

**MUNICIPAL GOVERNMENT AND THE CULTIVATION OF
SUSTAINABLE ECONOMIC DEVELOPMENT:
THE CASE OF THE CITY OF WINNIPEG**

BY

ALEX R. ROBINSON
B. Sc., Civil Engineering
University of Manitoba

A Practicum
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements for the Degree of

MASTER OF CITY PLANNING

Department of City Planning
University of Manitoba
Winnipeg, Manitoba

© March 2000



National Library
of Canada

Acquisitions and
Bibliographic Services

395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale
du Canada

Acquisitions et
services bibliographiques

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-76860-0

Canada

THE UNIVERSITY OF MANITOBA
FACULTY OF GRADUATE STUDIES

COPYRIGHT PERMISSION

**MUNICIPAL GOVERNMENT AND THE CULTIVATION OF SUSTAINABLE ECONOMIC
DEVELOPMENT: THE CASE OF THE CITY OF WINNIPEG**

BY

ALEX R. ROBINSON

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of
Manitoba in partial fulfillment of the requirement of the degree**

of

MASTER OF CITY PLANNING

ALEX R. ROBINSON © 2002

Permission has been granted to the Library of the University of Manitoba to lend or sell copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film, and to University Microfilms Inc. to publish an abstract of this thesis/practicum.

This reproduction or copy of this thesis has been made available by authority of the copyright owner solely for the purpose of private study and research, and may only be reproduced and copied as permitted by copyright laws or with express written authorization from the copyright owner.

Municipal Government and the Cultivation of Sustainable Economic Development: The Case of the City of Winnipeg

By: Alex R. Robinson

Faculty of Graduate Studies, Department of City Planning
University of Manitoba, Winnipeg, Manitoba

Abstract

Municipal government corporations are becoming increasingly involved in attempts to retain, recruit and attract businesses in the name of economic development. In the late 1990s the City of Winnipeg was involved in economic development initiatives that involved either a concession to a business through direct means such as cash grants, reduced prices on land, buildings or services, or property tax reductions. Whereas the pervasive underlying goal of these initiatives was to enhance the quality of life for the citizens of the city through related economic development, these inducements were extended in a comparative policy vacuum. This lack of researched policy, coupled with the absence of a clear set of publicly-defined measurable objectives, can easily be assessed to merit greater attention.

The purpose of the practicum reported here was to research how a municipal government (the City of Winnipeg) may be able to cultivate sustainable economic development through its discretionary ability to regulate and set land values on its real estate assets. The research specifically focused on policy for the use of the City's industrial land assets, as a strategic arena for leveraging sustainable economic development.

By literature review, key informant interviews and Internet survey methods a sustainable economic development policy framework recommendation is made to the City of Winnipeg. The information was gathered through a process of hypothesising possible roles and strategies a municipal government might take in the area of sustainable development. These initial hypotheses were tested iteratively against further literature review, examination of other cities' relevant experience, as well as a collection of local 'expert' opinion to better inform recommendations for the specific Winnipeg context.

It was concluded that the City of Winnipeg should develop a sustainable economic development policy, as opposed to the current ad hoc approach, using the framework recommended as a result of this research. This policy can target the industrial land assets currently owned and regulated by the City of Winnipeg to leverage movement away from the current 'business as usual' approach towards a process that will consciously cultivate *sustainable* economic development. Put another way, from an ad-hoc land 'mining' strategy to a carefully monitored 'gardening' of key plots of land. In policy monitoring terms the recommendation is to focus on 'genuine progress' measurement (progress towards greater sustainability) rather than continued reliance on 'gross production' measures.

Acknowledgements

I would like to acknowledge and thank the following people for their contributions and support for this practicum. My advisor, Dr. Ian Wight, for his time and patience throughout the duration of this project. Without Dr. Wight's insight and guidance I would not have been able to bring this practicum to conclusion. Doug Kalcsics and Peter Diamant both graciously agreed to participate on my committee, their input was essential and is greatly appreciated.

I would also like to thank the many people who agreed to be interviewed as key informants as well as the representatives of the numerous cities and agencies that provided much of the valuable information required for this research.

Finally, my most sincere thanks to my wife Natasa for her unwavering support, encouragement and understanding.

Table of Contents

Abstract	i
Acknowledgements	ii
Contents	iii
List of Figures	vi
List of Tables	vi
Chapter 1: Introduction	1
1.1 Statement of Purpose	1
1.2 Problem Statement	1
1.2.1 Industrial Land Assets: City of Winnipeg	4
1.3 Objectives	8
1.4 Study Limitations	9
1.5 Organisation of the Practicum – Structure and Method	12
1.5.1 Literature Review	14
1.5.2 Relevant Precedents and Experience	16
1.5.3 Key Informant Interviews	17
1.5.4 Participant Observation	17
1.6 Overview	18
Part I: Sustainable Economic Development – In Theory	
Chapter 2: Sustainable Economic Development	19
2.1 Economic Development	19
2.1.1 Growth versus Development	20
2.2 Sustainable Economic Development: Why Strive For It as a Societal/Municipal Goal?	21
2.2.1 Sustainability and Sustainable Development	23
2.2.1.1 Technological versus Ecological Sustainability	26
2.3 Measures of Sustainable Economic Development	27
2.4 Summary	29
Chapter 3: Municipal Government Involvement in Economic Development	32
3.1 Roles that Municipal Government Can Play	33
3.2 Roles that Municipal Government Should Play	36
3.2.1 The Concepts of New Work and Innovation	38
3.3 Summary	42

Part II: The Policy Development Context

Chapter 4: The City of Winnipeg – Local and Regional Context	44
4.1 Historical Context	44
4.1.1 Metro Winnipeg and Unicity	45
4.2 The City of Winnipeg Act	47
4.3 Current Economic Development and Land Use Policy	48
4.3.1 Plan Winnipeg...Toward 2010	48
4.3.2 Plan Winnipeg...Vision 2020	51
4.3.3 The City-Region Context	52
4.3.3.1 The Capital Region	54
4.3.3.2 The Capital Region Strategy	55
4.3.3.3 The Capital Region Review Panel	59
4.4 Summary	60
Chapter 5: Economic Context	62
5.1 The Local Economy – Statistical Indicators	63
5.1.1 Gross Domestic Product	63
5.1.2 Employment	64
5.2 The Local Economy – Analytic Review	65
5.2.1 Critical Strategies and Opportunities for Winnipeg	66
5.2.2 Concerns and Threats for Winnipeg	68
5.3 Summary	68

Part III: Relevant Precedent and Experience

Chapter 6: Relevant Precedent and Informed Experience	70
6.1 Internet Survey/Questionnaire	70
6.1.1 Austin, Texas	71
6.1.2 Chattanooga, Tennessee	73
6.1.3 Portland, Oregon	75
6.1.4 Progress Indicators (Benchmarks) – The Oregon Progress Board	78
6.2 Key Informant Interviews	80
6.3 Summary	84

Part IV: From Theory and Precedent To A Policy Framework for the City of Winnipeg

Chapter 7: Synthesis	86
7.1 What is Known	86
7.2 What Needs To Be Known – Future Research Considerations	89
7.3 Summary	90
Chapter 8: Conclusions and Recommendations	91
8.1 Conclusions	91
8.2 Recommendations	92
8.2.1 City Policy Framework	92
8.2.2 Further Research	95
Glossary of Terms	
Appendices	
Appendix 1 City of Winnipeg Industrial Zoning Designations	98
Appendix 2 Internet Survey/Questionnaire	99
2.1 Letter of Introduction	99
2.2 Questionnaire	100
Appendix 3 Key Informant Interviews	101
3.1 Letter of Introduction	101
3.2 Interview Guide for Key Informants	102
Bibliography	103

List of Figures

Figure 1	Industrially Zoned Land Within the City of Winnipeg	6
Figure 2	Practicum Structure	13
Figure 3	The Capital Region	54

List of Tables

Table 1	Industrial Parks Located Within The City of Winnipeg	7
Table 2	Winnipeg GDP by Industry Sector	63
Table 3	Winnipeg Employment by Industry Sector 1987 to 1998	65

Chapter 1: Introduction

1.1 Statement of Purpose

The purpose of this practicum is to research how a municipal government (the City of Winnipeg) may be able to cultivate sustainable economic development through its discretionary ability to regulate and set land values on its real estate assets.

