 (trends plan)	48
Table 8. 1963 and designated land use areas, metropolitan Toronto planning area (MTPA)	49
<u>Chapter IV</u>	
Table 9. Land acquisition and servicing financed under the National Housing Act, Canada, 1950-1969	72
Table 10. Land acquisition and servicing financed under the National Housing Act, Canada, 1950-1969	73
<u>Chapter V</u>	
Table 11. Total private, non-institutional land value and average annual per cent change, United States, selected years, 1922 to 1966	82
Table 12. Percentage changes in estimated value of locally assessed real estate, by type of property, 1956 to 1966	84
Table 13. Average value per acre of farmland, average annual rate of increase, and ratio of values in metropolitan and non-metropolitan counties, United States, by State and Region, 1954 to 1964	88

List of Tables (continued)

	<u>Page</u>
Table 14. Estimated cost of new single detached dwellings financed under The National Housing Act, Canada, 1949-1969	94
Table 15. Land and housing costs in CMAs, 1964-1967, central metropolitan areas, Canada, 1964-1967	95
Table 16. Estimated costs of new bungalows financed under The National Housing Act by area, 1968-1969, Canada	96
Table 17. Cost of developed lots, San Francisco, California	98
Table 18. Changes in cost of typical bay area lot	99
Table 19. Population and population change for selected areas of the United States, 1960-1965	101
Table 20. Population and population change for New York SMSA by county, 1960-1965	101
Table 21. Cost of land - Westchester County, 1965-1970 period	103
<u>Annex I</u>	
Table 22. Thirty-Year population growth projections, United States, and its large urban regions and largest metropolitan areas and complexes, 1970-2000	130
Table 23. Future projected land area of largest urbanized agglomerations, 2000, and area of predecessor urbanized areas in 1970. United States	132
Table 24. Percentage change in population for the central cities and remaining parts of the 1961 Census Metropolitan Areas, Canada, 1951-1961	134
Table 25. Land-use data	135
Table 26. Mean proportions of land devoted to various uses at different times in 22 cities	136
Table 27. Mean proportions of land devoted to various uses at different times in 12 cities	136
Table 28. Net urban residential and employment densities measured in persons per acre	137
Table 29. Land absorption coefficients estimated from a sample of 22 cities (acres per person)	138
Table 30. Acres of land in 30 large American cities, classified by broad use categories, net data	139
Table 31. Land-use categories in 30 large American cities as a percentage of total land area, net data	142

List of Tables (continued)

	<u>Page</u>
Table 32. Rates of urbanization and densities of some cities of United States compared with Montreal	145
Table 33. Possible model of geographic distribution of 30 million population growth in new communities, 1970-2000	146
 <u>Annex III</u>	
Table 34. Estimated cost of land for single family development Westchester County by planning area, 1966-1968	158
Table 35. Estimated amount of land in various single family zones, Westchester County by planning area, 1969	159
Table 36. Percentage distribution of estimated amount of land in various single family zones, Westchester County by planning area, 1969	160
Table 37. Estimated per-unit costs of land for private multi-family housing, Westchester County by planning area, 1966-1968	161
Table 38. Approximate percentage distribution of selling price of single family units, Westchester County, by planning area, 1966-1968	162

List of figures

	<u>Page</u>
<u>Chapter III</u>	
Figure I. Regions of the United States of America	28
Figure II. Urban regions, 2000	29
Figure III. Percentage of population in urban agglomerations of 20,000 and over and of 100,000 and over, Canada and the United States, 1851-1961	33
Figure IV. Distribution of urban centres of 5,000 and over, Canada, 1871 to 1961	34
<u>Chapter V</u>	
Figure V. Land values life cycle	86
Figure VI. Land-price stages in the conversion process	92
<u>Annex III</u>	
Figure VII. Westchester County, New York, planning areas	157

INTRODUCTION*

This study is concerned with urban land. Principally it deals with those policies and measures both official and unofficial which control, alter or affect in some way the manner in which urban land is put to use. Such land-use decisions are exceedingly vital to man's social and economic welfare. Socially, they dictate where man will live, the quality of his environment and how and in what form his activities will be related. Economically, they have an influence either directly or indirectly on the location, type and character of businesses and, in turn, on the general tone of economic growth. Land and its use is, therefore, central to the welfare of a nation and to its citizens. This concern becomes increasingly more important and more critical in those regions of the world experiencing very rapid rates of urbanization.

With a fixed total supply of land, a nation's concern necessarily must turn to an examination of several key questions. Among the most prominent are the general urbanization trends and urban land requirements for a nation as a whole, the areas or regions where growth will be experienced most sharply, the rate at which agricultural land is absorbed into urban use, how well this market works and the costs and benefits involved, the legality of land-use policies and which are acceptable as control measures for urban land. This examination would, no doubt, include the traditional land-use policies of zoning, subdivision regulations and official maps, as well as land acquisition and taxation policies. It would also deal with the question of the effectiveness of such policies and examine at what level of government they are exercised. The general national traditions and customs in setting out policies and approaches to land-use and its controls would also be an important area of investigation.

With these areas of concern clearly set out, a nation would be in a better position to understand and assess its needs and make recommendations for future action based on a set of national or regional land-use policy objectives. This study attempts to examine several of the above areas of concern for one of the most rapidly urbanizing regions in the world - North America - by looking in detail at land-use problems and opportunities in both the United States of America and in Canada.

Chapter I begins with a systematic examination of the history of land development during the early colonial period and later post-colonial period in the United States of America and Canada. This is followed by chapter II which presents a critical appraisal of present urban land-use policies and control measures, the role which different levels of government play in their implementation and problems and recommendations concerning a governmental framework for guiding development.

* This study was prepared for the United Nations by Peter W. Amato, University of Wisconsin, Madison, Wisconsin, who acted as a consultant.

The general urbanization trends and urban land requirements in North America are covered in chapter III as well as more detailed studies of selected urban areas. An evaluation of the constitutional and legal aspects of land-use and development is made in chapter IV together with an analysis of public land acquisition policies in Canada including federal-provincial and municipal-city land assembly methods. The land development process and several of the factors influencing land costs and land values in selected urban areas in the United States of America and Canada are set forth in chapter V. The question of the relation of different forms of land taxation to land development policy is discussed in some detail in chapter VI.

The future outlook, needs and directions for guiding land-use development are examined in chapter VII which ends with recommendations concerning changes in governmental relationships and the presentation of a national-provincial urbanization and land-use policy.

I. HISTORY OF LAND DEVELOPMENT IN NORTHERN AMERICA

America's first colonizing experiences

1. The early period of colonization in America was influenced by its first settlers, the Spanish, French, English, Dutch and Swedish. Each of these groups of settlers brought to America the traditions and customs of their native lands and planned villages and towns and surrounding agricultural lands much in accord to the traditional patterns of land allotment and division most familiar to them. 1/ Modification and adaptations of these traditions in town planning and land division appeared slowly as special opportunities and unique requirements of the American continent became more apparent.
2. Spain, more than any other colonizing power, followed a formalized system of written rules and regulations in its town planning and land settlement ventures in America. As early as 1513, central control over colonial planning was being asserted under the principle that towns, if not started with form, would never attain it. 2/ The concept of collective ownership and communal land management guided many of the early Spanish planning attempts. Several years later, in 1573, the Laws of the Indies was established which is considered America's first planning legislation. These ordinances governed the planning of new cities by specifying detailed standards and procedures. 3/ Although many of the results of Spanish influence in city planning in America have been obliterated over time, some still remain on the lands once subject to Spanish rule in the great arc from the Gulf States to New Mexico and from southern to central California.
3. French influence in America lagged more than a century behind that of Spain. Moreover, the French settlement was planned more according to existing circumstances and the skill and knowledge of its founder than according to written and codified set of laws as was common for the Spanish colony. French settlements sprung up as adjuncts to a commercial enterprise and exhibited great variety in urban pattern and form. 4/ The plan for the upper town of Quebec, a non-linear configuration,

1/ John W. Reps, The Making of Urban America (Princeton, New Jersey, Princeton University Press, 1965), p. 1.

2/ Dan Stanislawski, "Early Spanish Town Planning in the New World", Geographical Review, Vol. 37 (1947), p. 6.

3/ For an analysis of the impact of the Laws of the Indies and Spanish town planning in America, see John W. Reps, The Making of Urban America (Princeton, New Jersey, Princeton University Press, 1965); Robert C. Smith, "Colonial towns of Spanish and Portuguese America", Journal of the American Society of Architectural Historians, Vol. XIV, No. 4 (Philadelphia, December 1955), pp. 3-12; Dan Stanislawski, "Early Spanish Town Planning in the New World", Geographical Review, Vol. 37 (New York, 1947), p. 96; Dan Stanislawski, "The Origin and Spread of the Arid Pattern Town", Geographical Review, Vol. 36 (New York, 1946), pp. 105-120.

4/ John W. Reps, The Making of Urban America (Princeton, New Jersey, Princeton University Press, 1965), p. 56.

was one type of urban form established by the French in North America. In contrast, Montreal's pattern, narrow and linear, was greatly influenced by a form of rural land subdivision with narrow-fronted, long lots. This concept of land division was developed in French Canada, first along the rivers during the seventeenth and eighteenth centuries and later spread covering the plains of the Saint-Laurent valley and the low lands centring on and around Montreal. ^{5/} Subsequently, it had a significant influence on the form of many French planned cities in North America. The fortress town of Detroit, dominating the Detroit River between Lake Erie and Lake St. Clair, also exhibits a long, narrow form along the water's edge. French planning exercised considerable influence on early American planning through Pierre Charles L'Enfant's plan for Washington, D. C. and indirectly through Haussemann's reconstruction plan for Paris. Nevertheless, few elements of French planning have been retained today in North America with the exception of the French-speaking Province of Quebec.

Colonial city planning

4. England became interested in North America towards the end of the sixteenth century. Early English settlements were irregular in plan and were not established as permanent fortified towns as many of the early Spanish towns. The majority of the towns were platted in advance with the right to land extended to all settlers.

5. The colonial legislatures in Virginia and Maryland designated sites for towns during the latter half of the seventeenth century and the early years of the eighteenth century. The procedure for the development of designated sites, established a method of land acquisition and land evaluation, provided for town layout and the disposition of town lots.

6. Maryland and Virginia attempted to develop laws granting land to individuals. In 1680, the Act for Cohabitation and Encouragement of Trade and Manufacturing, brought direct public action into the town development arena. This act permitted each county to acquire 50 acres for a town and sell land rights to individuals. This act, however, was nullified in the following year.

7. English attempts at early town development in North America were centered on land acquisition policies. These policies were embodied in several acts passed during the latter part of the seventeenth century and the beginning of the eighteenth century. The Act of Ports, 1690, authorized the justices of each county to purchase the required land for city development and permitted half-acre lots to be acquired by individuals provided that a house of specific dimensions was built within four months after purchase. The Dongan Charter of New York in 1696, granted the city ownership of public buildings and of all lands not allocated. The Town Act of 1706, repealed three years later, contained detailed and liberal provisions giving freedom from certain taxes. Hereafter, English towns were created by special

^{5/} Michael Barcel, Montreal Planned and Unplanned, Whitefriars Press Ltd., London, 1967. Montreal started as an urban settlement, according to Barcel, in a traditional European sense with a system of streets and squares as early as 1642. Nevertheless, its even earlier farm subdivision heritage had an important influence on its urban development since it helped to establish its street pattern and its long lot lines at right angles to the rivers.

acts as needs arose. Williamsburg, one of the most successful pieces of town planning in colonial America was developed under a special law which stipulated specific land amounts, roads, form and dimension of the capital and minimum house size.

8. The economy of the North American New England colonial towns was based on agriculture. The villages and towns were tied together by persons sharing similar religion, kinship and allotment-share in the land-based enterprise. The welfare of the community as a whole predominated the land system and reflected the origin of the European land tenure system. Pasture lands and wooded areas were held in common ownership.

9. New England villages were planned to accommodate a limited population and a sharp break was very noticeable between village and the countryside. The village itself centred on an open space or common with great care being taken in the siting of individual buildings.

10. The colonial towns of Carolina and Georgia were similar in certain respects to the New England towns, especially in their emphasis with pre-planning and on various land and acquisition policies.

11. The Georgia settlements contributed several innovations to land policies and control measures. The basic module was the ward. The open square and local streets allowed for urban expansion without formless sprawl encouraging a social pattern of co-operation and neighbourly assistance. 6/

12. It can be said that generally throughout colonial America, governmental control was considered the norm and it was common practice for government to take the initiative in urban development. 7/ The Laws of the Indies governed the establishment of Spanish towns beginning in the latter part of the sixteenth century and continuing for two centuries. In the latter half of the seventeenth and early eighteenth century colonial legislatures of Virginia and Maryland assumed control through land acquisition and disposition. However, only Penn's plan for Philadelphia stands out as a contribution to the encouragement of social organization, in which the city was considered a social organism needing guidance in its development but not complete governmental control.

6/ The land policies of Savannah, Georgia, are particularly noteworthy. Oglethorpe's plan called for the basic division of country lands into rectangular areas of one mile square. This was in keeping with the Continental Congress System of western land surveys. In the Savannah Plan, land was controlled by trustees whose jurisdiction expired after 21 years. During their office, trustees could make grants of land of no more than 500 acres, but were not allowed to own any kind of land while members of the corporation. The land tenure system was designed to eliminate land speculation and profit. The corporation granted individual land parcels consisting of 50 acres denying the right of re-sale to the grantee to prevent accumulation of large holdings by any individual. Deeds held restrictions that required the erection of a house within 18 months and cultivation of at least 10 acres of land outside of the town within 10 years.

7/ See Building the American City, Report of the National Commission on Urban Problems to the Congress and to the President of the United States (Washington, D. C., U. S. Government Printing Office, 1968), p. 199

13. Nevertheless, colonial towns plans made significant contributions to the reservation of open spaces, differentiation of major and minor streets, and to land platting and parceling. Colonial towns were designed to be self-contained, rural-urban units of holdings for communal and individual use. Unfortunately, these early land development experiments had little effect on later nineteenth century town development in North America which was principally concerned with developing the maximum number of building lots on a given street.

Post-colonial period

14. Prior to 1776, the capability of local governments in North America to control urban growth was felt in many ways. The city was a positive instrument of public welfare and was successful in securing power to provide many town services but completely effective control over the use of private property was never fully attained. 8/ However, after the American Revolution, social and political forces created a hostile environment which set back many of the earlier gains of land-use policies and control measures secured under colonial government. 9/

15. Land speculation became the order of the day in the post-colonial period aided by the ordinance of 1785 which established the rectangular survey system.. This ordinance governed the settlement of the early states during the nineteenth century until the closing of the frontier. 10/

16. The effect of this ordinance on national land policy and on city planning was to reinforce the inclination for the gridiron system. Section lines became rural roads and right angle crossings served as base lines. Federal legislation which established half-section townsites of 320 acres perpetuated the rectangular street system.

17. Anti-urban political theory, the rise of economic competition, the decline of municipal government and the rise of land speculation created a change in the development of cities exposed to growth. The five squares set aside for parks in the original Philadelphia plan were in other use by 1811. The Washington plan of 1803 included more than 130 buildings in areas where a restricted number had been

8/ Various land policies and acquisition methods in North American cities are of interest. Prior to the revolution the pioneer cities of the Ohio Valley developed a system of land division based upon Henry Banquet's square stockade principle used in his expedition against Indians. In 1701, the Virginia General Assembly enacted a law entitled "An Act for Better Strengthening the Frontiers and Discovering the Approaches of an Enemy". The settlement system developed around settlements of 20 families. Land grants were given for 10,000-30,000 acres to any society.

9/ William I. Goodman, Principles and Practices of Urban Planning (Chicago, International City Managers' Association, 1969), p. 12.

10/ The Land Ordinance of 1785 required that land be laid out in rectangular townships six miles square prior to sale. Each township was to be divided into 36 square sections of 1 mile² each or 640 acres. Half the land could be sold as townships; the other half had to be sold by the section by auction. All sales were cash; one-seventh was to be reserved by the Secretary of War in the form of land certificates and sections numbered 8, 11, 26 and 29 were reserved for the national Government. Section 16 was set aside for a school site.

listed in the original L'Enfant plan. The colonial control tradition of open space and orderly growth was completely abandoned in the Mangin plan for New York City in 1800 and the Commissioner plan of 1811. These plans consisted of an unrelieved gridiron with no open spaces and a street system completely unrelated to topography. The basic rationale of planning during this time was the suitability for the buying, selling and improving of real estate.

18. After 1830, an increasing number of speculators entered the land market and with the exception of building regulations, government had little inclination or capacity to regulate the uses of land. 11/ Local policy was used to reinforce demands of the urban land market and, for the most part, people accepted uncritically the way in which American cities were developing. The 1880s were boom times for building and the only form of land control measures were primitive zoning and subdivision controls.

19. Early subdivision controls. The gridiron street system offered the subdivider the most convenient pattern for surveying and recording deeds. 12/ One of the earliest large-scale residential subdivisions in the post-colonial period was a 1,600 acre tract to be known as Riverside, near Chicago. It was designed by Frederick Law Olmsted and Calvert Vaux in 1869. Garden City, Long Island, was another similar development. Roland Park subdivision in Baltimore, begun in 1891, was distinguished for singularly high standards of physical development. Another pioneer development built in 1913 was Forest Hills, Long Island, one of the earliest planned suburbs.

20. A number of well-planned communities were initiated after 1918. River Oaks in Houston, Texas, occupying an area of 1,000 acres, was planned with a full complement of community facilities including a golf course and a market centre. In 1923, the Palos Verdes Estates was planned on a site overlooking the Pacific Ocean, south of Los Angeles. The site covered 3,000 acres and residential lots ranged in size from a half to 30 acres. About a quarter of the area was allocated to schools, parks, churches, libraries, shopping and recreation. 13/ Nevertheless, these well-planned subdivisions were more the exception than the rule. The typical subdivision of the post-colonial period was not planned, it simply grew over the edges of a spreading city. And a minimum of necessary urban services were provided.

21. Much of the land subdivision practices of the nineteenth century and early decades of the twentieth century placed the subdivider in a poor light. Reforms were overdue. Early regulations were mainly designed to assume the adequacy of engineering data and the adequate recording of plats. Gradually, objectives were broadened. Controls were forthcoming based upon the principle that the use and

11/ William I. Goodman, Principles and Practices of Urban Planning (Chicago, International City Managers' Association, 1969), p. 15.

12/ A subdivision may be defined as "any land or portion thereof shown on the last preceding tax rolls as a unit or as contiguous units which is divided for purchase or sale by any subdivider into five or more parcels within one year shall be considered a subdivision and requires a map for the approval of the planning commission and the legislative body." Subdivisions Map Act, California, Article 3, Section 11535 (1943).

13/ Arthur B. Gallian and Simon Eisner, The Urban Pattern (Princeton, New Jersey, Van Nostrand Co. Inc., 1903), p. 119.

development of land constitutes a right bestowed by the community upon an individual. In addition, it was expressed that the development right may be withdrawn or withheld when and if the individual violates the conditions upon which it is vested in him. 14/ Much of these notions bear the stamp of the 1920s when subdivision regulation began to be considered as a means of guiding urban growth which are discussed more fully later in the text.

22. Subdivision activities in the nineteenth century grew out of excesses of land development companies which had created many uncertainties in land titles. Legislation was enacted mainly in the midwest and far west which stated several specific administrative, legal and physical requirements. 15/

23. The park reformers and the "City Beautiful Movement" The largely uncritical acceptance of the urbanization process of the nineteenth century was confronted by two small groups of activists at the end of the century, the housing reformers and the park planners. 16/ The park planners argued to convince a number of cities after 1860 that parks and boulevards were desirable and they could not be provided without planning and land controls.

24. The interest in parks stimulated a time for rebirth of the planned city. Sanitation in the city was very poor and housing conditions were often intolerable. The large cities in the United States were becoming seriously congested towards the last few decades of the nineteenth century. In New York City, densities reached

14/ One of the first steps taken in several states for the control of subdivisions was the licensing of the subdivider. To obtain a licence, education was necessary in the principles and practices of land sales as well as knowledge of state and local laws pertaining to the subdivision of land. In both state and local laws it was generally necessary for the owner of land to employ a licensed engineer to prepare the subdivision map for recording.

15/ The major requirements were: (1) All proposed subdivisions must be accurately surveyed and platted; (2) The survey must be verified by the local government engineer; (3) The plot must be approved by local officials and recorded prior to any sale of lots and (4) The plot must be accompanied by a certificate of a local tax official indicating that no outstanding tax liens exist on said property. Subdivision regulation also reflected a strong concern for the design of the street system. Legislation often required that new streets tie into the towns' existing street pattern, and that they continue the widths and the alignment of earlier streets and be dedicated to the public.

16/ It should be noted that the park movement in the United States succeeded because it was based upon the argument that rural environment was virtuous. The philosophy of anti-urban bias in American planning could be ignored or subtly supported from the positive approach of rural virtues. The design of parks took their ideas from the design of cemeteries in the 1830s and played upon the informality of winding streets and natural scenery. Public parks became a positive note in city design and the landscape architects were in demand. The largest park division was the New York City Central Park designed by Frederick Law Olmsted..

326 persons per acre in 1870 and slum sections in New York Boston, Chicago and Cleveland were more densely populated than almost any city throughout the world. ^{17/} While the park reformers were attempting to raise public sentiment to the need for parks and open spaces in urban areas, it was the Columbian Exposition of 1893 which sufficiently aroused the public to seek means of improving the quality of the urban environment. ^{18/}

25. The only models for city change and betterment were the Columbian Exposition of 1893 and the Washington plan of 1902 which were restricted to three elements: civic centres, thoroughfares and parks. By 1913, 253 cities were engaged in beautification improvement programmes. More comprehensive plans were submitted in San Francisco in 1905, St. Louis, Chicago, Des Moines, New Haven in 1910, Dallas and Rochester in 1911 and Portland in 1912. Land Use Policies and control measures during the period were thus embraced in a city beautification context.

26. The City Beautiful Movement was the beginning of comprehensive planning which became viable through a three-dimensional quality of urban planning. The movement served as an inspirational value in popularizing the need for city planning and the control over the uses of land.

27. The movement did have grave deficiencies despite its positive stimulation for planning and revitalization of urban design. First, beautification and adornment had economic limitations. Benefits of beautification often took second place in face of other pressing demands for city revenues. Secondly, the movement lacked legislation of public control over private actions that were decisive in setting the quality of urban environment. The achievement of limited goals required public investment rather than legislative controls and, as a consequence, it created an upper-middle class constituency for planning that by nature was suspicious of governmental controls. At the local level, communities responded enthusiastically to having a rewarding objective like beautification through public investment.

28. The 1909 conference of the New York Committee on Congestion of Population suggested the theme of using planning to deal with the cities' social problems. Subjects consisted of surveys of the economic and industrial conditions in the city, housing conditions and the ownership and control of land. The following year the National Planning Conference of Architects and Landscape Architects established the New York Commission of the National Housing Association.

^{17/} William I. Goodman, Principles and Practices of Urban Planning (Chicago, International City Managers' Association, 1969), p. 12.

^{18/} The Columbian Exposition of 1893 was a result of the climate of the time. In 1890 a group of the nation's prominent designers among them Frederick Law Olmsted, Daniel Burnham, and John Root developed a unified plan which catered to the latent interest for planning and signalled the revival of urban planning. After 1900 the annual meeting of the American Institute of Architects' papers dealt with beautification of areas as a main theme. The centennial year of Washington, D. C. produced a district park planning system for the occasion. The subcommittee of the Centennial went to Europe and was impressed with Paris and the monumental character of the wide sweeping boulevards. The plans for Washington were finalized in 1901 and repercussions were seen and felt everywhere. The principles of the Renaissance were widespread and interest in civic beautification became the business leaders' cry through newly formed improvement groups.

29. John Nolen's book in 1929 quoted an English writer as saying, "In America it is the fear of restricting or injuring free and open competition that has made it difficult for cities to exercise proper and efficient control over their development." ^{19/} The tendency to promote those forms of civic improvement which can be carried out without interfering with vested interests stimulated controls in other directions as well. Severe sanitary restrictions were imposed, a limit to height and density of dwellings was legislated and an effort was made to prevent destruction of amenities on privately-owned land. All these actions were aimed at civic improvement which would not conflict with other interests.

30. The City Beautiful Movement established two aspects of local planning that remain to this day. The professional consultant was promoted to a position of prominence and the quasi-independent planning commission composed of leading citizens was created. The city became accustomed to a client-consultant relationship. Planning as an official function of local government became established almost as quickly as the consultant system. The need for placing responsibility under the public authority was recognized and prestigious citizens were appointed to unpaid planning commissions. The first city planning commission was appointed in Hartford in 1907. A few years later, Chicago appointed a commission of 328 members for the Burnham plan. By the 1920s planning was popular as a direct result of the City Beautiful Movement. In 1929 46 cities had a planning budget over \$5,000 and the trend towards consultant hiring increased. The semi-independent planning commission multiplied the ways to organize the local planning function that was imbedded in the enabling statutes of the state. The City Beautiful Movement can be accredited with the stimulation of the beginning of planning as it is known today in North America and in particular in the United States.

¹⁹ William I. Goodman, Principles and Practices of Urban Planning (Chicago, International City Managers' Association, 1969), p. 2.

II. URBAN LAND-USE POLICY AND CONTROL MEASURES

The rise of zoning

31. The rise of zoning on the North American continent and the standard city planning enabling acts of the 1920s ushered in what may be considered the modern period of land-use policies and control measures.

32. Early zoning regulations in the United States were concerned with those uses considered a menace to life itself and regulations against most of these uses were based on presentation of evidence in court that the uses were existing and had proven themselves dangerous. This proof was possible usually after some great loss of life directly or indirectly could be traced to the specific use. Legal action on zoning affairs passed through two stages of development. The first stage included a group of court cases which actually preceded zoning and served to establish the base for a more comprehensive recognition of the legal use of police power. 20/ These cases expanded the scope of the police power which included land-use regulation and eventually became the basis for zoning legislation.

33. In Canada, zoning has served several purposes in the past. Principally, as in the United States, it had been used even before being established as by-laws to protect established areas from unwanted land-uses. 21/ It had also been used

20/ Police power may be defined as the inherent power of a local governing body to regulate the health, safety and welfare of its citizens.

21/ Royal Architectural Institute of Canada, "Reflections on Zoning", Zoning Study Committee (1964), p. 6.

The Royal Architectural Institute of Canada goes on to say that:

"The early enabling legislation in Canada makes it clear that 'zoning' - that is, the restriction of land use in defined areas or in a whole municipality - served a number of purposes. In British Columbia, before the First World War, authority was given to local councils to regulate 'the location, construction, and use of breweries, stables, sawmills, chemical-works, paint works, soap-works, livery stables, piggeries, blacksmithshops, foundries, laundry and wash-houses... some will diminish the value of assessable residential buildings and other businesses, or cabins, which may, if unrestricted as to location, tend to reduce the value of assessable property'. The protective element of land-use control was even more apparent in the 'power to prohibit /dance halls, skating-rinks, and all places of amusement/ in certain portions of the city. Another power authorized by-laws 'for preventing... the erection and use... of any laundries or wash-houses, and for ordering the removal of laundries from any particular locality when in the opinion of the Council such laundries are a nuisance or an eyesore to such locality...'"

in an attempt to guide and control the development of new areas or old areas undergoing change, but had, like its United States counterpart, not proven very successful.

34. The laissez-faire attitude of city planning of the early nineteenth century in northern America created broad kinds of public responses. An emphasis on minimum standards to which everyone is entitled became the forerunner of zoning and early tenement house laws. 22/

35. Cities in the United States began restricting building heights and land-use in the interests of public health and safety. San Francisco and Los Angeles passed ordinances in the 1880s limiting the location of laundries. In 1889, height restrictions were placed on buildings in Washington, D.C. The Boston height restrictions were upheld in the Supreme Court as a valid exercise of police power in 1909. Fire district ordinances also were popular for prohibiting the building of wooden structures in designated areas. The Tenement Housing Act of 1901 vigorously enforced the housing reformers' 50 years of work toward persuading the public to assume some community responsibility for conditions under which the "other half" lived.

36. In Canada, during this period, it is clear that zoning powers were granted to enable municipal councils to protect existing property values. These powers had their origin partly in the common law of nuisance. As early as 1904, residential streets in Ontario cities could be protected from irregular setbacks and "the location, erection and use of buildings for laundries, butcher shops, stores and manufactories" could be controlled. 23/

37. The early developments of zoning could be seen as efforts on the part of property owners to prevent unwanted change in neighbourhoods and to control the heights and arrangements of buildings and not primarily as attempts to control the urban land market. In 1907, a group of Fifth Avenue merchants in New York City banded together to try to protect the fashionable shopping district from new factories. They were joined by city planning advocates and established the Advisory Commission on Height and Arrangement of Buildings. This group laid the foundation for the drafting and adoption of the New York City zoning ordinance of July 1916, the first comprehensive zoning ordinance in the

22/ New York City sanitation reports of 1834-1845 blamed bad housing as a major cause of disease. The state legislature survey of 1857 attempted to show the relationship between disease and poor housing and in 1867 New York City passed its first tenement legislation. The 1867 zoning ordinance slightly restricted the tenement's lot coverage and by 1901 the building coverage was reduced to 65 per cent of the land. Within a few years other states had followed and passed comparable laws and five years later the cities of Chicago, Boston and Cleveland adopted similar ordinances.

23/ Royal Architectural Institute of Canada, "Reflection on Zoning", Zoning Study Committee (1964), p. 6. Some of the earliest zoning by-laws in Canada applied to areas as small as a single street. It should also be noted that the only statutory name in Ontario Zoning Legislation is "restricted area by-law". The term "zoning by-law" is more popularly and widely used.

United States. This legislation set the basic pattern for zoning ordinances and five years after this ordinance 26 states had passed zoning ordinances. Zoning was first introduced in Canada in the Province of Ontario in 1921.

38. During the 1920s there was widespread acceptance of comprehensive zoning.^{24/} Lawyers began to develop zoning as a method for effectuating a community plan.^{25/} The rapid rise and immense popularity of zoning contributed to the major changes in local planning during this time. In 1922 the United States Department of Commerce published a Standard State Zoning Enabling Act. By 1925, 368 municipalities in 19 states had passed ordinances based on the Standard State Enabling Act model for state zoning legislation. In 1926 the United States Supreme Court removed any constitutional doubt about the concept of zoning in the case of the Village of Euclid v. Ambler Realty. By 1925, 368 municipalities had passed ordinances and by 1930 this figure had risen to more than 1,000, and some or all localities in every state were legally empowered to adopt zoning ordinances.^{26/}

^{24/} Zoning ordinances in the United States and in many parts of Canada regulate subjects by prescribing how each parcel of land in a community could be used. Most zoning ordinances designate permitted uses and many divide uses into categories such as dwellings, businesses or industry. These uses are then divided into sub-categories. Over the years ordinances have tended to establish more use categories. A limitation on population density was established by setting minimum required sizes for each lot and limiting the number of families per acre or limited by yards along lot boundaries, building height and the proportion of lot area covered by building. Zoning ordinances also required new development to make provision for their own parking needs. The zoning map shows the location and boundary of zones or districts established by zoning regulations.

^{25/} The Municipal Act of British Columbia is one of the few Canadian provincial zoning enabling acts that says anything about the purposes of zoning. This act was re-enacted in 1960 and may be called an official statement of purpose for the province. In passing a zoning by-law in British Columbia, the following matters are to be considered:

- (a) The promotion of health, safety, convenience and welfare of the public;
- (b) The prevention of the overcrowding of land and the preservation of the amenities peculiar to any zone;
- (c) The securing of adequate light, air and access;
- (d) The value of the land and the nature of its present and prospective use and occupancy;
- (e) The character of each zone, the character of the buildings already erected, and the peculiar suitability of the zone for particular uses;
- (f) The conservation of property values.

^{26/} Building the American City, Report of the National Commission on Urban Problems to the Congress and President of the United States (Washington, D.C., United States Government Printing Office, 1968), p. 200.

39. The framers of the early zoning legislation in the United States anticipated simple administration. They believed that zoning should be "self-executing" and that the duty of a building official was not to exercise judgement but to simply check with zoning ordinance compliance. The citizen was allowed hearing through the local board of zoning appeals and variances were granted to alleviate hardship and special conditions. Administration of zoning requirements falls to the building inspector to apply requirements through permit process. The local board of appeals then becomes the structure framework for appeals, variations of special conditions or hardship, special exceptions of conditional uses and special use permits and amendments which allow for the provision for changing the rules. The zoning ordinance lists particular uses and may permit additional uses within a zone as special exceptions provided that certain conditions are met.

40. In most Canadian provinces the control procedure for the traditional zoning by-laws is handled by a decision by the local council after a hearing, either by the council, a committee of the council or a qualified appointed official, followed by an appeal, if applied for, to a provincial agency. 27/

41. The courts in Ontario in interpreting the zoning powers in the Planning Act have been very liberal in recent decisions in holding valid by-laws applicable to very small areas. 28/ Councils have also been very liberal in conceding amendments in applications by developers. Amendments in several cases were obviously contemplated from the start since the original by-laws did not permit the most probable development.

42. Zoning in North America became popular as a method of stabilizing and protecting property values. But as a theory it was the chief means of guiding urban development according to a comprehensive plan. Needless to say, much of its practice was different than its theory. Single family residential areas were secured from intrusion of undesirable uses. Multi-family commercial and industrial uses were commonly overzoned. Zoning became primarily a static process of attempting to set and preserve the character of certain neighbourhoods in order to preserve property values in those areas, while imposing only nominal restrictions on these areas holding a promise of speculative profit.

27/ In some Canadian provinces the local hearing is not required by law, but is an accepted practice which is subject to no statutory standards. Also, an "appeal" to a provincial agency may be automatic in some provinces, but in all cases it is required by law. According to the Royal Architectural Institute of Canada in "Reflections on Zoning" already cited (p. 24), "automatic appeal - a statutory requirement of provincial 'approval' - is unnecessarily time consuming. Individual interests would be fully protected if interested individuals had notice of the local hearing and were given a right to appeal.

28/ It should be noted that these policies on zoning amendments are explicit in the "Holding Use Regulations" found in the London bye-laws. The Ontario law goes further than most other Canadian provinces to protect the interests of the developer by giving him the right to initiate a change in the bye-law by application to the Ontario Municipal Board.

The Standard City Planning Enabling Act

43. In 1928, Herbert Hoover, Secretary of Commerce with a nine-man advisory commission on city planning and zoning, drafted a Standard City Planning Enabling Act. ^{29/} The model law placed the leadership of local planning commissions into the hands of the Chamber of Commerce and well-to-do citizens whose plans paid little attention to slums and poverty. In concept the model law made subdivision regulation a part of a comprehensive and continuing programme of planning and growth rather than a device used independently to achieve ends. The means of effecting a plan was transferred from the city engineer, county surveyor, tax supervisor and city treasurer to the planning commission. The standard act required that a plan be approved after the major street plan had been adopted.

44. Subdivision control regulated the subjects of site design and the relationships to surroundings consistent with comprehensive plans. Requirements assured that utilities (local streets and sewers) tie into existing or planned-for adjacent property. The width of streets, the length of blocks, the size of lots and the handling of the frontage of lots are all considered through subdivision regulation. The administration of subdivision control provides a more general standard of design. The local planning commission or governing body applies the standards.

45. The Municipal Mapped Streets Act within the Model Planning Enabling Legislation allows municipalities to "preserve the integrity of their master plan, and especially of the major street, by regulations under the police power rather than by the costlier method of eminent domain. By preventing the erection of buildings within the needed rights-of-way of streets the city (through an official map) will not be compelled to abandon or greatly modify the plans of proposed major street improvements because of new construction contrary to these plans." ^{30/}

46. Enforcement provisions for the standard act makes the sale of an unapproved plat unlawful in certain circumstances authorizing the city to enjoin the sale. It is also unlawful for the county recorder to file or record an unapproved plat. Improvements in or on new streets are forbidden for unapproved subdivisions. Provincial Planning Acts are the basis for both zoning and subdivision regulation.

47. The weaknesses of the Standard City Planning Enabling Act were many. There was confusion between the zoning ordinance and the private land-use portion of the comprehensive plan. The comprehensive plan was long range, general and had no legal effect while the ordinance was short range, precise and had a legal effect. The Standard City Planning Enabling Act stated that the comprehensive plan should include a zoning plan for control of height, area, bulk etc. which are elements not needed in a comprehensive plan. This resulted in many instances in the adoption of zoning ordinances without the necessary land-use plans upon which

^{29/} William I. Goodman, ed., Principles and Practices of Urban Planning (Chicago, International City Managers' Association, 1968), p. 353.

^{30/} Local Planning Administration, Mary McLeary, ed. (Chicago, International City Managers' Association, 1959), p. 36. It should also be noted that the Standard City Planning Enabling Act aided in tax records and land titles and the protection of lot purchasers all of which contributed to its constitutional acceptance. For the act to become effective it must be closely co-ordinated with other local governmental policies, ordinances, and activities, such as the comprehensive plan, the official map, the zoning ordinance and municipal policies.

zoning should be based. Another weakness was the encouragement of piecemeal adoption. Also, the distrust of the municipal legislative body made the planning commission the principal client rather than the legislative body, thus isolating this body from the mainstream of political decision-making. The independent planning commission became free of control of the legislative body in the belief that municipal legislators were not competent and that planning was too complex for them to understand. The act also neglected to require the publication or public presentation of the act and it therefore became a confidential document.

48. Nevertheless, several provisions of the act were well thought out. 31/ And the Standard City Planning Enabling Act did contribute to subdivision regulation. By 1934, the new approach empowered the planning commission to regulate subdivisions in 425 cities in the United States.

Present urban planning policies and land control measures

49. The role of federal governments. In order to understand present urban planning policies and control measures in North America it is necessary to have some understanding of the roles which each layer of government plays in the total picture in both the United States and in Canada. The constitution of the United States states that those powers not specifically granted to the national government are retained by the states. Thus the control over land-use is one of the powers which has been retained by the states and which in many instances has been delegated to localities themselves through state enabling legislation. To-day's land-use regulations are therefore mainly adopted and administered by local government in which 10,000 governments now exercise regulatory powers. These jurisdictions vary in area and in population. This does not mean that only local governments control the use to which land is put. Government at all levels have either direct or indirect influence over land-use.

50. Canada's 10 semi-autonomous provinces have constitutional authority over municipalities but the federal government has none and to this date very little joint federal-provincial co-operation in urban affairs has been achieved. The most notable exceptions to this have been in the fields of urban renewal and public housing in which a certain amount of co-operation between the federal government and its provinces has been achieved through the activities of the Central Mortgage and Housing Corporation.

51. The federal government's role in setting land policy measures in the United States has been more indirect than direct. A review of the history of federal land policy produces a confusing picture. Early policy was based on the belief that the wilderness was and ought to remain unfettered by development. 32/ A homestead was considered a rightful reward for people living in the country where abundant land was available. Nevertheless, placing a price on land was deemed necessary in order to generate public finances but federal control went

31/ The planning commission was to consist of six citizens serving for six-year terms which overlapped; (2) the planning staff was responsible to the planning commission; (3) the plan did not necessarily have to be adopted by the legislative body; and, (4) the legislative body was required to refer all physical development matters to planning commission but it could override the commission by a 2/3 vote.

32/ Benjamin Horace Hibbard, A History of the Public Land Policies (Madison, Wisconsin, University of Wisconsin Press, 1965), p. 547.

very little beyond this. ^{33/} Most of the federal controls and regulations over land from the end of the revolution to the beginning of the twentieth century were based on a narrow revenue policy. Such policy did not seriously consider controlling land speculation by adjusting the purchase price of land nor safeguarding various forest and mineral rights by federal ownership. There was, also, little attempt to couple land policies with preserving agricultural and hunting lands. Congress, during this period, never assumed the burden of creating settlements. ^{34/} The Canadian situation was somewhat different, if not in urban areas at least along the vast northern borders in which frontier settlements exist to this day.

52. This early lack of controls on the part of the United States federal government have left the country with a poor patrimony of available lands owned by government. Moreover, to this day no single consistent national policy for urban development has been formed. ^{35/} Today, the federal government both directly and indirectly shapes much of the country's land-uses by its many programmes of aids to towns, cities, metropolitan areas and regions. The 701 Planning Assistance Program provides federal matching grants to recognized planning agencies and by so doing aids in the promotion of land-use planning activities. The National Highway Act provides funds for the developing of highways throughout the country and in turn determines the axis of city, metropolitan and regional growth. In addition, various federal housing programmes, most notably the Federal Housing Administration Mortgage Guaranteeing Program, as well as the Urban Renewal Program within the Department of Housing and Urban Development (H.U.D.) help to determine many land-uses and in turn shape land policies and control measures in many areas.

53. National planning policies generally favour particular areas or groups, or they contradict one another. An example of contradicting policy lies in the housing activities of the national government. Mortgage insurance encourages middle-income families to purchase new homes in the suburbs while urban renewal efforts seeks to encourage middle-income families to stay in the central cities.

54. In Canada, the federal response to urban problems has been limited and largely confined to the field of housing. Attempts at joint co-operation on the part of federal and provincial governments have not been successful outside

^{33/} Benjamin Horace Hibbard, A History of the Public Land Policies (Madison, Wisconsin, University of Wisconsin Press, 1965), p. 548-549.

^{34/} President George Washington in 1790-1791 suggested that a limit be set on the total amount of land sold each year and that the cost per acre should be raised as settlers could afford the increase but speculators could not. Gallatin of Ohio felt the frontier should be settled in an organized and systematic manner. With these few exceptions, restrictions on the rapidity and form of settlement hardly entered the minds of legislators or citizens during the half century preceding the Civil War. The land policy which Congress devised was cheap land, accessible to all at low prices.

^{35/} Brian J.L. Berry, Jack Meltzer, ed., Goals for Urban America (Englewood Cliffs, New Jersey, Prentice Hall, 1967), p. 69.

of the housing field. 36/ Recently, the Canadian Task Force on Housing and Urban Redevelopment 37/ began planning work in Canada but it is constrained and limited in many of its operations by artificial boundaries. 38/

55. The main federal commitment to urban problems in Canada is channelled through the Central Mortgage and Housing Corporation (C.M.H.C.). This corporation, established in 1945, is principally concerned with administering the National Housing Act. The bulk of its activities under the Housing Act deal with housing and renewal, although there are provisions for community planning and research activities. 39/

56. Nevertheless, federal assistance is available under the National Housing Act to aid municipalities wishing to assemble raw land for residential development. The emphasis of this programme is directed towards areas where lack of serviced land is hampering housing growth. Such land assembly projects (discussed more fully later in the text in chapter IV), developed jointly by the federal and a provincial government, offer fully-serviced lots and block lands in planned subdivisions.

57. The Canadian Government's commitment to urban planning and land-use policy, although hampered by many legal constraints, has nevertheless never perceived urban problems to be as grave as rural ones. It is very doubtful that anything approaching the broad social, economic and physical provisions of the Agricultural and Rural Development Act of Canada will be forthcoming in the near future for Canadian cities. The only exception to this lies with the National Capital

36/ The Conference on Housing and Urban Development, called in December 1967, points out the Canadian problems of intergovernmental co-operation. The federal government, recognizing that Canada had become an urban nation, proposed aid for urban regional planning for a new community programme and for air and water pollution standards. Both Prime Minister Pearson and Labour Minister Nicholson (who had responsibility for Central Mortgage and Housing Corporation) carefully couched their proposals and stated that suggestions would be gratefully received. Mr. Nicholson, in a speech given to the Federal-Provincial Conference on Housing and Urban Development on 11 December 1967, stated that "Physical planning, of course, is essentially a provincial responsibility. For this reason, the federal government cannot enter this field on its own, and would never dream of doing so". However, his attempt to allay fears was to no avail, as the premiers decided they wanted no part of it. As a result the conference had to be adjourned a day early.

37/ See Report of the Federal Task Force on Housing and Urban Development (also called Heller Report) (Ottawa, Canada, Queen's Printer, 1969).

38/ The Task Force asked for urban and regional planning backed up by regional government and for the establishment of a federal agency similar in operation and level of responsibility to the Housing and Urban Development Agency in the United States. The Report, however, was tabled in the House of Commons on 29 January 1969. Mr. Heller, who was head and director of the Report, subsequently resigned his public office because of lack of action on the part of the government.

39/ According to the Central Mortgage and Housing Corporation Annual Report 1967, out of a total loan advance of over \$794 million which was allocated to community planning and research, less than \$1 million was applied to urban planning in a non-housing capacity.

Commission in Ottawa whose activities extend over provincial boundaries covering an area of 1,800 square miles. 40/

58. The role of state and provincial governments. State policies in the United States affecting general planning and land-use control policies are expressed almost entirely in enabling acts delegating responsibility to the local governments. Courts are not policy-making agencies and cannot effectively resolve policy conflicts. On the national level courts have constantly refused to consider questions of exclusion in the context of land-use control cases. The Supreme Court has not heard a zoning case since *Nectow v. City of Cambridge* in 1928. Clearly, institutions other than courts are necessary to resolve conflicts. In this context, planning by states has not received the attention that it should. In recent years the states' role in developing land policies and control measures has been directed towards generating greater revenues for locality funds for land acquisition, sewage systems, hospital construction, highways and urban renewal. Comprehensive planning has become a regional concern in many states. Hawaii was the first state to have a statewide plan and has been followed by New York, California, Michigan, New Jersey and Pennsylvania. State planning has increased its role in supervision of local preconditions for acceptance of federal aid. In some states the state has come to exert a high degree of partnership with national and local governments.

