

AN ANALYSIS OF SELECTED COMPREHENSIVE
MASTER PLANS IN CANADA, 1943-1970

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The Requirements for the Degree of
Master of City Planning

By
Delbert Juba

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ABSTRACT

Long-range, comprehensive master plans have been very popular among Canadian planning professionals. The widespread use of the master plan has been justified by the belief that plan policies and proposals will have a significant and lasting influence upon the future growth and development of the city. But while planners may believe that their plans do exert some influence upon urban growth and development they have little empirical evidence to support this claim.

This thesis has been designed to measure and evaluate the success of Canadian master planning practice. It is an attempt to measure whether or not and to what degree that comprehensive master plan has been successful in guiding and directing urban growth and development during the post-World War II period. Toward this end the master planning experience in the cities of Toronto, Winnipeg, and Calgary are selected as specific case studies.

The criterion for the evaluation of master plans has been the relatively simple measure of goal-achievement. If plan policies and objectives have been achieved then it is concluded that the plan has been an effective guide to urban growth and development.

Although it was hypothesized that master plans have been ineffective guides to action, that plan policies have not been followed, and that plan goals have not been achieved, the results of this research demonstrate that this is not entirely the case: four of the six plans tested in this thesis may be generally regarded as successfully implemented. But while the research results do demonstrate that master plans have been followed it also suggests that there is considerable room for improvement in master planning methods and techniques.

It is recommended that master planners should direct their attention toward the determination of community goals, and once these goals have been identified they should prepare shorter-range, concept specific master plans designed to reflect community needs and to achieve community goals. It is suggested that the contemporary master plan should be less comprehensive than its predecessors so that it may direct attention to the most important and pressing community issues and problems, and so that it may examine realistic means to achieve desired ends. Before the master plan can be truly regarded as successful it must be designed and issued in a manner which will stimulate public interest and arouse public support. Plan-implementation must be regarded as a community responsibility, not just the responsibility of the planning department.

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CHAPTER ONE

INTRODUCTION

1.0 Background

Since the end of World War II Canadian governments have attached a special significance to the potential benefits of long-range planning as a technique to achieve the most efficient, economic, and orderly provision of essential municipal services. As a result, city planning had become institutionalized as a legitimate function of urban government by the early 1950's. These newly appointed planning authorities were presented with a well-defined but formidable task: they were to reduce the inefficiencies so characteristic of the preceding era of undirected, laissez-faire urban development; they were to bridge the growing gap between municipal needs and municipal resources with the application of scientific principles to the provision of essential services; and they were to superimpose a measure of rationality over the entire process of municipal government decision-making.

Charged with this mandate city planning professionals have and continue to hold special regard for the role of rationality, objectivity, and comprehensiveness in the process of planning for urban growth and development. Out of this the long-range, comprehensive master plan¹ has emerged as the primary planning technique. Not only has the master plan become the universal tool of the planning professional, it has become central to the legislative framework for municipal planning in Canada. Every major Canadian city has attempted long-range master planning at one time or another; it has become more the rule than the exception.

Furthermore, every graduate Canadian planning school has emphasized the importance of a comprehensive, multi-disciplinary approach to planning education. In fact, the master plan has become so integral to the city planning function that city planning and the master plan are more often than not perceived as synonymous. The terms are used interchangeably; they defy distinction. The public no less than the planning professionals recognize the plan as the primary product of planning work.

Such work is taken very seriously; planners believe that planning is related to implementation. They believe that the master plan will exert a significant and lasting influence upon the future growth and development of the city. And even in periods of no-growth we believe the plan will have some influence upon renewal and redevelopment initiatives, residential densities, and business activities, to name a few. But it is only a belief; the question concerning the relationship between master planning and implementation has been characteristically neglected. To be sure, a few writers have published professional commentaries on the perceived effects of any given plan. But these are highly speculative. They are based on one premise: that the plan will have an effect upon urban development. There has yet to be a deliberate and systematic attempt to measure and evaluate the actual success of master plans in terms of their implementation record.

Have the many master plans developed since the end of World War II actually had an effect upon the development of our cities? This is the primary question to be addressed in this thesis. It is an attempt to measure whether or not and to what degree the comprehensive master plan has been successful in guiding and directing the process of urban

development. Toward this end, the master planning experience in Toronto, Winnipeg, and Calgary are selected as specific case studies.

To question whether or not the master plan has been effective in directing the process of urban growth and development in our cities is to question the entire system of municipal planning in most Canadian provinces. To suggest that these plans have had little impact upon urban development will have serious implications for our prevailing conception of the city planning process and its functions. And it will require that one question the existing legislative framework under which the planning function operates. For example, is the master plan concept sensitive to the limitations of our existing system of development controls? If not, are needed changes possible? It is questions such as these which must become a central concern to the master plan enthusiast, and it is these questions which are of central concern to the entire field of local government planning, presently and historically.

Historically, planners have accepted their plan-making function. By the end of 1948, for example, 16 of Canada's 19 largest cities were preparing plans. Furthermore, 50 of the 118 smaller centers with a population between 5,000 and 30,000 persons had appointed planning boards, and 32 of these were well on their way toward the completion of a master plan.²

To be sure, the nature of these plans may vary from city to city or from province to province but, on the most fundamental basis, they are very similar. The plan is to be comprehensive in scope, and it should be designed to achieve efficiency, economy, and utility in the future growth and development of the city.

But despite the past popularity of master plans, they no longer enjoy the unequivocal endorsement of all planning professionals. A small but growing body of intuitive, largely conjectural theory is beginning to suggest that master plans, however comprehensive or carefully conceived, are destined to be ignored and filed away, with or without official adoption.³ These critics suggest that the plan's manifest purpose - to control and shape urban development on the basis of rational criteria - has rarely been accomplished in fact. And the criticism extends well beyond the circles of the planning profession: businessmen, political and social scientists, lawyers, and experienced citizens and politicians with many years of practical observation in local government planning and politics are beginning to question the city planner's almost exclusive faith in master planning techniques.

In the light of the foregoing, an objective study of master planning theory and practice is long overdue. The question dominating this thesis is largely one of impact: Does the master plan really function as an effective guide to municipal government decision-making? Does the master plan actually have an effect upon the day-to-day decisions of the business community? The average citizen? What influence have our past master plans had upon the decisions which effect the growth and development of our cities?

1.1 Some Preliminary Thoughts and Observations

On the basis of personal observation and recent research it is hypothesized that the master plan has had little effect upon the process of urban development and the delivery of municipal services; that the master plan has been of little relevance and even less utility as a

guide to the day-to-day decision-making process of local government; and that when measured in terms of implementation record, there is little positive correlation between the policy proposals outlined in the plan and what has occurred in fact.⁴ Recent research would tend to lend some initial credibility to this hypothesis.

The City of Vancouver planning department, for example, has recently conducted an informal survey of 18 North American cities to determine what role the plan has played in municipal government decision-making.⁵ Of the 18 cities surveyed, 13 senior government planners responsible for the preparation of comprehensive master plans admitted that their most recent plans were irrelevant to current decision-making. Of the remaining 5 who responded that the plan did have some relevance, the plans were all less than five years old. It was concluded that "most plans tend to wear thin very quickly" simply because "they cannot adequately predict changes in factual conditions...or changes in prevailing value...or because in their search for elusive consensus they too often end up as platitudinous motherhood statements".⁶

In addition, a provincially appointed Planning Act Review Committee has recently evaluated the entire system for the operation of municipal planning in Ontario and has suggested that "...the energies expended on the preparation of plans has indeed been considerable but the plans' usefulness to the planning of development and the control of change has been fairly limited".⁷ The committee concluded that the plan was irrelevant to the development control process and planning policy was made incrementally through the development decision process.⁸

Generally, the public attitude tends to parallel these opinions. To illustrate, a recent Free Press commentary concerning the unveiling of the City of Montreal's most recent master plan is framed in a highly cynical, pejorative tone. "We have plans in this province for almost everything"⁹ observed the author. In specific reference to the substantive content of the plan it "...is based, as all such plans are, on massive guesses, hypotheses, and presumptions" and "very little of it likely (sic) to come to fruition, which is perhaps fortunate..."¹⁰ His reasoning is straightforward and perhaps very close to the truth: "The world of planners and the world of reality are, on the record, very far apart".¹¹

In and of itself this largely anecdotal evidence cannot and does not provide the basis for advancing this hypothesis but it does tend to imply that there are a number of significant deficiencies relating to the contemporary practice of master planning. It is suggested that if there are, in fact, deficiencies in the rational comprehensive planning model they are the product of the much discussed and debated theory-practice gap. For example, the theoretical model of rational comprehensive planning is a product of the aspirations of the utopian viewpoint which thinks in terms of ideal solutions. This is why the plan has become such a dominant and central theme in the planning process. It assumes that local government decisions are made solely on the basis of technical, administrative, and economic criteria; all established to reflect some form of consensus regarding the public good. Such is the traditional assumption of local government. In practice, however, city government decisions are made in a highly charged political atmosphere. And it is quite true that since the experimentation with metropolitan government

organization the role of politics in the process of city government decision-making has become particularly animated. But the rational comprehensive model of planning denies the very real role of politics in this process. When politics is involved, the rationality implied in the name 'rational comprehensive' is, at best, a purely theoretical concept. In practice, it is extremely difficult to plan with any degree of certainty in a context where the most significant local government decisions are eventually arrived at on the basis of chance, improvisation, or negotiation (planned or otherwise). In this atmosphere a plan based upon rationality can hardly aspire to exert even the most circumstantial impact upon the process of urban development. Consider the following separate but related observations.

First, the rational comprehensive model assumes that in the process of providing municipal services, independent local government authorities will cooperate. In reality, however, conflict is inevitable; it is more the rule than the exception.¹² There are genuine cleavages of interest between most local governments within a metropolitan area. Although contiguous municipalities or for that matter all municipalities in a metropolitan area may be socially and economically interdependent, inter-municipal competition is almost always the rule. In the event of conflict the elected official's primary interest must lie with the perceived well-being of his electorate, not the city as a whole.

The city planners, as appointed officials, have only advisory power. They are to advise the city government politicians as to the most efficient manner in which growth should occur, the most responsible allocation of limited resources, how and when services should be provided,

and the potential consequences of any given action. But the politician's interest may not so much lie in the most efficient, the best, or the most orderly provision of services. His primary interest lies in arriving at a decision which will not conflict with what he sees as the immediate and long-term interests of his electorate, not the city as a whole. In short, it is anomalous and entirely inconsistent to superimpose advisory planning power over political authority and suggest that the former will prevail. Nor, for that matter, does centralized advisory power imply centralized political power.

Second, the highly futuristic orientation of the master plan assumes a consistent policy direction for local government. Typically, master plans portray a vision of the city some 20 to 30 years into the future. It is unlikely if not patently impossible for a municipal government to follow one consistent policy direction for such a long period. To do so would require some form of party organization. By design and in practice local government explicitly discourages party organization.

Third, the rational comprehensive model also assumes that once a plan is adopted as the official plan there will be no internal political opposition. In an environment characterized by competition rather than cooperation this is, at best, a very questionable assumption.

Fourth, master plans envisage the active involvement of the private sector. From the outset it is often stated in the preface to these plans that the successful realization of plan policies and objectives are contingent upon the investment of considerable private sector financial resources. Cooperation of the various private sector interests can never

be guaranteed. Nor can it be legislated. City government does, of course, have a variety of controls and regulations which it can and does use to maintain conformity with the plan. But these controls are extremely weak; they are restrictive not prescriptive. They cannot ensure that the private sector will invest in a manner consistent with the plan. Furthermore, the interests of city government are closely tied with the interests of the private sector: the majority of municipal concerns such as the supply of housing or the development of office, retail, and industrial land are delivered by the private sector. When private sector interests conflict with master plan policies it is unlikely that plan policies will be followed for any length of time.

Taken together, these few observations form the basis for advancing my hypothesis. On the surface, a cursory glance at the recent history of local government would further support this hypothesis and suggest that the theory of master planning bears little resemblance to the social, economic, and political systems both the planner and the politician are forced to work within. Nor does it bear any relation to the practical constraints imposed upon and assumed by planning as an advisory, bureaucratic function of government. By the end of the war, just when master planning was gaining increasing popularity and acceptance, local government was particularly ill-prepared to accommodate master planning proposals. It was, for example, undergoing crucial, administrative, executive, and jurisdictional changes; local government administrative functions were poorly defined; services were provided by a variety of ad hoc, single-purpose agencies; and senior government intervention was becoming more the rule than the exception. Local government was not nearly as simple as that envisaged by the early proponents of master planning theory.

There are a number of additional problems inherent in the general nature, scope, content and objectives of the master plan which makes plan-implementation extremely difficult. Such problems include, but are not limited to, the general tendency to predict the future by extrapolating from past trends; the lack of detailed attention to financial matters; the characteristically ambiguous and vague policy statements; the difficulty of identifying a consensus of community values and translating that consensus into physical objectives; and the virtual impossibility of predicting technological innovation many years into the future. These problems are related to the very ambitious goals planners have imposed upon the master planning process. Indeed, these difficulties may be partially overcome if planners were to adopt a less ambitious, more realistic role for the master plan. Or; if they were to develop more accurate forecasting techniques, more concise and direct policy statements, and a realistic method of relating the plan policies and objectives to the municipal capital budget, to name a few. Many of these potential improvements to the master planning method have been discussed under the relative safety of theoretical speculation; few have been attempted in practice.

But what is of particular concern here is that the protracted debate concerning master planning has, for the most part, focused exclusively upon the problems inherent in the master plan itself. There has been little discussion of the relationship of the master plan and its relevance to the general functions and the practices of local government. But since master planning has been so central to the entire concept of city planning and since it has received so much attention, a complete discussion can hardly proceed without specific reference to or independently of this body of planning theory.

1.2 Study Format

Chapter two describes the theory and the practice of master planning, especially as it pertains to the North American experience. Following a brief discussion of master planning theory relative to the complex body of city planning theory, the definition, the process, and the functions of the master plan are described and analyzed. The review also highlights the historical evolution of this theory as it has occurred in both the United States and Canada.

This chapter also summarizes the arguments of those planners who have begun to strongly criticize master planning theory and practice. What need be stressed is that the debate underlying most appraisals and commentaries of master planning has tended to become increasingly polemical: supporters suggest that the plan does play an important role in municipal decision-making; critics complain that the master plan instrument is ineffective and ignored by municipal government decision-makers. The critics maintain a common theme: they question whether or not planners should approach city planning problems and issues from an exclusively comprehensive perspective; they question the underlying assumption that the master planning process can identify a public interest, or, for that matter, whether or not there is an identifiable 'public interest'; they question the belief that local government decision-making is or can be a rational process; and finally, they question the established methods and techniques of plan preparation. In short, they question the planner's almost exclusive faith in the rational comprehensive planning model.

Chapter three discusses the question of plan implementation from the legal perspective. Indeed, an abiding theme prevailing throughout much of the contemporary planning literature relates to what is said to be the inadequate statutory power of master plans. The review is limited to the legislation of Ontario, Manitoba, and Alberta. Although the earliest provincial Acts revealed a measure of ambiguity and uncertainty concerning the plan's purpose and legal effect, it is quite clear that the early post-World War II legislation has addressed the important question of plan purpose and legal effect. The legislation describes the general nature and scope of a master plan; it outlines the specific concerns which need be studied; it establishes the procedural requirements which must be satisfied before any plan may become the 'official' plan; and it establishes that no by-law is to be passed for any purpose if it does not conform to the official plan.

Since this study is primarily concerned with the implementation record of post-World War II master plans and since these plans have characteristically addressed a complex variety of issues in varying degrees of detail a model for evaluation is required to ensure a systematic, relatively objective review. Chapter four reviews past examples of plan evaluation. It is concluded that although there have been a variety of indicators used to evaluate effectiveness, there is one simple criterion by which performance may be judged: Was the plan implemented? Is the vision of the future described some 20 years hence now a reality?¹³ First and foremost, goal-achievement, or the degree to which the plan's policy recommendations and proposals (prescriptive, descriptive, or predictive) have become a reality will be tested. If

the plan objectives have been achieved then it can be concluded that the plan has been an effective guide to decision-making. If, on the other hand, very few of the policies and recommendations identified in the plan have been accomplished it is interpreted as substantial support to conclude that the plan has been irrelevant to the decision-making process and has failed to fulfill its objectives.

Chapters five, six and seven form the empirical evaluation of master plans as they have been applied in the cities of Toronto, Winnipeg, and Calgary, respectively. The model of evaluation developed in chapter four is applied to test six selected master plans. (Table 1 outlines the variety of master plans which have been prepared for Toronto, Winnipeg, and Calgary during the post-World War II period. Only those plans marked with an asterik will be evaluated in this study). Each plan was selected for evaluation on the basis of 1) plan availability; 2) a preliminary investigation to determine their comprehensiveness; and 3) a desire to obtain a relatively representative sample of the master planning experience in each of the three cities.

Evaluating performance is one essential step in the study of Canadian master planning practice; explaining that performance is another. Chapter eight summarizes and interpretes the evaluation findings. The findings are interpreted with reference to the hypothesis advanced above. Finally, there is a detailed explanation of recommendations for future city planning theory and practice.

It should be noted that the choice to focus on the master planning experience in Toronto, Winnipeg, and Calgary as it has occurred after the

Table 1 Master Plans Prepared for Toronto, Winnipeg and Calgary, 1983-1981 (* evaluated in this study)

<u>City/Region</u>	<u>Prepared By</u>	<u>Year</u>	<u>Status</u>	<u>Time Horizon</u>
Metropolitan Toronto				
1. The Official Plan of the Metropolitan Toronto Planning Area*	MTPB ¹	1959	Advisory	20 years
2. Metropolitan Plan for the Metropolitan Toronto Planning Area	MTPB	1966	Advisory	20 years
3. Metroplan	MTPD ²	1976	Advisory	20 years
City of Toronto				
1. Master Plan for the City of Toronto and Environs*	CTPB ³	1943	Advisory	30 years
2. The Official Plan for the City of Toronto Planning Area	CTPB	1949	Official	20 years
3. The Official Plan for the City of Toronto Planning Area	CTPB	1969	Official	20 years
4. City of Toronto Official Plan	CTPB	1979-1981	Official	20 years
Metropolitan Winnipeg				
1. Metropolitan Plan-Greater Winnipeg*	MPC ⁴	1948	Advisory	not specified
2. Metropolitan Winnipeg Development Plan*	Metro Corporation	1968	Official	23 years
3. Plan Winnipeg	Dept. of Environ. Planning	1980	Advisory	20 years
City of Calgary				
1. City of Calgary General Plan*	Planning Dept.	1963	Official	18 years
2. The Calgary Plan*	Planning Dept.	1970	Official	8 years
3. City of Calgary General Plan	Planning Dept.	1973	Official	not specified
4. Calgary General Municipal Plan	Planning	1981	Official	20 years
1. Metropolitan Toronto Planning Board		3. City of Toronto Planning Board		
2. Metropolitan Toronto Planning Department		4. Metropolitan Toronto Planning Commission		

war is based on both judgement and preference. First, plans prepared after the war afford the best opportunity for application to contemporary practice: they were the first to be prepared on the basis of a truly comprehensive analysis, and the enabling legislation from which these plans derived their power and legal effect has not changed significantly in the past 40 years. Second; Toronto, Winnipeg, and Calgary are chosen as specific case studies in a desire to attain a relatively representative cross-section of Canadian planning practice. For example, Toronto and Winnipeg were beginning their first experiment with a two-tiered form of local government in the hope that they could achieve an integrated, coordinated, and metropolitan-wide planning function. In contrast, the Calgary experience has not occurred in an environment characterized by dramatic changes in local government jurisdiction or administrative and executive powers. Third, each city had developed its own method and system of development control and regulation. Generally, they each use the same legislatively prescribed instruments to control and regulate development but it may be the subtle procedural differences or the differing social, economic, and political environments each planning agency works within which may have significant effects upon the success or failure of any given plan.

FOOTNOTES

1. Terminology tends to vary: 'Urban General Plan', 'Development Plan', 'Physical Plan', 'Long-Range Plan', and 'City Plan' are a variety of terms generally intended to describe a plan for the future physical and/or social development of a city or specific geographic region. Throughout this thesis the term 'Master Plan' will be used since it most often appears in the literature. Historically, the master plan has been designed to regulate land use and the physical development of the city. More recently, and especially in the post-World War II period, the master plan has been used to denote a comprehensive planning strategy which not only deals with policies respecting land use and physical development, but social and economic development as well. For a historical discussion of the master plan see Charles Haar, "The Content of a General Plan: A Glance at History", Journal of the American Institute of Planners (hereafter JAIP), Vol. 21, 1955, p. 66.
2. Thomas Gunton, The Evolution and Practice of Urban and Regional Planning in Canada, 1900-1960. University of British Columbia, Ph.D. Dissertation, 1981, p. 283.
3. See, for example, Melville Branch, Continuous City Planning: Integrating Municipal Management and City Planning. (New York: John Wiley & Sons, 1981); Walter Van Nus, The Plan-Makers and the City: Architects, Engineers, Surveyors and Urban Planning in Canada, 1890-1939. University of Toronto, Ph.D. dissertation, 1975; Ronald Fromson, Planning in a Metropolitan Area - The Experiment in Greater Winnipeg. MCP Thesis, University of Manitoba, 1970.
4. This hypothesis is advanced with specific reference to post World War II Canadian master plans. It should be stressed that there have been a number of American master plans which were widely regarded as successful in terms of their effect upon urban growth and development. These include: City of Philadelphia, City Planning Commission, Comprehensive Plan: The Physical Development Plan for the City of Philadelphia, 1960; National Capital Planning Commission, Comprehensive Plan for the National Capital and its Environs, Washington, 1952; and City of Cincinnati, City Planning Commission, Metropolitan Master Plan, 1947.
5. Ted Droettboom, "New Directions in Overall Planning", Quarterly Review, Vol. 3, No. 3, 1976, pp. 8-11.
6. Ibid., p. 10.
7. The Planning Act Review Committee, Operation of Municipal Planning. Background Paper #2, (Toronto: Ministry of Housing, Communications Branch, n.d.), p. 14.
8. Ibid., pp. 5-6.
9. Frank Walker, "Plans are Still Going Agle", Winnipeg Free Press, May 8, 1984, p.2.

10. Ibid.
11. Ibid.
12. This has been the finding of many recent studies regarding past and present city government practices. See, for example, Meyer Brownstone and T. J. Plunkett, Metropolitan Winnipeg: Politics and Reform of Local Government. (Berkeley: University of California Press, 1983); Harold Kaplan, Reform, Planning and City Politics: Montreal, Winnipeg, Toronto. (Toronto: University of Toronto Press, 1976); and Alan Altshuler, The City Planning Process: A Political Analysis. (Ithaca: Cornell University Press, 1965).
13. The use of this evaluation criterion has been suggested by John Dakin, "Evaluation of Plans: A Study of Metropolitan Planning in Toronto", Town Planning Review. Vol. 44, No. 1, 1973, p. 3.

CHAPTER TWO

THE MASTER PLAN IN THEORY AND PRACTICE

2.0 Introduction

As a technique for organizing the form and structure of the urban environment, physical development plans have been popular for many centuries. This plan-making tradition has been traced back well before the Christian era and numerous urban historians have documented its popularity throughout the Middle Ages, the Renaissance, and the Age of the Baroque.¹ These early plans were exclusively physical in their orientation; they were the result of utopian thinking and man's search for the ideal city.² But the rational comprehensive master plan concept as we know it today is a relatively new planning technique, becoming popular around the turn of the 20th Century.³

The introduction of the master plan to North America was the subject of some controversy.⁴ The master plan concept emphasized the need for government control and intervention in a society structured around the rights of fee-simple property ownership, free enterprise, and minimal government intervention. But the master plan has overcome these barriers. It stands at the core of contemporary city planning theory and practice, it emphasizes the long-range perspective, it recognizes a need for government intervention, and it maintains an affinity to utopian thought in a society which is noted for its emphasis on the individual, the short-term, and the practical.

The master planning concept has endured because it is based upon the theoretical framework of rational comprehensive planning which has a

relatively simple and strongly appealing internal logic. On the basis of a comprehensive, relatively objective analysis of past, present, and anticipated conditions, the master plan is intended to be an instrument for municipal government self-direction and a means of directing urban growth and change in a responsible, efficient, and logical manner.⁵ It is to identify desired goals and the means to their end; it is to act as a guide for local government decision-makers; it is to keep citizens informed about government policy; and, as a corollary, it is to superimpose a measure of rationality over the entire sphere of local government decision-making, public and private. The master plan instrument is indeed very integral to the entire field of local government planning.

2.1 City Planning and the Master Plan

Whether it be through adoption, selective borrowing, or careful study and analysis, city planning scholars have accumulated a very wide and complex body of theory. There are political theories, social theories, economic theories, and theories dealing with the morphology of the city, to name a few. Each occupies its own important position within the planning process and are, to be sure, integral to an understanding of all planning theory. But each of these theories is not a complete theory of city planning; they cannot stand alone. Master planning theory can stand alone. It embodies all other theories relating to city planning, ties them together and, in so doing, has come to occupy a dominant position as the theory of city planning; it is the theory of theories.

Master planning theory is a theory of planning as opposed to a theory in planning.⁶ The theory deals with city planning methods and with procedure. Two key principles form the substance of this theory;

rationality and comprehensiveness. A master plan should be comprehensive; it must take account of all important factors of potential consequence to the city's future urban growth and development. The interpretation and the synthesis of these factors must be rational; each factor should be studied together and individually, and an overall development strategy or concept should be developed on the basis of this rational analysis.

John Friedmann's discussion of planning theory is perhaps the best description or breakdown of the component parts of city planning theory to date.⁷ He suggests that planning theory may be best understood when conceptualized as a continuum having two extremes as poles. On the one extreme there are technical functions which encompass the variety of technical skills a planner may possess (i.e. economics, architecture, geography, and transportation). On the other extreme there are ideological functions (i.e. values, ends of action, development plans, theoretical models, and utopias). Friedmann demonstrates that master planning theory, or rational comprehensive planning theory, sits on the ideological or normative extreme. He suggests that it is based on five broad principles: planning as an ideology, planning as the partaking of utopian thought, planning as a specific form of social rationality, planning as the science of politics, and planning as a directive in history.

These broad principles provide the city planner a certain measure of discretion in determining which one or more principles should be most carefully studied. Most importantly, it provides the planner with the opportunity to identify an ideal end unrestrained by the constraints and limitations which may underlie the means to that end. Master planning

theory, then, is synthetic as opposed to empirical and it is utopian as opposed to pragmatic; it need not be consonant to the existing institutional setting of local government.

Consequently, master planning theory is not a precise theory with well-defined parameters. It is an expression of an ideology or a belief. The belief is that, as a society, we should plan for the future physical growth and development of the city and in order to do so, we must do it in a rational, comprehensive manner. We must take into account all aspects of our institutional arrangements and all factors which affect urban growth and development. Since so many factors should be considered, master planning is by nature an imprecise predictive and directive instrument. Different planners may hold different views concerning what constitutes a good master plan, the studies it should include and the principles it should incorporate. Despite these differences, however, a consensus regarding master plan definition, the process of its preparation and its intended functions can be identified.

2.2 Definition, Process and Functions

The master plan concept is relatively simple and straightforward. T. J. Kent - a leading proponent of master planning - has defined the master plan as "the official statement of a municipal legislative body which sets forth its major policies concerning desirable future physical development".⁸ Professor Charles Haar - a celebrated authority and critic of master planning practice - has defined the master plan as a "comprehensive long-term general plan for the physical development of the community" which:

...embodies information, judgements, and objectives collected and formulated by experts to serve as both a guiding and predictive force. Based on comprehensive surveys and analyses of existing social, economic and physical conditions in the community and of the factors which generate them, the plan directs attention to the goals selected by the community from the various alternatives propounded and clarified by planning experts, and delimits the means (within available resources) for arriving at these objectives.⁹

Goodman and Freund, the editors of what is often cited as the standard text on city planning practice, Principles and Practice of Urban Planning, have defined the master plan as "an official public document" which acts as a guide to policy decisions and identifies how the leaders of government would like to see the city to develop in the next 20 to 30 years.¹⁰

To summarize, it is clear that the master plan is to outline the general, and the long-range planning and development policies of a municipal government, and is to be derived from a comprehensive survey and analysis of the community. These three essential characteristics have been defined by Goodman and Freund:

"Comprehensive" means that the plan encompasses all geographic parts of the community and all functional elements which bear on physical development. "General" means the plan summarizes policies and proposals and does not indicate specific locations or detailed regulations. "Long-range" means that the plan looks beyond the foreground of pressing current issues to the perspective of problems and possibilities 20 to 30 years in the future.¹¹

There is also a generally accepted process which should be followed in the preparation of master plans. In discussing the rational comprehensive planning model, Grabow and Heskin have identified a relatively rigid sequential order: 1) the establishment of an objectively defined set of goals; 2) the articulation of all possible courses of action to attain those goals; 3) the evaluation of all those courses of action in terms of their efficiency; 4) the selection of that alternative which most nearly

epitomizes the set of goals, and; 5) the assessment of that action, once implemented, in terms of its actual effect upon the overall structure.¹²

Although the intended functions of a master plan are numerous there does appear to be some agreement that the master plan is the one planning tool to be used within the broad planning function of assisting a community to develop in an orderly, responsible manner. Generally, the plan is to identify and bring attention to the community's overall development problems and opportunities; it is to provide a larger picture of how a community should develop so that legislators and private decision-makers may coordinate their individual decisions toward the realization of an overall goal of development.

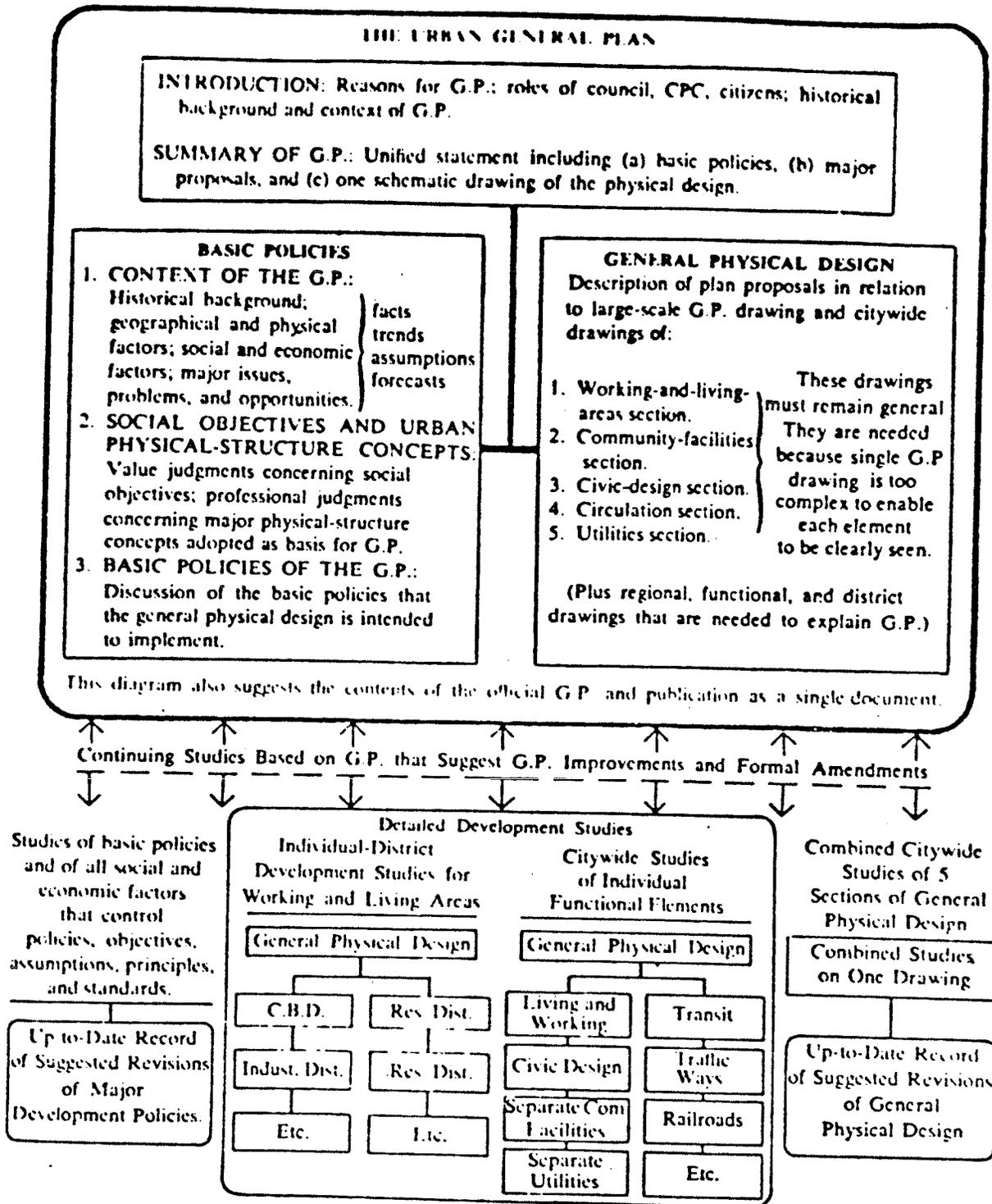
To summarize, the plan should function to determine policy (from the realization that a policy is needed to the final decision on what the policy should be); effectuate policy (assist legislators to arrive at specific, day-to-day development decisions on the basis of long-range policies which have been thought out and adopted in the policy determination phase); communicate a coherent and unified picture of the municipal government's long-range development policies to other persons and agencies concerned and effected by the development of a community; educate and arouse interest in community affairs; provide factual information of present and anticipated conditions; and identify city planning principles and ideas. The plan should also function to promote coordination between autonomous public agencies, the planning department or commission, the city's chief executive, all municipal government departments and the public. It should stimulate public participation in local government affairs; it should guide the development decisions of

the private sector; and it should guide the courts when ruling on
implementary legislation of action intended to carry out the plan.¹³

Taken together, the definition, the process, and the functions of
master plans do emerge to create a relatively coherent theoretical frame-
work. Within planning circles it is most often referred to as the
rational comprehensive planning model. The model is flexible; the
process and the functions of the master plan can and does vary from city
to city. No two master plans are exactly alike and no two master plans
are intended to fulfill the exact same functions within the local govern-
ment decision-making process. Each master plan is prepared according to
the individual, often unique circumstances and opportunities of each
community. Indeed, it is this flexibility which is considered to be a
major strength in the master planning method. Keeping in mind this
potential for flexibility, figure 1 is presented to illustrate the
basic format and content of the master plan.

As highlighted in this schematic representation, the comprehensive
perspective is the most notable characteristic of the rational compre-
hensive planning model. But there has not always been a consensus that
city plans should be comprehensive in their study scope. The concept has
developed in an incremental manner and around it emerged a distinct
profession specifically concerned with the planning and development of our
cities. The following historical review illustrates the evolutionary
development of master planning theory and practice.

Figure 1 The Urban General Plan



Source: Goodman and Freund, Principles and Practice of Urban Planning.

2.3 The Development of Master Planning Theory

Any discussion concerning the development of master planning theory and practice must necessarily begin with the early fathers of the American planning movement; a movement which has had a significant and lasting influence upon Canadian planning practice because of the lack of a distinctive and unique body of Canadian planning theory.¹⁴

From its beginning, master planning was essentially a utopian concept. The master plan, if it accomplished nothing else, provided the planner with an avenue for imaginative thinking unrestrained by the difficulties encountered when attempting to plan an existing city with an already built environment and well-defined institutional arrangements and responsibilities. Daniel Burnham, one of the earliest scholars of the American planning movement, personified this utopian desire in so often repeated counsel:

Make no little plans; they have no magic to stir mens blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remember that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever growing insistency.¹⁵

This statement presented future planners with a well-defined mandate. They were to become a guiding, directive force in the future growth and development of American cities. And not only were they to direct, they were to influence; to ensure that cities developed according to accepted city beautiful principles and in an orderly, efficient manner. Frederick Law Olmstead Jr., Alfred Bettman, and Edward Basset - the most notable advocates of master planning theory and the principle architects of its theory - accepted the challenge and ensured that the history of the

American planning movement would very much become the history of the master plan.

Frederick Law Olmstead Jr. was the first to articulate a definitive role for the master plan. He observed that planning was concerned with one single, complex subject: guidance and control over urban growth and change. In 1911, at the 3rd annual conference on city planning, Olmstead introduced the idea that only a comprehensive master plan could accommodate the demands of such a complex field:

We must cultivate in our minds and in the minds of the people the conception of the city plan as a device...for preparing and keeping constantly up to date, a unified forecast and definition of all the important changes, additions, and extensions of the physical equipment and arrangement of the city which sound judgement holds likely to become desirable and practicable in the course of time, so as to avoid so far as possible both ignorantly wasteful inaction in the control of the city's growth. It is a means by which those who become at any time responsible for the decisions affecting the city's plan may be prevented from acting in ignorance of what their predecessors and their colleagues in other departments of city life have believed to be reasonable contingencies.¹⁶

The plan was to be a coordinating, integrating force in local government decision-making; politicians may come and go but the plan was there to ensure continuity in goals and in direction. This has been a unanimous theme in all the early writings concerning the master plan. There has also been a general agreement that the comprehensive approach was the one way to ensure that local government decision-makers would have the information needed to work out solutions to urban development problems which would be in the best interests of the city and its people.

In 1928, speaking before the 20th annual conference on city planning, Alfred Bettman built upon Olmstead's early theory and defined this notion of comprehensiveness:

A city plan is a master design for the physical development of the territory of the city. It constitutes a plan of the division of land between public and private uses, specifying the general location and extent of new public improvements, grounds and structures, such as new, widened or extended streets, boulevards, parkways or other public utilities and the location of public buildings, such as schools, police stations, fire stations; and, in the case of private developments, the general distribution amongst various classes of uses, such as residential, business and industrial uses. The plan should be designed for a considerable period in the future, twenty to fifty years. It should be based, therefore, upon a comprehensive and detailed survey of things as they are at the time of the planning, such as the existing distribution of existing developments, both public and private, the trends towards redistribution and growth of population, industry and business, estimates of future trends of growth and distribution of population and industry, and the allotment of the territory of the city in accordance with all such data and estimated trends, so as to provide the necessary public facilities and the necessary area for private development corresponding to the needs of the community, present and prospective.¹⁷

Quite clearly, the fathers of master planning theory excluded nothing which should not be included in a master plan properly understood. To be comprehensive meant to include virtually everything the city planner had time to study; the more one studied, the more data one collected, the better prepared one was to plan for the future growth and physical development of the city.

Based on this premise master planning became very popular. But the actual success of the master planning technique remained somewhat questionable. Thomas Adams, for example, estimated that there had been at least 1000 master plans prepared for American cities between 1910 and 1935,¹⁸ but he argued that master plans had failed to produce results; that this failure to produce results did not justify the time and money in preparing plans; and that "too much planning had ended up on paper and in pigeon holes".¹⁹

Edward Basset had also observed that master plans were failing to produce results of tangible character. For Basset the master plan was "becoming a scrapbook and is an embarrassment instead of a help".²⁰ He suggested that much of the confusion and uncertainty surrounding the master plan was the result of its overly comprehensive perspective, and argued for a limited comprehensiveness. The plan should be limited in scope to deal exclusively with the physical features of the city. If the concern did not relate to land areas for community use and if it could not be shown on a map then it should not be included in the master plan.²¹

According to Basset's more limited notion of comprehensiveness, seven elements should be included in a master plan: Streets, Parks, Sites for Public Buildings, Public Reservations, Zoning Districts, Routes for Public Utilities, and Pierhead and Bulkhead lines.²² Basset did concede that responsible planning would require attention to numerous other factors, but he argued that it is the planner's knowledge of these things which made a good planner; they need not be included in the master plan.