1.2 Problem Statement

Municipal government corporations are becoming increasingly involved in attempts to retain, recruit and attract businesses in the name of economic development. The reasons for this are numerous but there is clearly a pervasive ideology in municipal government that economic development is critical to the future of the community the municipal corporation serves and governs. Kitchen captures this well when he notes that “there are few issues closer to the hearts of municipal politicians, administrators, and local citizens as expanding the economic base of their municipality ... economic development, it is argued, provides jobs, generates income, and reduces property taxes” (1985, p. 1).

Although economic development has historically been the domain of the federal and provincial governments economic globalization has led to an ever-increasing focus by municipalities on economic development, as in development of the local economy. The City of Winnipeg has started to take on an increasingly active role in the local economy. This interventionist role of municipal governments in economic development matters has been primarily a reaction to a perceived need of local government to more actively influence the

forces that shape the local economy.

As a result of this virtual prerogative regarding economic development, while being cognisant of the significant impacts said development can have, an examination is merited of the particular roles currently assumed by municipal government in this policy/action area. This practicum centres on assessing the effectiveness of existing strategies and providing a framework for the development of explicitly sustainable economic development policy options, wherever this explicit interest might be advanced.

The ideologies and strategies around economic development are both numerous and wide-ranging (from the sole pursuit of increasing the Gross Domestic Product at almost any cost, to an ecologically-conscious zero net growth policy). This wide disparity in economic development policy interests from agency to agency (as well as intra-agency) leads to a wide range of impacts on the communities where the policy is applied.

At the same time that there has been increasing overt and direct local government involvement in economic development there has arisen increased public awareness of what Beatley (1997) has interpreted as “the false dichotomy between jobs and the environment”. Economic development policy is often found to be at odds with environmental policy, and vice versa. A heightened awareness and concern for the environment, as well as the recognition of its contribution to quality of life, has led to a reaction against certain forms of economic development that might be perceived as ‘unsustainable’ by some. A problem

associated with this 'anti-economic growth' posture is that, in many respects, economic development of some sort is required to enable the quality of life we have come to expect.

As stated by Beatley (1997),

"The challenge of this posture is that while it may be perceived to support a high quality of life, it also squelches the tax base that supports that quality of life. To avoid these problems, communities must undertake more strategic, forward-looking approaches to economic activity by assuming control over their development patterns and proactively seeking out the appropriate mix of activities. For in addition to business providing jobs for local residents, the taxes generated from commercial activity are necessary to support the community's physical, social and natural assets. Thus, just as a healthy environment is critical to a sound economy, a sound economic base is necessary for a healthy community"(p. 137).

Given this, what course of action can or should a large municipal government corporation, interested in actually cultivating explicitly sustainable economic development, embark upon? How can the City of Winnipeg form policy that will strike a balance between economic growth and environmental responsibility? From the point of view of environmental responsibility a possible economic strategy would be to pursue only economic growth that is, as defined by Beatley (1997) "environmentally benign or restorative". The approach of this practicum is to focus on researching policy for economic development, which is, at the very least, environmentally benign while at the same time recognizing the need for, and not precluding the possibility of, an environmentally restorative strategy. This also reflects the broad contours and main scope of the 'sustainable' interest layered on the envisaged economic development policy-making challenge.

The City of Winnipeg has, to date, no formal economic development policy, let alone

a policy for *sustainable* economic development. An overall policy is currently being developed but it will form more of a general blueprint rather than specific targeted strategy.

In the last few years the City has been involved in many initiatives that have involved either a concession to a business through direct means such as cash grants, reduced prices on land, buildings or services, or property tax reductions. The City has also been involved in numerous processes to make it easier for business to “do business” with the City of Winnipeg through the elimination of red tape and other impediments. Whereas the pervasive underlying goal of these initiatives has been to enhance the quality of life for the citizens of the city through related economic development, it was readily apparent to the present researcher that these induced initiatives were conducted in a comparative vacuum of both context and policy.¹ This lack of researched policy, coupled with the absence of a clear set of publicly-defined measurable objectives for such policy, can easily be assessed to merit greater attention. A clear publicly-designed and approved economic development policy, ideally with some explicit concern for at least environmental sustainability, is needed for the City of Winnipeg.

1.2.1 Industrial Land Assets: City of Winnipeg

A key component of the City of Winnipeg’s economic development toolbox is the control it exerts over, including regulation of its industrial land assets (especially industrial land). In order to cultivate *sustainable* economic development it would seem strategic to

¹ The researcher has previously worked for the City of Winnipeg for nine years in several capacities related to economic development. This experience is elaborated on in Section 7.2 – Key Informant Interviews

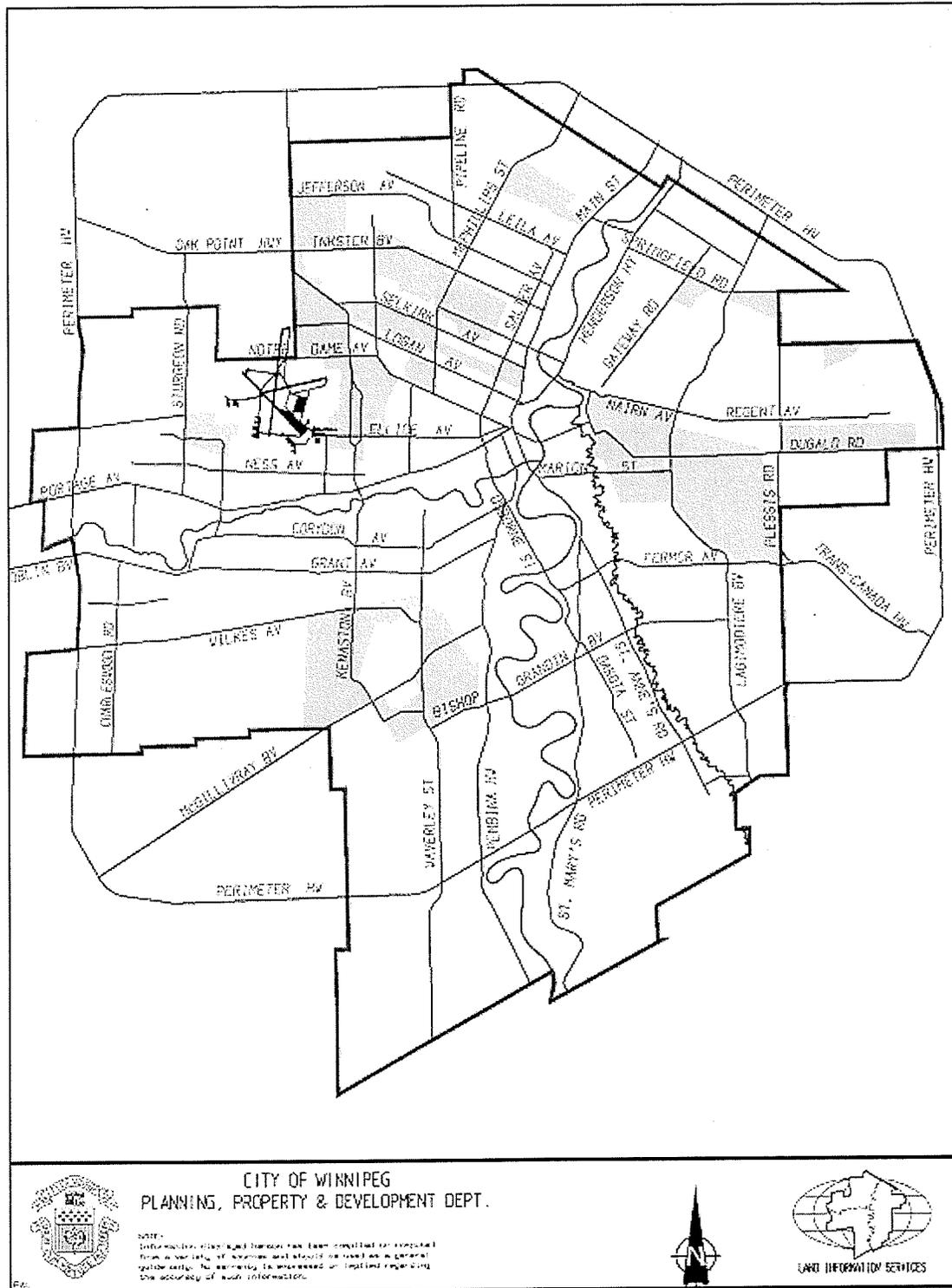
focus on such land assets. As Roseland (1998) has noted “land use permeates virtually every aspect of sustainable communities”.