59. Recently, states are becoming increasingly aware and concerned with their responsibility at the municipal level since only states can reallocate the necessary power and reorganize activities of the municipalities, counties, authorities and special districts which administer local government in the United States. The New York State legislature passed the New York State Urban Development Corporation Act on 10 April 1968, giving the State Corporation formidable broadly inclusive powers of both a positive and permissive nature. 41/ The act gives the corporation power to condemn, to clear land and to relocate displacees. It can also waive local laws, ordinances, zoning codes, charters and construction regulation. The law accords to the Development Corporation all the ancillary powers appropriate to a multipurpose public authority. 42/ This development in New York State may well be the forerunner of a new movement on the part of states to begin an active partnership with its citizens and corporations as a "packager" of developmental activities, an activity which to date very few have attempted.

40/ Planning for the National Capital Region is performed by the National Capital Commission, a Crown Corporation, which according to Leary "... was established by the Canadian Parliament in 1959, as the latest in a series of three increasingly more powerful and better financed organizations which have been working on regional planning and implementation in the Canadian Capital Region for the last 70 years". See Robert M. Leary, "Capital on the Ottawa", Town Planning Review, Vol. 41, No. 1 (Liverpool University Press, January 1970). The Planning and Design Branch of the Commission was funded in 1967, through which long and short range physical planning, advice to municipalities and urban design and development are carried out.

41/ See New York State Urban Development Corporation Act, MCK. UNCONSOL. Laws 6251 et. seq. (New York, 1968).

42/ William K. Reilly and S. J. Schulman, "The State Urban Development Corporation: New York's Innovation", The Urban Lawyer, Volume 1, Number 2 (American Bar Association, summer 1969).

60. The Canadian provincial experience in local planning and land-use policies have been somewhat more active and directly involved than has been the experience of its counterpart in the United States. These areas of activities are discharged by Departments of Municipal Affairs within each province although no province requires planning as a municipal function. All provinces, however, have passed general laws dealing with municipal planning. The various provincial planning acts generally contain guides for the establishment of planning boards and empower local authorities to start planning areas. Planning acts are also the basis for zoning and subdivision regulation and for development controls in Alberta and Saskatchewan. A master plan is not normally a prerequisite for the establishment of a zoning map, though conformance is necessary in Ontario and Alberta if both exist. 43/

61. During the past five years the Province of Ontario has made significant progress towards an effective regional development programme. 44/ The major objectives and goals of Ontario's Regional Development Programme stress the conservation of the natural environment and encourage each region towards its recognized socio-economic potential. The programme has three stages: the inventory stage, 45/ the evaluation stage and the plan creation stage which was begun in 1969 and was due to be completed in first draft by early 1971. This latter stage calls for 12 steps for each of the province's 10 planning regions. The 12 steps include the preparation of land-use maps for each region including

43/ According to Gow, "Zoning bylaws can be enacted by municipalities but must satisfy a provincial body before they can be law. It is almost incredible, in light of contemporary United States practice, that in many provinces amendments to zoning ordinances are still sent to the senior authority for approval before they can be law. In fact, much of the day to day activity of the Community Planning Branches is taken up, as in Ontario, with local subdivision and zoning reviews." See Rowland Gow, "The Effectiveness of Metropolitan Planning in Canada", unpublished major paper (University of Wisconsin, Department of Urban and Regional Planning, May 1960), p. 19.

44/ According to the Regional Development Branch of Ontario in a paper presented 2 February 1970, entitled "Ontario's New Regional Development Program", the progress over the past five years has been very rapid. "In January 1965, the federal government and the province jointly sponsored a Conference on Areas of Economic Stress in Canada at Queen's University, Kingston. One month later, the Province was host to a major International Conference on Regional Development and Economic Change. In the spring of 1966 a White Paper, Design for Development, was published setting down the objectives and administrative machinery. In December 1968 a second White Paper, Design for Development, Phase II, indicated important relationships between the regional development objectives and those of a parallel movement known as regional government, in which the existing structure of local government is being reorganized into larger and more effective units."

45/ The inventory stage, as assessment of all existing information, was completed in 1967. In January 1967, Dr. Richard S. Thoman became the first Director of the Regional Development Branch. He continues in this position and also as Professor of Geography at Queen's University, on leave of absence. In the January 1967-January 1970 period, the staff of the branch increased from seven to 55, with a 1970-1971 complement of 60.

current land-use and inherent capability and urban impact on land-use. ^{46/}
This programme could have significant impact on regional development in Ontario
and on a system of regional control over the use of land.

62. For the Province of Quebec the La Haye Report, a 969-page document on urbanization in the province, recommended metropolitan boards for Montreal and Quebec City. In sum total it may be said that provincial commitment to planning and general land-use policy at the metropolitan level has been ideologically supportable but has not been given the financial backing that is needed. It should be noted that all provinces have their own housing authorities which administer federal loans and grants, but the creation of significant metropolitan governments whose power may tend to dominate that of the province is still regarded with a certain amount of fear.

63. The role of local and metropolitan government. Land-use planning and control is the major activity of local government in the United States as well as in Canada. General organizational guidelines in the United States are set in state enabling acts, zoning boards of appeals, planning boards and in the governing body of local jurisdictions. Local government relies on the property tax as a major source of revenue. How land is used within its borders generally becomes more a matter of solvency than a matter of social consideration. Policies at the local level are developed to attract uses which add more in property taxes or local sales taxes. Uses which do not pay their own way are often excluded. Therefore, policies that influence industrial and commercial uses and luxury housing and discourage low and moderate housing are encouraged

^{46/} The 12 steps in the programme are:

- (a) Refinement of provincial goals;
- (b) Assessment of Evaluation Stage for patterns and problems;
- (c) Preparation of a socio-economic base study;
- (d) Preparation of land-use maps involving current land-use, inherent capability, especially as shown by the Canada Land Inventory, and urban impact;
- (e) Assessment of impact of technological and related change;
- (f) Examination of possible growth points;
- (g) Establishment of regional objectives;
- (h) Formulation of urban-oriented policies and selection of relationships with urban policies;
- (i) Formulation of non-urban policies and identification of relationships with urban policies;
- (j) Liaison with other provincial departments (this is a continuing process but a specific review is provided for here);
- (k) Isolation of alternative plans;
- (l) Recommendation of a best set from point (k) above.

At the end of step (g) and again at the end of step (l) the plans are sent to the regional development councils and the regional advisory boards for detailed review. Work currently is continuing "on time" according to a schedule established in 1967.

in both countries. Sometimes fiscal policies are behind certain types of exclusionary land-use decisions, such as large lot zoning, multiple dwellings, minimum house size requirements and mobile homes.

64. Sewer and water lines are another indirect tool or framework guiding urban development at the local and metropolitan level. Sewer and water lines have great impact on timing, location and control over urban growth. The size and capacity of sewer and water lines can set maximum limits on the density of a new development. Guidelines for decision making for sewer and water systems with a view to development guidance is lacking. In some places the basic decision is made by officials of the independent sewer and water districts and government has no control. The sanitary department may be permitted to go its own way even if the local government is in a position to follow development rather than lead it. Decisions made on functional criteria by functional experts often run counter to or fail to support broader urban development policies.

65. The Canadian municipalities are generally more limited in their planning and general government activities than metropolitan areas in the states. Kaplan has observed, "... Canadian provinces exert a far tighter and more pervasive control over their municipalities than do American states. Canadian provinces, though certainly sensitive to the demands of municipalities, are prepared to rearrange municipal government structure in a much freer fashion than any American state government would contemplate". ^{47/} Planning efforts for Canada's metropolitan areas have tended towards comprehensive physical plans covering land-use, population, transportation and community facilities. However, most of the plans are for central cities and are area-wide only in those cases in which a regional agency exists. The larger cities of Montreal, Toronto, Vancouver and Winnipeg and a few smaller ones such as Victoria, Sudbury and St. John have produced policy plans but few agencies have developed transportation or comprehensive land policy studies with the exception of Toronto.

Government framework for guiding development

66. The problem of multi-jurisdiction. The rising needs and expectations of urban America have outpaced local government and have increased levels of local government public expenditures and taxation. ^{48/} The federal structures of both the United States and Canada coupled with the vast spread of their respective countries and the diversity of urban areas all limit the effectiveness which federal governments may have on land policy.

67. Today, the metropolitan areas of the United States have become integrated economic and social units within a recognized large population nucleus. As of 1967, 228 such areas existed. Generally, Standard Metropolitan Statistical Areas (SMSA) consist of entire county areas that are primarily non-agricultural and related to a central city of 50,000 population or more. Two-thirds of all

^{47/} Harold Kaplan, Urban Political Systems, A Functional Analysis of Metro Toronto (New York, Columbia University, 1967), p. 48.

^{48/} Building the American City, Report of the National Commission on Urban Problems to the Congress and President of the United States (Washington, D.C., United States Government Printing Office, 1968), p. 323.

Americans reside in SMSAs. A study of population trends shows that by 1985 71 per cent of Americans will live in SMSAs and 30 SMSAs will be inter-state and contain a population of 20 million.

68. The Canadian Dominion Bureau of Statistics defines a Census Metropolitan Area (CMA) as an area containing a population of at least 100,000 with a central city of at least 50,000 people. The built-up area of the CMA outside of the central city must have a density of at least 1,000 persons per mile² and at least 70 per cent of its labour force in non-agricultural pursuits. In 1961 17 areas in Canada met these criteria. In 1966, 48.1 per cent of the country's population lived in the urban centres of the CMAs.

69. Metropolitan governments in the United States are served by 20,745 local governments or 25 per cent of all local governments in the country. Most local governments are small in geographic terms and are administered by some 134,000 elective officials, including 87,000 members of governing bodies such as county boards, city councils, school district boards etc. An average of 91 governments per SMSA illustrates the complexity of the problem. Chicago has 1,113 local governments while Philadelphia has 871 local governments. School districts in metropolitan areas also account for a high number of local governments. The average metropolitan county has 350 elected local officials and the average SMSA central city has more than four overlapping local governments. 49/

70. In Canada, the proliferation of small jurisdictions are not as gigantic as they are in the United States. Montreal has approximately 52 local governments. Nevertheless, the inefficiencies in programming of services and metropolitan planning which these boundaries present to government are as real as those faced by many metropolitan areas in the United States.

71. Governmental framework in the United States has been characterized by the extension of multiple layers and generally unrelated boundaries. This promotes the emergence of various types of local government. Moreover, the entire territory of most states in the country is divided among areas served by counties which were developed to carry out the states delegated responsibilities. No part of a state lacks a local government layer. Municipalities were set up to provide for additional public service needs of closely settled local areas. 50/ The services to be provided included fire protection, sewerage, water supply, refuse collection, public health and hospital services. Most recently the continued increase in local governmental complexity and needs has produced the special district. The special district has been stimulated by state regulation upon the financial powers of the county and municipality. Special districts do not have property taxing power, but they do have the power to impose benefit charges or special assessments, as well as to borrow money and the power to receive grants.

72. Although there is no reference in the constitution to planning, the national government has nevertheless produced a map of programmes that have had revolutionary effect upon the scope and context of land planning. Federalism

49/ Ibid., pp. 324-325.

50/ Ibid., p. 325.

has been redefined as a result of the rapid growth in urban population and the inadequacy of state and local responses to the problems. 51/ Cities have been rebuffed by rural legislatures and have therefore gone directly to the national government for support. The greatest need in the governmental framework of the United States is to mutually reinforce efforts involving all three levels of government: local, state and national. Creative federalism must redefine the working relationships between governmental jurisdictions. There is no longer a domain for the national government, a sector for the states or a place for the municipality independent of other levels. Rather there exists a mutually interdependent relationship among all levels. New levels of involvement require not a single frame of reference but an entire pyramid of planning jurisdiction and policy. Local self-determination with planning that stops on a map at city limits is outmoded.

73. The state in the federal system of government is the father of the municipality and all other jurisdictions in its boundaries. 52/ The city derives its power, as outlined earlier, from state authorization through enabling legislation. Previously this power was confined to controls over zoning, subdivision and the official maps. Now state enabling legislation extends to urban development, transportation, low-income housing, and industrial development.

74. Since 1930 major trends in planning have produced a set of ideas that challenge the effective guidance of urban development by accommodating more extensive public interest claims on private actions and presenting more alternatives to traditional zoning and subdivisions. 53/ Planning by states has not received attention, but states have authorized more power to local planning. The United States governmental structure has become archaic, in several ways. Much attention has been given to regionalization or shifts in services but little attention has been given to basic structure. Local government has inherited several weaknesses making it unable to deal effectively with many of its problems. The unevenness of the tax base among different local governments produces wide variations in local fiscal capacity. Difficulties in co-ordinating public services and diffused government responsibilities are other structural weaknesses in the current urban government.

75. In Canada, the lack of financial assistance or reallocation of tax sources to metropolitan areas is causing great hardship in many urban areas. The particular and strong reliance on the property tax (to be more fully discussed in chapter VI) and the exclusion of a diversification of other tax sources has weakened the financial position of many localities.

76. Recent refinements of regulatory techniques. Land-use control concerns the creation of a governmental framework in which the legitimate choices of people can be effectively formulated into public policy and be translated into reality. All levels of government play significant roles in guiding urban development. In order to determine which level of government should be assigned the responsibility for urban development and land-use controls the question of

51/ William I. Goodman, ed., Principles and Practices of Urban Planning (Chicago, International City Managers' Association, 1968), p. 29.

52/ Ibid., p. 36.

53/ Ibid., p. 28.

responsiveness and power must be asked. Land-use control is almost entirely expressed in enabling acts delegating responsibility to local governments and in the decisions of state courts in the United States and to local governments and provincial governments in Canada. The governmental framework for guiding development presently consists of zoning and subdivision as the chief regulatory tools used by local government in both countries.

77. Although today's regulations still resemble those of the 1920s, many show marked differences. ^{54/} Regulatory techniques have been refined and standards have been raised. It is now accepted that regulations should be part of a process to guide development affirmatively toward the desired public objectives. Techniques and objectives have been adapted to changes in the process of city planning itself. Some examples of the refinement of regulatory techniques in the United States are the specification of permitted uses by listing all uses permitted in a district and prohibiting all others, non-cumulative regulations which attempt to eliminate the old zoning set of use pyramids and the creation of more districts and more subjects regulated including landscaping and screening materials. In recent years many communities in the United States have amended their zoning regulations to require larger lot sizes for a variety of reasons. Predominant among them are no doubt the desire on the part of some communities to prevent developments for as long as possible. In other cases it may be to prevent people of low and moderate income to seek location in their communities, and in still others the desire to raise development quality. Other changes in zoning regulations from the earlier period is the "wait and see approach" or "planned unit development". This in essence implies that a municipality places increasing reliance on discretionary public review of development proposals shortly before development occurs. Another device becoming more widespread is that of the "conditional use" or "special permit use" which allows a developer a tentative use only if he is able to comply and satisfy various standards. These latter regulations are not significantly reflected in Canadian legislation.

78. If properly applied, many of the above refinements and changes to the earlier zoning regulations can combine both zoning and subdivision control into a single administrative process. This could well provide a hallmark of land-use control mechanisms and administrative machinery which cannot be achieved by local public action alone, particularly given the nature of land-use needs.

^{54/} Building the American City, Report of the National Commission on Urban Problems to the Congress and President of the United States (Washington, D.C., United States Government Printing Office, 1968), p. 205.

III. SOCIAL AND ECONOMIC ASPECTS OF URBANIZATION

Urbanization trends in North America

79. Historical growth of United States population In order to understand fully the rate of growth of the many urban areas in the United States and their particular land needs and land-use, the problem may best first be approached from the broad perspective of national and regional growth. The population of the United States reached 200 million in November 1967, according to the Bureau of the Census calculation, and is projected to grow by 101 million over the next 30 years (1970-2000). At this rate, the United States population will double to 400 million by approximately the year 2036. This rate of increase will be the slowest in the nation's history (see table 1).

80. Experience in both North America and Europe indicates that a general correlation exists between increasing urbanization and reduction in population growth rates. Moreover, recent United States data on fertility and numbers of children reveal a significant differential between metropolitan and non-metropolitan areas for each 1,000 white women, between the ages of 25-29, there was 8 per cent more children under five years of age. ^{55/} Experience has shown, however, that many factors govern population growth rates. What can be predicted with a somewhat greater degree of certainty is the relative growth rate of urban regions in the United States or future geographic population patterns.

81. Regional and metropolitan growth in the United States ^{56/} In the year 1900 the north contained 62 per cent of the population; the south 28 per cent; and the west 6 per cent (see figure I). By 1968, a number of proportional regional shifts had been made resulting in a distribution of population to: north, 52 per cent, south, 31 per cent and west, 17 per cent. It is projected that the west and south will continue on a relatively rapid growth rate and by the year 2000 they will contain 22 and 26 per cent of the nation's population respectively, with the north containing 52 per cent. ^{57/}

^{55/} Population Characteristics (Series P. 20, No. 184), "Women by number of own children under 5 years old, 1968 and 1967" (Washington, United States Bureau of the Census, 16 June 1969).

^{56/} It should be noted that the regional population growth rate of the United States only considers the conterminous land areas or the 48 states and the District of Columbia. Alaska and Hawaii, admitted to the nation as states in 1959, are geographically separated from the mainland and therefore not included.

^{57/} This author wishes to acknowledge indebtedness to J. P. Pickard, "Trends and Projections of Future Population Growth in the United States, with Special Data on Large Urban Regions and Major Metropolitan Areas, For the Period 1970-2000", Technical Paper No. 4, presented to the Ad Hoc Subcommittee on Urban Growth, Committee on Banking and Currency, United States House of Representatives (Washington, D. C., 22 July 1969), for much of the data and information contained in this study under the headings, Regional and Metropolitan Growth and New Community Development in the United States.

Table 1. Doubling period of United States population, 1805-2036, showing mean annual growth rate a/

<u>Year</u>	<u>Total population</u> (millions)	<u>Doubling period</u> (years)	<u>Annual growth rate</u> (per cent)
1805	6.25		
1829	12.5	24	3.0
1852	25	23	3.0
1880	50	28	2.5
1915	100	35	2.0
1967	200	52	1.3

Projection:			
2036 <u>+</u>	400	69	1.0

a/ Table 1 from Jerome P. Pickard "Trends and Projections of Future Population Growth in the United States, with Special Data on Large Urban Regions and Major Metropolitan Areas, For the Period 1970-2000", Technical Paper No. 4, Presented to the Ad Hoc Subcommittee on Urban Growth, Committee on Banking and Currency, U. S. House of Representatives (Washington, D. C., 22 July 1969). Derived from U. S. Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1957, Table, Series A 1-3, "Estimated Population of the United States: 1790 to 1957" (Washington, D. C., United States Government Printing Office, 1960), p. 7.

82. Twelve large urban regions will dominate the nation by the year 2000 ranging in size from 3 to 126 million population (see figure II). These regions will contain about 70 per cent of the total United States population on 10 per cent of the conterminous land area (see table 2). All of these urban regions are projected to gain population over the next 30 years but it should be kept in mind that more than one third of all counties in the United States showed population decreases for the period 1960-1966. Thus, population changes for major regions in the country (north, south and west) represent the net difference between areas of population growth and population decline. The 12 urban regions, on the other hand, will account for approximately 85 per cent of the entire net increase in the nation. Nevertheless, within these large urban regions, individual metropolitan areas may well experience substantially different amounts of growth. The Los Angeles-Orange-Ventura Counties are projected to grow by 11.6 million population whereas the Pittsburgh area is projected to grow by only 0.2 million (see annex I, table 22). The seven large metropolitan area complexes, New York, Los Angeles, Chicago, San Francisco Bay, Detroit, Miami, and Washington, will each increase their population by at least 3 million by the year 2000 and will account for over one third of the net population growth.

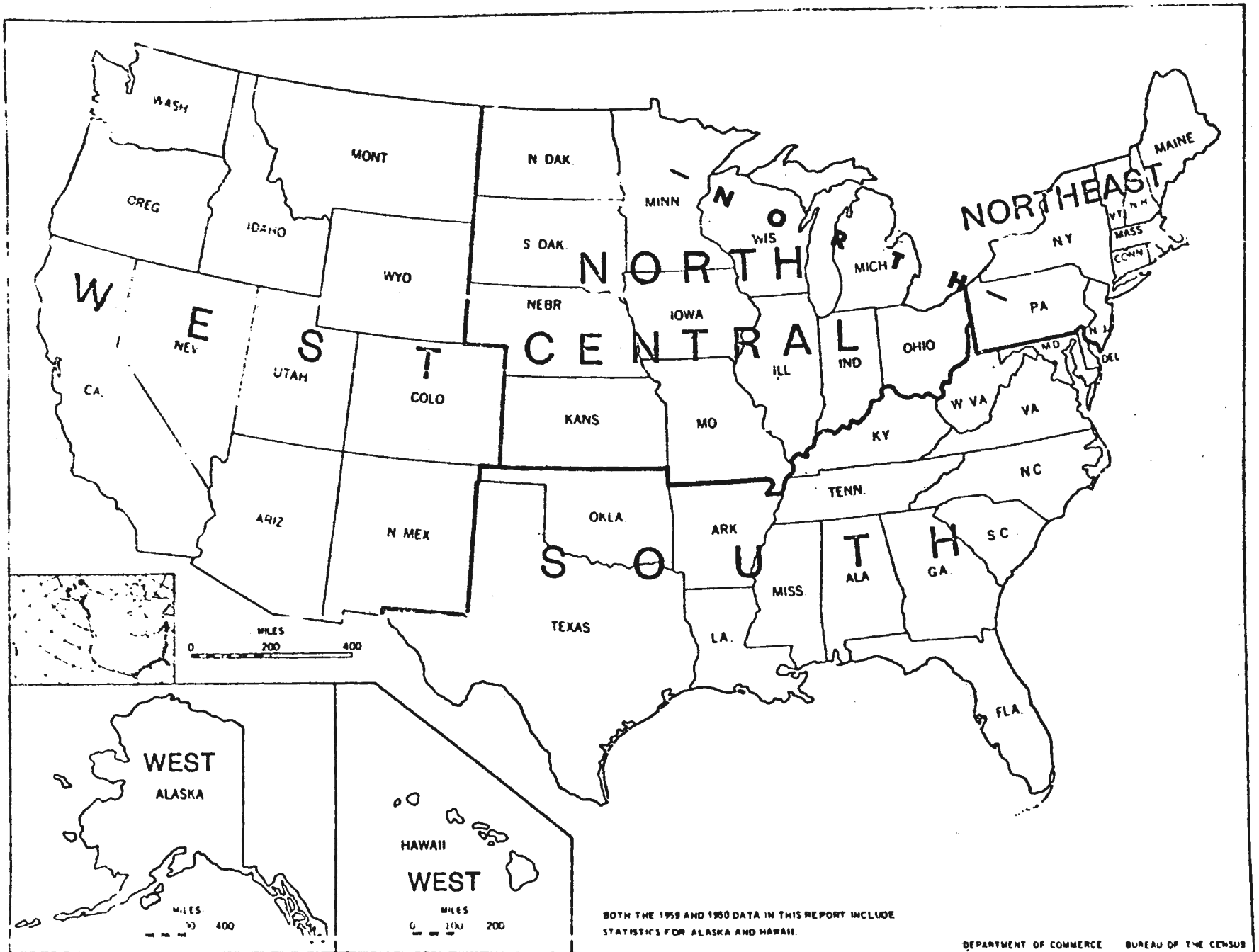


Figure I. Regions of the United States of America

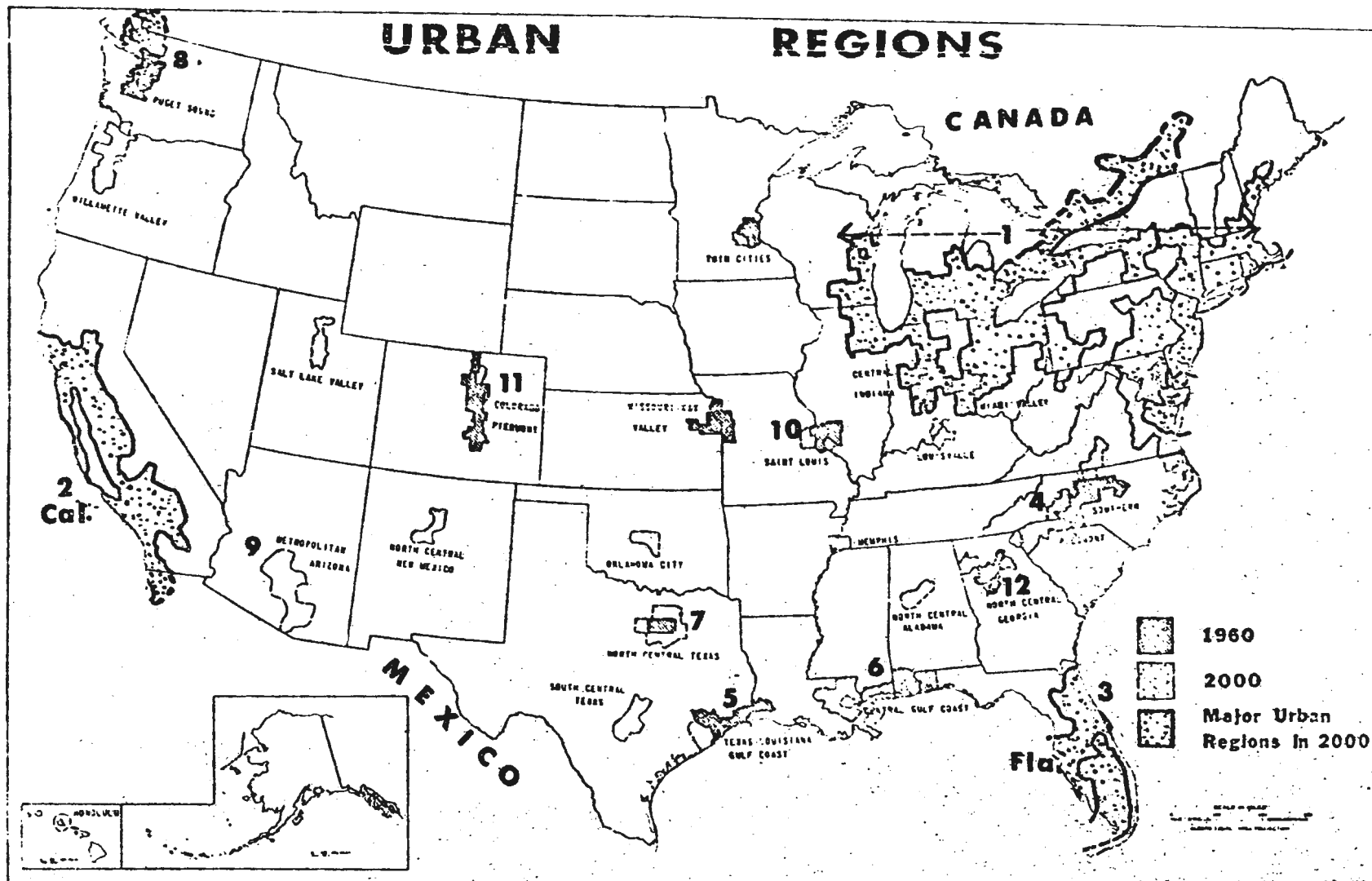


Figure II. Urban Regions, 2000. The three major urban region zones are shown in stippled shading.

Outlying urban regions in 1960 are shown for comparison. Source: J. P. Pickard, Dimensions of Metropolitanism by Urban Land Institute (Washington, D.C., 1967), and from J. P. Pickard, Trends and Projections... (see table 1).

The 12 future large urban regions of 2000 are numbered in order of their population size. Two of these are in the north; six in the south and four in the west. The metropolitan belt is projected to contain 126 million people in the United States and 14 million in Canada in 2000.

Table 2. Population of large urban regions of the United States, 2000 (projected), showing land area and population density

<u>Urban region</u>	<u>Land area (sq. mi.)</u>	<u>2000 Population (000)</u>	<u>2000 Population density</u>
Metropolitan belt	159,500	126,500	790
Atlantic seaboard	65,000	67,400	1,040
Lower Great Lakes	94,500	59,100	625
California	48,000	42,500	880
Peninsular Florida	20,300	13,000	640
Southern Piedmont	14,500	5,200	360
Texas-Louisiana Gulf coast	6,500	4,900	750
Central Gulf coast	11,700	4,700	400
North central Texas	7,000	4,200	600
Puget Sound	6,300	3,800	600
Metropolitan Arizona	14,200	3,550	250
St. Louis	4,700	3,500	745
Colorado Piedmont	6,700	3,200	480
North central Georgia	<u>5,000</u>	<u>3,100</u>	<u>620</u>
Total, 12 urban regions	<u>304,400</u>	<u>218,150</u>	<u>715</u>
Balance of Conterminous United States	2,655,600	86,500	33
Conterminous United States	<u>2,960,000</u>	<u>304,600</u>	<u>103</u>

Source: Basic data and projections from J. P. Pickard Dimensions of Metropolitanism, Urban Land Institute, 1967/68 and unpublished file materials. Data published in Dimensions have been revised to reflect actual population trends through 1 July 1966, and to conform to more recent United States population projections.

83. The population growth that has been experienced by many of the large United States metropolises is a world-wide phenomenon which has existed in some areas for almost the past two centuries with the advent of the industrial revolution. More recently in the United States, as in North America in general, the widespread use of motor vehicles has tended to cause many metropolises to spread horizontally at an excessively rapid rate. Within the 50 year span, 1920-1970, the seven large metropolitan area complexes in the United States mentioned above, increased their geographic extent by 5,000 square miles growing from 2,000 to 9,000 square miles in area. According to various growth projections, these metropolitan area complexes will double during the next 30 years to approximately 18,000 square miles. The New York and Los Angeles regions will contain urbanized areas of approximately 5,000 square miles each; Chicago and the San Francisco Bay area are each estimated to grow to 2,000 square miles while the Detroit, south-east Florida and Washington areas will range from 1,200 to 1,700 square miles each. Moreover, several other metropolises will surpass the 1,000 square miles by the year 2000 (see annex I, table 23).

84. Historical growth of Canadian population Significant urban development in Canada began about the first quarter of the nineteenth century and by 1851, 7 per cent of Canada's population was concentrated in cities of 20,000 and over. Montreal had a population of more than 50,000 and Quebec and Toronto of more than 30,000 people. ^{58/} During this period the percentage of world population living in cities of 20,000 or more was below 5 per cent. ^{59/} Thus, Canada, just prior to its period of rapid urbanization increases (between 1871 and 1885) had already reached a higher level of urbanization than the world average.

85. A little more than a century later, Canada ranked among the world's most highly urbanized countries. The United Nations Economic and Social Council Report, 1965, placed Canada among the top 20 of some 100 countries in levels of urbanization. And today, together with the United States, Canada forms one of the three most highly urbanized regions in the world.

86. Around 1961, the levels of urbanization of Canada and the United States were very similar, about 70 per cent in both countries. However, in terms of the percentage of population in urban agglomerations of 20,000 or more, the United States leads Canada. Roughly 57 per cent of the conterminous population of the United States resides in urban agglomerations of 20,000 as compared to Canada's 52 per cent for the years 1960-1961, but this gap has been fast diminishing since 1921. ^{60/} The percentage of population in urban agglomerations of 100,000 and over was higher in Canada in 1961 than for the United States (see figure I). In

^{58/} Leroy O. Store, Urban Development in Canada (Dominion Bureau of Statistics, 1967, pp. 14-15.

^{59/} See Kingsley Davis, "The Origin and Growth of Urbanization in the World", American Journal of Sociology, 60 (March 1955), pp. 429-437.

^{60/} Leroy O. Store, Urban Development in Canada (Ottawa, Canada, Dominion Bureau of Statistics, 1967), p. 16.

comparison to less than 30 per cent for the United States in 1960, Canada registered approximately 33 per cent of its population in urban agglomerations of 100,000 and over in 1961. Whereas the United States led Canada in this respect in 1870 by roughly 11 per cent versus 3 per cent for Canada. Thus, Canada, during the present century has been urbanizing into large agglomerations of 100,000 and more population at an even faster rate than the United States.

87. Since colonial times, Canadian settlements have shown a marked tendency towards urban concentrations and now, although the territory covers 3.8 million square miles, most of the population concentrations in the country live in a narrow strip approximately 200 miles wide along the United States border. Looked at another way, approximately 75 per cent of the population lives on less than 1 per cent of Canada's land area and two thirds of the entire population inhabit a few large urban centres. 61/

88. Regional and metropolitan growth in Canada Canadian urbanization concentrated in five specific areas which were brought about by forces both external and internal to it. Shifts in the commodity structure of demand on the world market and technological changes have been partly responsible for urban concentrations. Also, shifts in the structure of demand and decisions by political authorities which influence the structure of demand and the supply of economic goods and services have caused concentrations of Canadian populations at specific locations.

89. Canadian take-off towards high levels of urbanization occurred during the 10-15 years following confederation in 1867 and historical advances in Canadian urbanization since this period may be seen as a result of industrialization. The demographic process of migration has been important as an underlying force in the urbanization of various areas in the country since the most fertile segments of the population have moved from the farm to urban and suburban areas.

90. The high degree of Canadian urbanization in 1961 was not evenly distributed but was accompanied by marked variations among Canadian regions (see figure III). The country may be divided into five major regions: (1) The Maritimes which includes Newfoundland, New Brunswick, Prince Edward Island and Nova Scotia; (2) Quebec; (3) Ontario; (4) The Prairies which includes Manitoba, Saskatchewan and Alberta and (5) British Columbia. In table 3 a marked difference in regional distribution of the population since 1941 may be observed. The Maritimes is the least populated and has been the slowest in growth rate in the country, followed by the Prairies. These areas have also shown negative net migration rates for the periods 1951-1961 and 1961-1966 with the exception of Alberta during the 1951-1961 period. In contrast to these figures, the provinces of Quebec, Ontario, and British Columbia have shown remarkable gains through internal migration and all indications point to continued future population increases through migration to these rich provinces. In looking at Canada's over-all rate of growth, as well as that of its leading provinces, a decrease can be seen for each census period after 1951. However, Canada's average annual growth rate of urban population during the sixties was 4.1 per cent compared to only 2.7 per cent for the United States, 2.5 per cent for Sweden and 2.2 per cent for the Federal Republic of Germany. 62/

61/ Rowland Gow, "The effectiveness of metropolitan planning in Canada", Unpublished major paper (Madison, Wisconsin, University of Wisconsin, May 1969), p. 1.

62/ Ibid., p. 3.

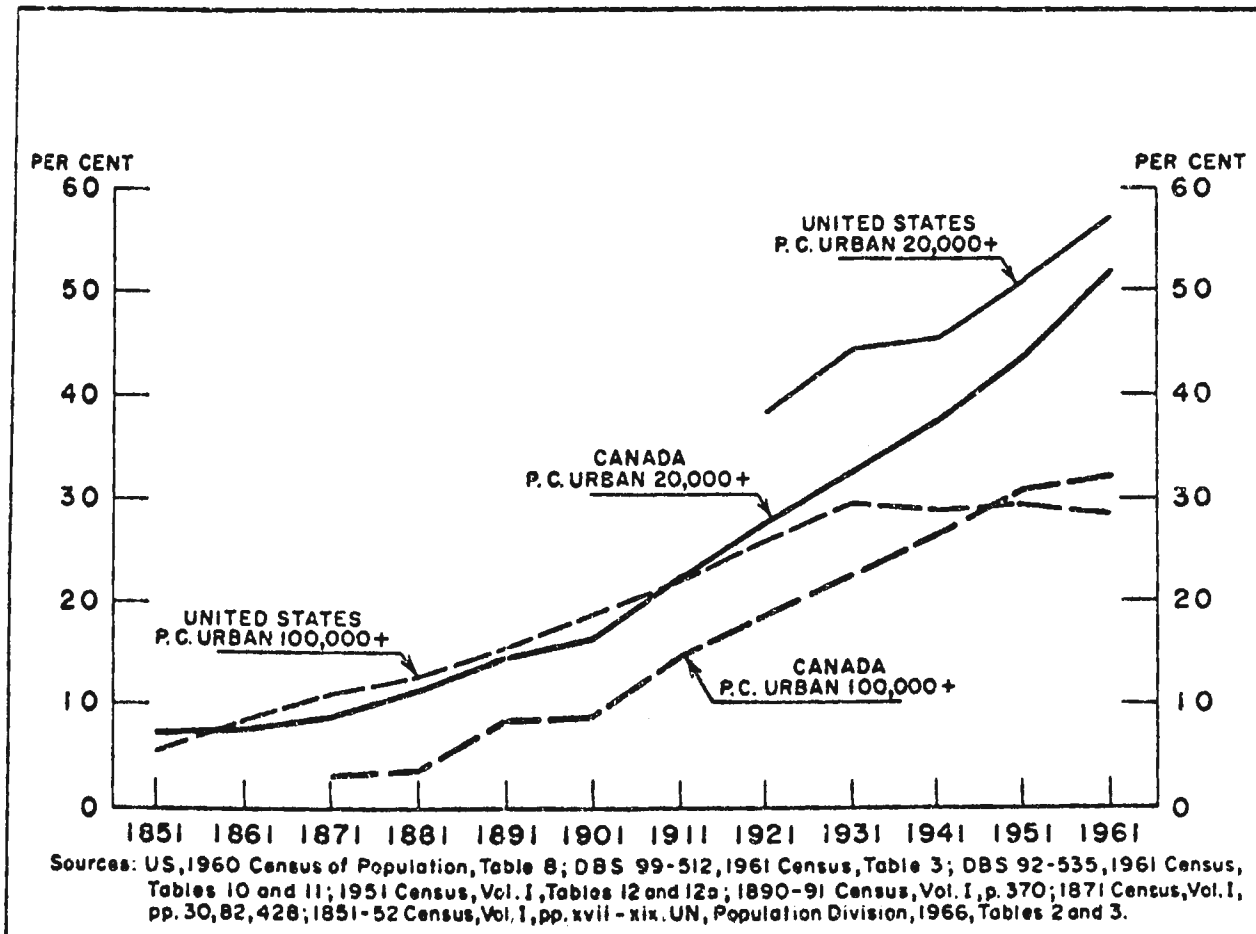


Figure III. Percentage of population in urban agglomerations of 20,000 and over and of 100,000 and over, Canada and the United States, a/ 1851-1961.

a/ Before 1941 the Canadian and United States figures are for incorporated centres only. Since 1941 these figures include unincorporated urban centres and urbanized fringes of cities. The United States data refer to the conterminous United States, and to years ending in zero.

Source: Leroy O. Stone, Urban Development in Canada (Ottawa, Canada, Dominion Bureau of Census, 1967), Chart 2.1, p. 16.

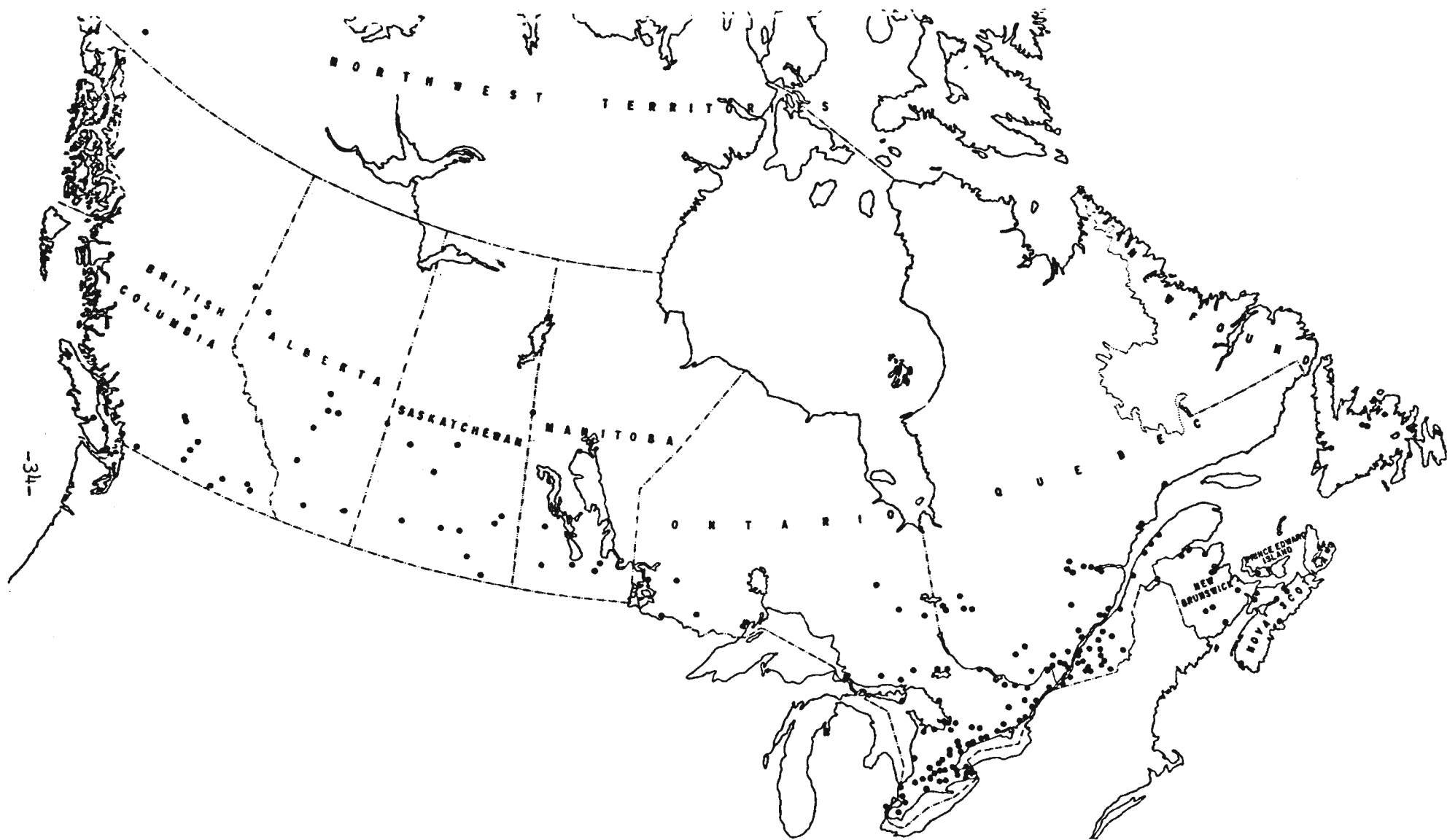


Figure IV. Distribution of urban centres of 5,000 and over,
Canada, 1871 to 1961

Source: Leroy O. Stone, Urban Development in Canada (Ottawa, Canada, Dominion Bureau of Statistics, 1967),
Map 1, p. 24n.

Table 3. Population and its components, Canada and the provinces

Unit	Population and change from the preceding census*										Natural Increase and Net Migration** x 1,000			
	1941		1951		1956		1961		1966		1951-1961		1961-1966	
	Pop.x 1,000	Percent- age	Pop.x 1,000	Percent- age	Pop.x 1,000	Percent- age	Pop.x 1,000	Percent- age	Pop.x 1,000	Percent- age	N.I.	Mig.	N.I.	Mig.
Newfoundland	303	na.	361	19.1	415	14.8	458	10.3	493	7.8	110	-15	36	-24
Prince Edward Is.	95	8.0	98	3.6	99	0.9	105	5.4	109	3.7	18	-11	4	-5
Nova Scotia	578	12.7	643	11.2	695	8.1	737	6.1	756	2.6	128	-34	19	-40
New Brunswick	457	12.0	516	12.7	555	7.5	598	7.8	617	3.2	119	-37	19	-34
Quebec	3,332	15.9	4,056	21.7	4,628	14.1	5,259	13.6	5,781	9.9	998	+205	522	+63
Ontario	3,788	10.4	4,598	21.4	5,405	17.6	6,236	15.4	6,961	11.6	953	+685	725	+237
Manitoba	730	4.2	777	6.4	850	9.5	922	8.4	963	4.5	150	-5	41	-29
Saskatchewan	896	-2.8	832	-7.2	881	5.9	925	5.1	955	3.3	172	-79	30	-46
Alberta	796	8.8	940	18.0	1,123	19.5	1,332	18.6	1,463	9.9	265	+127	131	-3
British Columbia	818	17.8	1,165	42.5	1,398	20.0	1,629	16.5	1,874	15.0	224	+240	245	+140
Canada	11,810	10.9	14,009	21.8	16,081	14.8	18,238	13.4	20,015	9.3	3,148	+1,801	1,777	+259

Source: Canada Year Book, 1968, * page 191, ** page 192. From Rowland Gow, "The Effectiveness of Metropolitan Planning in Canada" unpublished major paper (University of Wisconsin, Department of Urban and Regional Planning, May 1969), p. 2.

91. The metropolitan areas of Canada are dominated by Toronto and Montreal (see table 4). The City of Toronto is, nevertheless, experiencing a decrease in central city population, while its metropolitan and fringe areas are undergoing fairly rapid population increases.

92. A Census Metropolitan Area (CMA) is defined by the Dominion Bureau of Statistics as an area containing about 100,000 plus people with a central city of at least 50,000 (see description chapter II). ^{63/} In 1961, 17 areas in Canada met the criteria for CMA's and in 1966, they contained 8.1 per cent of the entire population of the nation. The CMA's are growing faster than the rest of Canada and are experiencing a very rapid urbanization of population (see annex I, table 24).

General urban land requirements

93. The situation in the United States Unprecedented changes have occurred in the United States in its largest cities subsequent to 1945. A high birth rate and the rapid urbanization process has caused a tremendous growth of metropolitan areas throughout the country. Nevertheless, most of this growth has occurred in the suburbs and not in central cities. During the 1950-1960 period, 12 of the largest cities in the United States actually declined in population and many have also lost certain amounts of employment during more recent years. According to the Davidoffs and Gold, over the last two decades, "80 per cent of the new jobs created in the nation's large metropolitan areas have been located in their suburban rings. The central cities of these metropolitan areas have not only failed to win a significant share of new urban employment, but, in some cases, they have experienced a net outflow of jobs." ^{64/} The future prospects of many of the nation's largest cities, therefore, appears to be somewhat in doubt. The availability of land, particularly for residential uses, is a scarce commodity in many of them and the suburbanization trend gives no indication of tapering off. On the contrary, the scarcity and high costs of urban land appear to be a dominant force in the mushrooming growth of the metropolitan areas on one hand and the population and employment declines of many large centre cities on the other hand.