This call for a limited comprehensiveness was not popular. Planners believed that if there were any deficiencies in the master plan approach it was due to insufficient study and the advisory status of their plans. That argument prevailed: A standard planning Act had already been drafted and by 1926 the City of Cincinnati had become the first American city with an official comprehensive plan.²³

2.4 Canadian Master Planning: Theory and Practice, 1893-1945

Like the American experience, the development of master planning theory has had a significant if not directive influence upon the

evolution of Canadian planning practice. The idea that urban growth could be regulated by a plan first became popular around the turn of the twentieth century, just when the City Beautiful movement was gaining momentum.²⁴ At that time there was yet to be a recognizable planning profession in Canada so Canadians turned to the American movement for direction. And the American experience suggested that urban growth could be regulated by a rational plan, that there was an ideal to be achieved, and that the ideal could be figured out in advance, with a comprehensive master plan.²⁵

Following the city beautiful influence, three distinct phases in the evolution of Canadian planning theory and practice can be identified. First, the Federal government's establishment of the Commission of Conservation in 1909 resulted in the formal recognition that Canadian cities were lacking guidance in their development and growth. The Commission's officials strongly endorsed the application of comprehensive master plans to achieve orderly urban growth and development. Second, the arrival of Thomas Adams and his subsequent establishment of the Town Planning Institute of Canada (TPIC) in 1919 marked the emergence of a complete and coherent theory of Canadian master planning. Under Adams' leadership city planning began to take on the character of a professional enterprise and the master plan became entrenched in Canadian planning thought; it was supported by a legislative framework designed to give these plans legal effect. Third, the Federal government's formation of a Cabinet Committee on post-World War II reconstruction substantiated the need for comprehensive master plans to help guide future urban growth and development.

The effects of this first fifty years in the evolution of Canadian planning practice are significant. By the end of World War II city planning was widely recognized as an important and complicated activity; it was not something city councillors and citizens could do in their spare time. It was a professional activity requiring well-trained professional men, and its potential benefits warranted official recognition and institutionalization as a legitimate function of local government. And once city government formally recognized their planning function the preparation of comprehensive master plans became the single most important priority for the planning professionals.

2.4.1 The City Beautiful: Experimenting with the Master Plan

City Beautiful advocates were the first to introduce the master plan concept to local government authorities. In Toronto a number of prominent businessmen formed the Toronto Guild of Civic Art.²⁶ Together with the support of the Toronto Board of Trade,²⁷ the Guild pressured city council to prepare a plan for future urban development, but in the face of continued refusal, prepared their own plan in 1909.²⁸ In 1893 Winnipeg city council established a Parks Board to work toward a plan for civic centers and landscape open space.²⁹ Edmonton hired Frederick G. Todd to prepare a parks plan.³⁰ The Quebec Association of Architects pressured Montreal city council into forming an Arts Committee to prepare a city plan.³¹ A Federal Plan Commission for Ottawa was appointed in 1913 with its first task to hire a consultant to prepare a plan for Ottawa and Hull.³² The cities of Regina, Calgary, Banff, and Vancouver hired British born Landscape Architect and American planning consultant, Thomas Mawson, to promote the idea of master planning for civic improvement.³³

During this initial period of activity the plan had become popularized as the primary product of planning work. Planning consultants accepted their plan-making function; it was the plan which would be used by their clients to promote the principle of orderly, responsible urban growth. And there was agreement concerning what constituted a good master plan. It was to be utopian; it was to portray an ideal vision of the future. It was also felt that a good master plan need not be overly concerned with the associated problems and costs of implementing grand schemes. For example, Byron Walker, a leading Toronto businessman and manager of the Canadian Imperial Bank of Commerce admitted when discussing the Toronto Guild's first plan that "as to the financial aspects, I say frankly that I haven't got any idea what the costs will be."³⁴

Most master planning initiatives were unsuccessful during this initial period of experimentation. Local government was neither committed nor obligated to see these plans through to their implementation. This was because the plan was very much the result of the efforts of civic minded organizations, not the efforts of the city government administration. The planning movement was a movement backed by philanthropic citizens who lobbied for independent planning commissions supported by but not integrated into the administrative hierarchy of city government. The master plan was one way for these independent citizen and business groups to present their visions of their city to city politicians, but the politicians were not required to take these plans seriously. And in many cases these plans were not taken seriously. On the contrary, some suffered a rather ignominious fate: Thomas Mawson's original illustrations and maps for the City of Calgary eventually served as wallboard

for a garage in Northwest Calgary,³⁵ while Regina city council didn't even want a final copy of his plan for their city.³⁶

Apparently, the master plan concept would require substantial change before city government took it upon themselves to take these proposed initiatives seriously. This call for change began as early as 1909 with the Federal government's establishment of the Commission of Conservation.³⁷ In Thomas Gunton's estimation this has turned out to be one of the most significant initiatives in determining the future direction of Canadian city planning.³⁸

2.4.2 The Commission of Conservation: Comprehensive Planning Introduced

With the establishment of the Commission of Conservation came considerable interest and discussion in city planning methods and techniques. Dr. Charles Hodgetts, in his concern for public health, was the first Canadian planning enthusiast to strongly endorse the use of comprehensive town plans. For Hodgetts good city planning was not so much a matter of "building and planning extravagantly but wisely and well".³⁹ Wise city planning began with the preparation of a comprehensive master plan which would "take into account everything that helps make town life work living".⁴⁰ Not only were plans to be comprehensive, they were to be long-term:

Having in view all the varied interests, a plan for town extension contemplates and provides for the development as a whole of every urban, suburban, and rural area that may be built upon within from thirty to fifty years.⁴¹

Other city planning enthusiasts supported by Dr. Hodgett's call for comprehensive, long-range plans. In the Report of Preliminary Conference (1915) of the Civic Improvement League Sir John Willison supported the

idea of comprehensive master plans for civic improvement: "We need better maps of our cities and towns, surveys of our social conditions, investigations into questions relating to good roads, transportation and public utilities".⁴² Dr. Frank Johnson, a University of Toronto professor, echoed the need for long-term comprehensive plans. "Our great cities" he writes "are showing a lack of guiding hand and some wise, far-seeing plan in their development."⁴³

It is interesting to note that despite the failure of the City Beautiful plans, city planning advocates did not question the master plan technique. On the contrary, they accepted the plan a priori: it was considered axiomatic that the preparation of a master plan was the single most important, almost exclusive activity of the professional planner. The establishment of the Town Planning Institute of Canada (TPIC) in 1919 was a conscious effort to promote this view.⁴⁴

2.4.3 Thomas Adams and Master Planning Theory

Thomas Adams was and probably remains the strongest advocate of comprehensive master planning in Canadian history. His philosophy was straight forward: "One must be practical in method to get anything done at all - and it is a waste of time to set up idealistic utopias of what we would like to do but cannot".⁴⁵ Rather: "Our first duty is to acquire a thorough knowledge of our own conditions and to formulate and strive for the attainment of our own ideals, in our own way and with the realization of our power to shape our own future."⁴⁶

After having established the TPIC, Adams developed a theoretical foundation for master planning based upon this notion that only a comprehensive, rational analysis of all important variables relating to

city planning could serve as an effective guide for city government decision-makers. For Adams the plan was to be designed to become a means to an end; an end which was "a stable and well balanced physical structure so designed to secure health, safety, order and convenience, and generally to promote human welfare".⁴⁷ Comprehensiveness was the key:

Before we can make a plan of a city we must know all the aspects of its physical structure. This involves study of its related economic, social, and physical conditions; the trends towards change in these conditions; the mistakes and successes of past development; and the possibilities for securing improvement.⁴⁸

For Adams there was to be no limits on the scope of a master plan: "There is nothing in the development of a city which does not come under the purview of town planning properly understood".⁴⁹

He also developed a theory regarding plan implementation, suggesting that city planning involved three stages: "one of initiating, one of making, and one of giving effect to the plan".⁵⁰ Drawing upon the British experience with master plans, Adams was unequivocal in his conviction that past failures to give effect to the plan were due to the neglect of financial details and to the lack of enabling legislation.

He suggested that:

Many cities...have had town planning reports and plans prepared at considerable cost and have been disappointed to find, after the work was done, that it was almost impossible to put the proposals into practice. This may not have been due to any defect in the proposals themselves, but to the fact that the schemes were prepared without the municipality having obtained power to carry them out and to the cost and how it could be met.⁵¹

To summarize Thomas Adams' theory, the master plan was to be comprehensive in its scope, relatively general in nature, economically responsible, and capable of implementation. Successful master planning would also require a fundamental expansion of government powers.

In order to promote this theory and in order to secure the necessary government powers over land use control and regulation the TPIC was formed not only as a professional association, but as a lobby group to promote city planning practice. The Institute's primary objective was that of "advancing the scientific study and practice of town planning in Canada", with its major goal to work toward "the preparation of plans for future development".⁵² With Adams' theory and with well-trained, professional planners the founders of the TPIC believed that master plans would be successful. They were beginning to lobby for expanded planning powers and this enthusiasm appeared reasonable because of the growing acceptance and popularity of zoning as a regulatory device. Planners believed that this restrictive control would go a long way toward solving this persistent problem of plan implementation. It appeared that all they were lacking was the proper sequence: the plan first and zoning second. As emphasized in the first volume of the TPIC's journal:

The importance of zoning in Canadian cities is being increasingly recognized. It will be unfortunate, however, the (sic) cities which prepare zoning schemes do not simultaneously consider their general planning problems. The proper zoning plan cannot be prepared without regard to the comprehensive plan....If the zoning plan is prepared it may ultimately have to be considerably amended to adapt itself to a plan of the physical growth of the city.⁵³

The master plan concept had become so popular that the Journal of the Town Planning Institute of Canada became little more than a progress report for professional planners. Planners reported their experience in plan preparation and debated over the methods to secure the necessary legislation to give their plans effect.

How successful were these early master plans? In retrospect, it is reasonable to suggest that the plans did not live up to the planner's

expectations. Politicians were simply unsympathetic to the cause of master planning. This unsympathetic atmosphere has been summarized by Walter Van Nus:

1. In 1921, Ottawa appointed a Town Planning Commission with Noulén Cauchon as chairman but Cauchon's 1922 plan for the federal district received little support;
2. In Hamilton a series of Town Planning Commissions resigned in frustration at city council's continued refusal to implement their plans;
3. Toronto's chief planning authority, Tracey le May, worked toward a general plan but Toronto's politicians were reluctant to follow through, feared anything but the most malleable zoning, and did no zoning on its own initiative which would help implement le May's recommendations;
4. Kitchener (then Berlin) hired Charles E. Leavitt, a New York consultant to prepare a comprehensive plan but little was accomplished. In 1914 Kitchener and Waterloo had established Town Planning Commissions which worked toward the preparation of town plans. In 1922 Kitchener hired Adams and in 1930 Waterloo hired Seymour to prepare plans but the plans were largely ignored with the exception of one major success when Kitchener adopted Canada's first comprehensive zoning by-law on December 31, 1924;
5. Manitoba planning efforts were met with failure at every turn. Wilfred Hobbs, land surveyor and municipal engineer, was appointed Town Planning Comptroller with only limited power to approve townsite plans. Winnipeg passed a zoning by-law in 1929 but it, too, could not be classified as successful since it did not apply to any specific areas of the city, but rather applied only to any area designated by future by-law;
6. By 1929 the remaining three western provinces had little success: Saskatchewan municipalities ignored the compulsory acts of 1917; Alberta's permissive act discouraged municipalities from preparing plans and the act was ignored; British Columbia's planners were reluctant to prepare plans urging that expanded planning power would be required before plans would be effective.⁵⁴

Walter Van Nus is not alone in his assessment of master planning efforts during this period. Consider Thomas Gunton's summary:

In London, Ontario, the municipal government declined to pay for the printing of a planning study which they had commissioned Thomas Adams to prepare just a few years earlier.... In Hamilton, Ontario, the newly elected mayor was so opposed to planning that the local planners decided that they should not even both (sic) lobbying for action. Even Ottawa, the city which had petitioned the government for planning powers, refused to implement their recently completed plans even though the power to do so was available.⁵⁵

Such was the situation for master planning prior to the end of World War II. Planners supported it but government did not. But the status and the role for master plans was soon to change. Federal government interest in post-World War II reconstruction served to highlight the potentially integral role city planning and the master plan could have upon future urban growth and development.

2.2.4 Post World War II Reconstruction: The Era of Master Planning

In 1943 the Federal government appointed a parliamentary committee to study post-World War II reconstruction and re-establishment.⁵⁶ A special subcommittee, chaired by Queen's University economist, C. A. Curtis, was appointed to undertake an indepth and detailed study of city planning. The resulting Curtis Report must be considered as the critical turning point for the future of city planning generally, and that of comprehensive master planning in particular.

The Curtis Report concluded that most Canadian cities were facing very serious urban problems and that only careful attention to city planning principles and ideas could solve these problems. The Committee was especially appalled with unreasonable concentration and congestion; the general deterioration of central business districts; indiscriminate intermingling of incompatible uses; lack of coordinated control; and the general ugliness and unsightliness characterizing most Canadian cities,

large and small.⁵⁷ Previous city planning efforts were condemned. "Too often" concluded the committee, "we have pursued policies of drift, piecemeal patching or compromise or adaption".⁵⁸ They did not support the passive approach to planning. They admonished the inadequate legislation, concluding that "necessary legislation and techniques required for adequate town planning are not in operation anywhere in Canada".⁵⁹ The passive approach was condemned as being nothing other than "restricted administration of zoning and by-law enforcement".⁶⁰

The committee recommended that city governments undertake a vigorous program of rational comprehensive master planning which was "essentially the matter of using land to its most efficient and socially desirable way".⁶¹ The report called for:

1. The complete revamping of provincial planning legislation including the provision to make the preparation of town plans mandatory;
2. The appointment of provincial planning boards to prepare comprehensive, broad regional plans and that all government plans be subject to the approval of these provincial boards, and;
3. The government's active involvement in private housing and land markets.⁶²

With specific reference to comprehensive plans the committee recommended that plans be prepared on the basis of cooperative action by all three levels of government. They also suggested that city plans should include a detailed series of plans:

While it is convenient to use the term "plan", it should be evident that a series of detailed plans are in fact required, both in the preparatory stages, and in the regulations as to future land use which must eventually be established. There must, however, be one co-ordinated framework to which all details of land use and location are fitted.⁶³

The basic elements to be included in a city plan included a plan for neighbourhoods, public services, major streets and traffic, public transportation, public utilities, parks, zoning, building and construction codes, land use, general amenities, and land acquisition.⁶⁴

The Curtis Report has proven to be instrumental to the development of the City Planning profession as we know it today. By 1944, just a short time after the committee tabled its recommendations, all provinces except Quebec revised their legislation in order to provide municipal government with sufficient control over land and its use to accommodate city planning concerns;⁶⁵ the provincial governments established provincial-wide planning boards to ensure coordinated regional planning; the Federal Government was to pass a National Housing Act (1944); and planning professionals, concerned government officials, and urban experts were to form the Community Planning Association of Canada.⁶⁶

To summarize, city planners had adopted a truly comprehensive approach to planning by the early 1950's. They may not have had the experience with the implementation of these long-term, comprehensive master plans but they did believe that city planning, if it was to be done at all, should include studies of every factor of potential consequence to the physical development of a city or a region.

But just as this comprehensive master planning approach was beginning to become accepted in Canada, a small group of American planners were beginning to launch a number of specific criticisms of the rational comprehensive planning model. The American experience with master plans suggested that it was very difficult, if not impossible, to plan effectively on a truly comprehensive level; that the general nature of

master plan recommendations were precluding the reasonable possibility of plan-implementation; and that the manifest purpose of the master plan - to guide and direct future urban growth and development in a rational, efficient manner - was inconsistent with the political and institutional arrangements of local government.

2.5 Master Plan Critics: The Search for Alternative Techniques

The criticism of master planning practice may be broken down into two general categories. First, some planners accept the basic premise of master planning theory, but suggest that changes are needed to make the approach more effective. Others reject the practice altogether, suggesting that planners would be more effective if they were to develop alternative approaches to the study and analysis of complex urban problems.

Ira M. Robinson has suggested that the fundamental reason for the growing scepticism with master planning practice was that the master plan did not detail "...a plan or strategy for implementation, which spells out the specific, detailed courses of action to move the city from where it is currently to the desired state as reflected in the long-range plan".⁶⁷

Of the many master plan critics to call for change, Martin Myerson is probably the most notable. He accepted the basic theory of master planning, but suggested that changes were needed to make the approach more effective. In a 1956 speech to the American Institute of Planners he suggested that the master plan was not an effective guide to action because of its long-range perspective. As an alternative to the typical 20-25 year time horizon he believed that planners should direct their attention to 'middle-range' development plans with 5-10 year objectives and the specific actions and initiatives needed to fulfill those objectives.⁶⁸

Myerson urged that the middle-range development plan would be much more practical in its application. Middle-range development plans prepared subsequent to or in combination with the master plan would provide the much needed bridge to link the present with the distant future:

Long-range comprehensive plans commonly reveal a desired state of affairs. They rarely specify the detailed courses of action needed to achieve the desired state. By their long-range nature they cannot do so. The development plan, in contrast, will indicate the specific changes in land use programmed for each year, the rate of new growth, the public facilities to be built, the structures to be removed, the private investments required, the extent and sources of public funds to be raised, the tax and other local incentives to encourage private behavior requisite to the plan.⁶⁹

Other critics maintained that master plans served no purpose at all, and that planners should abandon the approach in favour of other techniques. Herbert Gans, John Friedmann, and Charles Lindholm are the most noted champions of this position.

Herbert Gans argued that it is impossible to identify unique community goals and that plans were unsuccessful because they were not accurate expressions of the development constraints and opportunities of a community, that they could not accurately identify a public interest with respect to land use, and that they were conceived without attention to the economic realities of most city administrations.⁷⁰

John Friedmann questioned one of the most fundamental premises of master planning theory: that there is an identifiable public interest.⁷¹ He suggested that the master plan has turned out to be a "colossal failure", and that this failure was due to a number of factors:

1. Perceptions, interests and values are formed by location of the observer in a given social matrix. The resulting multiplicity of social perspectives cannot by sheer force of logic be integrated into a single normative scheme.

2. Governments engaged in comprehensive planning are dependent upon external forces and conditions which they are unable either to control or correctly foresee. The planning, then, must be exceedingly flexible, adaptive, and opportunistic with respect to changes in the external environment. The comprehensive plan does not generally allow for large uncertainties in the conditions that limit autonomous choice.
3. Planners do not possess more than fragmentary knowledge relevant to the situation with which they are concerned. Professional judgements and values must be used to fill the gaping holes of ignorance.
4. Comprehensive planners assume a capacity for central coordination that rarely exists in actual fact.
5. Comprehensive planners work with models of 'balanced' development. But accelerated change - when planned guidance would seem to be most needed - calls for rapid and far-reaching changes in institutional arrangements.
6. The logic for comprehensive planning is inconsistent with the imperatives for action.⁷²

Charles Lindholm also believed that the comprehensive form of master planning was highly unsuccessful. He argued that it was impossible to formulate policy in a truly comprehensive manner, that it was impossible to identify a specific public interest and establish a set of goals that mirror that interest, and that the ends-means conception of policy determination was simplistic and unrealistic.⁷³

Alan Altshuler has also questioned the idea that there is an identifiable public interest. He suggested that "democratic planning of a highly general nature is virtually impossible".⁷⁴ He argued that comprehensive goals can only be stated in general terms, and that the ambiguous nature of general goal statements allow the city council and the public to interpret the goals however they so wished. This ambiguity was defeating the purpose to careful planning.

To summarize, these master plan critics have based their arguments on one common theme. The theme is that master plan goals and objectives were not being achieved because political decision-makers were reluctant to commit themselves to general, long-range goal statements. They may agree with the goals in principle, but when pressed by the political realities of daily decision-making these long-range goals were mostly ignored. Like Martin Myerson, most critics suggest that planners should pursue middle-range planning with operational but relatively general goals.⁷⁵ It was generally believed that this operational, middle-range perspective would promote a genuine interest in, and understanding of city planning issues and problems, for both the general population and the political decision-makers.

This criticism continues today. Dr. Melville Branch, in his most recent work, Continuous City Planning: Integrating Municipal Management and City Planning, has charged that:

...master plans are often idealistic formulations rather than attainable projections or serious policy proposals...are conceived far into the future without relation to current conditions, budgets, available and potential resources, and means of effectuation. They can therefore be considered presentday manifestations of the utopian strain which has existed throughout recorded history.⁷⁶

Based on his thesis that long-range plans are "anachronistic delusions" and "idealistic formulations" rather than attainable projections or serious policy proposals, he suggests that master planning practice has resulted in a dilemma for contemporary planners: they have been operating outside the mainstream of decision-making and are regarded by those who manage the city more as a nuisance than a significant directive force.

The foundations of this strong critique are best illustrated with what Dr. Branch coined the "seven deadly sins" of master plans. These deadly sins are listed in order of their significance in preventing effective planning:

1. The picture of the physical city 20-25 years in the future, shown by traditional end-state master plans does not represent what the community wants nor what is possible, but what city planners wish it could be.⁷⁷
2. Physical plans do not treat financial, economic, political, social, technological and other 'nonphysical' realities which must be incorporated into meaningful city plans.⁷⁸
3. Traditional city plans are formulated as if municipal government can provide whatever funds are needed and will enact whatever laws and regulations are required to achieve the end-state city planners believe is desirable many years hence.⁷⁹
4. The end-state depicted in city plans is so far in the future and so idealized that it does not represent the outcome of a feasible sequence of shorter range municipal operations and attainments.⁸⁰
5. City planning has attempted to function independently of politics and separately from the administrative process of the municipality.⁸¹
6. Past city planning has presumed that it can avoid the primary, most pressing, and most difficult urban problems (i.e. poverty, unemployment, housing shortages, destructive social behavior, environmental pollution, and most recently the energy crisis).⁸²
7. Master plans are conceived and issued as inflexible printed publications, revised and republished only at long intervals, regardless of changing conditions and events.⁸³

Having reviewed the positions of both the supporters and the critics of master planning theory and practice, it is clear that planning professionals are quite divided in their assessment of master planning practice. For the master plan advocates one underlying theme dominates their argument: rational choice, not political horse-trading, should

guide municipal government decision-makers.⁸⁴ They suggest that a preconceived plan, once agreed upon and ratified by council, can go a long way toward coordinating and directing the incremental, day-to-day decisions of city government. The critics, on the other hand, may agree with these objectives but suggest that these rationalistic models of social guidance are only impressive intellectual statements which bear little relationship to the operation of municipal government decision-making. They suggest that local government decision-makers are politicians in the truest sense of the word and that their decisions arise out of a political process, not a rational one. For the critics, it is anomalous to superimpose a rational model over a political process. Since it is this question of a rational decision-making process which is so central to the arguments of both positions, it merits a brief review.

2.6 The Assumption of Rationality

A contemporary planning theorist, Amitiai Etzioni, has described the rationalistic model of decision-making as a relatively straightforward means-end conception about how decisions are and ought to be made:

An actor becomes aware of a problem, posits a goal, carefully weighs alternative means, and chooses among them according to his estimates of their respective merit, with reference to the state of affairs he prefers.⁸⁵

Myerson and Banfield have described the process as follows:

1. The decision-maker considers all of the alternatives (courses of action) open to him; i.e., he considers what courses of action are possible within the conditions of the situation and in the light of the ends he seeks to attain;
2. he identifies and evaluates all of the consequences which would follow from the adoption of each alternative; i.e., he predicts how the total situation would be changed by each course of action he might adopt; and

3. he selects that alternative, the probable consequences of which would be preferable in terms of the most valued ends.⁸⁶

Stated simply, a rational decision is a decision based upon a foundation of accurate information. It is the exercise of good judgement. With all relevant information collected and analyzed in the master plan, good judgement, not individual political agendas, may be applied to the decisions affecting the present and future growth and development of the city. And, according to the rational comprehensive planning model, the exercise of good judgement will require that all important factors which may bear upon the city's growth and development be identified and analyzed.

For the earliest master plan enthusiasts, the logic of this argument was compelling. It implied that the city planner could become an applied scientist; that objectivity and strict adherence to the canons of scientific method would result in the best advice to municipal government decision-makers. But this model assumed that the decision-makers had a high degree of control over the decision-making process, that the decision-maker wanted to base his or her decision upon the best available information, and that decision-makers could agree upon and pursue common goals and objectives for the city as a whole. It is at this point where the critics tend to disagree.

The master plan critics have attempted to discredit the assumption of rationality. In a number of recent studies concerning local government planning and politics, the findings of most analysts tend to suggest that local government decisions are most often the result of individual political interests and concerns rather than rational choice

or good judgement; that no systematic process underlies local government decision-making, and that decisions are made as constraints and opportunities present themselves, not on objective criteria.⁸⁷ These empirical and political investigations notwithstanding, the assumption of rationality has failed to stand up even in the less rigorous, more esoteric world of the theoretician.

In John Friedmann's analysis of the most basic rationalist models (i.e., John Dewey's doctrine of instrumentality and Max Weber's theory of social action) he suggests that if one accepts their assumptions the logic of the models are impeccable, but:

...in important respects, the model of rational planning turns out to be quite useless. The concept of an objective, perfect rationality is found to have no counterpart in the real world; as an intellectual construct, it is of doubtful value for explaining the actual practice of planning.⁸⁸

Similarly, Myerson and Banfield suggest that "no decision can be perfectly rational since no one ever knows all of the alternatives open to him at any given moment or all the consequences which would follow from any given action".⁸⁹ Grabow and Heskin have described these rationalistic models as "unattainable ideals".⁹⁰ Richard Bolan has described these models as "naive" views of man and society and directs attention to the conclusion of his colleagues:

One fundamental assumption underlying these rational-empirical strategies is that men are rational. Another assumption is that men will follow their rational self-interest once this is revealed to them.⁹¹

To be sure, the entire debate concerning this assumption of rationality is an abstract, highly theoretical one. Just because a

perfect rationality cannot be attained is not in itself reasonable grounds to suggest that the rational comprehensive planning model should be abandoned. Nor does it imply that planners cannot exercise a measure of foresight and good judgement as advisors within the decision-making process. But one question remains: Is the master plan the best way for city planners to convey this advice and achieve results in the decision-making process, regardless of the nature of that process?

To a large extent, any answer to this most important question must be understood within the framework of our laws relating to the master plan and its prescribed role in the control and regulation of land and its use.

2.7 Summary and Conclusions

To summarize, it should be stressed that master planning practice is a relatively new planning technique. With the exception of the brief period of physical master planning during the City Beautiful Movement, the preparation of master plans only became a meaningful municipal and metropolitan government activity by the end of World War II. It was the primary activity of professional planners during the late 1940's and early 1950's.

During the fifty or more years leading to the actual practice of rational comprehensive planning, two important factors which would ensure the popularity of the master plan can be identified. First, privately sponsored citizen and professional organizations were preparing plans. It was one method to communicate their individual interests to the city government administration. Second, while the city government

administration ignored these plans and dealt with urban problems and issues on a day-to-day basis, the planning professionals were gradually developing a theory of city planning.

As this theory evolved, the master plan concept of the preceding years was not rejected. Rather, planners were searching for ways to improve upon and make the master plan a more meaningful and successful tool. As a result, planners slowly developed and adopted the rational comprehensive planning model; a model which suggested that if plans were to be effective they would have to be based on a comprehensive study and a rational analysis of all important factors of potential influence to the growth and development of the city.

City government's eventual acceptance of this rational comprehensive model was - for the planners who were advocating its application - probably more the result of good fortune than any other factor. By the end of World War II the severity of urban problems had reached the point that local government could no longer deny the need for careful planning in the regulation and control of urban growth and development. In addition, the Federal government, in its concern for post-World War II reconstruction, identified the inefficiencies of city government land management and recommended that city governments adopt growth management and land use strategies. The Curtis Report suggested that local government pursue a vigorous programme of rational comprehensive planning. For the first time, the theories and the abilities of the newly founded planning profession would be tested.

Planners were more than willing to accept the challenge. Based on their rational comprehensive planning model, municipal government planning and the formal adoption of growth management strategies became an important and integral function of city government. Planning commissions, departments or boards were formed in every major Canadian city. At the same time, provincial governments were revamping their planning legislation to ensure that local government would be provided sufficient power to allow this planning to become an effective, directive force in municipal government decision-making. The central theme of this new legislation was the concept of comprehensive master plans. Accordingly, every major Canadian city endeavored to prepare a rational comprehensive master plan.

But with time and with experience in the preparation and implementation of master plans, a few planning theorists were beginning to question their profession's almost exclusive reliance on master planning techniques. These critics suggested that master plans were characteristically unsuccessful and initiated a search for more effective alternatives.

Despite this call for change in emphasis and in strategy, rational comprehensive master planning continues to be the single most important activity of planning professionals. The legislation is still drafted around the concept of master plans, and the master plan is still regarded as the primary product of planning work. The master plan critics may have developed a fairly well articulated argument to discredit the fundamental premises of rational comprehensive planning theory but planners are generally reluctant to rethink this model.

As we move into the 1980's it is clear that planners have become somewhat remiss in documenting their accomplishments and evaluating their techniques. As we begin to prepare rational comprehensive plans with time horizons extending well into the 21st Century we have yet to evaluate past master plans against the claims of our theory. Such evaluation is as much an obligation as it is a professional responsibility.

What is past need not be prologue.

FOOTNOTES

1. See, for example, Helen Rosenau, The Ideal City: Its Architectural Evolution in Europe. (New York: Methuen, 1983); Lewis Mumford, The City in History: Its Origins, Its Transformations, and Its Prospects. (New York: Russell Sage, 1936); and Melville Branch, Continuous City Planning: Integrating Municipal Management and City Planning. (New York: John Wiley and Sons, 1981).
2. Melville Branch, op.cit., esp. Part I.
3. Ibid.
4. Ibid.
5. John Friedmann, "Planning as a Vocation", (Part I), Plan Canada. Vol. 6, No. 3, 1966, p. 3.
6. See, for example, Andreas Faludi, A Reader in Planning Theory. (Oxford: Pergamon Press, 1973).
7. John Friedmann, "Planning as a Vocation", (Part II), Plan Canada. Vol. 7, No. 1, 1966, pp. 8-25.
8. T. J. Kent Jr., The Urban General Plan. (San Francisco: Chandler Publishing Co., 1969), p. 18.
9. Charles Haar, "In Accordance with the Comprehensive Plan", Harvard Law Review. Vol. 68, 1955, p. 1155.
10. William I. Goodman and Eric C. Freund (eds.), Principles and Practice of Urban Planning. (Washington: The International City Managers Association, 1968), p. 349.
11. Ibid.
12. Stephen Grabow and Alan Heskin, "Foundations for a Radical Concept of Planning", JAIP, Vol. 39, No. 2, 1973, p. 106.
13. See, for example, William I. Goodman and Eric C. Freund, op.cit., pp. 358-367. Also see Alan Altshuler, "The Goals of Comprehensive Planning", JAIP, Vol. 31, No. 3, 1966, pp. 186-195.
14. Elizabeth Howson, The Plan is Dead, University of Waterloo, School of Urban and Regional Planning, Bachelor Thesis, 1975, p. 9.
15. Daniel H. Burnham, cited in Charles Moore, Daniel H. Burnham, Architect, Planner of Cities. (Boston: Houghton Mifflin, 1921), Vol. III, p. 147.
16. Frederick Law Olmstead Jr., cited in William I. Goodman and Eric C. Freund (eds.) op.cit., p. 352.

17. Alfred Bettman, cited in Daniel Mandelder, Managing Our Urban Environment: Cases, Text, and Problems. (Indianapolis: Bobbs-Merril, 1963), pp. 458-459.
18. Thomas Adams. Outline of Town and City Planning: A Review of Past Efforts and Modern Aims. (New York: Russell Sage, 1935), p. 213.
19. Ibid. pp. 326-327.
20. Edward M. Basset, The Master Plan. (New York: Russell Sage, 1938), p. 65.
21. Ibid., p. 67-71.
22. Ibid., pp. 11-43.
23. T. J. Kent, op.cit., p. 47.
24. David Farbman, A Description, Analysis, and Critique of the Master Plan. Institute of Urban Studies, Unpublished Paper, 1959-1960.
25. Walter Van Nus, The Plan-Makers and the City: Architects, Engineers, Surveyors, and Urban Planning in Canada, 1890-1939. University of Toronto, Ph.D. Dissertation, 1975, Chapter 2.
26. Margaret Meeks, History of City Beautiful Thought in Canada. University of British Columbia, M.A. Thesis, 1979, p. 4.
27. Geoffrey Stanford, To Serve the Community: The Story of Toronto's Board of Trade. (Toronto: University of Toronto Press, 1974), p. 113.
28. Thomas Gunton, The Evolution and Practice of Urban and Regional Planning in Canada, 1900-1960. University of British Columbia, Ph.D. Dissertation, 1981.
29. Alan Artibise, Winnipeg: A Social History of Urban Growth. (Montreal: McGill-Queens University Press, 1975), p. 268.
30. Margaret Meeks, op. cit., p. 156.
31. Thomas Gunton, op.cit., p. 77.
32. Margaret Meeks, op.cit., p. 99.
33. Thomas Gunton, op.cit., p. 77.
34. Byron Walker, "A Comprehensive Plan for Toronto", cited in Thomas Gunton, op.cit., p. 83.
35. Joyce Morrow, Calgary Many Years Hence: The Mawson Report in Perspective. (Calgary: City of Calgary/University of Calgary, 1979).
36. Thomas Gunton, op.cit., p. 80.

37. For details concerning the formation of the Commission of Conservation see Clifford Sifton, "Inaugural Address", Commission of Conservation Annual Report, (hereafter CCAR), 1910, pp. 4-5.
38. Thomas Gunton, op.cit., p. 97.
39. Charles Hodgetts, "Housing and Town Planning", CCAR, 1912, pp. 135-136.
40. Ibid., p. 136. (emphasis mine)
41. Ibid.
42. Sir John Willison, "Civic Improvement League for Canada", Report of Preliminary Conference, Commission of Conservation, 1915, p. 13.
43. Frank Johnson, Report of Preliminary Conference. Commission of Conservation, 1915. p. 22.
44. For a review of the events leading to the appointment of Thomas Adams as Chairman see "Opening Statement", CCAR, 1914.
45. Thomas Adams, cited in Thomas Gunton, op.cit., p. 104.
46. Thomas Adams, Outline of Town and City Planning: A Review of Past Efforts and Modern Aims. (New York: Russell Sage, 1935), p. 42.
47. Ibid., p. 22.
48. Ibid., p. 23. (emphasis mine)
49. CCAR, 1915, p. 261.
50. Thomas Adams, "Outline of Town and City Planning", CCAR, 1915, p. 327.
51. Thomas Adams, "Housing and Town Planning in Canada", CCAR, 1915, p. 173.
52. Editor's Message, Journal of the Town Planning Institute of Canada, (hereafter JTPIC), Vol. 1, preliminary No., 1920, p. 1.
53. JTPIC, Vol. 1, No. 3, p. 10.
54. Walter Van Nus, op.cit., pp. 107-176.
55. Thomas Gunton, op.cit., p. 156.
56. Advisory Committee on Reconstruction, Housing and Community Planning, Final Report of the Subcommittee, (Ottawa: King's Printer, 1946).
57. Ibid., pp. 161-162.
58. Ibid., p. 161.

59. Ibid., p. 181.
60. Ibid.
61. Ibid., p. 9.
62. Ibid., p. 166.
63. Ibid., p. 175.
64. Ibid., pp. 175-176.
65. Thomas Gunton, op.cit., p. 234.
66. Ibid., p. 271.
67. Ira M. Robinson (ed.), Decision-Making in Urban Planning. (Beverly Hills: Sage Publications Inc., 1972), p. 311.
68. Martin Myerson, "Building the Middle-Range Bridge for Comprehensive Planning", JAIP, Spring, 1956.
69. Ibid., p. 62.
70. Herbert Gans, People and Plans. (New York: Basic Books Inc., 1968).
71. John Friedmann, "The Future of Comprehensive Urban Planning: A Critique", Public Administration Review, May/June, 1971, No. 3.
72. Ibid., pp. 317-318.
73. Charles Lindholm, "The Science of Muddling-Through", Public Administration Review, 1959, pp. 325-326.
74. Alan Altshuler, "The Goals of Comprehensive Planning", JAIP, Vol. 31, 1966, p. 190.
75. Alan Altshuler, The City Planning Process: A Political Analysis. (Ithaca: Cornell University Press, 1965).
76. Melville Branch, op.cit.
77. Ibid., p. 47.
78. Ibid., p. 51.
79. Ibid., p. 57.
80. Ibid., p. 60.
81. Ibid., p. 64.
82. Ibid., p. 72.

83. Ibid., p. 73.
84. John Friedmann, "The Future of Comprehensive Urban Planning: A Critique", op.cit., p. 315.
85. Amitai Etzioni, "Mixed-Scanning: A 'Third' Approach to Decision-Making", Public Administration Review. December, 1967, p. 385.
86. Martin Myerson and Edward Banfield, Politics, Planning and the Public Interest: The Case of Public Housing in Chicago. (Glencoe: The Free Press, 1965), pp. 314-315.
87. See, for example, Alan Altshuler, The City Planning Process: A Political Analysis. (Ithaca: Cornell University Press, 1965); Harold Kaplan, Reform, Planning and City Politics: Montreal, Winnipeg, Toronto. (Toronto: University of Toronto Press, 1982); and Albert Rose, Governing Metropolitan Toronto: A Social and Political Analysis. (Berkeley: University of California Press, 1972).
88. John Friedmann, "Planning as a Vocation", (Part I), Plan Canada, Vol. 6, No. 3, 1966, p. 5.
89. Martin Myerson and Edward Banfield, op.cit., p. 315.
90. Stephen Grabow and Allan Heskin, op.cit., p. 108.
91. Richard Bolan, "Mapping the Planning Theory Terrain", The Planning of Change. (2nd Edition), (New York: Holt, Rinehart, and Winston, 1969), p. 26.

CHAPTER THREE

STATUTORY REFERENCES TO THE MASTER PLAN

3.0 Introduction

Master plan policies and objectives must be accomplished within the framework of provincial legislation. The master plan must derive its force through the enactment of provincial statutes and municipal by-laws and regulations.¹ This chapter is a discussion and analysis of the statutory references to the master plan, especially as it pertains to the plan's legal effect. This inquiry into the legal effect of plans is important; the successful implementation of plan policies is very much dependent upon the legal force of the plan. Indeed, the review of the historical evolution of the master plan has underscored the fact that before master plans are taken seriously, and before they are implemented they require legal force. Plans without official legislative approval are binding on no one, not even the planners and politicians who may have determined plan objectives and drafted plan policies.

This review of the legislation is intended to highlight a number of specific factors of importance to the successful implementation of a master plan. The specific issues include:

1. The underlying principles of the planning legislation.
2. The master plan's role in the larger structure and process of the city planning function.
3. Statutory references to plan definition, plan content, study scope, plan amendment, and legal effect.
4. Legislatively prescribed implementation instruments intended to protect the spirit and intent of master plan policies.

Following this review of what may be called the 'black letter of the law' relating to the master plan, there is a discussion of the relationship between the master plan and its most powerful implementation tool, the zoning or land use by-law. With a particular focus on the provincial legislation of Alberta, it is shown that the relationship between the plan and the land use by-law is sometimes very weak.

When the relationship between the plan and the land use by-law is weak, successful plan implementation is very much a function of the planner's effective use of non-regulatory implementation techniques. A brief review of these techniques suggests that it is difficult to implement plans without formal legal status.