There are currently over 2100 acres of industrially-zoned land within the City of Winnipeg of which the City directly owns 700 acres. Figure 1 shows the location of all industrially zoned land, and Figure 2 details the designated individual industrial parks located within Winnipeg. As can be seen from Table 1, there are currently a total of 2101 acres of land zoned for industrial use (a detailed description of the various City of Winnipeg industrial zoning districts is shown in Appendix A) located in designated industrial parks within the City of Winnipeg.² Of these 2101 acres, 563 acres are presently undeveloped. Of the industrially zoned land in the industrial parks (shown in Table 1), that is currently (March 2000) available for development, over 65% (369 acres) is owned by the City of Winnipeg in the St. Boniface Industrial Park.

The St. Boniface Industrial Park is situated in the north-east quadrant of the city of Winnipeg in what is generally described as the East Winnipeg Industrial Area. This area is bounded by Dugald Road to the north and the Winnipeg Aqueduct and railway to the south. It is bounded to the east by Plessis Road and to the west by Mazonod Road. Of the total of 369 acres of presently undeveloped industrial land located within the St. Boniface Industrial Park, approximately 234 acres are unserviced.

² There are other Industrial Parks located in Winnipeg (for example Buffalo Industrial Park in Fort Garry), but the most readily available aggregate information obtained is, as shown, in Table 1. The information provided in Table 1 is that which is provided to potential developers by Economic Development Winnipeg.

Figure 1: Industrially Zoned Land Within the City of Winnipeg



(Source: The City of Winnipeg, Planning, Property and Development Services Department)

Table 1: Industrial Parks Located Within The City of Winnipeg

INDUSTRIAL PARK	PARK OWNER & ZONING	TOTAL ACRES	AVAILABLE ACRES
Murray Industrial Park	Privately owned; originally developed by the City of Winnipeg Zoned: MP2	180	20
Omands Creek Industrial Area	Arle Realty Ltd. & Galsworthy Holdings Ltd. Zoned: M2	119	2 10
Inkster Industrial Park	Privately owned; originally developed by the City of Winnipeg Zoned: MP2	600	0
Inkster Park South	Privately owned; originally developed by The Dominion Company Zoned: MP2	90	0
Transcona Industrial Park	CN North America zoned: M2-M3	130	20
Dugald Industrial Park	Hart Realty Company	70	30
St. Boniface Industrial Park	City of Winnipeg Zoned: MP2	700	135 234
Tuxedo Industrial Area	CN North America Zoned: M2 & M3 On a long-term lease by CN	212	112
	Total	2101	563

(Source: Economic Development Winnipeg: Winnipeg Facts, 1999)

Given this direct control, over the majority of industrial land available for development in the City of Winnipeg, it seems prudent to focus any contemplated sustainable economic development policy on such industrial land availability. This research specifically focuses on policy for the use of the City's own industrial land assets, as a strategic arena for leveraging, through careful 'cultivation', sustainable economic development. How can or might the City of Winnipeg actually "cultivate" explicitly *sustainable* economic development (at least in terms of environmental sustainability), through its discretionary ability to regulate, and set industrial land values for its real estate assets?³

³ The 'cultivation' metaphor, as 'urban husbandry', is drawn in part from the work of Roberta Brandes Gratz, in her books 'The Living City (1994) and, most recently, 'Cities Back From the Edge' (1998). Cultivation is used to frame a policy approach that 'gardens' land resources (for long term sustainability) as opposed to 'mining' a resource for unsustainable short-term gain.

1.3 Objectives

In order to fully explore the question of how the City of Winnipeg can cultivate sustainable economic development, by using its discretionary ability to regulate and set land values, a series of inter-related questions for investigation was developed, thereby articulating the underlying objectives of the research:

- Why should the City of Winnipeg pursue sustainable economic development? Why might such a municipal government want, by policy and associated actions, to generally facilitate not simply economic development but to actively cultivate sustainable economic development? (For example, why not continue 'business as usual'?).
- How might a particular municipal government (the City of Winnipeg) best pursue such cultivation of sustainable economic development, given the range of opportunities and constraints that characterise its operating environment? An analysis of enabling legislation and related policy must be conducted to ascertain what can be accomplished within the existing context, and to subsequently determine if changes are required.
- Given the above, what place might the City's specific discretionary ability to regulate and set municipal land values – especially in relation to its own industrial land assets, have in policy designed to cultivate sustainable economic development?

- How might such a policy be best articulated for optimal political and administrative effectiveness in the current City of Winnipeg context? What would be the most effective form and process with respect to this issue?
- What might be learned from such a targeted policy development initiative for future theorising about the role of municipal government in relation to the cultivation of sustainable economic development?

1.4 Study Limitations

The research reported here has been influenced by the following limitations:

- The research has been conducted in a practicum, rather than thesis, context. Although generally referencing a broad base of relevant precedents and literature, the project has been framed to emphasise relevance to the stated goals and objectives of the City of Winnipeg, as defined by Council approved by-laws, policies or directives.
- Policy-related recommendations have been constrained to ones within the City of Winnipeg's provincially-legislated jurisdiction. Where legislative amendments for a particular strategy are required they are recommended, but the process for their adoption is not examined or explored in depth.
- All policy recommendations will be cognisant of City Council-adopted by-laws and policies; where changes are required to said by-laws and policies, only a cursory implementation strategy is presented.
- Information received through the key informant survey and Internet

questionnaire will not be independently verified.