94. Furthermore, it is estimated that nearly all of the population increases which the United States will experience by the year 2000 (100 million additional persons) will be housed in the suburbs. Little, if any, additional growth will be experienced by the nation's largest centre cities. In fact, for some, there will be considerable population outflow to suburban rings which have had the greatest share of all new housing starts over the past decade. The average growth for the suburbs during the 1960s stood at 70 per cent, an increase of 10 per cent over the preceding decade and nearly 80 per cent of new residential construction is taking place outside the centre cities of St. Louis, Philadelphia, Detroit, the District of Columbia, Cleveland, Boston and Baltimore. ^{65/}

^{63/} Also see Leroy O. Store, *Urban Development in Canada* (Ottawa, Canada, Dominion Bureau of Statistics, 1967), p. 231.

^{64/} Paul and Linda Davidoff and Neil Newton Gold, "Suburban Action: Advocate Planning for an Open Society", *Journal of the American Institute of Planners*, Volume XXXVI, Number 1 (January 1970), p. 13.

^{65/} *Ibid.*, p. 13.

Table 4. Population in metropolitan areas
and percentage changes

Area	Population (thousands)			Percentage increase	Estimates (thousands)			Percentage increase	
	1956	1961	1966	1961- 1966	1967	1968	1969	1967- 1968	1968- 1969
Edmonton	255	337	401	18.9	412	425	437	3.1	3.0
Halifax	164	184	198	7.7	201	203	204	0.7	0.3
London	154	181	207	14.4	215	220	224	2.3	1.8
Montreal	1,745	2,110	2,437	15.5	2,489	2,527	2,553	1.5	1.0
Ottawa	345	430	495	15.1	508	510	527	1.8	1.7
Quebec	312	358	413	15.6	419	424	430	1.0	1.4
St. John	86	95	101	5.9	101	102	101	1.5	-0.8
Sudbury	98	111	117	5.7	118	120	122	1.4	2.0
Toronto	1,502	1,825	2,159	18.3	2,233	2,280	2,316	2.1	1.6
Vancouver	665	790	892	12.9	923	955	980	3.4	2.6
Victoria	134	154	173	12.5	177	182	184	2.6	1.6
Winnipeg	412	477	509	6.8	514	523	534	1.7	2.2
Canada*	6,968	8,374	9,634	10.0	9,891	-	-	-	-

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics 1967, p. 197 and from D. B. S. Weekly (13 March 1970).

* Only the sample cities are described, but the Canada total is for all the Census Metropolitan Areas.

95. In order to fully understand the changes which have and are occurring in the location of populations and the land demands which they are making and may be expected to make for residences and other services, an examination of the Niedercorn-Hearle Memorandum would be very beneficial. ^{66/} This memorandum examines in detail land-use patterns in 48 of the largest cities in the United States. It looks at changes over time in terms of the proportion of urban land devoted to different types of uses. It also examines changes taking place in a sample of 22 and of 12 cities during recent years by looking at densities for resident population and manufacturing and commercial employment. In addition, the memorandum attempts to determine the relationship between amounts of urban land brought into use by unit increases in population and manufacturing and commercial employment (see annex I, table 25 which lists the major cities under examination in the memorandum).

^{66/} See John H. Niedercorn and Edward F. R. Hearle, "Recent Land-Use Trends in Forty-Eight Large American Cities", Memorandum RM-3664-1-FF (The Rand Corporation, Santa Monica, California) (September 1963).

96. An examination of the data supplied from the 22 cities comparing each of them at two different points in time ("early data" calculated from early land-use surveys and "late data" from the most recent years) shows that both residential and other public land uses have increased. This is true in terms of both total area and total developed land in the 22 cities (see annex I, table 26). Industrial and commercial land have remained at approximately the same if we consider their proportion to total land. However, both have declined if they are considered in proportion to developed land. The amount of land devoted to roads and highways has also decreased both as a proportion of total land area and as a proportion of developed land, whereas other public uses have increased. Interestingly, the relative amounts of vacant land have decreased regardless of the fact that 10 of the 22 cities examined in the Niedercorn-Hearle Memorandum made substantial annexations during the time periods under study (table 27 in annex I deletes these 10 cities from the study). Except for commercial use, all other land-use categories increased their proportion of total land devoted to a particular land-use, the largest increase being residential followed by public uses. The proportion of the total area which remained vacant decreased. As a proportion of developed land all categories of land-use remained fairly constant from early data to late data.

97. Thus, it may be concluded that since land in the central cities is disappearing very rapidly, the question of how intense central city land can or will be put to use becomes an all important question. An examination of the data of samples from 22 and 12 cities (see annex I, table 28) reveals that average densities for all types of land-use declined with the exception of commercial land in those cities in which the land base has remained fairly constant over time. For the 22 city sample, residential densities showed the greatest decline. This decline was followed by industrial and commercial land-uses. In those cities with a constant land base, the industrial densities have shown the greatest decline. And as mentioned previously, commercial densities increased slightly. According to the memorandum, these findings are indicative of the fact that many cities have either attained their maximum levels of population and industrial employment or will do so in the very near future. There is thus a strong trend toward lower population and manufacturing densities in the future. Commercial densities, on the other hand, may continue to exhibit high density centres.

98. Another important factor directly related to future land requirements is that of land-absorption coefficients. Estimates of the land-absorption coefficients of 22 cities which relate increases in population and employment to increases in developed land are made in annex I, table 29. The land-absorption coefficient may be defined as the amount of land (measured in acres) which would be brought into urban use by an increase of population or employment of one person. This table indicates that all of the regression coefficients are highly significant statistically since changes in population, manufacturing employment and commercial employment account for high proportions of each land-use category variance. Only the road and highway system indicates a low proportion of variance. This may be accounted for by the fact that the road system was built many years ago and they are thus not affected greatly by population changes. (Tables 30 and 31, annex I show acres of land in 30 large American cities by broad use category and as a percentage of total land area, net data.)

99. The Niedercorn-Hearle Memorandum clearly indicates that vacant land in the larger American cities is rapidly disappearing and that net population and

manufacturing densities are decreasing. Underlying this decrease of population and jobs density in the centre city is the availability of a relatively vast supply of vacant land on the peripheries of most of the nation's largest cities and metropolitan areas. Accordingly, it has been estimated that 99 per cent of the vacant land in the nation's 20 largest urban areas lies outside of the core cities. ^{67/} Furthermore, the Niedercorn-Hearle data concerning the net amount of usable land in some central cities may be overestimated. According to Gold and Davidoff, "In Newark, New Jersey, for example, the 2,400 acres said to be vacant in 1960 are not easily developed marshlands, as are more than 70 per cent of the 3,568 acres said to be vacant in San Francisco in 1948. In New York City, the supply of vacant land includes land partially and even entirely under water. Jamaica Bay, in the Borough of Queens, much of which is below ground level, is also included as part of the City's vacant land supply." ^{68/} These further refinements would appear to indicate that even less land is available in many central cities than that reported by Niedercorn and Hearle. Also, the memorandum fails to distinguish between residentially and non-residentially zoned areas. Both are grouped together which would tend to distort the total amounts of lands available for housing, the largest user of urban land.

100. Gold and Davidoff have looked at the land requirements which would be necessary under varying assumptions to house 6 million new low and moderate income families over the next 10 years. In addition to land needs for the residents themselves, acreage would also be needed for supporting facilities such as streets, community facilities, commercial facilities etc. (see annex I, tables 26 and 27). Viewing the need of simply housing all 6 million new families in centre cities, a total of 3.5 million acres would be needed which according to Gold and Davidoff is "more than six times the amount of land annually brought into urban use in the country as a whole". ^{69/} In addition, if land needs of middle and upper income units are added to this figure based upon 20 million units needed over the next 10 years, there will be a call for approximately 11 million acres, thus resulting in very keen competition for an exceedingly limited urban land base.

101. The Canadian Situation Canada is very similar to the United States in land area and 80 per cent of its population is also urban. Within the next decade approximately 81 per cent of the Canadian population will be urbanized and 60 per cent of the population will live in 29 large urban areas. As migration to the larger cities continues, it is estimated that the provinces of Quebec and

^{67/} See P. and L. Davidoff and N. Gold, "Suburban Action: Advocate Planning for an Open Society", Journal of the American Institute of Planners, vol. 36, p. 13. See also, Neil N. Gold and Paul Davidoff, "The Supply and Availability of Land for Housing for Low- and Moderate-Income Families", The Report of the President's Committee on Urban Housing, Technical Studies, Volume II, Washington, D.C. (United States Government Printing Office, 1968), pp. 322-347.

^{68/} Ibid., p. 326.

^{69/} Ibid., p. 318. This figure was arrived at by assuming an average household size of 3.5 persons for each of the required 6 million new low and moderate income households. The total population would be 21 million, and at a rate of six persons to every one acre of developed land 3.5 million acres would be needed.

Ontario will be 80 per cent urbanized well before 1980. Indications are that 500,000 acres of new land will be suburbanized by the 1980s. Rising land and housing costs (see chapter V) will be part of the price that consumers will have to pay. However, unlike the United States, Canada's population is much more concentrated in a few economic regions. Half of Canada's 20 million people live in metropolitan areas and 5 million live in the three largest centres - Montreal, Toronto and Vancouver. The emerging problems and trends which these regions face are very similar to rapidly growing regions in the United States.

102. The vast Montreal region is only about 6 per cent urbanized but the urbanized part of the territory absorbs approximately 95 per cent of the population of the entire region. There were 124,000 acres of urbanized land in the region in 1961 of which 79 per cent was located in the metropolitan area which itself is only 31 per cent urbanized. There is an increasingly important amount of new urban growth taking place beyond Montreal's metropolitan area. Between 1952 and 1961 a 12 per cent increase in the entire amount of new urbanized land took place in the suburban area just outside of the metropolitan area. This proportion increased to 24 per cent for the 1961-1964 period. 70/

103. The population of the Toronto-centred region is expected to reach 8 million by the year 2000 compared with 3.6 million in 1966. This growth will mainly take place towards the west and south-west with only a modest growth to the north and east. The suburbanizing trend is taking place westward where sizeable quantities of land are prematurely being removed from agricultural and recreational use. These lands are being put into low density residential use and are also being held for speculation.

104. It has been estimated that out of the nearly 8 million people in the Toronto-centred region by the year 2000, 5.7 million or 71 per cent will locate on or near the lakeshore. It will be necessary to develop an urbanized zone therefore from Bowmanville to Hamilton as a two-tiered arrangement of cities separated by a parkway belt of open space with mainly non-urban uses, but having high performance inter-urban transportation facilities. 71/

105. Regional development of the Toronto-centred region must consider its international, national, and provincial context. The region plays an important role in the north-eastern quadrant of North America and is strongly influenced by surrounding major metropolitan centres of north-east America - New York, Boston, Detroit, Chicago, St. Louis and Montreal. There exists a market of 90 million people within a 500-mile arc. The region also has strong economic linkages to the Chicago-St. Louis-Cincinnati-Cleveland quadrilateral and to the Montreal and New York seaports. 72/ These linkages have helped to stimulate a development

70/ Montreal City Planning Department, Urbanization, A Study of Urban Expansion in the Montreal Region, Technical Bulletin No. 5 (Montreal, Canada, November 1966), p. 10.

71/ Government of Ontario, Design for Development: The Toronto-Centred Region (1 May 1970), p. 3.

72/ Ibid., p. 4.

corridor between Chicago and Montreal in which the Toronto-centred region is centrally located and of great importance. Today, the region performs a leading manufacturing, financial, and cultural role in Canada. It contains branches of many American firms which produce for the Canadian market. In 1966, the region had 3.6 million of the province's 6.96 million people and the proportion continues to increase.

Land-use and land requirements in selected urban areas

106. Land requirements in six major United States cities In order to understand the character and supply of vacant land in major United States cities, Gold and Davidoff examined conditions in Los Angeles, Chicago, New York, Pittsburgh, Atlanta and San Francisco. Their findings indicate that vacant urban land is a scarce commodity.

107. Los Angeles The city undertook a land-use survey in 1963 and found that 28.7 per cent of the city's total land area was vacant. Furthermore, if it could be assumed that all of the vacant land was suitable and available for development, 45.4 per cent would be used for residential purposes with the remaining going into non-residential uses. And by 1980, it is estimated that perhaps as much as 60 per cent of the city may be developed for residences. ^{73/} Nevertheless, although the percentage of total land zoned for residence may be increasing in Los Angeles, the salient issue of what amounts of population at what densities these areas may house is still an important question. It is highly probable that over 80 per cent of the residentially zoned supply of vacant land will be zoned for single family housing and only 3 per cent will be zoned for seven or more units to the acre if no dramatic changes are experienced from the 1963 land-use distribution. This leaves the city with a small amount of land (less than 20 per cent) available for low- and moderate-income family housing. Since few if any of these families can afford to build single family homes in the city, they depend more upon either the existing housing stock or some form of higher density or multifamily units. ^{74/}

108. In addition, the City of Los Angeles has a severe maldistribution between vacant land and minority racial and ethnic concentrations. Ninety-nine per cent of vacant land in the city is located at considerable distance from areas of Negro and Mexican-American concentration. This problem is further compounded since the Negro

^{73/} Neil Gold and Paul Davidoff, "The supply and availability of land for housing for low and moderate-income families", The report of the President's Committee on Urban Housing, Technical Studies, vol. II (Washington, D.C., U. S. Government Printing Office, 1968). According to these two authors, "The percentage of land used for residential purposes is increasing steadily as higher incomes enable more households to bid for single-family zoned land in the city's outer sections. Between 1960 and 1963 alone, the percentage of land used for residences rose from 36.3 per cent to 45.4 per cent", p. 326.

^{74/} In 1967, the median FHA value of one-family homes in Los Angeles was \$25,000. This would preclude low and moderate-income housing in most of the single-family zoned areas of the city.

and Mexican-American areas of the city contain more than 70 per cent of the substandard housing stock.

109. Chicago A 1963 survey of land-uses in the City of Chicago found that one sixteenth of the total land base was vacant (9,110 acres). However, nearly 75 per cent of this vacant land base was zoned for manufacturing, commercial and business uses and the remaining 25 per cent was zoned residential. In terms of the holding capacity of the vacant residentially zoned land in the city, it is estimated that less than 26,000 units could be accommodated. This is a very small potential in a city which had more than 215,000 substandard units in 1960 and whose population is adding 40,000 new households per year. To make the Chicago situation even worse, not only is the land supply exceedingly small, but its location is mainly in the industrial sections of the city which makes it unattractive for much needed residential use.

110. New York The city conducted a land-use survey in 1959 which presents the most current statistics. Less than 10 per cent of New York's total land base was classified vacant in 1959 of which 20-30 per cent, partially under water, is unsuited for residential development. By boroughs vacant land distributes itself as follows: Bronx 11 per cent; Brooklyn 6.7 per cent; Manhattan 0.3 per cent; Queens 8.6 per cent and Richmond 30 per cent. In 1968, the largest supply of the city's vacant land base remains in Staten Island (Richmond) and to a smaller degree in southern Queens and in northern Bronx. The Borough of Manhattan finds itself in the difficult situation with 253,143 unsound units in 1960 and literally no vacant land to permit the construction of needed replacement housing. An acute imbalance exists between minority groups, particularly Negro and Puerto Rican communities, and areas of vacant lands. Areas for rebuilding for these groups can only come from the demolition of existing structures. The Federal Urban Renewal Program has accounted for 442 acres for redevelopment purposes which have gone into middle- and upper-income housing. Nevertheless, land costs under renewal have been exceedingly high and the extent to which the city can continue to acquire renewal land would appear to be very limited. 75/

111. Pittsburgh The supply of vacant land in Pittsburgh according to Gold and Davidoff is also very limited. They estimated that less than 800 acres were available in 1963 for residential purposes. However, none of this land could be efficiently used for low-income housing since it is primarily located on steep terrain. In 1960, Pittsburgh had 59,000 unsound housing units located near the centre of the city and along the city's three rivers in the same areas in which the bulk of the city's Negro population is housed. Characteristically, none of these areas contain any major amount of available vacant land for residential development. It has been estimated that if only 15,000 low- and moderate-income units were to be built at 1960 density figures of 15 units per acre, 1,000 acres would be needed. 76 Clearly the city of Pittsburgh cannot accommodate this number of new Units on its present available vacant land base. Future growth will of necessity be outside of the city limits.

75/ Neil Gold and Paul Davidoff, op. cit., p. 333. Average land costs under the Federal Urban Renewal Program in New York City have been \$659,000 per acre.

76/ Ibid., p. 333.

112. Atlanta The city of Atlanta conducted an inventory of vacant land in 1965-1966 which showed that 25 per cent of the city's total land base was vacant. Twenty per cent was zoned commercial and industrial while 80 per cent was zoned residential. Moreover, single-family housing was zoned on 93 per cent of the vacant residential area which immediately limits the amounts of low- and moderate-income families which can be housed in the future in the city. Of the remaining 7 per cent of the residential area, zoning is for high-rise, multi-family housing which would also be out of the financial reach of low- and moderate-income families. This leaves a small pittance (less than 1 per cent) of land available for low- and moderate-income families. In 1960 more than 25 per cent of Atlanta's housing stock was unsound (40,000 units). If one quarter of these units were to be built on vacant land at 1960 densities, only 1,000 acres would be needed. This acreage is not available for low- and moderate-cost housing because of the city's zoning regulations.

113. San Francisco According to 1961-1964 statistics, the city had 2,271 acres of vacant land or 6 per cent of the city's land base area. None of this land would be suitable for unsubsidized low- and moderate-cost housing. Moreover, it has been estimated that only approximately 300 acres of all vacant land in the city would be suitable for residential development. If the available vacant land base for housing in the city is compared to condition of structure, the startling urgency for residential land for racial and ethnic minorities becomes very apparent. The city's housing supply is not expanding rapidly enough to accommodate low- and moderate-income household needs with the result that the number of unsound units in the city is increasing. San Francisco lacks the land base to provide for present and future population and housing needs and extensive and costly in-city demolition does not appear to be the answer.

114. It may be stated with a fair degree of certainty that the land problems facing most of the nation's major central cities is represented by the six cases described above, particularly those which do not have annexation powers. The supply of vacant land, especially for residential purposes, has been either exhausted or is fairly close to exhaustion. What may be available, has been almost entirely reserved for upper-middle and upper-income groups. Financial and locational necessity is precluding lower- and moderate-income groups a representative share of the land base in most major central cities in the country. The predominant type of housing being constructed in major central cities is high-rise housing which given relatively high land and construction costs results in housing not suitable to ethnic and racial minorities without some form of substantial subsidy.

115. The Gold and Davidoff study also looked at the supply of suburban land for the cities of Los Angeles, Chicago, New York, Atlanta and San Francisco, particularly with a view towards the availability of such land to house low- and moderate-income groups. Their conclusions are that large tracts of available low-cost land surrounding many centre cities have spurred industrial and commercial development in suburban areas creating jobs at skill levels within the competence of many ill-housed centre-city population groups. Nevertheless, most of these jobs remain either unknown or inaccessible to core area populations. The adoption of restrictive zoning policies in the suburbs, including large lot sizes and high minimum house sizes, makes low- and moderate-income subdivisions activity extremely difficult. As a result, the residential holding capacity of land surrounding many of the major centre cities in the United States has been, and continues to be, substantially reduced. Thus, without some opening up of the entire metropolitan

land base to all forms of housing and price levels, the scarcity of land for racial and ethnic minorities will continue to worsen.

116. Land requirements in two major Canadian metropolitan areas Canadian metropolitan area growth, like its counterpart in the United States, is causing many problems. It is becoming increasingly difficult to supply efficient transportation services to widespread urban populations and strains on municipal tax resources are growing. Other issues rising out of rapid urban development in Canada are those concerned with solid waste disposal, water and air pollution, and the growing need for recreational space. Land and its uses in and around metropolitan areas are of vital concern to urban Canada.

117. Montreal The Montreal region may be divided into a series of concentric belts having their common centre in the downtown area. The results of the first analysis of population movement in the region in 1964 showed that Montreal was undergoing the phenomenon of decentralization. 77/ The rate of urbanization for the Montreal region has averaged 83 acres per 1,000 increase in population with the greatest rapidity of urbanization taking place in the outer belts.

118. The phenomena of urbanization for the period 1952 to 1964 can best be understood by the socio-economic climate in the region during this time. During the earlier 20-year period, from 1932 to 1953, gross population density of the Montreal metropolitan area experienced little population change. 78/ During the period from 1952 to 1955 the population increased by 11 per cent and the amount of land used for urban purposes increased by 15 per cent, much of this occurring in the suburbs. 79/ Several factors are advanced as contributory to the rapid rate of suburban population increase:

77/ The centre of Montreal according to the Urbanization Bulletin No. 5 (Montreal, Montreal City Planning Department, November 1966), p. 13, has been "undergoing an important loss of population and a strong decrease in density of population". (Density is calculated as the number of persons per acre of total land area. Urban density being the number of urban persons per acre of urbanized land.)

According to the report The Wave of Metropolitan Expansion, Technical Bulletin No. 1 (Montreal, Montreal City Planning Department, January 1964), pp. 9-10:

"Population, both in absolute number and as a proportion of the population of the whole region, is diminishing in the central zones."

"The population of the City of Montreal with respect to the population of the Island of Montreal is gradually diminishing. The population of the Island of Montreal with respect to the rest of the inner region is also gradually diminishing."

78/ The population in the metropolitan area dropped from 29 to 28 persons per acre during this period and dropped again to 27 persons per acre in 1955.

79/ These factors produced a rate of urbanization of 50 acres per thousand increase in the population. From 1932 to 1952 the rate of urbanization was only 38. It should be noted, however, that even during the 1952-1955 period, urban expansion was only beginning. By 1955, only 19.3 per cent of the 318,000 acres of the Montreal metropolitan area was being used for urban purposes.

"People seemed to have a preference for single-family houses, which were built in very large numbers in the suburbs;

"Automobile ownership increased;

"The standard of living of the population was higher;

"The central part of the metropolitan area did not offer an equivalent choice of housing." 80/

118a. During the 1955-1958 period, economic expansion was in progress. Credit became easier and the construction of dwelling units increased as banks were permitted to invest in home mortgages guaranteed by government. Land speculation became prominent and by the end of this period very large tracts of land surrounding the metropolitan area were sought and obtained by powerful holding companies. 81/ By 1958, over 23 per cent of the metropolitan area had been urbanized with a gross urban density of 25 persons per acre and a rate of urbanization of 61 acres per thousand.

119. The 1958-1961 period showed a further increase in urban expansion with land in urban use increasing by 33 per cent although population only increased by 12 per cent. Gross population density dropped from 25 persons per acre to 21 and the rate of urbanization increased to 110 acres per thousand.

120. The 1961-1964 period showed a more stable urbanization trend in comparison to the great increases experienced earlier. Population increased by only 8 per cent and the urbanized land area increased by 16 per cent. Density dropped from 21 to 20 persons per acre. This latter period also witnessed a filling of several of the gaps of land-use left in the preceding rapid waves of urbanization.

121. In the analysis of urban expansion for the Montreal metropolitan area for the time period 1952-1964 a very interesting statistic appears - "the rather constant distribution of the urban area among the four categories of land use; the relative importance of each category with respect to the total varied by only a few points". 82/ This can be seen in table 5. Moreover, in reviewing the nature of urban expansion which has taken place, the great importance played by the residential sector becomes very apparent. By far the greatest land consumer has been the residential sector. As mentioned earlier, 80 acres of land on the average was consumed to accommodate each additional 1,000 persons in population. This urbanization was accompanied by an average population density drop from 28 to 20 persons per acre. These trends raise questions such as how much land will be required for future urban development and how rapidly will the region be fully developed if trends are left to continue.

80/ Urbanization, Bulletin No. 5 (Montreal, Canada, Montreal City Planning Department, November 1966), p. 21.

81/ Population expansion during the 1955-1958 period reached drastic proportions causing a serious pressure on the home-building industry. A 12 per cent increase was registered from 1,655,000 to 1,856,000 and the urbanized land area grew from 61,300 acres in 1955 to 73,500 acres, an increase of 20 per cent.

82/ Urbanization, Bulletin No. 5 (Montreal, Montreal City Planning Department, November 1966), p. 28.

122. It is evident that the Montreal region will continue to experience the consumption of increasing amounts of land for urban use. There are two powerful forces at work in this regard - a decreasing tendency in average density over the last 10 years on the one hand and an increasing amount of land used for urban purposes on the other hand. The Montreal region has been proceeding in much the same manner as other large North American urban areas with emphasis on the single-family detached dwelling at very low densities (see annex I, table 32, for a comparison of data). By 1981 it is estimated that the metropolitan population will almost double, reaching 4 million. Under the assumption that most of the development would take place within the metropolitan area, saturation would be reached within the next 20-year period at an average density of 12 persons per acre. 83/

123. Toronto The emerging problems of the Toronto-centred region may be categorized as: "(1) those relating to extensive urbanization; (2) those related to the urban form created by aspects of unstructured sprawl; (3) those related to the inadequate use of districts with high development potential; (4) those related to the lack of provincial integration; (5) those related to the misallocation, misuse and consequent damage to non-renewable regional resources". 84/

124. In particular, the shortage of land for housing is becoming acute and is pricing home ownership beyond the reach of a large portion of the population. Industrial land is also in short supply in some areas. The Toronto-centred region report calls for a well-structured urbanized area along the Lake Ontario shore from Bowmanville to Hamilton. In the peripheral zone, it is recommended that urban areas of reasonably significant size should be developed around existing areas in order to decentralize the high growth of metropolitan Toronto. Within the commuter zone of Toronto, a policy of retaining land for recreation and agricultural open space use is proposed as well as a transportation plan which will articulate the proposed development concept.

125. The population of the metropolitan Toronto area is approximately 2 million persons which is 10 per cent of Canada's total population and 30 per cent of that of the Province of Ontario. Since 1953 the population has increased about

83/ It is not very probable that urbanization will occur exactly this way. Certain parts of metropolitan Montreal will most likely be bypassed and the point of saturation would thus be reached around the year 2000.

84/ Government of Ontario, Design for Development: The Toronto-Centred Region (1 May 1970), p. 12. As part of the presentation of the Toronto-Centred Region report on 5 May 1970, the Honourable W. Darcy McKeough, Minister of Municipal Affairs, called for a partnership between province, municipalities and private sector and the need for strong local government. Municipalities must have capability to recognize problems, establish solutions, carry solutions through to successful implementation. However, according to McKeough, the number of municipalities in the region are unable to perform even the most basic tasks or providing local services. What is needed is local government reform based on three fundamental components: regional government, municipal consolidation, and strengthening of elected municipal council.

Table 5. Distribution of urbanized land, by type of use
Montreal metropolitan area, 1952-1964

	1952		1958		1961		1964	
	Acres	Percent- age	Acres	Percent- age	Acres	Percent- age	Acres	Percent- age
Residence	32,065	60.3	47,353	64.5	62,877	64.5	72,175	63.7
Industry	5,872	11.1	7,497	10.2	9,002	9.2	11,300	10.0
Quasi-urban	5,989	11.3	7,556	10.3	11,819	12.1	13,725	12.1
Other	9,220	17.3	11,051	15.0	13,820	14.2	16,084	14.2
Urbanized area	53,146	100.0	73,457	100.0	97,518	100.0	113,284	100.0

Source: Urbanization, Bulletin No. 5 (Montreal, Canada, Montreal City Planning Department, November 1966), table 5, p. 29.

60 per cent or about 3 per cent per annum, which makes it one of the highest metropolitan growth rates on the continent. 85/

126. The exceedingly rapid rate of urbanization of the Toronto-centred region raises several questions on future land needs and uses in the area such as what are appropriate patterns of land-use to be developed under the regional plan and the quantity of land that should be designated for urban, industrial, recreational, agricultural and other immediate uses. 86/

85/ In several dimensions the metropolitan area of Toronto ranks among the top few on the continent. Approximately 40,000 new housing units are produced each year, which is 20 new units for every thousand population - triple the pace of house-building in New York, Chicago, and Los Angeles. In addition, the Metro area produces more new industrial development than any city on the continent. Toronto produces 2 million to 3 million square feet of new office space each year.

86/ Also within the Regional Plan structure are equally important questions such as programmes of reforming municipal tax base and a system of grants to municipalities. The Regional Plan calls for a strong system of regional governments which should be developed in the near future covering the Toronto-centred region. Regional municipalities will be required to prepare official plans within a specified time period which must conform to policies of the Toronto-centred region. Once adopted, all local municipal official plans and zoning bylaws would have to be brought into conformity with the regional plan. Thus a hierarchy of plans will be prepared from province, to regional municipality, to local municipality, with each level of planning being more detailed than the plan prepared above it.

127. The Metropolitan Toronto and Region Transportation Study (MTARTS) developed alternative patterns for regional development under different density assumptions for the year 2000 (see tables 6 and 7).

Table 6. Regional form
2000 (trends plan)

	Built-up area	Over-all population density persons per square mile	Gross residential area acres
1964	220,000	8,200	123,000
2000 (High residential density assumption)	410,000	10,000	123,000 <u>+100,000</u> 223,000
2000 (Low residential density assumption)	592,000	7,000	123,000 100,000 <u>+180,000</u> 403,000

Source: Government of Ontario, Metropolitan Toronto and Region Transportation Study (Ontario, Department of Municipal Affairs, November 1967), 6 growth alternatives, map 3A.

Table 7. Population and employment, industrial and residential areas
2000 (trends plan)

Sector	Population	Employment	Industrial area (gross acres)	Residential area (gross acres)	
				High density assumption	Low density assumption
Toronto	4,210,000	1,600,000	82,300	148,300	247,800
Region	6,430,000	2,330,000	110,000	223,100	402,900

Source: Government of Ontario, Metropolitan Toronto and Region Transportation Study (Ontario, Department of Municipal Affairs, November 1967), table 3, p. 16.

128. In terms of future land requirements emphasis is placed in the plan on forces that will generate a relative expansion in certain non-residential areas, particularly in extensive institutional, recreational and suburban shopping developments. An increase of urbanized area per person based on improved living standards is also emphasized 87/ (see table 8).

Table 8. 1963 and designated land-use areas*
Metropolitan Toronto Planning Area (MTPA)

	Residen- tial	Industry	Commer- cial	Open space	Insti- tution	Transport and utilities	Total
	<u>1963 land-use</u> (percentage)						
Metropolitan Toronto	59.0	9.2	2.7	17.1	1.4	10.6	100
Fringe areas	36.0	6.1	0.5	37.8	0.2	19.3	100
MTPA	51.0	8.2	1.9	24.2	1.0	13.6	100
	<u>Designated land-use in proposed official plan</u> (percentage)						
Metropolitan Toronto	56.7	18.4	2.9	12.1	1.9	8.0	100
Fringe areas	44.4	21.0	0.8	20.6	0.4	12.7	100
MTPA	51.6	19.4	2.0	15.7	1.3	10.0	100

* As a percentage of total area excluding agricultural and vacant land.

New community development

129. Developments in the United States A new town may be defined as an "independent, relatively self-contained, planned community of a size large enough to support a range of housing types and to provide economic opportunity within its borders for the employment of its residents".

130. Historically, efforts in new community building in the United States were private efforts. Nineteenth-century company towns were built by certain industries to house their workers. Early attempts were followed by real estate communities built for profit. Radburn, built during the 1920s by Clarence Stein, looked to social as well as physical goals. Stein obtained public financial assistance for this venture, as well as for other communities which he built. An active federal

87/ For a more thorough analysis of this phenomenon, see Victor Gruen, The Heart of Our Cities (New York, Simon and Schuster, 1964), p. 267.

role in new communities began during 1917-1918, in response to war industry housing shortages and a limited attempt was made at direct governmental control and housing construction.

131. Community development was next taken up by the federal government with the greenbelt towns in 1935, as part of the New Deal. They were officially authorized by the Emergency Relief Appropriation Act of 1935. This act empowered the President to "acquire by purchase or by the power of eminent domain, any real property or any interest therein". ^{88/} Three greenbelt towns or new communities were built: Greenbelt, Maryland; Greenhills, Ohio; and Greendale, Wisconsin. During the early years planned communities remained in the hands of the government. Since 1945, however, the government holdings have been liquidated and the private market has phased out its low-income ownership.

132. Power and reclamation projects including new communities on a smaller scale than the greenbelt towns were also built during the 1930s. Later "atomic energy towns" were built for the special federal science programmes. Both of these efforts have subsequently passed into private ownership, but the interest of the federal government in new communities still remains in evidence.

133. Since 1947 there have been 63 new communities or large developments which have either been completed or are under construction in the United States. ^{89/} These new communities distribute themselves as follows: 18 in the north, 12 in the south; 31 in the west and 2 in Hawaii. Forty-nine of these new developments are located in metropolitan areas and are predominantly residential and commuting in character. Others are more economically independent of metropolitan centres containing large industrial developments or other sources of employment. A few depend almost exclusively on retirement income.

134. According to Jerome Pickard, new community development in the United States over the next 30-year period may well account for approximately 30 per cent of all new growth in the United States, with the greatest number of these new communities occurring in or near the largest metropolitan areas. Pickard presents a "possible model" for new community growth over the next 30 years which is neither "a definite plan nor a policy statement" (see annex I, table 33). The actual development of new communities will depend to a great extent on market and economic factors. Nevertheless, federal government policy is leaning greatly towards the encouragement of new community development particularly under Title IV of the 1968 Housing and Urban Development Act.

135. Regionally, the greatest population growth to new communities may be experienced in the south of the country, followed by the west. The south is ripe for new community development since there are a number of existing resources and

^{88/} John R. McFarland, "The Administration of the New Deal Greenbelt Towns", Journal of the American Institute of Planners (July 1966), p. 221.

^{89/} David D. Brodeur, "Survey and Analysis of Large Developments and New Communities Complete or Under Construction in the United States Since 1947", United States Department of Housing and Urban Development, Community Resources Development Administration, New Committee Division (February 1969), as reported by J. P. Pickard, Trends and Projections of Future Population Growth in the United States with Special Data on Large Urban Regions and Major Metropolitan Areas for the period 1970-2000 (Washington, D.C., 22 July 1969).

several locations for development throughout the region. At present only five metropolitan areas exceed 1 million population. The west, on the other hand, although sparsely populated is more restricted concerning possible new community location. Resources, especially water, are not available throughout the region. It is anticipated that the smallest number of new communities will develop in the west over the next 30 years but that they will, nevertheless, contain some of the largest population groupings of approximately 134,000. The north, conditioned by relatively slow population growth rates and an already highly developed character, will experience the least rate of new community growth. The average new community size in the north may be approximately 125,000. The average population size of all communities will be approximately 110,000.

136. Great caution must be exercised, however, in any discussion and evaluation of the impact of new community development on future land needs. There exists a good deal of confusion in the field first on the proper classification or definition of what exactly a new community is and second on the assessment of the impact "different forms of new communities" will have on the land market and the amounts and locations of lands they will demand. Anthony Downs has developed a list of alternative forms of future growth patterns in the United States. According to Downs, all could occur within a single state and several could even occur at the same time within one metropolitan area. 90/ Nevertheless, although

90/ See Anthony Downs, "Alternative Forms of Future Urban Growth in the United States", Journal of the American Institute of Planners, Volume XXXVI, Number 1 (January 1970), p. 4. Downs believes 10 alternative forms of future growth patterns in the United States which are not mutually exclusive are:

1. Redevelopment of older neighbourhoods in central cities or older suburbs through clearance and rebuilding. It has two forms:
 - a. Unplanned redevelopment (by individual parcel-owners with resulting highly fragmented patterns)
 - b. Planned redevelopment (under planned-unit-development type of control)
2. Peripheral sprawl with unplanned development control, either on the edges of the continuously built-up portions of metropolitan areas, or beyond those edges but still within commuting range.
3. Planned peripheral growth on the edges of the continuously built-up portions of existing metropolitan areas. It has two forms:
 - a. Peripheral planned-unit-development (under planned-unit-development type of control)
 - b. Peripheral new cities (under comprehensively planned, city-wide type of control)
4. Satellite growth beyond the continuously built-up portions of existing metropolitan areas but within commuting range of them. It has three forms:
 - a. Scattered satellites (under planned-unit-development type of control)
 - b. Satellite new cities (under city-wide type of control but not contiguous to existing smaller communities)
 - c. Satellite expanded cities (under city-wide type of control but contiguous to existing smaller communities) (foot-note continued on next page)

many forms are possible, Downs believes that "far more future urban growth is likely to be peripheral sprawl than all the others combined". Moreover, according to Downs, the non-metropolitan new cities and expanded communities "are not likely to capture any significant fraction of the nation's future growth, in spite of their current vogue in planning literature. The extra costs of these forms of urban growth mean that peripheral or satellite alternatives to peripheral sprawl are far more likely to occur." 91/

137. Consequently, many of the findings of Pickard on the location of the majority of new communities and Downs' belief that most new urban growth is likely to be peripheral to centre cities are much in agreement. If new community developments in North America are to be expected, they will most likely be peripheral to major urban complexes or of a satellite type. Few will be of the Great Britain version - relatively independent non-metropolitan new cities. 92/

138. In 1968, the United States Congress passed legislation under the Housing Act of that year which was intended to spur the development of new cities. However more than a year later there has been no action under the legislation which offers loan guarantees and other assistance to developers. A number of suggestions have been advanced to remedy inactivity in the area of new town development. One proposal is "to offer incentives, possibly grants, to states to establish development authorities that would acquire land and override local zoning ordinances and codes that hamper large-scale development". 93/ At present, New York's Urban Development Corporation (UDC) represents the only state agency of this kind although efforts along similar lines are in various stages of development in Pennsylvania, New Jersey, California and West Virginia. The Urban Development Corporation which has bond authority to start new towns is planning new communities near Syracuse

90/ (continued)

5. Non-metropolitan growth beyond commuting range from any existing metropolitan areas. It has two forms:

a. Non-metropolitan new cities (under city-wide type of control and not contiguous to any existing communities)

b. Expanded non-metropolitan communities (under city-wide type of control but contiguous to existing communities)

91/ Ibid., p. 4.

92/ Ibid., p. 10.

93/ "Federal plans to spur building of new cities are bogged down", by John Herbers, The New York Times (21 December 1969).

and Buffalo. 94/ However, the United States has still nothing started in new communities of the kind and magnitude envisioned by the 1968 law. The National Committee on Urban Growth Policy recommended that the federal government provide assistance to build 10 new cities of at least 1 million population each and 100 cities of about 100,000 population.

139. Developments in Canada New towns in Canada have a long history. However, the Canadian new towns have traditionally been of the one-industry company town type - not located in or around rapidly urbanizing areas as they have been located in frontier areas. They have thus been fairly small and have not had a significant impact on decentralizing or on relieving pressures in the urbanized sections of the country. 95/ This is not to say that new communities have not and are not being contemplated in Canada. Problems of metropolitan growth for both the large complexes of Montreal and Toronto relate to three basic issues:

- (a) The shortage of serviced land for development;
- (b) The inability of municipalities to finance development and provide services; and
- (c) The shortage of housing (public and private) for low-income and lower middle-income housing.

However, a few critics of new communities believe that the present urban complexes can well accommodate future growth. W. Wronski, Commissioner of Planning in Toronto, believes that it is a false assumption to assume that there is an inadequate supply of land for new residential development in the Toronto area. He points out that there is sufficient land in the metropolitan planning area which the Toronto Metropolitan Plan designated for future residential development to accommodate growth for the next quarter century which is based on an approximate level of 2,000 acres per year. It appears, according to the "Wronski Memo", that

94/ It is planned that UDC's new community in the Town of Lysander, New York, in the five-county Syracuse area will attain a population of 1 million by the year 2000 which will represent a 64 per cent gain over the 1965 population. The suburban areas in the state are growing at a rate five times as fast as central cities and the expansion of new jobs is also in outlying areas. UDC believes that a new city on large vacant tracts of land in the town of Lysander is ideally suited for planned new town development to serve Onondaga County if the county is to realize its potential in sharing in the state's industrial growth. Approximately 4,600 dwelling units are planned to accommodate 16,000 persons on a 2,100-acre site. The new community proposed by UDC in the Buffalo area will be in conjunction with the new State University of Buffalo campus. The purpose of the new community will be to provide housing and supporting facilities for students, faculty, staff and employees who will not be housed on campus. It is also hoped that the new community will assure orderly and rapid growth in the area.

95/ For an exhaustive bibliography on Canadian as well as other frontier communities, see Bibliography - Resource Frontier Communities, Series 3, volume 1 (Manitoba, Canada, the University of Manitoba, Centre for Settlement Studies (April 1969)).

no shortage of residential land exists in the Toronto area in the next several decades but difficulties may be experienced pertaining to how quickly this land may be made available for development by servicing in order to eliminate high land prices. 96/

140. Rather than providing satellite towns, new communities could, according to Wronski, be provided by being built into the general development pattern of the metropolitan area primarily on vacant land. The Thistletown Project in Etobicoke is a good example. Also the 1,800-acre publicly owned "Malvern" project in Scarborough is another example. 97/

141. Nevertheless, other reports have called for the development of new communities in rapidly urbanizing regions. The Metropolitan Toronto and Region Transportation Study of 1968 (MTARTS), and the most recent Toronto-centred region study of May 1970 call for the development of new communities. 98/ The Toronto-centred study proposed to shape the growth of the region's metropolitan core into a two-tiered urbanized area and to encourage growth in selected communities beyond easy commuting range of metropolitan Toronto.

96/ See Memo to the Toronto Planning Board from W. Wronski, Commissioner of Planning, "Report on Satellite Towns as a Solution to the Housing Emergency in Metropolitan Toronto" (16 February 1967), p. 10. According to the Wronski memo, pp. 7-8, "To develop a satellite town near Metropolitan Toronto within a reasonable development period to meet an emergency, would require government action to guide industry and population to the new community probably at the expense of development in Metropolitan Toronto itself. Not only is the machinery lacking for such a measure, but there is also very little evidence of need, pressure, or desire to syphon industry away from the metropolitan area. Within the metropolitan corporate limits there are approximately 15,600 acres of vacant residential land and approximately 14,000 acres of vacant industrial land."

97/ Ibid., p. 12.

98/ The MTARTS study calls for the creation of a new city in Columbus (East Whitty township) of 150,000 population and another new town of 135,000 in Brock.

IV. CONSTITUTIONAL AND LEGAL ASPECTS OF LAND USE AND DEVELOPMENT

Origins of rights to real property

142. Historically land has been a necessity to man's survival. Since it is limited in supply, it has been subject to various laws and rights of ownership. These laws and rights have changed over time as man's understanding and feelings about himself and his environment have changed. This section explores these rights to land and the laws preserving these rights in North America in light of one specific land use control - public land acquisition. However, before exploring the origins of present United States and Canadian land legislation a few legal definitions need to be established.

(a) Land The surface of the earth with everything on it, under it, and over it. 99/

(b) Property Enforceable rights in an asset. Real property consists of rights in land, that is, the physical land, buildings upon it, minerals underneath and sky above. Personal property on the other hand, consists of rights in moveable objects. 100/

(c) Bundle of Right Theory Real property ownership consists of a bundle of rights which are both divisible (more than one individual may claim the same right) and separable (different rights in the same property may be owned by different parties) when less than the full bundle is owned.

(d) Estate The extent of ones interest in or ownership of land. Rights in real property are exchanged. They cannot be transferred because land is immobile. 101/

143. Public limitations on property rights When the countries of North America became independent the new governments assumed the ownership of all the land. The land was sold or given to individuals on certain conditions and limitations. The limitations which apply to all land include:

99/ Robert Kratovil, Real Estate Law, 3rd edition (New Jersey, Prentice-Hall, 1958), p. 3.

100/ Philip P. Green, Jr., Cases and Materials on Planning Law and Administration (Chapel Hill, North Carolina, University of North Carolina Institute of Government), p. VI:2 and R. Kratovil, Real Estate Law, 3rd edition (New Jersey, Prentice-Hall, 1958), p. 1.

101/ Richard L. Nelson and Frederick T. Aschman, Real Estate and City Planning (New Jersey, Prentice-Hall Inc., 1957), p. 58.

(a) Eminent Domain Government may assume ownership of private land for community benefit with compensation. Part or all of the bundle of rights of the private owner may be acquired. The transfer of rights may be forced through the process of condemnation. 102/

(b) Police power Government may limit exercise or private rights in real property without compensation, if the health, safety, morals, or general welfare of the public is served.

(c) Taxation Government may charge the owners of real property a certain fee in accordance with a uniform rule, in order to defray public expenses. 103/

(d) Escheat If the parties possessing legal title to land fail to hold it, the property reverts to the state.

The above limitations on private property rights lie with the individual states. However, the states have delegated certain of these rights to other governmental bodies.

144. The English common law and the allodial system In order to fully understand the rights to real property transfer in North America, its roots must be traced. These roots generally lie in western Europe, especially in England where the English common law developed during the period of Henry II. 104/

145. The common law of England and the allodial system thus became the basis for property rights and property law in the United States (the only exception being the State of Louisiana). It has also become the basis of property rights and property

102/ Dr. William N. Kinnard, Jr., An Introduction to Appraising Real Property (University of Connecticut, 1968), pp. 2-5.

103/ Philip Nichols, The Law of Eminent Domain, vol. 1, revised, 3rd edition by Julius L. Sachman (New York, Matthew Bender, 1963), p. 77.