It should be noted that the review is confined to the statutory references found in the provincial legislation of Ontario, Manitoba, and Alberta. This is not necessarily a limitation for the legislation relating to the master plan is too lengthy and too often amended to include a review of all provincial Acts. In addition the level at which the legislation is discussed should be fairly representative of the legislation throughout Canada. (Excerpts of the provincial legislation which provide the background for this study are presented in Appendix A).

3.1 Planning Legislation: Balancing Public and Private Property Rights

One of the abiding themes of the provincial planning legislation is that before planning and land use by-laws become law, the public interest must be considered. If certain land uses or if certain development patterns do not promote the public interest, they should be controlled and regulated. This principle is justified by the fact that land is a

limited resource and its enjoyment and benefit must accrue to the public in general. This concern for the public interest, however, must be balanced against the opposing principle of individual property rights.

Planning legislation is intended to balance these competing philosophies. It is designed to protect private property rights and to ensure that the exercise of these rights do not conflict with the public interest. As noted by one legal writer, any legislation which purports to regulate land use in any manner over and above that found in common law ipso facto is intended to protect and enhance the public interest.²

In order to protect and enhance the public interest, the courts have ruled that it is within the power of the elected officials to attempt to 'bring about' certain conditions by regulating the private use of land. The United States Supreme Court decision of Village of Euclid v. Amber Realty Co. in 1926 enshrined the public right to bring about certain conditions with zoning by-laws and regulations.³ The court ruled that zoning regulations were enforceable on the basis that it was in the public interest and therefore within the rights of elected officials to determine that a city should be beautiful, healthy, spacious, and well-balanced in its development.

It has been in this spirit of the public interest that master plans have come to be such a widely accepted planning technique. With careful attention to the public interest, master plans are to identify the appropriate character and pattern of land use and urban development. This should include the actions necessary to protect and enhance public safety, health, convenience, and efficiency. In Manitoba, for example, it was

established as early as 1916 that a municipality did have the right to prepare town planning schemes designed "...with the general object of securing suitable provision for traffic, proper sanitary conditions, amenity and convenience".⁴ In Ontario this principle was enshrined in the legislation by 1917,⁵ while the province of Alberta, as early as 1913, established that a municipality could regulate the development of future subdivisions with a plan designed to ensure the construction or protection of lighting, sanitary facilities, suitable roadways, and open space.⁶

Since these earliest statutory references to master planning schemes, the legislation has become much more sophisticated with detailed attention to the definition and purpose of the master plan. The legislation has also made reference to the appropriate scope of study and the legal impact of a master plan. In fact, the master plan has come to be regarded as such an important planning tool that most provincial governments have developed elaborate planning systems with a clearly delineated hierarchical structure of plans.

3.2 The Operation of Municipal Planning in Ontario, Manitoba and Alberta

In the provinces of Ontario, Manitoba and Alberta the legislators have developed a solid statutory basis for the master plan as the central element in the city planning process. In Ontario, for example, master plans are formally titled 'Official Plans' and may be prepared for entire metropolitan areas, for municipalities (rural and urban), and for neighbourhoods.⁷ According to the City of Winnipeg Act S.M. 1971 c.105, the provincial government of Manitoba has envisaged an important role for the master plan. There are three levels or types of plans: 'Greater Winnipeg Development Plan' encompassing the entire metropolitan region

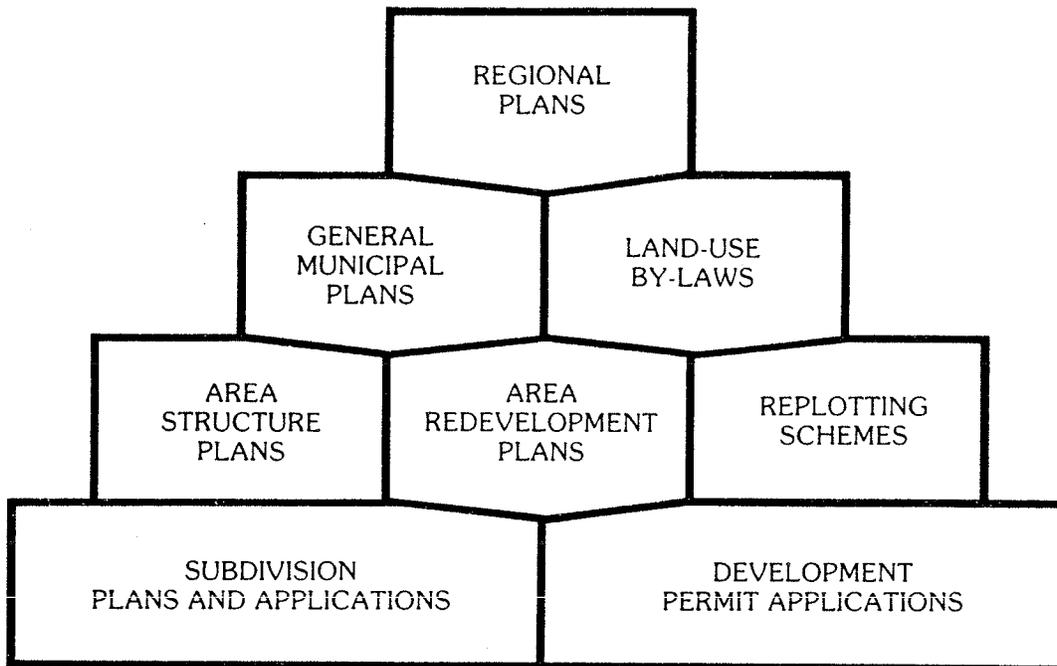
and the additional zone; 'Community Plan' for the whole area of a community or part of a municipality within the framework of the Greater Winnipeg Development Plan; and 'Action Area Plan' for an area within a community that exists within the metropolitan area as established by by-law.⁸ In Alberta, the planning system has been developed around a well-defined hierarchy of plans, with each plan specially designed to perform a specific function.⁹ As illustrated in figure 2, plans at the top of the hierarchy are to be the most comprehensive, containing broad policy statements to guide the development of large regions. Plans lower in the hierarchy are to contain specific policies of local application.

To summarize, the legislation has endorsed and encouraged master planning practice. Master plans are much more than an important part of the city planning process, they are the central theme around which the legislation has been drafted. In theory, this hierarchial structure of plans should create a coordinated planning process at the neighbourhood, community, municipal and metropolitan or regional levels. In fact, the operation of city planning in the provinces of Ontario, Manitoba and Alberta is quite compatible with the original theory of master planning. Within this established framework, the legislation also demonstrates that there is a general consensus with respect to the definition of a master plan, as well as its purpose, its appropriate content and study scope, and its legal effect.

3.3 Statutory Definition

The various provinces have defined the master plan in a characteristically similar manner. Although there are some minor variations between the provinces, the definition does not vary dramatically. The Province of Ontario's definition of 1946 is most characteristic:

Figure 2 Hierarchy of Statutory Plans and By-Laws in Alberta



Source: Inter-Agency Planning Branch, Planning in Alberta: A Guide and Directory, p. 15.

'official plan' shall mean a plan consisting of maps and explanatory texts prepared and recommended by the planning board and adopted and approved as provided in this Act, covering a planning area and showing a programme of future development, including the regulation of the use of land, buildings and structures in the planning area and any other feature designed to secure health, safety, convenience, and welfare of the inhabitants.¹⁰

The Province of Manitoba defines the plan a "statement of the city's policy and general proposals in respect of the development of use of landfor the improvement of the physical, social and economic environment".¹¹ The definition is similar in Alberta with an emphasis on orderliness, economy and convenience.¹²

3.4 Objectives, Content, and Study Scope

In addition to the stated purpose of a master plan as described in the official definition, the legislators have established that there are a number of objectives to which the master plan should address itself. Generally, master plans are to provide the framework for the development of the city as a whole. Master plans are to identify critical development problems and opportunities; they are to set forth the desired timing, patterns, and characteristics of future development; and they are to establish and specify the programmes and actions necessary for the implementation of the master plan.

In order to achieve these objectives the legislators have typically provided quite elaborate provisions concerning the appropriate scope of study and the appropriate content of master plans. Master plans are to be comprehensive in study scope. They are to investigate the physical, social and economic conditions which may affect the planning and development of the municipality or metropolitan area; they are to be prepared on

the basis of surveys and studies of land use, population growth, the economic base of a municipality, transportation and communication needs, social services, and any other factor which may be relevant to or of consequence to the planning and development of a municipality or metropolitan area.

As described in the legislation, the master plan is to be a complex document going well beyond policies respecting land use and dealing with virtually all matters that would be of concern to a city or metropolitan government administration. These concerns are almost limitless: environmental protection, economic development, social services, fire protection, police protection, library services, education, staging of sewer and water facilities, health, population densities, and municipal services.

Since plans are intended to be expressions of the public interest, the legislation has established certain procedural requirements which must be followed when preparing and adopting an official master plan. These procedural requirements have been included to ensure the public's right to participate in the preparatory stages of a master plan. All persons are provided the opportunity to make suggestions and representations if they so wish. And it is clear that the public's right to make representations should not be a perfunctory formality or gesture. The planning authority should encourage this participation with the distribution of important information, and the development of a formal public participation process.

To summarize, the legislation has provided considerable flexibility with respect to the appropriate scope of study and content of a master plan. The legislation allows the planning authority the power to include virtually anything it may consider pertinent to the development of the city. It provides for a measure of autonomy in determining what any given plan should include. In fact, the legislation is so broad that every master plan may be unique; it may reflect those special concerns and issues of unique concern to a city or region, so long as the policies and recommendations are based on an understanding of the public interest and on a comprehensive study and analysis.

3.5 Legal Effect

Plans which have been formally approved and adopted by the appropriate authorities are intended to have legal effect. Master plans are to have a restrictive legal effect. The approving authorities are not compelled or bound to ensure that the policies and programmes identified in the plan are acted upon. They are bound only to ensure that any undertaking or initiative inconsistent with plan policies is not allowed to occur. The authorities are provided regulatory power to restrict any development which may be considered to contravene master plan policies.

This permissive legal effect of the master plan has been one of the most consistent of themes in the legislation. No government is responsible to ensure that plan policies will be followed and that specific development plans or proposals are implemented. The only prescriptive requirement to a municipal or metropolitan government may be found in the statutory references to the zoning or land use by-law. A municipal government may be required to enact a zoning by-law subsequent to the

official adoption of the master plan. In most cases the legislation stipulates that the by-law should be consistent with plan policies.

When considering the legal effect of master plans it is also necessary to understand the statutory references to plan amendment. That amendment is very easy; the approving authority is always provided the option of amending the approved plan if it so desires to pass any by-law or allow any development which contravenes a master plan policy. In Ontario, for example, these provisions for plan amendment were established in the earliest Acts. As early as 1917 these provisions for amending a plan were quite clear: Any official plan "...may, subject to the approval of the board, be amended, changed or extended from time to time by the council as it may deem expedient".¹³ By 1946 the Ontario legislation explicitly empowered a municipal council to act contrary to the policies of its approved plan, subject to two-thirds affirmative vote of council: "Notwithstanding any other Act, where an official plan is in effect, no public work that does not conform therewith shall be undertaken, except with the general approval of a two-thirds affirmative vote of all members of the council of a municipality in which the public work is undertaken".¹⁴

To summarize, then, it is clear that master plans have no definitive legal effect. The strongest requirement is that a municipality may be required to enact a zoning by-law that conforms to master plan policies. Zoning by-laws, however, may be amended. In addition, the zoning by-law is primarily a physical tool. This means that the social and economic objectives of policies contained in the plan have no real legal effect. By law, plans are to be comprehensive, but also, by law, the many parts which make up a master plan need only be regarded insofar as they are

relevant to or apply to the comprehensive zoning or land use by-law. Consequently, the zoning by-law, insofar as it is specially designed to regulate land use, is very limited in its ability to implement the social and economic aspects of any master plan. But even the ability of the zoning by-law to implement the physical aspects of a master plan is questionable.

As demonstrated in the following discussion regarding the legislatively prescribed development control and regulatory instruments, the comprehensive zoning by-law need not always be based upon or conform to master plan policies. In fact, the linkage between the master plan and the primary development control instrument is sometimes very weak.

3.6 The Master Plan and the Development Control System: The Alberta Example

The preceding review of the legislation relating to the master plan and its legal effect creates the impression that master plans are extremely important to the general operation of municipal planning in Canada. To strictly interpret the legislation in this manner would be to create a false impression. Master plans are but one part of a complex municipal planning process. They represent the initial phase of the planning process and are followed by the second phase - the development control process.

Various legislatively prescribed development control and regulatory mechanisms such as zoning by-laws, site plan controls, and subdivision plan approvals represent the action end of the planning process. It is this development control system which should - in theory at least - be related to the master plan and applied to implement its proposals. This

linkage between the master plan and the development control process is a good measure of a municipality's desire to achieve master plan objectives.

What is the relationship between the master plan and these various development control mechanisms? In a recent review of the operation of municipal planning in Ontario, The Planning Act Review Committee attempted to answer this question. Their findings were mixed: "It is true to say that the co-ordination of development control with plan policies varies in the province from strict adherence to complete relaxation".¹⁵ But, in general the committee found that the relationship between the master plan and development control is weak.¹⁶

The committee members reported a number of reasons for this weak linkage. They suggested that the plans were not understood by local government decision-makers and government departments outside the planning department; that master plan proposals were too vague to be of any help in the evaluation of development proposals; that plans were too futuristic, focusing mostly on long-term goals without specific attention to how the municipality is going to get there; that plans characteristically neglected to relate their policies to available financial resources; and that in the end, policy was made incrementally by the development control process.¹⁷

Furthermore, the committee found that the comprehensive zoning by-law was the main tool used for master plan implementation.¹⁸ But it was also emphasized that "such simplification hides the fact that policies may not exist or that a tough control process may be in pursuit of vague plans and unstated policies".¹⁹

Notwithstanding these findings, the theory of master planning has established that master plan policies should be formulated prior to the enactment of the zoning by-law. Once enacted, the master plan policies and programmes will - according to theory - be implemented on an incremental, day-to-day basis. The logic underlying this theory appears valid, but in actual practice it is extremely difficult to relate long-range, often general master plan policies to specific development control decisions. So, even if the development control system is carefully enforced by the development control authorities, it may be difficult for them to ensure that the decisions they are making do not contravene the general policies outlined in the master plan. But the problems are not simply related to the relative freedom of interpretation given to decision-makers. There is also a problem in the legislation itself. The following review of the Alberta legislation exemplifies the difficulties associated with the application of a zoning by-law to implement general master plan policies.

Under the Province of Alberta's legislation, as consolidated in The Planning Act, R.S.A. 1980, master plans are expected to play an integral role in municipal planning and land use regulation. The legislation has established the general municipal plan as the primary planning instrument to be used at the municipal level, but these plans have a very weak relationship to the land use by-law which is the primary development control instrument in Alberta. This weak relationship highlights the difficulties associated with plan implementation.

According to the legislation, all general municipal plans must conform to the regional plan in effect for their respective areas.²⁰

Likewise, any area structure plan or area redevelopment plan must conform to the general municipal plan. However, there is no statutory requirement that the land use by-law need conform to or be based upon the general municipal plan (see figure 3). The only legislative reference to the effect of a general municipal plan upon land use states that the development appeal board need only "comply with" a general municipal plan when considering appeal applications.²¹ The only other reference to the binding effect of a general municipal plan upon land use is the requirement that no approving authority is to approve land subdivision applications which do not conform to the general municipal plan.²² It appears, then, that the general municipal plan is only provided legal status over land use insofar as it applies to new land development; not redevelopment of the inner city, parks and recreation, transportation, municipal services, etcetera.²³

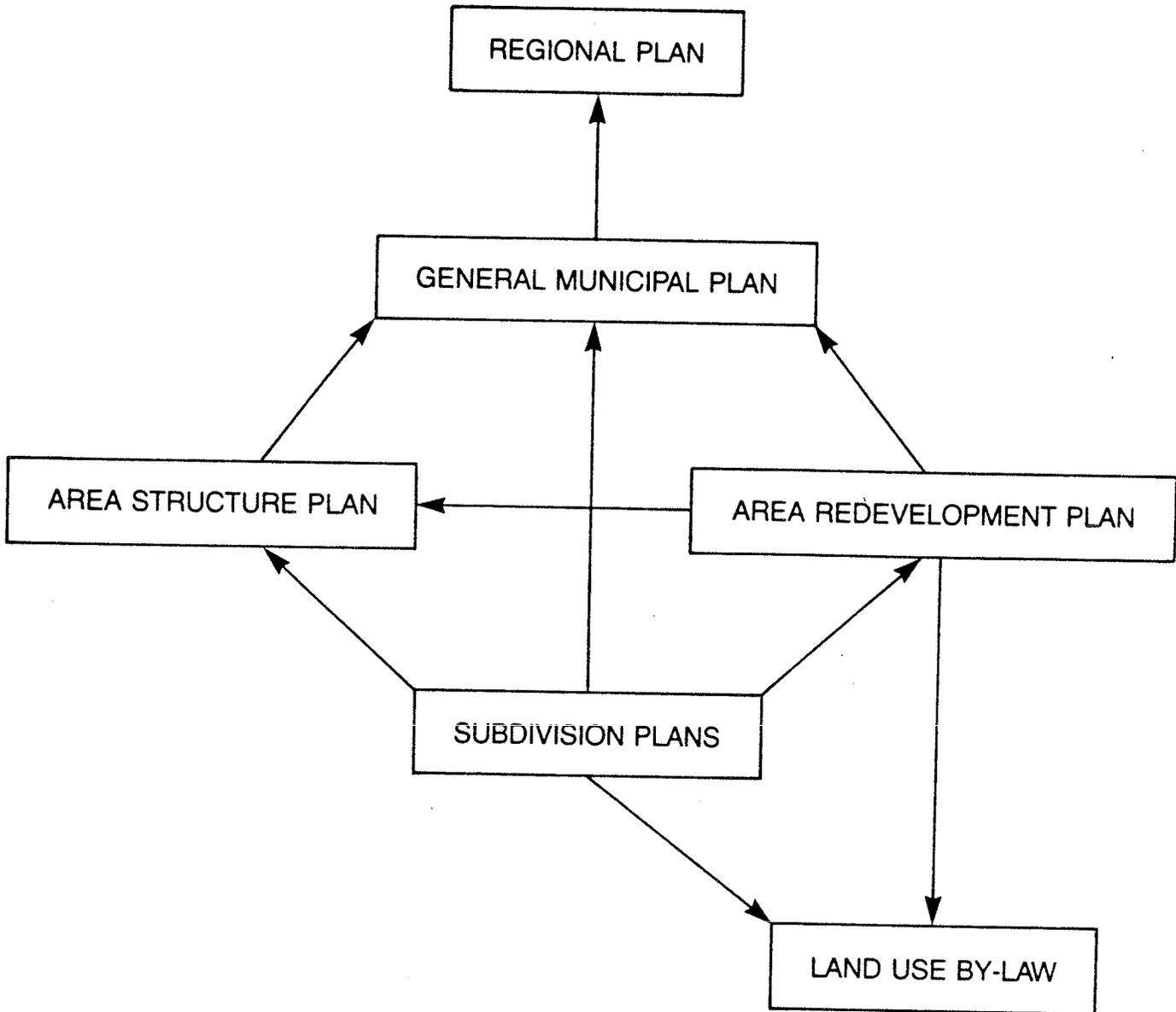
Given this situation, how is a general municipal plan to be implemented? The province may have developed an elaborate planning system based on a structured hierarchy of plans, but the land use by-law need not conform to a general municipal plan. F. A. Laux, a University of Alberta law professor, summarizes the anomaly:

What is the purpose of having a general municipal plan if a land use by-law need not conform to the plan? In other words if a municipality is entitled to prepare and adopt a general municipal plan and then proceed to ignore it in the planning document that really counts, the land use by-law, it is obvious that the whole purpose and intent of a general municipal plan would be defeated.²⁴

3.7 Non-Regulatory Implementation Techniques

Although the land use by-law is the most important legal tool available to implement master plans, it is not the only one. In addition

Figure 3 Relationship of the Master Plan to the Land Use By-Law in Alberta



Arrows indicate the conformity requirements of the different plans.

Source: City of Calgary Planning Department, Calgary General Municipal Plan, April 1981, Figure 4.1.1

to the regulatory techniques outlined in the legislation, there are important administrative and financial tools available for plan implementation. As noted by S. Willison et. al., it is the use of these additional methods of plan implementation which may be of critical importance to the successful realization of master plan policies:

Usually no single tool or method can "implement" a plan. The essence of implementation is the orchestration of a series of actions or the development of a strategy which, if carried out, will achieve desired objectives. The best results are likely to be achieved by some combination of two or more approaches because implementation is rarely a single purpose affair - which is usually the case in the pursuit of multifaceted environmental, economic, and social objectives.²⁵

There are a number of non-regulatory implementation techniques available to the planner. For the purpose of convenience they may be broken down into two broad categories: direct and indirect.

Indirectly, a planner or a planning department may exercise various skills in interpersonal and interorganizational persuasion and coordination to ensure that their plans are being actively considered and implemented. For example, he may organize community groups in order to ensure that political pressure is brought to bear on the political decision-makers. Or, on an interpersonal level, the planner may attempt to influence or persuade politicians and key government officials to act according to master plan policies.

On a more direct level, certain positive actions may be taken to implement master plan policies. These include the public acquisition of land and buildings; public construction and improvement of land, buildings, and infrastructure; and public subsidy such as rent subsidy or tax incentives to private development. But these direct methods of plan

implementation require political support. The decision to buy or sell land, to improve public property, or to provide tax incentives must necessarily come from within the political process. Since the use of these and other methods are not prescribed in the legislation they cannot be guaranteed. Consequently, the planner must rely on indirect implementation techniques. The elected representatives make the decisions with respect to land use control and regulation, including the social and economic implications thereof. They may or may not follow the advice of the planner: the legislation does not stipulate that the political decision-makers must act upon the planner's advice.

Since the political process is so important to the successful implementation of any master plan, one single question becomes of critical importance: How sensitive is this political process to the concerns and issues identified in the master plan? The answer to this question must be based upon an evaluation of the successes and/or failures of past master plans. Anything less is pure conjecture.

FOOTNOTES

1. Cam Harvey, An Introduction to Law and Local Government for University of Manitoba City Planning Students. (University of Manitoba: Faculty of Law, 1979), Vol. 1.
2. F. A. Laux, The Planning Act (Alberta). (Vancouver: Butterworth & Co., 1979), p. 1.
3. Cam Harvey, op.cit.
4. Statutes of Manitoba, An Act Relating to Planning and Regulating the Use and Development of Land for Building Purposes, 1916, c. 114, s. 1.
5. Statutes of Ontario, An Act Respecting Surveys and Plans of Land in or Near Urban Municipalities. 1917, c. 44.
6. Statutes of Alberta, Town Planning Act, 1913. Cited in Inter-Agency Planning Branch, Planning in Alberta: A Guide and Directory. (Edmonton: Alberta Municipal Affairs, 1980), p. 1.
7. Revised Statutes of Ontario, The Planning Act, 1980, c. 379.
8. Statutes of Manitoba, City of Winnipeg Act, 1971, c. 105.
9. Statutes of Alberta, The Planning Act, 1977, c. 89.
10. Statutes of Ontario, The Planning Act, 1946, c. 71, s. 1(g).
11. Statutes of Manitoba, City of Winnipeg Act, c. 105.
12. Statutes of Alberta, The Planning Act, 1963, s. 94(1).
13. Revised Statutes of Ontario, The Planning and Development Act, 1917, c. 236 s. 54(3).
14. Statutes of Ontario, The Planning Act, 1946, c. 71.
15. The Planning Act Review Committee, Operation of Municipal Planning. Background Paper #2. (Toronto: Ministry of Housing, Communications Branch, n.d.), p. 20.
16. Ibid., p. 14.
17. Ibid., pp. 14-29.
18. Ibid., p. 17.
19. Ibid., p. 20.
20. Revised Statutes of Alberta, The Planning Act, 1980, s. 53(3).

21. Ibid., s. 83(3).
22. Ibid., s. 88.
23. F. A. Laux, op.cit., p. 27.
24. Ibid., p. 28.
25. John S. Willson, et.al., Comprehensive Planning and the Environment: A Manual for Planners. (Cambridge: Abt Books, 1979), pp. 155-156.

CHAPTER FOUR

THE GOAL-ACHIEVEMENT EVALUATION MODEL

4.0 Introduction

Considering the fact that master plans have been such an important planning tool it is surprising to find the relative scarcity of empirical investigations and scholarly discourses into the subject of plan-evaluation. This lack of attention to questions relating to plan-evaluation is most likely due to the difficulties associated with the objective evaluation of comprehensive policy proposals which are intended to achieve varied physical, social, economic, and sometimes political objectives. Master plan evaluation can quite easily become a complicated and confusing endeavor.

Master plan evaluation is difficult because just as master plan goals are varied and complex, so too is the political process of plan-implementation. Neither master plan goals nor the political process lend themselves to easy simplification or categorization so important to the formation of systematic and objective evaluation models. Moreover, since the purposes of master plans are varied, a master plan may be judged successful by one set of criterion and unsuccessful when measured against another.

This chapter develops and explains the evaluation strategy which has been followed in this study. Master plan performance has been tested against one relatively simple criterion:

Implementation Record, or the relatively straightforward measure of goal-achievement. It is a measure of the degree to which stated plan policies have been followed, and various plan goals and objectives implemented.

Six specific plans have been selected for evaluation:

1. Master Plan for the City of Toronto and Environs (1943);
2. The Official Plan of the Metropolitan Toronto Planning Area (1959);
3. Metropolitan Plan-Greater Winnipeg (1948);
4. Metropolitan Winnipeg Development Plan (1968);
5. City of Calgary General Plan (1963), and;
6. The Calgary Plan (1970).

Since each of these plans have been prepared on the basis of a comprehensive study and analysis of the city, and since each of these plans recommend complex and varied policies, a model for evaluation is required for a systematic, objective evaluation.

The development of the evaluation model applied in this study has been preceded by a careful study of a number of important considerations. First, there was a review of past examples of plan-evaluation. Second, there was a brief analysis of the nature of stated master plan goals and objectives. Third, there was an analysis of the plan-preparation process. Fourth, there was a content analysis of each plan selected for evaluation to determine the most common policy components of a master plan.

4.1 Past Examples of Plan Evaluation

There has been a definite shortage of past research to help guide an evaluation of master plans. This is not to suggest that city planners have not developed evaluation techniques, just that they have yet to apply their evaluation methods and techniques to the study and analysis of comprehensive master plans. In terms of plan-evaluation, Nathaniel Lichfield, Morris Hill, and David Boyce et. al. have become leading

researchers in the evaluation of alternative plans to determine which of the many possible courses of action should be proposed in any given master plan.¹ But these models are of questionable applicability when attempting to evaluate the implementation record of master plans. They provide little in terms of establishing acceptable evaluation methods or performance criteria for the retrospective study and analysis of comprehensive master plans.

What this trend in the research suggests is that planners have channelled their energies into developing techniques for improving master plans without having first determined the successes and failures of their past efforts. This reluctance to develop and apply evaluation methods and techniques may be the result of many factors.

First, the planner's primary task is to create a viable master plan which will have a significant and positive impact upon the future growth and development of a city. A retrospective study of past master plans which have become dated and are no longer in force does little to address this primary task; master planning requires prospective thought, not retrospective study. Second, John Dakin has suggested that the demand for quantifiable facts made so popular by the logical positivist tradition of science, has discouraged the evaluation of planning practice which is characterized more by imponderables than quantifiable fact.² Third, since city planning is a relatively subjective activity, there appears to be no operational or consensual indicators of good planning.³ What all this tends to suggest is that the study and evaluation of master plans which have long since become dated is very much an academic exercise.

And it is clear that while the academic community has been quick to table countless theories and proposals to either improve upon or completely abandon the rational comprehensive planning paradigm, they have done so without having first evaluated the actual practice of master planning to see where its strengths and weaknesses really lie. It is one thing to criticize, and relatively simple to hypothesize, but quite another to base recommendations on valid and reliable research.

This is not to imply that master plans have not been the object of close scrutiny and determined evaluation, but rather to point out that the planning profession has not assumed a leading role in this evaluation. Master plans have been the object of constant public scrutiny. The editorial pages of most Canadian newspapers are the most common arena for public comment and evaluation, especially when controversial development and redevelopment issues become prominent. For example, in a recent controversy over Campeau Corporation's proposal for Scotia Plaza in Toronto, the inevitable controversy presented itself: the proposal contravened the official plan. Similarly, Cadillac Fairview's recent proposal to expand Polo Park shopping mall in Winnipeg contravened the containment policies established in Plan Winnipeg. For those who were against these developments, charges that official plans are "fragile and ephemeral" are "only as solid as the will of the people in charge of implementing it"⁴ come to dominate public opinion. It appears that the public has almost naturally evaluated master plans in terms of implementation record. And it is equally true that plans are most often the subject of evaluation when, a priori, it is already known that their policies have been contradicted by incremental political decisions which have rendered the plan useless and outdated.

Because of the inherently political nature of master plans, most deliberate attempts to evaluate master plans come from within the political science field.⁵ According to these investigations, effective planning most often means the official adoption of master plan policies as public policy. The predominate focus has centered around the policy-making process, and the success or failure of any given plan is determined only insofar as it has had a noticeable role (or lack of a role) in the decision-making process of local government. The underlying premise being that the acceptance of master plan policies is a prerequisite to effective planning. But as the public so readily points out, the two are not necessarily conterminous.

For the purpose of this study there are only two major works which offer some potential guidance when attempting to evaluate master plans from a retrospective analysis.

First, in W. G. Roeseler's major work, Successful American Urban Plans, master plans were evaluated according to their stated objectives and their actual achievements.⁶ Success or failure was determined "... by the simplistic yardstick of discernable attainment of goals".⁷ But this study was not a comprehensive evaluation; the author chose to test only one or two major components of the many master plans in his case study (i.e. transportation, urban renewal, land use, etc.), not the entire plan. Consequently, his ability to draw conclusions with respect to the entire master plan was extremely limited.

Furthermore, the author was highly selective in his selection of plans to be evaluated, with a definite bias for testing plans which could

positively demonstrate that master plans, or certain portions of them, can and have been effective in terms of their impact on the urban environment. As implied in the title itself, the study was not so much an objective evaluation of master planning practice, but a selective demonstration of 'Successful American Urban Plans'.

In terms of developing a model for the objective evaluation of master plans, one study is of particular value. Robert Fried's evaluation of post-World War II master planning in the city of Rome has identified some useful criteria and guidelines for plan-evaluation.⁸ Specifically, master plan performance was evaluated according to: 1. Planning Technique or Style; 2. Planning Power; 3. Planning Commitment; 4. Environmental Quality; 5. Goal Achievement; and 6. Time Costs. His description and analysis of these indicators merit lengthy quotation:

1. Planning Style. This criterion applies not to the results obtained but the methods used. It is assumed that the use of appropriate methods and procedures and techniques will lead to or constitute effective planning. If one is assessing comparative master planning, one looks at kinds of information that have been collected about trends, preferences, intentions; the diversity of perspectives brought to play; the sophistication of research and analysis. Some yardsticks of comprehensiveness might be used, measuring the range and diversity of perspectives, disciplines, and sectoral preferences incorporated into the plan or planning process. Have the goals and interests of a wide variety of groups, institutions, and departments been consulted and incorporated into the plan? Has the plan sought to achieve some consistency of purpose among major public and private operators in all major sectors? Have local expectations been fitted into the calculations and choices made by higher levels? Of course, these tests do not measure the impact of the techniques, procedures, or research; they measure the style of planning rather than its effectiveness; they measure an input rather than an output.

2. Planning Power. Another often used test of planning effectiveness focuses on the fate of planners, or rather of their proposals, in the policy-making process. Effective planning here means the successful initiation and vetoing of policy proposals by planners; the adoption of their advice as government policy; perhaps even the obedience of private and public operators to planner advice.

3. Planning Commitment. Another indicator of performance may be found in government budgets: we might measure planning effectiveness by examining the amount of money spent on planning in a given jurisdiction...Unfortunately, absolute and relative levels of spending on planning, or on any other public activity, are no certain indicators of performance quality.

4. Environmental Quality. One can attempt also to measure the quality of the urban environment as a means of testing planning effectiveness...If subjective estimates of environmental quality are used, it may be rather important whose estimates they are. There is accumulating evidence that environmental quality is perceived and assessed differently by different social groups. Perspectives and standards differ between social classes and between professional planners and laymen.

5. Goal Achievement. We might attempt to measure the effectiveness of ...planning by setting the achievements of planners against their stated goals. The goals of planners tend to be descriptive and prescriptive: descriptive (predictive) for those allowed to make their own decisions and prescriptive for those subject to collective choice. The effectiveness of planning can be tested by the degree to which the prescriptions of the plan are obeyed and the descriptions (predictive behaviors) become reality. Effective planning exists (1) when public and private sectors obey the ground rules laid down in the plan; (2) when they maintain the investment commitments contained in the plan; and (3) when using their discretion, they act in accordance with the plan's predictions. The measure of planning effectiveness by the goal achievement criterion is whether the rules are enforced and respected, investment commitments are kept, and predicted developments take place.

6. Time Costs. There is one other performance test to apply... and that is simply the ability to produce and adopt a master plan within a reasonable period of time. Planning effectiveness involves in the first instance the ability to arrive at some ongoing agreement, however provisional, however negative, as to what the future environment should be like and how and perhaps when it should become that way...Other things being equal, planning is more effective when plans are swiftly made and implemented than when it takes long years to arrive at agreement. The longer the wait, presumably, the more unwanted developments are permitted to occur and the more desired improvements may be held up.⁹

4.2 Goal Achievement: Was the Plan Implemented?

As stated at the outset of this thesis, there is a relatively simple criterion by which the performance of master plans may be judged: Was the

plan implemented? Is the vision of the future described some 20 years hence now a reality? This is a simple measure of goal achievement. Certain goals and objectives are put forward in every master plan and with these goals and objectives in mind a master plan concept for future development is prepared. Indeed, it seems most logical that the achievements of a master plan be evaluated with reference to its own stated goals and objectives.

If the goals have been achieved then it can be concluded that the plan has been a successful one; that it has been a practical and useful guide to decision-making. On the other hand, if few or none of the goals have been achieved then it can be concluded that the plan has not been successful; that it has had little influence on the decision-making process of local government.

But since master plans are comprehensive documents which often outline relatively general, sometimes confusing and ambiguous objectives and policy guidelines, master plan evaluation is not nearly as straightforward as the relative simplicity of this criterion may imply. More often than not there are no unequivocal rules or predictions, and no clearly stated goals by which achievement may be measured. In addition, master plan goals and objectives are not always stated in physical terms which may be objectively evaluated. Many master plan goals and objectives are expressed in qualitative social and economic terms which can only be evaluated subjectively. As Robert Fried so rightly emphasized in his study and evaluation of Roman master planning:

Planning effectiveness can also legitimately be assessed in terms of latent goal achievement because planning serves, or has served in Rome, a variety of ulterior purposes. Planning has been used to create and destroy private fortunes, help the

poor, demonstrate fidelity to tradition, win personal or party credit, capture attention and prestige for planners, build and disrupt political alliances, affirm an ideology, win factional contests, apply professional doctrine, and engage in pseudo-or symbolic action. Latent planning goals may be more important to many actors than manifest goals, but if it is difficult to measure manifest goal achievement,¹⁰ it is next to impossible to measure latent goal achievement.

By definition, an objective evaluation must necessarily eliminate subjective or normative judgements. But since all master plans include subjective, non-quantifiable objectives with respect to environmental, social, and economic factors, a perfectly objective inquiry would constitute only a partial evaluation of master planning practice.

To a certain extent, however, these subjective and qualitative elements of a master plan can be objectively evaluated. To illustrate, because of the predominantly physical nature of the legislatively prescribed implementation techniques, the master planner's primary task is to translate these qualitative social, economic, and environmental objectives into policies relating to the physical development of a city. And, indeed, city planning's eventual acceptance of the rational comprehensive planning model was predicated on the belief that such objectives could be translated into physical objectives. For example, if a major social goal of a master plan is to eliminate poverty and substandard housing conditions then the planner must first study poverty and its impact on substandard housing accomodation with an eye toward expressing this goal in terms of physical, readily quantifiable objectives which may be expressed in the form of housing policies or programs, municipal government subsidies, building codes, open space requirements, etc.. If a major goal is to reduce the social and economic deterioration of a central

business district or particular community, then that objective must be expressed in terms of zoning or land use by-laws, transportation or parking plans, tax incentives and subsidy programs, or urban renewal projects, etc..

The point is that no matter what these relatively subjective goals may be, they are all somewhat interrelated and, one way or another, are directly or indirectly tied to and influenced by the physical characteristics of a city. That is why most planners have supported the rational comprehensive planning model. They maintain that all these social and economic factors are related to urban development and the physical structure of a city and, ipso facto, can be influenced by physical development policies. Therefore, if the comprehensive planner's major task is to translate social and economic objectives into policies respecting the physical development of a city, it can be suggested that if the physical policies which have evolved out of this process have been achieved, so too have the social and economic objectives, insofar as physical development directly or indirectly effects social and economic conditions. So even if master plan goals and objectives are stated in relatively subjective or latent terms, conclusions regarding goal achievement may be made on the basis of an evaluation of the physical, the readily quantifiable, and hence testable, goals.

But even if a goal achievement evaluation strategy is to avoid subjective or normative evaluations, this does not necessarily make the task of evaluation a simple procedure. Master plans are comprehensive documents containing countless policies with respect to the physical development of a city. There are design standards, transportation plans, zoning plans

housing policies and plans, and plans for the delivery of municipal government services, to name a few. There is also considerable variation between master plans. Some are more comprehensive than others, some are detailed and specific in their policy proposals, while others are general and vague, some include detailed financial and cost estimates while others do not, some develop detailed implementation strategies while others ignore it completely, and some are official while others are only advisory in status. Clearly, then, a detailed evaluation of a number of master plans from a variety of different cities would be an extremely complex, perhaps impossible task.

It is therefore most important to develop a model for evaluation which can simplify this complexity and reduce the task to more manageable proportions, without necessarily compromising or limiting the possibility for drawing valid conclusions with respect to the success of the entire master plan. An analysis of the plan-preparation process, together with an identification of the most important elements common to most master plans can provide the framework for developing a model which will achieve this end.

4.3 The Plan-Preparation Process: Description, Prediction and Prescription

According to the description of master planning theory as outlined in Chapter Two, the plan-preparation process can be broken down into a number of specific but mutually interdependent phases. For example, Goodman and Freund's schematic representation of the various elements which make up a master plan (Figure one, Chapter Two) highlights three phases in the process of plan-preparation: 1. Introduction (background

studies, surveys of existing social, economic, and physical conditions, etc.); 2. Basic predictions and general physical plan (derived from the analysis and extrapolation of various facts and trends, and based on both value and professional judgements), and; 3. Detailed development studies (plans for specific functional elements relating to the basic predictions and the general physical design concept). A simplified representation of this process is shown in figure 4.

This simplified model identifies three major phases of plan-preparation which correspond to the three phases outlined in figure 4: Description, Prediction, and Prescription.