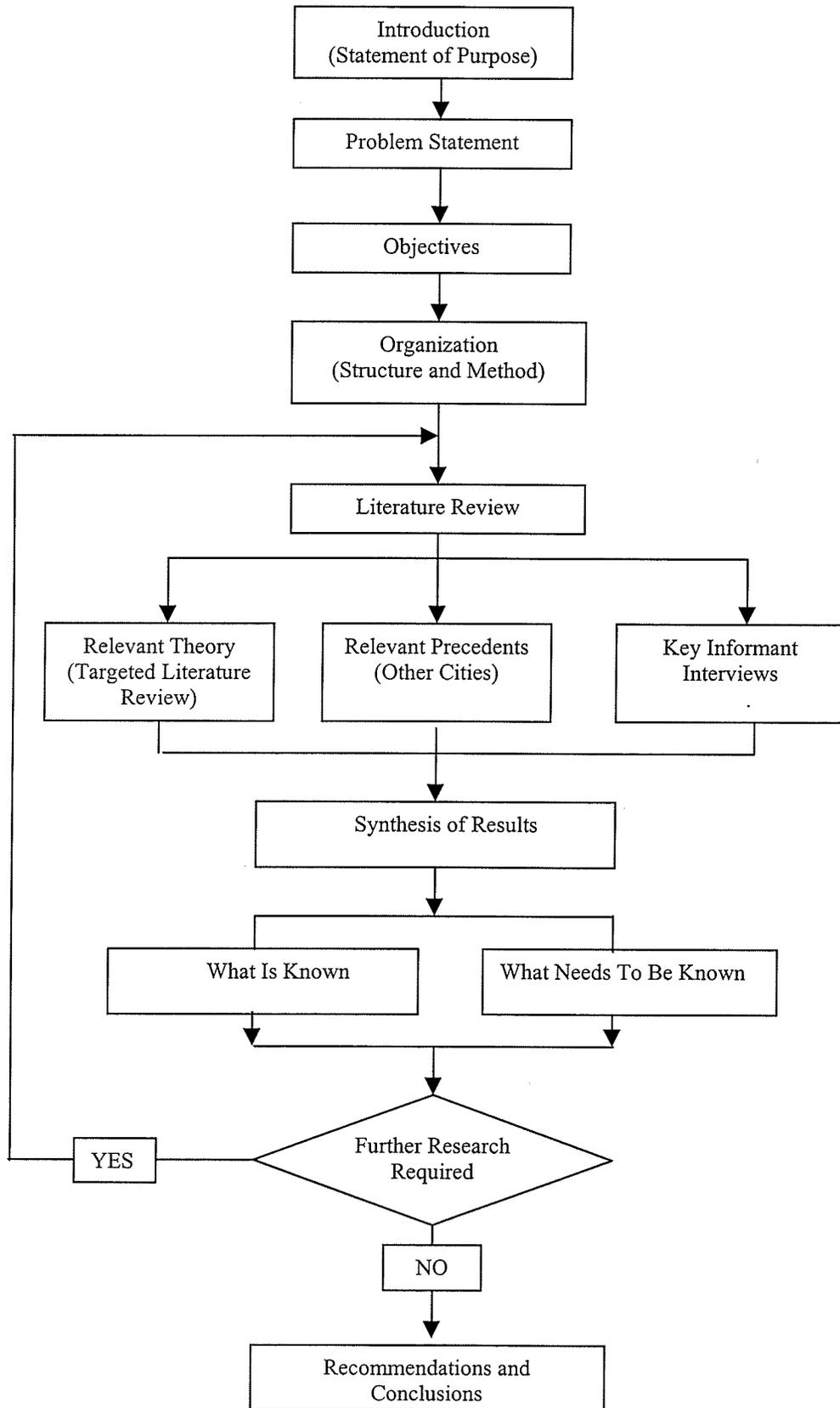
- The City of Winnipeg's Planning, Property and Development Services Department is viewed as "the client" for this practicum, and as such this research deals solely with city-owned land, or land which is within the ability of the city to significantly influence its development.
- A definition of sustainability has been adopted, not developed. This research has focused on policy that supports the cultivation of "technological sustainability" as described by Orr, (1992) while attempting to also be cognisant of the need for an eventual policy shift into the realm of what Orr refers to as "ecological sustainability". "Technological sustainability" is interpreted as comparable with what Beatley (1997) describes as "environmentally benign". It is a consideration of this research that the impacts of any initiatives flowing from recommended 'basic' economic development policy must not preclude, or at least not negatively impact, a future emphasis on ecological sustainability as the operative policy context.
- It is argued that in order to foster at least technological sustainability one must also cultivate a 'culture' of innovation. This research has focused on how the City of Winnipeg, through its ability to impact land assets, can stimulate innovation. As stated by Bingham and Mier (1997, p. 204) local government "should induce innovations, not capital; ideas, not jobs". They go on to note that urban economic development policies often fail because "they ignore the engine of growth - technological change".

- Indicators of sustainable economic development will ultimately be required to fully assess the actual impact of any policy recommendation regarding municipal government intervention in economic development. Such indicators are not developed as part of this research, but a process for their determination is offered.
- An underlying assumption relating to municipal government involvement in economic development is that such involvement is, in fact, warranted. Throughout this research the main criteria for rationalising municipal government involvement in economic development is that such action can only be justified if it “serves to improve the allocation of society’s resources and thereby increases the level of income available to the population as a whole” (Kitchen, 1985, p. 2). Put differently, segments of the population may gain benefits but not to the detriment of others, or the environment.
- This research will focus on the role that a local municipal government can play in cultivating sustainable locally-based economic development. This assumption is based on reports that between 70 and 80 per cent of local economic growth in a given area (Kitchen, 1985, p. 33) can be attributed to the development of local business (rather than the importation of non-local business activity).

1.5 Organisation of the Practicum – Structure and Method

The strategy employed for this research is as outlined in Figure 2, Practicum Structure. This Introduction, including the, Problem Statement, Objectives and Practicum Organization, has been developed following a general literature review of the subject, coupled with personal experience and discussion with relevant professionals. Further research was then undertaken in order to develop the deeper insight required to more fully respond to the research questions. This further research featured: a more targeted literature review; a survey of a sample of other cities' experience as relevant precedents (by means of an Internet questionnaire); and follow-up or wrap-up key informant interviews.

Figure 2: Practicum Structure



1.5.1 Literature Review

A broad review of the role of large-scale municipal government corporations (cities) in cultivating sustainable economic development was conducted. This review focused on related theory and alternative philosophical perspectives that have particular relevance to the City of Winnipeg context. While most literature seemed to settle around environmentally sustainable economic development, an effort was also made to survey for perspectives representative of technologically sustainable and ecologically sustainable development.

The literature review was undertaken to identify, through a review of key issues, the range of roles that large municipal government corporations can play in the cultivation of sustainable economic development. This review sought to identify not only the positive influences a municipal government might have through particular roles with regards to economic development, but also to identify any policies or strategies, rooted in more problematic roles, that have produced a negative impact. The intent was to not only theorize what roles have or have not been effective, but also to document/critique actual related strategies/policies and their subsequent impacts. This entailed critically assessing and then either undertaking, or identifying a need for, further research to provide answers to the following questions:

- What is the essence of economic development? Is it qualitative improvement (development) or quantitative expansion (growth)?

- Given the numerous definitions and interpretations of sustainability, what is *sustainable* economic development?
- What defines a ‘positive’ and ‘negative’ impact? Can quantifiable indicators and criteria for success be established?
- What roles *should* municipalities play in economic development?

By endeavoring to answer these questions a general understanding of the topic was arrived at (what is known – see Chapter 8, Section 1). More importantly, this initial research phase revealed specific issues regarding this topic that either have not been fully explored, or questions that have not been answered in a satisfactory context (what is *not* known-see Section 8.2). From the specific issues revealed to require further research one specific area was selected as the focus for further study. This provides, in the form of the specific research question, the basis for dealing with a particular practical problem, regarding the appropriate role(s) of municipal government in cultivating sustainable economic development: How might a municipal government (the City of Winnipeg) consciously and conscientiously “cultivate” (at least environmentally) sustainable economic development by using its discretionary ability to regulate and set land values, especially in terms of its own industrial real estate assets? The actual review of pertinent literature was conducted in two phases:

- A preliminary broad-based review of seemingly relevant periodicals, bibliographic reference sources, government documents, Internet sources, etc.
- A more targeted review, based on the information gathered in the first phase,

that focused on the most seemingly relevant sources, given the envisaged aim and purpose of the practicum. The Bibliography incorporates the results of both of these reviews.

Further review of relevant theory and precedents was conducted on an iterative basis later in the research, as indicated in Figure 2.

1.5.2 Relevant Precedents and Experience – Internet Survey/Questionnaire

A number of cities were identified throughout the initial literature review as having notable seemingly effective sustainable development policies, or as providing examples of sustainable economic development practices that would be of relevance to this research. These cities were: Chattanooga, Tennessee; Austin, Texas; Minneapolis/St. Paul, Minnesota; Berkeley, California; Portland, Oregon; Seattle, Washington; and Calgary, Alberta.