104/ During the tenth century a feudal system of land ownership arose in western Europe because of the danger from invaders. Peasants exchanged their land ownership for a lord's protection and became vassals by farming the land and paying the lord a portion of the yield of their harvest. The vassal might also give part of his land to another vassal to farm thus building up an intricate system of subinfeudation in which land and produce were exchanged for protection. The feudal or tenurial system, common to western Europe, was, nevertheless, not the only method of land ownership. An allodial system in which landowners held ownership themselves existed in scattered areas. England adopted the feudal system early in its history, however, between the thirteenth and seventeenth centuries, the system evolved into what is known today as English Common Law. In 1290 the process of subinfeudation was ended and in 1540 the "statute of Wills" provided for the giving of property by will rather than automatic reversion (escheat) to the overlord when there was no family heir. The "Statute of Tenures" in 1660 officially ended the feudal system in England and ushered in the allodial system. It was the allodial system of land ownership which the English settlers brought to North America in the seventeenth century. See John L. Cribbet, Principles of the Law of Property (Brooklyn N.Y. Foundation Press, 1962), pp. 27-29.

law in Canada with the exception of the Province of Quebec where the law is stated comprehensively in general principles to be found in a civil code and a code of civil procedure. Quebec is also the only province "wherein the common law does not prevail, and where both French and English are official languages. The background of the legal system of the Province of Quebec is essentially French and civil and has, therefore, been strongly influenced by Roman law and old French ordinances and customs, especially the Custom of Paris and, of course, the Code of Napoleon and the Code de procédure civile." 105/

146. According to Castel, however, the Quebec codes are not slavish imitations of their French counterparts. The Quebec civil law system has followed its own evolution in North America to the extent that several rules may defer considerably from those prevailing in France and some parts of the law of property are excluded from the civil code. 106/ It may be said that both systems, the civil law tradition and the common law, share a common legal reason dependent as to their source "or the same principles of thought and logic that apply in all fields of human endeavour". 107/

147. Variations in common law do exist between different states and provinces but the broad background is English. One feature of old English law, the power of eminent domain, has had particular impact in North America and has also become to a certain extent a controversial issue. In England, the king could take over

105/ Jean-Gabriel Castel, The Civil Law System of the Province of Quebec (Toronto, Canada, Butterworths, 1962), p. 1.

106/ Ibid.

"It must be noted, however, that although the substance of the law of Quebec is mainly derived from French sources, this province is not wholly governed by the civil law. Important branches of the law that come within the jurisdiction of the provincial legislature under the British North America Act, relating for instance to some rules of evidence in commercial matters, the remedy of injunction, or sections of the law of insurance etc., are chiefly drawn from English sources. Not all of the private law of the Province of Quebec is covered by the Civil Code or the Code of Civil Procedure. Even some parts of the law of property and civil rights are excluded from the scope of the Civil Code."

For the law outside the Code, see Walton, The Scope and Interpretation of the Civil Code of Lower Canada (1907), pp. 24 et seq.

107/ William R. Lederman, "The Common Law System in Canada", Canadian Jurisprudence: The Civil-Law and Common Law in Canada, edited by Edward McWhinney (Toronto, The Carswell Company Limited, 1958), p. 34. It should further be noted that according to McWhinney, "Legal Theory and Philosophy of Law in Canada", Ibid., p. 1, "The Canadian Constitution, in its formal origins at least, is a statute of the United Kingdom Parliament - The British North America Act of 1867. The Common Law of the English-speaking provinces is, in its historical roots, 'received' English Common Law, brought over (according to the conventional legal fiction) to North America by the first English settlers to the extent that its substantive provisions were applicable to conditions in the new colonies."

property within his domain without compensation. But in 1215 the Magna Carta established that property could only be taken over by "due process of the law" by an act of the legislature. No requirement for compensation was made. Eleven of the 13 original colonies in the United States followed this English example of no compensation requirement. 108/ Nevertheless, in the early colonial days, the actual use of eminent domain was limited. Land was cheap and abundant, but as it became more valuable, the idea of payment for the taking of private land became the rule. Since there was no precedent for this in English law, justification had to be found in American laws. 109/ For this guidance the United States Constitution under article V states "No person shall... be deprived of life, liberty or property, without due process of law; nor shall private property be taken for public use without just compensation", and article XIV reinforces the "due process of law" clause as it applies to the states - "No State has the right to deprive any person of life, liberty, or property without due process of law...."

148. As mentioned earlier, all legislative authority in Canada originates in the Crown and is passed down through various enactments of Her Majesty's governments. The primary enactment affecting Canada is the British North America Act (BNA Act). This legislation is an act of the British Parliament and with certain subsequent amendments serves as the written constitution of the dominion. The effect of this act has been to make a complete and exhaustive division of powers between the provinces and the dominion. "Under Section 92 of the BNA Act, the provincial legislature is given exclusive authority in regard to municipal institutions in the province, local works and undertakings (with some exceptions), property and civil rights in the province, the imposition of punishments to enforce its authority...." 110/ Planning is thus carried out in Canada on a municipal level under municipal bye-laws. The Municipal Act contains most of the powers conferred by the legislature on municipalities, included among these being powers of land expropriation and compensation.

149. The concept of just compensation It is interesting to note that in 1877 the Supreme Court of the United States upheld the 14th amendment alone and did not require "just compensation" when property was taken under eminent domain. In 1897, however, the position was reversed. The concept of eminent domain today is considered part of the due process of law and requires just compensation. 111/

108/ See Urban and Rural America: Policies for Future Growth (Washington, D.C., United States Government Printing Office, Advisory Commission on Intergovernmental Relations, 1968), p. 43.

109/ Philip Nichols, The Law of Eminent Domain, vol. 1, revised 3rd edition (New York, Matthew Bender, 1963), p. 53.

110/ "The Planning Act and Other Planning Legislation" (Ontario Department of Municipal Affairs, revised, November 1968), p. 3. It should be noted that these items cover practically all of the community planning field. Planning becomes, therefore, primarily a provincial and municipal matter.

111/ Fred P. Bosselman, "Alternatives to Urban Sprawl: Legal Guidelines for Governmental Action" (Washington, D.C., National Commission on Urban Problems, 1968), p. 42.

The interpretation of the phrase "public use", as stated in article V, has been perhaps the most difficult legal issue in the history of eminent domain. Initially, the purposes for which eminent domain could be lawfully exercised were not issues, but during the nineteenth century, a meaning for the phrase evolved. By today's standards, the definition was narrow, including only the traditional governmental functions such as public roads, ditches, schools, government buildings and parks. In 1893, however, the legal definition was broadened in the court decision Monoagahela Navigation Co. v. United States. 112/ It was stated that "Public uses are not limited, in the modern view, to matters of mere business necessity... but may extend to matters of public health, recreation, and employment." 113/ The inclusion of "public health, recreation and enjoyment" as a public use in the above court decision has shaped eminent domain into a very powerful governmental control over the use of land.

150. Today numerous programmes employ the power of eminent domain. Many of these programmes have evolved since the 1930s and are discussed later in this chapter. It should be noted, however, that the power of eminent domain still rests with the states. The right to exercise the power for a public use remains with the states, or officially delegated authorities on the local level. The federal government may exercise the power of eminent domain only to aid the execution of its functions, as specified in the federal constitution. 114/

151. The Canadian law and experience with land ownership, expropriation and compensation has followed a pattern of development fairly similar to the United States provided that one takes into consideration some of the constitutional differences between the two countries as mentioned earlier. The Expropriations Act of Ontario, 1968-1969, for example, states that "the approving authority in respect to an expropriation shall be the Minister responsible for the administration of the Act, in which the power to expropriate is granted, except that,

- (a) Where a municipality or a local board thereof, other than an elected school board, expropriates lands for municipal purposes, the approving authority shall be the council of the municipality; and
- (b) Where an elected school board expropriates lands, the approving authority shall be the school board." 115/

152. In addition, the Ontario act states that where land is expropriated, the expropriating authority shall pay the owner such compensation in accordance with the act based upon:

112/ 148 U.S. 312, 325-26 (1893), United States Supreme Court Reporter (Washington, D.C., United States Government Printing Office, 1894).

113/ Fred P. Bosselman, "Alternatives to Urban Sprawl: Legal Guidelines for Governmental Action" (Washington, D.C., National Commission on Urban Problems, 1968), p. 43.

114/ Philip Nichols, The Law of Eminent Domain, vol. II (New York, Matthew Bender, 1963), pp. 673-674.

115/ The Expropriations Act, 1968-1969, Statutes of Ontario, 1968-1969, chapter 36 (Toronto, Queen's Printer, February 1970).

- (a) The market values of the land;
- (b) The damages attributable to disturbance;
- (c) Damages for injurious affection and
- (d) Any special difficulties in relocation. 116/

153. From the above, it should be apparent that although the United States and Canada have, for the most part, adopted an allodial system of land ownership, where the rights to real property lie with the individual rather than with the government, there is still no ownership of the complete "bundle of rights" for any property. Certain powers are reserved for the public which permits the public good to take precedence over the desires of an individual citizen.

Public land acquisition as a control mechanism

154. The problem of land Recently the National Commission on Urban Problems established in January 1967 and the President's Committee on Urban Housing established in June 1967 have explored many of the problems concerning land-use policies and control in the United States. Similarly, the Report of the Federal Task Force on Housing and Urban Development, January 1969, has recently explored the problems of land-use policies and control in Canada. The Task Force believes "that urban planning and development are dependent on control of land itself... Land use must be an area of centralized regional concern and control... There must be regional authorities which define and control land use through its zoning, its assembly and its servicing... Its brief is not for the elimination of local governments as it is presently constituted. If there are regional functions which demand regional authority, there are equally local concerns which can and should be handled at the local level". 117/

155. Canadian, as well as American, cities and metropolitan areas face land problems. However, the problems of United States cities appear even more severe. Despite the fact that 99 per cent of the United States land base is undeveloped, grievous spatial imbalances exist in America's economic and social life. The President's Committee on Urban Problems believes that although market forces in large part determine the use of space, the federal government policies and state and local development programmes, using tax policies, zoning controls, building codes and defence contracts, also determine the use of space. The President's Committee goes on to raise the question as to whether federal policies should perpetuate the present day imbalance.

156. It should be noted that approximately one third of the nation's land is still federally owned. The 50 states comprise some 2,000 million acres and of this amount 750 million acres belong to the Interior Department's Bureau of Land Management, the Department of Agriculture's Forest Service and 30-odd other federal agencies.

116/ Ibid., p. 11.

117/ See Report of the Federal Task Force on Housing and Urban Development (Ottawa, Queen's Printer, 1969), p. 62.

About half of this land is in Alaska, the rest is scattered among the remaining states ranging from 86.4 per cent of Nevada down to 0.3 per cent of Connecticut, 0.8 per cent of New York and 1.0 per cent of Ohio.

157. A New York Times article dated 15 June 1970, entitled "Panel will urge changes in use of vast federal land holdings", reports that The Public Land Law Review Commission had just completed its findings on the management of these federal lands which it also hopes will have some impact on the development of a policy for optimum use of all the nation's land. Several western states want to get this land out of federal hands and into tax rolls. Mining and timber companies want enlarged access to its resources and conservationists want it protected and improved for recreational uses. Regardless of these various proposals, most of the federal lands are remote from the great urban population pressures of the nation's cities and would not have any immediate effect on easing the land requirements for a growing national population. Foresight is needed, however, for their best use, particularly to be set aside for parks and open spaces. The vacant land situation, on the other hand, under any form of ownership in and around the nation's cities is rapidly disappearing. According to the Niedercorn-Hearle Memorandum for the Rand Corporation, as mentioned in chapter III, 1963 findings in 48 large American cities shows that vacant urban land is in extremely short supply. And unless large amounts of vacant land can be found inside city boundaries, the average large city appears to have nearly reached its upper limits of population and employment in commerce and manufacturing. This crisis situation, elaborated in greater detail in chapter III, may be briefly illustrated here:

(a) Los Angeles Ninety-nine per cent of the vacant land is located at a considerable distance from areas of Negro and Mexican-American concentration. Negro and Mexican-American areas contain more than 70 per cent of substantial housing stock of the city. Vacant land in the all-white areas of the city will have to be used eventually.

(b) Chicago The land supply is too small to permit more than a token of land needs for poor families. The location of this vacant land is basically in industrial sections of the city and therefore unattractive to developers.

(c) New York Manhattan with 253,143 unsound units in 1960 had literally no vacant land to permit the construction of needed replacement housing. An imbalance exists between the location of unsound housing and areas of vacant land.

(d) Atlanta The supply of vacant developable land in the city's nearly all-black areas is not sufficient. Outside in the suburbs the criterion by which demand is defined is ability to pay not the need for shelter.

(e) San Francisco This city lacks the land base to provide for present or future population and housing needs. Extensive and costly in-city demolition does not appear to be the answer.

158. The vacant land situation appears to be almost identical in all major cities in the United States which do not have annexation powers. The supply is exhausted or will become exhausted in the very near future. Where the supply is available, zoning practice precludes the use of this land for low density, multifamily housing. High rise housing is being built in the centre cities but this housing is too expensive for low income families.

159. Urban renewal has been used as a base to increase the supply of land in central cities but the record is not a good one. Until the land problems of central cities are solved the housing problems in the United States are largely incapable of solution.

160. Urban sprawl, high land costs and the general unavailability of land in the major urban centres of the country have prompted national groups to make recommendations regarding land acquisition programmes which have been viewed as potential tools for controlling land development. 118/ Nevertheless, public land acquisition has never been extensively used in the United States and even less seldom as a means for controlling land development. This is not as true in Canada where a number of public land acquisition programmes at the national, provincial and local levels are taking place. It would be helpful at this point to examine the recent history of public land acquisition in the United States and in Canada, as well as future possible developments.

Public land acquisition in the United States

161. Besides the power of eminent domain discussed earlier, government in the United States may acquire private property rights by:

- (a) Outright purchase;
- (b) Easement;
- (c) Prescription;
- (d) Dedication (and forced dedication) and
- (e) By tax foreclosure, gift, devise, and exchange. 119/

162. By outright purchase it is assumed that there is agreement as to price by both the seller and the government. However, if the seller proves unwilling, the state may use the power of eminent domain which in itself is a form of property purchase, although generally involuntary, for which market value is paid the owner. Nevertheless, due to the high cost of urban land, public purchase of property rights is often limited. Other alternatives such as the purchase of only certain rights in the property called a "negative easement" are being tried in the United States. This would prevent development and stimulate recreation or forestry as an alternative use. 120/ However, the experience to date with negative easements have not been very encouraging since prices required by the courts for development purchase rights have been often equal to full market values.

118/ See for example, Building the American City, Report of the National Commission on Urban Problems (Washington, D.C., 1968), pp. 246-253, and The Report of the President's Committee on Urban Housing, Technical Studies, vol. II (Washington, D.C., 1968), p. 401.

119/ Philip P. Green, Jr., Cases and Materials on Planning Law and Administration (Chapel Hill, North Carolina Institute of Government, University of North Carolina), p. VII.

120/ Ibid., p. VI:8.

163. The use of easements provides another means for public control over land. Easements, or incorporeal rights, do not form ownership or estates in land but by definition are a privilege or right of use that one party has in the property of another. They serve to act as limitations on the free use of property of an owner and hence serve to define ownership. Common easement uses include right of ways, utilities and scenic easements, but generally only pertain to a small portion of a particular land parcel in question. Hence they do not act as significant land-use control mechanisms but only aid in the servicing of urban land.

164. Dedication, on the other hand, involves transfer of full property rights of ownership from the private to the public sector. Under this heading, a private owner may expressly donate his land to the public for public use without compensation. Developers of large residential tracts, realizing that streets, alleys, parks and school sites are necessary for any significant residential development, have in the past dedicated the land to the public. They have thus relieved themselves of the burden of paying taxes on the land and the necessity of actually providing for the facilities. More recently, however, many developers have been required to set aside certain amounts of land or are forced into dedicating park and school sites as a percentage of total land development.

165. The government's use of dedication as a means of land acquisition and as a control mechanism is limited to specific sites and for specific types of development. Other minor means of land acquisition, such as tax foreclosure, gift, devise and exchange, are also minor tools depending more upon chance than the purposeful will of government.

166. Power of Eminent Domain In view of these limitations on public land acquisition, eminent domain, as previously mentioned, stands out as a powerful tool. Eminent domain permits governments to make a transfer of property with or without an owner's consent if there is a public use involved and if just compensation is paid. Article V of the United States Constitution states that private property may not be taken by government for public use without just compensation. Nevertheless, these issues are often open to interpretation. Changes have shown great flexibility. Private property and the laws pertaining to it in the United States have not been considered static--designed only to maintain the status quo. The legal system of case law and judicial review has permitted changing interpretations of the law to reflect changing needs and conditions in society. 121/

167. Recent federal programmes involving land acquisition have well illustrated the evolution in the American tradition regarding the power of eminent domain. Programmes enacted by the legislative branch of government are considered legal. If challenged, they are tested for legality in the courts. Final interpretation lies with the courts and over the past 40 to 50 years the concept of what may be considered a public use has been broadly expanded by the federal legislature.

121/ J. H. Beuscher, Land Use Controls (Wisconsin Development Series, State of Wisconsin, Department of Resource Development), p. V-2.

Many of these concepts were challenged but have been generally upheld by courts on all levels. 122/

168. With the enactment of the Housing Act of 1937 a large step was taken in the interpretation of the meaning of public use. 123/ This act established a programme of federal financial aid to local authorities for the development of low-cost or public housing. Local communities were thus encouraged to use the power of eminent domain to acquire land for public housing. The government would maintain ownership of the land, but the use of the land and the housing built upon it was to be restricted to a small proportion of the population, the hard-core poor. It was argued that the elimination of slum conditions, breeding disease and crime, was a public use. It was reasoned that benefits were for the entire American population and not a single segment of the population. Notwithstanding, when tested in the courts, public housing has been upheld as a public use. 124/

169. In order for the local authorities to acquire the right to use eminent domain, state enabling legislation had to be enacted. Many states did this and some even went so far as to authorize the formation of limited dividend housing corporations by private interests giving them the power of eminent domain, as needed to provide regulated public housing (New York and Pennsylvania were two such states). Hence the interpretation of public use was broadened to include the taking of public land by private groups for the benefit of a limited population. 125/

170. Urban Renewal In 1949, with the enactment of the United States Housing Act, the next large interpretive step was taken in the power of eminent domain. 126/

122/ The Monongahela Navigation Co. v. United States case of 1893 set the meaning of public use beyond the execution of normal government business to include matters of "public health, recreation, and enjoyment". Land in the decision, however, remained in government ownership. Moreover, until 1937, public use was interpreted as requiring public ownership and public access to the property. (cf. Ferguson v. Illinois Central RR, 202 Iowa 508, 512, 210, N.W. 604, 606 (1926)). See Wilton S. Sogg and Warren Wertheimer, "Legal and Governmental Issues in Urban Renewal", in James Q. Wilson, ed., Urban Renewal: The Record and the Controversy (Cambridge, Massachusetts, MIT Press, 1967), p. 146.

123/ United States Government, 75th Congress, United States Statutes at large, Part I, Act of 1 September, 1937, C.896, 50 Statute 888, 42 U.S.C., S.S. 1401-35 (Washington, D.C., United States Government Printing Office, 1937).

124/ New York City Housing Authority v. Miller, 270 NY 333, 1 NE (2d) 105 ALR 905 (More recently, the public purpose has been interpreted to mean that low-income housing, whether it is or not in a slum area, is a public purpose). See Philip Nichols, The Law of Eminent Domain, vol. II (New York, Matthew Bender, 1963), p. 766.

125/ David W. Craig, "Regulation and purchase: two governmental ways to attain planned use", Charles M. Haar, ed., Law and Land: Anglo-American Planning Practice (Cambridge, Massachusetts, 1964), p. 195.

126/ United States Government, 81st Congress, First Session, Part I, vol. 63, Act of July 15, 1949, C.338, 63 Stat. 413, 42 U.S.C., S.S. 1441 (Washington, D.C., United States Government Printing Office, 1950).

The 1949 Act established the programme of urban redevelopment, now commonly known as urban renewal. The urban redevelopment formula permitted financial subsidies to be given to local agencies to cover the difference between land acquisition cost plus preparation cost and the resale value of land sold to private developers. Under this arrangement, the local government agency acquired the land through eminent domain, cleared it, and resold it to private developers who developed the land in accordance with an approved development plan. Hence eminent domain was clearly encouraging private re-use of land acquired by the public power for private profit. Housing had been authorized as a public use in 1937. Commercial and industrial development, as well as housing was interpreted to be of benefit to the entire community, or a public use, by the 1949 Act. It should be noted that in Florida, Georgia and South Carolina redevelopment statutes have been held unconstitutional because of commercial redevelopment. These states, however, are exceptions. 127/

171. Courts have upheld the legality of urban renewal proceedings and cases questioning the constitutional validity of enabling legislation have been approved. Beginning with the state of Pennsylvania in 1947, as of 1963, 34 state courts had rendered favourable decisions. Slum clearance has been interpreted as a public purpose and lies within the power of eminent domain. This ruling gives ample support for the development of state enabling legislation. 128/

172. The well-known Berman v. Parker case, in 1954, firmly established the position of the Supreme Court of the United States regarding a public purpose. The elimination of slum conditions, no matter who owned or used land was considered a public use by the court and slum elimination was considered a public purpose. The court upheld the right of states, through eminent domain, to intrude on private interests on behalf of "public safety, health, morality, peace and quiet, law and order". Public use as specifically stated in the Constitution, became equivalent with public purpose. Thus the extension of the application of the power of eminent domain was built around a much broader interpretation of the concept of "public use". 129/

127/ W. S. Sogg and W. Wertheimer, "Legal and Governmental Issues in Urban Renewal", James Q. Wilson, ed., Urban Renewal: The Record and the Controversy (Cambridge, Massachusetts, MIT Press, 1967), p. 147.

128/ William J. Goodman, ed., Principles and Practice of Urban Planning (International City Managers' Association, 1968), p. 505.

129/ The Berman v. Parker case (No. 348 US 26, 99L Ed 27, 75 S Ct 98) went beyond the mere legitimacy of slum clearance as a public purpose. It involved the question of as to whether a sound non-slum building could be cleared for urban redevelopment. The building in question, a department store in sound condition was located in the middle of slum properties. The courts upheld that the building could indeed be taken, since it was necessary for the implementation of the redevelopment plan which was designed to eliminate the conditions that cause slums, such as overcrowding, lack of recreation facilities. The prevention of future slums was considered a public purpose. Nevertheless, the plan ensured more than mere slum elimination. The case states: "... It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well-balanced as well as carefully patrolled", as quoted in William J. Goodman, ed., Principles and Practice of Urban Planning (International City Managers' Association, 1968), p. 504.

173. Later, in the Housing Act of 1954, the prevention of slum conditions rather than elimination of slum conditions became the goal of urban renewal. 130/ This act introduced rehabilitation of existing buildings as a renewal tool (Renewal replaced the old term redevelopment and included rehabilitation). Only a small percentage of land is acquired through eminent domain under a rehabilitation programme since on the average, only 20 per cent of the living units are cleared. For other units in a building, monetary incentives and technical assistance are provided to bring them up to the level of municipal codes or other standards agreed upon for a renewal area. If the property owner refuses to make the improvements, or cannot make the improvements, the local authority has the right to acquire the property under eminent domain. The local authority would rehabilitate the units themselves or sell it to another party capable of making the necessary improvements. The close alliance of the power of eminent domain and the police power should be noted here. The police power forces an owner to comply to certain standards in the rehabilitation project area on the basis of the general welfare. If refusal is encountered, eminent domain can be used to force the sale of the property.

174. As "public use" has become synonymous with "public purpose", the traditional goal of eminent domain has almost become synonymous with that of the police power. Originally, the goal of eminent domain centred around a particular property and its future use, whereas the goal of the police power centred on the protection of properties in an area. Now eminent domain is effectively used not so much as a means of acquiring public title to a property, but rather in achieving a stated public purpose which is justified on the grounds that it protects the health, safety, morals, or welfare of the public - exactly those purposes which legitimize the police power. Thus eminent domain and the police power although clearly distinguishable in the power they allow to the government, have similar goals.

175. Besides the question, what is a public use or public purpose, other legal issues have arisen within the urban renewal programme. Among these are included the question of just compensation and the problem of enabling legislation.

176. The determination of what constitutes just compensation has traditionally been based on the notion of market value. Three techniques are commonly used by appraisers in determining market value, the market data approach (the property is compared with other similar properties that have recently been sold), the cost approach (the cost of replacement of the property - allowance for depreciation is added to the market value of the land, as determined by comparison with vacant land) and the income approach (where the future income producing capability of the property is capitalized to its present value). These three approaches may differ widely in actual market value determined and they may also differ in reliability. Just compensation is generally determined by the market data approach, if reliable information can be obtained. 131/ However, the courts usually make the final decision.

130/ United States Government, 83rd Congress, United States Statutes at Large, Second Session, Act of 2 August 1954, C.649, 68 Stat. 626, 42 USC S 1460 (Washington, D.C., United States Government Printing Office, 1955).

131/ Julius L. Sackman, "Limitations of the Cost Approach", The Appraisal Journal (Chicago, 1963), p. 172.

177. Out of 31 states and five jurisdictions adopting enabling legislation it has been tested and held constitutional in 19. Nevertheless, enabling legislation may limit the extent to which urban renewal and eminent domain may be employed. 132/ In three states, the authority vested with the power of eminent domain lies in a single city. In another state restrictions are so severe under the enabling legislation that renewal is not feasible. Enabling legislation, then, may be a blockage to an urban renewal programme if it is so framed. 133/

178. Another legal problem involves marginal land acquisition. Marginal land may be acquired when it is necessary for the protection or enhancement of the public improvement. It is specifically authorized in nine states.

179. Under urban renewal programmes, the federal government subsidizes local and state efforts. The federal government pays two thirds of the gross project costs in most cases. Land acquisition generally accounts for 64 per cent of gross project costs. 134/ Recent emphasis on residential rehabilitation is reflected in the Neighborhood Development Program, established by the Housing Act of 1968. The Neighborhood Development Program is a programme for urban renewal rehabilitation. (It differs from previous renewal because of the method of funding and the citizen participation component.) The emphasis on rehabilitation means less emphasis on actual land acquisition. As of December 1964, 970 urban renewal programmes had been undertaken in the United States with 36,400 acres of land slated for acquisition and redevelopment. 135/

180. Highway Programmes Another area in which government influences land use and land policy in the United States is through the Highway Planning and Construction Program of the Federal Department of Transportation. Under this programme financial assistance is given to state highway departments for costs associated with road building, including land acquisition. The federal government pays 90 per cent

132/ According to William J. Goodman, ed., Principles and Practice of Urban Planning (International City Managers' Association, 1968), p. 513, "For urban renewal programs involving just compensation for properties taken, two separate appraisals are made. The local public agency then sets a maximum price that it is willing to pay based on these appraisals. If the owner will not accept a price within the designated range, condemnation proceedings by the court take place to acquire the property."

133/ Jacob Henry Beuscher, ed., Land Use Controls -- Cases and Materials, 3rd edition (Madison, Wisconsin, College Printing and Typing, 1964), p. IX:20. In addition, it should be noted that damages resulting from eminent domain activity may be compensatable. For example, if access to adjacent property is affected, or water supply affected, owners may have justifiable claims against the action. The court decisions imply that damages such as these are compensatable if they have practical significance and not remote or speculative. Compensation for damage is required by law in 25 states.

134/ William J. Goodman, ed., Principles and Practice of Urban Planning (International City Managers' Association, 1968), p. 512.

135/ William L. Slayton, "Achievements of the Urban Renewal Program", James Q. Wilson, ed., Urban Renewal: The Record and the Controversy (Cambridge, Massachusetts, MIT Press, 1967), p. 209.

of the cost of the Interstate Highway System and 50 per cent on primary and secondary roads. The high costs and need for highways is clearly recognized. The State Highway Department in many cases must use the power of eminent domain for the acquisition of the land.

181. Also to be noted is the "Advance Acquisition of Highway Rights-of-Way Study", required by the Federal-Aid Highway Act of 1966. 136/ As stated in the report, potential advantages include minimization of costs, more orderly relocation, more orderly community development, greater security for developers, stimulation of highway improvement activities and allowance for negotiations with property owners without pressure. Potential shortcomings, on the other hand, include problems of changing a commitment, the creation of speculation rather than stable land use and the fact that a state must maintain properties once acquired to avoid deterioration. Advance land acquisition is legally authorized for the Federal Interstate system, and is specifically permitted in 27 jurisdictions. Twelve states, in fact, have set up advance land acquisition funds for transportation. The problem, however, is that even where funds exist, they are too small to do the job - they must compete for funds with ongoing highway construction projects. The state of California is a notable exception. Since 1952 the state has used an advance right-of-way acquisition fund of \$30 million, which allowed, on the average, \$25 million savings per year. 137/

182. Under the Urban Mass Transportation Act of 1954 loans and grants are given to states and local public bodies to finance "acquisition construction, reconstruction and improvement of facilities and equipment for use by operation or lease or otherwise, in mass transportation service in urban areas and in co-ordinating such services with highway and other transportation...". 138/ The need for urban transportation on the one hand, and the problem of financing for the necessary land acquisition on the other, has been clearly recognized in this country. Perhaps no other public use has been so long legitimized than public transportation facilities.

183. Open Space Land and Community Facilities Public land acquisition is also authorized under title VII of the Housing Act of 1961, entitled Open Space Land, Urban Beautification, and Historic Preservation. Section 702 of that title authorizes grants to states and local public bodies to "help finance the acquisition of title to or other permanent interests in, such land and the development for open-space uses...". The land must be in an urban area. 139/

136/ United States Government, 89th Congress, Second Session, United States Statutes at Large, vol. 80, Federal Highway Act of 1966, Public Law 89-574, 80 Stat. 766; and 90th Congress, First Session, United States Statutes at Large, the Federal Highway Act of 1968, Public Law 90-495, 82 Stat. 815 (Washington, D.C., United States Government Printing Office, 1969).

137/ "Advance Acquisition of Highway Rights-of-Way Study" (Washington, D.C., July 1967), p. 3.

138/ United States Congress, House of Representatives, Committee on Banking and Currency, Basic Laws and Authorities on Housing and Urban Development, 90th Congress, Second Session (Washington, D.C., 15 January 1968), p. 394.

139/ William J. Goodman, ed., Principles and Practice of Urban Planning (International City Managers' Association, 1968), p. 405.

184. The federal government has also recognized the need to ease the financial risk of large scale private land development. Title X of the Housing and Urban Development Act of 1965 provides for FHA Mortgage Insurance for Land Development. FHA mortgage insurance is given for not more than 75 per cent of the total value of the property after completion of the total project and not more than 50 per cent of the estimate of value before development plus 90 per cent of actual development costs. In 1968, the provision for new community financing was made. Such a development can be approved if "it will, in view of its size and scope, make a substantial contribution to the sound and economic growth of the area within which it is located". 140/ This mortgage insurance, however, has not often been used by developers because of the restraints and conditions of FHA approval.

185. One of the most potentially useful federal programmes was authorized in title VII of the Housing and Urban Development Act of 1965. Under section 704 of title VII, advance acquisition of land for community facilities (public works and public facilities) was authorized. The project must be judged to contribute to the economy, efficiency, and comprehensively planned development of the area. 141/ Grants pay the interest on the loan up to five years to cover the purchase price but do not cover the land acquisition cost. Advance land acquisition under this programme saves land costs and generally eminent domain proceedings.

186. New Towns With the exception of FHA mortgage insurance for new community development little mention is made of federal public land acquisition for new town development. However, with recent attention placed on urban growth and development, as mentioned earlier in this text, the federal government may become more involved in new community development in the near future. The National Commission on Urban Growth proposed on 25 May 1969 that the United States build 110 new cities to accommodate a growing population over the next 30 years. There have also been proposals made from federal officials regarding urban community development banks, which would provide development capital for new community building. Such a proposal, in fact, was included in the State of the Union Message of President Johnson on 15 January 1968. In all likelihood, however, the federal role may be restricted to one of assistance with the initiative remaining on the local and state levels. This has been the role of the New York State Development Corporation in its land activities as previously outlined in chapter III. Other states may soon follow this lead in land acquisition for new town development. 142/

Public land acquisition in Canada

187. Federal-provincial land assembly The Canadian Task Force Report of 1969 believes that much of the present system for assembling and servicing of land in Canada is both inefficient and irrational. The Task Force recommended that "... municipalities or regional governments should acquire and service all or a substantial portion of the land required for urban growth within their boundaries...". In order to do this the federal government according to the Task

140/ Basic Laws and Authorities on Housing and Urban Development, 90th Congress, Second Session (Washington, D.C., United States Government Printing Office, 15 January 1968), p. 146.

141/ Ibid., pp. 345-347.

142/ The New York Times (15 January 1968), p. 21, col. 1.

Force should be prepared to make loans to municipalities or regional governments. Early legislation embodied in the National Housing Act of 1944, offered federal guarantees to institutional lenders, who were mostly life insurance companies, for their investment in land assembly and housing. A few middle income housing projects, in fact, were developed late in the 1940s through investor land assembly consortiums. However, by the mid-1950s, private investors and life insurance companies were finding better ways in which to make money.

188. The Canadian National Housing Act was amended in 1949 to provide "Federal funding of 3/4 of the cost of buying vacant land and servicing it for urbanization, if the Provincial and local governments concerned would apply for this aid and agree between them to meet the other 1/4 of the cost". 143/

189. The National Housing Act of 1954 which amended the 1949 Act offers two forms of federal aid for acquisition and development of land for public housing or general housing purposes.

(a) Under section 35A of this act the federal government provides up to 75 per cent of the cost of assembling raw land for residential development with the balance being borne by the provincial partner. The individual municipality concerned may be asked to assume a portion of the provincial share. Under this arrangement the federal government shares 75 per cent of profits or losses upon disposal of the land. 144/

(b) Under section 35C of this act the federal government provides loans to provinces, municipalities or other agencies up to 90 per cent of the cost of acquiring and developing land. The federal loan is repaid over a maximum period

143/ Alan Armstrong, "Emerging Urban Land Policy in Canada", Notes for a colloquy on National Land Policies held by the American Society of Planning Officials (New York, 8 April 1970). By the passage of the land provisions of the National Housing Act of 1949, Armstrong further remarked: "It is not clear whether Parliament wanted to side-step speculation or to achieve better urban planning, or both; the government of the day had a big majority and there was very little debate of this land assembly measure."

144/ National Housing Act 1954 (Ottawa, Queen's Printer, 1969). Section 35A states: (1) The Corporation may, pursuant to agreements made between the Government of Canada and the government of any province, undertake jointly with the government of the province or any agency thereof projects for: (a) The acquisition and development of land for housing purposes; (b) The construction of housing projects or housing accommodation of the hostel or dormitory type for sale or for rent; (c) The acquisition, improvement and conversion of existing buildings for a housing project or for housing accommodation of the hostel or dormitory type.

of 15 years and disposal of the land becomes the responsibility of the province, municipality or other agencies. 145/

190. Under the first form of federal-provincial partnership agreements, six land assembly projects for 960 residential building lots were approved in 1969. Since the inception of the programme in 1948, a total of 25,568 lots had been authorized for development of which 17,416 have been placed in a sales position and 15,261 have been sold (see tables 9 and 10). Also, under this arrangement, approval has been given for the acquisition of 1,321 acres of land for housing purposes.

191. Under the second form of federal aid, assistance was limited before 1969 to land for public housing projects and thereafter legislation was extended to include land for general housing purposes. Five loans amounting to \$7 million were approved in 1969. 146/

192. Over 23,000 acres of land have been assembled in Canada with federal aid from 1949 to 1969. This land has been assembled in over 180 tracts which adjoin most of the large and middle-sized urban centres in the country but it only represents approximately 5 per cent of the total urban growth during the same two decade period. 147/ Reasons why municipalities have generally been reluctant to whole-heartedly support the 1949 land assembly measure, according to Armstrong, may be thought of as:

(a) The programme was launched without municipal consultation and could mean substantial municipal investment and major amendments to local works plans and schedules;

(b) Municipal politicians seem to have been susceptible to local pressures against an arrangement that would cut so radically across the normal practices of the urban land market. 148/

145/ Ibid., section 35C. "(1) The Corporation may make a loan to a province, municipality or public housing agency for the purpose of assisting that province, municipality or agency to acquire and service land for public or general housing purposes. (2) A loan made under the authority of this section shall (a) bear interest at a rate prescribed by the Governor in Council; (b) not exceed ninety per cent of the cost of the acquisition and servicing of the land, as determined by the Corporation; (c) be secured by a first mortgage upon the project in favour of the Corporation; (d) be for a term not exceeding fifteen years; and (e) be repayable in full...."

146/ Central Mortgage and Housing Corporation Annual Report 1969 (Chicago, 11 March 1970), p. 20.

147/ Alan Armstrong, "Emergency Urban Land Policy in Canada", Notes for a colloquy on National Land Policies held by the American Society of Planning Officials (New York, 8 April 1970).

148/ Ibid., p. 6.

Table 9. Land acquisition and servicing financed under
the National Housing Act
Canada, 1950-1969

Period and area	Federal-provincial land assembly projects (Section 35A, National Housing Act)				
	Approved by order-in-council				
	Land holdings		Land developed		
1950- 1969	Number of projects	Acres	Number of projects	Number of lots	Estimated net federal contribution \$000
Newfoundland	6	1,183	12	2,676	7,932
Prince Edward Island	-	-	-	-	-
Nova Scotia	1	3	1	114	197
New Brunswick	4	110	2	718	1,309
Quebec	-	-	-	-	-
Ontario	32	10,570	61	17,741	44,249
Manitoba	2	457	-	-	-
Saskatchewan	6	1,124	19	2,205	4,151
Alberta	1	5	-	-	-
British Columbia	1	640	11	1,904	4,127
Yukon	-	-	-	-	-
Northwest Territories	-	-	2	210	750
Canada	53	14,092	108	25,568	62,715

	Number of lots allocated for sale under federal-provincial partnership			
	Developed	Sold	Unsold at end of period	Actual
				expenditures (federal share) \$000
Newfoundland	2,079	1,666	413	7,295
Prince Edward Island	-	-	-	-
Nova Scotia	114	7	107	182
New Brunswick	263	157	106	985
Quebec	-	-	-	-
Ontario	11,923	11,511	412	39,360
Manitoba	-	-	-	523
Saskatchewan	1,349	681	668	3,707
Alberta	-	-	-	11
British Columbia	1,478	1,143	335	4,687
Yukon	-	-	-	-
Northwest Territories	210	96	114	528
Canada	17,416	15,261	2,155	57,278

Loans for Land Acquisition (Section 35C, NHA)

Source: Canadian Housing Statistics, Central Mortgage and Housing Corporation, 1969, from Table 4g.

Note: Canada data are net; provincial data are gross.

Table 10. Land acquisition and servicing financed under
the National Housing Act
Canada, 1950-1969

Federal-provincial land assembly projects (Section 35A, National Housing Act) Approved by order-in-council					
Period and area	Land holdings		Land developed		
	Number of projects	Acres	Number of projects	Number of lots	Estimated net federal contribution \$000
1950-1960	13	6,335	49	15,156	23,408
1961-1965	3	-96	13	3,773	17,151
1966	4	228	8	2,119	4,030
1967	9	2,573	24	2,323	5,637
1968	16	4,685	8	1,381	8,093
1969	8	767	6	816	4,396
1969					
Newfoundland	1	300	-	290	828
Prince Edward Island	-	-	-	-	-
Nova Scotia	-	-	-	-	-
New Brunswick	2	94	1	47	61
Quebec	-	-	-	-	-
Ontario	4	769	2	201	631
Manitoba	-	-	-	-	-
Saskatchewan	1	158	-	-	-
Alberta	-	-	-	-	-
British Columbia	-	-	4	614	1,614
Yukon	-	-	-	-	-
Northwest Territories	-	-	-	-	-

Table 10 (continued)

Period and area	Number of lots allocated for sale under federal-provincial partnership				Actual expenditures (Federal share) \$000
	Developed	Sold	Unsold at end of period		
1950-1960	9,609	8,588	1,021		22,277
1961-1965	3,605	3,455	1,171		9,597
1966	604	624	1,151		3,788
1967	1,097	825	1,423		6,861
1968	1,146	786	1,783		7,004
1969	1,355	983	2,155		7,751
1969					
Newfoundland	480	186	413		1,412
Prince Edward Island	-	-	-		-
Nova Scotia	-	-	107		31
New Brunswick	112	127	106		135
Quebec	-	-	-		-
Ontario	328	425	412		2,872
Manitoba	-	-	-		523
Saskatchewan	241	69	668		831
Alberta	-	-	-		-
British Columbia	188	147	335		1,881
Yukon	-	-	-		-
Northwest Territories	6	29	114		66

Loans for Land Acquisition (Section 35C, National Housing Act)

Source: Canadian Housing Statistics, Central Mortgage and Housing Corporation, 1969, from table 47.

Note: Canada data are net; provincial data are gross.

193. At present the group most vocal in favour of public assembly of land for development in Canada are the large merchant builders. They believe that the price of land affects the size, design and class appeal of their end product - housing. Thus, many of the big builders in Canada are asking for public intervention to halt the rise in land prices so as to assure a more stable and sellable housing end product.

194. By the end of the 1960s most of the Canadian provinces had set up active housing agencies with the Ontario Housing Corporation being the most vigorous in land assembly programmes. On the east side of metropolitan Toronto, one of the largest land assembly programmes of joint federal-provincial-municipal land assembly programmes has recently been signed.

195. Municipal-city land assembly Perhaps the most noteworthy of land development and land acquisition programmes undertaken anywhere on the North American continent are those of a few of the smaller cities in Canada - in the cities of Red Deer, Saskatoon and Edmonton. A more detailed examination of these cities concerning their land acquisition policies would be rewarding.

196. The City of Red Deer is located between Edmonton, Alberta's capital, and Calgary. It is in the heart of one of the most prosperous mixed farming districts in Canada. The city grew in population from 4,000 in 1946 to about 9,000 in 1953 and as the city grew to 12,760 in the following two years various facts and planning principles were accepted by the City Council and the city's general public which would allow for a city growth to 40,000 by 1976-1980. Prominent among these principles was the design of all city services to accommodate the future projected population. 149/ Also, during the 1954-1956 period a land-use map was prepared which made it possible to calculate approximately how many additional acres of land would have to be provided and serviced for residential purposes and how much land would be needed for future industrial development. According to the Planning Commission, it became clear that land speculation would quickly take place as soon

149/ Denis Cole, "The City of Red Deer", Habitat (July-August 1963), pp. 29-30. The following facts and principles were accepted by the Council:

(a) It was not unreasonable to expect that the city would grow to 35,000 or 40,000 (three times its 1956 population) by 1976-1980 (20-25 years).

(b) All services - water, sanitary and storm sewers and major roads should be designed, located and constructed to allow for the accommodation of 40,000 people.

(c) No street should be reconstructed or paved until the trunk utilities designed to serve 40,000 were installed.

(d) Every effort should be made to make new subdivisions as self-supporting as possible. This would free borrowing power for improving services in the built-up areas and for major items of general benefit to the community (e.g., sewage disposal plant, bridges and municipal buildings).

(e) A large engineering staff should not be employed ("as you never know - things may slow up"), but engage consulting engineers for all engineering design and supervision.

(f) The small Public Works Department should not be enlarged (probably for the same reasons), but tender all work in excess of what existing city crews could handle.

as public decisions were reached on the order of development and the first major trunk sewers were developed to the perimeter of the then built-up city area. 150/ Consequently "it was therefore decided the city should acquire quietly, as opportunity arose and finances permitted, certain strategic lands on the fringes. Where possible, it obtained long-term options on large tracts of land in the logical direction of development." 151/

197. It should be remembered that the city of Red Deer held a very strong hand in the negotiation for lands - trunk sewers had not been laid. A competitive spirit grew among landowners to sell or option land because there were several choices open to the city as to which areas to service within the 20-year study period. The cornerstone of Red Deer's expansion policy thus was one of acquiring land for residential and industrial expansion "to ensure the orderly and economic development of such lands in the interests of its citizens". 152/ (See annex II A, Process of Land Development, City of Red Deer, and City of Red Deer, Report on Servicing of Subdivisions.)

198. The city has followed its plans and policies for urban expansion since 1956 and a number of benefits are now becoming apparent:

(a) The city now services some 300 lots a year at a cost of about \$900,000 per annum. This sum is recovered within 12 months in cash and is reinvested the following year in more land and services. Expansion, therefore, does not involve any city borrowing.

(b) At the time of the NHA construction, the capital cost of the installation of services is recognized by Central Mortgage and Housing Corporation and in the determination of lending value. Using the same ratios, which are made establishing insurable loan amounts for housing, indicates that from 70 per cent to 95 per cent of the cost of services is financed by approved lenders on a long-term basis rather than by the city.

(c) Owing to the fact that all contractors build at the same time in the two areas the city develops, all competition is concentrated on providing the best house for the money. The purchaser has a choice of homes built by 10 to 15 builders in each area.

(d) The builders are happy with the arrangement as they do not have to tie up capital in land or services and they are assured of adequate serviced lots at no greater price than is paid by their competitor.

150/ Ibid., p. 31. It should be noted that the total annual land needs of the city "was not expected to exceed 30 to 50 acres per year for the first few years because of the desirability of encouraging 'in-filling'. In the event that a speculator or builder should get possession of, say, the first 100 acres of the 500 acres to be served by the initial major sewer (costing about \$350,000), he could monopolize the entire market in serviced lots for several years or force the city into leap-frogging or constructing a second trunk line. Any one of these alternatives was considered contrary to orderly and economic development."

151/ Ibid., p. 31.

152/ Ibid., p. 31.

(e) By city ownership of the land, more generous open space, parks and school sites can be provided and generally the opportunity for improved design layout cannot be underestimated.

(f) Through the city's large land holdings, 150 to 200 acres can be designed at a time and it is proving possible to bring about many desirable innovations which could not be achieved by regulation or bye-law.

(g) There seems little doubt that when the city does reach 40,000, it will have one of the most efficient and economical systems of services which could be devised.

(h) Land speculation in the residential field has been virtually eliminated.

(i) The growth has now engulfed almost all the earlier fringe areas and a clear line defines the boundary between the built-up, serviced urban community and the surrounding farm land.