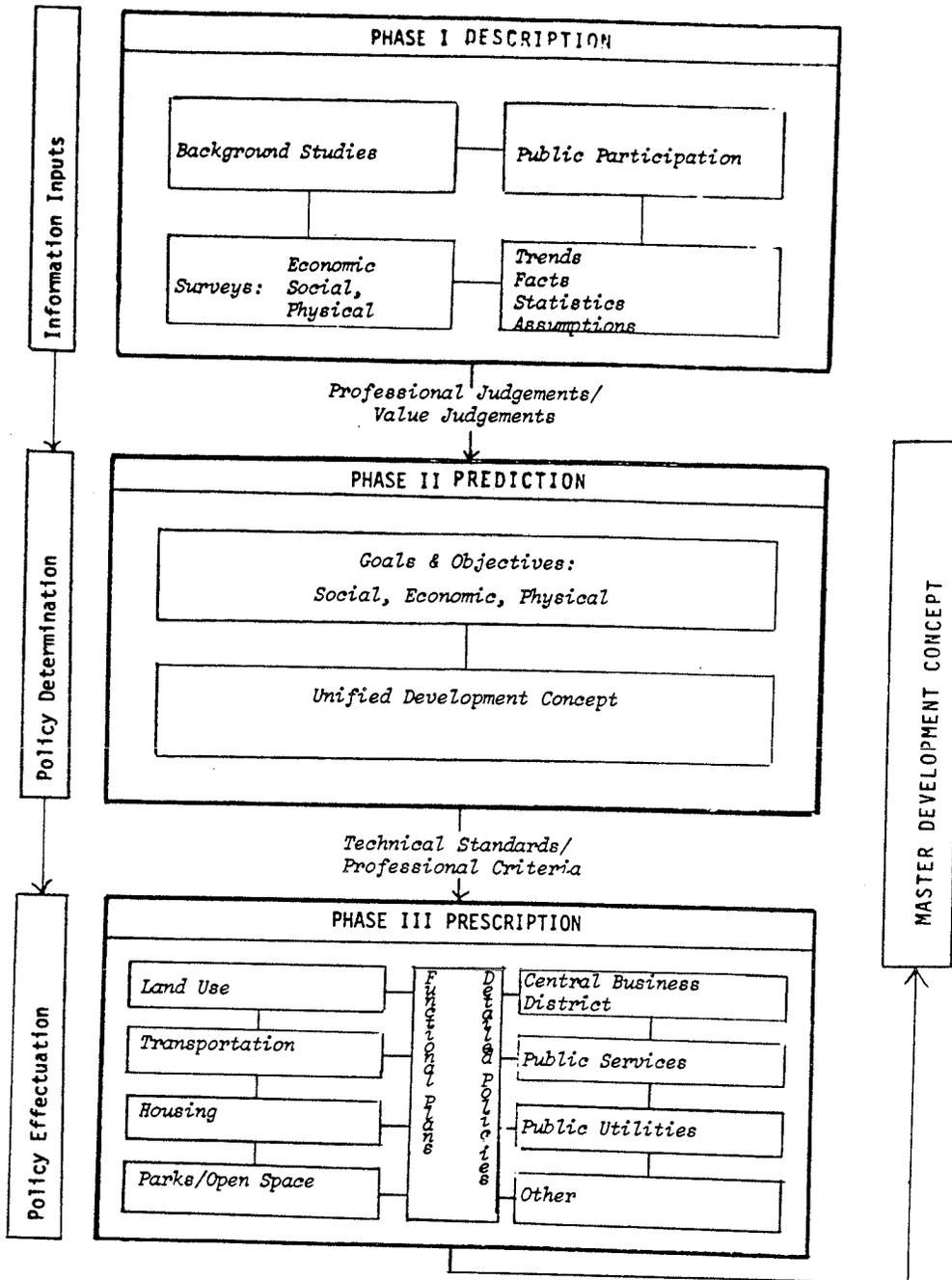
Phase I: Description

The first phase of plan-preparation may be called the descriptive phase. It describes existing physical, social, economic and political conditions. It is based on a variety of information inputs including background studies and reports; surveys of social, economic, and physical conditions; public input; the collection of various facts, trends and statistics; and the articulation of certain assumptions and professional principles.

Phase II: Prediction

On the basis of the information gathered in the descriptive phase, the planner begins to develop a number of forecasts and predictions. Once various predictions have been made, the planner begins to prepare a unified statement of goals and objectives which, beyond the strict interpretation and/or extrapolation of the inputs gathered in the descriptive phase, is based on both value and professional judgements with respect to the

Figure 4 The Plan-Preparation Process



planning and development of the city. This unified statement of goals is eventually translated into physical development objectives in the form of an overall development concept. The phase is predictive: various goals and objectives are determined from the study and interpretation of information inputs, and the physical design concept needed to achieve these objectives is described in general terms.

Phase III: Prescription

Once the generalized development concept has been determined, the plan-preparation process moves to the prescriptive phase. Each functional element of potential importance to the conceptual plan is studied and analyzed, and a detailed plan of each functional element is prepared. If the general development concept is to be realized these plans must conform with the generalized physical development concept identified in the predictive phase. They must be designed to accommodate the needs and demands identified in the descriptive phase. The phase is prescriptive; it should identify specific and detailed policies or plans needed to fulfill the goals and achieve the ends identified in the descriptive and predictive phases. When each functional plan is brought together the comprehensive master plan document is prepared for approval and official adoption as the official policy commitment of a municipal or metropolitan government.

Although the plan-preparation process may be conveniently broken down in the manner described above, it is most important to stress that plan-making is a process and that each of the phases are mutually interdependent. If the functional elements of the plan are inconsistent with the general scheme identified in the predictive phase, the comprehensive master plan will not be completely realized. Or, if the plans of each

functional element are consistent with the general concept but are not implemented the general concept will be compromised and, therefore, not realized in its entirety. Similarly, if the assumptions and forecasts upon which the general concept was based do not come to pass it may be impossible to realize the general concept. It is this interdependence between the descriptive, predictive, and prescriptive phases of plan-preparation which carry a number of implications for plan-evaluation.

First, it is not necessary that the descriptive aspects of a master plan be objectively evaluated. By their general, subjective, and highly qualitative nature they cannot be objectively evaluated. But this is not to say that one cannot draw conclusions with respect to the success or failure in realizing that overall concept. If the analyses undertaken in the predictive phase were accurate and if the functional plans in the prescriptive phase were implemented, then it is reasonable to suggest that the general concept was also realized. Second, since the general concept was guided by a number of physical, social, and economic goals it can also be concluded that these goals have been substantially or at least partially realized.

To put it another way, a model for the evaluation of master plans can be developed in a manner which will highlight the elements in a master plan which can be objectively evaluated. Predictions and forecasts can be objectively evaluated; functional plans for transportation, land use, public services, etc., can also be evaluated; and conclusions respecting the realization of the descriptive goals and objectives may be drawn on the basis of the evaluation of the predictive and the prescriptive.

But this simplification does not necessarily make plan-evaluation a relatively straightforward task. A model for evaluation may be appropriate for one plan but not another: not all plans are based on the same predictions, nor do they include the same types of functional plans. Before a standard model for evaluation can be developed the most important predictive and prescriptive elements which are common to all or most master plans must be identified. One can conclude that it is the elements common to most master plans which are most important, they form the substance of a master plan, regardless of the unique circumstances surrounding the planning and development of any given city.

4.4 The Primary Elements of a Master Plan

What are the primary elements of a master plan? In order to answer this question each of the six master plans selected for evaluation in this study were individually analyzed to determine the most common predictive and prescriptive elements which make up a master plan.

The results of the analyses were correlated into what may be called a frequency distribution of the type of predictions and forecasts, and the types of functional proposals and plans common to the six master plans selected for evaluation. Each of these predictions and functional plans were categorized in qualitative terms. To be more specific, each prediction and functional plan which appeared in the master plan were categorized according to the detail of the projection or the specificity of the policy proposal or functional plan.

To illustrate, if a plan prediction was arrived at on the basis of a detailed study and analysis it was given an 'A' classification. If the

prediction was simply a subjective estimate which did not appear to be based on a detailed study and analysis it was given a 'B' classification. Similarly, if functional plans consisted of detailed and specific policy proposals, or if it consisted of generalized policy statements with no detailed policy or plan it was given an 'A' or 'B' classification, respectively. If a prediction or plan was not dealt with in the master plan it was given an 'X' classification. The results of this analysis are presented in Table 2.

By correlating the results of each individual plan analysis, those predictions and those functional plans which are most commonly presented in a master plan can be identified. Before any predictive or prescriptive functional element in a master plan was identified as a primary element at least two-thirds or four of the six plans selected for evaluation would have had to have dealt with the issue in detail with specific policy proposals or plans, or in general detail with predictions, policies, or plans described in general terms. A summary of the results of this analysis is presented in Table 3.

The primary elements of a master plan have been grouped into seven distinct categories. Population forecasts are the most common predictive element in the six master plans selected for evaluation. In terms of prescriptive functional plans, six specific categories have been identified as a primary element of a master plan: 1. Land Use, 2. Transportation, 3. Public Services and Institutions, 4. Public Utilities, 5. Parks and Open Space, and 6. A plan for the Central Business District.

Under each of these subject categories a number of distinct but interdependent components have been identified. It is these components

Table 2 The Primary Elements of a Master Plan

A. DESCRIPTIVE						
GENERAL GOALS & OBJECTIVES						
MAJOR POLICY PROPOSALS						
PHYSICAL DEVELOPMENT & DESIGN CONCEPT						
B. PREDICTIVE (INPUTS)						
	PLAN CODE ¹	T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
A. POPULATION PROJECTIONS						
1. Growth	B ²	A	B	A	A	A
2. Composition	X	A	X	X	X	X
3. Distribution	X	A	X	A	X	X
4. Density	X	A	X	X	X	X
B. ECONOMIC/EMPLOYMENT						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Growth	X	A	X	A	X	A
2. Composition	X	A	X	X	X	A
3. Distribution	X	A	X	X	X	B
C. HOUSING						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Market Demand/Supply	X	A	X	X	X	A
2. Composition	X	A	X	X	X	A
3. Distribution	X	A	X	X	X	B
D. PUBLIC SERVICES/INSTITUTIONS						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Education/Schools	X	A	B	X	X	A
2. Health/Hospitals	B	X	X	B	B	A
3. Other (Police, Libraries)	X	X	X	X	B	B
E. FINANCIAL/ADMINISTRATIVE						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Revenue	X	A	X	X	X	A
2. Expenditures	X	X	X	X	X	A
C. PRESCRIPTIVE (FUNCTIONAL PLANS/POLICIES)						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
A. LAND USE PLAN						
1. Industrial		A	A	B	A	A
2. Residential		A	A	B	A	A
3. Retail/Commercial		X	A	B	A	B
B. TRANSPORTATION PLAN						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Major Thoroughfares		A	A	A	A	A
2. Parking		X	X	B	B	X
3. Public Transit		B	A	A	B	X
4. Rail		X	B	A	B	X
5. Air		X	B	B	B	B
6. Water		X	B	X	X	X
C. HOUSING PLAN						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Private Sector		X	A	B	X	X
2. Public Sector		B	A	B	X	X
D. PUBLIC SERVICES/INSTITUTIONS						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Education/Schools		A	A	A	B	X
2. Health/Hospitals		B	X	X	B	B
3. Police		X	X	X	X	A
4. Fire		X	X	X	X	B
5. Libraries		X	X	B	X	A
E. PUBLIC UTILITIES						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Water Supply		X	B	X	A	A
2. Waste Disposal		X	A	X	A	A
3. Storm Water/Flood Control		X	B	X	A	A
F. PARKS AND OPEN SPACE						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Physical Plan		A	A	A	A	A
G. ADMINISTRATIVE/FINANCIAL						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Capital Budget		X	B	X	X	B
H. CENTRAL BUSINESS DISTRICT						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Physical Plan		A	X	A	A	X
I. OTHER						
		T ₁	T ₂	W ₁	W ₂	C ₁ C ₂
1. Neighbourhood Standards		X	X	A	X	X
2. Design Standards/Criteria		X	X	A	B	X
3. Urban Renewal		B	X	X	A	X
4. Future Planning Tasks		X	B	X	A	X
5. Flood Plains		X	X	B	A	X

¹ T₁- Master Plan for the City of Toronto and Environs (1943)
T₂- Official Plan of the Metropolitan Toronto Planning Area (1959)
W₁- Metropolitan Plan-Greater Winnipeg (1948)
W₂- Metropolitan Winnipeg Development Plan (1968)
C₁- City of Calgary General Plan (1963)
C₂ The Calgary Plan (1970)

² A- Detailed Projections, Proposals or Plan
B- General Projections, Proposals or Goal Statements
X- No Projections, Proposals or Plan

Table 3 The Primary Elements of a Master Plan:
Summary of Analysis

PREDICTIVE

- I. Population Projection
 - a. Growth

PRESCRIPTIVE

- | | |
|--|--|
| II. Land Use <ul style="list-style-type: none">a. Industrialb. Retail/Commericalc. Residential | V. Public Utilities <ul style="list-style-type: none">a. Water Supplyb. Waste Disposalc. Storm Water/Flood Control |
| III. Transportation <ul style="list-style-type: none">a. Major Thoroughfaresb. Public Transitc. Air* | VI. Parks and Open Space <ul style="list-style-type: none">a. General Development Policies/
Physical Plan |
| IV. Public Services/Institutions <ul style="list-style-type: none">a. Education/Schoolsb. Health/Hospitals | VII. Central Business District <ul style="list-style-type: none">a. General Development Policies/
Physical Plan |

*Air transportation will not be reviewed in this study. Although five of the six plans investigated did make some reference to airports or to air transportation they did so in very general terms. The expressed concerns typically related to noise pollution, not to policy guidelines or specific plans for airports. Under the British North America Act, 1867, policies respecting air transportation and airport planning fall under the exclusive jurisdiction of the Federal Government of Canada.

which comprise the complete development strategy or policy commitment of each functional plan. To illustrate, the land use proposal or plan has been consistently broken down into three components: Industrial, Retail/Commercial, and Residential. Each of these components have been evaluated in this study.

It is these subject categories and their components which are considered to be the primary elements of a master plan. To be sure, each master plan does vary in the types of proposals presented, but it is these primary elements which are considered to be the most important; they constitute the substance of a master plan. Since it is these categories which are the most important elements of a master plan, a workable model specifically designed to focus on these primary elements has been developed. From the evaluation of each primary element, valid conclusions respecting the success or failure of the entire master plan may be drawn.

Before discussing the model to be applied in this investigation a brief interpretation of the primary elements of a master plan (as summarized in Table 3) is in order. First, and most notably, projections respecting population growth have been the only consistently used predictive indicator. There may be projections respecting employment growth, housing demand, or the need for additional public services and institutions, but this has not been the case for the majority of plans investigated. Second, it is clear that master planners have developed a relatively solid consensus with respect to the types of functional elements which should be included in a master plan. It is interesting to note that the consensus has been almost exclusively centered around physical development issues, not social or economic ones.

4.5 The Goal-Achievement Evaluation Model

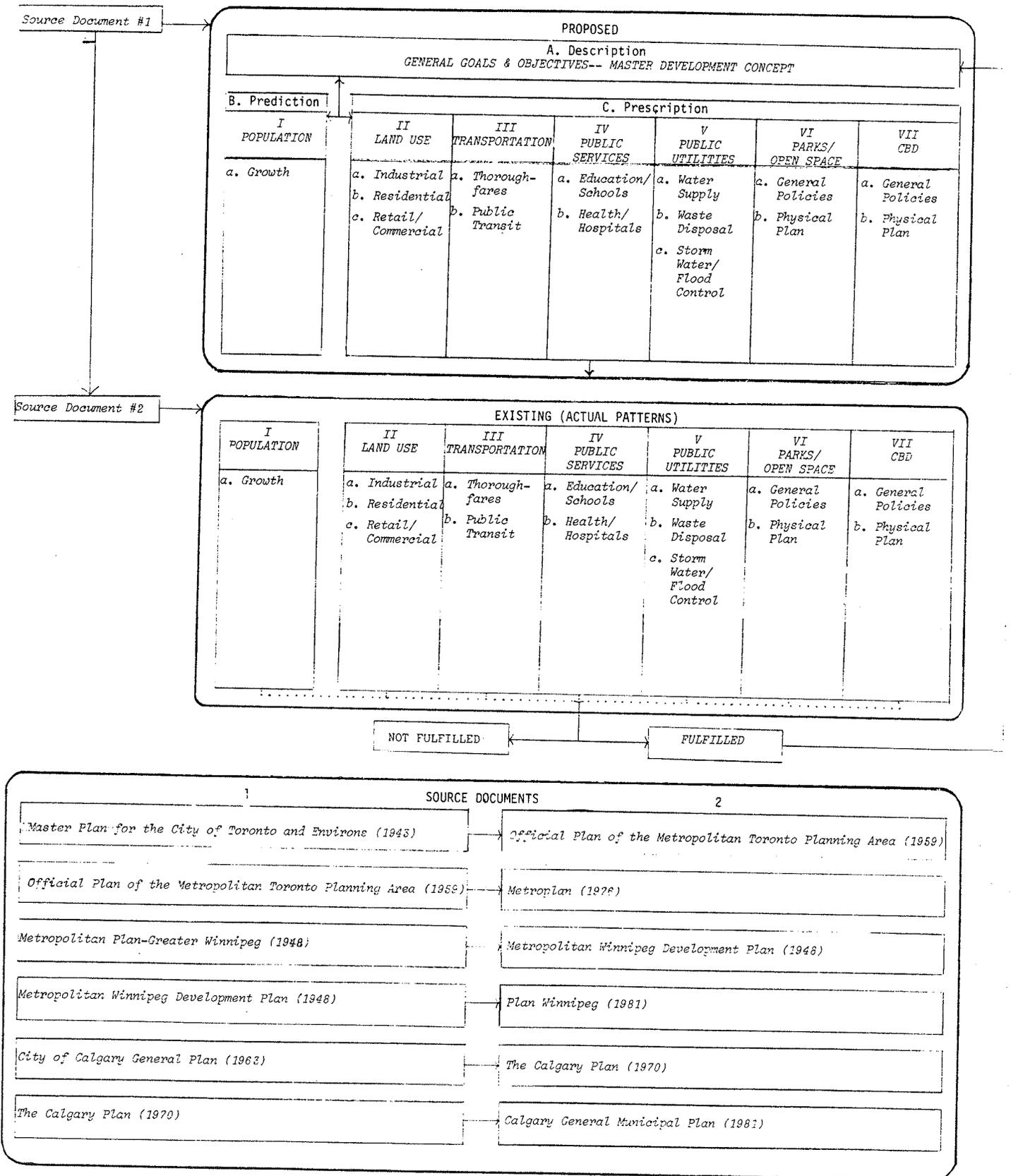
The schematic representation of the plan-preparation process (Figure 4), together with the identification of the primary elements which constitute the substance of a master plan (Table 3) have formed the basis for the development of the goal-achievement evaluation strategy. Figure 5 presents a schematic representation of the evaluation process, the specific master plan components to be evaluated, and the primary source documents to be used in the evaluation.

To be more specific, each primary predictive and prescriptive element of the master plan has been evaluated against its own predictions or its own policies or plans. For example, the accuracy of population projections have been tested. This has been a relatively simple matter of testing the forecast identified in the plan against actual population statistics.

The evaluation of the primary prescriptive elements of a plan is somewhat more complicated. The general policy proposals or specific plans have been identified and the proposals or the plans have been evaluated against what has occurred in fact. To illustrate, the transportation policies or the transportation plans have been tested against what has actually occurred. Similarly, the proposed land use policies or plans have been evaluated against the land use which has actually occurred.

To determine existing conditions or the conditions existing at the end of the master plan's time horizon, subsequent master plans have provided the information base. To illustrate, as outlined in Figure 5, two master plans which have been prepared for the Winnipeg metropolitan

Figure 5 The Goal-Achievement Evaluation Model:
Process, Components and Source Documents



area have been chosen for evaluation. The Metropolitan Plan-Greater Winnipeg (1948) has been tested against the conditions existing in 1968, as identified in the Metropolitan Winnipeg Development Plan of 1968. In a similar manner the implementation of the Metropolitan Winnipeg Development Plan (1968) has been tested against the conditions existing in 1980, as described in Plan Winnipeg.

It should be repeated that the criterion for determining the success or failure of the six master plans selected for evaluation has been the relatively simple measure of implementation record. If the evaluation of the plan demonstrated that master plan policies and objectives have been followed and implemented then it can only be concluded that the plan has been a successful one; that the general goals and objectives and the master development concept has been substantially achieved. If, on the other hand, plan policies have not been followed and if the proposals or plans have not been implemented then it can only be concluded that the master plan has not achieved its goals and that it has been an unsuccessful instrument for directing urban growth and development.

But to what extent need a certain policy or plan be implemented to be considered successful? To actually determine the extent or degree to which a primary plan proposal has been implemented is a rather complicated process: population projections will never be precisely accurate, and it is equally unlikely that each functional plan element will be implemented in its entirety. Master plans do not claim to be an exact prediction of what will be, nor are they intended to be an unequivocal prescription of what shall be. Rather, it is an image of what is likely to be if the public and the private sectors use the plan as a frame of reference

to guide their individual and collective actions.¹⁰ There is a certain flexibility built into each master plan.

Consequently, this question of implementation record is necessarily a question of degree or extent to which the master plan has been followed and acted upon; it cannot be evaluated in simple 'yes' or 'no' terms. For the purpose of this study, implementation record has been measured in percentage terms. For example, the evaluation of each primary plan element and its components have been measured in terms of the extent to which the policies or plans have been successfully followed and implemented. Conclusions respecting implementation record are summarized in percentage terms: 0%, 25%, 50%, 75%, or 100%.

4.6 Summary and Conclusions

To summarize, the comprehensive master plan is a complex document which does not easily lend itself to objective evaluation. The problems associated with objective evaluation are further enhanced by the fact that the planning profession has yet to establish accepted criterion, procedures, or guidelines for the evaluation of master plans.

The identification of these evaluation problems, however, does not suggest that master plans cannot be evaluated. Quite to the contrary, a detailed content analysis of the six master plans selected for evaluation in this study demonstrates that there are a number of specific subject areas common to most master plans. It is these primary elements of a master plan which are most important and do therefore merit the careful attention of any evaluation strategy.

It is also evident that there is no single criterion by which master plan performance should be measured. The measure of implementation record or goal achievement is nevertheless one of the most easily measured and potentially useful criterion although the study of implementation record necessarily demands a retrospective study of master planning practice, its findings may be of particular value to the contemporary master planner: it may reveal certain patterns or trends, suggesting where master plans have been most successful, and identifying those general areas which demand the planners' more careful study and attention in the future.

If there is any one drawback associated with the goal achievement criterion, it is the difficulty of evaluating different policies or objectives by the same criterion. For example, a plan may include very detailed and extensive policy guidelines and proposals, whereas another may be very general and vague in its policy proposals. For the very detailed and extensive plan the standard for evaluation is considerably greater than the standard applied to a very general plan. To illustrate, a plan that has made few detailed and extensive proposals will be judged successful, even though it has had little impact upon the city, whereas a very detailed plan may be judged unsuccessful, even though it has had noticeable influence upon the city. What this tends to suggest is that a fair evaluation must necessarily require some subjective estimates of success or failure. It is therefore emphasized that while there has been every attempt to preserve the objectivity of the following evaluation, some of the estimates of goal achievement do demand subjective appraisals of success or failure.

FOOTNOTES

1. See, for example, Nathaniel Lichfield, "Evaluation Methodology of Urban and Regional Plans: A Review", Regional Studies, Vol. 4, 1970, pp. 151-157; Nathaniel Lichfield and Peter Kettle, Hypothesis and Aims of the Research Project and Method of Study. Planning Methodology Research Unit, Working Paper No. 1, School of Environmental Studies, University College London, 1972; David Boyce, et.al., Metropolitan Plan-Making: An Analysis of Experience with the Preparation and Evaluation of Alternative Land Use and Transportation Plans. (Philadelphia: Regional Science Research Institute, 1970); and Morris Hill, "A Goals Achievement Matrix for Evaluating Alternative Plans", JAIP, January, 1968, pp. 19-29.
2. John Dakin, "The Evaluation of Plans: A Study of Metropolitan Planning in Toronto", Town Planning Review. Vol. 44, No. 1, 1973, p. 3.
3. Robert Fried, Planning the Eternal City: Roman Politics and Planning Since World War II. (New Haven: Yale University Press, 1973), p. 3.
4. Editorial, "The Price of a City Plan", Winnipeg Free Press, November 27, 1984, p. 6.
5. There have been many books and articles which have discussed municipal government politics with some emphasis on city planning. See, for example, Meyer Brownstone and T. J. Plunkett, Metropolitan Winnipeg: Politics and Reform of Local Government. (Berkeley: University of California Press, 1983); Harold Kaplan, Reform, Planning and City Politics: Montreal, Winnipeg, Toronto. (Toronto: University of Toronto Press, 1982); and Albert Rose, Governing Metropolitan Toronto: A Social and Political Analysis, 1953-1971. (Berkeley: University of California Press, 1972).
6. W. G. Roeseler, Successful American Urban Plans. (Lexington: Lexington Books, 1982).
7. Ibid. p. xix.
8. Robert Fried, op.cit. esp. Chapter One.
9. Ibid., pp. 4-9.
10. Metropolitan Toronto Planning Board, The Official Plan of the Metropolitan Toronto Planning Area. Toronto, 1959, p. I.

CHAPTER FIVE

EVALUATION OF THE MASTER PLANNING EXPERIENCE IN TORONTO

5.0 Introduction

This chapter forms the evaluation of the master planning experience in the City of Toronto and the Metropolitan Toronto Planning Area. Two plans have been evaluated: Master Plan for the City of Toronto and Environs (1943), and the Official Plan of the Metropolitan Toronto Planning Area (1959). The first was prepared by the City of Toronto Planning Board (CTPB) and was intended to be in effect for a thirty year period. The second was prepared by the Metropolitan Toronto Planning Board (MTPB), and was intended to be in effect for a twenty year period.

As described in the preceding chapter, the implementation record of the CTPB's plan has been determined by testing the policy proposals and functional plans contained in the master plan against the conditions existing in 1959, as described in the Official Plan of the Metropolitan Toronto Planning Area (1959), and the conditions existing in 1976, as described in Metroplan (1976).¹ The implementation record of the Official Plan of the Metropolitan Toronto Planning Area (1959) has been determined by testing the policy proposals and functional plans of the master plan against the conditions existing in 1976, as identified in Metroplan (1976).

The results of each evaluation have been summarized in general terms. The specific details of the evaluations have been appended.

5.1 Master Plan for the City of Toronto and Environs (1943)

The CTPB submitted the Master Plan for the City of Toronto and Environs to the City of Toronto Council for official approval on

December 31, 1943.² The plan did not receive formal recognition as the official plan but was instead recognized as an 'unofficial' statement of City policy.

The plan was intended to exert an influence over an area well beyond the legal boundaries of the City of Toronto. As stated by the CTPB:

At the outset, the Board perceived that the political boundaries of the City bear no relation to the social and economic life of its people. Since in a planning sense political boundaries have no significance, the Master Plan, of necessity, applies to and encompasses the whole of the future built up area, of which Toronto is the centre and the most important part.³

As a response to the growing number and intensity of urban problems in the City of Toronto and its region, the Master Plan was generally intended to eliminate the negative effects of unplanned and haphazard building by private enterprise, and to eliminate the confusion resulting from over 800 by-laws and thousands of amendments.⁴

The CTPB described the City of Toronto and its region as haphazard in form and structure, aesthetically unattractive, and congested.⁵ As the one conscious attempt to eliminate these problems, the Board emphasized that the plan should be regarded as an "important undertaking" which was designed to investigate "...the crisis created by the necessity of building a modern city on the framework of the old pre-machine age town", and "to coordinate the physical development of the Metropolitan Area as one geographic, economic and social unit".⁶

The CTPB was concerned with the failures of previous plans, and emphasized the importance of plan implementation:

Toronto has planned before, but as the enthusiasm that led to the plans died away, the plans themselves have been pigeonholed as impractical dreams, and never have its people displayed the tenacity of purpose to look upon planning for what it undoubtedly is - the most valuable tool in civic development. Now, after a lapse of years, another start is made, but with infinitely greater difficulty due to the accumulated neglect of intervening years.

If the decay which is eating at the heart of the City is to be stopped; if the City is not to be strangled by its own traffic; if children are to have safe places in which to play; and if citizens are to live in convenient and congenial surroundings, planning must be made a continuing function of civic government, under a partnership of all the municipalities in the Metropolitan Area. Co-operation is of the most vital importance and urgency, for the future holds the choice of order or chaos.⁷

5.1.1 The General Development Concept

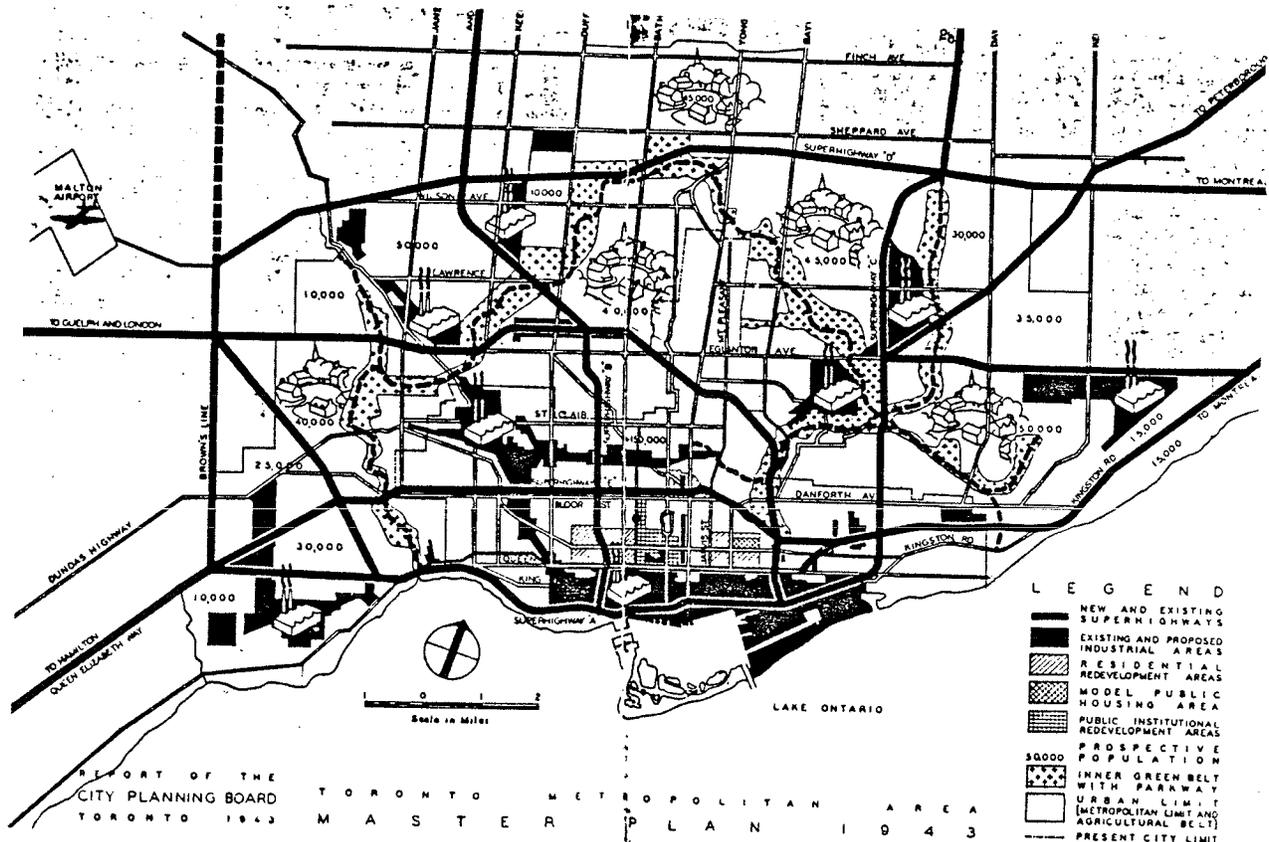
The primary plan proposal was to create a decentralized pattern of urban development (Map 1). Future urban growth and development was to be directed to the vacant land of suburban and fringe municipalities, with an incidental increase in development intensity within the City of Toronto boundaries.

This proposal for the general development of the planning area was based on the CTPB's estimation that the Metropolitan Toronto population would increase from 900,000 persons in 1943 to between 1.25 and 1.50 million persons by 1974. In order to accommodate this growth, plan policies were designed to direct new development to the vacant land of suburbs adjacent to the City of Toronto, but to maintain the City of Toronto as the central business district within the Metropolitan Area.

In support of this decentralized pattern of urban development the CTPB proposed to develop a complex network of 'superhighways' from which any part of the Metropolitan Area would be easily accessible. Public

transit facilities such as subways and at-grade rapid transit lines were to radiate from the City of Toronto to the fringe municipalities. There was to be a general improvement of the City of Toronto's central business district with a concentration of major public service institutions and retail/commercial facilities in downtown Toronto (see Table 4 for a summary of the plan proposals).

Map 1 Master Plan for the City of Toronto and Environs:
General Development Concept



5.1.2 Implementation Record: Evaluation Summary

Table 4 summarizes the major plan policies and the results of the goal-achievement evaluation. For specific details of the plan proposals and their evaluation, the reader is directed to Appendix B.

As proposed, the general pattern of urban growth and development in the Metropolitan Toronto Area has followed a decentralized pattern. Residential and industrial growth has occurred in the suburban and fringe municipalities, with a considerable increase in development intensity within the City of Toronto.

Although the general development concept proposed in the plan appears to have been carefully followed and implemented, it is very unlikely that this has been the result of the Master Plan. Only a few of the specific policy proposals and functional plans were implemented. Population growth in the Metropolitan Area was twice as great as anticipated. Residential and industrial development was more extensive than expected, and was not confined to the specific areas designated in the Master Plan. Residential development, for example, occurred at twice the proposed density. Transportation policies were also unsuccessful. Only fifty percent of the specific proposals for major thoroughfares were implemented as proposed, while only one proposal for public transit was implemented. The most notable plan successes occurred within the City of Toronto, where detailed proposals for the central business district were very carefully followed. Proposals for the development of the parks and open space system and for the development of public service institutions within downtown Toronto were also implemented.

Table 4 Master Plan for the City of Toronto and Environs (1943): Evaluation Summary

EVALUATION CATEGORIES	DE-TAIL	POLICY/ PLAN	IMPLEMENTATION RECORD	%
I. POPULATION GROWTH	B	1974 population to range between 1.25 and 1.50 million persons, a maximum increase of 600,000 persons.	1971 population was 2.09 million persons, an increase of 1.19 million persons. Growth was twice as great as expected.	50
II. LAND USE				
a. Industrial	A	Industrial Growth to be directed into six major areas of intensive industrial land use.	Industrial development was considerably more extensive than anticipated, and occurred in less centralized pattern than that proposed.	25
b. Residential	A	Residential development to be contained within boundaries of metropolitan area. Suburban residential development not to exceed 38.55 persons per hectare. Superblock of low-income housing.	Development was more extensive than anticipated. Residential densities in metropolitan area averaged 82.75 and 78.27 persons per hectare in 1971 and 1976 respectively. Proposed superblock was implemented.	25
c. Retail/Commercial	X			
III. TRANSPORTATION				
a. Major Thoroughfares	A	To develop a network of arterial and main highways. Construction of 5 major "superhighways". Additional street extensions.	Many major thoroughfares were constructed during the planning period, but few have developed as planned.	50
b. Public Transit	B	Construction of subway along Queen St., crosstown rapid transit line, and a line along Garrison Creek Superhighway.	The Queen St. subway line was implemented.	25
IV. PUBLIC SERVICES/INSTITUTIONS				
a. Education/Schools	A	Osgoode Hall to locate at corner of Queen St. and University Ave..	Implemented as proposed	100
b. Health/Hospitals	B	Expansion of Toronto General and construction of similar institutions within the area bounded by University Ave., Gerrard St., Bay St., and Dundas St..	Toronto General; the Hospital for Sick Children; and New Mt. Sinai Hospital, on the west side of University Ave..	100
V. PUBLIC UTILITIES	X			
VI. PARKS AND OPEN SPACE	A	Inner Greenbelt and Parkway to be located in the valleys of the Don and Humber Rivers. Greenbelt to surround existing built up area. Proposed linkage of two valleys just north of Wilson Ave..	The Don and Humber Valleys form the major physical features of the metropolitan parks system. Proposed linkage developed much further north than proposed.	75
VII. CBD	A	Five detailed proposals to ensure proper grouping of public and semi-public institutions in the CBD.	Many important public and private institutions have located in CBD. The only notable exception to plan policy was the construction of New Massey Hall on the south side of King St. West.	100

To summarize, the Master Plan for the City of Toronto and Environs has experienced both successes and failures. The most notable successes have occurred within the boundaries of the City of Toronto, whereas proposals for the development of the transportation system and for residential and industrial development within the entire Metropolitan Area were not followed.

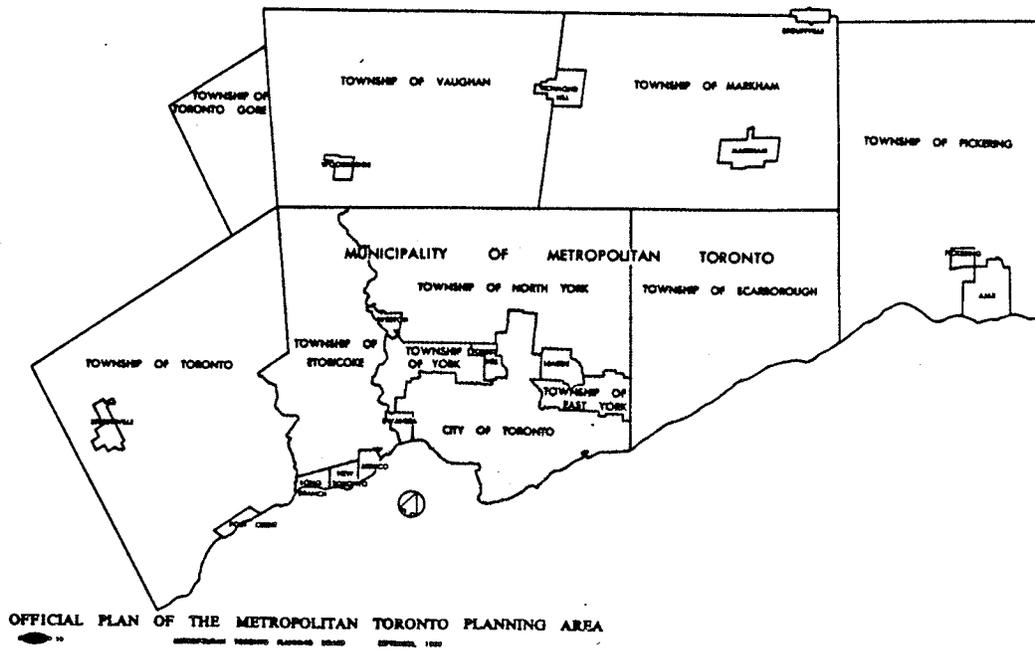
5.2 Official Plan of the Metropolitan Toronto Planning Area (1959)

Under the provisions of the Municipality of Metropolitan Toronto Act (1953), the Official Plan of the Metropolitan Toronto Planning Area (1959) was prepared by the MTPB. The plan title is somewhat misleading: it did not receive formal adoption as the 'official' plan but was recognized only as an unofficial policy statement for the Metropolitan Toronto Planning Area.

The Metropolitan Toronto Planning Area was very large, totalling some 720 square miles which included the Townships of Toronto, Toronto Gore, Vaughan, Markham, and Pickering (see Map 2).