A more detailed review of the sustainable development practices was conducted, through an Internet-based survey of the cities noted above (as well as numerous other cities in Canada). A complete list of the questions posed is shown in Appendix 2. The survey of these cities, as well as the survey of a sample of local (Winnipeg) expert opinion, yielded certain commonalities and particular insights, which were employed to make recommendations regarding the roles a municipal government such as the City of Winnipeg could or should adopt with respect to the cultivation of sustainable economic development.

1.5.3 Key Informant Interviews

Key informant interviews were conducted with relevant local professionals and policy stakeholders to better context the perspectives derived from the literature reviews and the analyses of relevant experience and precedents from other cities. These interviews included local practitioners of land development, planning professionals and city politicians. A complete list of the questions used to guide the interviews is provided in Appendix 3. The questions were derived from issues noted in the course of the literature reviews, from the examination of other cities' experience and insights, as well as from the experience of the author.

1.5.4 Participant Observation

It should also be noted that this researcher worked for the City of Winnipeg for approximately ten years in the field of economic development, and was last employed as the Manager of Business Liaison in the Planning, Property and Development Department. This experience has provided a detailed understanding of the current philosophies and strategies employed by the City of Winnipeg relevant to this research. It also brings knowledge of the pertinent by-laws, policies and mandates under which the City of Winnipeg operates. This combination of knowledge and experience has allowed the author to provide informed opinion, similar to that of a key informant. This has also permitted certain conclusions to be made as to what may or may not form the components of a plausible sustainable economic development strategy for the City of Winnipeg, within the context of existing policies, by-laws and philosophies: for example, the knowledge of current and past practices employed

by the City of Winnipeg with respect to economic development initiatives.

1.6 Overview

This chapter has attempted to provide relevant background material, while outlining the overall research strategy and the particular tactics used to explore the main research question, and questions flowing from it. Chapter 2 examines the notions of sustainability and economic development in general. This chapter also reviews the prevalent theory associated with sustainable economic development, and the subtle differences between 'growth' and 'development' as policy emphases. Chapter 3 reviews relevant municipal government involvement in economic development, as well as the roles that municipal agencies have played and could play. Chapter 4 focuses on the City of Winnipeg by providing some historical context, and a review of the relevant by-laws and policies as well as of studies that influence land use, economic development and sustainability. Chapter 5 provides a sense of the operative economic context, in part through a review of recent studies conducted on the Winnipeg economy. Chapter 6 details the results of the Internet survey and the key informant interviews, while Chapter 7 synthesises the information gathered by these methods for insight on the main research question, and related questions. Chapter 7 also identifies some of the more theoretical areas of this research that seem to warrant further study. The inter-related concepts of technological sustainability, 'new work' and innovation are reviewed in Appendix 4. The final chapter of this practicum presents, by way of a briefing to the City of Winnipeg, policy recommendations developed from this research, as well as identifying more practical matters meriting further research by the City.

Chapter 2: Sustainable Economic Development

2.1 Economic Development

Economic development can range from the provision of information/services (with the goal of creating a more favourable climate for business) to direct cash grants or incentives, and it tends to have different meanings in Canada and the United States. Canadian municipalities generally have fewer tools to provide financial aid to businesses than their American counterparts, but both approaches will be discussed. Relevant precedents from both countries have been reviewed to determine what can be learned from the various approaches.

One way of defining economic development is to describe the desired outcome. Skelly (1995, p. 1) defined municipal (or local) economic development as an initiative undertaken by a municipal government, or by an agent acting on behalf of the government, that is “designed to increase the wealth (jobs, income, public goods and services, quality of life) in the local economy”. Furthermore, he advanced the following possible criteria for assessing the outcome of an economic development initiative as ‘successful’:

- Job creation and net job growth
- Tax revenue growth
- Improved quality of life
- Enhanced innovation and competitiveness

Skelly's (1995) definition and the desired outcomes have been used to contextualise the basic notion of economic development employed throughout this research.

2.1.1 Growth versus Development

The term 'development' itself must also be clarified. Daly (1996, p. 167) has stated that much confusion has been generated by assuming that growth is the same as development. He argues that growth is in essence a 'quantitative expansion', whereas development is essentially 'qualitative improvement'. For him, employing these distinctions, sustainable development is "development without growth in the scale of the economy beyond some point that is within biospheric carrying capacity" (p. 167). He feels that we must shift our vision as to what we define as sustainable development, and we must change our underlying goal from one of "quantitative expansion (growth) to that of qualitative improvement (development) as the path to future progress" (p. 1).

According to Daly, the earth has a finite limit of natural resources, rendering quantitative expansion (growth) as not sustainable in the longer-term. He relates this to his view that the economy should be viewed as a subsystem of the ecosystem, and not the other way around. Sustainable development for Daly means "living within environmental constraints of absorptive and regenerative capacities"; it is "development without growth" (p. 165). Daly also argues that when evaluating economic development strategies by an analysis of the benefits, the true costs regarding the depletion or degradation of "natural

capital” stocks must also be included.

Traditional economic development programs can generally be characterised as having primarily economic growth goals. They typically seek to create economic development with a growth focus (as opposed to economic development with a qualitative improvement focus). Although the City of Winnipeg has no formal economic development policy to date, its ad hoc forays into this area can be typified as having the goal of growing economic forms of wealth. But, as argued by Daly (1996, p. 167), growth is not necessarily development, and this research will focus on policy oriented towards sustainable economic *development*, and how the City of Winnipeg might set out to attain it in terms of a qualitative improvement in its economic circumstances. It is in this context that the ‘cultivation’ metaphor is used, to better frame an economic development policy that is more sensitive to a concern for ‘qualitative improvement’. It is a policy focus that is more representative of a ‘gardening’ strategy, through cultivation of qualitative improvement, as opposed to the ‘mining’ outlook of quantitative expansion emphases (often associated with a narrow ‘growth’ conception).

2.2 Sustainable Economic Development: Why Strive For It as a Societal/Municipal Goal?

In order to ascertain the role of a municipal government in cultivating sustainable economic development an acceptable definition of sustainability must be either developed or adopted. A great deal of current literature on economic development focuses on the

creation and distribution of wealth within a defined area, but pays little attention to issues of social equity and environmental sustainability. For example, the City of Winnipeg's 1998 public information pamphlet entitled Winnipeg into the New Millennium: Generating Economic Opportunities and Jobs does not mention the issue of sustainability at all. A focus in the present research is to establish what areas of commonality exist or can exist between economic development (traditionally thought of as 'growth' of the business sector) and sustainable economic development (qualitative improvement for the community as a whole). Given these areas of commonality, how can they be used to develop strategies and policies with regard to not simply 'growing' the economy but 'cultivating' it, and in doing so achieving more sustainable economic development?

Frankel (1998) has observed that "all living systems upon which life depends are in decline, and the rate of decline is accelerating as material prosperity increases" (p. xii). This has resulted in the need for a radical change in the way we think about economic development as well as many other subjects. He argues that "business as usual" cannot continue. We need to better understand how economic development is related to social and environmental well-being. More emphasis must be put on sustainability when discussing economic development, and on what governments as well as corporations can actually do to cultivate or foster it, so that it becomes part of our culture, in harmony with nature, in an enduring way.

Daly and Cobb (1998) argue that current economic development practice (generally

defined as growth) is associated with rapid deterioration, with 'mining', of the natural environment of planet Earth. Their response would be to impose restrictions on the depletion of natural resources, as well as to mitigate the negative impacts of the growth bias on the environment, in order to protect economic development (as qualitative improvement) options for future generations. With these notions in mind, the concepts of sustainability and sustainable development are now further reviewed.