(j) Land is not out of agricultural use until needed for servicing and concentrated urban development.

(k) The borrowing power of the city is now concentrated on improving the standards of services in the old areas and on other major public projects.

199. It may readily be said that the land development policies in the city have virtually eliminated land speculation and there is also ample evidence to indicate that "if growth continues at the anticipated rate and present policies are continued, the City of Red Deer will compare favorably with any other city of its size in Canada, in so far as its environment, amenities and tax structure are concerned". 153/

200. The City of Saskatoon is a much larger city than Red Deer having a population of 130,000. The city entered the land acquisition field during the 1930s. Until then, land was generally assembled in the usual haphazard way by private developers but many of them defaulted in taxes during the depression years to the extent that the city emerged as a big landowner. However, Saskatoon, unlike many other cities after the depression, hung on to its land bank and by 1953, when the city started to feel growth problems, land acquisition became an official policy.

201. The City of Saskatoon realized early the significance of its land holdings and was "able to convince the city council of the day and all subsequent councils of the wisdom of maintaining such a land bank and of being able to control the direction, rate and type of growth". 154/ City government has thus been able to provide land for private developers at reasonable prices. It has been able to do this while still planning comprehensively and reserving sufficient land for public uses such as schools, libraries and parks.

153/ Ibid., p. 33.

154/ Letter on land acquisition - City of Saskatoon dated 12 December 1968 by H. E. Wellman, City Planner and Building Director to Mr. D. L. McDonald, Director, Planning and Urban Design Division, National Capital Commission, Ottawa.

202. Notwithstanding the forecast that the population of the city is expected to double approximately every 12 years, the city has enough reserve land to meet development needs for the next 20 years and has acquired Crown land to ensure green space for greater Saskatoon for 50 years hence. 155/

203. Conflicts in major land use patterns and in matters relating to staging or timing of city growth have virtually been eliminated by the continuous programme of land purchase by the city on a progressive basis.

204. The city also has found that private land developers have been very co-operative and that it has been "able to establish a much more favourable price relationship with the former owners of the land than has the private development sector...". 156/

205. Saskatoon's experience with early land acquisition has been extremely fortunate in a planning sense and the city has stayed with its development philosophy during its evolution from a little market centre into a prosperous industrial city, often called "the Potash Capital of the World". (See annex II, C Land Acquisition Policy, City of Saskatoon, Saskatchewan, for a complete description of city's land acquisition programme.)

206. The City of Edmonton, in Alberta, because of experiences similar to Saskatoon, obtained extensive amounts of vacant lands that had been surrendered in default of taxes during the depression. It used provincial legislation to achieve replotting and for a period of years was able to implement an orderly general plan. However, unlike Saskatoon and Red Deer, the City of Edmonton did not institute a programme of land acquisition and by the mid-1950s had run out of tax lands for city expansion purposes both for housing and transportation corridors. By the mid-1960s, "the supply of serviced land for suburban housing was declining and the cost of land was increasing dramatically. The City had no way of guaranteeing the maintenance of an adequate supply. Land in the declared expansion areas was under private ownership and servicing depended upon private sector decisions. The decision to establish a new direction of growth was essential if land for housing was to be available at an uninflated value." 157/ In addition, land costs for needed transportation corridors were placing a great financial strain on the city.

207. On 17 October 1969, the provincial government on behalf and at the request of the City of Edmonton had acquired almost 5,000 acres of vacant land southeast of the city for a new community development which is planned to house 85,000 people by 1985-1990. Initial construction will begin in the fall of 1971. The city will service the area by the extension of its sewers and water and utility lines and will market land to developers at a rate to ensure a constant and adequate amount for all forms of housing and at land prices which will tend to be stabilized. 158/

155/ Jeannine Locke, "Saskatoon, The Good Life City", MacLean's (October 1969), p. 29.

156/ H. E. Wellman letter, see foot-note 154.

157/ See Unpublished Notes, "South East Development Area", The City of Edmonton City Planning Department (Edmonton, March 1970).

158/ The Alberta Housing Corporation, on behalf of the City of Edmonton, negotiated the acquisition of most of the land in the new community which will average at less than \$2,000 per acre.

208. There thus exists an opportunity for the City of Edmonton to develop a high quality residential community because of the control which it will have over the price of land and the comprehensiveness at which it is planning. This project is one of the largest and most imaginative of its type attempted to date in North America. 159/

159/ For a thorough examination of the plans and proposals for Edmonton's new community see "Riverbend Terwillegar Heights Outline Plan", City of Edmonton Planning Department (Edmonton, 1969).

V. LAND COSTS AND LAND VALUE

An overview

209. Four unique aspects of land set it apart from all other commodities. Land is ubiquitous. It is found everywhere. It is unique. No piece of land is exactly like any other piece of land. It is permanent. Man may use it and change it but he rarely completely destroys it. It is without intrinsic value. Its utility is created by man and its selling price is the market place. ^{160/} The importance of land to man and its unusual characteristics have made land-use policies and control measures a necessity which grows significantly more important each year.

210. Previous chapters in this study have discussed and analysed past and present governmental policies and control of land in North America especially those relating to land use. However, land as an unregulated commodity, and the activities of the private sector of the economy have not been examined. Several questions may be raised in this context, such as what creates land costs, land price and land value in urban areas, what is the process of land development and what are the costs associated with land development. These are some of the most significant questions concerning land and each will be examined in some detail.

211. A very small percentage of the land on the North American continent is in urban use. In terms of soil conditions, terrain etc. one may postulate that a good portion of this non-urban land is suitable for urban development. The real issue is rather how fast and in what areas will the available land supply be made readily for urban development. Most of the buildable land supply of the continent's largest cities is already developed to the extent that new developments must be located around and at the fringes of central cities. The problems are how to best use the land and what type and amount of facility extension is needed to permit urban use. These are the major questions from a public standpoint more than the problem of simply lack of supply.

212. From the start, it should be noted that the tendency for individuals to concentrate about a central place produces an acute competition for land surrounding central places which, when channelled through a market mechanism involving private ownership of land, results in higher land values for these areas than land further away. Urban land values should reflect density, with the highest values occurring at or near the areas of highest population densities or near areas of highest interchange and interaction of individuals and decreasing in gradients or steps to the most distant areas of the city. However, other considerations enter the picture, such as the particular characteristics of the city and the district, characteristics of the land, and urban planning effects. ^{161/} In addition, there

^{160/} Niel N. Gold and Paul Davidoff, "The supply and availability of land for housing for low- and moderate-income families", The Report of the President's Committee on Urban Housing, Technical Studies, vol. II (Washington, D.C., US Government Printing Office, 1968), p. 279.

^{161/} See E. G. Silbert, "Town Planning and Land Values", Journal of the Town Planning Institute (January 1952); and Peter W. Amato, "Population Densities, Land Values, and Socioeconomic Class in Bogotá, Colombia", Land Economics, vol. XLV, No. 1 (February 1969), for a more thorough analysis of the determinants of urban land values.

may be other distortions in land values by the creation of secondary peaks on the urban fringes (e.g., a strong regional shopping centre or other high-income generator). Nevertheless, variations in land costs, particularly increases to these over time, cannot be fully explained by central place theory alone.

213. According to Milgram, "a piece of ground is an apparently stable object, but its value is not... with no change in its intrinsic qualities, its value can multiply manyfold because of urban growth around it which makes it an appropriate place for activities of high intensity". 162/ Many land economists have argued for generations over the relationship of sales price of a particular parcel of land to true value. The former loosely representing the value which the market may place on land as compared with the value which may be ascribed to it by its present or expected social benefits and services. This study will look at land value as market or sale price value and as such the estimates on land values depends therefore "upon the expected returns from the use to which it is currently put, the expected time of change of use, and the expected returns from the more intensive use of the future". 163/ At this point it must be recognized that judgement has place in assigning a market value to land. Moreover, the expected stream of income may well vary among different individuals or among groups of investors and "the rate of capitalization of that stream is again a matter of individual judgement". 164/

214. Moreover, other factors such as rate and direction of population growth in a particular area and time preferences for financing by both purchaser and seller may also tend to give land a particular value at a particular time. Moving from the individual piece of land to land values in a community, a major area or region, to a nation itself, the meaning of land value becomes even more nebulous and difficult to define. Many factors tend to influence these land values such as general business and economic conditions on a regional or national level, forces of population growth and particular institutional factors. Nevertheless, comparisons of over-all averages of land values from one period to another or between different areas during the same period can be revealing in so far as they may give some insight into the array of factors which cause variations in land values. It must be kept in mind, however, that comparisons of this type may conceal differences in values caused by the continuously changing proportions of land in particular uses and locations vis-à-vis other uses in the metropolitan region. 165/

162/ Grace Milgram, "United States Land Prices - Directions and Dynamics", The National Commission on Urban Problems, Research Report No. 13 (Washington, D.C., US Government Printing Office, 1968), p. 1; Milgram further states: "In agricultural use, the higher value of one piece /land/ over another of equal size arises from differences in fertility and in location with respect to the market in which the produce can be sold, that is, in the net value of the product and the cost of transporting it to the market and selling it. In purely agricultural societies, land is therefore relatively easy to assess currently and for the future. In an industrialized society, land is valuable not for its own qualities but as the site of activities."

163/ Ibid., p. 1.

164/ Ibid., p. 1.

165/ Ibid., p. 1.

215. Table 11 presents land values and average annual percentage change in the United States for selected periods between 1922 and 1966. The total value of land appears to have increased steadily from \$95,000 million in 1922 to \$112,000 million in 1930 only to fall back during the depression to values prevailing 16 years earlier. However, by the end of 1945 land prices had again risen and despite the Korean and other conflicts, they had more than doubled during the following 11 years. A decade later, prices again approximately doubled. The annual rate of change in land values in the United States increased at a rate of 2.1 per cent for the pre-depression years and dropped to minus 2.1 per cent following the depression. Thereafter, rates ranged from 5 to 6 per cent increases.

Table 11. Total private, non-institutional land value and average annual per cent change, United States, selected years, 1922 to 1966

A. Absolute values in current prices (\$000,000,000)

Year	<u>1922</u>	<u>1930</u>	<u>1938</u>	<u>1945</u>	<u>1956</u>	<u>1966</u>
	95	112	94	121	207 to 282 ^{a/}	354-549 ^{b/}

B. Average annual percentage change

<u>1922-</u> <u>1930</u>	<u>1930-</u> <u>1938</u>	<u>1938-</u> <u>1956</u>	<u>1945-</u> <u>1956</u>	<u>1956-</u> <u>1966</u>
2.1	-2.1	5.4	5.0 (5.9) ^{b/}	4.5 to 6.0 ^{c/}

Sources: Grace Milgram, "United States Land Prices - Directions and Dynamics", The National Commission on Urban Problems, Research Report No. 13 (Washington, D.C., US Government Printing Office, 1968); table VII as reported by 1. Joseph S. Keiper, Earnest Kurnow, Clifford D. Clark and Harvey H. Siegel, Theory and Measurement of Rent (Philadelphia, Chilton, 1961), chap. II. 2. Raymond W. Goldsmith, The National Wealth of the United States; the Postwar World (Princeton, Princeton University Press, 1962), table II, pp. 86-87. 3. John W. Kendrick, "The Wealth of the United States", Finance (January 1967), p. 10 ff. 4. Allan D. Manvel, "Trends in the Value of Real Estate and Land, 1956 to 1966", Research Report No. 12 (Washington, D.C., National Commission on Urban Problems, 1968), p. 16.

a/ The variations in these figures are due to exclusion or inclusion of land owned by public utilities by different investigators.

b/ Estimates made by different investigators.

c/ Estimates made by different investigators under varying assumptions.

216. In a study prepared by Allan Manvel on estimated taxable land values for various land-use classifications for the years 1956 and 1966, 166/ two major points were noted. The total listed taxable parcels of urban realty went up by over 25 per cent (from approximately 46 million parcels to over 59 million) while the total number of non-urban properties declined. The total value rise in land almost doubled which was due more to the dramatic rise in the average value of land per property than to simply the increase in the number of parcels. Vacant lots, for example, which averaged \$1,665 per parcel in 1956 witnessed an 86 per cent increase in 1966, climbing to an average value of \$13,102 for a 6.4 per cent increase per year. These increases were followed by acreage and farm properties which witnessed an 82 per cent increase over the 11-year period beginning in 1956 for a 6.2 per cent average increase per year. Commercial and industrial sites had a 5.9 per cent increase per year and non-farm one-family house parcels 4.4 per cent value increase per year over the same time period. 167/ Manvel's findings, as shown in table 12 by type of property based on findings of the 1957 and 1967 censuses of Government, indicate: 168/

(a) Assessed valuations in all properties rose by 90.2 per cent during the period with an annual increase of 6.6 per cent. Urban properties registered the highest increases at 7.0 per cent per year and within this category assessed values for multi-family properties rose the highest at 7.7 per cent annually. Notwithstanding, multi-family properties also witnessed the greatest total number of new parcel increases which would account in part for their over-all rise in total value. Vacant land also had a great rise in assessed value, 116.7 per cent, for the entire period or 8.0 per cent increase per year.

(b) Land values on all properties rose by 94.5 per cent during the period with an annual increase of 6.9 per cent slightly faster than over-all assessed valuation. Urban properties also registered the highest gains with multi-family land values increasing the sharpest at 40.7 per cent for the period or 9.2 per cent annually. Vacant lots followed closely at a 108.5 per cent total increase, or 7.6 per cent annually.

(c) Land value and structural value per property showed greatest variation for the period under study. Land value increases lead structural value increases, 60.2 per cent compared to 42.3 per cent respectively, or at an annual rate of

166/ Allan D. Manvel, "Trends in the Value of Real Estate and Land, 1956 to 1966", in Three Land Research Studies, Research Report No. 12 (Washington, D.C., The National Commission on Urban Problems, 1968), p. 2.

167/ A certain amount of caution must be exercised, according to Manvel, in the interpretation of these figures. During the period under study some acreage properties were combined and others were broken up for tax recording purposes. Also, the geographic makeup of various classes of property was altered during this period and part of the value increase could be directly traced to new development caused by population growth and urbanization.

168/ The limitations of the data as reported by Manvel are: "(1) They omit some components of privately owned realty; (2) There are deficiencies in the basic census data, especially as to levels of assessment; and (3) The land-value percentages applied to total real estate values, as described above, are imprecise judgemental estimates." See Allan D. Manvel's already cited "Trends in the Value of Real Estate and Land, 1956 to 1966", p. 10.

4.8 per cent to 3.6 per cent. The land-use category "vacant lots" registered the highest land value increases per property at 86.3 per cent and was followed by the category "acreage and farms" 82.4 per cent increase for the period or 6.2 per cent annual increase. Conversely, this latter category showed the least structured value increase per property. Urban residential properties increased in land values by 53.9 per cent, whereas commercial and industrial properties did not keep up with land values during this period since they registered only 33.0 per cent and 49.6 per cent increases respectively.

Table 12. Percentage changes in estimated value of locally assessed real estate, by type of property, 1956 to 1966**

Item	Total	Acre- age and farms	All "urban" property	Urban residential property			Commercial and industrial property			Vacant lots
				Total	One family	Multi- family	Total	Com.	Ind.	
<u>Percentage change, 1956 to 1966:</u>										
Assessed valuations	90.2	50.5	96.7	108.9	108.7	110.0	70.9	73.5	67.4	116.7
Number of properties	21.4	-0.8	28.2	36.4	34.4	98.4	8.3	N.C.*	N.C.	11.9
Total value	81.1	70.3	83.8	88.0	83.3	117.5	71.0	73.5	67.2	108.5
Land value	94.5	81.0	104.1	109.8	106.2	140.7	92.1	92.7	90.3	108.5
Structural value	72.7	27.5	75.8	81.4	76.1	112.3	61.9	62.6	61.6	---
Total value per property	49.2	71.7	43.4	37.8	36.4	N.C.	58.0	N.C.	N.C.	86.3
Land value per property	60.2	82.4	59.1	53.9	53.4	N.C.	77.4	N.C.	N.C.	86.3
Structural value per property	42.3	28.5	37.1	33.0	31.1	N.C.	49.6	N.C.	N.C.	---

* N.C. (not computed).

** Source: Allan D. Manvel, "Trends in the Valuation of Real Estate and Land, 1956 to 1966", Three Land Research Studies, Research Report No. 12 (Washington, D.C., The National Commission on Urban Problems, 1968), p. 7.

217. The above data support the position that land values have been increasing faster than total values of properties and that the speculative prospect of vacant land both as lots and as acreage and farms have witnessed the greatest assessed value increases over the period 1956 to 1966. These value increases per property were followed by commercial-industrial land value increases indicating a continued demand for central city and more intensive land-uses in urban areas.

218. It should also be noted that the upward trend in real estate values during the 1956 to 1966 decade (6.1 per cent annual rate of increase for land and structures) while far greater than the population rate increase or commodity price levels, resembled more closely the rate of rise of gross national product, national income and personal income. During this period the total United States population increased 1.5 per cent, wholesale prices increased 1.0 per cent, the Standard and Poor Corporation list of common stock prices increased 6.2 per cent and the gross national product increased 6.0 per cent.

The land development process

219. The life cycle of land values is generally at its lowest point during its undeveloped stage. Its value rises steeply during the pre-development stage if it is apparent that it may become prime future urban land as exists on many urban fringe areas. Its price continues to rise as it becomes improved and begins to stabilize after it is developed (see figure V). The major value rise occurs therefore slightly before and during its development into urban use. If the land is mis-developed or its improvements are not fully appropriate in character to the land itself or to the community, land values may dip.

220. It becomes apparent, then, that the urban land market on the urban-rural fringe is of a volatile and dynamic character. The rural urban fringe may be considered to commence in that area marked by the transition between developed and undeveloped land. 169/ It is here that the dynamic market exists. The process of bringing land into use involves three major participants, original landowner, the land developer and the consumer. 170/ The original landowner may be a farmer working the land for crops, holding the land for a sudden rise in value, or an individual who has personal interest or sentiment in the land. The land developer may be considered the change agent in the development process who acquires the land and improves the land. Sites often become areas for housing in which the land developer builds the units himself. Seventy-five per cent of developers today carry through the entire process. 171/ Before 1941, however, common practice held that the developer would sell the improved sites to a builder or individual who would construct buildings or housing units on it. This practice has changed drastically.

169/ Alfred Allan Schmid, Converting Land from Rural to Urban Uses (Baltimore, Johns Hopkins Press, 1968), p. 29.

170/ Ed Kaiser and Shirley Weiss, "Local Public Policy and Residential Development Process", Law and Contemporary Problems, Housing, Part 1 (Duke University School of Law, Spring 1967), p. 233.

171/ Alfred Allan Schmid, Converting Land from Rural to Urban Uses (Baltimore, Johns Hopkins Press, 1968), p. 27.

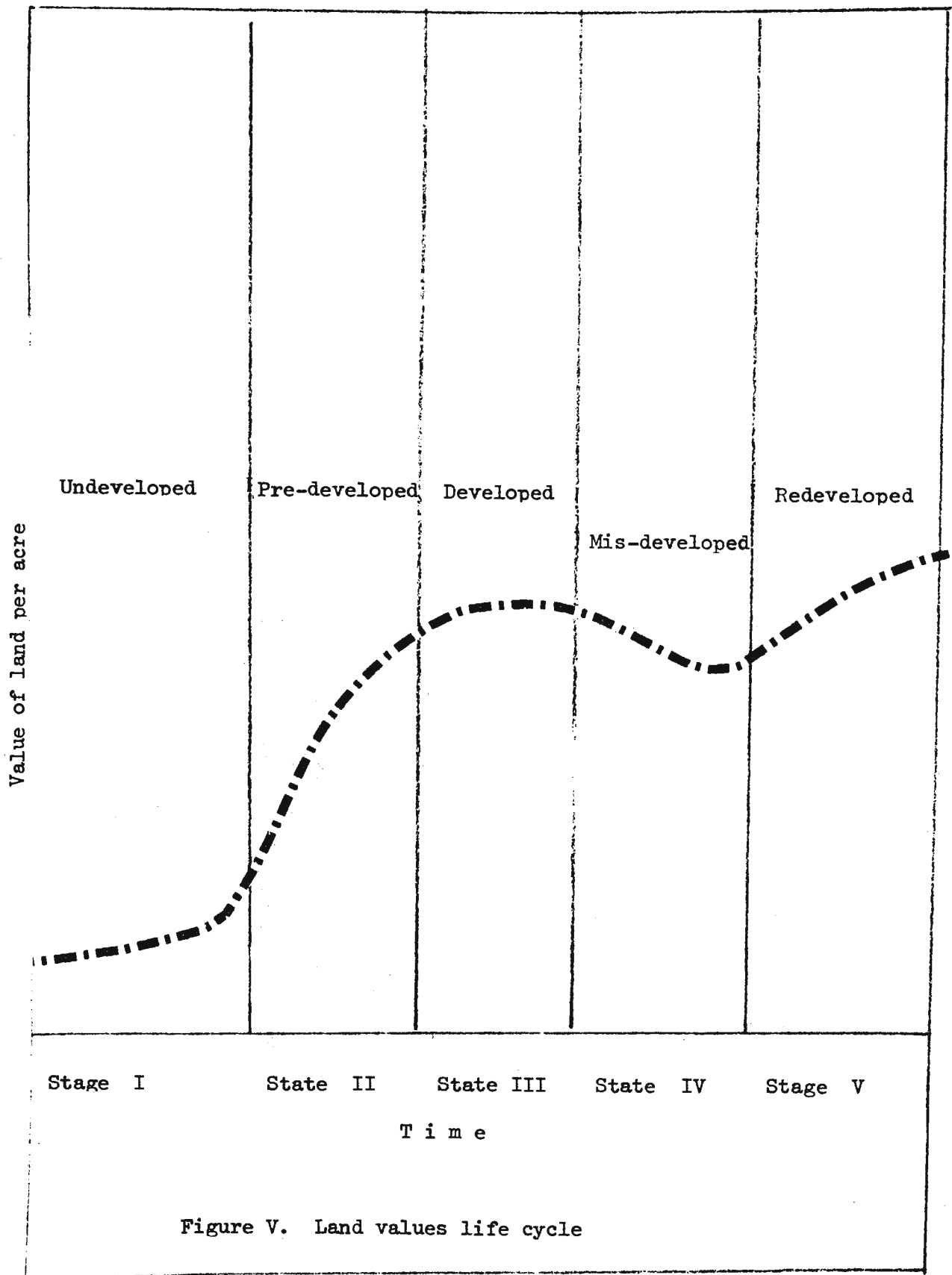


Figure V. Land values life cycle

Source: Property Research Corporation.

221. Numerous legal, financial, and physical considerations face the developer. He must be skilled in assembling the right combination of factors that will create a saleable product. The risk involved in this business is reflected in the rate of failures in the business industry which is the second highest in the nation. In 1967, failures among firms in the building industry in the United States (including subcontractors) accounted for 19 per cent of failures in all industries.

222. The consumer is the last factor in the land development process. His decision depends upon a number of variables, including financing considerations, desired life style and need for shelter. The consumer creates the demand which the developer tries to meet. In essence then, there are two land markets, the raw land market and the developed land market. The first involves the developer who switches roles and becomes the seller of a land package to the American consumer. Land value is not intrinsic to the land. In each case the interaction of the supply and demand forces creates the value and price of the land. 172/

223. The rural-urban fringe. As mentioned earlier, the dynamic aspects of the land market exist at the rural-urban fringe. Farmland values in this zone tend to reflect urban influences, particularly within metropolitan counties. This can be seen from table 13 which shows value per acre considerably lower in non-metropolitan than in metropolitan counties in the United States for the periods 1954 and 1964. 173/ However, the United States Department of Agriculture cautions that not all "... the differences in the level of market value can be attributed to the presence of cities." In some cases, particularly in regions II and III (the lake states and corn belt) cities tend to be located in or near fertile agricultural lands and market values for these metropolitan counties reflect this as well as location with respect to the market for farm products. Other tentative conclusions may likewise be made. "The fact that, on the whole, farmland in the fastest growing metropolitan areas does not have the most rapid rise in value is most likely the result of the constant process of withdrawal of more expensive land from farm use... or its speculative holding by non-farmers." 174/

224. Allan Schmid has also compiled useful data regarding the supply-demand interaction on the raw land market and the resulting land values. An appreciation of 1,466 per cent in 1960 and 1,819 per cent in 1964 was found when raw land prices paid by developers were compared with farm land prices (using data from the National Association of Home Builders). 175/ These figures demonstrate the dynamic value rise characteristics of the urban fringe. They also show the rising

172/ Building the American City, Report of the National Commission on Urban Problems to the Congress and President of the United States (Washington, D.C., United States Government Printing Office, 1968) p. 432.

173/ The only exception to this was in the State of New Jersey where farmland was more valuable outside than within metropolitan counties.

174/ Grace Milgram, "United States land prices - Directions and dynamics" Research Report No. 13 (Washington, D.C., The National Commission on Urban Problems, 1968), p. 54, and Alfred Allan Schmid, Converting Land from Urban to Rural Uses (Baltimore, Johns Hopkins Press, 1968).

175/ Alfred Allan Schmid in his already cited Converting Land from Urban to Rural Uses, p. 21.

Table 13. Average value per acre of farmland, average annual rate of increase and ratio of values in metropolitan and non-metropolitan counties, United States, by states and region, 1954 to 1964

State and region (1)	Metropolitan counties			Non-metropolitan counties			1954	1964
	Average value per acre		Annual increase	Average value per acre		Annual increase	Col.(5)	Col.(6)
	1954	1964	Percentage	1954	1964	Percentage	Col. (2) Percent	Col.(3) Percent
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Massachusetts	\$241	\$405	5.4	\$139	\$276	7.1	57.6	68.1
Connecticut	310	603	6.9	197	302	4.4	63.5	50.0
New York	180	285	4.7	88	146	5.3	48.8	51.2
New Jersey	400	638	4.8	395	689	5.7	98.4	107.9
Pennsylvania	226	372	6.2	86	146	5.5	38.0	39.2
Maryland	283	798	10.8	141	299	7.8	49.8	37.4
Region I	237	416	5.9	106	181	5.8	44.7	43.5
Michigan	195	326	5.3	115	205	5.9	59.0	62.8
Wisconsin	190	329	5.6	93	140	4.2	48.9	42.5
Minnesota	124	236	6.7	105	162	4.5	84.6	68.6
Region II	175	303	5.7	103	163	4.7	59.0	54.0
Ohio	267	416	4.6	169	274	5.0	63.2	65.8
Indiana	244	407	5.3	189	300	4.7	77.4	73.7
Illinois	318	531	5.3	216	338	4.6	67.9	63.6
Iowa	216	290	3.0	197	270	3.2	91.2	93.1
Missouri	236	311	2.8	73	143	7.0	30.9	45.9
Region III	267	418	4.6	163	256	4.6	61.0	61.2
Virginia	186	255	3.2	100	178	6.0	53.7	69.8
W. Virginia	106	139	2.8	64	87	3.2	60.3	62.5
N. Carolina	183	388	7.8	126	243	6.8	68.8	62.6
Kentucky	254	440	5.7	89	170	6.7	35.0	38.6
Tennessee	202	359	5.9	86	169	7.0	42.8	47.0
Region IV	188	337	6.0	97	181	6.3	51.5	53.7
S. Carolina	\$110	\$205	6.3	\$ 86	\$167	6.9	78.1	81.4
Georgia	115	289	8.6	58	128	8.1	50.4	44.3
Florida	241	529	8.1	90	240	9.9	37.3	45.3
Alabama	92	190	7.5	55	116	7.7	59.8	61.1
Louisiana	142	248	5.8	110	231	7.8	77.4	93.1
Region V	150	331	8.2	74	170	8.7	49.3	51.3
Oklahoma	31	155	6.7	62	117	6.6	76.5	75.4
Texas	113	186	5.2	56	102	6.2	49.5	54.8
Region VI	108	181	5.3	57	105	6.3	52.7	58.0
Colorado	57	109	6.6	37	65	5.8	64.9	59.6
Washington	270	407	4.2	103	135	2.8	38.1	33.1
California	385	648	5.5	165	359	8.1	42.8	55.4
Region VII	374	627	5.4	140	261	6.4	37.4	41.6

Source: Grace Milgram, "United States Land Prices - Directions and Dynamics", The National Commission on Urban Problems, Research Report No. 13, table IX, p. 34, as reported from U.S. Department of Agriculture, Economic Research Service, unpublished memorandum, William H. Scofield, December 1967 (Washington, D.C., 1968).

cost over time of fringe land values in the United States. In absolute terms, there was a 50 per cent increase in raw land prices between 1960 and 1964. Prices averaged between \$1,995 to \$3,030 per acre respectively. These prices are those paid by developers. The United States Department of Agriculture has collected data showing prices paid to farmers for farm land for non-farm use. In 1961 the most frequent average price per acre paid for subdivision residential use was \$1,333. ^{176/} This is significantly less than the average 1960 price of \$1,995 paid by developers. It identifies the presence of intermediate land owners or speculators who may be firms, or individuals who purchase farmland just as it enters the predeveloped stage but who do not productively use the land. Intermediate landowners generally sell to the developer somewhere in the predeveloped stage, ideally to capture the greatest possible appreciation in land values. There is little available data to indicate the extent of land speculation in the fringe areas today or its precise impact. It does exist, however and becomes a problem if the speculator holds the land beyond the time that it would be normally developed. This reduces the supply of available land and inflates the price of the available supply. Nevertheless, the presence of the land speculator in the urban fringe market is not the only factor influencing the rise in raw land values. Factors such as city size, terrain, and transportation costs together with services and utilities or the lack of them influence land values at the urban fringe even more dramatically. Also important are inflation (affecting values over time) and artificial scarcity, due to the lack of services and utilities needed for urban development. ^{177/} No available data precisely measure the relative importance of each of these factors but the interaction of all of them determines the final value of the raw land. The mix of the elements and hence the price varies among metropolitan areas.

225. The volatile nature of the urban raw land market on the rural-urban fringe around North American cities should not be overlooked. It is here that land values appreciate at the greatest rate. And profits from this appreciation are distributed among a number of involved parties. Moreover, it should be noted that the market is imperfect. There are only a few buyers and sellers and they have imperfect knowledge of each other and the supply of available land. Land costs very significantly since it is difficult to find the true value of a piece of land.

226. In the rural-urban fringe areas around Montreal a number of problems present themselves which are not simply volatile land prices but involve many serious planning and environmental problems which are characteristic to a great extent of fringe areas surrounding many of the large urban centres in North America in general. "In the fringe are to be found isolated industries, quarries, and sand pits, auto dumps, golf courses and other outdoor recreational areas, summer cottages, large residential estates for the upper middle class, cemeteries,

^{176/} Ibid., p. 23.

^{177/} Sherman J. Maisel, "Background Information on Costs of Land for Single-Family Housing", Housing in California, Governor's Advisory Committee on Housing Problems (April, 1963), pp. 235-236.

religious institutions etc." 178/ Several of these uses, particularly auto graveyards and quarries and sand pits present environmental problems and blots on the landscape. Governmental or institutional buildings and uses, including military installations and airports, because of the size of the parcels involved often make proper and orderly planning of surrounding territory very difficult. In addition, summer cottages, built for summer season use only, usually with inadequate sewer and water systems and poorly planned streets, lacking educational and other institutional facilities often work themselves into the urban tissue of rapidly growing urban areas. Moreover, the retreat of the farming area in the rural-urban fringe is characterized by the complete or partial abandonment of farming activities. In the Montreal study it was found that for each 100 acres of land already urbanized, 68 acres of land lay ready to be developed in the rural-urban fringe. Moreover, it was felt that the total amount of land under speculation was about three times as great as that which visible evidence could be found in the abandoned lands. These lands themselves, however, represent a 10 years' supply of urban land at recent rates of land consumption. Such large reserves of land in private ownership which may appear wasteful from the point of view of sound urban development appear very rational from the point of view of Montreal land speculation which will be discussed later in the text.

226a. Value of Developed Land. On the other hand, as opposed to the very dynamic rural-urban fringe area, the developed land market is more stable. Before land can enter this market, it must be equipped with sewer, water, sidewalk and other improvements. The developer receives the professional assistance of lawyers, engineers and land planners. Detailed cost data from one case by Percy E. Wagner gives a general picture of the magnitude of the expenses involved. 179/

227. Schmid has analysed Federal Housing Administration (FHA) and National Association of Home Builders (NHBA) data, (2.6 lots per acre was considered an average) in order to calculate raw land costs per lot. Generally, throughout the country, city developed lot prices show large appreciations over former farm values. Total development costs per lot were set at \$2,435 (the highest found in studies on improvement costs). These figures were used as constants and applied to the FHA and NHBA data available for different cities in the United States. The FHA data showed appreciation ranging from 0 to 3,792 per cent over farm value for 1964 with an average of 892 per cent. The range of the NHBA data, also for 1964, showed a range from 0 to 16,345 per cent with an average rate of 1,875 per cent. 180/

228. Figure VI, Land Price Stages in the Conversion Process, indicates that the cost of improvements for urban development account for more than 50 per cent of the value of the land. Nevertheless, Maisel points out that the increase in land values over time is not primarily due to increases in land development costs since over 50 per cent may be caused by the appreciation of the land value alone, although,

178/ Urbanization, A Study of Urban Expansion in the Montreal Region, Technical Bulletin No. 5, (Montreal, Montreal City Planning Department, November 1966), p. 33.

179/ See Percy E. Wagner, A Critical Analysis of a Developing Subdivision, presented at the National Convention of the American Institute of Real Estate Appraisers, (Miami Beach, Florida, 1961) in Alfred Allan Schmid, Converting Land from Rural to Urban Uses, (Baltimore, Johns Hopkins Press, 1968), p. 13. In the particular case cited by Wagner the value rise in land going from farm area to urban use in the State of Illinois was over a 2,000 per cent rise.

180/ Alfred Allan Schmid, Converting Land from Rural to Urban Uses, (Washington: Resources for the Future, Johns Hopkins Press, Baltimore, 1968), p. 19.

admittedly, a part of this appreciation is caused by the improvements themselves. 181/

228a. In addition, there are other important considerations of land costs to the total development process. Land costs directly influence housing costs and as such become important considerations in housing policy in the country. Over 9 per cent of total housing development and construction costs of single family homes is attributable to land purchase. On-site and off-site improvements such as sewers, water, kerbs, sidewalks etc. account for another 21-22 per cent of the total. The entire land development cost, including land purchase price and improvements, therefore, account for one-third of the total price of homes.

229. The median price of new single family homes with FHA-insured mortgages more than doubled between 1950 and 1967, although this increase was not entirely caused by higher raw land costs. 182/ Costs of construction also rose by a third during this period.

230. Another interesting phenomena is that with a rise in land prices has come a move toward the purchase of larger lots for single family houses which has resulted in a shift to multi-family living for many who did not want or could not afford large lot purchasing. 183/

231. There is little argument, however, that regardless of the complex relationship between rising income, changing tastes, rising total house construction costs and the price of residential land, those families whose incomes lag behind the average increase or are simply too low, find themselves increasingly priced out of the new house market. Obviously, the increase in land prices, is a major component in this process throughout the continent.

232. The Central Mortgage and Housing Corporation of Canada in its latest statistical report, states that during the past few years "land costs increased more rapidly than construction costs. Estimated costs of lots used for NHA /National Housing Authority/ bungalows averaged \$3,623 during the year, an increase of 8.1 per cent from the year before. This followed increases of 6.2 per cent and 5.0 per cent in

181/ Sherman J. Maisel, "Background Information on Costs of Land for Single-Family Housing", Housing in California, Governor's Advisory Committee on Housing Problems (Montreal, 1963), pp. 235-236. Increases in FHA insured single-family homes went from \$8,300 to \$17,992 during this period according to U. S. Bureau of the Census, Statistical Abstract of the United States (89th Edition) (Washington, D.C., 1968), p. 703. It should be noted however, according to Milgram, "United States Land Prices" ..., op. cit., pp. 55-56, "While residential land prices were tripling or quadrupling, costs of construction rose by a third, with the Boekle Construction Index for small residential structures rising from 92.4 in 1955 to 120.1 in 1965 (1957-59=100)."

182/ Frank G. Mittelbach "Patterns of Land Utilization and Costs: A Study of Los Angeles" (Los Angeles, University of California, Graduate School of Business Administration, 1967, Mimeo.) and Sherman J. Maisel, "Background Information on Costs of Land for Single-Family Housing", Housing in California, Governor's Advisory Committee on Housing Problems (1963), pp. 235-236. Both Mittelbach and Maisel in their respective studies found that a large part of site increases was due to increase in site size over time. Maisel found that this change accounted for 20 per cent of the site increase.

183/ Central Mortgage and Housing Corporation, Canadian Housing Statistics, Montreal, (1969), table 81.

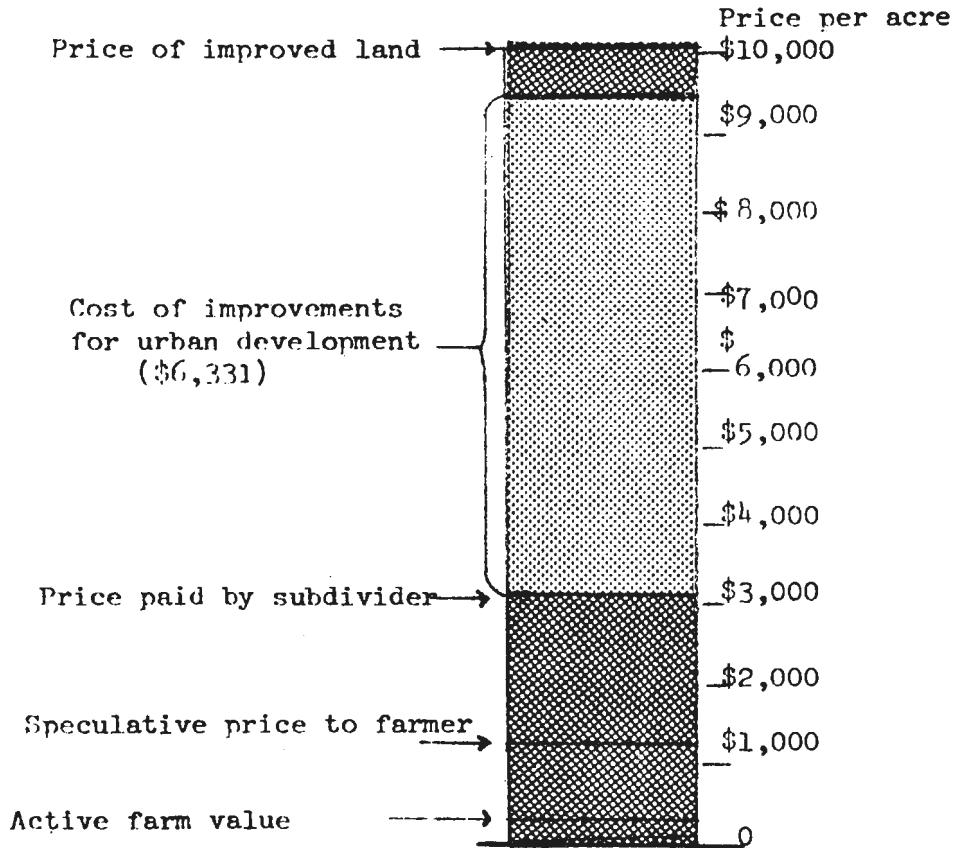


Figure VI. Land-price stages in the conversion process

Source: Alfred Allan Schmid, "Suburban Land Appreciation and Public Policy", Journal of the American Institute of Planners, vol. XXXVI, No. 1 (Washington, D.C., January 1970), p. 39.

1968 and 1967 respectively" 184/ (see table 14). The increase in land costs affected nearly all central metropolitan areas but its rate varied significantly across the country. For the period 1964-1967 land costs for new NHA bungalows in central metropolitan areas throughout Canada registered a 14.1 per cent increase and a total final housing cost up 17.1 per cent. Toronto registered the highest increase during this period with land costs up 61.2 per cent and total building costs up 41.0 per cent. Interestingly, Montreal showed a decrease in land costs, down 21.9 per cent and over-all housing costs down 2.5 per cent (see table 15). More recent figures for the period 1968 and 1969 (table 16) show that higher total housing costs were experienced in nearly all metropolitan areas. The Central Mortgage and Housing Corporation reports "increases of over 12 per cent took place in Halifax, London, Hamilton, Edmonton and Sudbury. In Toronto, the average cost of NHA financed bungalows in 1969 was \$27,547. This represented an increase of 9.5 per cent over 1968. In contrast the cost of new housing in Montreal and St. John's declined during the year." 185/

233. Aware of the general problems of increased home costs in the province, particularly on the increasing price of land, the Ontario Housing Corporation under its land development programme removed the necessity for families to initially buy the land for their home. Lots are leased for a term of 50 years with "the lessee having the option of purchasing the lot at any time after the end of the fifth year from the commencement of the lease at the market value established at the beginning of the lease term". 186/ Ground rents to the lessee are based on the cost of the lot to the Ontario Housing Corporation.

234. In order to be eligible for this programme, a person must have economic circumstances which enable him "to undertake the financial responsibility of

184/ Ibid., p. xiv.

185/ "Land Lease Program", Ontario Housing Corporation. This land development plan is grouped under the H.O.M.E. (Home Ownership Made Easy) programme of the Ontario Housing Corporation which further states: "The option to purchase may be exercised by payment of cash; or, the option may be exercised on an agreement of sale plan. This plan will permit the amortization of the market value over a period not exceeding 35 years from the date of commencement of the original lease."

186/ Ibid. The restrictions are:

- "(a) The maximum construction cost, selling price, or appraised value of the proposed dwelling to be placed on the lot, exclusive of land and services, shall not exceed \$15,000 (for a three bedroom unit, \$16,000 for a four bedroom unit and \$17,000 for a five bedroom unit).
- (b) The lessee must arrange for his own financing, commence construction of his dwelling within six months and complete it within eighteen months, or the transaction is cancelled.
- (c) All house construction, whether NHA-financed or otherwise, must conform to the building by-laws of the municipality where located and the "Residential Standards" of the Division of Building Research, prescribed by Central Mortgage and Housing Corporation for houses built under the National Housing Act. Where one standard is higher than the other, the higher standard will govern."

Table 14. Estimated cost of new single detached dwellings financed under the National Housing Act, Canada, 1949-1969

<u>Period</u>	<u>Land costs</u>	<u>Construction costs</u>
1949	657	7,335
1951	1,030	9,412
1954	1,671	10,377
1955	1,788	10,564
1956	1,993	11,306
1957	2,259	11,543
1958	2,463	11,561
1959	2,472	11,750
1960	2,360	11,678
1961	2,453	11,776
1962	2,535	11,916
1963	2,692	12,134
1964	2,813	12,717
1965	2,816	13,460
1966	3,006	14,772
1967	3,155	15,035
1968	3,350	15,215
1969	3,623	16,270

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics, (Montreal, 1969), from table 81.

Table 15. Land and housing costs in CMAs, 1964-1967 Central Metropolitan Areas, Canada, 1964-1967

Area	Land cost \$		per cent change	Total housing cost* \$		per cent change
	1964	1967		1964	1967	
CANADA	2,813	3,209	14.1	15,807	18,507	17.1
EDMONTON	3,347	3,779	11.1	15,330	19,144	25.0
HALIFAX	1,974	1,842	-6.7	15,307	17,506	14.3
LONDON	2,983	3,709	24.3	15,107	18,020	19.3
MONTREAL	2,434	1,901	-21.9	16,232	15,833	-2.5
OTTAWA	3,515	3,584	2.0	17,269	20,047	16.0
QUEBEC	2,004	2,328	16.1	14,941	16,279	8.9
ST. JOHN	1,874	2,687	43.4	14,424	17,482	21.1
SUDBURY	2,524	2,285	-9.5	15,845	17,995	13.6
TORONTO	5,126	8,262	61.2	17,455	24,836	41.0
VANCOUVER	3,413	3,991	16.9	17,007	20,616	21.2
VICTORIA	2,471	3,163	28.0	16,925	20,595	21.8
WINNIPEG	3,211	3,121	-2.8	16,602	18,436	11.0

* Refers to new bungalows financed under National Housing Act. The 1964-1967 changes were all positive with the exception of Montreal, where the change was -2.5 per cent.

Source: Central Mortgage and Housing Corporation, "The Present Housing Situation and Future Prospects" (December 1967, tables 9 and 10).

Table 16. Estimated costs of new bungalows financed under the National Housing Act by area, 1968-1969
Canada

Area	Total cost		Land cost	
	1968	1969	1968	1969
Metropolitan areas				
Calgary	20,066	21,941	4,168	4,741
Edmonton	19,796	22,283	4,665	5,234
Halifax	20,281	22,882	3,562	4,115
Hamilton	24,236	27,598	7,629	9,110
Kitchener	20,449	21,714	5,157	5,760
London	19,236	21,936	4,644	5,537
Montreal	16,866	16,040	2,078	1,818
Ottawa-Hull	18,059	18,969	3,616	3,625
Quebec	16,617	17,982	2,292	2,470
Regina	17,832	19,908	3,038	3,321
Saint John	17,272	19,970	2,209	2,901
St. John's	21,123	20,470	4,789	4,731
Saskatoon	17,802	19,653	3,120	3,827
Sudbury	19,680	23,720	3,359	4,480
Toronto	25,153	27,547	8,330	9,404
Vancouver	21,949	24,063	4,723	5,874
Victoria	23,157	27,429		7,002
Windsor	23,144	24,779	5,203	5,785
Winnipeg	19,674	21,719	4,160	4,453
Total	18,955	20,353	3,695	4,052

Source: Central Mortgage and Housing Corporation, Canadian Housing Statistics (Montréal 1969), from table 82.