The Master Plan attracted considerable attention. Not only was it the first Canadian plan to be prepared for such a large urbanized region, it was the first plan of the Municipality of Metropolitan Toronto, the second tier of the newly established Metropolitan government structure. As a policy framework for the future development of the Metropolitan Toronto Planning Area, the Master Plan was intended to reduce the conflicts between adjacent but independent municipalities. The lack of coordinated planning and development between the various municipalities in the Metropolitan Area was considered to be one of the most pressing planning problems. As emphasized by the Ontario Municipal Board in 1953:

Map 2 Metropolitan Toronto Planning Area



...the present division of jurisdiction with respect to community planning and the control of land use is considered by the Board to be a most serious weakness of the present system of local government. No intelligent or efficient extension of municipal services throughout the Metropolitan Area can be expected in the absence of a comprehensive metropolitan plan of development and some centralized control of major land use.⁸

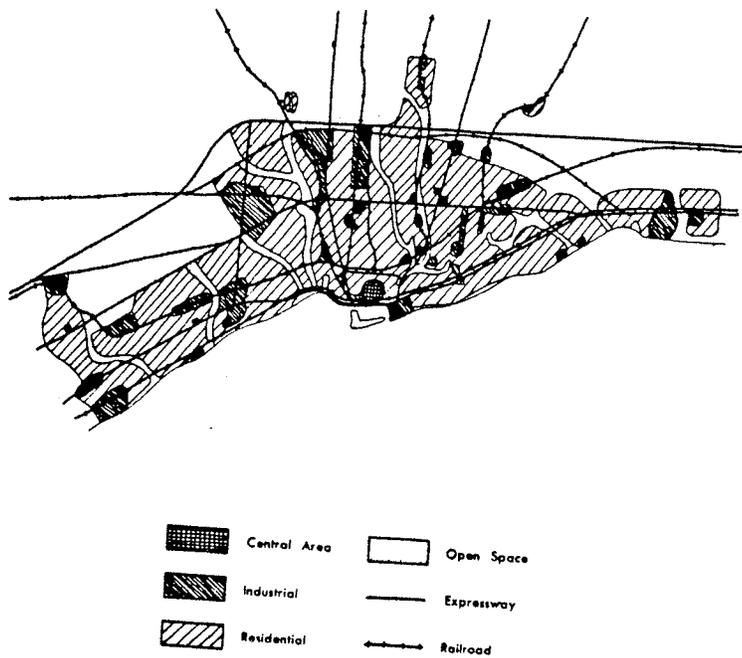
5.2.1 The General Development Concept

The Master Plan was intended to establish the basic land use pattern and development framework for the anticipated growth of the Metropolitan Toronto Planning Area to 1980. Map 3 illustrates the general land use pattern of the Metropolitan Area as it existed in the late 1950's.

The metropolitan planners proposed that future urban growth and development be directed to create a broad 'urban ribbon'. The Lake Ontario shoreline and the rural fringe were to form the south and north

boundaries of the urban ribbon, and it was to extend well beyond the boundaries of the Metropolitan Planning Area, to Hamilton on the west and Oshawa on the east. This urban ribbon was considered to be the one development pattern which could best achieve the efficient and economic servicing of a large urbanized region.

Map 3 Generalized Land Use: Metropolitan Toronto Planning Area, 1959



The MTPB projected that the population of the Metropolitan Toronto Planning Area would increase from 1.2 million persons in 1958 to 2.8 million persons in 1980. It was suggested that a decentralized development pattern would best accommodate the many needs of a growing industrial, commercial, and population centre.

Industrial growth, for example was to be directed into a number of industrial 'islands' and 'radial strings' conforming to major transpor-

tation facilities. This decentralization would reduce the traffic congestion and establish a solid economic base for all constituent municipalities. Residential density was to be increased throughout the Metropolitan Area, with greatest densities in the City of Toronto core area and lowest densities in the fringe municipalities. Retail and commercial growth was to develop in correspondence with population increases, with greatest development intensity within the City of Toronto core area.

The MTPB also proposed a number of major improvements to the transportation network. There were a number of specific proposals for major expressways which were designed to create an integrated series of radial, crosstown and circumferential routes. The proposed public transit system was based on a primary subway system to be served by rapid transit and bus lines.

Proposals for public services and institutions were limited to education and schools, with most new development to occur in suburban municipalities. Public utilities were to be expanded as required, and in the most economic manner as possible. Major river valleys, for example, were to form the central feature of the storm water and flood control system.

Major improvements to the parks and open space system were to focus on the river valleys and the Lake Ontario shoreline (see Table 5 for a summary of the plan proposals).

Table 5 Official Plan of the Metropolitan Toronto Planning Area (1959): Evaluation Summary

EVALUATION CATEGORY	DE- TAIL	POLICY/ PLAN	IMPLEMENTATION RECORD	8
I. POPULATION GROWTH	A	1980 population within metropolitan planning area to be 2.8 million.	1981 population within metropolitan planning area was 2.91 million.	100
II. LAND USE				
General Policy		New development to occur in decentralized pattern; to eventually form broad "urban ribbon"	General pattern is decentralized.	
a. Industrial	A	Growth to be 562 acres per year. To form a number of "islands" to conform to basic expressway pattern; to form "radial strings" which conform to rail facilities. Five areas for industrial parks.	Actual growth 87 acres per year less than expected. Decentralization of industrial land into well-defined industrial parks.	100
b. Residential	A	Density to increase throughout planning area. Density to be highest in core, with continuous decrease to fringe areas.	Density highest in core area. Density increase 8 acres higher than proposed.	75
c. Retail/Commercial	A	City of Toronto CBD to be developed as major office and retail centre. Growth to be related to population increases.	City of Toronto CBD is major office and retail centre. By 1974 it housed 68% of available office space. Decentralization mostly to North York, with major concentration in Don Mills/Eglinton area.	75
III. TRANSPORTATION				
a. Major Thoroughfares	A	Develop metropolitan expressway system with radial, crosstown and circumferential routes. Nine specific thoroughfare proposals.	Effective metropolitan expressway system in place, but few specific proposals implemented.	25
b. Public Transit	A	Develop rapid transit with primary subways, rapid transit lines and bus lines. Four specific proposals.	Public transit system based on a combination of subway, rapid transit and bus lines. Three of four specific proposals implemented.	75
IV. PUBLIC SERVICES/INSTITUTIONS				
a. Education/Schools	A	Proportion of school age children to total population to increase to 24.3% by 1980. Growth to occur in suburban municipalities.	By 1976 school age population comprised 22% of total metro. population. Growth has occurred in suburbs, but not as projected.	25
b. Health/Hospitals	X			
V. PUBLIC UTILITIES				
a. Water Supply	B	Lake Ontario to provide primary water supply source. 1980 water consumption to be 370 m.g.d.. To develop supply system of 614 m.g.d.. Three proposals.	Lake Ontario is the primary water supply source. Maximum daily consumption in 1974 was 447 m.g.d.. Several purification and filtration plants	100
b. Waste Disposal	A	Sewer extension "as required". Three proposals to upgrade total system.	Extensions in sewage disposal system has occurred as required. There are four treatment plants in metro. Toronto.	100
c. Storm Water/Flood Control	B	To be collected and discharged via natural water courses, creeks, rivers, and Lake Ontario.	Natural water courses have been preserved and are used for storm water drainage and parks.	100
VI. PARKS AND OPEN SPACE	A	To be developed along major river valleys and Lake Ontario shoreline. Park system to total 16,617 acres by 1980. Numerous development proposals.	Parks have developed along major river valleys and Lake Ontario shoreline. By 1974 total park system constituted 14,481 acres. Few development proposals have been implemented as proposed.	50
VII. CBD	X			

5.2.2 Implementation Record: Evaluation Summary

Table 5 summarizes the major plan policies and the results of the goal-achievement evaluation. For specific details of the plan proposals and their evaluation, the reader is directed to Appendix C.

Generally, the Master Plan has been quite successful in terms of its record of implementation. Population projections were accurate. The general pattern of urban growth and development has been decentralized, although the urban ribbon has not developed to the extent proposed in the Master Plan. Industrial development has occurred in well-defined industrial areas, along the lines of major transportation facilities. Residential density has increased throughout the Metropolitan Toronto Area, with greatest concentration in the City of Toronto. Retail and commercial development has occurred in both suburban municipalities and in the core area, but the core area is definitely the primary retail and commercial centre. The public transit system has also developed as proposed, with services provided by a combination of subway, rapid transit and bus lines.

The most notable failure of the plan has been in its proposals for the expressway system. The existing network of major thoroughfares bears little resemblance to the plan proposals. Another notable exception to the general success of the plan has been in the development of the parks and open space system. Although the parks and open space system does focus upon the natural features of the Lake Ontario shoreline and the major river valleys, few of the specific development proposals were implemented. Finally, the predictions with respect to the demand for educational facilities and services within the Metropolitan Area were not

accurate. As projected, growth in the proportion of school age children to total population did occur in the suburban municipalities, but the predictions respecting the proportionate increases in specific municipalities were not accurate.

FOOTNOTES

1. Metropolitan Toronto Planning Department, Metroplan: Concept and Objectives, 1976.
2. City of Toronto Planning Board, Master Plan for the City of Toronto and Environs, 1943, p. 1.
3. Ibid.
4. Ibid., p. 3
5. Ibid., p. 10.
6. Ibid., p. 13.
7. Ibid.
8. Ontario Municipal Board, Decisions and Recommendations. (Toronto: Queen's Printer, 1953), p. 71.

CHAPTER SIX

EVALUATION OF THE MASTER PLANNING EXPERIENCE IN WINNIPEG

6.0 Introduction

This chapter forms the evaluation of the master planning experience in Metropolitan Winnipeg. Two plans have been evaluated: Metropolitan Plan-Greater Winnipeg (1948), and the Metropolitan Winnipeg Development Plan (1968). The first was prepared by the Metropolitan Planning Commission (MPC), and was designed to be in effect for twenty years. The second was prepared by the Metropolitan Corporation of Greater Winnipeg, and was designed to be in effect for a 23 year period.

As outlined in the goal-achievement evaluation model, the implementation record of the Metropolitan Plan-Greater Winnipeg has been determined by testing its policy proposals and functional plans against the conditions existing in 1968, as described in the Metropolitan Winnipeg Development Plan (1968). The implementation record of the Metropolitan Winnipeg Development Plan has been determined by testing its proposals and functional plans against the conditions existing in 1980, as described in Plan Winnipeg (1980).¹

The results of each evaluation have been described and summarized in general terms, while the specific details of each evaluation have been appended.

6.1 Metropolitan Plan-Greater Winnipeg, 1948

The Metropolitan Plan-Greater Winnipeg consisted of a series of nine separate reports; the final five were published in 1948, to complete the series on various phases of development.² These reports were submitted

to the City of Winnipeg and the municipalities of the Metropolitan area, but were only approved in principle by the City of Winnipeg and the Municipality of Charleswood.³

Although the Master Plan did not receive formal adoption by the municipalities in the Metropolitan area, it did receive wide recognition as a major planning proposal. It was, for example, presented at the 1947 conference of the Canadian Federation of Mayors and Municipalities; it was presented by the National Film Board; it was displayed at the Businessmen's Conference on Urban Problems, sponsored by the United States Chamber of Commerce and held in Washington, D.C.; and it was displayed at the Central Mortgage and Housing Corporation's exhibit at the Canadian National Exhibition held in Toronto.⁴

As a response to the variety of urban problems within the Metropolitan Winnipeg region, the Master Plan was designed:

...to lessen congestion on streets; to secure safety from fire, panic and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of populations; to facilitate the adequate provision of transportation, water, sewerage, schools, parks and other public requirements; to conserve the value of property and encourage the appropriate use of land throughout the municipality....⁵

6.1.1 The General Development Concept

It is difficult to identify a general development concept from an analysis of each of the nine separate reports. The plan was generally intended to coordinate the urban growth and development in all the municipalities of the Metropolitan Winnipeg region so as to create a balanced relationship between different land uses and between the municipalities which formed the Metropolitan area. Vacant land was to be

developed in a manner which would create desirable communities in attractive, efficient subdivisions, with adequate provision for parks and recreation, employment areas, and transportation.⁶ It was expected that the coordination and cooperation between individual municipalities would promote a responsible and efficient form of urban development which would not only benefit the entire Metropolitan region but also promote the interests of each municipality.

Towards the ends described above, the Master Plan included land use policies in the form of a comprehensive zoning scheme. There were also proposals for the development of major thoroughfares, public transit, schools, parks and open space, and the central business district.

Amongst the many plan proposals, some of the most notable included a comprehensive system of major thoroughfares, a strategy for the routing of bus transit lines, a detailed strategy for the development of neighbourhood and metropolitan parks, and a plan to control the decentralization of retail and commercial facilities from within the central business district. (See Table 6 for a summary of the major plan proposals).

6.1.2 Implementation Record: Evaluation Summary

Table 6 summarizes the major plan policies and the results of the goal-achievement evaluation. For specific details of the plan proposals and their evaluation the reader is directed to Appendix D.

Measured in terms of goal-achievement, the Master Plan cannot be considered successful. Although population projections were relatively accurate, most plan proposals have not been implemented. The land use plan, which was embodied in a comprehensive zoning scheme, was not

Table 6 Metropolitan Plan-Greater Winnipeg (1948):
Evaluation Summary

EVALUATION CATEGORY	DE- TAIL	POLICY/ PLAN	IMPLEMENTATION RECORD	%
I. POPULATION GROWTH	B	Population to grow to 530,000 by 1979, an increase of 300,000.	Population increased to 561,000 by 1976 and 578,625 by 1981.	100
II. LAND USE General Policy Only	B	To create a balanced relationship between different land uses and between constituent municipalities in the metropolitan area. Proposals for all three major land uses contained in comprehensive zoning scheme.	Each municipality prepared and adopted its own individual town planning or zoning scheme. The proposed zoning scheme was neither approved nor adopted. It was not enforced.	0
III. TRANSPORTATION				
a. Major Thoroughfares	A	To provide a comprehensive system of major thoroughfares to be direct in alignment, of adequate width, and continuous. Twenty development proposals.	Major thoroughfares are not, in all instances, direct in alignment or continuous. Eight development proposals implemented.	50
b. Public Transit	A	To improve service and efficiency. Rapid transit system not required. Thirty-seven proposals for routing of bus lines.	No rapid transit system has been developed. Most of the 37 specific proposals were implemented by Winnipeg Railway Company.	100
IV. PUBLIC SERVICES/INSTITUTIONS	X			
V. PUBLIC UTILITIES	X			
VI. PARKS AND OPEN SPACE	A	To provide integrated system of "in-city" and "large" parks. Utilization of river banks as major feature of parks system. Develop continuous system of pleasure drives throughout metropolitan area, especially along river banks. Five development proposals for major parks.	Integrated parks and open space system has not developed as proposed. Riverbanks not utilized to best advantage. No continuous system of pleasure drives. Few of the development proposals have been implemented.	25
VII. CBD	A	To control decentralization of retail and commercial facilities so as to encourage development within the CBD. Encourage physical grouping of similar institutions. Formation of Downtown Business Association. Five development proposals.	Decentralization has been extensive throughout the metropolitan area. Clustering of similar institutions has occurred. A Downtown Business Association has been formed. Few development proposals have been implemented.	25

implemented. Quite to the contrary, each municipality prepared and adopted its own zoning or town planning scheme. Less than fifty percent or eight of the twenty proposals for the development of major thoroughfares were implemented as proposed. The plan for parks and open space was not followed. The riverbanks, for example, were not utilized to best advantage, there was no continuous system of pleasure drives, and the proposals for improvement in the metropolitan parks were not implemented. Proposals for the central business district were not implemented. Contrary to plan policy, the decentralization of retail and commercial facilities to suburban strip developments was not controlled.

The most successful plan policies were those respecting the improvement of the public transit system. As recommended, the bus transit system was expanded and improved, rather than developing a major subway or rapid transit system. Most of the specific proposals for improvement in the bus transit system were implemented by the Winnipeg Railway Company.

To summarize, the Metropolitan Plan-Greater Winnipeg was not implemented to any great degree. Despite its publicity, the independent municipalities within the Metropolitan region preferred to remain independent by preparing their own planning schemes or zoning by-laws. The desire to achieve an integrated and coordinated planning function within the Metropolitan region was not realized. The MPC had no formal legislative power or effective means of enforcing and implementing its planning proposals.

6.2 Metropolitan Winnipeg Development Plan (1968)

The Metropolitan Winnipeg Development Plan was the second master plan to be prepared for the Metropolitan Winnipeg region. It was published twenty years after its predecessor, the Metropolitan Plan-Greater Winnipeg. There was, however, a significant difference between the two plans: the Metropolitan Winnipeg Development Plan was prepared by the Metropolitan Corporation of Greater Winnipeg, whose authority was established by legislation.

The Metropolitan Plan received formal adoption as the official plan, and was to have a binding legal effect upon all municipalities in the Metropolitan Winnipeg area.⁷

The most notable characteristic of the plan was its very general policy statements. It was intended to:

...modify and add to the existing physical form so as to achieve a compact urban area with a concentrated centre and a clearly defined pattern of activities connected by efficient and economic service systems.⁸

6.2.1 The General Development Concept

As defined in the stated plan objective, the Metropolitan Plan proposed to create a compact urban area, with a concentrated centre, and with efficient public service systems. This general development concept was to be achieved with the careful application of five general policy proposals:

1. To organize urban growth so as to promote efficiency, amenity, economic growth and flexibility for future change.
2. To distribute population in densities appropriate for living, working, personal development and recreation.
3. To further the preceding objectives by providing those public services that are the responsibility of the Corporation and to influence the provision of public services by others.

4. To promote private investment in support of the objectives established in the plan.
5. To develop and pursue such policies, administrative methods and programs that may be necessary to further the objectives in general of any specific feature of the plan.⁹

The major plan proposals and policies are summarized in Table 7. Briefly, the Plan was based on the prediction that Metropolitan population would grow to 700,000 persons by 1981. Numerous areas within the Metropolitan Area were designated as appropriate areas for industrial, residential, and retail and commercial development. There were policies and proposals to improve the major thoroughfare and the public transit system. The Plan included a few proposals for the future development of public services and institutions such as education and health services. The Plan proposed a number of specific improvements to the public utilities system. Metropolitan parks were to be expanded and improved with a number of specific development proposals, and a riverbanks acquisition programme. The central business district was to be strengthened and improved as the primary metropolitan centre.

6.2.2 Implementation Record: Evaluation Summary

Table 7 summarizes the major plan policies and the results of the goal-achievement evaluation. For specific details of the plan proposals and their evaluation, the reader is directed to Appendix E.

Generally, the plan has proven to be moderately successful in terms of its implementation record. It was certainly more successful than its unofficial predecessor.

Table 7 Metropolitan Winnipeg Development Plan (1968):
Evaluation Summary

EVALUATION CATEGORY	DE- TAIL	POLICY/ PLAN	IMPLEMENTATION RECORD	%
I. POPULATION GROWTH	A	Population of metropolitan area to grow to 700,000 persons by 1981, an increase of 200,000.	Population grew to 584,842 persons by 1981, an increase of 85,000.	50
II. LAND USE				
a. Industrial	A	To ensure industrial areas are adequately serviced. To establish unified industrial development agency. To promote metro. area as location for industry and scientific and technological research. Numerous areas designated for industrial expansion.	Industrial areas provided with adequate service. No unified industrial development agency. Industrial development has occurred in designated areas, but growth has been far less extensive than expected.	50
b. Residential	A	To protect residential areas from intrusion by undesirable uses. Eight areas designated for residential development and expansion.	Most residential areas have been protected from intrusion of undesirable uses. Seven of eight areas have developed as proposed, but growth has been less extensive than expected.	75
c. Retail/Commercial	A	To direct future retail/commercial development into well-defined "groupings" or "town centres", rather than traditional strip development.	Most retail/commercial development has taken form of large regional shopping malls, but some strip commercial development has occurred.	75
III. TRANSPORTATION				
a. Major Thoroughfares	A	To improve network of major thoroughfares according to four-stage development plan. Fifty-seven individual proposals.	Twenty-three development proposals implemented.	50
b. Public Transit	B	To develop system of high speed bus transit with own rights-of-way where necessary. To give priority to public transit where essential or desirable.	Most transit routes provided with "express" service. Buses have been provided priority in some locations, especially in the CBD.	50
IV. PUBLIC SERVICES				
a. Education/Schools	B	To provide for higher educational needs on sites of adequate size and in locations to serve entire metropolitan area. Two specific recommendations.	Major educational institutions have developed on large, easily accessible sites. Both recommendations implemented.	100
b. Health/Hospitals	B	To provide adequate hospital service on sites of adequate size and in locations to serve metro. area.	Hospitals have developed on large sites with easy accessibility (e.g. Victoria General Hospital).	100
V. PUBLIC UTILITIES				
a. Water Supply	A	To supply metropolitan area with potable water, under adequate pressure to supply present and anticipated demand. Physical plan for new construction.	Water supply service is reliable. Water quality is high and water pressure is sufficient to meet demand. Physical plan closely followed.	100
b. Waste Disposal	A	To develop adequate and efficient waste disposal system. Prohibit combination of sanitary sewer systems with storm sewer system. Physical plan for new construction and upgrading.	Adequate level of service at minimal cost (\$3 per household per month). No combined systems constructed since 1961. Most specific recommendations have been implemented.	75
c. Storm Water/Flood Control	A	Maximum utilization of natural water courses. Three policy recommendations.	Natural water courses utilized for parks, recreation and water drainage. Plan policies strictly enforced.	100
VI. PARKS AND OPEN SPACE	A	To expand metropolitan parks system. Riverbank acquisition program. Various specific proposals.	Parks and open space system has been improved and expanded. Riverbank acquisition has been moderate. Some deficiencies in existing system.	50
VII. CBD	A	To strengthen and improve CBD as vital, efficient, and attractive metro. centre. Pedestrian priority. Prepare downtown plan.	CBD not improved significantly. Automobiles have priority. Downtown plan prepared: 5 of 12 recommendations implemented.	25

Population projections were inaccurate; population grew considerably less than expected. Partially as a result, most plan proposals for expansion of the various land uses were somewhat overoptimistic in terms of growth projections. Industrial and residential land uses have expanded in the areas designated by the Plan, but growth was far less than expected. Retail and commercial development was not concentrated in the CBD, but in accordance with another, but seemingly contradictory plan proposal, retail and commercial growth did occur in 'groupings' or 'town centres'. Proposals for public transit improvements were implemented. The relatively general policy recommendations for public services and institutions were also followed. Similarly, plan proposals and policy recommendations for the development of public utility services were followed.

Contrary to the general success of this plan, the proposed network of major thoroughfares was not implemented. Only the first stage of the four stage functional plan was carefully followed. The parks and open space system was not successfully implemented. The parks and open space system has been improved and expanded throughout the Metropolitan area, but there continue to be deficiencies in the existing system, and the proposed riverbank acquisition programme was not carried out. One of the most notable plan failures related to the proposals respecting improvement of the City of Winnipeg Central Business District. As proposed, a Downtown Plan¹⁰ was prepared, but the Metropolitan Plan's primary policy objective, to strengthen and improve the CBC, was not achieved.

To summarize, the Metropolitan Winnipeg Development Plan may be generally characterized as a successful plan only if the absolute number of policy proposals are considered. However, some of the most important

and controversial issues identified in the plan (e.g., the deterioration of the CBD, efficient transportation, and the parks and open space system) were not successfully resolved or improved. These most important and detailed plan policies required relatively extensive and specific initiatives and programmes which the Metropolitan Corporation of Greater Winnipeg was unable to implement.

Footnotes

1. City of Winnipeg, Department of Environmental Planning, Plan Winnipeg: Summary and Recommendations of the Study Team, July, 1980. Numerous other background reports of the "Development Plan Review" were also consulted.
2. Metropolitan Planning Commission, Annual Report, 1949, p. 14.
3. Ibid.
4. Metropolitan Planning Commission, Annual Report, 1948, p. 15
5. Metropolitan Planning Commission, Preliminary Report on Zoning, Report #6, 1947, p. 23.
6. Metropolitan Planning Commission, Preliminary Report on Residential Areas, Report #7, 1948, p. 57.
7. At the time of writing, this plan continues to be in effect as the official "Metropolitan Winnipeg Development Plan", although Plan Winnipeg, is gaining wide recognition as the City of Winnipeg's planning policy statement.
8. Metropolitan Corporation of Greater Winnipeg, Metropolitan Development Plan, 1968, para. A.4.22. Throughout this study the official title, "Metropolitan Winnipeg Development Plan", has been used.
9. Ibid., para. A.4.32.
10. Metropolitan Corporation of Greater Winnipeg, Downtown Plan, 1969.

CHAPTER SEVEN

EVALUATION OF THE MASTER PLANNING EXPERIENCE IN CALGARY

7.0 Introduction

This chapter forms the evaluation of the master planning experience in the City of Calgary. Two plans have been evaluated: the City of Calgary General Plan (1963), and The Calgary Plan (1970). Both plans were prepared by the City of Calgary Planning Department, and received formal approval as official plans by Calgary City Council.

As described in the goal-achievement evaluation model, the implementation record of the City of Calgary General Plan has been determined by testing its policy proposals and functional plans against the conditions existing in 1970, as described in The Calgary Plan (1970). The implementation record of The Calgary Plan has been determined by testing its proposals and functional plans against the conditions existing in 1981, as described in the Calgary General Municipal Plan (1981).¹ As illustrated in Table 1 (Chapter One), there have been many plans prepared for Calgary since the 1963 plan. As a result, and because of the 20 year time horizon of the City of Calgary General Plan (1963), some of its proposals will be tested against the conditions described in the Calgary General Municipal Plan (1981).

The results of each evaluation have been described and summarized in general terms, while the specific details of each evaluation have been appended.

7.1 City of Calgary General Plan (1963)

The City of Calgary General Plan was prepared by the City of Calgary Planning Department. It was the first Post World War II master plan prepared for the City of Calgary. It was prepared for a twenty year planning period, and was adopted as the official plan. Unlike the master plans prepared for Toronto and Winnipeg this plan was prepared for the City of Calgary only; it was not a Metropolitan Plan, in the sense that it was not designed for more than one municipality.

The Plan was the first major planning report prepared for the City of Calgary since Thomas Mawson's original master plan - Calgary: A Preliminary Scheme for Controlling the Economic Growth of the City (1914).² The plan was not based on a sophisticated series of background studies and reports, but was comparatively brief in its study of background conditions. It began with a description of Calgary's historical development which was immediately followed with population projections.

The plan outlined no specific goal statement. It was stated only that:

As the physical expression of the City reflects the characteristics, traditions and history of its people, so must the physical plan for the City's future growth reflect the characteristics and aspirations of the citizens³ expected to form its populace during the period of the plan.

7.1.1 The General Development Concept

The Master Plan was generally intended to recognize and reinforce the development characteristics of the existing City, and to provide for the progressive replacement of physically and functionally obsolete areas. It was to create a balanced land use structure. New development was to

be directed to vacant land, and the supply of this developable land was to be sufficient to accommodate the needs of industrial, residential, and commercial expansion.

The major plan proposals were directed toward accommodating growth and expansion. With respect to land use, for example, industrial development was to be directed to a number of specific areas, which were to be well-related to transportation services; residential development was to be contained within a ten mile radius of the city centre; and retail and commercial developments were to safeguard free traffic flow, by discouraging ribbon or strip mall development. The plan for expansion and improvement of major thoroughfares was designed to promote efficient automobile transportation throughout the City of Calgary. There were no proposals for public transit. With respect to public services, the plan established a standard for future hospital development. Public utilities were to be developed in an orderly and economic manner. The parks and open space system was to be expanded in correspondance to population growth. There was no plan for the Central Business District. (See Table 8 for a summary of the major plan proposals.)

7.1.2 Implementation Record: Evaluation Summary

Table 8 summarizes the major plan policies and the results of the goal-achievement evaluation. For specific details of the plan proposals and their evaluation, the reader is directed to Appendix F.

When measured in terms of goal-achievement, the master plan can be regarded as a moderately successful master plan. Population projections were somewhat overoptimistic, but this overoptimistic forecast of growth

Table 8 City of Calgary General Plan (1963):
Evaluation Summary

EVALUATION CATEGORY	DE- TAIL	POLICY/ PLAN	IMPLEMENTATION RECORD	%
I. POPULATION GROWTH	A	Population to grow to 670,892 by 1981, a net increase of 430,000.	Population grew to 592,743 by 1981, over 160,000 persons less than projected.	75
II. LAND USE				
a. Industrial	A	To provide attractive industrial sites in sufficient number. Sites to be well-related to transportation facilities. Nine specific locations for growth and expansion.	Sites are adequate in size and number. Industrial land well-related to transportation facilities. Development has occurred as proposed, but most extensively in two areas.	75
b. Residential	A	To provide adequate supply of land in easily serviced locations. Contain development within ten mile line from City centre. Detailed plan for future development.	Some evidence of housing shortage in 1970's, especially for low and middle income groups. Development not contained within ten mile line from City centre. Some specific proposals implemented.	25
c. Retail/Commercial	A	Discourage "ribbon" commercial development. Development to safeguard free traffic flow.	Some ribbon or strip commercial development has occurred. Regional and sector commercial devel has had some negative impact on traffic flow	0
III. TRANSPORTATION				
a. Major Thoroughfares	A	To develop and improve the transportation network. Four specific recommendations.	There is a low functional standard of most major streets due to insufficient rights-of-way, uncontrolled access, too many intersections and a lack of continuity. Outward expansion of major roads without adequate development of inner-city transportation network. The four recommendations have been implemented.	50
b. Public Transit	X			
IV. PUBLIC SERVICES/INSTITUTIONS				
a. Education/Schools	X			
b. Health/Hospitals	B	To provide major hospital facility for every 70,000 to 75,000 persons	By 1979 the number of hospital beds was inadequate. By 1981 there were 7 major hospitals, or 1 major facility for every 84,677 persons.	0
V. PUBLIC UTILITIES				
a. Water Supply	A	To expand waterworks system by orderly and economic stages. Specific recommendations for expansion and upgrading.	By 1981 water supply capacity to serve 575,000 persons. Specific recommendations implemented.	100
b. Waste Disposal	A	To expand sewage disposal system in orderly and economic manner. Construct new treatment plant to service areas north and south of the Bow River.	Expansion and upgrading has occurred as planned.	100
c. Storm Water/Flood Control	A	To coordinate storm sewer construction with progression of development.	All new developments provided with storm water drainage facilities, except in southeast where natural topography eliminates problems associated with water drainage.	100
VI. PARKS AND OPEN SPACE	A	To expand parks system to keep pace with anticipated population growth. Numerous specific proposals.	Parks system has been expanded and improved, however, some major deficiencies do exist. Specific proposals implemented.	75
VII. CBD	X			

ensured that one of the major plan objectives, to accommodate new growth and to ensure the supply of needed land and services, was achieved. There was more than sufficient land set aside for new development. Only industrial land use was developed in conformance with plan policies. Proposals respecting the location and character of residential and commercial development were not followed: residential development was not contained, and urban ribbon commercial development was not discouraged.

The most carefully followed and successfully implemented plan policies were those relating to public utilities and to the expansion of the parks and open space system. All proposals for the expansion of the public utilities service system were developed as required. Most of the specific proposals for new construction of public utilities infrastructure were followed. The parks and open space system was expanded as proposed in the plan.

To summarize, it should be emphasized that the City of Calgary General Plan was mainly concerned with growth and expansion. The plan was designed to help accommodate this growth with normal extensions of the built up areas. The plan proposed no strong policy initiatives or programmes to affect any significant changes in the development trends experienced throughout the City's history.

7.2 The Calgary Plan (1970)

The Calgary Plan was prepared by the City of Calgary Planning Department and was provided with official legislative approval in 1970. In recognition of widespread social, political and economic changes, the plan was prepared with a comparatively short, eight year, time horizon. The

plan was based on a relatively detailed series of background studies and reports. The stated plan objective was to suggest:

...guidelines for urban development that will provide the basis for improved council decision-making and above all ...to provide a framework for improving the physical environment.⁴

7.2.1 The General Development Concept

The most notable feature of the plan was that it was designed to encourage a pattern of urban growth which was clearly related to environmental constraints and opportunities.

The primary plan objective was to encourage growth which would facilitate the efficient extension of physical services and would preserve natural amenities. Land uses were to be designed to minimize the costs of physical services. Like its predecessor, The Calgary Plan proposed no policies which would significantly alter the existing form and structure of urban development.

It was projected that population would grow to 568,000 persons by 1979, a net increase of over 180,000 persons. With respect to land use, this growth was to be directed in a manner which would maintain a receptive climate for industrial development; encourage high density residential development, especially in the inner city; and minimize conflict between commercial and other uses. There was a detailed plan for the development of an efficient system of major thoroughfares, and a plan to develop a rapid transit system which would focus on the CBD. There were a few projections and policy proposals for public services and institutions, as well as a number of specific proposals for the future expansion and improvement of the public utility infrastructure. The plan included a detailed physical plan for future development of the

parks and open space system. It was also proposed that the CBD be strengthened and improved with specific improvements to inner city parks and open space, transportation, and housing. (See Table 9 for a summary of the major plan proposals).

7.2.2 Implementation Record: Evaluation Summary

Table 9 summarizes the major plan policies and the results of the goal-achievement evaluation. For specific details of the plan proposals and their evaluation, the reader is directed to Appendix G.

Measured in terms of implementation record, the master plan has been moderately successful. Population projections were reasonably accurate. The major plan objective - to encourage and accomodate urban growth and development - was achieved. Throughout the planning period, new development was directed to vacant suburban land, with some notable improvements in the development intensity of the CBD.

More specifically, the proposals for industrial development were implemented, although industrial growth was not as extensive as anticipated. Proposals for residential development were not implemented: most new development did not meet the major plan policy that residential density in a new suburban areas be no less than 22 persons per acre. The plan for retail and commercial development, although very general, has been successful. Transportation policies have also been implemented: most proposals for improvements and extensions of the major thoroughfare system were implemented, while the proposals for the development of the public transit system (L.R.T.) were carefully followed. Policies respecting public services were very general, but with the exception of projections for future school enrollment, they were not followed or implemented. The

Table 9 The Calgary Plan (1970):
Evaluation Summary

EVALUATION CATEGORY	DE- TAIL	POLICY/ PLAN	IMPLEMENTATION RECORD	%
I. POPULATION GROWTH	A	Population to grow to 568,000 by 1979, a net increase of 182,400.	Population grew to 505,637 by 1979 a net increase of 120,000.	75
II. LAND USE				
a. Industrial	A	To maintain receptive climate for industrial investment. To assume coordinating role. Detailed plan to direct new development into eight specific areas.	Industrial land use contained within designated areas. Actual growth not as extensive as projected. Most growth in Foothills subdivision in the southwest and around the airport in the northwest.	50
b. Residential	A	To encourage high density development, especially in the inner-city. City-wide residential density to be no less than 22 p.p.a..	Residential density did not increase as planned. Between 1970 and 1978 average residential density in suburban areas ranged between 15 and 18 p.p.a..	0
c. Retail/Commercial	B	To minimize conflict between commercial and other land uses. Shopping centres to locate at intersections of major thoroughfares. Four principles and standards for future development.	Shopping centres located at intersections of major thoroughfares.	100
III. TRANSPORTATION				
a. Major Thoroughfares	A	To develop comprehensive thoroughfare system. Detailed plan for new construction and upgrading.	Most proposed construction proposals were carefully followed.	75
b. Public Transit	A	To develop rapid transit system which focuses on CBD and sub-centres of intensive development. Develop two corridor system to serve northwest, south and southeast. System to focus on east-west spinal route along 8th Ave..	By 1978 the rapid transit facility (L.R.T.) in the south and southwest corridor and the east-west spinal route were either constructed, under construction, or approved for construction.	100
VI. PUBLIC SERVICES				
a. Education/Schools	B	Detailed projections for future school enrollment. No specific policy or plan for location of future school sites.	Enrollment estimates moderately accurate.	75
b. Health/Hospitals	B	Hospitals to be easily accessible. That there be 3,538 active treatment beds by 1978. City and Hospital Districts to form common planning agency.	There were 2,850 active treatment beds by 1978. Proposed common planning agency was not formed.	0
V. PUBLIC UTILITIES				
a. Water Supply	B	Major supply complex to be constructed at Bearspaw Reservoir.	Bearspaw facility constructed.	100
b. Waste Disposal	B	Continue to allow large industrial companies to treat and discharge their effluent into Bow River.	Large industries are allowed to treat effluent and discharge it into the Bow River. Pollution has not been a significant problem.	100
c. Storm Water/Flood Control	B	To undertake further studies of flood control problems and solutions.	Study of flood control has been ongoing.	100
VI. PARKS AND RECREATION	A	Detailed physical plan with numerous policy priorities.	Many but not all of the proposed developments or improvements to parks and open space system have been implemented.	75
VII. CBD	A	To enhance attractiveness and viability of inner city with improved transit, pedestrian movement, housing quality, and parks. Three specific recommendations.	Downtown has witnessed many improvements, especially in rapid transit. Most federal gov't NIP and RRAP programs have focussed in the inner-city. Decrease in inner-city population.	75

relatively general policies respecting public utility services have been followed. The variety of specific proposals for improvement of the parks and open space system have been moderately successful. Proposals for the improvement of the CBD were also followed. There have been some improvements in the CBD, especially with respect to transportation facilities. Contrary to plan policy, however, there was a decrease in inner city population throughout the planning period.

To summarize, it should be emphasized that although the plan may be considered successful in terms of its implementation record, it was very much like its predecessor in the sense that it proposed no significant alterations to the prevailing pattern of urban development. Plan proposals were not very restrictive, as most growth was expected to take the form of a simple extension of the existing land use pattern. Perhaps the most notable achievement of the plan was the successful implementation of the proposed rapid transit system.

FOOTNOTES

1. City of Calgary Planning Department, Calgary General Municipal Plan, 1981.
2. Thomas Mawson and Sons, Calgary: A Preliminary Scheme for Controlling the Economic Growth of the City, 1914.
3. City of Calgary Planning Department, Calgary General Municipal Plan, 1981, p. 1.
4. City of Calgary Planning Department, The Calgary Plan, 1970, Foreword by Peter Petrasuk, Chairman, Planning Advisory Committee.

CHAPTER EIGHT

SUMMARY, RECOMMENDATIONS, AND SUGGESTIONS FOR FUTURE RESEARCH

8.0 Introduction

In this chapter the results of the goal-achievement evaluation are summarized and analyzed. The results of each individual plan evaluation are summarized together, and various trends are identified and interpreted.

The summary and interpretation of these findings lead to a number of conclusions and recommendations. Of the many conclusions which could be reasonably suggested, three are most important. First, the research hypothesis - that master plans have had no noticeable effect upon the growth and development of the city - has not been supported. When measured in terms of implementation record, four of the six master plans evaluated in this study may be generally regarded as successfully implemented. Second, unofficial master plans which are prepared for a geographic area outside the jurisdictional authority of a planning department or board have little chance of successful implementation. Those master plans prepared without the support of formal implementation and regulatory powers are unlikely to be implemented. Third, certain components or parts of a master plan are more likely to be implemented than are others. Complex and interdependent plan policies and programmes which require the support and participation of many private and public sector decision-makers are less likely to be implemented than are simply conceived policies and plans under the jurisdiction of one or a few agencies.¹

Following a discussion of these and other findings and conclusions there is a discussion of one alternative to the current practice of rational comprehensive master planning. It is suggested that master planners should direct their attention toward the determination of community goals, and once these goals have been determined they should prepare shorter-range, concept specific plans designed to reflect community needs and to achieve community goals. It is the goals of the community which should at all times provide the basis for the development of master plan concepts.

Concept-specific master plans should be somewhat less comprehensive than the rational comprehensive master plans. They should identify the most important community issues and problems, they should examine the means to achieve desired ends, and they should be designed and issued in a manner which will stimulate public interest and arouse community support. It is argued that planning policies and programmes will not be fully achieved without the community having first recognized that they have had a role in goal-identification, and that it is a community responsibility, not just the responsibility of the planning department, to ensure that plan policies are followed and community goals achieved.