2.2.1 Sustainability and Sustainable Development

There are numerous definitions and interpretations of the term sustainable development. As stated by Daly (1996, p. 1), although there appears to be a consensus regarding the need for sustainable development the term "is still dangerously vague". Orr (1992, p. 23) points out that the word sustainable itself "conceals as much as it reveals" and that the phrase sustainable development "raises as many questions as it answers". A review of some of the many definitions can provide some insight into the issue, as well as inform the adoption of a definition suitable for this research.

Sustainable (economic) development is commonly thought to be a philosophy that tries to combine "aspects of traditional economic development with elements of environmental and social policy" (Colgan, 1997, p. 123). The World Commission on Environment and Development (1987, p. 8) defined sustainable development as that which "meets the needs of the present without compromising the ability of future generations to meet their own needs". Although they serve as a useful starting point these rather vague

definitions do not provide explicit 'indications of success' or how to measure progress. Daly and Cobb (1998) felt that the vagueness of the World Commission on Environment and Development's definition of sustainable development was done deliberately, in order to obtain a broader level of acceptance. However, this vagueness leads to an inability to determine if and when goals have been achieved. To use this, or any, definition of sustainability, progress indicators need to be developed, in order to create economic development policies that can be measured and assessed against what is constituted as sustainable development.

Colgan (1997) suggested that there are two broad approaches to strategizing the pursuit of sustainable development: "reduced consumption" and "suitability". The "reduced consumption" approach puts forth the argument that there are physical limits to the earth and as such there are limits beyond which economic activity (that uses the resources of the earth) cannot be sustained. From an ecological point of view this implies that unchecked economic growth poses a substantial threat to the health of the planet. The "suitability approach" does not assume that there are absolute limits on resources. Resource limitations are not purely physical and can be viewed as limitations of technology, whereby technology is regarded as being able to address the issue of finite resources, by producing new and innovative ways of more efficiently using them. The "reduced consumption" and the "suitability" approaches can be thought of as being generally analogous to Orr's (1992) distinction between ecological sustainability and technological sustainability, respectively.

Maclaren (1996, p. 8) argues that sustainable economic development implies “that the local economy is both stable and diversified” and also that “economic activities have minimal impacts on the natural environment, and are efficient in their consumption of resources”. Richardson (1989, p. 14) defined sustainable *urban* development as “ a process of change in the built environment which fosters economic development while conserving resources and promoting the health of the individual, the community, and the ecosystem”. In 1992 he further refined his definition of sustainable urban development as:

“the continuing maintenance, adaptation, renewal and development of a city’s physical structure and systems and its economic base in such a way as to enable it to provide a satisfactory human environment with minimal demands on resources and minimal adverse affects on the natural environment” (p. 145).

The World Commission on Environment and Development’s definition of sustainable development implies that there must be an integration of the economy and the environment when developing sustainable economic development policy. Frankel (1998, p. 23) has stated that with ecologically sustainable economic development “wealth continues to be created, but through processes that do not draw down the material resources on which we and future generations depend; we grow without depleting our natural capital”. He further states that when discussing sustainable development we should think in terms of a “new humanism”, a more integrated thinking that involves the “Three E’s: Economics, the Environment and Equity”. All of the principles offered regarding sustainability and sustainable development clearly point to the need for municipal government to have policy in these areas, and that the environment can not be thought of as being separate from the economy.

2.2.1.1 Technological versus Ecological Sustainability

Although widely quoted and applied The World Commission on Environment and Development's definition of sustainable development has also been widely discounted. Orr (1992) argues that the report's definition of sustainability merely hedged its bets between two versions of sustainability, technological and ecological. Technological sustainability is rooted in the belief that "every problem has either a technological answer or a market solution" (Orr, 1992, p. 24).

To help differentiate between the two versions, Orr (1992) uses a medical analogy of a heart attack victim, and compares that situation to that of a more sustainable world condition. The immediate need of the sufferer of a heart attack is to have their vital signs stabilized, in order to simply save their life, and then afterwards it is critical to deal with the longer-term process of correcting the causes that brought on the problematic condition (and thereby seek more natural ways to sustain life). Using this analogy Orr argues that, when discussing a sustainable planet, the immediate need is to first stabilize the situation: "Technological sustainability is about stabilizing planetary vital signs" and "ecological sustainability is the task of finding alternatives to the practices that got us into trouble in the first place". Orr (1992, p. 27) also believes that, technologically sustainable development "might be sustainable" (such as if development is carefully defined as qualitative improvement). Ecological sustainability, in Orr's view, places a significant emphasis on the role and responsibility of citizens, as much as governments. Its prime objectives, as described

by Orr is to “restore civic virtue, a high degree of ecological literacy, and ecological competence throughout the population” (p. 31).

2.3 Measures of Sustainable Economic Development

As previously described (Section 2.1), certain desired outcomes have been proposed for a successful (municipal) economic development program. What also must be derived are measurable methods for determining when these goals or outcomes have been accomplished. Certain economy performance criteria are relatively easy to quantify (for example, unemployment levels and average wages) and the methods for measuring them are clearly prescribed, but criteria regarding quality of life and sustainability are not so easily quantified. Frankel (1998) noted that it is often stated that “what gets measured gets managed”, but there is also the converse: “that which isn’t gets discounted or ignored” (p. 25).

To date, success in local government interventions in economic development has not generally been measured in terms of what Kitchen has (1985, p. 9) described as “improved economic welfare”, but instead by “new development or retention of development that would have otherwise left”. He argues that this “business as usual” strategy must be abandoned. As previously stated by Daly (1996), we must replace the goal of “quantitative expansion (growth) with that of qualitative improvement (development) as the path to future progress” (p. 1). A factor measuring “improved economic welfare” should be incorporated into sustainable economic development. Redefining Progress (1996) proposed the “Genuine Progress Indicator” as being a more accurate indicator of economic well-being. It

encompasses social and environmental costs as opposed to a focus on more limited traditional indicators as Gross Domestic Product. The Genuine Progress Indicator (GPI) is similar to the 'Index of Sustainable Economic Welfare' developed by Daly and Cobb (1989).

It is important to note that not all sustainability indicators may be scientifically quantified and measured. Some indicators may need to be subjectively evaluated, and this will require some form of community consensus but, clearly, subjective measures of accountability are better than none. It may not be possible to develop a universally acceptable set of indicators. The numerous definitions and interpretations of sustainability coupled, with each municipality's unique circumstance, may only lead to the development of a process that allows a particular community to develop a definition of sustainability as well as the indicators that it will use to measure it.

In Maclaren's 1992 summary report on Sustainable Urban Development in Canada: From Concept To Practice, the issue of urban sustainability was shown to be a common objective when discussing the practice of strategic planning in Canadian municipalities. Although clearly articulated across Canada as a common goal, little work has been done to establish a method of measuring progress towards this goal. A prerequisite of measurement is a clearly defined set of benchmarks or 'sustainability indicators'. Such indicators could be employed to not only measure progress with respect to the achievement of sustainability but would be of great value in developing sustainable economic development policy.

One of the conclusions reached by Maclaren (1996) was that there was no common definition of urban sustainability, and this was clearly identified as a specific issue that warranted further discussion and research, namely; “is there a common definition of urban sustainability that should be used when developing indicators of urban sustainability?” (p. 103). Thus, it is extremely important, whatever economic development policy is adopted by the City of Winnipeg, that it can be measured and evaluated (even if said evaluation is somewhat subjective). This highlights the need for substantial community input into the development of such indicators.

2.4 Summary

When striving for sustainability it is critical to define what the fundamental principles of a sustainable community are and how its local government’s economic development strategy is interrelated with those principles. As defined by Beatley (1997), and valued as the basis for this research:

“A sustainable community is one that seeks to develop and promote an economic base that has a minimal impact on the environment and is ideally restorative of it. Sustainability principles should be the cornerstone of any community employment and economic strategy.” (p. 139).