- Notes:
1. Excludes loans approved on leasehold property.
 2. Includes land, construction and other costs, but excludes the mortgage insurance fee.
 3. Land cost data reflect the prices paid for lots regardless of the extent of servicing or the method of financing.

constructing and maintaining a dwelling, according to the prescribed minimum standards for the development and within the time limits laid down. 187/

235. Lots are made available under this programme to individual private applicants, to co-operative groups and to merchant builders for speculative building purposes. By the end of 1968, when OHC's land development programme was a year and a half old, 3,309 serviced lots in 13 communities were offered out of which over 85 per cent were taken of which 78 per cent were on a lease arrangement. The land development programme of OHC is without doubt one of its most imaginative programmes and a pioneer of the North American continent.

Supply-demand interaction and land costs: case studies

236. San Francisco - Sherman J. Maisel has analysed data for the San Francisco Bay area, one of the fastest growing metropolitan regions in the United States. His study has effectively shown the impact that changes in lot sizes have upon total cost per lot (see table 17). Development costs increase with increasing lot size at a fairly steady rate between 2,500 ft² per lot to 10,000 ft² per lot. After this, development costs increase at a slower rate. 188/ Large lots are, therefore, relatively more economical for the developer.

237. Maisel's analysis also indicates the change in lot price and development cost between 1950 and 1962 in the San Francisco Bay area. In this study the causes of value change are identified (see table 18). The average lot in the Bay area increased from 5,500 ft² in 1950 to 6,500 ft² in 1962. The land value for these lots rose from \$600 to \$2,235, with development costs rising from \$700 to \$1,615. The total lot values rose from the 1950 figure of \$1,300 to \$3,850 on the average of 1962. As the figures indicate, the increase in land and development costs cannot be completely explained by the change in lot size. Maisel discovered that the change in size accounted for only 20 per cent of the value increase and that a 28 per cent increase resulted from the cost and quality of development apart from other factors. The greatest portion, 52 per cent, was caused by the increase in the value of the raw land.

238. Philadelphia - Another study of the relationship of demand in various land-use categories and its impact on land prices may be observed by the conversion of land from rural to urban use in Philadelphia during the period 1945-1962. More than three-fourths of this land went into residential use.

239. The study area consisted of 5,200 acres of vacant land in the north-east section of the city of Philadelphia which is the core of the eight-county Standard Metropolitan Statistical Area (SMSA). In 1960 Philadelphia's SMSA had a population

187/ Sherman J. Maisel, "Background Information on Costs of Land for Single-Family Housing", Housing in California, Governor's Advisory Committee on Housing Problems, p. 250.

188/ Grace Milgram, The City Expands - A Study of the Conversion of Land from Rural to Urban Use, Philadelphia 1945-62 (Washington, D.C., United States Department of Housing and Urban Development, 1967).

Table 17. Cost of developed lots
San Francisco, California

Sq. ft. of Lot	Based on front set	Lot	Total per lot	Raw land per lot at \$10,000 per acre	Total developed costs	Land \$10,000 ² per acre for 6,000 ft ²		Total costs per lot
						Per acre	Per lot	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2,500 (row houses)	525	\$ 175	\$ 700	\$ 835	\$ 1,535	\$ 12,700	\$ 1,060	\$ 1,760
5,000	1,050	200	1,250	1,670	2,920	11,200	1,760	3,120
6,000	1,260	225	1,485	2,000	3,485	10,600	2,120	3,605
7,000	1,470	350	1,720	2,330	4,050	10,000	2,330	4,050
8,000 @ 75 front ft.	1,575	275	1,850	2,670	4,520	9,400	2,510	4,360
9,000 @ 80 front ft.	1,680	300	1,890	2,860	4,840	8,800	2,520	4,500
10,000 @ 90 front ft.	1,890	325	2,215	3,335	5,550	8,200	2,735	4,950

Source: Special survey for this study. Sherman J. Maisel "Background Information on Costs of Land for Single-Family Housing", Housing in California, Governor's Advisory Committee on Housing Problems, 1963, p. 229.

Table 18. Changes in cost of typical Bay Area lot

Year	Size of lot (ft ²)	FHA value (\$)	Cost to develop (\$)	Land value (\$)	Cost to develop per front ft. (\$)	Land value per acre (\$)
1950	5,500	1,300	700	600	10	3,300
1960	6,500	3,500	1,535	1,965	20	9,300
1962	6,500	3,850	1,615	2,235	21	10,600

1950-1960

Cause of value change

Per cent of total increase

For original lot size:	
\$635 in cost and quality of development	29
\$1,100 in value of raw land	50
From change in size of lot: \$465	21
From original lot size:	
\$720 in cost and quality of development	28
\$1,325 in value of raw land	52
From change in size of lot: \$505	.20

Source: Sherman J. Maisel "Background Information on Cost of Land for Single-Family Housing", Housing in California, Governor's Advisory Committee on Housing Problems, 1963, p. 229.

of 4.3 million persons. The estimated increase for the year 2000 is approximately 3.7 million people and the SMSA's urbanized land is expected to increase by three-fourths. The city of Philadelphia is the most densely populated area of the SMSA with 90 per cent of its 78,500 acres in urban use in 1960.

240. The development process in Philadelphia has been mainly in the hands of private developers, subject of course to municipal land-use and building controls and to the timing and installation of public facilities. The price of underdeveloped land in Philadelphia has been found to be inversely related to distance from the centre city. Within one mile of the central business district land in 1960 was valued at \$10,000 an acre, land 10 miles distant was valued at half that value and 20 miles distant at only one-tenth the value.

241. During the period covered by the study about a half of the sample land or 5,200 acres were developed, three quarters of which was put into residential use. An examination of land transactions in the study area reveals a picture of numerous individuals and companies with diverse needs and interests. The developments which have taken place have witnessed a thirteen-fold increase in land value during the 18-year study period from \$1,030 per acre in 1945 to \$13,300 per acre in 1962. In deflated dollars the increase has been seven-fold.

242. The increases in land value indicate market forces in response to varying characteristics of the land, such as shifts to denser zoning classes, improvements in accessibility and factors involved with increased population and employment opportunities in the area. Analysis by means of a multiple regression of the price per acre on a series of variables revealed high explanatory power for three:

(a) The greatest increase in value was produced by the possibility of more intensive use. Land which was zoned for raw housing more than doubled the price of single-family land.

(b) Land with access to sewers was almost double the price of land without such access.

(c) Land fronting on a major boulevard increased four-fifths in value as compared with those lands without boulevard frontage.

243. Westchester County - As of 6 April 1965, a special census reported that there was 853,198 persons residing in Westchester County which represented a 5.5 per cent increase over 1960 figures. This was a significantly lower rate than for other geographical areas of which the county is a part. For the same period, the United States as a whole had an increase of 7.7 per cent, the North-east Region (composed of the New England and Middle Atlantic Divisions) had a 6.3 per cent rise, the Middle Atlantic Division (composed of the States of New Jersey, New York and Pennsylvania) increased by 6.5 per cent and New York State had an increase of 7.6 per cent (see table 19). The New York Standard Metropolitan Statistical Area to which Westchester is most directly linked had a higher rate of growth 5.9 per cent and during the 1960-1965 period, the New York suburban counties increased by 14.5 per cent. The greatest rates of increases being experienced by those suburban counties not contiguous to New York City, Rockland with 32.5 per cent and Suffolk with 35.3 per cent, 189/ (see table 20). According to the Westchester County Population Report, "the availability of housing coupled with accessibility of employment opportunities apparently provided a continuing impetus to growth in

189/ Westchester County Department of Planning "Population Change in Westchester County, 1960 to 1965" (White Plains, New York, February 1967), pp. 1-3.

Table 19. Population and population change for selected areas of the United States 1960-1965

	1965		1960		1960-1965	
	Number	Percentage	Number	Percentage	Number	Percentage
United States	193,190,000	100.0	179,323,175	100.0	13,866,000	7.7
North-east Region	47,482,000	24.6	44,677,819	24.9	2,804,000	6.3
Middle Atlantic Div.	36,373,000	18.8	34,168,452	19.1	2,204,000	6.5
New York State	18,053,000	9.3	16,782,304	9.4	1,271,000	7.6
Westchester	853,198	0.4	808,891	0.5	44,307	5.5

Source: U. S. Bureau of the Census Current Population Reports: Population Estimates, "Population Estimates of the States: July 1, 1965", Series P-25, No. 348, (September 16, 1966).

Table 20. Population and population change for New York SMSA by county 1960-1965

	1965		1960		1960-1965	
	Number	Percentage	Number	Percentage	Number	Percentage
New York SMSA	11,327,000	100.0	10,694,633	100.0	631,000	5.9
New York City	7,992,000	70.6	7,781,984	72.8	209,000	2.7
Suburban ring	3,335,000	29.4	2,921,649	27.2	422,000	14.5
Bronx	1,528,000	13.5	1,424,815	13.3	103,000	7.2
Kings	2,699,000	23.8	2,627,319	24.5	71,000	2.7
New York	1,565,000	13.8	1,698,281	15.9	-133,000	-7.8
Queens	1,942,000	17.1	1,809,578	16.9	132,000	7.3
Richmond	258,000	2.3	221,991	2.1	36,000	16.3
Nassau	1,397,000	12.3	1,300,171	12.2	97,000	7.5
Rockland	181,000	1.6	136,803	1.3	44,000	32.5
Suffolk	902,000	8.0	666,784	6.2	235,000	35.3
Westchester	853,198	7.5	808,891	7.6	44,307	5.5

these counties (Rockland and Suffolk). While the increased density in Nassau is an indication of approaching saturation and thus a reduced rate of growth, the same is not nearly so true for Westchester. Given the employment opportunities to be found in the County, the relatively slow growth is probably related to the lack of housing types available in sufficient quantities at costs considered reasonable by those desirous of moving into the County". 190/

244. The reasons for this scarcity of housing types in the county at reasonable prices is the result of a combination of several factors. Local municipal policies, "home rule", have controlled the extent and types of new residential development in the county during the last half century. Low density single-family units are most sought after with several communities, particularly in northern and central sections of the county seeking larger lots (one acre or greater) for single-family residences. 191/ In addition, besides the general rise in construction costs, land costs in Westchester rose appreciably during the late 1960s with costs in the southern sections of the county at more than \$20,000 per acre (see table 21 and annex III). This has resulted in costs of new single-family housing to vary from about \$40,000 in the northern sections to over \$80,000 in the south. The construction costs of homes is estimated to be about 40 to 60 per cent of the total selling price with land costs varying from 17 to 30 per cent of the selling price. Because of these exceptionally high costs, builders prefer to construct multi-family housing, but as mentioned previously there is both a scarcity of land zoned for this purpose in the county, as well as a reluctance on the part of communities to accommodate zoning requests by builders.

190/ Ibid., p. 3.

191/ According to a recent report, Interim Report 2, Residential Analysis for Westchester County, New York, Factors Affecting the Cost and Supply of Housing, (White Plains, New York, Economic Consultants Organization, Inc., June 1970), many residents throughout the county have become very concerned over the types of new housing which could or should be built in their areas. This report, pp. viii and ix, states:

"These views have been pressed upon local government officials. For example, residents in the southern part of the county, where significant apartment development has already taken place, do not wish to see further development of this type in areas not presently zoned for high densities. In the northern and central parts of the county, residents and officials are usually even more reluctant to entertain proposals for multi-family developments.

"Considering this wall of opposition, builders are often faced with long, arduous discussions with zoning, (and) planning, (with) village and town boards before they can begin construction of apartments in areas which are not already zoned for multi-family use.

"... Builders must not only contend with hostile local attitudes, they also have to contend with rising costs of all types. One result is a bias towards large lot, high cost single-family homes by residents."

Table 21. Cost of land - Westchester County
1965-1970 period

Section of county	<u>Single-family per acre</u>		<u>Multi-family per unit</u>	
	With services (Water and sewer)	Without services	Garden apt./townhouses	High rise
North	\$15,500- 18,500	\$13,500- 15,500	\$1,500-4,000	\$1,500- 2,500
Central	\$15,000- 20,000	-	-	-
Southern	\$20,000+	-	\$6,000	\$4,000

Source: Interim Report 2, Residential Analysis for Westchester County, New York, Factors Affecting the Cost and Supply of Housing (White Plains, New York Economic Consultants Organization, Inc., p. ix).

245. County government in Westchester has not been an active force in guiding development. Strong home rule on the part of local governments has contributed to the high costs of housing and land costs to the extent that many employees of Westchester firms are unable to live in the county. A development plan which will provide for smaller lot zoning is very much needed in the county. It has been found that a major element in the cost of land for single family housing is the size of the parcel. The cost of land increases as the size of the parcel increases in all sections of the county although not necessarily on a proportional basis depending very much on the relative amounts of land available in different sizes in various planning areas in the county. For example: "in Planning Area I outside of Peekskill, a less than one-acre parcel (often about a half-acre) sells for about 65 per cent of the cost of one full acre". (See annex III, table 34, Estimated Cost of Land for Single Family Development). "The relationship is reversed for land in Planning Areas II and IV where the cost of a half-acre parcel is less than half of the cost of a one-acre parcel." 192/ It should be noted that Planning Area I has larger proportions of land zoned for half-acre and one-acre developments than either Planning Areas II or IV (see annex III, tables 35 and 36 and figure VII, Planning Areas, Westchester County).

246. The availability or lack of availability of public utilities also directly affects land prices. Land with public utilities readily available generally sells for more than land without these facilities. The type of residential zoning also affects land prices, but much less in the southern parts of the county where land prices are set more by the amount of land available. Land costs for garden apartments or townhouses are generally greater per unit than for high-use developments due to the relative density levels permitted. These costs range from \$1,200 per unit in the northern parts of the County to \$6,000 in the southern and central regions (see annex III, table 37). "This range of costs reflects the amount of land available in the area for multi-unit use and the 'acceptability' of apartment development on the part of town officials and residents... the range of costs of land for high-rise units is more than for garden apartments; the lowest cost land sells for as low as \$1,400 per unit, the highest at \$8,000 per unit in the central and southern areas of the County... the wide range of per-unit land costs... reflects the amount and location of land in zones which permits high-rise development." 193/

247. It should be noted that the decision of which land to develop in the county, other things being equal, "is seldom made on the basis of lowest cost of improvements, but rather on the basis of availability of land... if single-family housing at 2 units per acre is allowed, the developer builds at that density, even though he is aware... that lower cost housing could be built if land could be developed at a higher density, for example, 10 units per acre." 194/

248. The results of the above practices of zoning in Westchester County cause a rapid rise in the over-all cost of housing. Prime land is used up, less desirable land is subject to development over time and housing spills over at low densities to areas further away which is more expensive to develop. The added costs are passed along to the buyer (see annex III, table 38, Approximate percentage distribution of selling price of single family units, Westchester County, by planning area, 1966-68).

192/ Ibid., p. 27.

193/ Ibid., p. 30.

194/ Ibid., p. 36.

249. Montreal - The Montreal Region covering 2,125,000 acres contained 2,488,000 persons in the 1961 census being only 6 per cent urbanized. The urbanized part of the territory centred in Montreal contains 95 per cent of the population although the metropolitan area of Montreal itself is only 31 per cent urbanized. Moreover, the increase in the urbanized land area which took place in the suburban area just outside of the metropolitan area during the 1952-1961 period amounted to 12 per cent of the entire increase in the urbanized land of the whole region. From 1961 to 1964 this proportion rose to 24 per cent. Consequently new urban growth beyond the metropolitan area is becoming more important, although land within the metropolitan area is far from being completely urbanized. 195/

250. The price of land in the metropolitan area of Montreal and beyond thus varies considerably according to the degree of development in the vicinity. Land speculation in the Montreal region is taking place on a grand scale. For example, in 1961 there were "60,000 acres of undeveloped land on the Island of Montreal in the hands of speculators - enough for all metropolitan urban development for 12 years or so - and that, in addition, nearly 90 per cent of the undeveloped land in the Ile Jesus was held for speculation. In the western part of the Island of Montreal and on the South Shore, 60 per cent to 67 per cent of the land was reserved for the same purposes; in the eastern part of the Island, the proportion was 60 per cent." 196/ By 1964, practically all of the undeveloped land in the vicinity of the metropolis - two to three times as much an amount of existing urban land - was held for speculation.

251. Some of the amounts of money made in the land speculation game in the Montreal region are reported as follows:

"On the South Shore, some farms were bought in 1963 and 1964 at prices between \$700 and \$800 per gross acre. Two years later, they were sold to construction companies at figures between \$3,000 and \$4,000 per acre. In the same area, in 1964, land was bought for a public project at \$0.10 per square foot or \$4,300 per gross acre. The following year, lands adjacent to the public project, by then completed, were on the market at \$0.20 and \$0.25 per square foot, or from \$6,000 to \$7,500 per net acre.

"On the Island of Montreal, an international corporation sold a piece of land for \$154,000. Four months later, the same piece of land was resold for \$444,000. In the fall of 1962, an important local authority in the Metropolitan Area announced its intention to purchase a piece of land. The site was bought by a landholding company three days later at \$0.70 per square foot; and, two months later, the company resold the site to the authority at \$1.19 per square foot.

"We also have some reliable data on the average price of land in housing developments. For example, in 1964, the average price of a lot in housing developments of single-family bungalows, financed under the National Housing Act, was \$1,763 in one part of the Metropolitan Area and \$2,434 in another part of the same area." 197/

195/ Urbanization, A Study of Urban Expansion in the Montreal Region
Technical Bulletin No. 5, (Montreal, Montreal City Planning Department,
November 1966) p. 10.

196/ Ibid., p. 52, as quoted from C. Langlois, "Speculation and Sprawl", The Canadian Geographer (1961).

197/ Ibid., p. 106.

252. There are, nevertheless, many more losing bets in the land speculation game than winning ones. With the outer boundary of the territory of land speculation spreading each year beyond all reasonable needs, it has been estimated that the "reserve existing ten years ago, in 1956, would have been enough, without adding an acre, to supply all urban land needed right through to 1976 and beyond". 198/ The question may be asked as to who pays for the losing bets. The simple answer is that the winning lands are made to cover the costs of the losing ones and that in the last analysis it is the ultimate owner who pays the price for losing bets as well as for the exorbitant cost of carrying huge reserves of undeveloped speculative land. The ultimate owner in many cases is the homeowner.

253. It has been estimated conservatively that if the amount of money invested in speculative land reserve in the Montreal Region is \$600 million, annual carrying charges are approximately \$40 million. "These charges represent almost two thirds of the estimated annual 'bill', paid by purchasers for newly developed land, of some \$65,000,000." 199/

254. Nevertheless, land speculation is not the only problem facing the Montreal region. The density of development is another critical factor. Municipalities have the power to limit the maximum permissible densities, but equally important is the need to prescribe minimum densities in the region. It is undesirable that development proceeds as it presently does in a piecemeal basis.

255. From the above case studies of rising land prices in the San Francisco Bay area and in the north-east section of Philadelphia, high land costs in Westchester County and excessive land speculation in the Montreal region, one may now turn to the question of policy implications. Part of the rise in land prices can be assigned to the development process, but an even greater part can only be assigned to land speculation and to those general factors of urbanization, particularly to demographic forces which increase the need for housing and land upon which to construct housing. The extent of the increase can be measured, but it is not possible to say whether the level of prices or the rate of land value increase is too high. There exists numerous difficulties in isolating the relevant forces which make up the demand for land, particularly residential land. Moreover, according to Milgram, "little is known, either empirically or in theory, of the forces which cause the levels (of land prices) to differ, nor what makes one level acceptable in one community and a level twice as high acceptable in another". 200/ According to

198/ Ibid., pp. 54-55.

"In 1956, a territory subject to speculation of 190,000 acres, for a built-up area of 65,000 acres.

"In 1964, a speculative territory of 250,000 acres for a built-up area of about 120,000 acres.

"In 1976, a projected 355,000 acres under speculation for a built-up area of 230,000 acres."

199/ Ibid., p. 55.

200/ Grace Milgram, The City Expands - A Study of the Conversion of Land from Rural to Urban Use, Philadelphia 1945-62, United States Department of Housing and Urban Development (Washington D.C.), p.131.

Winnick, the "base line of land values" is peculiar to a city and an analyst confronts numerous problems in attempting to measure the level of demand for land. 201/

256. More reliable regional population forecasts and economic growth forecasts are needed, together with more specific information on highways, extensions and facilities. Such information would help to remove some of the uncertainties of time, place and type of development which should lead to "a more rational pattern of development, and would serve to limit the extreme variance in sale price of land arising from expectations". 202/ Other important factors concern land-use controls and extension of facilities. It is apparent that lower land costs, particularly for residential land-use, can be achieved if sufficient amounts of land are available for development which are also served by efficient and adequate transportation systems. This, according to Milgram, would also call for "sources of employment spread throughout the metropolitan area, in order to promote dispersed housing demand and prevent monopoly prices from arising at a small preferred location". 203/ In some cases, however, it may be necessary to do more than encourage, guide and control. It may be necessary for some form of regional agency to take action when lands are held for development to ensure their development as well as to acquire lands early for future developments. The power of land acquisition must also be accompanied by a means of reserving land for eventual acquisition. 204/

257. In addition, great care would have to be taken that excessive land is not zoned in any particular use since this would serve to promote sprawl and premature subdivision. Marion Clawson believes what is needed is "sufficient area for each purpose, including enough area to provide some competition among sellers and some choice among buyers - but no more". 205/

258. Given the inadequacy of forecasting methods of land-use by specific location and the present political situations of metropolitan areas, it seems highly improbable that a true balance can be achieved. But this is not to say that efforts at improving current methods of land control and, in turn, land prices, are not warranted.

201/ See Louis Winnick, as quoted in Derek Senior, The Regional City. An Anglo-American discussion of metropolitan planning (London, Longmans, Green and Co., 1966), p. 127.

202/ Grace Milgram in her The City Expands..., p. 133.

203/ Ibid., p. 134.

204/ It should be noted that in the Province of Quebec the power to reserve lands is known as homologation. For regional development purposes, however, a special form of homologation would be necessary since existing provisions of municipal law are unsuitable.

205/ Marion Clawson, "Urban Sprawl and Land Speculation", Land Economics, Volume XXXVIII (May 1962) as quoted in Grace Milgram in her The City Expands..., p. 134.

VI. LAND TAXATION

An overview

259. In order to fully understand land policy and control measures in North America an examination of the property tax is especially relevant since there is a growing tendency to relate fiscal considerations to land policy. The capital gains tax levied by the United States federal government on specific types of income is also relevant to land policy decisions since the tax affects land-use and indirectly land values. Taxes are levied by government on the local, state and federal levels with a different mix among different governmental units. The backbone of revenues at the local level is the ad valorem levy on the assessed value of property (land plus improvements). In 1968, in the United States, this tax accounted for about 88 per cent of the tax revenue of local governments, 68 per cent of the general revenue from local sources and 47 per cent of the general revenue from all sources. 206/ However, when all taxes on all levels of government are considered, it accounts for only 15 per cent of the total. 207/ On the other hand, state governments rely on different types of taxes. There is no set pattern, for example, in regard to the property tax. Twenty-one out of 47 states with SMSA's have less than 1 per cent of the total state-local property tax revenues (1965-1966 data). Fourteen had between 2 and 5 per cent and four had greater than 15 per cent of the state-local property tax revenue. 208/ The rest of state finances come primarily from sales taxes and income taxes. The federal government, on the other hand, relies heavily upon the income tax (81 per cent of total federal revenues in 1960). 209/ Excise taxes make up most of the remainder of the 15 per cent federal tax base.

260. The federal income tax also has important bearing on land and property development and use. Profits from the sale of undeveloped land (i.e., the profits of a speculator but not the developer) are taxed as capital gains. The present capital gains tax rate is equal to one half of the income tax rate with a maximum ceiling of 25 per cent of profit. Since the federal income tax rate varies with the size of the individual income, this special provision may give great tax savings to land owners in the high tax brackets. It influences land value to the extent that it encourages land speculators which in turn force an appreciation of land value. There are also special corporation tax rates which encourage this form of land ownership.

206/ Benjamin Bridges, Jr., "Past and Future Growth of the Property Tax", in Property Taxation, U.S.A., Richard W. Lindholm, ed. (University of Wisconsin Preys, 1969), p. 21.

207/ Ibid., p. 21.

208/ Dick Netzer, Impact of the Property Tax: Effect on Housing, Land Use, Local Government Finance, Research Report 1 (National Commission on Urban Problems, 1968), p. 6.

209/ Jerome Percival Pickard, Changing Urban Land Uses as Affected by Taxation (Washington, Urban Land Institute, 1962), p. 18. Excise tax does not tax real property directly, except through the federal excise on real estate transfers (\$1.10/1,000 or 0.11 per cent of sales value at time of the transfer, levied in the form of revenue stamps on the seller).

261. The depreciation allowance on improved provisions must also be taken into consideration. For tax purposes the federal income tax allows a write-off of depreciation at a faster-than-normal rate than the actual physical decay of a building. There are several methods of calculating depreciation. Among those most favoured by real estate investors are the accelerated depreciation formulae which allow an investment in real estate to be recovered tax-free by "depreciation deductions which in the case of new construction can be taken at a rate which recovers two thirds to three fourths of the depreciable cost in the first half of the useful life of the building and more than 40 per cent of the cost in the first quarter of the useful life". 210/

262. Several major tax features thus favour the real estate investor. By the use of depreciation deductions on new construction many investments in real estate can be recovered tax-free. An investor's equity is a small fraction of the total investment, thus the tax-free capital recovery may be further enhanced since depreciation deductions are levied against an entire building.

263. In addition, the gain and loss treatment in real estate is also favourable to the investor since losses may be fully deductible as ordinary loss from ordinary income and gains may qualify for favourable capital gain treatment. And all gains, regardless of prior depreciation taken, are capital after a 10-year period. Tax on gains may also be postponed through various forms and a build-up of value in real estate may be traded for other investments in real estate without being taxed. Owners of real estate may also build up value of their property by repair and maintenance expenditures which qualify as currently deductible expenses. Although, these in fact may go well beyond aiding physical deterioration and obsolescence by building up property value.

264. As the foregoing points out, depreciation allowances may play a very significant role in income tax provisions affecting real estate investment. Land, however, is not depreciable for federal income tax purposes. Only depreciable improvements are subject to depreciation allowances.

265. The property tax also plays a very important role as a source of municipal revenue in many parts of Canada. In 1963, revenues from the property tax and from property-based businesses amounted to 90 per cent of all locally derived municipal revenues in the provinces of Ontario, Nova Scotia and New Brunswick. However, in many of the other provinces revenues from property taxes were substantially lower. Throughout the history of local government in Ontario, property taxes have remained a major source of available income to municipalities, producing required annual revenues and balancing current budgets. Over the years, the base of the property tax in Canada has both widened and narrowed. In the 1965 calendar year, property taxes generated 60 per cent or more of local revenue sources, differing in degrees, if not in kind, among the provinces.

266. Although the tax system of Canada and the United States share many similar traits, there are, nevertheless, a number of fundamental differences. In Canada, for example, it is not presently possible, as it is in the United States, to deduct property taxes from income for the purposes of income tax. On the other

210/ Richard E. Slitor, The Federal Income Tax in relation to Housing, (United States Government Printing Office, 1968), p. 12. For a more thorough analysis of various depreciation formulas and their effect on investment see Slitor and the National Commission on Urban Problems, Building the American City (Washington, D.C., 1968), pp. 399-407.

hand, Canadians at present are not taxed on capital gains made in real estate. In the United States capital gains are taxed. There are proposals, however, before Parliament and provincial governments to reform the Canadian income tax structures which in effect would bring it closer to the present United States system, particularly as it relates to real estate and capital gains taxes. 211/

267. A proposed "site value" tax in various provinces in Canada would narrow the tax base by departing from existing and accepted relationship of taxation to the value of the accommodation provided. This would tend to increase the weight of taxes on farming operations and compress urban construction on to more crowded sites but would not eliminate land speculation. The site value tax, according to the Smith Committee Report, "is designed to appropriate to the state, increments in the value of land... but it is a discriminatory levy so far as other forms of capital gains are not taxed". 212/

268. The weight of residential property taxes is offset in several western provinces in Canada by direct grants to homeowners which vary from \$120 in British Columbia to \$150 in Alberta, Saskatchewan and Manitoba. The Smith Committee found these grants discriminatory since in all cases, except in Manitoba, grants were to owner occupants and not to tenants.

269. At this point, a brief review of the history of the property tax in both the United States and in Canada would be helpful in order to give the reader an understanding of various national traditions from which a better approach to future tax policies may be made. 213/

History of the property tax in the United States

270. The roots of the present property tax system in the United States lie in the past. Taxes have been known to man since ancient times. In Athens in 596 B.C. land and tangible personal property were taxed. The produce of agricultural land has always been an easily measured form of wealth and taxes on it have been very understandable. In medieval times taxation was differentiated and often confused. In twelfth-century England different taxes were levied on real property and not just on land. During the next several hundred years taxation drifted into just a land tax.

271. Nevertheless, there was no systematic, rational system in England to which the early colonies in the United States could look with the exception of the

211/ E. J. Benson, Minister of Finance, Proposals for Tax Reform (Ottawa, Queen's Printer, 1969). The tax reform proposals presently before the Canadian Parliament are broad and comprehensive. The proposals specially recommend the inclusion of capital gains and a number of other benefits in income to be subject to tax. It is argued that... "Those who make substantial gains in the stock market or in real estate increase their ability to spend money just as those who earn wages or derive an income from carrying on business. Interest payments are already fully taxed. Capital gains are now widely sought as an objective in investment. Indeed the freedom of capital gains from tax is distorting the investment of savings under present circumstances."

212/ The Ontario Committee on Taxation Report, Volume II, The Local Revenue System, published by Frank Fogg, (Ottawa, The Queen's Printer, 1967), p. 27 (also known as Smith Committee Report).

213/ Ibid., p. 68. The site value tax finds no support among the recommendations of the Smith Committee.

"poor-law rate", established in England in 1601. This law took into account ability to pay and became the basic premise of the New England tax structure. 214/

272. The early colonists in New England were anxious to protect their freedom and were wary of any taxes imposed by the state. This fact, together with modest governmental expenditures, kept early New England taxes low. There were, however, related taxes in New England - the poll tax, the property tax and the faculty tax or that tax levied against potential income or earning capacity.

273. This three-tax system was based on the faculty principle or ability to pay principle. 215/ Taxes were levied therefore on the person (poll tax), his real and personal property (property tax) and on his income (faculty tax).

274. At the time of the American Revolution in 1776 some sort of property tax was levied in all states. The southern colonists did not originally have a property tax, probably because municipal governments were controlled by plantation owners who held much of the land but over time the property tax became more central throughout the country. During the eighteenth century the faculty tax gradually disappeared and a tax split of one third poll tax and two thirds property tax became common. In some states the land tax became primary. In the state of Ohio land was taxed at three different rates, depending on the type of property.

275. The first half of the nineteenth century witnessed the maturation of the property tax which became the base of local and state revenues. Important changes were made on the tax with a shift of a market-value assessment standard. Through changes in administration techniques and adoption of statements identifying the nature of taxable property, the property tax became a more useful and practical tool over time. Nevertheless, in the later part of the century, a growing realization of the limitations of the tax became apparent and much criticism was raised.

276. In retrospect, although the property tax system in the United States has been far from perfect, it has been more difficult to replace than to tolerate and has, in fact, provided much needed revenues for local and state governments over time.

History of the property tax in Canada - (Province of Ontario)

277. The strength of the property tax in Canada has had a relatively long history as it has had among English-speaking nations in general. Since the earliest days, for a period of 175 years, it has represented the single local tax of any great significance. It has been challenged, as in the United States, but its actual replacement has never been a practical possibility. It was first levied in Ontario under a system of justices of the peace and later buttressed by constitutional act in 1793, popularly called the Assessment Act of 1793 followed

214/ Arthur D. Lynn, Jr., "Property Tax Development: Selected Historical Perspectives", in Property Taxation, U.S.A., Richard W. Lindholm ed. (Madison, the University of Wisconsin Press, 1969), p. 10.

215/ Walter Morton, Housing Taxation (Madison, Wisconsin, University of Wisconsin Press, 1955), p. 75.

by the Assessment Act of 1803. A personal property tax was proposed in Ontario in 1843 and achieved broad application in 1853 only to be abandoned in 1914. However, it was the Assessment Act of 1904 which has provided the legislative base for property assessment and taxation in Ontario to this date. This act has undergone periodic revisions but few fundamental changes. 216/ The concept of this act was the apportioning of value of property between land and buildings. 217/

278. The single tax concept, which had wide popularity in the early 1920s, was actually passed in Ontario Province but was repealed in 1924 before it was able to actually take hold. The 1919 Report of the Manitoba Assessment and Taxation Commission raised serious doubts concerning the single tax and was instrumental in its repeal in Ontario. Partial graded exemptions of the single tax still persist in the province and there continues to be interest in the single tax in the form of the site-value tax as mentioned earlier.

279. Since 1850, assessed value of property has called for assessment of property at its actual value, but it has become increasingly more difficult to reassess property frequently and maintain assessed values at levels which coincide with current values. The gap has widened between assessed values and real values over the years. During the period of the 1930s there were sharp reductions in assessed values throughout Canada, due to declining property values. Municipal expenditures were curtailed between 1939 and 1945 and there existed little need for reassessing. However, subsequent to the war years, municipal expenditures have found themselves in a very serious financial position. Many provinces have consequently been forced to update assessments in order to bring them more into line with actual increased property values.

Land taxation and land development policy

280. The question of using land taxation for promoting land development has been explored by several researches. Clawson has investigated land taxation as "a conscious instrument" to bring about land development. 218/ Land should be taxed highly in areas where development is desired and lowered in areas where the deferment of development is desired. The present system of almost "universal underassessment of vacant land", according to Milgram, encourages the deferment of such lands from early use since holding costs are low and speculative profits are a distinct future possibility.

281. The Smith Committee Report for Ontario recommends that:

(a) All real property, whether taxable or not, be assessed each year at 100 per cent of actual current value;

(b) Residential properties, recreational properties and wasteland be subject to property tax on a taxable assessment of 70 per cent of assessed value;

216/ Ontario Committee on Taxation Report, Volume II, The Local Revenue System, published by Frank Fogg (Ottawa, the Queen's Printers, 1967), pp. 41-42 (also known as Smith Committee Report).

217/ It should be noted that before the passage of the Assessment Act of 1904 the MacLennan Commission recommended that buildings should be allowed to carry a negative value for assessment purposes in certain cases. However, this recommendation was not adopted in the Act.

218/ Marion Clawson, "Urban Sprawl and Land Speculation", Land Economics, Volume XXXVIII (May 1962), pp. 109-110.

(c) Business properties other than transportation and communication properties, but including working farms and taxable mining properties, be subject to property tax on a taxable assessment of 50 per cent of the assessed value;

(d) Occupants of business properties other than working farms and transportation and communication properties, but including taxable mining properties, be subject to business occupancy tax on a taxable assessment of 50 per cent of the assessed value of the occupied property at the same mill rate as the property tax; and

(e) Roadways and rights-of-way over land used by transportation and communication businesses be exempt from property and business occupancy taxes and other properties of such businesses be subject to property tax and the occupants thereof be subject to business occupancy tax on a basis to be determined when the assessment of the properties have been completed. 219/

282. The Report of the Select Committee of the Ontario Legislature has "agreed with the Smith Committee's endorsement of the property tax as the major source of municipal tax revenue, to maintain both local autonomy and fiscal responsibility... it specifically recommended that the form of the basic shelter grant be changed to a credit against provincial personal income tax payable.... Like the Smith Committee, the Select Committee recommended the reassessment of all property at current market value and the elimination of the split mill rate between residential and business properties." 220/ The select committee departed, however, from the Smith Committee recommendations by suggesting that the residential properties assessment percentage rate be 60 per cent and working farms be 40 per cent, not 70 and 50 per cent respectively as suggested by the Smith Committee.

283. A form of differential tax has also been suggested in the United States and some are presently operative. These are deferment of taxes until development taxation at current use value rather than market value and taxation of the increased value arising from development potential either in full or in part.

284. Variations of these methods all have a potential for influencing development but the actual effect depends upon the particular economic and social climate and other operating land-use controls in a specific area. The possibility that land taxation could lower land prices hinges on the concept of lessened attractiveness of land as a speculative venture by the actual taxing of speculative profit and thus reducing net gains. 221/

219/ Ontario Committee on Taxation Report, Volume II, The Local Revenue System, published by Frank Fogg (Ottawa, the Queen's Printer, 1967), p. 119.

220/"The Select Committee of the Ontario Legislature was appointed on May 31, 1968, to conduct an examination of the Report of the Ontario Committee on Taxation (the Smith Committee)... The Select Committee reported on September 16, 1968 in a one-volume work of some 300 pages entitled, Taxation in Ontario: A Program of Reform." See "Tax Memo", Canadian Tax Foundation No. 47 (October, 1968).

221/ Grace Milgram, "United States Land Prices - Directions and Dynamics", The National Commission on Urban Problems, Research Report No. 13 (Washington, D.C., 1968), p. 135.

Taxes and land-use control policy

285. In this century, the property tax has without question become less of a burden to individuals and families in North America than other taxes. If federal, state and local taxes are combined in the United States, it would be noted that the federal income tax accounts for 69.81 per cent of the total (1945 figure). 222/ Property tax, on the other hand, is only 8.85 per cent of the total, but before 1930, it was one of the highest forms of government taxes. This change is explained by the growing size of personal incomes relative to property value and the trend of states to move away from the property tax. In 1922, for example, 40 per cent of all state revenues in the United States were derived from the property tax. In 1952 this figure had been reduced to 3.8 per cent. However, the fact remains that it amounts to a 25 per cent "sales" tax on housing - the highest tax on any single commodity.

286. In further consideration of the relation of taxes to land-use policy and control, several significant experiments which have been tried in North America, particularly in the United States, may set the way for other similar changes in the future. These should be discussed.

287. The idea of taxing land more heavily than the improvements on the land has been discussed for many years. This was done in a few states during the nineteenth century as well as attempted in a few provinces in Canada during the early 1920s. The basic arguments for a "land tax" is that the "property tax" discourages major repair and rehabilitation of properties. With a low tax on the land, the argument is advanced that there is no incentive to build housing or other buildings needed for population growth. It is this latter problem which has principally spurred the land tax enthusiasts. They argue that speculation and land withholdings on the urban rural fringe would be discouraged by a heavy and single tax on the land. According to their reasoning the landowner would be forced to either build income-producing improvements on the land or sell the land because of added financial burdens. 223/

288. In Pennsylvania there has been a shift during this century from the property tax to a graded tax, in which land is taxed at twice the rate of improvements. Instituted in 1913, in Pittsburgh, the tax rates were gradually changed. The tax was fully in effect by 1925. This tax, however, covered mainly local municipal services - not schools and county taxes. These have continued to be levied on property, including improvements. Hence, in 1960, the total property tax on improvements by all governmental units was at a rate of 71 per cent of the tax on land, not 50 per cent. The purpose of the tax was to stimulate development of higher uses. To date its effect has been questionable. Between 1914 and 1960 the assessed valuation of land has fallen from \$481,000,000 to \$424,000,000. Improvements, on the other hand, have risen in assessed value from \$282,000,000 to \$792,000,000. Hence, although land is taxed at a higher rate, it has accounted for only 52 per cent of the total municipal revenue. 224/ The decline in land

222/ Ibid., p. 92.

223/ Jerome Percival Pickard, Changing Urban Land Uses as Affected by Taxation (Washington, D.C., Urban Land Institute, 1962), p. 35.

224/ Ibid., p. 36.

value has also removed much of the stimulus to develop vacant land. Nevertheless, it may be argued that the main problem is that the tax is graded, rather than a pure system of only land taxation. That is, the principle is present, but it is diluted too much to be effective.

289. Another line of argument for changing the property tax is that the income produced by the property, rather than its ad valorem assessment, should be the base of the tax. This has been effected on a limited basis for central city commercial properties in Boston, Massachusetts and the State of New Jersey. In Boston, in the 1950s, the need for municipal revenues created a high property tax rate. It was, however, a burden to new construction and effectively discouraged such. In 1957, for example, the Prudential Insurance Building construction, already in progress, was halted because of the heavy burden of the tax. It could not support the tax because it did not have any incoming revenue. In 1961 the Massachusetts Supreme Court agreed that 20 per cent of gross income could be paid to the city in lieu of taxes. This has stimulated new construction, and similar arrangements have been made for other substantial buildings. Consequently, the trend in Boston has been towards a "property income tax". 225/

290. In 1961, the New Jersey Urban Renewal Corporation Law was passed, which permits the use of productivity for taxing new structures in urban renewal areas. For the first 15 years, a developer in an urban renewal area may pay 15 per cent of his gross income from the property in lieu of an ad valorem property tax. However, full tax must be paid on the land. The profit permitted the developer during the tax abatement period is limited to 1.25 per cent plus the mortgage interest rate of the cost of the project. As in the Boston case, the intent is for the tax abatement to encourage new commercial construction in the downtown areas. 226/

291. A third effort to link taxes with urban land-use and development has been in the State of Hawaii. Hawaii, highly centralized on the state level, has one of the most comprehensive tax systems in the United States, taxing virtually all potential revenue sources, including real property. The property tax is administered by the state and distributed to the county where it is a major source of revenue. 227/

292. A land-use law, primarily a tool for effecting the Master Plan, was passed in Hawaii in 1961. The law provides that the state zoning authority define and administer boundaries of major land-uses: urban, agricultural, conservation and rural. The law allocates the land for urban expansion, protects agricultural land, prevents scattered developments, and restrains land speculation. It may thus be considered an additional land-use control. 228/

225/ Ibid., p. 46.

226/ Morris Beck and Jack Guttentag, New series on home mortgage yields since 1951 (New York, Columbia University Press, 1970), p. 42.

227/ Shelley Mark, Property Tax Administration and Hawaii's Land Use Law, in Property Taxation U.S.A., Richard W. Lindholm, ed. (Madison, Wisconsin, University of Madison, 1967), p. 187.

228/ Ibid., p. 189.

293. The Hawaiian Land Use Law also affects taxation policy since the State Department of Taxation considers the legally constituted land-uses for tax purposes, not the existing land-use pattern. This policy helps to stimulate the best use of land according to planning considerations which conform with the land-use district plan. It is too early to evaluate the result of this tax system, but in view of its theory, it would appear to have great potential for stimulating a consistent uniform growth of the islands' land base. 229/

229/ Ibid., p. 200.

VII. FUTURE OUTLOOK AND RECOMMENDATIONS

The problems

294. The largest population growth which has occurred on the North American Continent over the past several decades has been in metropolitan areas. The greatest increases have taken place in suburban areas outside of central cities. The central cities, on the other hand, enjoyed either minor rates of increase or, in several medium and large metropolitan areas, experienced declines. Over half of the increase in total urban population in the United States was accounted for by the urban areas of over 1 million population, and those from 250,000 to 1 million accounted for further 25 per cent.

295. The growth in metropolitan areas as a whole in the United States for the 1960-1965 period was due primarily to natural growth - 78 per cent. The remaining 22 per cent was due to migration. This migration, however, was selective, over 80 per cent being to 10 metropolitan areas: Los Angeles, Orange County, New York, north-eastern New Jersey, San Francisco, Oakland, San Jose, Washington, D.C., Riverside and Dallas. Areas in the north-east of the county and the Great Lakes Region, as well as most areas in the south, south-west, mountain and far west regions, experienced the least amounts of population increases due to migration. 230/ Migrations also tended to take place among the better educated and skilled, leaving many depressed areas depleted of the most productive sector of their work force.

296. Future estimates for the United States indicate that metropolitan areas will substantially increase by the year 2000, particularly in the south and west of the country. The ratio of negro population growth will also continue to rise in the larger centre cities but at the same time such central cities will be in a less favourable position to compete for new business than their suburbs.

297. Canadian population growth has been mainly occurring in urban agglomerations of 100,000 and over which are concentrated in five specific areas. It is estimated that within the next decade over 80 per cent of the population will be urbanized, 60 per cent of whom will be living in 29 large urban areas. The problems of land which Canada's urban areas will face will be in large part very similar to those facing the United States, although on a lesser scale. Land for housing and other urban uses in sufficient quantity at reasonable prices will become more and more difficult to assemble.

298. These findings, as well as those presented throughout this study (see especially chapter III) lead to the conclusion that various techniques for guiding urban development both existing and new must be put into effect if the nations of North America are to achieve a rational development and use of their land base. The problems of future population growth and land demands are obvious. 231/ They are

230/ Urban and Rural America: Policies for Future Growth, Advisory Commission on Intergovernmental Relations (Washington, D.C., United States Government Printing Office, April 1968), p. 123.

231/ Ibid., p. 124.

- (a) The diseconomies of scale which will inevitably result from increasing population concentrations in large metropolitan areas;
- (b) The growing inability of many centre cities to provide employment for their residents, particularly those in the United States having racial or ethnic minorities;
- (c) The loss of the young and able work force by many rural areas to select employment centres of large metropolitan areas;
- (d) A prolongation of development practices which tend to create urban sprawl.

Techniques for guiding urban development and land-use policies

299. In order for more rational land-use controls to be implemented, a greater co-ordination must be made to bring planning efforts and developmental controls into closer harmony. Zoning, for example, is often not related to community plans, property tax assessments, nor to other regulatory devices. In addition, the linkages between community plans, zoning and land-use regulations are seldom related to regional or area-wide plans which in themselves depend upon the enforcement of local land-use regulations and controls. The advisory commission recommends: 232/

- (a) Regional, area-wide or county review should be undertaken of local planning, zoning, subdivisions control and official map regulations which have an area-wide impact;
- (b) Decisions regarding highway, water and sewer line locations should be specifically related to urban development policy.
- (c) Comprehensive metropolitan-wide, watershed, drainage basin and water utility planning should be undertaken.