The discussion of this alternative planning method is necessarily general in its focus. There has been no attempt to examine the specific working details of the suggested approach. What this study has demonstrated is that while there may be a number of reasons to question master planning practice, planners should recognize that master plans have had a directive influence over urban growth and development,

especially with respect to the delivery of services under the exclusive jurisdiction of the public sector. This is an important finding. The debate must now focus on the potential for improving the method and the result. There is a need for more research, and it is suggested that this research should focus on a number of important themes.

8.1 Summary of Evaluation Findings

Table 10 summarizes the goal-achievement evaluation results for each master plan individually, and identifies various trends which become apparent from the collective analysis of each plan evaluation. In order to isolate specific trends in the evaluation findings the results are summarized and presented in two ways.

First, the findings of each master plan evaluation are summarized in order to determine the extent to which each particular master plan has been implemented and its general development concept achieved. Each of the six rows in Table 10 represent the goal-achievement evaluation results of a specific master plan. On the far right of each row the absolute number of successfully implemented (>50%) policies or functional plans (factors) are presented. This total of successfully implemented policies or functional plans should be compared to the total number of factors evaluated. If the resulting ratio is greater than .50 the plan is judged to be a successful one; that the general development concept was substantially realized.

Second, the evaluation results of each evaluation factor are presented in the columns (e.g. Population Projection, Land Use, Transportation, etc.). The ratio at the bottom of each column represents the

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page numbering

collective implementation record of the corresponding evaluation factor. For example, there have been six individual evaluations of population projection. Of these six, four of the projections are considered to be accurate; that is actual population growth was reasonably close to that which was projected.

8.1.1 Successful Master Plans

Table 10 demonstrates that four of the six plans evaluated have been successful in terms of goal-achievement. Specifically, the plans which have been found to be successful include: 1. Official Plan of The Metropolitan Toronto Planning Area (1959); 2. Metropolitan Winnipeg Development Plan (1968); 3. Calgary General Municipal Plan (1963); and 4. The Calgary Plan (1970). In each of these case studies the majority of the evaluation factors which have been evaluated were greater than 50% implemented.

8.1.2 Unsuccessful Master Plans

Two of the six master plans selected for evaluation cannot be considered as successful in terms of goal-achievement. These include: 1. Master Plan for the City of Toronto and Environs (1943); and 2. Metropolitan Plan-Greater Winnipeg (1948). In both cases the majority of evaluation factors which were evaluated were less than 50% implemented. It is concluded that the plan goals and objectives were not achieved and the general development concept was not implemented.

The fact that both of the unsuccessful master plans were metropolitan plans does have some significance. One of the major arguments advanced in support of the research hypothesis was that urban government

decision-making during the post-World War II period has become highly political, and that it was anomalous to superimpose a rational decision-making model over a political process. The finding that both unsuccessful plans were metropolitan plans tends to support this argument. To be sure, there are two metropolitan master plans which have been successful, however, there are a number of distinct differences between the plans which were successful and those which were not successful. First, the unsuccessful plans were prepared by advisory planning bodies with no formalized political or executive powers. Second, the plans were prepared and issued as policy documents for a number of politically independent municipal jurisdictions, and there was no identifiable authority responsible for policy enforcement and implementation. The metropolitan plans which were successful were prepared under the authority of a formally recognized metropolitan corporation with specific planning, regulatory, and implementation powers. An authority with specific, well-defined powers is necessary because master plans have only a restrictive legal effect, not a prescriptive one. The power to implement master plan proposals and initiatives must be derived from within the political decision-making process.

8.1.3 The Primary Elements of a Master Plan: Implementation Record

Beyond the analysis of the implementation success or failure of each master plan, Table 10 also identifies those primary elements of a master plan which are more or less likely to be implemented than others. The preliminary analysis in Chapter Four (Tables 2 and 3) demonstrated that a master plan can be broken down into seven distinct categories. It

is these primary elements of a master plan which are considered to be most important; they constitute the substance of a master plan.

An analysis of the implementation record of each of these primary elements of a master plan suggests a number of conclusions which are summarized below:

1. The population projections contained in a master plan can be expected to be reasonably accurate. Each of the six plans correctly forecasted that population would increase during the planning period. Four of the six have been reasonably accurate with respect to the actual numerical increase in population.
2. Land use policies and plans are very difficult to enforce and implement. Master plans have been characteristically unsuccessful in directing the growth and development of industrial and residential land use. Master plan policies and plans for the development of retail/commercial facilities have been somewhat more successful than industrial and residential land use plans.
3. Master plan policies respecting the development of major thoroughfares are very difficult to successfully implement. Only one of the six transportation plans studied in this evaluation has been substantially implemented.
4. Master plan policies respecting the improvement and construction of public transit systems and facilities have been successfully implemented. Each of the five public transit plans were at least partially implemented. Three of the five were greater than 50% implemented.
5. Master plan policies for the development of education/school services have been successfully followed and implemented. Three of the four plans with policy proposals for the development of education/school services were implemented.
6. Master plan policies respecting the development of health/hospital services and institutions have not been carefully followed. Three of the five plans with specific policies and proposals for the development of health and hospital services and institutions were ignored.
7. Master plan policies for the development of public utilities have been very successful. Each of the four plans with specific policies and proposals for the development of public utilities infrastructure have been followed.

8. Master plan policies for the development of parks and open space systems show no identifiable pattern of success or failure. Three of the six parks and open space policies and plans have been carefully followed, while three were not carefully followed.
9. Master plan policies and proposals for the development and/or redevelopment of the CBD show no identifiable pattern of success or failure. Of the four plans with specific policies for the development of the CBD two were carefully followed while two were not carefully followed.

These findings do suggest a very important implication for contemporary master planning theory and practice. Consider the nature of those functional policies and plans which have been successfully directed with master plan policies and proposals. These particular aspects of a master plan are distinctive in that they typically fall under the exclusive jurisdictional authority of a municipal or metropolitan government (e.g. Public Transit, Public Utilities, Education/Schools). They are managed and administered by public sector authorities. For example, public transit services are usually administered by a public transit authority, municipal school boards are responsible for the delivery and development of public educational services, and a municipal engineering department is usually responsible for the development of public utilities infrastructure. In each case the critical planning and policy decisions come from within the public sector, not the private sector.

The validity of this suggestion is further supported when one considers those aspects of a master plan which are very difficult to implement (e.g. Industrial, Commercial and Residential Land Use; the CBD; and Health/Hospital Services). Each of these very important aspects of the city do not fall under the exclusive jurisdiction of a municipal and/

or metropolitan government. This is especially true for land use. The development of industrial, residential and retail/commercial land uses are dependent upon the decisions and investments of countless private and public sector agencies. And these business decisions cannot be accurately foreseen or predicted. Just as master planners are unable to accurately predict those decisions, they are also unable to significantly influence these decisions with master plan policies or proposals. The inability to significantly influence private sector development decisions is very much the result of the relatively weak legal effect of a master plan.

Similarly, decisions respecting the development of major thoroughfares are also very complex and extend well beyond the jurisdictional authority of a municipal or metropolitan government. The construction of major thoroughfare networks within the city are highly dependent upon provincial and/or federal government policies or plans. In addition, the development of major thoroughfares are directly related to land use. This is also the case for the development of major health services and institutions. These decisions are influenced by a complex variety of factors not the least of which include federal and provincial government policies, and the health professionals.

This finding that certain master plan policies and objectives are more or less difficult to achieve than others is an important one; it demands that the contemporary master planner recognize that the practice is characterized by a significant dilemma.

The dilemma is that it is usually the most important and potentially significant goals which are the most complex and therefore the least

likely to be achieved. It is also something which the preceding estimates of plan success or failure based solely on the absolute number of goals achieved has been unable to take account of.

8.2 The Failure to Achieve the Most Important Goals

Estimates of goal-achievement based solely on the absolute number of goals achieved are unable to account for the relative importance of certain master plan goals. In Winnipeg, for example, the Metropolitan Winnipeg Development Plan (1968) identified CBD deterioration as a major planning problem. One of the most significant plan goals was to re-establish downtown Winnipeg as the primary commercial and entertainment centre. This goal was not achieved. In Toronto, the Official Plan of the Metropolitan Toronto Planning Area (1959) identified traffic congestion as a major planning problem, especially in downtown Toronto. The primary strategy to resolve this problem was the plan for major thoroughfares, but this plan was not implemented. In Calgary, The Calgary Plan (1970) identified suburban residential sprawl as one of its most pressing planning problems. The major plan policy designed to address this problem, residential density limits, was not carefully followed or implemented.

The implications of these observations do merit careful interpretation. While many master plan goals and objectives may in fact be achieved, it is often the case that the most important goals (and most significant in terms of their effect upon the overall form and structure of the city) are not achieved. This observation clearly demonstrates that if there is to be any one change in master planning theory and practice it must be able to provide an accurate and well articulated

agenda of community goals. An agenda of community goals will allow planners to concentrate on specific, priority planning issues, rather than comprehensive, long-term ones.

8.3 Normative, Concept Oriented Master Planning

The city planner's mandate - to guide and direct urban development - necessarily implies leadership. Each of the six master plans evaluated in this study represented a passive form of leadership. Long-range comprehensive master plans do not stimulate widespread and ongoing community involvement and participation, and they do not provide the community with the opportunity to grasp upon any particular goal or theme of development. Rather, each plan contained numerous policy proposals and functional plans, with each issue and each policy proposal of seemingly equal importance. This presents a strong case for planners to adopt a more aggressive role in the decision-making process. One way to achieve this more aggressive role would be through legislative amendment designed to increase planning and development control powers. This is unlikely to happen. Rather, a more aggressive role will have to be achieved with innovative planning techniques. It is suggested that master planners should focus less on rational comprehensive plans in favour of normative or concept-specific plans.

Oxford's dictionary defines normative as "of or establishing a norm". Normative may refer to a behavior or a process. Traditional master plans have followed a rational comprehensive process, not a normative one. The rational comprehensive planning model is based on city

planning principles which need not necessarily represent community norms. Rational comprehensive planning may, in fact, be at variance with the realities and the process of community or social action. It is suggested that if plans are to successfully resolve the most critical development issues of a community they will require the cooperative action of that community. The master plan, then, should be based on a normative model of planning.

8.3.1 Some Examples of Innovative Master Planning: The Regina RSVP

In response to the growing dissatisfaction with traditional master plans there have been some recent examples of innovative alternatives to the rational comprehensive planning method. One of the better known attempts to develop alternative planning methods was undertaken in the City of Cleveland, under the direction of Norman Krumholz.² Two of the more recent innovations have occurred in the Canadian cities of Vancouver and Regina.

In the City of Cleveland, the city planners rejected their traditional roles as objective planning technicians to instead become politically committed activists. The Cleveland Policy Planning Report³ set out the operating philosophy of the planning department. Planners acted upon short-term, immediate city issues, openly sided with neighbourhood associations, and provided the association with the information and support services necessary to successfully influence policy decisions.

There is some evidence to suggest that the planners were able to successfully influence policy decisions. They had successfully opposed a new west side highway, they expanded the public transit service and

reduced fares, and they implemented a "dial-a-ride" service for the elderly.⁴ Normal Krumholz summed the fundamental reason for rejecting the rational comprehensive planning model:

Attempts to implement policies spells politics. This does not introduce politics into planning; it has always been there. The critical question is: Whose politics, whose values will planners seek to implement.⁵

The City of Vancouver, Planning Department has also rejected the traditional master planning method in favour of a goal-oriented or goal-specific approach to planning. The Vancouver planners have emphasized public participation in the process of identifying community goals. Community goals provide the framework for planning policy. It is an ongoing and continuous process.⁶

This ongoing process of goal identification is framed with in "Liveable City" development theme or concept. It is a catchy theme which invites public participation and encourages public support. It is a norm within the community, and it is supported and promoted by the citizens, not just the planning department.

The City of Regina, Planning Department has adopted an innovative alternative to rational comprehensive master planning. The Regina planners have stressed the importance of public participation in the planning process. They have adopted a shorter-range perspective designed for flexibility and adaptability to changing planning problems and changing community goals.

The Regina RSVP: A Planning Strategy for Regina (1977) suggested that the problem associated with traditional master plans was "essentially

one of dynamics".⁷ The problem was that the planner's traditional role was a passive one, while effective community or social action required active and aggressive planning policy. The city planning process was based upon a straightforward principle:

We believe that urban planners have a responsibility to try to make their work as relevant as possible to the concerns of the citizens they serve. They should be able to make a direct and immediate contribution to solving current and continuing city problems...

To make a genuine contribution at the level of current events... the planner must move from a passive to an active role. He must not merely respond to the initiatives of concentrated interests in the private sector, he must act to place the initiative in the hands of the citizens, where it belongs.⁸

The Regina planners emphasized that city planning issues were 'everybody's business' and on this premise the master plan was prepared to reflect three fundamental themes:

1. That as a general principle public interests will take precedence over private interests. To accomplish this, initiatives must be taken to bring public opinion to bear on planning decisions.
2. That greater emphasis will be placed on short-term than on the long-term.
3. That planning concentrate on specific, current issues, rather than the traditional comprehensive concerns of long-range planning. Moreover, planners will use programs of liason with the general public to allow the citizens themselves to play a major role in determining the agenda of issues to be considered.⁹

The planners who prepared the Regina RSVP assumed it to be their responsibility to adopt an aggressive approach to planning which was, from its beginning, designed to translate public policy into action. Goal identification and problem solving was to take the form of strategic

interventions. The emphasis was on immediate intervention, but did not preclude long-range thinking:

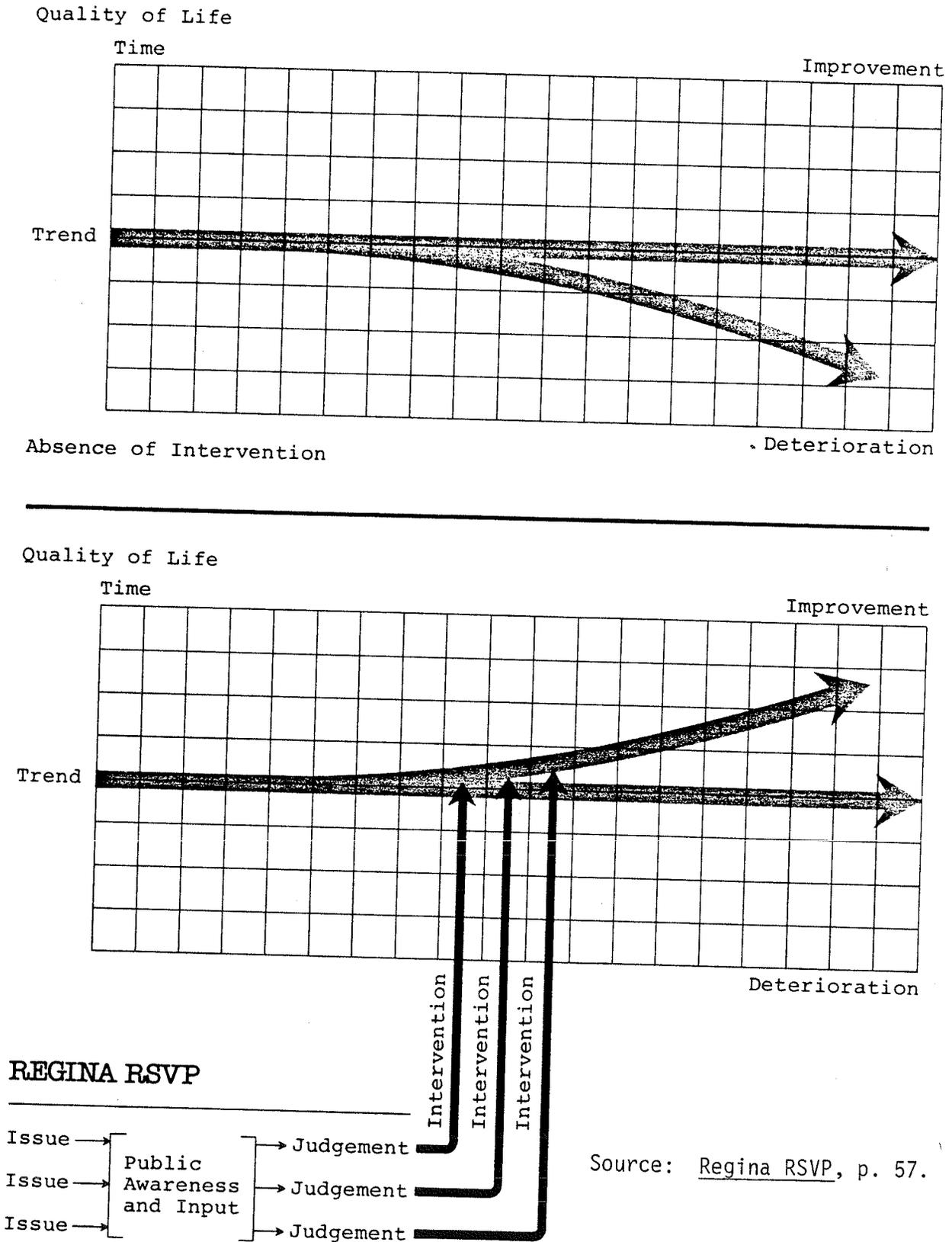
1. Short term action - planning policies must focus on the present and near future....This does not mean that long-range perspectives have no importance....
2. Strategic intervention - everything cannot be done at once. An effective plan must concentrate on issues rather than grand schemes, and issues must be placed in order of priority so that an effective attack can be launched on the critical issues.¹⁰ (see Figure 6)

8.4 Long-Range Planning and Strategic Intervention

The City of Regina's model of strategic intervention and the City of Vancouver's long-range goal orientation are two different but complimentary planning models. A long-range plan is not itself planning. Nor does a series of strategic interventions necessarily imply planning. It is suggested that effective planning can only occur when long-range goals provide the larger framework for the development of strategic interventions. It is recommended that future master plans become less comprehensive in their study scope. Master plans should identify the long-range goals of a community and should then proceed to identify the critical issues which will have a bearing on the long-range planning model. The successful master plan of the future must pay careful attention to community issues and concerns. Only then will the master plan come to enjoy a high-profile within the city.

Too often the master plan has not identified a long-range vision of the future that may be realistically attained with a series of shorter-range strategic choices. It is most important that the citizens of a community have a shared vision of the future and a common purpose. In the complex, constantly changing urban environment strategic planning designed

Figure 6 Regina RSVP: The Strategy of Intervention



Source: Regina RSVP, p. 57.

to achieve immediate results is not enough; it becomes planning for its own sake. The recommended alternative to traditional rational comprehensive master plan is a form of strategic planning which is geared to a long-range vision of the future. The key to the future success of the master plan is the planners ability and willingness to encourage public participation in establishing goals and identifying the means necessary to achieve those goals. The guiding principle is participatory democracy; the people whose quality of life is affected by planning decisions must be a part of the process of arriving at the decisions that affect urban growth and development.

8.5 Suggestions for Future Research

While this research has primarily concerned itself with the problems associated with the implementation of master plans there has been no detailed exploration of alternatives to the rational comprehensive planning model. There is a definitive need for more research in this area. Indeed there are many more limitations to overcome than there are reasons not to proceed. It is recommended that there are a number of specific areas which require deliberate and concentrated study:

1. There should be a performance evaluation of the Vancouver and Regina planning models. These plans should be evaluated so that accurate comparisons of performance between the rational comprehensive and the normative planning models can be made.
2. There should be a stronger emphasis on master plan evaluation. More evaluation is necessary not only to determine the validity of the current findings, but also so that planners can begin to isolate the many variables which may affect the success or failure of a master plan.
3. There should be an ongoing study of the relationship of planning performance to different municipal and metropolitan government political structures. The political structure may be more determinant of plan performance than is any characteristic of the plan itself.

There are also a number of general areas which do require further research.

These include:

1. A need for more study of and experimentation with master methods and techniques. Rational comprehensive planning theory (chapter two) identified a variety of functions a master plan is intended to fulfill (e.g. public education, arouse interest in community affairs, identify city planning principles and ideas, etc.).
2. A need to study the changing role of the master plan to the changing role of city government. As city governments attempt to broaden their scope of policy issues (e.g. poverty, crime, discrimination, socio-economic development, etc.), master planners must take account of provincial and federal programmes and initiatives.
3. A need to re-evaluate the hierarchical structure of most planning systems established by provincial legislation (see chapter three). There is a need to question whether or not the seemingly natural tendency to work from the top down works against the dynamics of community action.
4. A need to study what it is that prompts community action. Effective planning necessarily implies a realistic understanding of the realities and the process of community or social action.
5. A need to successfully apply non-regulatory implementation techniques. Legislation cannot keep a plan alive in the community. Rather it is the city planner who should take the responsibility to ensure that plan goals and policies are well-known and understood within the community.
6. A need to more effectively incorporate the realities of political decision-making in the master planning process. Before politicians can follow master plan policies they must first know what those policies and their implications are. Planners must work with the political process, not against it. This will require improved politician-planner communication and cooperation in all phases of the planning process.
7. Finally, there is a need to improve methods of information collection, analysis, and storage. The information base of a master plan is static and quickly outdated. A good information system should be accurate, informative, and up-to-date if it is to be of any value to the master planner. The formation of master plan policies and objectives should be based on an accurate assessment and interpretation of urban indicators which measure quality of life within the city (e.g. crime, poverty, unemployment, home ownership, education, etc.).

8.6 The First Caveat

This research proceeded with but one working hypothesis: that master plans have been ineffective guides to action, that plan policies are seldom followed, that plan goals are seldom achieved, and that, as a result, cities have lacked guidance in their growth and development. The research demonstrates that this is not entirely the case. But it also demonstrates while master plans have had some effect upon urban growth and development there is much room for improvement. There is certainly no simple answer to the many questions this research has attempted to address. And this, perhaps, must be the planners first caveat. They can no longer avoid the inescapable fact that effective planning is democratic planning. It is all too easy for planners to simply accept long-established planning methods and techniques and to superimpose these principles over the constantly changing physical, social, political and economic realities of city life. Planners cannot and should not dictate how a community should develop and what it should become. These questions must be decided in a democratic manner within the community. The planner can only help create images and encourage the community interest and enthusiasm necessary to achieve community goals

FOOTNOTES

1. This finding is supported by Ernest R. Alexander, "If Planning Isn't Everything, Maybe It's Something". Town Planning Review, Vol. 52, No. 2, April 1981, p. 141.
2. City of Cleveland, Cleveland City Planning Commission, Cleveland Policy Planning Report. Vol. 1, 1975.
3. Norman Krumholz, Janice Cogger and John Linner, "The Cleveland Policy Planning Report", JAIP, Vol. 1, 1975. pp. 298-304.
4. Micheal P. Smith, The City and Social Theory. (New York: St. Martins Press, 1979) p. 267.
5. Norman Krumholz, et.al., op.cit., p. 303.
6. Letter from Mr. Ray Spurman, City of Vancouver Planning Director, May 1984.
7. City of Regina, Planning Department, Regina RSVP: A Planning Strategy for Regina, 1977, p. 2.
8. Ibid., pp. 2-3.
9. Ibid., p. 3.
10. Ibid., p. 57.

APPENDICES

APPENDIX A

STATUTORY REFERENCES TO THE MASTER PLAN:

SELECTED EXCERPTS OF THE ONTARIO,
MANITOBA, AND ALBERTA LEGISLATION

I. A MUNICIPALITY'S RIGHT TO PREPARE PLANS

- a. An Act relating to Planning and Regulating the Use and Development of Land for Building Purposes, S.M. 1916, c. 114:

1. A town planning scheme may be prepared in accordance with the provisions of this Act with the general object of securing suitable provision for traffic, proper sanitary conditions, amenity and convenience in connection with the laying out of streets and use of land and of any neighboring lands for building or other purposes.

- b. An Act respecting Surveys and Plans of Land in or near Urban Municipalities, S.O. 1917, c. 44:

4.--(1) The council of a city, town or village may procure to be made for adoption by it a general plan of such city, town or village, and the urban zone adjoining it; or of such portion of the same as such council may deem expedient.

II. PLAN DEFINITION

- a. The Planning Act, S.O. 1946, s. 1:

(g) 'official plan' shall mean a plan consisting of maps and explanatory texts prepared and recommended by the planning board and adopted and approved as provided in this Act, covering a planning area, and showing a programme of future development, including the regulation of the use of land, buildings and structures in the planning area and any other feature designed to secure the health, safety, convenience, and welfare of the inhabitants.

III. PLAN OBJECTIVES, CONTENT, AND STUDY SCOPE

- a. The Town Planning Act, S.M. 1924, c. 196:

3. A town planning scheme may be prepared in accordance with the provisions of this Act with the general object of securing suitable provision for traffic, proper sanitary conditions, amenity and convenience in connection with the laying out of streets and use of land and of any neighboring lands for building or other purposes.

- b. The Planning and Development Act, R.S.O. 1927,
c. 270:

4(2) Such plan should show all existing highways and widening, extension or relocation of the same which may be deemed advisable and also all proposed highways, parkways, boulevards, parks, playgrounds and other public grounds or public improvements, and shall be certified by an Ontario land surveyor.

- c. The Town Planning Act, S.O. 1929, c. 49:

19. Any local or rural authority shall have power--

- (d) to prepare plans for the development of railway and rapid transit and street railway and airport facilities, and to recommend plans so prepared to any Railway Board or public authority having jurisdiction in the matter, and to any railway or other company concerned therewith, and to use all lawful measures to secure the adoption of such plans and the due coordination of terminal, transportation, and other facilities of commerce and traffic within and about the municipality;
- (e) to make provision for any street widening project by defining the minimum distance from the centre or side line of existing or projected streets at which buildings or other structures may be erected, placed, constructed or reconstructed;
- (f) to make provision for the reservation of land for projected streets or street widening projects, and for parks and other public purposes;
- (g) to make provision for the supply of light, water, sewerage, street transit and other facilities to the various parts of the area included in an official town plan or scheme;
- (h) to prescribe the order in which any part or parts of the development provided for in the official town plan or scheme will be carried out and the order in which any designated parts of the area included in the official town plan or scheme will be supplied with light, water, sewerage, street, transit and other facilities;
- (i) to make provision for the method of financing any works and expenses to be incurred in connection with or incidental to the carrying out of the development prescribed in the official town plan or scheme or any part

or parts of such development.

d. The Planning Act, S.O. 1946, c. 71:

2(4) In defining the scope and general purpose of the official plan the Minister shall have regard among other matters to the requirements of the planning area for drainage, land uses, communications and public services.

e. The Planning Act, S.A. 1963, s. 95:

(a) shall be prepared on the basis of surveys and studies of land use, population growth, the economic base of the municipality, its transportation and communication needs, public services, social services,

f. City of Winnipeg Act, S.M. 1971, c. 105:

573 In reviewing the Greater Winnipeg development plan, the council shall have regard to,

(a) the principle physical, social, environmental and economic conditions of the city and the additional zone, including the principle purposes for which the land is used;

(b) the size, composition and distribution of the population of the city and the additional zone;

(c) without restricting the generality of clause (a), the provision of public services and facilities including transportation and communication facilities in the city and in the additional zone;

(d) housing requirements, including the renewal, rehabilitation and improvement of neighbourhoods and the urban core;

(e) open space requirements, including the management and preservation of forested areas and the protection, restoration, reclamation or use of river banks;

(e.1) the preservation, protection and enhancement of areas of land, building structures and sites of historical, archaeological, geological, architectural, environmental, or scenic significance; and,

(f) any considerations not mentioned in clauses (a) to (e.1) inclusive which may be expected by the council to affect any matter so mentioned.

IV. PUBLIC PARTICIPATION

- a. The Town Planning Act, S.M. 1924, c. 196:

(2) Provision shall be made by these regulation--

(a) for securing co-operation on the part of local authority with the owners and other persons interested in the land proposed to be included in the scheme at every stage of the proceedings by means of conferences and other such means as may be provided by the regulations;

- b. The Planning Act, S.A. 1977, c. 89:

60. A council shall, during the preparation of a general municipal plan, provide an opportunity to those persons affected by it of making suggestions and representations.

- c. City of Winnipeg Act, S.M. 1971, c. 105:

575(1) Before giving a Greater Winnipeg development plan by-law a first reading, the council shall forward it to the executive policy committee.

(2) The executive policy committee, upon receipt of the Greater Winnipeg development plan by-law under subsection (1), shall consult with each community committee for a community and each council of a municipality in the additional zone that the council considers may be affected significantly by the proposed amendment, alteration, repeal or replacement of the Greater Winnipeg development plan.

V. LEGAL EFFECT

- a. An Act relating to Planning and Regulating the Use and Development of Land for Building Purposes, S.M. 1916, c. 114:

7. A town planning scheme when approved by the Minister shall have effect as if it were specially enacted in this Act.

- b. The Town Planning Act, S.A. 1929, c. 49:

20. The adoption by a local or rural authority of any official town plan or scheme, shall not commit the authority to undertake any of the

projects therein suggested or outlined, but shall prevent the undertaking by the authority of any public improvements within the scope of the official town plan or scheme in any manner inconsistent therewith or at variance therefrom.

c. The Planning Act, S.O. 1946, c. 71:

12. Notwithstanding any other Act, where an official plan is in effect, no public work that does not conform therewith shall be undertaken,

13. Where there is conflict between an official plan and a by-law passed under section 406 of The Municipal Act, the official plan shall prevail.

14. Where lands, buildings or structures are used or buildings or structures are located in contravention of the official plan or the official plan is contravened in any other manner, in addition to any other remedy or penalty provided by law, such contravention may be restrained by action at the instance of the planning board or ratepayer of the municipality (sic) in which the contravention took place.

d. The Planning Act, S.M. 1975, c. 29:

34(1) The adoption of a development plan does not require the board of a district or the council of a municipality to undertake any proposal therein suggested or outlined; but no undertaking or development plan shall be carried out that is inconsistent or at variance with the proposals or policies set out in the development plan.

(2) Upon the adoption of a development plan the council of a municipality shall--

(a) proceed forthwith to draft a zoning by-law to carry out the intent of the plan; and

(b) enact the by-law within
(i) 6 months; or
(ii) such longer period of time as the minister, after consultation with the district or municipality may decide.

VI. PLAN AMENDMENT

a. The Planning Act, S.O. 1946, c. 71:

12. Notwithstanding any other Act, where an official plan is in effect, no public work that does not conform therewith shall be undertaken, except with the general approval of a two-thirds affirmative vote of all members of the council of a municipality in which the public work is undertaken.

b. The Planning Act, S.M. 1975, c. 29:

26(4) Subject to the provisions of this Act, the board of a district or the council of a municipality may, after advising the minister, prepare a development plan or any amendment thereto.

APPENDIX B

MASTER PLAN FOR THE CITY OF TORONTO AND ENVIRONS (1943)

GOAL ACHIEVEMENT EVALUATION RESULTS

MASTER PLAN FOR THE CITY OF TORONTO AND ENVIRONS (1943)

GOAL-ACHIEVEMENT EVALUATION RESULTS

I. POPULATION GROWTH

Projection:

That the population in the Metropolitan Area in the year 1974 will be between 1.25 and 1.50 million persons, or a maximum increase of 600,000 persons over the 1943 population of 900,000 persons.

Implementation Record: (50%)

Actual population increased to slightly over 2 million in 1971, and to almost 2.2 million in 1976. Growth in population occurred at more than twice the rate projected.

II. LAND USE

General Policy:

That new development be accommodated in the vacant land of adjacent municipalities, with an incidental increase in development intensity within the City of Toronto boundaries.

a. Industrial

That metropolitan industrial development be directed to six specific areas of intensive land use:

1. In the extreme south west corner, between Queen Elizabeth Way on the north and the Lake Ontario shoreline on the south;
2. In the southern most portion of the City of Toronto municipal boundary, between Queen Street on the north and the lakeshore on the south;
3. In the extreme south-west corner of the planning area, between Eglinton Avenue on the north the proposed Kingston Road on the south-south east and Daives Road on the West;
4. In the north west corner of the City of Toronto municipal boundary, with narrow fingers of devel-

opment extending to the east and to the south.

5. In the central region of the planning area, with two major districts on the north and south of the Don Valley Parkway;
6. In the northwestern region of the planning area, with scattered industrial blocks northwest of the Humber Valley;

Implementation Record: (25%)

Industrial areas have not developed as proposed. Industrial development has been considerably greater than anticipated, and it has occurred in a much less centralized fashion. Nevertheless, plan policies 1, 2, and 4 were partially implemented. Industrial development in the southwest corner of the planning area has been noticeably more extensive than anticipated, whereas development around the waterfront in the southern portion of the City of Toronto has been much less extensive than expected.

b. Residential

General policy proposals:

1. To contain residential development within the boundaries of the planning area;
2. Residential densities in suburban areas are not to exceed 10,000 persons per sq. mi. (38.55 persons per hectare);
3. To construct low income housing "superblock" on a 41 acre site bounded by Parliament Street, Gerrard Street, Dundas Street and River Street.

Implementation Record: (25%)

Suburban residential development was much greater than anticipated. Residential density in the City of Toronto and surrounding area was greater than the proposed limit. Within the entire metropolitan area, residential density averaged 82.75 and 78.27 persons per hectare in 1971 and 1976. The proposed "superblock" low-income housing

² City of Toronto Planning and Development Department, Toronto Planning Atlas. 1980, p. 2.

development was implemented as proposed, and is now known as Regent Park.

c. Retail/Commercial

No specific policies or plan.

III. TRANSPORTATION

General Policies:

1. To provide an adequate system of transportation that will permit the maximum freedom of convenience of movement between residential, employment, and recreational districts;
2. To provide a framework for the future construction of grade separated superhighways from which any part of the City and region could be easily accessible;
3. To construct rapid transit subways.

a. Major Thoroughfares:

To develop a network of arterial and main highways:

1. Superhighway "A"- To run along the waterfront extending some 600 miles from Montreal to Windsor;
2. Superhighway "B"- To take advantage of the bed of the Garrison Creek to provide southerly continuation of the proposed expressway to Northern Ontario, located between Kelle and Jane Streets. The connection with the waterfront highway to be in the vicinity of Princess Gate on the westerly boundary of the City's principle industrial area.
3. Superhighway "C"- To run north from the easterly terminus of the waterfront highway, in the vicinity of Coxwell Avenue to a junction with Eglinton Avenue which is to be developed as a main route crossing both the Humber and Don Valleys to connections with Brown's Line and Kingston Road;
4. Superhighway "D"- Bypass traffic to use Brown's Line as a connection to the Queen Elizabeth Way, passing through the easterly terminus of the contemplated new Provincial highway to Guelph, Kitchner, Galt and Stratford;
5. Superhighway "E"- To form the backbone of east and westbound traffic through the city centre.

To be constructed parallel to Bloor Street and to swing south-easterly through the Rosedale Ravine and then to follow the line of Gerrard Street to Kingston Road. Its westerly terminus to be at the junction of Brown's Line with the proposed new road to Guelph;

6. The extension of Jarvis Street to connect with Mount Pleasant Road;
7. The construction of a high speed route following the Old Belt Line Railway from the waterfront to a junction with the Garrison Creek superhighway;
8. The projection of Spadina Road with a tunnel under Davenport Road.

Implementation Record: (50%)

Few of the proposals have been implemented. Many major thoroughfares were constructed during the plan period, but only a few of the proposals were implemented. These include:

1. Superhighway "A" was partially implemented. The Gardiner Expressway runs parallel to the waterfront from Kingsway South on the west, to Lakeshore Boulevard on the East. Lakeshore Boulevard turns north at Woodbine Avenue.
2. Superhighway "D" was constructed as the MacDonald-Cartier Freeway. It provides the east-west thoroughfare, but runs south of Wilson Avenue between Bathurst and Weston Roads.
3. The Jarvis Street extension to Mount Pleasant was implemented, as was the Spadina Road extension.

b. Public Transit

To endorse the Toronto Transportation Commissions proposals to:

1. Construct a rapid transit subway line following Yonge Street from Heath Street to the Union Station;
2. Construct a crosstown line following Queen Street from Gladstone Avenue to the Canadian National Railway, and to follow the railway north-easterly to Pape Avenue.
3. Construct a rapid transit line on the Garrison

Creek Superhighway from Queen Street to St. Clair Avenue and on the Bloor Street Superhighway from Dundas Street to University Avenue with a connection to the Union Station to run southerly under the latter thoroughfare.

Implementation Record: (25%)

Today, Toronto has a successful system of subways and rapid transit facilities. Only the proposal to construct the Yonge Street subway line was implemented. The existing rapid transit system does not resemble the plan proposals.

IV. PUBLIC SERVICES/INSTITUTIONS

General Policy: No general policy or plan.

a. Education/Schools

It was proposed that all privately owned land bounded by University Avenue, Dundas Street, Bay Street and Queen Street be acquired for the purpose of forming a large civic square, and that Osgoode Hall locate within this area.

Implementation Record: (100%)

The area described in the plan has become a major center for public and semi-public institutions. Osgoode Hall was constructed within the boundaries of the area.

b. Health/Hospitals:

It was proposed that the area bounded by University Avenue, Gerrard Street, Bay Street and Dundas Street be set aside for the expansion of the General Hospital and the establishment of other hospitals and similar institutions.

Implementation Record: (100%)

Within the area designated in the plan there now stands the Toronto General Hospital, the Hospital for Sick Children, and New Mt. Sinai Hospital, on the west side of University Avenue.

V. PUBLIC UTILITIES

No policies or plan.

VI. PARKS AND OPEN SPACE

General Policy:

To develop an inner greenbelt and parkway to be located in the valleys and tributaries of the Don and Humber Rivers.

Implementation Record: (75%)

The Don and Humber Valleys do form the major features of the metropolitan Toronto parks and open space system. However, the proposed east-west linkage between the two valleys just north of Wilson Avenue has not been implemented. The Downsview Airport, the Canadian Armed Forces Base, and two residential subdivisions divide the two valleys at this point. The actual location of the linkage has been located much farther north, between Finch and Steeles Avenues.

VII. CENTRAL BUSINESS DISTRICT

General Policy:

To improve the Downtown area by providing for parks and open space, proper groupings of public and semi-public institutions, and reduce traffic congestion.

The specific recommendations included:

1. That the area bounded by University Avenue, Dundas Street, Bay Street, and Queen Street be acquired for the purpose of forming a large civic square in which would be located Osgoode Hall, the Registry Office, New City Hall, and other Civic and Administrative buildings;
2. That the area bounded by University Avenue, Garrard Street, Bay Street and Dundas Street be set aside for the expansion of the General Hospital and the establishment of other hospitals and like institutions;
3. That municipal parking lots be established as a public utility and that vacant lots which were operated privately and were improperly located from a traffic standpoint be dedicated as public parks;
4. That the area to the west of the University of Toronto be prohibited from development to allow for University expansion in an orderly and proper manner;
5. That provisions be made for the proper grouping of such important public and semi-public insti-

tutions as a National Music Centre, a New Massey Hall, or civic auditorium and many others whose location should not be left to chance or dictated by sites that happen to be available when the time for construction arrives.

Implementation Record: (100%)

The recommendations have been followed. With the exception of proposal #3 regarding the change of improperly placed parking lots to parks, the plan proposals have been implemented. City Hall was constructed as planned. The University of Toronto has expanded to the west, the development of important public and semi-public institutions have concentrated in the downtown area (i.e., Eaton Center, Ryerson Polytechnical Institute, Toronto Western Hospital, etc.), and many noteworthy parks (i.e., Alexandra, Grange, Queens, Moss, and Allan Gardens) are located within the boundaries of the downtown district. The only major exception to this rule is the construction of the New Massey Hall on the south side of King Street West.

APPENDIX C

OFFICIAL PLAN OF THE METROPOLITAN TORONTO PLANNING AREA (1959)

GOAL-ACHIEVEMENT EVALUATION RESULTS

OFFICIAL PLAN OF THE METROPOLITAN TORONTO PLANNING AREA (1959)

GOAL-ACHIEVEMENT EVALUATION RESULTS

I. POPULATION GROWTH

Projection:

That the population in the metropolitan area would increase from 1.2 million persons in 1958 to 2.8 million persons by 1980.