As has been shown, current literature contains numerous and varied definitions of sustainability. When commenting on Orr’s notions of technological and ecological sustainability, Van der Ryn and Cowan (1996) commented that “while both are coherent responses to the environmental crisis, they are far apart in their specifics” (p. 4). Common

to the majority of definitions is the issue of the protection of the environment, inferring the need for at least environmentally sustainable development. Even with these similarities one municipality's circumstance and subsequent interpretation of sustainability may be substantially different from another. Different municipalities can also, conceivably, interpret an identical policy of sustainability in a completely different manner. However, it can generally be stated that the majority of definitions of sustainability in urban contexts contain elements addressing the (natural) environment, social (equity) issues and economic (growth) issues. Thus, any sustainable economic development policy contemplated by a municipal government must sophisticate and integrate these three elements.

It is clear from this review so far that there is a wide range of opinion as to what constitutes an appropriate definition of sustainable development, and that there also seems to be no common interpretation of many of the definitions. Given this, what definition should be used by a municipal government when trying to 'cultivate' sustainable economic development policy? Orr (1992, p. 38) stated that cities (strictly defined) "will always be something of an exception to the model of natural systems", and that they may never be able to reach complete ecological sustainability (though this goal may be more achievable in a city-region context- see Section 4.3.3). The goal of significantly reducing future (and repairing past) environmental damage must be tackled somehow but, for Orr "urban concentrations must be justified on their contributions to intellectual, economic, and cultural life, not their sustainability."

The role to be recommended to the City of Winnipeg with regard to cultivating sustainable economic development will be similar to the one that Beatley (1997) described as “environmentally benign or restorative”(‘gardening’); it will most definitely not be ‘business as usual’ which involves more of a ‘mining’ approach to the earth’s natural resources. It will promote economic development that has goals similar to those set forth by Orr (1992, p. 40) that employs “postmodern technology” where the goal is to “optimize rather than maximize” and “cultivate rather than manipulate.” This strategy will focus on the conscious cultivation of economic development that, in Beatley’s words, “seeks to develop and promote an economic base that has a minimal impact of the environment and is ideally restorative of it”.

The roles that are further researched and developed for the City of Winnipeg for now are those that meet the comparatively short-term criteria reflected in Orr’s notion of simply “stabilizing” vital signs, all the time being cognisant of the need to sooner or later advance toward ecological sustainability. Pragmatically, the current interest is mainly in policy recommendations that do not preclude, or negatively affect, the ultimate pursuit of ecological sustainability for the City of Winnipeg and its region.

Chapter 3: Municipal Government Involvement in Economic Development

Healey (1997) argues that the post-industrialization phenomenon has had a huge negative impact on the economy of cities. This negative impact is one of the issues causing municipal governments to become increasingly more involved in the economic development of their cities. Kotler (1993) found that “on average, any given place is likely to lose one-half of its jobs over a ten year period as jobs come and go, are refined or reclassified”. The usual government response to this has been to focus on economic development and regeneration. Driving this is the underlying belief that local economies could no longer rely on macroeconomic policy to generate the required economic activity, and local government must now actively intervene in the local economy.⁴

The ongoing globalization of the economy and increased mobility of business has also resulted in an emphasis being placed on strategies that can cultivate new strains, new forms, new ‘species’, of economic development. This is perceived to be increasingly important for both the senior and municipal levels of government. The increased government focus on economic development has resulted in specific policies or strategies being developed with the intent to create jobs and strengthen economies.

A number of issues have been identified as being responsible for municipal government playing a more active role in economic development. In a Canada-wide survey of local government economic development initiatives Michael Skelly (1995, p. vii)

proposed that the following key factors are responsible for this heightened local government participation in the area of economic development:

- Global influences on local economies (and localization influences on the global economy)
- Fall of trade barriers
- Fiscal restraint of senior levels of government
- Competition from other municipalities (for industry and jobs)
- Collapsing world markets for resource commodities
- Economic restructuring (of municipal governments facing financial restraint and increasing demand for services)
- Need for a highly educated workforce
- A reduction in federal government economic development programs

An underlying assumption relating to local government involvement in economic development is that this involvement is, in fact, warranted. This is assumed to be the case for the City of Winnipeg but only if certain basic criteria (as outlined in section 1.4, Study Limitations) are adhered to.

3.1 Roles That Municipal Government Can Play

From an examination of a list of key features that businesses felt critical to their present and future plans, inasmuch as they relate to locational decisions, Kitchen (1985, p.

⁴ This assertion, in the Winnipeg context, is based on the experience of the researcher (see Section 1.5.4)

27) found that some were under the direct ability of municipal government to affect or effect.

The factors were, in decreasing order of importance:

- Availability of a trained labour force
- Access to markets and suppliers
- Energy costs
- Community facilities and quality of life
- Labour conditions
- Local taxes
- Transportation
- Return on investment
- Customer requirements
- Business/government relations
- Management and operational needs
- Cost of land
- Local capacity for growth

Thus, locational decisions can be assessed as being primarily dependent on market and cost conditions. It should be noted that some cost conditions, such as taxes, land values and servicing/utility costs, are under the control of some municipal governments. Local governments also have direct control over zoning/building restrictions and numerous permitting and licensing processes. This reinforces the notion that land and related building regulation is one of the few components of a 'cost-neutral' economic development strategy

at the disposal of a local government (with the exception of any efforts that can be made to create a more 'business-friendly' environment at City Hall).

It was also found that "quality of life" now figures more prominently in the decision of a business owner regarding location. Bingham and Mier (1997, p. 60) report that "a growing body of evidence supports the importance of quality of life and local amenities as critical location determinants". Given this, a closer examination of quality of life factors, that can be directly influenced by local government, should be examined. This should be examined not only from the point of view of attracting or maintaining business, but also in the context of being able to provide measurable indicators of the impact of economic development policy.

According to Sancton (1994, p. 467), in Canada the following functions have been explicitly delegated to municipalities by their respective provincial legislatures:

- Fire protection
- Local roads and streets
- Collection and disposal of residential solid waste
- Sewage systems
- Taxation of land and buildings
- Regulation of local land use

In summary, Sancton observes that municipalities are “units of the government concerned with regulating, servicing and taxing our built environment”. A commonality in all of these functions is property, or land, indicating that the regulation and use of land may be a key economic development tool for a municipal government (if an interventionist strategy is to be adopted). Healey (1997) states that very little attention has been focused on how land use regulation impacts land and property markets, although it is a key element of the local economy. In summary, the use of its land assets is an area over which municipal government has significant influence and strengthens the notion that, if used properly, industrial land assets can be a powerful economic development tool.

3.2 Roles That Municipal Government Should Play

Morris (1982) argues that a city should become “locally self-reliant” and it should dedicate significant effort to achieving this as a means to enhance economic development. In economic terms this means that the community receives maximum “value added” locally from the ‘gardening’ of its own resources. Morris also discusses the importance of education to the economic development of an area. Depending on the legislative authority of the particular local government, it may or may not be able to directly provide for the needed forms of education. However, as previously described, almost all municipalities have some jurisdiction or influence over a significant cost component of almost any business, namely, the required land and its associated property/business taxes. It is interesting to note that Skelly (1995, p. viii) concluded from his survey of Canadian municipalities that the City of Winnipeg, as well municipalities in Alberta, were notable for their nationally-significant

legislative authority to undertake a comparatively broad range of initiatives relating to economic development.