300. In addition, the charge has often been levied that urban construction and land-use policy controls have been developed without due regard for environmental quality and that regulations are often arrived at unfairly without public benefit. Opinion is also developing concerning methods for guiding urban development which suggests that techniques should differ in nature between the centre city and urban fringe areas or developed areas and developing areas. The developing areas may well encompass techniques which would encourage private developers to create their own environment while in the developed areas, techniques may well stimulate gradual change or in certain cases be concerned with redevelopment. In all cases, however, control of timing and location are necessary, as well as firm rules for allocating the costs of development and/or redevelopment between the locality and the developer.

232/ Ibid., pp. 165-172.

301. Techniques in developing areas should allow for effective co-operation through the government structure. At the metropolitan scale present techniques have not been effective in controlling the timing and location of land-use. Also at the metropolitan level, particularly at the urban fringe area a number of techniques and practices may be used such as:

- (a) Restriction of development through holding zones;
- (b) Public assistance for land assembly;
- (c) State authorization for planned development districts;
- (d) Assurance of fairness and equality of treatment in applying standards and regulations.

302. Holding zones provide a form of police power regulation on land-use which differ from land banks since they do not involve government acquisition of land as such. The Douglas Commission Report would allow local governments to establish holding zones in areas in which development could best be postponed for periods of three to five years and under certain circumstances holding zones may entail a compensation payment to landowners since hardships may be involved in keeping land out of development for a number of years.

303. Public assistance for land assembly may be considered a form of land banking which would be permitted in a community to achieve certain objectives. These objectives may be one or a combination of the following: to provide a continuing availability of sites for development to control the timing, location and type of development; to prevent urban sprawl and to reserve to the public various gains in land values.

304. The Canadian Task Force Study believes that local governments should be empowered to intervene directly in the development process by purchasing or condemning land outright. Such lands would then be leased back to private developers under certain conditions. The Task Force justifies its position on government's direct involvement in the development process on two accounts - cost efficiency and planning effectiveness. The speculative increment of land gain would be largely eliminated and servicing economies could be achieved through a larger scale of operations. Planning effectiveness would be achieved according to the Task Force through the very fact of ownership of land by the community. 233/

305. Planned unit development offers excellent opportunities to effectuate sound development by allowing for development of a size that would create its own environment. The Douglas Commission recommends that states enact legislation authorizing local government to use the power of eminent domain for land assembly for large-scale unit development which would conform to regional plans.

306. Fairness and equity of treatment in applying standards and land-use regulations, the Douglas Commission suggests, would allow an owner to choose between uncompensated regulation and complete sale of his land, arguing that, "The owner would be required to choose between some uncompensated reduction in value or complete sale of the property - a choice which would undoubtedly limit the number of owner-initiated actions while at the same time providing fair treatment for the owner who is

233/ Report of the Federal Task Force on Housing and Urban Development (Ottawa, Canada, the Queen's Printer), p. 43.

seriously damaged. Moreover, such an approach would eliminate the possibility of windfalls to the owner who receives some compensation, retains the property, and later is able to have the regulation changed. Indeed, partial compensation might encourage an owner to hold the land out for speculative purposes by covering his holding cost for a substantial period of time." 234/

307. In the developed areas of the metropolis, techniques must vary to a certain degree. Such techniques should strengthen development controls and consist of more effective powers and guidelines regarding variances, rezonings and nonconforming uses by:

(a) Imposing local government limitations on the power of the board of appeals to grant variances;

(b) Providing a means of eliminating nonconforming uses;

(c) Establishing normal rezoning policies as a guide to decisions on individual rezoning;

(d) Using land purchase and compensation techniques for development control (similar to practices in developing areas);

(e) Stating authorization for land banking or planned unit development by either states and local areas which would acquire land in advance of development (similar to practices in developing areas).

308. The power of the board of appeals to grant variances over a period of time may prove to be a major source of incompatible intrusions in a community. The Douglas Commission would "impose substantive limitations on power of the board of appeals to grant variances". 235/

309. The elimination of nonconforming uses is perhaps one of the most difficult of regulatory problems since it involves the notion of public good vs. individual fairness. An amortization period is generally given to property owners of nonconforming uses giving them time to comply with the regulation and to receive a reasonable return on their investment.

310. By establishing rezoning policies, localities would be provided with a base upon which they could best review later applications. Through this technique land-use controls would become more responsive to the needs of developed areas.

Future needs and directions for guiding development

311. Several approaches to future needs and directions for guiding development have already been discussed in the preceding sections. However, at this point, it

234/ Building the American City, Report of the National Commission on Urban Problems to the Congress and President of the United States, Government Printing Office, (Washington, D.C.), p. 251, as quoted by David Heeter, Toward A More Effective Land-Use Guidance System (Chicago American Society of Planning Officials, 1969), p. 62.

235/ Building the American City, Report of the National Commission on Urban Problems to the Congress and President of the United States (Washington, D.C., United States Government Printing Office, 1968), p. 249.

may be useful to review several of these methods, particularly those made by the Douglas Commission and those of the Canadian Task Force since both of these reports are certainly the most recent concise statements on land and general development policy in the United States and in Canada respectively. 236/

312. The Douglas Commission recommends that interim reallocation of regulatory powers be made as state powers become more responsible. This would enable competent local governments to guide urban development more effectively by enacting legislation granting counties exclusive authority to exercise land-use control powers within municipalities in metropolitan areas. Municipalities within metropolitan areas under 25,000 population or four square miles in area, would not receive this power. This recommendation supports the belief that local government below the state level should be responsible for detailed guidance and regulation of urban development. The lack of willingness and ability to provide effectively for massive change of the small unit substantiates this recommendation. To cope with the problems requires both legal powers and resources. The use of more sophisticated measures to guide development and to solve increasingly complex government problems will require full-time paid professional assistance. The smaller local governmental units cannot afford such services and will need to co-operate effectively with one another by co-ordinating their needs and providing a manageable amount of professional assistance.

313. The large number of independent local governments creates one of the most difficult obstacles for effective local control in the United States. This is not, however, as true for Canada. In order to improve the guidance of local development the reallocation of basic development control powers must be placed in the hands of competent local government. Together with this is the need for a neighbourhood role in the shaping of the environment and in land-use decision-making. The reallocation of land-use powers must be accompanied by efforts to foster neighbourhood interest and participation in recognizing and reconciling the interests of various groups in a community.

314. In addition, state governments should enact legislation denying land-use regulatory powers to local governments that lack a development guidance programme. This, according to the Douglas Commission Report, should be made a condition of the 701 Planning Assistance Programmes. The local development guidance programme should be locally approved and reflect policies on land-use controls of the locality covering transportation, housing, open space and air and water pollution. There should also be a locally approved capital improvement programme.

315. A third recommendation of the commission is the need to study governmental structure in relation to land-use controls. The Department of Housing and Urban Development may best require this as a condition to "701 funding". Under such a provision, states would study the allocation of planning and land-use control powers in the metropolitan areas and the decision-making effecting that control. The need for regional decision-making and the need for state action to redistribute control powers, as well as any other matters to assure orderly urban development, would also be studied.

236/ Ibid., Building the American City, pp. 244-253. This report is also known as the Douglas Commission Report. And Report of the Federal Task Force on Housing and Urban Development already cited, also known as the Canadian Task Force Study.

316. In addition, the commission recommends the restructuring of local planning and development responsibilities. The state should enact legislation authorizing (not requiring) local governments to abolish local planning boards. There is little justification for continued use of the planning boards according to the commission. The administration of land-use controls should be the job of paid professionals under the direction of elected officials. The planning board as a policy-making body has too often acted inconsistently. The only useful function of the planning board would be in an advisory position.

317. State recognition of local land-use controls could be achieved through state enacting legislation granting to large units of local government the same regulatory powers over state or public agencies that they have over private agencies. In this way local governments would not be thwarted by actions of the state or the federal government. At the same time it would have to be recognized that state and federal policies relating to free choice for persons at all income levels would necessarily take precedence over local policies.

318. Further the Douglas Commission recommends that an agency at the state level be established for development planning and review. The state would then create a state agency for planning and development guidance responsible to the governor of the state. The functions of this agency would include research and technical assistance to local units in land-use planning and control, the preparation of state and regional land-use plans and policies and the adjudication and supervision of decisions by state and local agencies affecting land-use.

319. Future needs and directions for guiding development would remain a local initiative through local governments and their primary responsibility would be for detailed guidance of urban development and land-use policies and control measures. Moreover, local governmental size should be increased through metropolitanization. A stronger local government necessitates the granting of additional powers and substantial financial and technical assistance. Within local initiative a stronger voice for neighbourhoods is also recommended. The effective implementation of state and national policies with local action effectively limited by state and federal government would assure fair treatment of property owners and minorities in the local unit.

320. It is apparent that orderly city growth could be better achieved if municipalities were left free to annex territory as needs arose. Yet several impediments are put in the way of smooth municipal growth by annexation. Residents of the area to be annexed generally must approve annexation and in some cases the residents of such areas may have the sole right to initiate the process. Several states (Alaska, California, Colorado, Minnesota, New Mexico, Washington and Wisconsin) have recently begun to liberalize annexing powers of municipalities. There are of course many variations and approaches which states can take on the question of annexation.

321. The Advisory Commission on Intergovernmental Relations recommends that states grant to municipalities, where appropriate, the ability to annex contiguous or non-contiguous unincorporated areas of a size sufficiently large to develop new communities. Residents in areas to be annexed would not have veto power but their interests in obtaining a reasonable level of municipal services at a fair cost would be protected by state or local agencies.

322. Furthermore, future urban growth may be guided more efficiently and effectively, according to the advisory commission, if local governments are authorized by states to adopt ordinances which would: 237/

(a) Reserve certain lands through an "official map" for specified periods of time for various public uses;

(b) Replace rigid conventional zoning standards by broader general standards under "planned unit development" regulations;

(c) Develop "unmapped" or "floating" zones which are not specifically located but whose use is defined in the zoning ordinance.

323. The Canadian Task Force on Housing and Urban Development finds that the emerging development patterns in the major urban areas in Canada are generally very similar to those in the United States. The development patterns which they found were not those of "cohesion, balance and order, but of confusion, imbalance and disorder". 238/ The vagaries of the speculative and uneven private land market are much in evidence across the Canadian landscape and "in place of positive zoning requirements to serve public need and interest stand an array of negative municipal restrictions ready in the name of 'balanced assessment' to restrict housing development in favour of industrial growth and to duplicate, fragment, or exclude, as whim would have it, needed public facilities". 239/ Improvements in land-use policies and control measures are therefore urgently needed in Canada.

324. The Task Force believes that local government as it is presently constituted in Canada should not be eliminated since there are local concerns which can and should be handled at the local level. However, there are also regional functions which can best be handled by regional authority. What is needed is the proper division of functions between local and regional interests. Land-use must be considered in a regional setting with long-range development and redevelopment plans drawn on a regional basis. According to the Task Force, after such plans have been drawn up, "regional governments must have the necessary authority to make them work. There must be regional authorities which define and control land use through its zoning, its assembly and its servicing. They must be the ones to plan and plot adequate transportation corridors and to select and preserve necessary land for parks and open spaces.... If they do not control property assessments directly, they must certainly possess powers of equalization to the point where there is no financial advantage or disadvantage in the relative location of industrial parks, residential developments and the like within the over-all regional plan." 240/

237/ For a more complete description of these recommendations see Urban and Rural America: Policies for Future Growth, Advisory Commission on Intergovernmental Relations (Washington, D. C., United States Government Printing Office, April, 1968), pp. 169-172.

238/ Report of the Federal Task Force on Housing and Urban Development (Ottawa, Canada, The Queen's Printer), p. 62.

239/ Ibid., p. 62.

240/ Ibid.

Within Canada there is a limited number of metropolitan governments and, particularly within Ontario, there is a clear trend towards regional governments. However, none of these attempts to date has effectively achieved regional planning. The Task Force believes that, "since urban planning can only be done effectively on a regional basis, the provinces should establish a system of regional governments, equipped with adequate powers, for each major area". 241/

325. Administratively, the Task Force found a myriad of governmental regulations and restrictions which touch on countless areas of urban development and result in great confusion and cost inefficiencies. They suggest that "all governments seek as a guiding principle to regulate only when regulation is clearly demanded and only in areas where they (governments) are the best equipped to do so". 242/

Proposed changes in governmental relationships

326. It is suggested that federal legislation in the United States should encourage and assist the state local efforts towards basic analysis and improvement of the urban governmental structure. In Canada, the various provinces presently have this power but could also be better assisted by certain federal help. State legislation should provide the machinery for and assistance to local efforts to review and adjust local governmental structure. The state constitutional and legislative action should improve the existing institutions of local government. This could be accomplished through authorization and financial aid for metropolitan councils of government, authorization of county-subordinate taxing areas, elimination of requirements mandating excessive numbers of independent elective county officials, provision for new incorporations in metropolitan areas, facilitation of local annexation and consolidation actions.

327. The weakest link in the local-state-national relationship of governmental structure in the United States is the local governmental diffusion composed of small, overlapping and duplicating local governments. 243/ Some of the weaknesses of this diffused structure are:

(a) Most local governmental units are too small to provide effective and economical solutions;

(b) Overlapping governments contribute to confusion and waste;

(c) There is weak policy leadership and inadequate administration organization;

(d) Professional services of highly qualified personnel are not attracted to local government.

Many of these problems also exist at the local level in Canada but they tend not to be as severe as conditions found in the United States.

241/ Ibid., p. 63.

242/ Ibid., pp. 70-71.

243/ Building the American City, Report of the National Commission on Urban Problems to the Congress and the President of the United States (Washington, D.C., United States Government Printing Office), p. 326.

328. Another area for proposed change in the local governmental structure arises from the consideration that local government differs from private business patterns. ^{244/} Regulating and policy duties of local government are public rather than private and the costly services of the local government such as education and health are a social service. Consequently financing of local services should be mandatory and not voluntary and must be applied uniformly. At the time governmental framework was developed, clear division of functions existed among multipurpose governments. Today, the interdependency of the governmental framework has necessitated a new structure to facilitate the leadership required to solve the problems in the existing system.

329. The states' role is likely dependent upon an emergence of a clearer hierarchy of responsibility for planning and development through exertion of leadership by states through legislation and financing. Opportunities for municipalities to receive increasing assistance from the state is necessary. The necessity of local government to become alert to the impact of growing state projects and policies for the local area will help to avoid state-local conflict and help to minimize local financial burdens. The likely increase in state regulatory controls over local growth and development for residential areas, industrial areas, air pollution and transportation will stimulate the need for state-local relationships of mutual co-operation.

A national-provincial urbanization and land-use policy

330. Urbanization trends will apparently continue at rapid rates and lead to many of the problems cited throughout this study. Such trends are complex and varied being the result of countless private and public decision-makers whose actions are conditioned in large part by government policies and programmes. At the federal level in the United States, direct governmental programmes, from the location and scheduling of highway construction, to the financing of residential construction, all lead to consequent urbanization trends. At the provincial and municipal levels in Canada and at the state and local levels in the United States, various land-use and development controls become major determinants of urbanization trends. On the whole, however, governmental policies have only recently begun to reflect the urban character of development in North America. Nevertheless, there exists no over-all policy at the national level in either the United States or Canada with regard to guiding public policies and programmes affecting the geographic location of urban growth, its size or rate of growth. The question may be raised, however, as to whether national governments should develop and implement an urban growth policy or whether this should be left to lower governmental units.

331. Many governmental programmes in the United States, including the Federal Housing Administration (FHA) mortgage insurance programme, the highway programme, the urban renewal programme and the Economic Development Administration programme, to name a few, all have significant effect on the location of population, on economic growth and on the character of urban development. These efforts to date have been random and not co-ordinated, directed at only a segment of the over-all problem. Clearly, an urbanization policy at the national level could well provide for co-ordination of the multitude of separate programmes in the federal

^{244/} Ibid., p. 327.

arsenal which would support consistent urbanization objectives. 245/ Even stronger arguments favouring a national urbanization policy in the United States are the consequences which unplanned growth may bring about, leading to greater disparity among states and regions as to population and economic growth on the one hand and greater disparities among social and economic classes on the other. This is particularly true with respect to racial segregation of centre city negroes in the United States.

332. Valid arguments may also be raised against the development of a national urban growth policy. The country lacks sufficient knowledge as to the basis of such a policy and the kinds of governmental tools which would be necessary and effective in directing and controlling urbanization and economic growth. In addition, it may be argued that a national urbanization policy would not be politically feasible since it would of necessity seek to encourage growth and economic opportunity in certain regions perhaps at the expense of others, namely, various areas will be nourished by some form of assistance while others will be left to die. Moreover, population movement and economic forces can be demonstrated to work fairly effectively without outside direction, distributing people and economic activity throughout different regions. 246/

333. Despite many of the foregoing arguments against the development of national urbanization policies, other arguments appear on balance to strongly favour such a national policy at least in the United States. 247/ "Governmental programmes", according to the Advisory Commission on Intergovernmental Relations, "already constitute significant influences on the direction of urbanization and economic growth, whether or not we have a national policy. A national urbanization policy would have the desirable effect of providing a framework for regularizing these influences and some assurance that their effects were understood and desired." 248/ The Commission goes on to recommend three policies dealing with urban growth:

- "(a) Development of a national policy to deal with urban growth;
- (b) A re-examination of multistate regional planning areas and agencies; and
- (c) A new and expanding role for state governments through the development of state urban development plans." 249/

245/ See Advisory Commission on Intergovernmental Relations, Urban and Rural America: Policies for Future Growth (Washington, D. C., United States Government Printing Office), pp. 125-131, for a more complete analysis of the effects of several national programmes on urban growth and the pros and cons of a national policy to deal with urban growth.

246/ Ibid., pp. 125-131.

247/ This is the conclusion reached by the Advisory Commission on Intergovernmental Relations. Other groups who have recently studied various aspects of the problem agree that certain forms of new directions for guiding urban development are needed, if not nationally, at least on a State or regional level. See Douglas Commission Report, Building the American City.

248/ Urban and Rural America: Policies for Future Growth, Advisory Commission on Intergovernmental Relations (Washington, D. C., United States Government Printing Office), p. 129.

249/ Ibid., p. 131.

According to the Commission several elements which deal with economic and urban growth on a national level already exist such as the Employment Act of 1946 and the Housing Act of 1949. What is lacking is a purposeful co-ordination of these and several other programmes with one another. Policies and processes are fragmented and states and local governments must therefore work without a well articulated national policy framework. If a consistent and well co-ordinated urban growth policy is to develop, extensive institutional arrangements will have to be made in government both at the federal and state levels. In particular states and local governments would, of necessity, have to be kept informed of federal plans whose decisions would directly affect them. 250/

334. Regarding the re-examination of multistate regional planning areas and agencies the commission feels that the different growth patterns of the nation's economic regions must be fully taken into consideration and existing and revised regional institutional arrangements would be needed. Early efforts in this area were mostly of a natural resource orientation. 251/ Later the Area Redevelopment Act of 1961 and its successor, the Economic Development Act of 1965, directed their efforts toward establishing multistate regional districts to aid depressed areas in the county.

335. The development of a national policy on urban development and land-use would necessarily involve a reassessment of the role of various multistate economic development commissions. The Executive Order of December 1967 established the Federal Advisory Council on Regional Economic Development, thus setting a broader framework for both Federal participation in regional programmes and for programme evaluation.

336. At the state level, the Advisory Commission on Intergovernmental Relations recommends the appropriate designated state agency co-ordinate planning and land-use policy at all levels of government and that it also set up systematic review and urban growth study processes. The commission also warns of the dangers of inaction in these areas on the part of the states. Such inaction may eventually lead to a larger position of federal dominance and an erosion of state government. To date, no state planning agency has adequate tools to assume a significant role in the development of state land-use and urbanization policy. Each state should develop this capacity in its executive branch which would provide assistance to the governor in budget-making and programme evaluation.

337. The situation in Canada regarding at what governmental level should land-use policy rest is somewhat different than in the United States. Provinces, in Canada, exert a much greater and thoroughly more pervasive control over their municipalities than do American states and any major impetus for changes in land-use policies and control measures must come from the provincial level. Federal responses to urban problems have largely been confined to the field of housing through the Central Mortgage and Housing Corporation (CMHC) and even in this area, the provinces

250/ Ibid., pp. 131-134.

251/ Some of these early efforts were the Tennessee Valley Authority (TVA). Later, various river basin planning commissions were established under the Water Resources Planning Act of 1965.

greatly control the extent and direction of CMHC activities. It is only in the National Capital Commission in Ottawa that the federal government has a direct and tangible involvement in land-use policy and control measures.

338. The Canadian Task Force believes that regional planning in Canada is necessary and desirable and that the growing trend towards metropolitan governments should be extended and accelerated. Regional authorities should possess necessary powers to implement regional plans but this is a matter not of federal jurisdiction. It is a provincial matter and appeal for necessary action must be directed to that governmental level.

339. Programmes for urbanization and land-use policy in North America should not rely solely on negative controls, such as zoning, for the effectuation of plans. Land banking, urban development authorities and corporations and new community building programmes should also be part of the arsenal of control and guidance measures at a regional level of government. Nevertheless, policies at a regional level should not be so specific as to necessarily require land-use and developmental controls and regulations. These may best be developed at the county-municipal and city levels. This would leave local government with most of its present zoning and subdivision regulations. Nevertheless, it would limit these controls to areas suitable for urban development and give them more improved approaches. The greatest strides would be made in regional organization to improve local planning. Notwithstanding, the state or province, as the particular case may warrant, would require localities to develop plans and land-use development controls and regulation ordinances in conformity to larger regional policies.

ANNEXES

Annex I

SUPPLEMENTARY TABLES

Table 22. Thirty-year population growth projections, United States, and its large urban regions and largest metropolitan areas and complexes, 1970-2000

Metropolitan area, urban region, or major region	Population (000 000)		30-year growth
	projected 1970	projected 2000	1970-2000 (000 000)
New York-N.E. N.J.-Connecticut ^{a/}	17.2	24.8	+ 7.6
Delaware Valley ^{a/}	5.7	8.4	+ 2.7
Boston-Brockton ^{b/}	3.6	4.4	+ 0.8
Washington	2.9	6.0	+ 3.1
Baltimore	2.1	3.3	+ 1.2
Hartford-Tolland Co. ^{a/}	0.9	1.6	+ 0.7
Balance of urban region	13.4	18.9	+ 5.5
Atlantic seaboard	<u>45.8</u>	<u>67.4</u>	<u>+21.6</u>
Chicago-N. W. Indiana ^{a/}	7.6	11.4	+ 3.8
Detroit-Ann Arbor ^{a/}	4.5	7.6	+ 3.1
Cleveland-Lorain ^{a/}	2.4	3.7	+ 1.3
Pittsburgh	2.4	2.6	+ 0.2
Cincinnati	1.4	2.1	+ 0.7
Milwaukee	1.4	2.1	+ 0.7
Buffalo	1.4	1.8	+ 0.4
Indianapolis	1.1	1.7	+ 0.6
Columbus, Ohio	0.9	1.6	+ 0.7
Dayton, Ohio	0.9	1.5	+ 0.6
Rochester, N.Y.	0.9	1.3	+ 0.4
Balance of urban region	15.5	21.7	+ 6.2
Lower Great Lakes	<u>40.4</u>	<u>59.1</u>	<u>+18.7</u>
Subtotal, metropolitan belt	<u>86.2</u>	<u>126.5</u>	<u>+40.3</u>
Saint Louis	2.4	3.5	+ 1.1
Minneapolis-St. Paul	1.7	2.4	+ 0.7
Kansas City	1.3	1.8	+ 0.5
Balance of North	22.6	24.3	+ 1.7
Total, northern regions	<u>114.2</u>	<u>158.5</u>	<u>+44.3</u>

Source: J. P. Pickard, Trends and Projections of Future Population Growth in the United States, with Special Data on Large Urban Regions and Major Metropolitan Areas for the Period 1970-2000, Technical Paper No. 4, presented to the Ad Hoc Subcommittee on Urban Growth, Committee on Banking and Currency, Washington, D.C., U.S. House of Representatives, 22 July 1969.

a/ Indicates metropolitan complex, made of more than one metropolitan area: New York-N.E. N.J.-Conn.: New York-Northeastern New Jersey Standard Consolidated Area plus Fairfield County, Connecticut; Delaware Valley: Philadelphia, Wilmington, Trenton; others are indicated by names in title.

b/ Boston-Brockton: Boston SEA (Suffolk, Essex, Middlesex, and Norfolk Counties) and Brockton SEA (Plymouth County).

Table 22 (continued)

<u>Metropolitan area, urban region, or major region</u>	<u>Population (000 000)</u>		<u>30-year growth 1970-2000 (000 000)</u>
	<u>1970</u>	<u>2000</u>	
Miami-Fort Lauderdale ^{a/}	1.8	5.0	+ 3.2
Tampa-St. Petersburg	0.9	2.1	+ 1.2
Orlando-Cape Kennedy <u>a/</u>	0.7	1.8	+ 1.1
Balance of urban region	2.3	4.1	+ 1.8
Peninsular Florida	<u>5.7</u>	<u>13.0</u>	+ <u>7.3</u>
Southern Piedmont	<u>3.3</u>	<u>5.2</u>	+ <u>1.9</u>
Houston-Galveston ^{a/}	2.1	4.4	+ 2.3
Balance of urban region	0.4	0.5	+ 0.1
Texas-Louisiana Gulf Coast	<u>2.5</u>	<u>4.9</u>	+ <u>2.4</u>
New Orleans	1.1	1.8	+ 0.7
Balance of urban region	1.6	2.9	+ 1.3
Central Gulf Coast	<u>2.7</u>	<u>4.7</u>	+ <u>2.0</u>
North central Texas (Dallas-Forth Worth)	<u>2.2</u>	<u>4.2</u>	+ <u>2.0</u>
Atlanta	1.4	2.5	+ 1.1
Balance of urban region	0.4	0.6	+ 0.2
North central Georgia	<u>1.8</u>	<u>3.1</u>	+ <u>1.3</u>
Subtotal, urban regions, south	<u>18.2</u>	<u>35.1</u>	+ <u>16.9</u>
San Antonio	0.9	1.7	+ 0.8
Balance of south	34.7	41.4	+ 6.7
Total, southern regions	<u>53.8</u>	<u>78.2</u>	+ <u>24.4</u>

^{a/} Indicates metropolitan complex, made of more than one metropolitan area, others are indicated by names in title.

Table 23. Future projected land area of largest urbanized agglomerations, 2000, and area of predecessor urbanized areas in 1970, United States

(Data in square miles)

Urbanized agglomeration	Total land area		30-year growth	% of increase
	2000	1970		
1. Los Angeles basin (Los Angeles) (San Bernardino-Riverside)	4,291	2,116 (1,882) (234)	+ 2,805	+ 133
2. New York-N.E. N.J.-Conn. (New York-N.E. N.J.) (Monmouth-Ocean Cos. N.J.) (Stamford-Norwalk-Bridgeport)	4,662	2,803 (2,384) (180) (239)	+ 1,859	+ 66
3. Chicago-Milwaukee (Chicago-N.W. Indiana) (Kenosha and Racine) (Milwaukee)	2,853	1,495 (1,139) (39) (317)	+ 1,358	+ 91
4. San Francisco Bay	2,104	1,145	+ 959	+ 84
5. Detroit-Toledo (Detroit-Pontiac) (Ann Arbor) (Toledo)	1,868	1,018 (844) (37) (137)	+ 850	+ 83
6. Washington-Baltimore (Washington) (Baltimore)	1,713	796 (523) (273)	+ 917	+ 115
7. Dallas-Fort Worth (Dallas) (Fort Worth)	1,611	1,015 (583) (432)	+ 596	+ 59
8. Houston-Galveston (Houston) (Galveston and Texas City)	1,530	714 (650) (64)	+ 816	+ 114
9. Delaware Valley	1,491	916	+ 575	+ 63
10. Southeast Florida	1,486	564	+ 922	+ 163
11. Cuyahoga Valley (Cleveland-Lorain-Elyria) (Akron)	1,278	750 (581) (169)	+ 528	+ 70
12. Atlanta (with Marietta)	1,100	468	+ 632	+ 135
13. San Diego	1,063	380	+ 683	+ 180
14. Minneapolis-Saint Paul	<u>1,047</u>	<u>730</u>	<u>+ 317</u>	<u>+ 43</u>
Total, 14 largest areas	28,727	14,910	+13,817	+ 93

Source: Based on published and unpublished data compiled in Appendixes to Dimensions of Metropolitanism (Research Monograph 14A) (Washington: Urban Land Institute, 1968), tables A-45 through A-53. The 1970 urbanized area data are projected from 1960.

Table 23 (continued)

<u>Metropolitan area, urban region, or major region</u>	<u>Population (000 000)</u>		<u>30-year growth</u>
	<u>projected 1970</u>	<u>projected 2000</u>	<u>1970-2000 (000 000)</u>
Los Angeles-Orange-Ventura cos. ^{a/}	9.3	20.9	+ 11.6
San Francisco Bay ^{a/}	4.5	7.7	+ 3.2
San Diego	1.3	3.4	+ 2.1
San Bernardino-Riverside ^{b/}	1.2	3.2	+ 2.0
Sacramento	0.9	2.0	+ 1.1
Balance of urban region	2.7	5.3	+ 2.6
California urban region	<u>19.9</u>	<u>42.5</u>	+ <u>22.6</u>
Seattle-Tacoma	1.8	3.4	+ 1.6
Balance of urban region	0.3	0.4	+ 0.1
Puget Sound urban region	<u>2.1</u>	<u>3.8</u>	+ <u>1.7</u>
Phoenix	1.0	2.6	+ 1.6
Balance of urban region	0.3	0.9	+ 0.6
Metropolitan Arizona	<u>1.3</u>	<u>3.5</u>	+ <u>2.2</u>
Denver	1.2	2.3	+ 1.1
Balance of urban region	0.4	0.9	+ 0.5
Colorado piedmont	<u>1.6</u>	<u>3.2</u>	+ <u>1.6</u>
Subtotal, urban regions west	<u>24.9</u>	<u>53.0</u>	+ <u>28.1</u>
Portland	1.0	1.7	+ 0.7
Balance of west	9.3	13.2	+ 3.9
Total, western regions	<u>35.2</u>	<u>67.9</u>	+ <u>32.7</u>
Conterminous U.S. total (48 states + D.C.)	<u>203.2</u>	<u>304.6</u>	+ <u>101.4</u>

^{a/} Indicates metropolitan complex, made of more than one metropolitan area, San Francisco Bay: San Francisco-Oakland, San Jose, Vallejo-Napa; others are indicated by names in title.

^{b/} San Bernardino-Riverside-Ontario is official title; consists of two counties.

Table 24. Percentage change in population for the central cities and remaining parts of the 1961 census metropolitan areas, Canada, 1951-1961

Census metropolitan area	Percentage changes in population ^{a/}				Percentages of 1961 MA population			
	MA	Central city <u>b/</u>	Other centres of 10,000+ <u>c/</u>	Remainder of MA <u>d/</u>	MA	Central city	Other centres of 10,000+	Remainder of MA
All MAs	44.8	23.8	57.0	110.7	100	61.9	5.8	32.3
Atlantic	31.9	11.7	78.6	70.6	100	57.1	16.4	26.5
St. John's	32.4	20.4	-	72.8	100	70.0	-	30.0
Halifax	37.3	8.1	101.0	78.0	100	50.3	25.5	24.2
Saint John	22.0	8.6	29.5	57.5	100	57.7	14.5	27.8
Quebec	41.1	27.9	53.6	117.7	100	75.0	3.8	21.2
Montreal	43.3	30.9	71.9	141.9	100	79.6	3.1	17.3
Quebec	29.4	4.9	24.1	76.3	100	48.1	8.2	43.7
Ontario	45.8	15.5	54.5	116.3	100	53.4	4.4	42.2
Hamilton	41.0	21.8	148.5	103.7	100	69.3	11.9	18.8
Kitchener	44.1	53.5	31.2	31.0	100	61.9	18.0	20.1
London	40.6	40.9	-	35.9	100	93.5	-	6.5
Ottawa	46.9	34.2	-	150.6	100	81.4	-	18.6
Sudbury	49.9	40.8	-	80.7	100	72.4	-	27.6
Toronto	50.7	-0.5	30.7	125.0	100	36.8	3.9	59.3
Windsor	18.2	-4.7	-	81.3	100	59.2	-	40.8
Prairies	61.6	50.2	70.4	133.0	100	72.9	10.9	16.2
Winnipeg	33.4	12.6	70.4	78.6	100	55.8	25.0	19.2
Calgary	96.1	87.0	-	233.5	100	89.5	-	10.5
Edmonton	91.0	74.9	-	251.4	100	83.2	-	16.8
British Columbia	39.9	10.9	29.3	90.7	100	46.5	6.1	47.4
Vancouver	40.6	11.5	29.3	101.6	100	48.7	7.2	44.1
Victoria	36.2	7.0	-	60.3	100	35.6	-	64.4

Source: 1961 Census, DBS 92-535, table 10.

a/ The 1961 areas of the MAs are held constant.

b/ Groups of incorporated centres are used in some cases: Montreal - all cities of 10,000 and over (in 1961) on Montreal Island; Kitchener-Kitchener and Waterloo; Ottawa-Ottawa, Hull and Eastview.

c/ As of 1951.

d/ Portion of MA outside of cities of 10,000 and over in 1951.

Table 25. Land-use data

List of cities used in the analysis

<u>48 cities</u>		<u>22 cities</u>	<u>12 cities</u>
Albany	New York	Boston	Boston
Baltimore	Bronx	Buffalo	Buffalo
Birmingham	Brooklyn	Chicago	Cincinnati
Boston	Manhattan	Cincinnati	Cleveland
Buffalo	Queens	Cleveland	Detroit
Chicago	Richmond	Dallas	Miami
Cincinnati	Newark	Dayton	Minneapolis
Cleveland	Oakland	Detroit	New York
Columbus	Oklahoma City	Long Beach	Newark
Dallas	Phoenix	Los Angeles	Pittsburgh
Dayton	Pittsburgh	Miami	Providence
Detroit	Portland	Minneapolis	St. Louis
Ft. Worth	Portsmouth	New York	
Hartford	Providence	Newark	
Jersey City	Rochester	Oklahoma City	
Kansas City	St. Louis	Pittsburgh	
Long Beach	St. Paul	Portsmouth	
Los Angeles	Sacramento	Providence	
Louisville	San Antonio	St. Louis	
Memphis	San Diego	San Antonio	
Miami	San Francisco	San Francisco	
Minneapolis	San Jose	Seattle	
New Orleans	Seattle		
	Syracuse		
	Washington, D.C.		
	Youngstown		

Source: J. P. Pickard in his already cited Trends and Projections....

Table 26. Mean proportions of land devoted to various uses at different times in 22 cities

<u>Type of use</u>	<u>Proportion of total land</u>		<u>Proportion of developed land</u>	
	<u>Early data</u>	<u>Late data</u>	<u>Early data</u>	<u>Late data</u>
<u>Total developed</u>	.756	.784	1.000	1.000
Residential	.290	.310	.385	.398
Industrial	.085	.085	.110	.104
Commercial	.041	.040	.053	.050
Road and highway	.207	.198	.279	.254
Other public	.133	.152	.174	.193
<u>Total undeveloped</u>	.245	.216		
Vacant	.233	.204		
Underwater	.012	.012		

Source: J. P. Pickard in his already cited Trends and Projections....

Table 27. Mean proportions of land devoted to various uses at different times in 12 cities

<u>Type of use</u>	<u>Proportion of total land</u>		<u>Proportion of developed land</u>	
	<u>Early data</u>	<u>Late data</u>	<u>Early data</u>	<u>Late data</u>
<u>Total developed</u>	.802	.857	1.000	1.000
Residential	.300	.325	.374	.379
Industrial	.100	.106	.124	.124
Commercial	.045	.044	.055	.050
Road and highway	.203	.210	.254	.245
Other public	.154	.172	.194	.202
<u>Total undeveloped</u>	.198	.143		
Vacant	.184	.129		
Underwater	.014	.014		

Source: J. P. Pickard in his already cited Trends and Projections....

Table 28. Net urban residential and employment densities measured in persons per acre a/

<u>Land use</u>	<u>22 cities</u>		<u>12 cities</u>	
	<u>Early data</u>	<u>Late data</u>	<u>Early data</u>	<u>Late data</u>
Residential	63.23	53.32	76.75	67.25
Industrial	28.42	25.44	36.20	30.85
Commercial	65.80	62.01	81.37	81.82

Source: J. P. Pickard in his already cited Trends and Projections...

a/ Industrial densities were calculated by dividing manufacturing employment by industrial land area. Commercial were obtained by dividing the sum of wholesaling, retailing and selected service trade employment as defined by the Bureau of the Census by commercial land. Finance, insurance, real estate, and professional services are not included in the calculations since data on these activities are not available.

Table 29. Land absorption coefficients estimated from a sample of 22 cities
(acres per person)

<u>Type of land</u>	<u>Population</u>	<u>Manufacturing employment</u>	<u>Commercial employment</u>	<u>Standard error</u>	<u>coefficient of determination</u>	<u>Reciprocal of absorption coefficient (persons per acre)</u>
Residential	.059			.0009	.86	16.94
Industrial		.034		.0008	.80	29.41 ^{a/}
Commercial			.047	.0010	.63	21.27
Road and highway	.006			.0006	.16	166.66
Other public	.010			.0004	.46	100.00
Total developed	.091			.0010	.86	10.99

Source: J. P. Pickard in his already cited Trends and Projections....

a/ This number implies a density higher than would be expected in newly annexed areas. It is biased by business cycle effects caused by the inclusion of some data spanning 1941-1945, and growth occurring nearer the core areas in some cities. The marginal densities for Dallas and Oklahoma City were 9.1 and 10.5. Data compiled by Hoover and Vernon suggest a similar value of about 10.0 for suburban areas within the New York region. See Edgar M. Hoover and Raymond Vernon, Anatomy of a Metropolis (Cambridge, Massachusetts Harvard University Press, 1959), p. 31.

Table 30. Acres of land in 30 large American cities, classified by broad use categories, net data

<u>City and state</u>	<u>Residential</u>	<u>Industrial</u>	<u>Commercial</u>	<u>Road and highway</u>	<u>Other public and semi- public</u>	<u>Total developed</u>	<u>Vacant</u>	<u>Total</u>	<u>Year of survey</u>
Buffalo, N.Y.	8,450	4,475	2,428	6,078	3,239	-	1,926	26,437	1964
Buffalo, N.Y.	8,286	4,287	1,867	4,934	4,046	23,420	1,767	25,187	1958
Buffalo, N.Y.	8,767	4,337	2,669	4,719	2,512	23,004	2,915	25,919	1940
Chicago, Ill.	45,440	17,280	10,560	34,560	25,600	-	8,960	142,400	1966
Chicago, Ill.	45,184	19,720	8,960	34,496	20,480	128,832	12,288	144,064	1961
Chicago, Ill.	41,600	19,712	8,704	33,216	13,504	116,736	16,128	135,808	1956
Chicago, Ill.	33,216	19,840	6,400	33,856	11,008	104,320	29,440	137,408	1941
Cincinnati, Ohio	-	3,456	3,641	6,610	-	-	10,270	49,424	1965
Cincinnati, Ohio	15,631	4,202	1,495	6,800	9,073	37,201	12,535	49,736	1960
Cincinnati, Ohio	13,416	3,873	1,192	5,933	8,724	33,138	16,598	49,736	1948
Cleveland, Ohio	17,249	3,871	4,750	8,360	-	-	6,376	48,923	1963
Cleveland, Ohio	18,500	8,390	1,750	8,000	5,800	42,440	6,430	49,230	1958
Cleveland, Ohio	16,700	8,380	1,820	7,610	5,450	39,960	8,910	49,230	1950
Dallas, Texas	45,903	9,468	7,248	24,584	23,427	-	75,517	186,147	1966
Dallas, Texas	41,502	7,038	5,775	23,223	17,618	95,156	87,548	182,704	1960
Dallas, Texas	37,471	3,664	4,799	15,083	11,112	72,129	62,123	134,252	1950
Dallas, Texas	12,262	1,518	608	6,277	5,445	26,110	6,054	32,163	1945
Dayton, Ohio	8,216	1,519	1,184	5,241	-	-	2,872	23,702	1965
Dayton, Ohio	7,723	1,758	1,099	4,322	3,367	18,269	2,259	21,924	1960
Dayton, Ohio	6,657	1,415	811	3,651	2,264	14,798	2,265	17,337	1954
Dayton, Ohio	5,692	1,283	590	3,427	2,260	13,252	2,480	15,809	1945
Detroit, Mich.	36,895	4,510	6,701	-	10,285	-	5,272	89,350	1961-62
Detroit, Mich.	35,526	5,349	4,101	24,940	7,734	77,650	7,381	89,343	1954
Detroit, Mich.	27,058	4,003	3,400	24,790	6,069	65,320	19,989	89,343	1943
Hartford, Conn.	3,417	452	922	1,971	3,753	-	1,428	11,982	1966
Hartford, Conn.	4,532	576	576	1,843	2,380	9,907	1,612	11,579	1954
Jersey City, N.J.	2,200	3,340	380	1,580	750	-	1,900	10,150	1965
Jersey City, N.J.	2,140	3,560	350	1,480	710	8,240	1,640	9,880	1948
Kansas City, Mo.	11,520	9,152	2,048	6,400	2,880	-	4,480	36,480	1968
Kansas City, Mo.	10,377	3,316	1,128	7,240	4,103	26,164	13,329	40,274	1946

Table 30 (continued)

<u>City and state</u>	<u>Residential</u>	<u>Industrial</u>	<u>Commercial</u>	<u>Road and highway</u>	<u>Other public and semi- public</u>	<u>Total developed</u>	<u>Vacant</u>	<u>Total</u>	<u>Year of survey</u>
Long Beach, Calif.	10,112	224	1,076	6,654	-	-	-	30,231	1966
Long Beach, Calif.	9,990	1,276	890	6,175	3,600	21,931	2,370	24,301	1954
Long Beach, Calif.	3,180	250	355	4,150	880	8,815	8,870	17,685	1937
Los Angeles, Calif.	185,600	15,501	13,037	42,131	10,893	-	29,408	295,014	-
Los Angeles, Calif.	106,444	19,410	12,437	42,139	21,826	202,256	90,778	293,034	1960
Los Angeles, Calif.	39,697	10,618	4,137	37,223	11,028	102,703	185,119	289,072	1940
Louisville, Ky.	14,594	-	1,167	6,968	7,666	-	4,339	38,071	1966
Louisville, Ky.	11,577	3,531	1,269	5,369	4,673	26,419	4,091	30,509	1954
Memphis, Tenn.	31,533	4,918	8,826	12,334	18,813	-	31,556	107,990	1968
Memphis, Tenn.	18,300	3,800	1,120	7,500	4,300	35,020	7,800	77,100	1953
Miami, Florida	9,713	889	1,778	5,213	1,544	-	2,531	21,668	1962
Miami, Florida	9,910	529	1,614	5,680	1,654	19,387	2,594	21,981	1959
Miami, Florida	9,818	362	1,674	5,620	1,463	18,937	2,945	21,882	1953
Minneapolis, Minn.	13,765	3,300	2,037	8,727	5,732	-	1,711	35,273	1967
Minneapolis, Minn.	13,668	3,556	1,446	8,727	7,987	35,384	2,244	37,628	1958
Minneapolis, Minn.	12,723	3,053	875	8,527	6,469	31,647	5,981	37,628	1948
New Orleans, La.	12,697	5,645	1,594	16,033	6,575	-	58,384	100,928	1965
New Orleans, La.	20,426	7,557	3,313	13,431	10,020	54,747	56,709	127,616	1960
New York, N.Y.	-	6,786	-	61,547	54,317	-	25,656	204,682	1960
New York, N.Y.	47,524	17,601	4,099	61,547	47,868	178,639	26,042	204,681	1959
New York, N.Y.	46,266	18,294	4,075	56,635	48,099	173,369	31,007	204,876	1955
New York, N.Y.	38,741	9,144	5,658	46,457	27,249	127,249	58,747	198,942	1938
Phoenix, Arizona	30,631	4,259	3,156	14,963	25,672	-	76,729	155,351	1965
Phoenix, Arizona	11,484	1,241	1,323	6,673	3,251	23,972	9,261	33,234	1958
Phoenix, Arizona	8,709	1,002	1,093	4,901	3,619	19,324	3,819	23,142	1957
Pittsburgh, Pa.	10,335	3,433	1,104	6,305	5,928	-	8,230	35,334	1960
Pittsburgh, Pa.	9,674	2,881	1,117	6,431	5,521	25,624	9,837	36,889	1959
Pittsburgh, Pa.	8,965	2,583	1,277	6,363	5,089	24,277	10,338	36,043	1940
Providence, R.I.	3,621	1,478	572	2,741	2,495	-	1,062	11,969	1961
Providence, R.I.	3,835	1,644	411	1,908	2,232	10,030	1,427	11,456	1953
Providence, R.I.	3,602	1,422	378	1,882	2,132	9,416	2,041	11,456	1946

Table 30 (continued)

<u>City and state</u>	<u>Residential</u>	<u>Industrial</u>	<u>Commercial</u>	<u>Road and highway</u>	<u>Other public and semi- public</u>	<u>Total developed</u>	<u>Vacant</u>	<u>Total</u>	<u>Year of survey</u>
Rochester, N.Y.	7,818	3,165	1,116	3,629	5,186	-	1,957	22,881	1963
Rochester, N.Y.	7,549	3,026	1,096	3,901	4,200	19,772	2,342	22,630	1954
St. Louis, Mo.	-	5,972	2,141	9,874	-	-	2,031	59,276	1964
St. Louis, Mo.	12,824	5,173	1,859	8,784	6,699	35,339	4,497	39,836	1950
St. Louis, Mo.	12,153	5,087	1,768	8,831	6,272	34,111	5,724	39,836	1948
St. Louis, Mo.	12,080	5,014	1,723	8,823	6,276	33,916	5,920	39,836	1947
St. Louis, Mo.	11,873	4,851	1,765	8,839	6,202	33,530	6,306	39,836	1940
St. Paul, Minn.	10,861	6,179	1,063	8,348	4,975	-	5,031	36,457	1962
St. Paul, Minn.	10,720	4,288	942	7,925	5,112	28,987	6,493	35,480	1958
Sacramento, Calif.	14,469	3,734	2,800	11,200	6,067	-	21,170	59,440	1966
Sacramento, Calif.	4,662	1,000	570	2,438	1,400	10,070	818	12,199	1953
San Antonio, Texas	30,004	2,374	4,088	21,432	-	-	37,132	110,329	1964
San Antonio, Texas	22,539	2,424	1,879	15,111	8,980	50,933	43,572	94,504	1956
San Antonio, Texas	14,922	1,024	3,480	9,240	7,766	36,432	9,706	46,138	1951
San Diego, Calif.	24,758	4,430	2,712	-	41,345	-	105,746	197,491	1966
San Diego, Calif.	19,836	1,442	1,877	8,133	7,803	39,091	50,923	90,014	1958
San Francisco, Calif.	8,665	1,832	1,884	7,494	8,073	-	1,371	29,319	1964
San Francisco, Calif.	8,229	2,562	1,178	7,609	7,704	27,282	3,568	30,850	1948
San Francisco, Calif.	6,883	1,776	1,123	7,244	6,028	23,054	5,172	28,340	1938
San Jose, Calif.	13,251	2,897	1,475	7,785	6,118	-	37,414	69,940	1965
San Jose, Calif.	3,500	780	250	2,000	800	7,330	1,720	9,050	1948
Seattle, Wash.	20,174	2,379	2,570	14,335	7,611	-	5,919	52,988	1964
Seattle, Wash.	18,940	2,243	2,062	13,930	8,113	45,288	8,583	55,057	1953
Seattle, Wash.	12,067	2,480	1,122	11,710	4,853	32,232	8,782	42,200	1947
Seattle, Wash.	9,362	1,023	2,051	11,073	2,354	25,863	13,764	40,813	1938

Source: Compilation of data from Neidercorn and Hearle Memorandum, table 6 for historical data, and from Allan D. Manvel, Three Land Research Studies, Research Report No. 12, National Commission on Urban Problems (Washington, D.C., United States Government Printing Office, 1969), see table 7 for more recent data.