Implementation Record: (100%)

Population projections were accurate. The 1981 population of the metropolitan area was 2.99 million persons.¹

II. LAND USE

General Policy:

New development should occur in a decentralized pattern. Urban development to eventually take the form of a broad "urban ribbon".

a. Industrial

That metropolitan industrial development be directed to a number of industrial "islands"; that suburban industrial locations conform with the basic expressway pattern; and that the general industrial land use pattern form a series of "radial strings" conforming to major rail facilities.

It was estimated that industrial land use in 1980 would take up 24,500 acres, an increase of 562.5 acres per year. This demand was to be accommodated in a number of large industrial parks:

1. North of the Don Valley Parkway;
2. Along Spadina Expressway and highways 400 and 27;
3. West of Queen Elizabeth Way and at highway 401 at Malton;
4. To the east on highway 401 at Ajax, and along the proposed Gardiner Expressway extension, and;
5. On lakeshore areas for firms requiring direct water intake or private dockage, especially in the area east of Frenchman's Bay.

¹ Statistics Canada, Census Data, 1981, Catalogue 92-806, Table 6.

Implementation Record: (100%)

The demand for industrial land was not as great as anticipated. Between 1958 and 1975 industrial land absorption averaged 475 acres per year,² 87 acres per year less than expected. Nevertheless, the actual rate of land absorption was 85% of that projected.

Decentralization of industrial land use has been substantially achieved. Most industrial land is scattered throughout the planning area, in well-defined industrial parks. These industrial parks align themselves with major expressways; there is adequate lakeshore industrial land, especially in the western extreme of the planning area.

b. Residential

General Policy:

To increase residential densities in most sections of the planning area.

The specific predictions and recommendations included:

1. That by 1980 there would be a need for about 116,000 acres of residential land. Of this total, 81,000 acres were to be developed in Metropolitan Toronto, with the remaining 35,000 acres to be developed in fringe areas;
2. That by 1980 core area residential density should be 89 persons per acre, and that densities gradually decrease toward the suburban and fringe areas. These projections for residential density were calculated on a persons per acre basis; Toronto-57, York-42, East York-33, Etobicoke-20, North York-22, Scarborough-22, and the Metropolitan Area-24.

Implementation Record: (75%)

Population density did increase throughout the metropolitan area. By 1976 residential density for the metropolitan area was 78.27 persons per hectare, or 31.7 persons per acre. This was broken down as follows: Toronto-33.6, York-44.5, East York-39.2, Etobicoke-24.2, North York-27.2, and Scarborough-23.5 persons per acre.³ Residential land use conforms with the

² Metropolitan Toronto Planning Department, Metroplan: Concept and Objectives. 1976, p. 96.

³ City of Toronto Planning and Development Department, Toronto Planning Atlas: Computer Drawn Maps of Planning Indicators for Metropolitan Toronto. August, 1980, p. 12.

plan proposals to allow higher residential densities in the core area. On average, however, residential density increased at a rate of 8 persons per acre higher than proposed.

c. Retail/Commercial

New retail and commercial developments were to be directed in a manner which would ensure:

1. That the downtown area of the City of Toronto would continue to function as a major center for retail shopping and office employment;
2. That most growth in commercial land would be closely related to population growth and should therefore occur in the suburban and fringe areas;
3. That the proportion of commercial land to population increase from 2.2 acres per 1000 persons in 1958 to 2.9 acres per 1000 persons in 1980.

Implementation Record: (75%)

The downtown area of the City of Toronto is the major retail and office center of the Metropolitan area. By 1974 the central area housed 308 million or 68% of all available office space.⁴ In 1971 the City of Toronto contained 40% of the total retail floor space in the metropolitan area, while surrounding municipalities and fringe areas contained 47.9% and 12.1% respectively.⁵ Retail and commercial development has not occurred exactly as planned. By 1974, for example, North York contained 60% of all suburban office space with major concentrations in the Don Mills/Eglinton area, and the area surrounding the intersection of Highway 401 and the Don Valley Parkway.⁶ In the remaining municipalities office space tends to be dispersed along expressways, at the intersection of major roads, and in shopping centers.⁷

III. TRANSPORTATION

General Policy:

To ensure the efficient and safe movement of people and goods throughout the planning area.

⁴ Metropolitan Toronto Planning Department, Metroplan: The Central Area and Subcentres, January 1976, p. 12.

⁵ Ibid., p. 27.

⁶ Ibid., p. 21.

⁷ Ibid.

a. Major Thoroughfares:

To develop a complete metropolitan expressway system with radial, cross-town, and circumferential routes which should interconnect the principle highways leading from the province into the planning area. To provide express service between large residential areas, employment areas, and the central city.

The plan for major thoroughfares proposed the construction of some 121 miles of major thoroughfares with highest priority directed to:

1. The eastward extension of the Frederick G. Gardiner Expressway to join Highway 401 just west of Highland Creek;
2. The westward extension of Highway 403 from Highway 27 to extend continuously from Windsor and Ottawa;
3. The extension of Highway 400 from its southern terminus at Highway 401 to join the Gardiner Expressway west of York;
4. The extension of Highway 403 to branch off from Highway 401 just west of Highway 27 to continue parallel to the Queen Elizabeth Highway at a distance at slightly over 3 miles;
5. The construction of an east-west expressway about 4-5 miles north of and parallel to Highway 401. Starting at Highway 401 just west of the Trafalgar-Toronto Township line the expressway parallels the northern boundary of Toronto Township, swings north to cross the Humber River above the proposed Clairville Reservoir, then continues on an alignment close to Highway 7 to Pickering Township where it would be continued by Highway 7. Ultimately, it should continue eastwards towards Peterborough and Ottawa;
6. The northward extension of the Don Valley Parkway to the east shore of Lake Simcoe;
7. The northward extension to Highway 27 from Dixon Road to just beyond Highway 7. North of Rexdale Boulevard it should assume a new alignment west of the present highway.
8. The northward extension of the Spadina Expressway from the Crosstown Expressway to Highway 401

and Wilson Avenue. From Wilson Avenue it should continue north as a limited access road, terminating at an intersection with the proposed expressway bypass.

9. The east-west Crosstown Expressway to be constructed just south of Dupont Street, to extend between the southerly extension of Highway 400 and the Don Valley Parkway.

Implementation Record: (25%)

The transportation plan was not implemented. Only proposal #3 bears any close resemblance to what has actually occurred. The existing north-south route between the Macdonald-Cartier Freeway is indirect, via Weston Road, Keele Street, and Dundas Street West.

b. Public Transit

To develop a rapid transit system consisting of a number of primary subways, rapid transit lines and buslines. The construction of 43 miles of subway lines to be directed into four major projects:

1. The extension of the Bloor-Danforth line to Royal York Road on the west and Warren Avenue on the East;
2. The northwest extension of the University line along Spadina Road and the Spadina expressway to Wilson Avenue;
3. The construction of a subway line on or close to Queen Street. The western terminus of the line to be at Sunnyside. To the east the line should follow the alignment of Queen Street then swing north to an interchange station with the Bloor-Danforth subway and to a terminus at O'Conner Drive;
4. The extension of the Yonge Street Subway to Sheppard Avenue.

Implementation Record: (75%)

Three of the four proposals were completely implemented. Proposal #3, to construct the Queen Street Subway, was not implemented. The proposed extension of the Yonge Street Subway to Sheppard Avenue has been continued further north to Finch Avenue by 1974.

IV. PUBLIC SERVICES/INSTITUTIONS

General Policy: No general policy proposal or plan

a. Education/Schools

It was expected that the proportion of school age children to total population would increase from 19.5% in 1958 to 24.3% in 1980. This growth was to occur in the fringe municipalities of Etobicoke, North York, and Scarboro. The proportion of school age children to total population in Etobicoke, North York and Scarboro to constitute 27.1, 17.1 and 17.1 percent of their respective populations.

Implementation Record: (25%)

By 1976 the school age population comprised 22% of the total metropolitan population, a proportional increase of 2.5%, slightly more than 50% of the projected 4.8% increase.⁸ Etobicoke has experienced the smallest proportionate increase in school age children while North York and Scarboro proportionate increases grew much more than expected to 22.0% and 24.0% respectively.⁹

b. Health/Hospitals

No policies or plan.

V. PUBLIC UTILITIES

General Policy:

To develop an integrated system of public utility services with a high degree of unified control.

a. Water Supply

It was expected that by 1980 the average daily water consumption in the metropolitan area would be 317 million gallons and 370 million gallons for the entire planning area. To provide for peak demand the metropolitan water supply system was to have a 614 million gallon per day capacity. Lake Ontario to provide the primary source of water. Proposals for upgrading the water supply system included:

⁸ City of Toronto Planning and Development Department, Toronto Planning Atlas: Computer Drawn Maps of Planning Indicators for Metropolitan Toronto, August, 1980, p. 20.

⁹ Ibid.

1. The construction of a water filtration plant to be located on the lakeshore in the western end of Metropolitan Toronto with a capacity of 100 million gallons per day;
2. The northern municipalities to be supplied from wells and one river. Supply to be approximately 8 million gallons per day.
3. The availability of additional water sources to be dependent upon the ultimate requirements of the planning area and to be subject to agreement between appropriate municipalities.

Implementation Record: (100%)

As proposed, Lake Ontario does provide the primary water supply source in the Metropolitan Toronto Area. Several purification and filtration plants and strategically located reservoirs have provided the Metropolitan Area with adequate water supply. In addition, numerous lift stations maintain water pressure throughout the planning area. The maximum daily consumption in 1974 was 447 million gallons per day.

b. Waste Disposal

To provide for waste disposal of sewerage with "extensions as required". Upgrading of system to begin with:

1. The construction of a Lakeview sewage treatment plant to be located in Toronto Township, west of the mouth of Etobicoke Creek;
2. The expansion of the Humber Sewage Treatment Plant to an ultimate capacity of 100 M.G.D.;
3. The expansion of the Ashbridge's Bay Plant to an ultimate capacity of 160 M.G.D..

Implementation Record: (100%)

The specific location of sewage treatment plants was not determined. Extensions in the sewage treatment facilities have occurred as required. There are four sewage treatment plants in the Metropolitan Area. These plants provide all industrial and commercial establishments and 90% of the residences with sanitary sewers.

c. Storm Water/Flood Control

Storm Water drainage to be collected and discharged to the numerous natural water courses, which drain, via the major rivers and creeks, to Lake Ontario. Extensive storm trunk sewers not required provided the natural

water courses are preserved and protected throughout the process of development.

Implementation Record: (100%)

The policy of preserving natural water courses has been closely followed. The Toronto Metropolitan Area is noted for its well-integrated system of natural water courses for storm water and flood control.

VI. PARKS AND OPEN SPACE

That there be at least 16,617 acres of developed parkland by 1980, an average of 7.3 acres per 1000 persons. Specific proposals for improvement of the existing system included:

1. Humber Valley- The entire length of the Humber Valley extending from Lake Ontario to the northern boundary of Steeles Avenue should be developed as a system of parklands totaling 15 miles and 1,550 acres;
2. Don Valley- Three distinct park systems to be established:
 - a. Massey Creek- continuous parkland to extend from Rosedale Ravine south to Warden Avenue in Scarborough at its eastern end and to Lawrence Avenue in North York at the Northern end (Total: 19 miles, 1,920 acres).
 - b. North West Don Valley-continuous park system to extend between Sheppard Avenue and Steeles Avenue (Total: 3 miles, 340 acres).
 - c. East Don Valley- continuous park to extend between York Mills Road and Steeles Avenue (Total: 4 miles, 685 acres).
3. Highland Park- The Highland Creek valley park to extend from the mouth of the river at Lake Ontario to Old Danforth Road on the north and in the vicinity of Lawrence Avenue and Orton Park Road on the west. In addition, a metropolitan golf course should be developed (Total: 1955 acres).
4. Scarborough Bluffs- develop a full-scale metropolitan park at the top of the Bluffs.
5. Lakeshore Parks-
 - a. Toronto Islands Park-To be developed as a major park (575 acres) complete with public beaches.

- b. Frenchman's Bay-The land surrounding Frenchman's Bay to be developed as a public park complete with public beaches.
- c. Ajax-To be developed as public park and beaches.
- d. Port Credit-To be developed as continuous park to extend from lakeshore to Queen Elizabeth Way.

Implementation Record: (50%)

By 1974 the total area of metropolitan parklands was 7,811.6 acres.¹⁰ In addition, Valley parklands totaled 6,670 acres for a combined total of 14,481.6 acres of parks and open space.¹¹ Not all the proposals for specific park developments were completely implemented. The individual proposals and estimates of their implementation records are presented below:

- 1. Humber Valley- (75%) The park system is not continuous, having a major break of approximately 3 miles north of the Weston Golf Course and south of the Albion Road.
- 2. Don Valley:
 - a. Massey Creek-(100%)
 - b. North West Don Valley-(25%) The park is not nearly as large as proposed.
 - c. East Don Valley-(50%) This is not a continuous park.
- 3. Highland Park- (100%)
- 4. Scarborough Bluffs- (25%) The park is not nearly as large as proposed and is not a major metropolitan park.
- 5. Lakeshore Parks:
 - a. Toronto Islands Park-(100%).
 - b. Frenchman's Bay-(50%) The park is not as large as proposed and has no public beaches.

¹⁰ Metropolitan Toronto Planning Department, Metroplan: Concept and Objectives. 1976, p. 158.

¹¹ Ibid.

- c. Ajax-(50%) Park is not as large as proposed and has no developed public beaches.
- d. Port Credit-(25%) Park extends only partially north along Etobicoke Creed, about 25% of the distance to Queen Elizabeth Way.

VII. CENTRAL BUSINESS DISTRICT

No general policies or plan.

APPENDIX D

METROPOLITAN PLAN-GREATER WINNIPEG (1948)

GOAL-ACHIEVEMENT EVALUATION RESULTS

METROPOLITAN PLAN-GREATER WINNIPEG (1948)

GOAL-ACHIEVEMENT EVALUATION RESULTS

I. POPULATION GROWTH

Projection:

That the population in the metropolitan area in the year 1979 would increase to 530,000 persons, an increase of approximately 300,000 persons from 1948.

Implementation Record: (100%)

Actual population increased to 561,000 persons by 1976, and to 578,625 persons by 1981.¹ Population projections have turned out to be quite accurate.

II. LAND USE

General Policy:

To make provisions for amenable living including pleasant, undisturbed residential neighbourhoods, with adequate commercial services, and provisions for employment opportunities in business and industrial areas.

The plan did not include individual proposals for industrial, residential, and retail/commercial land use. Rather, proposals for all three major land uses were included in a comprehensive zoning scheme which was intended to create a balanced relationship between the various municipalities in the metropolitan area.

Implementation Record: (0%)

Although it is difficult to determine the extent to which the zoning proposals were followed, most evidence tends to suggest that the zoning plan was not enforced. The proposed zoning scheme was neither approved nor adopted by the constituent municipalities. Rather, each municipality prepared and adopted its own zoning or town planning scheme. These included the Winnipeg Zoning By-law, 1950; and Town Planning schemes for the municipalities of Charleswood, 1951; St. Vital, 1952; Fort Garry, 1955; East St. Paul, 1956; Brooklands, 1957; Old Kildonan, 1957; and St. Boniface, 1958.²

¹ Statistics Canada, Census Data, 1976 and 1981.

² Valdene Buckley, Micheal Ediger, and Charles Folarin, An Evaluation of Comprehensive Planning in Winnipeg and Calgary: 1945-Present. University of Manitoba, Department of City Planning, Unpublished, 1983, p. 16.

III. TRANSPORTATION

General Policy:

To provide a comprehensive and efficient system of main traffic thoroughfares, and to improve the efficiency and speed of public transit service throughout the metropolitan area.

a. Major Thoroughfares

To provide a comprehensive system of main traffic thoroughfares, which are direct in alignment, adequate in width, continuous and of easy grade, so that it will be possible to move freely, safely, and expeditiously to and from all points of the metropolitan area.

The specific proposals included:

1. Extension of Portage Avenue via Rorie Street to Logan Avenue;
2. Connection from Henderson Highway over a proposed new bridge to Disraeli Street and then across the C.P.R. to a connection with the Portage-Rorie extension. Nairn Avenue from Transcona to connect with this downtown route;
3. Pembina Highway extension from Osborne and Corydon to Main Street;
4. Connection from Donald and Smith Streets across the Assiniboine River to connect with Pembina-Main route;
5. Ellice Avenue to be improved at the Balmoral and Colony connection, extended south-west in St. James to connect to Silver Avenue, and provided with alignment for future widening;
6. Corydon Avenue to Jackson Avenue connection;
7. Broadway extension to Portage Avenue;
8. Crosstown thoroughfare from Osborne Street to Salter Street to be widened and improved. Connection at south end across Red River in St. Vital, connection to Main Street at north end in West Kildonan.
9. Connection of Graham Avenue to Notre Dame East across Main Street, and improved connection of Notre Dame East to the Provencher bridge;

10. St. Mary Avenue extension to Portage Avenue;
11. Connections and widening of Wolever and extension into St. James to connect with Silver Avenue;
12. Connection of Oakenwald in Fort Garry to Glenlawn (or Fermor) in St. Vital, thence to the Niakwa Road;
13. Connection from Macdonald Road at Fort Whyte northward via Lockwood Street, the St. James bridge, Madison Street extended north and joined to the Rosser Road in Broodlands;
14. Connection of the Scotland-Grant and Frederic-Taylor routes west from Pembina Highway;
15. Connection of Wilkes Avenue to Point Road;
16. Connection of McPhillips, Lipton and Waverley Streets;
17. Connection of Burrows Avenue eastward to the Disraeli bridgehead;
18. Connection of Inkster Boulevard across Red River to Government Avenue in East Kildonan, and extension to Transcona;
19. Connection from Dawson Road to the Bird's Hill Road via Panet Road extended south;
20. Connection of the proposed Traverse-Aulneau-St. Joseph thoroughfare in St. Boniface, across the Red River to the Rorie-Disraeli route.

Implementation Record: (50%)

Eight of the twenty proposals have been implemented. These include:

1. The connection of Corydon Avenue to Jackson Avenue;
2. The Broadway extension to Portage Avenue;
3. The connection of Grant and Taylor routes west from Pembina Highway;
4. The St. Mary Avenue extension to Portage Avenue via Spence Street;
5. The realignment of Ellice Avenue at Colony Street;
6. The connection of Donald and Smith Streets via a new bridge to Pembina Highway;

7. The Disraeli bridge and overpass;
8. The St. Vital bridge.³

The major objective of the thoroughfare plan was not achieved. The Metropolitan Winnipeg Development Plan (1968) noted that transportation problems were numerous, especially in the central area.⁴

b. Public Transit

To improve the efficiency of service in all parts of the metropolitan area.

It was recommended that Winnipeg would not require rapid transit facilities similar to those found in other major cities. Of the 37 recommendations for transit routes most were related to the routing of bus lines along major thoroughfares, the standardization of transit vehicles, and the general improvement of existing facilities rather than the construction of an elevated or underground transit system.

Implementation Record: (100%)

Winnipeg has not developed an elevated or underground rapid transit facility. Most individual plan recommendations were used by the Winnipeg Railway Company as a guide for improving the transit service. Between 1946 and 1948, the company spent over \$3 million to purchase 158 large capacity buses. Changes in bus routes were made in conformity with the plan. Between 1953 and 1956 another \$5.5 million was spent for modernizing the transit system.⁵

IV. PUBLIC SERVICES/INSTITUTIONS

General Policy:

No general policy proposals or plan

a. Education/Schools

To ensure that every school site and school building be carefully planned so as to provide the best possible arrangement of facilities within and without the building, on the available site. The specific recommenda-

³ This evaluation has been based on the findings of Valdene Buckley et. al., op. cit., pp. 9-11.

⁴ Metropolitan Corporation of Greater Winnipeg, Metropolitan Winnipeg Development Plan, 1968.

⁵ Valdene Buckley et. al., op. cit., p. 17.

tions included a detailed summary of design standards, minimum lot sizes, and locations within the neighbourhood.

Implementation Record: (0%)

Each municipality within the metropolitan area developed its own policies for the delivery of educational services, preferring to disregard the plan proposals. The municipality of East Kildonan, for example, built its school according to its own plan, not the metropolitan plan.⁶ Furthermore, the Metropolitan Winnipeg Development Plan (1968) concluded that "...the overall standard is, as yet, poor, particularly with respect to school sites."⁷

V. PUBLIC UTILITIES

General Policy:

No policy proposals or plan

VI. PARKS AND OPEN SPACE

General Policy:

To provide an integrated system of "in-city" and "large" parks which:

1. for each area of two square miles, there should be an area of 100 acres for schools, parks, playgrounds, and recreation;
2. should be at least 100 acres in size, and should be developed with wooded areas, expanses of open lawn, scenic drives and paths, ponds and streams, picnic grounds and areas for active recreation for all ages;
3. should be a minimum of 100 acres of large park per 40,000 persons, which should be located five miles apart around the City, the exact location to depend largely upon natural features.

The specific recommendations for the future development of the parks and open space system included:

1. An integrated and continuous system of pleasure drives throughout the city, especially along the banks of the Assiniboine and Red Rivers, and

⁶ Valdene Buckley et. al., op. cit., p. 15.

⁷ Metropolitan Corporation of Greater Winnipeg, Metropolitan Winnipeg Development Plan, 1968, p. 106.

along major transportation routes such as Pembina Highway, Inkster Boulevard, Nortre Dame, St. Anne's Road, etc., and;

2. A series of five major parks:
 - a. Southeast of Kildonan Park between Raleigh and Henderson Highway;
 - b. North of Inkster Boulevard, and South of Carrothers Avenue, bounded by Kewatin on the west;
 - c. North of Kildare, south of the C.N.R. Victoria Beachline, west of Madeline Street, and east of Plessis Road;
 - d. North of Taylor Avenue and south of Grant Avenue between Waverley on the west and Wilton Street on the east;
 - e. North of Marion Street, south of Hamel Avenue, and bounded by Des Meurons and Archibald on the west and east, and;
 - f. North of Portage Avenue and south of Lodge Avenue, bounded by Ainslie and Rita Streets on the west and east

Implementation Record: (25%)

The proposals for additions to the parks and open space system were not implemented. The areas for proposed scenic drives are mostly commercial strip developments. Nor were the proposals for major parks implemented. For example, the proposed park for St. Boniface was developed as a residential community. The only proposal which was partially implemented was the park north of Grant Avenue, on which Grant Park and the Pan Am pool have be developed.

VII. CENTRAL BUSINESS DISTRICT

General Policy:

To control decentralization of retail and commercial facilities and to encourage intense development within the CBD.

The report contained five specific recommendations:

1. To maintain existing boundaries but to intensify development within them;
2. To form a Downtown Business Association to develop solutions to problems of congestion and to promote sound development as a safeguard to the future of the CBD;

3. To encourage the physical grouping of similar institutions and businesses;
4. To construct a new City Hall in the area south of St. Mary Avenue in the vicinity of Memorial Boulevard, and;
5. To restrict the location of outlying commercial developments to equitably distributed islands, and the size of islands to that required to serve only the immediate, surrounding neighbourhoods.

Implementation Record: (25%)

The proposal to encourage the grouping of similar institutions and businesses has been followed. This tendency to group similar businesses is most apparent in the clustering of financial institutions in the vicinity of Portage Avenue and Main Street, and in the grouping of major retail facilities between Eatons and The Bay on the south side of Portage Avenue. The Downtown Business Association has also been formed.

The recommendation for the location of new City Hall was not implemented. The most important proposal--to stop decentralization of business to suburban areas-- has not been achieved. This is evident in the development of many major shopping malls designed to serve large regional areas, not as the "small islands" to serve immediate neighbourhoods.

APPENDIX E

METROPOLITAN WINNIPEG DEVELOPMENT PLAN (1968)

GOAL-ACHIEVEMENT EVALUATION RESULTS

METROPOLITAN WINNIPEG DEVELOPMENT PLAN (1968)
GOAL-ACHIEVEMENT EVALUATION RESULTS

I. POPULATION GROWTH

Projection:

That the population in the metropolitan area would increase from slightly over 500,000 persons in 1966 to 780,000 persons by 1980. By 1981 it was predicted that the metropolitan population would reach 700,000 persons.

Implementation Record: (50%)

Actual population increased to 584,842 persons by 1981,¹ 115,000 persons less than projected. Total population growth between 1966 and 1981 was 85,000 persons, less than 50% of the projected growth rate.

II. LAND USE

General Policy:

To direct and organize urban growth so as to promote efficiency, amenity, and economy, and to provide flexibility for future change.

a. Industrial

To indicate where the development and redevelopment of working areas should take place, and to ensure that these areas are adequately serviced.

The specific recommendations included:

1. To establish a unified industrial development agency with adequate responsibilities and resources, and;
2. To promote the metropolitan area as a location for basic industry and scientific and technological research organizations.

Implementation Record: (50%)

The recommendation to establish a unified industrial development agency with adequate responsibilities was not followed. Prior to the adoption of the plan there

¹ Statistics Canada, Census Data, 1981.

was an established Greater Winnipeg Industrial Development Commission, but the Commission is no longer active, and there has been no single agency with special responsibility for industrial development within the City of Winnipeg.

The second recommendation, to designate certain areas for future industrial development, has been partially implemented. An examination of industrial land use in 1981 demonstrates that industrial development has occurred in those areas specially designated in the plan, but the growth of industry has been far less extensive than that projected in the industrial land use plan.

b. Residential

To ensure that housing supply is sufficient to meet future demand, that service facilities are conveniently located, that employment and entertainment areas are convenient and easily accessible to major residential areas, and that residential areas are protected from intrusion of undesirable uses.

The specific policy proposal was to direct future residential development to the fringe of the existing built-up areas. Eight areas were designated for future residential development:

1. Directly south of Assiniboine Park, bounded by Tuxedo Golf Course and Shaftsbury Boulevard on the east, in the vicinity of Chalfont Road on the west, and Wilkes Avenue on the south;
2. Southwest of the University of Manitoba bounded by Bison Drive on the north, Perimeter Highway on the south, Waverly Street on the west, and Pembina Highway on the east;
3. Southeast of the University of Manitoba, bounded by the existing built-up area on the north, Perimeter Highway on the south, St. Mary's Road on the west, and St. Anne's Road on the east;
4. North of John Bruce Road, bounded by the Seine River on the west, Lagimodiere Boulevard on the east, and Navin Road on the north;
5. Immediately south of the C.N.R. Transcona Yards, bounded by the Transcona Golf Course and Plessis Road on the west, Murdock Road on the east, and St. Boniface Road on the south;

6. Southwest of the C.P.R. North Transcona Yards, bounded by the C.P.R. Victoria Beach Line on the south and east, and Panet Road on the west;
7. North of Bunn's Creek, bounded by Perimeter Highway on the north, De Vries Avenue on the east, and extending west across the Red River to the C.P.R. Winnipeg Beach Line.
8. West of McPhillips Street, north of the C.P.R. Yards and Oak Point Highway, east of the R.M. of Rosser, and south of the Perimeter Highway.

Implementation Record: (75%)

With the exception of recommendation #1, which has been developed as a park rather than a residential community, the specific locations identified for residential development have developed as proposed. Recommendation #2 is now known as Richmond West and Fairfield Park; recommendation #3 has been partially implemented and is now known as South St. Vital; recommendation #4 is now known as South St. Boniface; recommendation #5 has been developed as Transcona South; recommendation #6 has developed as the residential communities of Grassie, Peguis, and Lakeside Meadows; recommendation #7 has developed as River East, Springfield North, North Main East, and North Main West; and recommendation #8 has developed into the residential communities of Maples, Inkster North, and Tyndale Park, while approximately 75% of the land designated for residential development in this area has either developed into industrial uses or has yet to be developed.

c. Retail/Commercial

To direct future retail and commercial development into well-defined "groupings" or "town centres".

There were no specific recommendations relating to the appropriate locations for these town centres.

Implementation Record: (75%)

Most retail/commercial development has occurred in suburban areas and has taken the form of large regional shopping malls. St. Vital Center, Garden City, Kildonan Place, and Unicity shopping malls are but a few examples of these large retail/commercial centers.

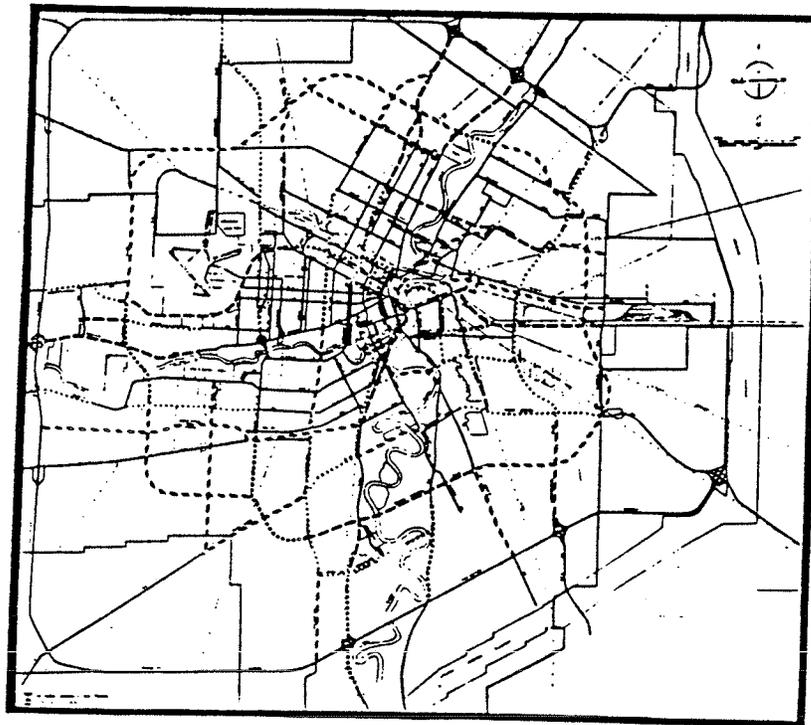
III. TRANSPORTATION

General Policy:

To improve the existing transportation system according to the recommendations contained in the Winnipeg Area Transportation Study², and to improve the efficiency and economy of the bus transit service.

a. Major Thoroughfares

To improve the network of major thoroughfares and roads according to a four stage development plan. The staged plan, illustrated below, contained 57 individual proposals.



WINNIPEG:
RECOMMENDED STAGING PLAN
THOROUGHFARES

..... 1968-1971
----- 1972-1976
..... 1977-1981
-/-/ 1982-1991

Implementation Record: (50%)

In total, 23 of the 57 recommendations have been implemented. The recommendations which have been implemented are listed below:

² Metropolitan Corporation of Greater Winnipeg, Streets and Transit Division, Winnipeg Area Transportation Study, 1966.

Stage 1 (1969-1971)

1. Relocation of Provincial Highway 59 to what is now know as Lagimodiere Boulevard;
2. Construction of the Pembina-Jubilee interchange;
3. Extension of Waverly Street from Grant Avenue to Bison Drive;
4. Construction of Bison Drive-Matheson Road from Waverly to University Crescent;
5. Extension of Grant Avenue from Kenaston to Roblin Boulevard;
6. Extension of Roblin Boulevard to the Perimeter Highway;
7. Extension of McPhillips Street to Logan Avenue;
8. Extension of Arlington Avenue to Notre Dame;
9. Extension of McGillvray Boulevard to Pembina Highway;
10. Extension of Oak Point Road to Brookside Boulevard;
11. Construction of Century Street from Kenaston Boulevard to King Edward.
12. Construction of the Trans-Canada Highway from Fermor to Lagimodiere Boulevard.

Stage 2 (1972-1976)

1. Construction of Bishop Grandin Boulevard;
2. Extension of Pembina Highway from Bishop Grandin to Bison Drive;
3. Extension of Leila from McPhillips to Main Street.

Stage 3 (1977-1981)

1. Construction and extension of St. Mary's Road from Bishop Grandin to the Perimeter Highway;
2. Extension of Pembina Highway from Bison Drive to ~~the~~ Perimeter Highway and beyond;
3. Extension of Kenaston Boulevard from Wilkes Avenue to the C.P.R. tracks.

Stage 4 (1982-Present)

1. Construction and extension of Lagimodiere Boulevard from the Trans-Canada Highway to the Perimeter Highway;
2. Extension of Waverly Street from Bison Drive to the Perimeter Highway;
3. Extension of St. Anne's Road from Bishop Grandin to the Perimeter Highway.³

b. Public Transit

To develop a system of high speed bus transit with its own rights-of-way where necessary as the forerunner to a true rapid transit system, and to give priority to the transit system where and when the movement of people show that this is essential or desirable.

Implementation Record: (50%)

Due to the lack of specific recommendations, it is difficult to determine the degree to which these general policy proposals have been achieved. The efficiency of the bus service system has been improved with the introduction of "express" services on most transit routes.

IV. PUBLIC SERVICES

General Policy: To improve the delivery of public services in the metropolitan area by supporting and coordinating the service programs of all public and private agencies.

a. Education/Schools

To ensure that the metropolitan needs for higher education are met on sites of adequate size and in locations suitable for their functions. The plan contained only two specific recommendations for the location of educational institutions:

³ This evaluation has been based on the findings of Valdene Buckley, Micheal Ediger, and Charles Folarin, An Evaluation of Comprehensive Planning in Winnipeg and Calgary: 1945-Present. University of Manitoba, Department of City Planning, Unpublished, 1983, pp. 25-27.

1. The establishment of a University in the downtown area, and;
2. The establishment of a Community College to serve the entire metropolitan area.

Implementation Record: (100%)

These recommendations have been followed. The University of Winnipeg has been developed in the downtown area, and the Red River Community College serves the technical educational needs of the entire metropolitan area.

b. Health/Hospitals

To ensure that adequate hospital service is provided on sites of a suitable size and in locations that will serve the metropolitan area.

The plan contained no specific policy recommendations for the location of future hospitals.

Implementation Record: (100%)

Although it is difficult to evaluate recommendations of such a general nature, it can be reasonably concluded that the major objective has been achieved. The construction of the Victoria General Hospital is one example where the location did meet plan recommendations. It was located on a large site fronting a major thoroughfare, and provides health services for the entire Metropolitan Winnipeg region.

V. PUBLIC UTILITIES

General Policy:

To provide an efficient, reliable, and high standard of municipal utilities under the responsibility of the Metropolitan Corporation of Greater Winnipeg.

a. Water Supply

To supply the municipalities of the Metropolitan area with potable water, under adequate pressures, sufficient to supply the present and anticipated future needs of the urban community. James F. MacLaren and Associates⁴

⁴ James F. McLaren and Associates, Report on Waterworks Development in Metropolitan Winnipeg, March, 1961.

recommendation of 1961 provided the basis for the specific recommendations for the construction of new watermains. This report also recommended that the metropolitan planners undertake a continuing study of water use and consumption, and make provisions for changes in water consumption and technical standards.

Implementation Record: (100%)

The basic objective of the plan has been achieved. In 1978, for example, it was concluded that "the present 'level of service' with respect to water supply is high as the people of Winnipeg are supplied with 'water on demand'."⁵ It was also concluded that the water supply system was very reliable, that the water was of very high quality,⁶ and that water pressure was sufficient to meet demand.⁶ In addition, the existing infrastructure closely resembles the proposed plan for new watermains and water supply facilities. For example, within the 10 year period of the Metropolitan Corporation's adopted plan, an additional 73 kilometers of feeder mains were constructed, and a new reservoir complete with a fully automatic pumping station was constructed at Marion Street and Lagimodiere Boulevard.⁷ Furthermore, the second cell of the Daion Reservoir was constructed with a capacity of 3600 million liters to supplement the seasonal balancing shortage available to the existing aqueduct.⁸

b. Waste Disposal

To promote the public health and welfare by providing an adequate and efficient system and means of regulating, collecting, conveying, pumping, treating, and disposal of, all domestic sewage and commercial and industrial waste products.

⁵ James F. MacLaren Ltd., A Background Report on Levels of Service-Water Supply and Distribution System, October, 1978, p. 2.

⁶ James F. MacLaren Ltd., Water and Waste: A Background Paper on Water Pollution Control, Water Supply, Land Drainage and Solid Waste Disposal in the City of Winnipeg, April, 1978.

⁷ City of Winnipeg, Waterworks and Waste Disposal Division, Plan Winnipeg: Water and Waste Component, May, 1980, p. 28.

⁸ Ibid., pp. 29-30.

The specific plan recommendations included the construction of numerous intercepting sewer lines, and a sewage treatment lagoon southwest of the intersection of Wilkes Avenue and the Perimeter Highway, to include some 4000 acres of land and an additional 3000 acres before 1968. It was also recommended that the City of Winnipeg stop the practice of combining sanitary sewer systems with storm sewer systems. The specifics of the proposal included the expansion of the intercepting sewer system to be tributary to three treatment plants: sludge drying beds in the north end of the metropolitan area, at the junction of Perimeter Highway and Wilkes Avenue; the Charleswood lagoons; and the North End Sewage Treatment Plant.

Implementation Record: (75%)

Although 60% of the existing sewer system is of the combined storm water and sanitary sewer system, all new developments since 1961 have been built on the separate sewer system.⁹ In addition a 1978 consulting report concluded that:

1. The sewer system makes ample provision to accommodate the total growth of the City of Winnipeg;
2. The cost of the service is low, at about \$3 per household per month, and;
3. The City of Winnipeg currently provides a good level of service with respect to pollution control during dry-weather.¹⁰

Plan Winnipeg has concluded that the sewer and pollution control system provides a valuable service in that it protects public health, provides convenient wastewater disposal, and protects environmental quality.¹¹

Only one proposal was not implemented. The West End Pollution Control Center has not been expanded to the extent proposed in the plan. It was recently concluded that this expansion is "...somewhat of a question mark until resolution of the growth patterns to be permitted north of Saskatchewan Avenue and/or west of the Perimeter."¹²

⁹ Ibid., p. 49

¹⁰ James F. MacLaren Ltd., Water and Waste, April, 1978, pp. 2-4.

¹¹ City of Winnipeg, Waterworks and Waste Disposal Division, op. cit., p. 52.

¹² James F. MacLaren Ltd., op. cit., p. S-13.

c. Storm Water/Flood Control

To maximize as a feature of the plan the amenity possibilities of natural watercourses in the metropolitan area and to ensure an efficient and economic land drainage system.

Specific policy recommendations included:

1. That the practice of combining storm water and sanitary sewer systems be prohibited in all new construction programmes;
2. That Winnipeg follow the Toronto example in its utilization of river valleys as both channels for storm water drainage and park areas; and,
3. That a special authority be formed to deal with the problems of storm water and flood control.

Implementation Record: (100%)

These plan policies have been strictly enforced. As stated previously, there have been no combined sanitary sewer and storm water systems constructed during the plan period. In addition, a separate authority, the Waterworks, Waste and Disposal Department, was formed with the introduction of Unicity in 1971. This department has assumed complete responsibility for regional land drainage. Natural river valleys have taken on a multipurpose function for parks, recreation, and drainage. A few highlights of the existing system are listed below:

1. Development of linear park-waterway plans for Sturgeon Creek, Beaver Dam Creek, Bunn's Creek, and the Seine River;
2. Development of regional land drainage plans for all new growth sectors;
3. Publication of drainage criteria manual;
4. Development of guidelines for design and construction of storm water impoundments (i.e., Southdale System, Rosser Lakes, and the Baldry Creek Ponds);
5. Development of cost sharing policies between developers and the City; and,

6. Integration of drainage program with other City of Winnipeg services.¹³

VI. PARKS AND OPEN SPACE

General Policy:

To expand and develop a metropolitan parks system to satisfy the needs of the urban community.

The specific recommendations included:

1. That the Metropolitan Corporation acquire an additional 1000 acres of land for use as metropolitan parks and golf courses. This acquisition program would increase total acreage of metropolitan parks and golf courses from 1470 acres in 1968 to 2,470 acres; and,
2. That the Metropolitan Corporation undertake a major program of riverbank acquisition for the use, enjoyment and benefit of the residents in the metropolitan area.

The specific location for parks and open space acquisition was not specified "...in order to protect the Corporation from the effects of land speculation."¹⁴

Implementation Record: (50%)

By 1978 the city-wide and regional open space system totaled 4012 acres.¹⁵ Of this total, which included cemeteries, 500 acres were undeveloped, while 250 acres were only partially developed.¹⁶

¹³ City of Winnipeg, Waterworks and Waste Disposal Division, op. cit., p. 72.

¹⁴ Metropolitan Corporation of Greater Winnipeg, Metropolitan Winnipeg Development Plan, 1968, p. B.6.7.

¹⁵ Douglas D. Paterson and Associates Ltd., Inventory and Analysis: Excesses-Deficiencies, A Parks and Open Space and Facility Review, 1979.

¹⁶ Ibid., p. 7.

In a background study prepared for the City of Winnipeg development plan review, it was concluded that river-bank acquisition had been carried out on a "moderately extensive" basis during the Metropolitan government administration, and that most open space acquisition had been in large tracts with a "landscape preservation emphasis".¹⁷ But these improvements were deemed to be inadequate: "At the district and city-wide levels, there is a further deficiency in some 3,650 acres of open space coupled with a growing and serious pressure being placed on the limited natural resources."¹⁸

In summarizing this 1979 inventory of the parks and open space system, it was generally concluded that:

1. Parks and Recreation facilities are uninviting to use. In general, they are weakly developed, poorly vegetated and lack variety, special definition, focus and sense of organization;
2. There is a lack of basic park planning and site design;
3. In the downtown construction along the river-bank prohibits river bank continuity and weakens the riverbank experience;
4. No continuous park or linkage system has been developed along any major portion of the riverbanks;
5. There are no scenic roadways, or other linkage systems joining regional parks and major open space systems;
6. Major deficiencies in regional parks exist in the downtown, and in the southeast and northwest sectors of the City.¹⁹

VII. CENTRAL BUSINESS DISTRICT

General Policy:

To strengthen and improve downtown so that it will be a vital, efficient and attractive centre for the metropolitan community.

¹⁷ Ibid., p. 15

¹⁸ Ibid.

¹⁹ Ibid.

To acknowledge the priority of pedestrian movement in those parts of downtown where people should be encouraged to concentrate.

To provide an efficient transportation system with convenient connections to areas of pedestrian concentration.

In order to identify the best method to achieve these general objectives it was recommended that a special downtown plan be prepared as an addition to the plan. This plan was prepared in 1969, and it included a number of specific recommendations:

1. Extension of Central Park;
2. Future expansion of the University of Winnipeg in the area bounded by Ellice Avenue, Kennedy Street, Qu'Appelle Avenue and Colony Street;
3. Adult education to be contained in the Isbister Building;
4. Establishment of a Vaughan Street Boutique on the east side of Vaughan Street, between the YMCA and Ellice Avenue;
5. Expansion of the TMCA in the vicinity of Colony Street West;
6. Redevelopment of Portage Avenue North between Kennedy and Carlton Streets;
7. Establishment of an entertainment core within the area bounded by Donald Street, Portage Avenue, and Notre Dame;
8. Intensive development in the vicinity of Portage Avenue and Main Street;
9. Establishment of a government center within the area bounded by Broadway Avenue, St. Mary Avenue, Memorial Boulevard, and Edmonton Street;
10. Construction of a Public Library on Graham Avenue;
11. Construction of an indoor skating rink immediately behind the proposed public library;
12. Construction of a convention center in the area between St. Mary Avenue, Edmonton and Carlton Streets, and York Avenue;
13. Construction of a conservatory on York Avenue;

14. Construction of a shopping plaza east of Donald Street and St. Mary Avenue;
15. Construction of an aquarium on the block bounded by York and Broadway Avenues, and Donald and Smith Streets.²⁰

The downtown plan also proposed the development of eight medium and high density residential apartments in the area bounded by Broadway and St. Mary Avenues, and Carlton and Fort Streets. In addition, there was a proposal to increase pedestrian accessibility within the downtown area. There was also a proposal for downtown traffic routes.

Implementation Record: (25%)

Of the original 15 proposals only five (#3,8,9,10, and 12) were completely implemented, while proposals 7 and 11 were partially implemented. The remainder were not implemented.

The proposal for residential apartment construction was not fulfilled. Most new construction has been office development; while many of the vacant lots identified for residential use have been used as parking lots.

The proposal to increase pedestrian accessibility has not been achieved. The movement of automobiles within the Central Business District continues to have priority over pedestrian traffic. The only noticeable improvement has been with the construction of Winnipeg Square and Eaton Place skywalks.²¹

²⁰ Metropolitan Corporation of Greater Winnipeg, Downtown Winnipeg, 1969.

²¹ This evaluation has been based on the findings of Valdene Buckley et. al., op. cit., pp. 23-25.

APPENDIX F

CITY OF CALGARY GENERAL PLAN (1963)
GOAL-ACHIEVEMENT EVALUATION RESULTS

CITY OF CALGARY GENERAL PLAN (1963)

GOAL-ACHIEVEMENT EVALUATION RESULTS

I. POPULATION GROWTH

Projection:

That the City of Calgary population would grow to 670,892 persons by 1981, a net increase of 430,000 persons.

Implementation Record: (75%)

Actual population increased to 592,743 persons by 1981,¹ over 160,000 persons less than projected.

II. LAND USE

General Policy:

To recognize and re-inforce those established characteristics which have contemporary validity and plan for the progressive replacement of those parts of the City which are functionally and physically obsolete and so maintain a balanced land use structure.

a. Industrial

To provide attractive industrial sites in sufficient number which are well integrated with the other developments of the City, which are well related to transportation facilities and which have the necessary services or facilities.

With respect to the general location of industrial development it was suggested that because of the natural topography and the existing railway routes there was no need to change the industrial land use pattern. However, it was predicted that the average annual land absorption rate for industrial land would be 200 acres. This demand was to be accommodated in a number of specific areas:

1. Spring Gardens-From 32nd Avenue to 48th Avenue N.E.; east of Nose Creek (145 acres);

¹ Statistics Canada, Census Data, 1981.

2. Airport Industrial Park-North of 48th Avenue N.E. and west of the Airport (120 acres);
3. Firestone Industrial-South of Centre Avenue, east of Nose Creek to #2 Highway (76 acres);
4. Argus-West of Blackfoot Trail, south of 58th Avenue S.E. to 66th Avenue S.E. (113 acres);
5. Barlow-East of W.I.D. canal to 36th Street S.E. (400 acres);
6. Highfield Extension-North of 42nd Avenue, east of Blackfoot Trail (174 acres);
7. Lower Highfield-East of Blackfoot Trail in the vicinity of 46th Avenue S.E. (200 acres);
8. Fairview Extension-South of 66th Freeway, north of Fairview residential (138 acres);
9. Haysboro-Between Maclead Trail and Haysboro residential area (121 acres).

Implementation Record: (75%)

By 1969 there were 6,941 acres of industrial land use in the City of Calgary.² By 1978 industry was developing in two major areas: 1) the Foothills subdivision and vicinity in the southeast, and 2) the Airport industrial area in the northeast.³ Development in these two areas has turned out to be much more extensive than expected.

b. Residential

To provide an adequate supply of developable land on sites in locations which will not require major capital service works until absorption of the immediately available land has been accomplished.

Based on populations projections and the assumption that established residential characteristics and trends will continue, the planners designated certain areas of land considered suitable for residential development for a 20 year period. Detailed projections for the first six years of the planning period (phase I) included some

² City of Calgary Planning Department, The Calgary Plan, 1970, Table 6.g.

³ City of Calgary Planning Department, Calgary General Municipal Plan, 1981, para. 2.1.24.

8,250 acres to accomodate 108,700 persons. New residential development was to be directed toward the south and southwest sectors of the City and was to be located no further than 10 miles in a direct line from the city centre.

Implementation Record: (25%)

Extensive residential development did occur in the designated areas, however, the policy to contain this development within a ten mile line from the city centre was not followed.⁴ Furthermore, by 1970 it was concluded that there was a shortage of adequate housing and site choice, especially for middle and low income groups; that the costs of servicing were very high; that residential development was not occurring according to sound environmental principles; and that there was piecemeal over-development of isolated sites in older areas.⁵ By 1979 it was concluded that residential growth in Calgary had been so rapid that the situation had been too volatile to allow the City to follow a useful long-range staging program; and that the City had pursued a market solution to housing problems, preferring to minimize government intervention.⁶

c. Retail/Commercial

To establish principles to be applied to new commercial development which will provide optimum service and convenience to the public, and assure sound development investments which will not restrict traffic movement, and which will be compatible with existing or proposed adjoining development.

The primary plan objective was to develop an approach to commercial location which was entirely different from that recognized in previous zoning controls.

The specific policies included:

1. That extension of "ribbon" commercial development along the frontage of arterial streets be discouraged;
2. That new commercial developments be located and designed in such a manner as to safegaurd the free flow of traffic on arterial or planned arterial streets;

⁴ Valdene Buckley, et. al., An Evaluation of Comprehensive Planning in Winnipeg and Calgary: 1945-Present. University of Manitoba, Department of City Planning, Unpublished, 1983, p. 39.

⁵ City of Calgary Planning Department (1970) op. cit., p. 3.1.

⁶ City of Calgary Planning Department (1981) op. cit., para. 2.3.4.

3. That highway commercial development be designed to give convenient service to the travelling public by controlled access points serving groups of commercial enterprises, i.e., separate access points will not be provided for each individual property; and,
4. That specific Development Plans which recognize the interests of existing commercial interests be prepared for each particular location where and when it becomes essential to relieve traffic congestion on traffic arteries having an existing commercially developed frontage.

Implementation Record: (0%)

By 1970 it was concluded that:

1. The internal traffic and pedestrian circulation systems in shopping centres was inadequate;
2. Some of the commercial locations encourage heavy traffic penetration through and parking within residential areas; and,
3. The impact of regional and sector commercial centres were having an adverse impact on the thoroughfare system and on local streets in the adjoining residential areas.⁷

Furthermore, strip commercial development along major transportation routes has been allowed to continue throughout the City of Calgary.⁸

III. TRANSPORTATION

General Policy:

To develop and improve a complete transportation network in the metropolitan area through cooperation with all affected public and private agencies.

a. Major Thoroughfares

To develop a street network and thoroughfare plan over

⁷ City of Calgary Planning Department (1970) op. cit., p. 5.3.

⁸ Ibid., Map 13a.

which the City has complete control and which it can implement over the years through its capital budget.

The specific proposals for improvement in the system of major thoroughfares included:

1. The re-orientation of the Central Business District express connection to the Blackfoot Trail;
2. The development of 2nd Street West and 5th Street West as one way Streets;
3. The re-orientation of 24th Street N.W. (Banff Trail Express Route); and.
4. The ultimate diversion of #2 Highway to accommodate the McCall Field expansion.

Implementation Record: (50%)

Each of the four specific proposals have been implemented.⁹ However, in 1970 it was concluded that there was a low functional standard of most major streets due to insufficient right-of-way widths, uncontrolled access, too many intersections, and a lack of continuity of the street system; that traffic congestion was resulting from conflicts with slow public transit; that there was insufficient river bridges and railway subway crossings; and that the outward expansion of the suburban transportation network has occurred without adequate development of an inner-city transportation network.¹⁰

b. Public Transit

No policy or plan.

IV. PUBLIC SERVICES/INSTITUTIONS

General Policy:

No general policies.

a. Education/Schools

No policy proposals or plan,

⁹ Valdene Buckley et. al., op. cit., p. 43.

¹⁰ City of Calgary Planning Department (1970), op. cit., p. 2.1.

b. Health/Hospitals

To provide a major hospital facility for every 70,000 to 75,000 persons in the City of Calgary.

Implementation Record: (0%)

In 1970 it was concluded that the number of auxillary hospital beds was inadequate.¹¹ By 1981 there were seven major hospitals in the City of Calgary,¹² or one major hospital for every 84,677 persons.

V. PUBLIC UTILITIES

General Policy:

No general policy proposal.

a. Water Supply

To expand the waterworks system by orderly and economic stages to accomodate the increase in population and development projected for the planning period.

It was projected that the City would require 30 billion gallons of treated water per year by the time the population reached 600,000 persons. The major recommendation for expansion of the water supply system was the construction of the Bearspaw reservoir on the Bow River in north Calgary.

Implementation Record: (100%)

In 1970 the main water supply source was the Glenmore Reservoir and Treatment Complex on the Elbow River in the southwest area of the City. It had a capacity to serve a population of 435,000 persons.¹³ By 1981 the

¹¹ City of Calgary Planning Department (1970), op. cit., p. 7.3.

¹² City of Calgary Planning Department (1981), op. cit., para. 3.7.42.

¹³ City of Calgary Planning Department (1970), op. cit., p. 7.5.

water distribution system had been expanded with the construction of the Bearspaw Reservoir on the Bow River. The two plants had a combined capacity to serve a population of 575,000 persons.¹⁴

b. Waste Disposal

To expand the sewage disposal system by orderly and economic stages to accommodate the increase in population and development which was projected for the planning period.

The major plan proposal was to construct a new treatment plant to service areas north and south of the Bow River.

Implementation Record: (100%)

By 1970 the City had undertaken a major program to improve the sewage treatment facilities to reduce the pollution load in the Bow River to within the limits set by the Provincial Board of Health.¹⁵ By 1981 the City's sewer system had been expanded and was based on two plants--one at Bonnybrook and one at Fish Creek--with a combined capacity of 73 million gallons per day.¹⁶

c. Storm Water/Flood Control

To coordinate storm sewer construction with the progression of development to ensure adequate service and maximum economy.

It was concluded that storm sewer construction would not present any particular difficulty, especially in the western two-thirds of the City. The provision of storm water facilities was not considered to be a dominant factor in the projection of new development. The only major policy proposal was that the City should ensure that all new developments were adequately provided with storm drainage facilities.

¹⁴ City of Calgary Planning Department (1981), op. cit., para. 3.7.61.

¹⁵ City of Calgary Planning Department (1970), op. cit., p. 7.5.

¹⁶ City of Calgary Planning Department (1981), op. cit., para. 3.7.64.

Implementation Record: (100%)

The City of Calgary has ensured that all new developments have been provided with adequate storm water drainage facilities throughout all sectors of the City, except in the southeast where it was concluded that the proximity of the Bow River, the W.I.D. Canal and the wetlands to the south eliminated any problems with storm water drainage in this area.¹⁷

VI. PARKS AND OPEN SPACE

General Policy:

To develop principles which will ensure that an acceptable proportion of park and open space would be provided to keep pace with the City's anticipated expansion.

In 1963 the City had 11.6 acres of open space per 1000 population. In order to maintain this standard it was recommended that:

1. Ten percent of any new subdivision be allocated as Community Reserve;
2. Two areas be set aside for development as city-wide parks-
 - a. on the North Hill (no precise area indicated, and,
 - b. in the Fish Creek area (no precise area indicated);
3. Golf courses be developed-
 - a. on the land south of the airport adjacent to the flightway, and,
 - b. in the Fish Creek Valley;
4. Major recreational facilities be developed-
 - a. southwest of 56th Avenue and 19th Street,
 - b. between University Drive and 24th Street, north of McMahon Stadium,
 - c. on the Nose Creek section of the

¹⁷ Ibid., para. 2.3.108.

- St. George's park system, and,
d. on a site south of 114th Avenue.

Implementation Record: (75%)

Each of these proposals have been closely followed. For example, ten percent of the newly subdivided land has been allocated as Community Reserve; a major city-wide park and open space has developed on Nose Hill and in the Fish Creek Valley; McCall Golf Course has been developed in the vicinity of the Airport; and major recreation facilities (e.g. Glenmore Athletic Park, Foothills Athletic Park and others) have developed as proposed. However, despite these new developments it was concluded that there were some major deficiencies in the 1970 parks and open space system, especially with respect to the distribution of recreational facilities and the lack of continuity in the parks and open space system.¹⁸

VII. CENTRAL BUSINESS DISTRICT

No policies or plan.

¹⁸ City of Calgary Planning Department (1970), op. cit., p. 4.3.

APPENDIX G

THE CALGARY PLAN (1970)

GOAL-ACHIEVEMENT EVALUATION RESULTS

THE CALGARY PLAN (1970)

GOAL-ACHIEVEMENT EVALUATION RESULTS

I. POPULATION GROWTH

Projection:

That the City of Calgary's population would increase from 385,600 persons in 1970 to 568,000 persons by 1979, a net increase of 182,400 persons.

Implementation Record: (75%)

Actual population increased to 505,637 persons by 1979,¹ a net increase of 120,000 persons. Actual population increase was not as large as expected, although by 1981 the population has surpassed the 1979 projection reaching a total of 592,743 persons.²

II. LAND USE

General Policy:

To encourage a form of urban growth that is more clearly related to environmental and economic considerations with the preservation of natural amenities and a distribution of land use which minimizes the cost of municipal services.

a. Industrial

To maintain a receptive and dynamic climate for existing and prospective industries.

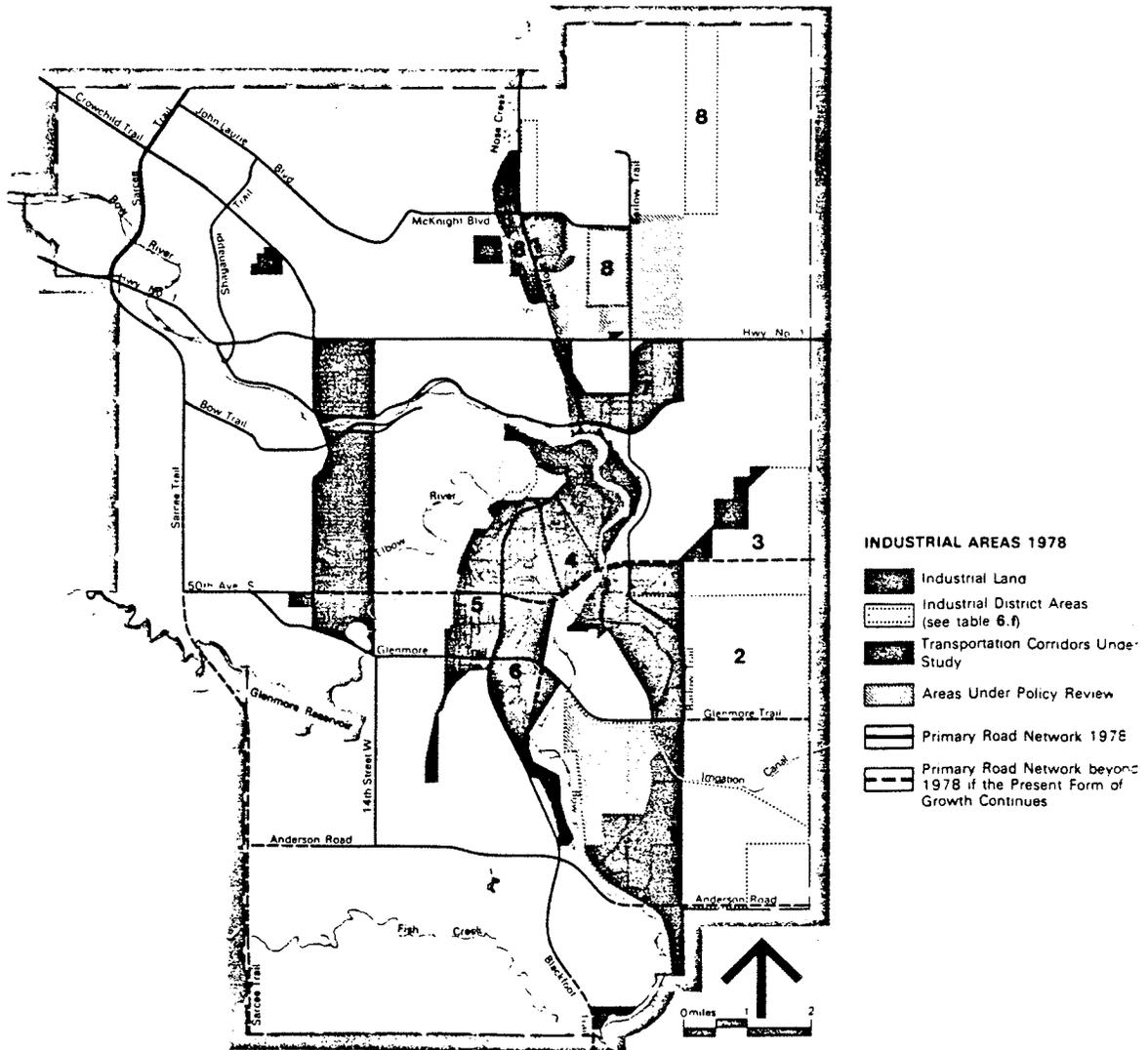
To assume a coordinating role in all matters pertaining to industrial development.

To designate the location and future characteristic of Calgary's industrial areas.

It was predicted that between 1970 and 1978 the City would need to accommodate a demand for 2,159 gross acres of new industrial land, making a total of 9,100 acres. This demand was to be directed to eight industrial parks scattered throughout the City. The specific areas for new residential development are illustrated below:

¹ City of Calgary, Civic Census, 1978, cited in Calgary General Municipal Plan, 1981, par. 2.1.9.

² Statistics Canada, Census Data, 1981.



The Calgary Plan — City of Calgary, Planning Department

Implementation Record: (50%)

In 1978 industrial land uses were contained within the eight industrial areas identified in the plan. However, the actual expansion of industrial development in these areas was not nearly as extensive as expected. Most industrial development has occurred in two main areas: the Foothills subdivision in the southeast and around the airport in the northeast.³

³ City of Calgary Planning Department, Calgary General Municipal Plan, 1981, par. 2.1.24.

b. Residential

To encourage high density residential development, especially in the inner city.

It was predicted that the City of Calgary would require an additional 180,000 new dwelling units by 1978. There were no specific proposals for the location of residential development, preferring instead to wait until sector plans had been completed.

Residential density, not location, represented the primary plan proposal. It was recommended that the city-wide residential density was to be no less than 22 persons per acre (p.p.a.).

Implementation Record: (0%)

Between 1970 and 1978 average residential density in new suburban areas ranged between 15 and 18 p.p.a..⁴ In 1981 it was concluded that the 22 p.p.a. limit "...came to be regarded fairly generally as more of an ideal target than a practical constraint. This meant that estimates of the residential capacity of new areas were frequently too high. Estimates based on the apparent minimum density of 22 persons per acre were often in practice, too high to be attainable."⁵

c. Retail/Commercial

To establish principles and standards to be used as guidelines for the location and design of commercial developments. Principles and standards should minimize unnecessary conflicts between commercial and other land uses.

The plan did not identify specific locations for new retail/commercial development, suggesting only "...that all commercial locations should be specified within Sector Plans to be adopted by City Council as official policy."⁶ Furthermore the plan suggested no detailed development guidelines, preferring only to recommend that shopping centres locate at the junction of major thoroughfares or streets, and that the principles and standards for future development ensure:

⁴ Ibid., par. 3.3.50.

⁵ Ibid., par. 2.3.4.

⁶ City of Calgary Planning Department, The Calgary Plan, 1970, p. 5.4.

1. compatibility of commercial development with adjoining residential areas through control of access,^{and} adequate buffering and landscaping of the perimeter of the site;
2. direct connections with the residential area pedestrian system;
3. efficient internal traffic circulation with adequate loading and waste removal facilities; and,
4. compatibility of design with surrounding residential areas.

Implementation Record: (100%)

Although it is difficult to evaluate these relatively general policies, it is concluded that the general characteristics of Calgary retail/commercial developments have followed these guidelines. Some specific examples include Chinook Centre,⁷ North Hill Shopping Centre, Brentwood Village Mall, Britannia and Stadium Shopping Centres.

III. TRANSPORTATION

General Policy:

To ensure that enough land be assembled to construct safe, well designed facilities for the movement of people, including sufficient land to give adequate protection to owners of adjacent property.

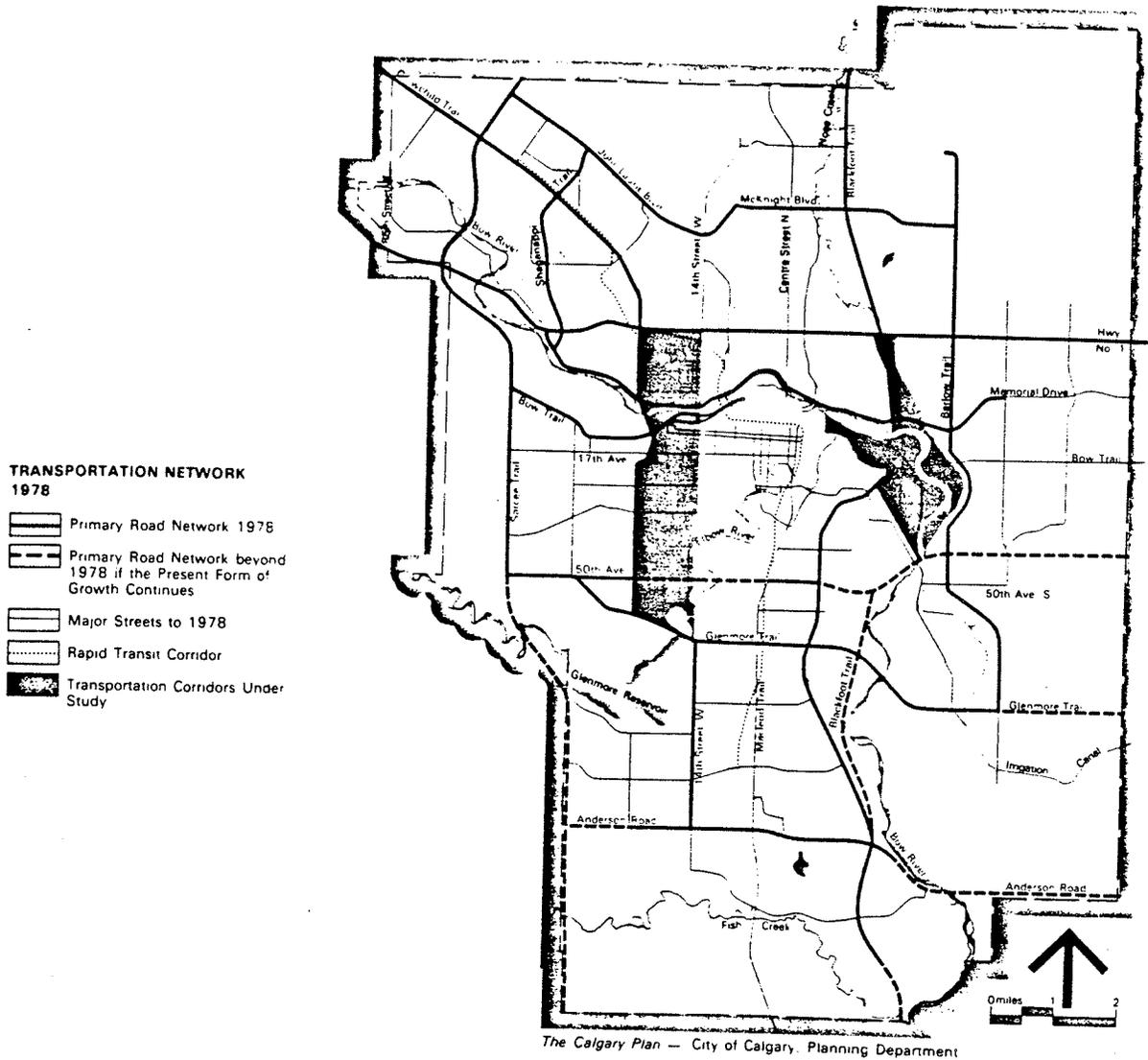
a. Major Thoroughfares

To develop a comprehensive thoroughfare system designed to supply mobility of people and goods into and throughout Calgary. The specific recommendations are presented in the Transportation Network map on the following page.

Implementation Record: (75%)

The proposed network of major thoroughfares was very carefully followed. The only major exception to this rule was the failure to construct the planned extension of Memorial Drive adjacent to the north bank of the Bow River.

⁷ For the specific characteristics of these retail/commercial centres see, Calgary General Municipal Plan, op cit., Table 3.2.1.



b. Public Transit

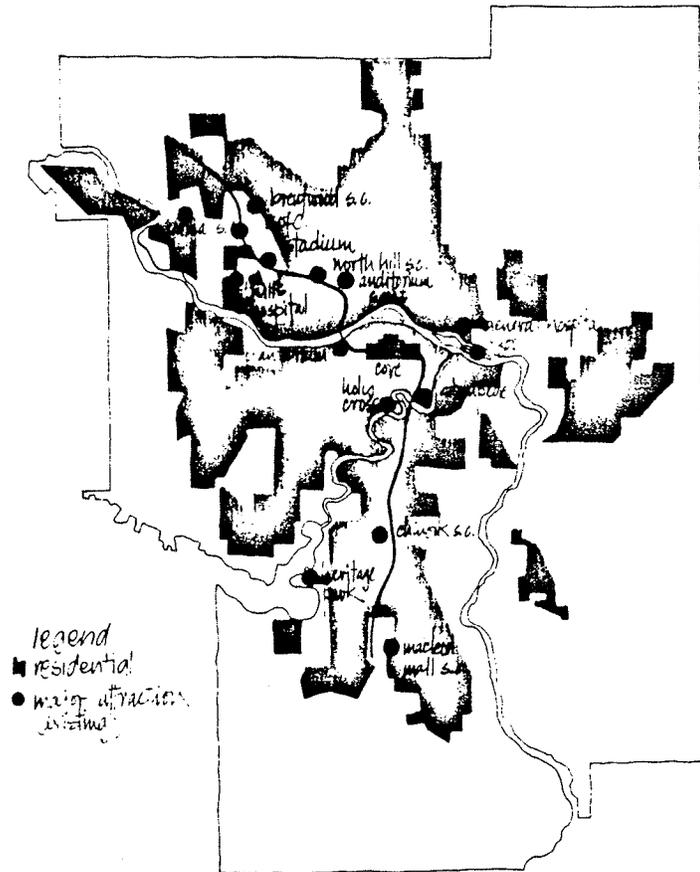
To develop a rapid transit and surface transit system which focuses on Calgary's downtown and sub-centres of intensive development. The specific recommendations for the future development of the rapid transit system are illustrated in the map on the following page. It was recommended that the City develop a two-corridor system serving the northwest, south and southeast, with a focus on a east-west spinal route along 8th Avenue in the Central Business District.

Implementation Record: (75%)

By 1978 the rapid transit facility (L.R.T.) in the south and southwest corridor and the east-west spinal

RAPID TRANSIT NETWORK

route were either constructed, under construction, or approved for construction. The L.R.T. proposed for the north-west had yet to be constructed.



The Calgary Plan, City of Calgary,
Planning Department

IV. PUBLIC SERVICES

General Policy:

To provide a diverse level of facilities for education, health care, and culture located to achieve the maximum level of use at the most economical cost to the City.

a. Education/Schools

The plan proposed no detailed policies or recommendations for the location and/or distribution of educational facilities. It was predicted that by 1978 school enrollment for students between grades 1 and 12 would reach 110,000 persons; that enrollment at the University of Calgary would reach approximately 21,000 students by 1978; and that enrollment at the Southern Alberta Institute of Technology would reach 8,000 students by 1978.

Implementation Record: (75%)

By 1978, total enrollment in grades 1-12 was slightly over 100,000 persons. Furthermore, enrollment at the University of Calgary and the Southern Alberta Institute of Technology had reached 19,000 and approximately 6,000 persons respectively.⁸

b. Health/Hospitals

That Health/Hospital facilities be conveniently located so as to be easily accessible to all parts of the City at the most economic cost to the City. The specific recommendations included: 1. That by 1978 there should be at least 3,538 active treatment hospital beds in the City of Calgary, a net increase of 770 beds; and 2. That the City and the Calgary Hospital Districts form a common planning agency.

Implementation Record: (0%)

By 1978 there were 2,850 active treatment beds in the City of Calgary, a net increase of 82 beds in the ten year period between 1968 and 1978.⁹ In addition, the proposed common planning agency was not formed. In 1978, for example, active treatment hospitals in Calgary were administered by various agencies, including the Metro-Calgary and Rural General Hospital District No. 93, the City of Calgary, the Salvation Army and the Province of Alberta.¹⁰

V. PUBLIC UTILITIES

General Policy:

To provide a full range of utilities to support urban development and to ensure that each utility is capable of expansion to service foreseeable commercial, residential, and industrial needs.

a. Water Supply

The plan contained two specific recommendations:

1. That a major water supply complex be constructed at Calgary Power's Bearspaw Reservoir;
2. That in areas being redeveloped to higher densities the cost of any new facilities required because of the intensity of the development be the responsibility of the developer.

⁸ City of Calgary, 1981, op. cit., Table 3.7.1.

⁹ Ibid., para. 3.7.42.

¹⁰ Ibid.

Implementation Record: (100%)

The Bearspaw Reservoir has been constructed on the Bow River.¹¹ It was not determined whether or not the cost of new facilities required because of the intensity of the development were the responsibility of the developer.

b. Waste Disposal

To continue to allow large industries to treat their own effluent with subsequent direct discharge to the Bow River, subject to the approval and control of the Provincial Board of Health.

Implementation Record: (100%)

Large industries have been allowed to treat their own effluent and water pollution has not been a serious problem within or outside the City of Calgary.¹²

c. Storm Water/Flood Control

That City Council request the Provincial Government to undertake further studies of the water course contributing to Calgary's potential flood problem, with specific reference to:

1. Determination of floodways which must be preserved for passing flood water;
2. Detailed studies of built-up areas, potentially subject to flood damage; and,
3. Designation of flood control areas.

Implementation Record: (100%)

The City of Calgary Flood Study was initiated by the City and the Department fo the Environment which introduced the concept of flood plain management.¹³ Furthermore, a Calgary Bow River Study Committee was established and comprised of representatives from the Province of

¹¹ Ibid., para. 3.7.61.

¹² Ibid., para. 3.5.37.

¹³ Montreal Engineering Co. Ltd., City of Calgary Flood Study, Vol. 1, Bow River Report, 1973.

Alberta, the City of Calgary and the Faculty of Environmental Design of the University of Calgary. The report recommendations were adopted with minor recommendations by City Council.¹⁴

VI. PARKS AND OPEN SPACE

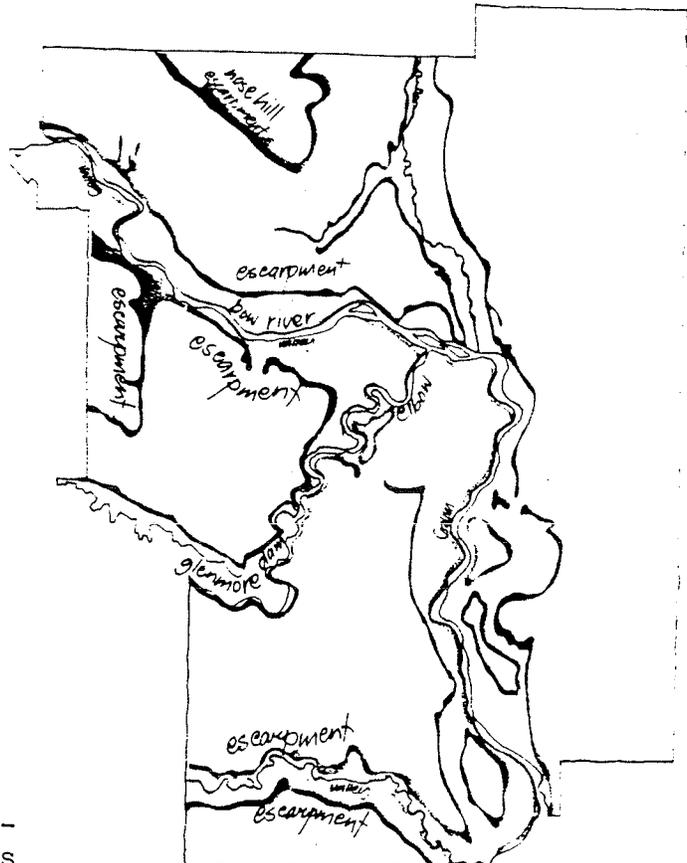
General Policy:

That parks and recreation programs should be emphasized as a desirable accompaniment to living, throughout life, with the objective of increasing recreational competence and enjoyment for all citizens.

In addition to the physical plan which is illustrated below, the plan emphasized that the City recognize ten policy priorities:

ESCARPMENTS, RIVER VALLEY SYSTEMS

1. To encourage the development of the City's recreation program based on the philosophy that recreation is a lifetime activity;
2. To distribute recreational facilities accessible to all age groups of the City;
3. To coordinate the use of city and regional recreational services;
4. To develop within river valleys



City of Calgary Planning Dept.

¹⁴ City of Calgary Planning Department, op. cit., 1981 par. 3.5.29.

- continuous open space systems containing good recreational facilities and visual amenity value;
5. To promote the integration of city-wide open space systems with adjoining residential areas through the provision of adequate vehicular and pedestrian access;
 6. To maximize the potential of existing facilities by greater intensity of use, good design, and recreational programming;
 7. To control air and water pollution to fully utilize the recreational value of the river valleys;
 8. To achieve a high standard of landscape design with the objective of providing pedestrian continuity throughout the city;
 9. To obtain continuous public access to all river banks, with the objective of providing pedestrian continuity throughout the city;
 10. To formulate a set of standards to provide guidance for future recreational land requirements to satisfy demands related to population growth and increased leisure time.

Under the guidance of these general policy priorities, the plan identified a number of improvements and/or additions needed in the parks and open space system by 1978. Specifically, it was recommended that the city:

1. Develop an additional 20 acres of special city-wide park, for a total of 245 acres;
2. Develop an additional 385 acres as major recreational park, for a total of 2,443 acres;
3. Develop an additional 65 acres as neighbourhood park, for a total of 1810 acres;
4. Develop an additional 630 acres as municipal golf course, for a total of 1105 acres;
5. Acquire an additional 490 acres as natural area park and open space; and,

6. Develop an additional 113 acres as major atheletic park.

Implementation Record: (75%)

By 1979 many of the proposed additions to the parks and open space system had been implemented. For example, there was a total of 269 acres of city-wide park facilities, 1234 acres of major recreational park, 2923 acres of natural park and open space, 562 acres of municipal golf course, and 3439 acres of community parks.¹⁵

VII. CENTRAL BUSINESS DISTRICT

General Policy:

To enhance the attractiveness and viability of the inner city environment with specific improvements in vehicular, rapid transit, and pedestrian movement; residential housing quality; parks and recreation; and the public participation process.

Some of the specific recommendations for the inner city included:

1. Provide inner city parks and open space system along the river banks and escarpments;
2. Develop rapid transit system along 8th Avenue; and,
3. Provide assistance for inner city residential rehabilitation.

Implementation Record: (75%)

Although it is difficult to evaluate the effectiveness of these relatively general policy guidelines, it can be reasonably concluded that these policies have been fairly closely followed. For example, the public transit system along 8th Avenue has been developed; there are a number of inner city parks (e.g. Central Park, Riley Park, the Calgary Zoo, and a linear system of parks and open space along the river banks and es-

¹⁵ Ibid., Table 3.6.2.

carpments); the large majority of Federal government N.I.P. and R.R.A.P. areas in Calgary were concentrated in the inner city;¹⁶ and the most intensive retail/commercial development has occurred in the inner city. Despite these positive trends, however, inner city population decreased by 8,611 persons between 1970 and 1979.¹⁷

¹⁶ Ibid., Figure 3.3.4.

¹⁷ Ibid., Table 3.3.1.