Table 31. Land-use categories in 30 large American cities as a percentage of total land area, net data

<u>City and state</u>	<u>Residential</u>	<u>Industrial</u>	<u>Commercial</u>	<u>Road and highway</u>	<u>Other public and semi- public</u>	<u>Total developed</u>	<u>Vacant</u>	<u>Year of survey</u>
Buffalo, N.Y.	32.0	16.3	9.9	23.0	12.3	-	7.3	-
Buffalo, N.Y.	32.9	17.0	7.4	19.6	16.1	93.0	7.0	1958
Buffalo, N.Y.	33.8	16.7	10.3	18.2	9.7	88.8	11.2	1940
Chicago, Ill.	31.9	12.1	7.4	24.3	18.0	-	6.3	-
Chicago, Ill.	31.4	13.7	6.2	23.9	14.2	89.4	8.5	1961
Chicago, Ill.	30.6	14.5	6.4	24.5	9.9	86.0	11.9	1956
Chicago, Ill.	24.2	14.4	4.7	24.6	8.0	75.9	21.4	1941
Cincinnati, Ohio	-	6.9	7.3	13.2	-	-	20.4	-
Cincinnati, Ohio	31.4	8.4	3.0	13.7	18.2	74.8	25.2	1960
Cincinnati, Ohio	27.0	7.8	2.4	11.9	17.5	66.6	33.4	1948
Cleveland, Ohio	35.1	7.9	9.7	17.1	-	-	13.0	-
Cleveland, Ohio	37.6	17.0	3.6	16.3	11.8	86.2	13.1	1958
Cleveland, Ohio	33.9	17.0	3.7	15.5	11.1	81.2	18.1	1950
Dallas, Texas	24.7	5.1	3.9	13.2	12.6	-	40.6	-
Dallas, Texas	22.7	3.9	3.2	12.7	9.6	52.0	47.9	1960
Dallas, Texas	27.9	2.7	3.6	11.2	8.3	53.7	46.3	1950
Dallas, Texas	38.1	4.7	1.9	19.5	16.9	81.2	18.8	1945
Dayton, Ohio	34.7	6.4	5.0	22.1	-	-	12.1	-
Dayton, Ohio	35.2	8.0	5.0	19.7	15.4	83.3	10.3	1960
Dayton, Ohio	38.4	8.2	4.7	21.1	13.1	85.4	13.1	1954
Dayton, Ohio	36.0	8.1	3.7	21.7	14.3	83.8	15.7	1945
Detroit, Mich.	41.3	5.0	7.5	-	11.5	-	5.9	-
Detroit, Mich.	39.8	6.0	4.6	27.9	8.7	86.9	8.3	1954
Detroit, Mich.	30.3	4.5	3.8	27.7	6.8	73.1	22.4	1943
Hartford, Conn.	28.5	3.8	7.7	16.4	31.3	-	11.9	-
Hartford, Conn.	39.1	5.0	5.0	15.9	20.6	85.6	13.9	1954
Jersey City, N.J.	21.7	32.9	3.7	15.6	7.4	-	18.7	-
Jersey City, N.J.	21.7	36.0	3.5	15.0	7.2	83.4	16.6	1948
Kansas City, Mo.	31.6	25.1	5.6	17.5	7.9	-	12.3	-
Kansas City, Mo.	25.8	8.2	2.8	18.0	10.2	65.0	33.1	1946

Table 31 (continued)

<u>City and state</u>	<u>Residential</u>	<u>Industrial</u>	<u>Commercial</u>	<u>Road and highway</u>	<u>Other public and semi- public</u>	<u>Total developed</u>	<u>Vacant</u>	<u>Year of survey</u>
Long Beach, Calif.	33.5	0.7	3.6	22.0	-	-	-	-
Long Beach, Calif.	41.1	5.3	3.7	25.4	14.8	90.2	9.8	1954
Long Beach, Calif.	18.0	1.4	2.0	23.5	5.0	49.8	50.2	1937
Los Angeles, Calif.	62.9	5.3	4.4	14.2	3.7	-	10.0	-
Los Angeles, Calif.	36.3	6.6	4.2	14.4	7.4	69.0	31.0	1950
Los Angeles, Calif.	13.7	3.7	1.4	12.9	3.8	35.5	64.0	1940
Louisville, Ky.	38.3	-	3.1	18.3	20.1	-	11.4	-
Louisville, Ky.	37.9	11.6	4.2	17.6	15.3	86.6	13.4	1954
Memphis, Tenn.	29.2	4.6	8.2	11.4	17.4	-	29.2	-
Memphis, Tenn.	23.7	4.9	1.5	9.7	5.6	45.4	10.1	1953
Miami, Fla.	44.8	4.1	8.2	24.1	7.1	-	11.7	-
Miami, Fla.	45.1	2.4	7.3	25.8	7.5	88.2	11.8	1959
Miami, Fla.	44.9	1.7	7.7	25.7	6.7	86.5	13.5	1953
Minneapolis, Minn.	38.9	9.3	5.8	24.7	16.2	-	4.8	-
Minneapolis, Minn.	36.3	9.5	3.8	23.2	21.2	94.0	6.0	1958
Minneapolis, Minn.	33.8	8.1	2.3	22.7	17.2	84.1	15.9	1948
New Orleans, La.	12.6	5.6	1.6	15.9	6.5	-	57.8	-
New Orleans, La.	16.0	5.9	2.6	10.5	7.9	42.9	44.4	1960
New York, New York	-	3.3	-	30.1	26.5	-	12.5	-
New York, New York	23.2	8.6	2.0	30.1	23.4	87.3	12.7	1959
New York, New York	22.6	8.9	2.0	27.6	23.5	84.6	15.1	1955
New York, New York	19.5	4.6	2.8	23.4	13.7	64.0	29.5	1938
Phoenix, Arizona	19.7	2.8	2.0	9.6	16.5	-	49.4	-
Phoenix, Arizona	34.6	3.7	4.0	20.1	9.8	72.1	27.9	1958
Phoenix, Arizona	37.6	4.3	4.7	21.2	15.6	83.5	16.5	1957
Pittsburgh, Pa.	29.2	9.7	3.1	17.8	16.8	-	23.3	-
Pittsburgh, Pa.	26.2	7.8	3.0	17.4	15.0	69.5	26.7	1959
Pittsburgh, Pa.	24.9	7.2	3.5	17.7	14.1	67.4	28.7	1940
Providence, R.I.	30.3	12.3	4.8	22.9	22.8	-	8.9	-
Providence, R.I.	33.5	14.4	3.6	16.7	19.5	87.6	12.5	1953
Providence, R.I.	31.4	12.4	3.3	16.4	18.6	82.2	17.8	1946
Rochester, N.Y.	34.2	13.8	4.9	15.9	22.7	-	8.6	-

Table 31 (continued)

<u>City and state</u>	<u>Residential</u>	<u>Industrial</u>	<u>Commercial</u>	<u>Road and highway</u>	<u>Other public and semi- public</u>	<u>Total developed</u>	<u>Vacant</u>	<u>Year of survey</u>
Rochester, N.Y.	33.4	13.4	4.8	17.2	18.6	87.4	10.3	1954
St. Louis, Mo.	-	15.2	5.5	25.2	-	-	5.2	-
St. Louis, Mo.	32.2	13.0	4.7	22.1	16.8	88.7	11.3	1950
St. Louis, Mo.	30.5	12.8	4.4	22.2	15.7	85.6	14.4	1948
St. Louis, Mo.	30.3	12.6	4.3	22.1	15.8	85.1	14.9	1947
St. Louis, Mo.	29.8	12.2	4.4	22.2	15.6	84.2	15.8	1940
St. Paul, Minn.	29.8	16.9	2.9	22.9	13.6	-	13.8	-
St. Paul, Minn.	30.2	12.1	2.7	22.3	14.4	81.7	18.3	1958
Sacramento, Calif.	24.3	6.3	4.7	18.8	10.2	-	35.6	-
Sacramento, Calif.	38.2	8.2	4.7	20.0	11.5	82.5	6.7	1953
San Antonio, Texas	27.2	2.4	4.1	19.4	-	-	37.0	-
San Antonio, Texas	23.8	2.6	2.0	16.0	9.5	53.9	46.1	1956
San Antonio, Texas	32.3	2.2	7.5	20.0	16.8	79.0	21.0	1951
San Diego, Calif.	12.5	2.2	1.4	-	20.9	-	53.6	-
San Diego, Calif.	22.0	1.6	2.1	9.0	8.7	43.4	56.6	1958
San Francisco, Calif.	29.6	6.3	6.4	25.6	27.5	-	4.7	-
San Francisco, Calif.	26.7	8.3	3.8	24.7	25.0	88.4	11.6	1948
San Francisco, Calif.	24.3	6.3	4.0	25.6	21.3	81.3	18.2	1938
San Jose, Calif.	19.2	4.2	2.1	11.3	8.9	-	54.3	-
San Jose, Calif.	38.7	8.6	2.8	22.1	8.8	81.0	19.0	1948
Seattle, Wash.	38.1	4.5	4.8	27.1	14.4	-	11.2	-
Seattle, Wash.	34.4	4.1	3.7	25.3	14.7	82.3	15.6	1953
Seattle, Wash.	28.6	5.9	2.7	27.7	11.5	76.4	20.8	1947
Seattle, Wash.	22.9	2.5	5.0	27.1	5.8	63.4	33.7	1938

Source: Compilation of data from Neidercorn and Hearle Memorandum, table 8 for historical data and from Allan D. Manvel, Three Land Research Studies, ibid., table 7 for most recent data.

Table 32. Rates of urbanization and densities of some cities of United States compared with Montreal

<u>City or area</u>	<u>Years</u>	<u>Rate of urbanization</u>	<u>Density of population</u>	
			<u>Early</u>	<u>Late</u>
Boston	8	29.8	24.4	28.0
Cleveland	8	77.4	22.1	21.5
Dallas	10	93.9	60	7.1
Detroit	12	167.6	27.1	23.7
Los Angeles	20	102.2	14.6	12.2
Minneapolis	10	95.0	15.5	14.9
Pittsburgh	19	21.7	25.1	26.2
San Antonio	5	130.6	11.3	10.2
San Francisco	10	24.1	26.2	28.6
Seattle	6	195.5	14.5	11.7
Washington	7	44.4	21.9	21.9
City of Montreal	12	25	42	42
Central Eleven	12	31	40	38
Montreal Metro Area	12	81	29	20

Between 1938 and 1960: exact dates may vary with individual cities.

Source: Urbanization, A Study of Urban Expansion in the Montreal Region, Technical Bulletin No. 5 (Montreal Planning Board February 1969), p. 95.

Table 33. Possible model of geographic distribution of 30 million population growth in new communities, 1970-2000

<u>Metropolitan Area, urban region, Zone</u>	<u>Growth</u> <u>1970-2000</u> ^{a/} <u>(millions)</u>	<u>New communities</u>						
		<u>number,</u> <u>total</u>	<u>by population size (000)</u>					
			<u>500</u>	<u>250</u>	<u>150</u>	<u>100</u>	<u>75</u>	<u>50</u>
California urban region:								
Southern California	+ <u>4.95</u>	<u>25</u>	<u>4</u>	<u>4</u>	<u>6</u>	<u>9</u>	<u>2</u>	
Los Angeles-Orange- Ventura-San Bernardino- Riverside-Bakersfield)	+ 4.1	17	4	4	4	5		
San Diego	+ 0.65	6			2	2	2	
Santa Barbara-S. C. coast	+ 0.2	2				2		
Central California	+ <u>1.9</u>	<u>13</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>4</u>	<u>4</u>	
San Francisco Bay	+ 1.0	4	1	1	1	1		
Sacramento	+ 0.3	3			1	1	1	
Balance of urban region	+ 0.6	6			1	2	3	
Metropolitan Arizona	+ <u>0.7</u>	<u>8</u>			<u>1</u>	<u>1</u>	<u>6</u>	
Puget Sound	+ <u>0.5</u>	<u>5</u>			<u>1</u>	<u>2</u>	<u>2</u>	
Colorado Piedmont	+ <u>0.5</u>	<u>6</u>				<u>2</u>	<u>4</u>	
Willamette Valley	+ <u>0.2</u>	<u>2</u>				<u>1</u>	<u>1</u>	
Total, western urban regions	+ <u>8.75</u>	<u>59</u>	<u>5</u>	<u>5</u>	<u>11</u>	<u>19</u>	<u>19</u>	
Outlying western regions	+ <u>1.85</u>	<u>20</u>			<u>4</u>	<u>7</u>	<u>5</u>	<u>4</u>
Western regions, total	+ <u>10.6</u>	<u>79</u>	<u>5</u>	<u>5</u>	<u>15</u>	<u>26</u>	<u>24</u>	<u>4</u>
United States, grand total	+ <u>30.0</u>	<u>272</u>	<u>9</u>	<u>14</u>	<u>36</u>	<u>77</u>	<u>84</u>	<u>52</u>
In urban regions; metro. zones	+ 21.7	160	9	14	27	57	53	-
In outlying regions	+ 8.3	112	-	-	9	20	31	52

^{a/} Population growth shown in millions is the amount allocated to new communities.

Annex II

THE CITIES OF RED DEER AND SASKATOON, SASKATCHEWAN

A. Process of land development, City of Red Deer

The following excerpts are taken from an article by Denis Cole entitled "The City of Red Deer", Habitat, Capetown, South Africa (July-August 1963). The fact that the City of Red Deer either owns or holds under option strategically situated lands in relation to future development, the process of development follows this approximate pattern:

1. One to five years in advance of need, city acquires land or options on land.
2. Subdivision is designed by district planning staff based on engineers preliminary design for trunk services for 40,000 population and existing contour maps and photographs.
3. Design is forwarded to consulting engineers for comment, checking and suggested revisions.
4. Subdivision design completed and submitted to City Engineer and Council for approval.
5. Survey contracted out and engineers prepare detailed designs and estimates for all services, ready for calling tenders.
6. Tenders received for work, usually from 10 to 18 contractors, and contracts awarded.
7. Supervision by consulting engineers under over-all direction of City Engineer.
8. Serviced lots made available to individuals for two weeks on first-come, first-served basis.
9. Balance of lots made available to house-building contractors.

It should be noted that, while subdivision and engineering designs are prepared for 150 to 200 acres at a time, only those lands required within a 12 to 18 month period are actually subdivided and serviced at any one time.

In respect to the above points, eight and nine and the sale policies of the city, some comments should be made. The sale price of the lots is based on the following costs and policies:

1. If the city constructs a \$300,000 sanitary sewer through the build-up area to the edge of a 500 acre site to be serviced, each acre contributes \$600 towards this trunk sewer or about \$200 per lot. The same principle applied to the trunk storm sewers and any arterial roads and major thoroughfares on the perimeter or running through a subdivision. It has been found that the cost of these three "off-site" services amounts to approximately \$7.50 per foot of assessable frontage and this is included in the sale price of each lot.

2. The sale price of each serviced lot includes a share of all services in the subdivision, including the provision of land and services for school sites and playgrounds - about 10 per cent of the gross area. The total cost of services amounts to about \$36.50 per foot of assessable frontage - there are no flankage charges. This cost or charge includes paved roads; concrete curbs; gutters and sidewalks; underground wiring for power, telephone and street lights; sanitary and storm sewers; water mains; mercury-vapour street lights on steel poles; gravelled lanes; and utility connexions to property lines. It includes all engineer's fees for design and supervision.

3. Land and survey costs amount to from \$5 to \$10 per foot, bringing the total price for off-site services, on-site services and land to about \$50 to \$55 per foot of assessable frontage. These prices have not changed in five years.

4. Not more than 10 per cent of the lots made available by the city are purchased directly by individuals. The balance is acquired by housebuilding contractors on the following terms: one-third down, one-third in four months; and the balance in eight months with a provision that the entire price must be fully paid up before a building permit is issued.

5. All licensed house builders are invited to attend a meeting at which the lots are distributed. Their names are placed in a hat and each builder draws for his priority of selection. Lots can usually be selected from five to 10 at a time, depending on how many are available. The builder who draws first choice picks five lots and then the second builder picks his five and so on until all have obtained an equal number. The selection then goes around again and gradually the smaller builders drop out followed by the larger until all are satisfied. This avoids a project appearance to the development and gives all builders an equal chance of a share in the best lots. Some difficulties have been experienced by builders, wanting to arrange groupings of houses and this is a problem that has not yet been resolved.

6. Each purchaser of a lot is required to start construction within 12 months. The city holds the title and does not dispose of it until the approved lender makes assurance that a mortgage is arranged and completion of the building is guaranteed. If the building is not started on time, money is refunded less a penalty and transfers are not permitted until buildings are completed.

7. When disposing of multiple-family or shopping centre sites, it has been the policy to establish a sale price which is very attractive to developers and to allocate such sites on the basis of the best development proposal. This has produced a competitive effort towards quality.

B. City of Red Deer, Report on Servicing of Subdivisions

The following excerpts are taken from a report by Denis Cole, Office of City Commissioner, Red Deer, Alberta, Canada, 9 August 1965.

Introduction

The purpose of this report is to review the background in which the city became involved in the major operation of land development, its operations during the seven years, 1958-1964 inclusive, its present situation and problems and some considerations for the future.

It may be said that the City of Red Deer has developed this programme to a degree unparalleled in any other city of its size, and its operations and progress have been observed with interest across Canada, and with envy by most urban communities faced with rapid growth.

In the post-war years, 1946-1953, the City experienced continuous growth at an unusually rapid rate and the population increased from 4,042 to 9,164.

Existing services (sanitary sewer, water and gravelled roads) were extended to meet the demand. During this period, however, the water treatment plant was not expanded nor were any new trunk water mains laid. No paved roads were constructed nor were any new trunk sanitary sewers installed to accommodate the increased volume of sewage.

Consequently, in 1953, the City was faced with severe problems in almost every area.

The gravelled roads which had been adequate for the population of 4,000 were rapidly disintegrating and many of the main roads, even downtown, were impassable after heavy rains.

Water had to be pumped through the filter plant faster than the plant could treat the water. There was no reservoir capacity at all to meet heavy demands in hot weather or for a large fire. The trunk water lines were inadequate to carry the necessary volumes of water which resulted in low pressures and insufficient fire protection.

The total absence of storm sewers necessitated the draining of surface water from streets into the sanitary system and the sanitary sewers, already overloaded by the increased volume of sewage, backed up in numerous areas of the City every time there was a heavy rain and flooded large numbers of basements. The extended sewer system had reached its limits. Raw sewage was discharged into the river. It was clear that drastic action had to be taken.

The City, at this time (1953) decided that the first requirement was to safeguard the City's water supply and instructed its Consulting Engineers to design a plant to look after the City's needs until it doubled in population (about 20,000). In 1954, a modern filtration and pumping plant was constructed.

In 1955 and 1956, the Red Deer District Planning Commission, in close collaboration with the City and with the assistance of the City's Consulting Engineers, proposed that all future long-range planning of utilities should be based on a population of 40,000 which might reasonably be expected in a period of 20-25 years (1975 to 1980). The population of the City in 1956 was 12,000. The areas which could most economically be serviced to accommodate this population of 40,000 were studied and recommendations made as to the location and size of trunk sewer mains and water mains that would be required with estimates of cost.

With the advice of Mr. Hardy, Dean of the Engineering Faculty of the University of Alberta and principal of Materials Testing Laboratories Ltd., specifications for paved roads were adopted.

During this period, designs were also prepared to provide the whole downtown with storm sewers and also to provide the new West Park and Eastview subdivisions with storm sewers.

In 1957, a traffic and parking study was undertaken by the Planning Commission and a firm of traffic consultants. A major thoroughfare and traffic plan to serve the future population was presented to Council in 1957 and adopted in principle.

From these studies and reports, it was apparent that literally millions of dollars would have to be spent on constructing large trunk sewers (sanitary and storm), and on new trunk water lines, through the areas which were already built up. Virtually all the roads in the developed part of the City would have to be rebuilt after the new trunks were laid, and new grade separations and bridges would have to be constructed.

The only method of financing these urgently required improvements was by borrowing. It seemed possible that it would strain the City's borrowing power to the limit to finance these improvements in the areas already developed and that it would take 10-15 years to complete even on a crash-programme basis.

It was in this situation that City Council had to consider how to finance the services in new subdivisions. The City could not afford to carry out the major programme above mentioned and, at the same time, finance utilities and roads in new subdivisions which, up to that time, had been financed with borrowed funds.

Council therefore considered the possibility of purchasing land, providing the services and immediately recovering the entire cost on sale of the serviced lots. This proposal carried with it the additional advantage of minimizing land speculation following the construction of major trunk roads and utilities to service particular areas.

The problem, however, was how to finance the acquisition of land and the construction of services for the short terms between expenditures for development, and sale recoveries. Various means were adopted to start this process in a small way, and, in the first place, the City provided sewer and water mains and gravelled roads to some City-owned lots on the East hill and sold these lots with basic services on a cash basis. Sidewalks and pavement were installed later with borrowed money on a 20-year frontage charge basis.

By 1957, it was decided to extend this operation and purchase substantial areas of land in West Park and Eastview over a term of years and to install all services including paving, sidewalks and street lighting and sell the lots on a cash basis fully serviced. This enabled the City to finance residential expansion without any drain on the City's long-term borrowing powers, and without placing any demands on the mill rate. It did necessitate, however, using the working capital of the city and short-term borrowings from the Bank to finance expenditures until sales recovered these costs.

All charges were based on estimated costs with no provision for surplus. Consequently, the working capital required and the need for short-term borrowings have steadily increased as the total operation expanded.

In fact, however, small surpluses have occurred to which have been added winter works recoveries, thus reducing the working capital and short-term borrowings which would otherwise have been required.

The C.M.R. Agreement and Riverside Industrial Area

In 1960, negotiations with the C.M.R. were completed under which the City would acquire or obtain control of a large industrial area in North Red Deer and would provide utilities and roads. In return, the C.M.R. would remove its tracks from the Central Business District (as soon as negotiations with the present users of the line could be completed) and would construct 5.6 miles of railway, a terminal and a yard in the new industrial areas to be known as Riverside Park Industrial Area. The agreement further provided that, as the old line was removed, the C.M.R. land (except two parcels on long-term lease) could be sold to the City at a price totalling \$200,000.

At the end of 1963, there was a shortage of lots and it was decided to allow for 350 lots sales in 1964 and to provide for a carry-over at the end of 1964 of some 75 lots. Consequently, about 425 lots were serviced for sale in 1964.

However, due to overbuilding at the end of 1963 and the beginning of 1964 and the gradual withdrawal of families from Red Deer in connexion with the change in status of Penhold, the 1964 sales dropped to 166, leaving 256 serviced lots available for sale having an average value of \$2,750 and a total value of some \$687,500. Ninety-five of these lots were withheld from the market and consequently were not paved in 1964. They are still being withheld. In addition to these lots, private individuals and contractors held 132 lots as at 31.12.64. It may be noted that lot sales in the first six months of 1965 have been extremely slow partly for the above-mentioned reasons, partly due to major apartment developments and partly because builders are reducing their inventories of lots.

Remedial steps have been taken in 1965. Only 34 new lots in Morrisroe are to be serviced in 1965; these had to be serviced in connexion with the extension of services to the new elementary school. In addition, the City had a commitment to provide sidewalks, etc., to the lots sold in Morrisroe in the previous year (1964). The total outlay on improvements in residential subdivisions in 1965 amounts to only \$150,000 (approx.) in Morrisroe plus \$75,000 on miscellaneous items in all other subdivisions. This compares with previous years as follows:

United States dollars

1962	902,663
1963	1,011,286
1964	868,458
1965	225,000 (approx.)

While it is a relatively simple matter to increase or cut back drastically on servicing additional lands, the purchasing of additional lands is much less flexible. In order to permit the economic planning and servicing of subdivisions, it is desirable to acquire or obtain control over large areas of land well in advance of our needs. This is arranged, for the most part, by acquiring parcels of 20-40 acres and obtaining options to purchase substantially greater areas in similar sized parcels each year over a period of years.

As previously stated, our equity in land for subdivisions other than Riverside amounted to \$284,067.56 as at 31 December 1964. Very approximately, this represents about 375 acres. Although most of this land cost \$1,000 per acre, the lower net equity is due to the surplus which has accrued through land sales over the seven-year period, 1958-1964 (over \$100,000).

On the basis of the average residential lot sales over the last seven years (250 lots per year), we have been using up approximately 75 acres a year. This means that as at 31 December 1964, we had approximately five years supply of land in reserve. In view of the long-range planning required for services, this is not considered excessive, but a careful examination of land consumption by development and sale must now be made before exercising further options to purchase land or entering into new agreements.

Review of 1958-1964 performance

During this seven-year period, the City invested \$6,108,707.35 in its prepaid subdivisions, and recovered \$5,220,160.74 leaving a total net equity as at 31 December 1964 of \$888,546.61.

This net equity comprises \$468,900.62 in land and \$419,645.99 in improvements. This represents, as previously shown, about five years of land reserve for residential development and about 15 years of land reserve for industrial development. The equity in improvements represents less than one year's normal consumption (recoveries on improvements have averaged \$600,000 per year over the last seven years).

It is submitted that, while every effect should be made to keep our equity to a minimum, our present reserves of land and advance investment in improvements is not out of line taking into account the total size of operation.

It should be noted, however, that the prepaid subdivisions have not been charged with interest for the City working capital and the Bank loans which have been made available to finance this large operation.

An argument against passing on this cost directly to the lot purchaser is that we receive full payment on the sale of lots but, in most cases, the City does not construct the surface improvements (paving sidewalks and lighting) until the following year. We therefore have the use of part of the purchaser's money for about a year and no allowance is made for this.

However, some thought should be given to adding a 5 per cent charge for administration to the over-all sale price of prepaid lots, other than in industrial areas. If the City does not charge the subdivision with interest on the operating money it makes available, the net equity should be gradually reduced, thereby reducing the need for short-term borrowing. This proposal would add \$125 to \$150 to the cost of serviced lots. On the basis of 250 lots per year, this would increase recoveries by some \$30,000 a year.

In view of the fact that our serviced lots are low in cost and virtually no change has been made in the sale price over the last five years, this small increase should not create any problem.

Finally, it should be pointed out that, while this major operation of land development does necessitate substantial borrowings from the Bank from September to April in each year, the City has been able to construct \$4,700,000 of improvements without long-term borrowing and has been able to provide fully serviced open spaces in the subdivisions without charge to the School or Recreation Boards. At the same time, the value of the improvements and land which the City now holds in reserve is considerably greater than its equity or net investment of \$888,546.61.

While this is a difficult period to finance due to slow lot sales and the need to continue exercising our land options it is considered that this is a temporary situation which can be overcome by using caution in further extension of improvements and by negotiating extension of some of our land options.

C. Land acquisition policy: the City of
Saskatoon, Saskatchewan

The following excerpts are taken from a report from H. E. Wellman, City Planner and Building Director, City of Saskatoon, 12 December 1968 to the National Capital Commission of Ottawa.

... You will note particularly that the larger scale plan shows some significant areas of land referred to as City tax title holdings in 1945. These were properties which had been subdivided around the turn of the century and which came back to the City for tax delinquency reasons during the depression and early years of the World War. As a result of this land bank, which came to the City more by accident than by design, we realized the significance of such land holdings and were able to convince the City Council of the day, and all subsequent Councils, of the wisdom of maintaining such a land bank and of being able to control the direction, rate and type of growth.

As a result, the City on its own account has adopted a continuous programme of land purchase on a progressive basis. We usually try to stay anywhere from five to 10 years ahead of development with our purchases and although we have not attempted in any way to develop a complete monopoly, we have, because of our ability to pay

cash normally for these properties, been able to forestall significant private participation in the development field in Saskatoon. Some of the more obvious gaps in our land purchase pattern are the result of the City not attempting to purchase land which had already been acquired for private development purposes. We have found that because of our major role in land development, private developers are very co-operative and adapt themselves very quickly to City standards and criteria.

As a result we have been able to eliminate completely conflicts in major land-use patterns and in matters related to staging or the timing of growth. All growth since the Planning Department was established in this City in 1954 has been related to the City's ability to provide services and we have been able to establish a very strong Technical Planning Board philosophy wherein the opinions and criteria laid down by each of the technical agencies providing utilities in the area is considered before any area is scheduled for development.

As mentioned, we have found the private developers of land to be very co-operative in this regard and in the infrequent circumstances where a developer has tried to develop out of sequence or in a land-use manner which would conflict with the over-all provisions of our Community Planning Scheme, we have been very successful in securing the co-operation of City Council in ruling in favour of our Community Planning Scheme and the criteria on which it is based. There have been several major tests of these criteria, particularly as they relate to the sequence of development, but because of the close relationship which we have been able to establish with our technical agencies, and in particular the City Engineering Department, we have been able to remove thus far any danger of unco-ordinated or out of sequence development, primarily by relating it to the City's ability to provide the services in a logical sequence.

Our land purchases within the last four years have ranged in price from \$200 per acre to a top of \$1,780 an acre, for land scheduled for residential development. The top price which we have ever paid, and in this particular instance the future land-use was for industrial purposes, was \$2,100 per acre approximately three years ago. We have found on the whole that the average price of the property which the City has purchased for future development purposes of all types, excluding the long-term regional park provisions, has averaged approximately \$600 per acre.

One rather unusual observation in this regard is the fact that for some reason the City has been able to establish much more favourable price relationships with the former owners of the land than has the private development sector; since almost invariably private developers are paying significantly higher prices for their land than are being asked of the City.

During the last 18 months, the City has taken advantage of recent amendments to the National Housing Act which permit the development of Land Holding Agreements as a first stage to the development of land assembly areas. You will note that we have marked on the two maps attached, three major areas of land identified as "Federal-Provincial-and Municipal Land Holdings Agreement Properties". These are lands purchased by the partnership in late 1967 and during 1968, at prices ranging between approximately 1,600 and \$1,800 per acre. In Saskatchewan the Federal Government pays 75 per cent of the costs of the acquisition of these properties, the Provincial Government pays 20 per cent, leaving only 5 per cent for the Municipal government to pay as its share. We have found this particular arrangement to be a very happy one for us because it has enabled us to fill in

gaps in our land ownership pattern, with very little financial involvement in so far as our own funds are concerned. We do not intend to stay in the Land Holdings Agreement arrangement because we have found our own Land policy to be a very effective one, giving us tremendously significant planning advantages as well as giving our City Council the ability to decide whether to make a profit, and if so, how much, on the resale value of the land. Thus far we have been able to pay for a significant number of community facilities such as two swimming pools, three fire halls, one municipal golf course, a covered skating rink, a football bowl and various other community facilities of this sort, out of the cash proceeds from the sale of our developed land without having to add directly to the tax burden of the citizens.

As mentioned briefly, the planning advantages to as complete a land development programme such as that with which we have been able to deal in Saskatoon, are almost unlimited. We feel that perhaps in one of the few instances available in this country, the full meaning of the word "co-ordination" takes on significance in municipal planning in Saskatoon. This Department is fully consulted by the administration prior to the acquisition of any land and we are quite frequently involved in the actual negotiations involving the purchase of the property.

Annex III

Changes in land values in Westchester County, New York - typical examples

The following excerpts are taken from an interview with Irving Lackenburgh, 20 Broadway, Pleasantville, 2 April 1969, New York, or reported by the Economic Consultants Organization of White Plains.

Cost of buildable land

At the present time land in Mount Pleasant with water is about \$10,000 an acre. This is raw land, with no sewers (Septic tanks are put in or if it is a large subdivision, a private sewer system; in recent years there have been no private sewer systems put in as no large subdivision has been built in Mount Pleasant area). If the land is in a good location it may bring \$15,000 to \$20,000 an acre.

A building site (less than an acre) is approximately \$5,000 and up in Mount Pleasant, New Castle, and North Castle. Raw land without water is roughly \$3,500 to \$5,000 a site in these areas. However, depending on location, the cost can rise to \$15,000 an acre for a building site with water and sewer in the Mount Pleasant area (close to a village, or in villages).

In the northern part of the county, \$15,000 an acre with water and sewer is a common price. In Mount Pleasant a 130' x 75' lot (1/4 acre) with water and sewer sold last month for \$10,000.

Increases in cost of land

Examples:

Mount Pleasant:

- 1943 - \$500 an acre; 1967 \$5,000 an acre (142 acres +)
- 1943 - \$3,000 for 6.8 acres; presently \$5,000 an acre
- Generally in 1943 raw land, with no water was sold for \$500 an acre, now it will sell for \$5,000 an acre

New Castle:

- 1927-1930 - 61 ac. \$40,000 (about \$550 an acre); now with no water about \$5,000 an acre
- 1927-1951 ac. in Bedford Hills \$35,000; now \$5,000 an acre
- 1944-11 ac. \$2,850 an acre in Chappaque

Pleasantville:

- 1936 - 37' lot \$100
- 1937 - 2 lots \$500 (about 1/2 acre)

Raw land before water and sewers in Mount Pleasant sold for \$3,500 an acre. Now with water and sewer it goes for \$10,000 a plot (roughly an acre). This is land in a subdivision which is already built up (originally the houses were in the \$35,000 to \$55,000 range). The \$10,000 figure is for comparable land in about the same location.

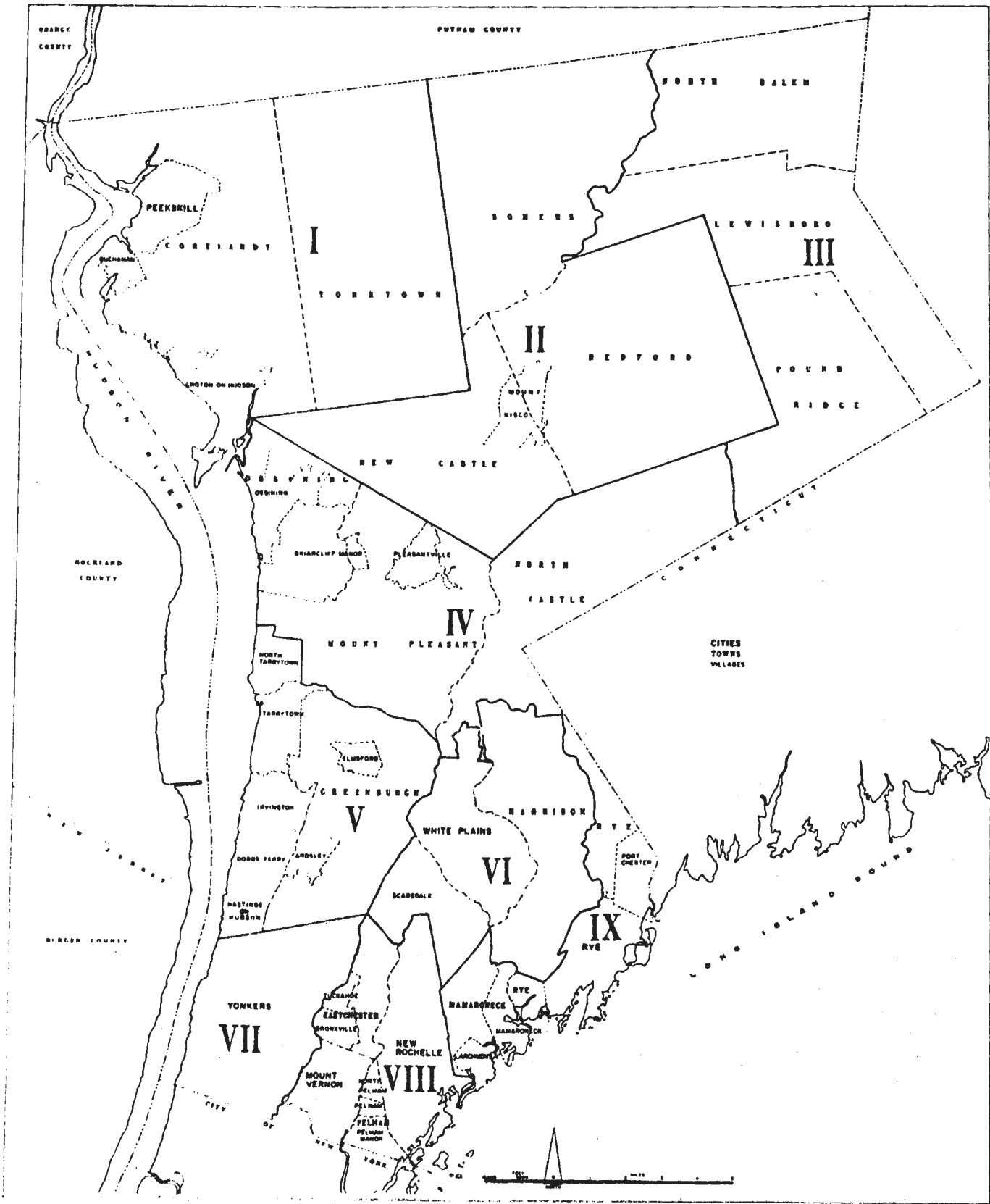


Figure VII. Westchester County, New York, Planning Areas.

Table 34. Estimated cost of land for single family development,
Westchester County, by planning area, 1966-1968

(In thousands of dollars)

Planning areas and cities	Less than one-acre ^{a/}			One acre			More than one acre		
	Low	High	Typical	Low	High	Typical	Low	High	Typical
Planning area I									
Peekskill	---	---	*	---	---	*	---	---	*
Remainder	\$8.0	\$9.5	\$8.8	\$10.0	\$15.0	\$13.5	---	---	*
Planning area II	4.3	5.0	5.0	9.0	20.0	15.0	\$8.0	\$15.0	\$12.0 ^{b/}
Planning area III	---	---	*	10.0	12.0	10.0	10.0	12.2	12.0 ^{b/}
Planning area IV	4.3	15.0	5.0	5.0	17.5	12.5	---	---	18.5
Planning area V	12.0	21.0	15.0	5.0	15.0	15.0	---	---	*
Planning area VI									
White Plains	---	---	10.0+	---	---	*	---	---	*
Remainder	---	---	*	---	---	20.0	---	---	*
Planning area VII (Yonkers)	---	---	10.0+	---	---	*	---	---	*
Planning area VIII									
Mount Vernon	---	---	*	---	---	*	---	---	*
New Rochelle	---	---	12.0+	---	---	*	---	---	*
Remainder	---	---	*	---	---	*	---	---	*
Planning area IX									
Rye	---	---	*	---	---	22.5+	---	---	*
Remainder	---	---	8	---	---	20.0+	---	---	*

Source: Tabulation of Builders Survey, Westchester County and information provided by land appraisers, 1969. From: Interim Report 2, Residential Analysis for Westchester County, New York, (Westchester, Westchester County, Planning Department, 1969), p. 28, table 6.

* Indicates very little or no land available in the particular area or category.

a/ Usually about half-acre, except in cities or villages where parcels are often one-quarter or one-third-acre.

b/ Land selling for the prices shown has no public water and sewer lines available.

Table 35. Estimated amount of land in various single family zones, Westchester County, by planning area, 1969 a/

<u>Planning areas and cities</u>	<u>Less than one acre</u>	<u>One acre</u>	<u>More than one acre</u>
Planning area I			
Peekskill	1,565	---	---
Remainder	13,138	19,918	12,870
Planning area II	4,436	16,611	34,186
Planning area III	1,167	3,503	39,784
Planning area IV	9,349	12,260	11,682
Planning area V	13,115	3,255	---
Planning area VI			
White Plains	4,244	---	---
Remainder	3,446	5,066	5,317
Planning area VII (Yonkers)	6,136	---	---
Planning area VIII			
Mount Vernon	887	---	---
New Rochelle	4,839	---	---
Remainder	3,441	---	---
Planning area IX			
Rye	1,847	885	---
Remainder	6,105	---	---
County total	73,715	61,498	106,139

Source: Planimetered from current (summer 1969) municipal zoned maps by Westchester County Department of Planning Personnel. From: Interim Report 2, Residential Analysis, p. 30, table 7.

a/ Includes land zoned specifically for single family residential purposes. In some areas, housing is a permitted use in a non-residential zone, but no acreage figures are available for this permitted use.

Table 36. Percentage distribution of estimated amount of land in various single family zones, Westchester County by planning area 1969 a/

<u>Planning areas and cities</u>	<u>Less than one acre</u>	<u>One acre</u>	<u>More than one acre</u>
Planning area I			
Peekskill	100.0	---	---
Remainder	28.6	43.4	28.0
Planning area II	7.7	28.9	63.4
Planning area III	2.6	7.9	89.5
Planning area IV	23.8	40.0	36.2
Planning area V	80.1	19.9	---
Planning area VI			
White Plains	100.0	---	---
Remainder	24.9	36.6	38.5
Planning area VII (Yonkers)	100.0	---	---
Planning area VIII			
Mount Vernon	100.0	---	---
New Rochelle	100.0	---	---
Remainder	100.0	---	---
Planning area IX			
Rye	67.6	32.4	---
Remainder	100.0	---	---
County total	30.5	25.5	44.0

Source: Planimetered from current (summer 1969) municipal zoning maps by Westchester County Department of Planning Personnel. From: Interim Report 2, Residential Analysis, p. 31, table. 8.

a/ Includes land zoned specifically for single family residential purposes. In some areas, housing is a permitted use in a non-residential zone, but no acreage figures are available for this permitted use.

Table 37. Estimated per-unit costs of land for private multi-family housing, Westchester County, by planning area, 1966-1968

(In thousands of dollars)

<u>Planning areas and cities</u>	<u>Garden apartments-town houses</u>	<u>High-rise a/ apartments</u>
Planning area I		
Peekskill	\$ 1.2 - \$ 1.5	b/
Remainder	2.5 - 4.0	*
Planning area II	*	\$ 2.5
Planning area III	*	*
Planning area IV	2.0 - 4.0	1.5
Planning area V	2.5 6.0	1.4
Planning area VI		
White Plains	3.5 - 4.5	2.5 - 8.0
Remainder	*	c/
Planning area VII		
Yonkers	2.0 - 6.0	1.4 - 4.0
Planning area VIII		
Mount Vernon	b/	b/
New Rochelle	*	*
Remainder	*	*
Planning area IX		
Rye	*	*
Remainder	*	2.5

Source: Tabulation of Builders Survey, Westchester County and information provided by land appraisers, 1969. From: Interim Report 2, Residential Analysis for Westchester County, (New York), p. 35, table 9.

* Indicates very little or no land available in the area or category or no recent construction activity.

a/ Six or more storey buildings.

b/ Construction of multi-family housing has taken place in these areas, but subsidy programmes have been used to offset the land costs so that an accurate indication of land costs are not possible.

c/ Zone changes on land used for multi-family housing preclude the accurate determination of land costs.

Table 38. Approximate percentage distribution of selling price of single family units, Westchester County, by planning area, 1966-1968

<u>Planning areas and cities</u>	<u>Land</u>	<u>Improvements</u>	<u>Construction</u>	<u>Profit and other</u>	<u>Total</u>
Planning area I					
Peekskill	---	---	---	---	---
Remainder	22.6	10.7	47.3	19.4	100.0
Planning area II	22.9	10.1	48.5	18.5	100.0
Planning area III	16.6	11.0	50.7	21.7	100.0
Planning area IV	24.2	12.8	45.4	17.6	100.0
Planning area V	24.9	7.0	40.2	27.9	100.0
Planning area VI					
White Plains	20.4	8.6	50.3	20.7	100.0
Remainder	25.0	5.3	57.1	12.6	100.0
Planning area VII (Yonkers)	25.0	10.5	49.0	15.5	100.0
Planning area VIII					
Mount Vernon	---	---	---	---	---
New Rochelle	20.0	7.0	62.2	10.8	100.0
Remainder	---	---	---	---	---
Planning area IX					
Rye	29.6	8.7	48.0	13.7	100.0
Remainder	28.6	9.4	42.9	19.1	100.0

Source: Interim Report 2, Residential Analysis for Westchester County (New York), p. 46, table 13.