Should municipal government play a direct interventionist role in economic development, or should it take a more passive role (e.g. streamlining processes, providing better information, eliminating 'red tape')? Also, if government does play a stronger interventionist role what should its focus be? Given reports that between 70 and 80 per cent of new growth (Kitchen, 1985, p. 33) can be attributed to local business it follows that local government should probably not focus on 'smokestack chasing'?⁵

Further to this, and supportive of the promotion of sustainable economic development, is the notion of local self-sufficiency. As stated by Beatley (1997):

"Having witnessed or weathered the 'boom and bust' cycles of manufacturing, military, and natural resource-based economies throughout the country, many communities are beginning to recognize the importance of a sound and diverse local economic base in maintaining sustainability. The most effective strategies for sustainable economic development therefore, revolve around ongoing investment in local labor, products and services ... (p. 147).

It seems apparent that any sustainable local economic development policy contemplated by the City of Winnipeg should devote a major portion of its attention to cultivating locally-based business development (as opposed to focusing on the attraction of incoming potentially 'transient' businesses that are simply looking for the cheapest location to conduct business, and will be likely to move on once government subsidies subside)

⁵ Kitchen uses the term 'new growth' in the context of expansion of the local economy.

As previously stated, local government should “induce innovations, not capital; ideas, not jobs” (Bingham and Mier, 1997). Thus, to stimulate growth one must stimulate innovation. Given this, how can local government operationalise such roles? Bingham and Mier argue that innovative activity can be attracted to a city through the provision of educational infrastructure and venture capital. A municipal government corporation may not have the required venture capital in a strictly monetary form, but it may have it in the form of land assets. As previously discussed in Section 1.2.1 the City of Winnipeg does have such assets, in the form of industrial land, and the discretionary legislative authority to use them in a manner that could target industrial sectors that stimulate innovation.

3.2.1 The Concepts of New Work and Innovation

In order to develop an economic development policy that will at least “stabilize” the City of Winnipeg’s equivalent to what Orr (1992) called, the “planetary vital signs” and promote Winnipeg as a sustainable place, as defined by Beatley and Manning (1997), some notions of the context and dimensions of technological sustainability need further exploration. Accordingly, the concepts of innovation and new work are reviewed, with an interest in testing their applicability as policy fundamentals in the Winnipeg context.

Jane Jacobs in The Economy of Cities (1969) notes that we know the following regarding the economy of cities:

“cities are settlements where much new work is added to older work and that this new work multiplies and diversifies a city’s division of labour; that cities develop because of this process, not because of events outside of themselves; that cities invent and reinvent rural economic life; that developing new work is different from merely repeating and expanding efficiently the production of already existing goods and services, and thus requires different, conflicting conditions from those required for efficient production; that growing cities generate acute practical problems which are solved only by new goods and services that increase economic abundance; and that the past development of the city is no guarantee of future development because the city can stop vigorously adding new work into the economy and thus can stagnate” (p. 122).

In this context the question of how to create “new work” is of obvious interest to any municipality desiring to cultivate sustainable economic development, and would seem to be in accord with the general notion of “technological sustainability” put forward by Orr (1992). As previously stated, municipal government involvement in economic development can range from the simple provision of information, with the goal of creating a more favourable climate for business, to direct cash grants or incentives. The concept of ‘new work’ will be used as a principle in the development of a sustainable economic development policy for the City of Winnipeg.

In a March 1997 report entitled, MIT: The Impact of Innovation the Bank of Boston tried to quantify the importance of innovation on the local economy of the Boston area by analysing the economic impact of MIT graduates. One of the key findings was “a pattern that emerged on the relationship of innovation and business formation to economic growth and renewal” (p. i). The report found a strong link between innovative businesses and a strong local economy. The rationale behind this linkage was that companies exhibiting the most innovation were those companies best able to contribute to rapid growth and structural

change in the economy; an economy (global, national and local) that is reported as “increasingly emphasising innovation” (p. i). The report also notes that, when determining the location for a new business, ‘innovators’ look to quality of life, proximity to key markets and access to skilled professionals as the most critical factors. Also cited were access to skilled labour, low cost of business and access to universities.

In 1999 the Canadian E-Business Opportunities Roundtable was formed to develop a strategy to greater enable Canada’s participation in the Internet economy. The Roundtable’s goal was to “establish Canada as a globally recognised e-business leader to promote a higher quality of life for our citizens through economic growth, job creation and more convenient access to information goods and services” (p. 2). The need for such an effort was based on the Roundtable’s sense of urgency with respect to a need for action in the area of e-commerce.

“Canada is well positioned to take advantage of the opportunities offered by e-business, but is not aggressively rising to the challenge. Canada faces a choice. We can capitalize fully and quickly on the e-business opportunity or remain complacent with our modest success and risk falling behind other advanced economies. We can make e-business a sustainable engine of growth and jobs for the Canadian economy or we can hesitate and watch many of our best ideas and people migrate to more hospitable environments. In short we can lead or lag” (p2)

An important recommendation of this report, namely the need for Canada to take better advantage of the opportunities provided for by the Internet economy is based on the fundamental need for Canada to look for sustainable methods of economic growth. The Roundtable report, entitled, Fast Forward: Accelerating Canada’s Leadership in the Internet

Economy provides many recommendations on what Canada should establish as national objectives. The following are directly relevant to the City of Winnipeg in the context of the present research:

- Accelerate the transformation of existing business in Canada by providing the incentives and tools for business leaders to invest in e-business.
- Foster e-business creation and growth by supporting Canada's emerging Internet clusters, ensuring that risk capital is available at all stages of business development, and by improving the incentives for entrepreneurs to build businesses in Canada.

Why are the above recommendations directly relevant, if not critical to any economic development strategy contemplated by the City of Winnipeg? To quote the Roundtable Report:

“No industry is likely to escape the influence of the Internet. Many sectors important to Canada's economy will migrate quickly to the Internet, including many traditional mainstays of the Canadian economy such as financial services, motor vehicles, telecommunications, transportation and storage, retail and utilities” (p.12).

Of these recommendations one opportunity particularly suited for Winnipeg is detailed – the opportunity to develop Global Customer Care Centres. These centres are the next generation of call centres that “integrate online and telephone solutions to customer services’ (p.19). This opportunity (or in the absence of action, threat) is apparent in Winnipeg

because of the development and maturity of the local Call Centre industry. The demand for the next generation of call centres should be viewed as a huge opportunity for Winnipeg but it also has the negative potential to become a repository for Call Centres of the past.

It seems impossible to contemplate the influences noted as not being one of the key challenges for the local economy in the very near future (if not now). There is certainly a role that local government can play in helping achieve these objectives. In the case of the City of Winnipeg, the City should not be offering risk capital but it can contribute to both objectives in a relatively risk-free way through the provision of land and/or buildings. The provision of discounted industrial land does not provide venture capital but it does help entrepreneurs with one of the most significant costs of business - a place to do business. The city is also providing a limited form of the security through the provision of land or taxes buildings (discounted greatly or not) that lending agencies are looking for when making loan or venture capital decisions. The City can also look to some form of tax freeze on targeted industry sectors that is revenue-neutral to the City.

3.3 Summary

The current absence for the City of Winnipeg of a measurable policy on economic development, let alone a *sustainable* economic development policy needs to be remedied. The ad hoc initiatives taken to date have shown degrees of short-term 'economic' success, but lack the incorporation of, or recognition of the need for, sustainability criteria. One of the City's most powerful tools with respect to economic development is its discretionary ability

to regulate its land assets. The articulation of an economic development policy using these land assets must attempt to incorporate some of the basic concepts of sustainability, and at the very least strive to be environmentally benign.

Such a policy should also be focused on the development of local industries and target those that promote 'technological sustainability' and represent 'innovation' or 'new work'. The policy should be aimed at shifting the focus from the 'the sale of land' to the long-term cultivation of sustainable economic development by 'gardening' the City's land assets. The City of Winnipeg's land holdings are key assets that should be viewed as one of the main components of a strategy designed to move the City towards policy that will nurture sustainable development.

Chapter 4: The City of Winnipeg– Local and Regional Context

In order to postulate possible sustainable economic development strategy and associated policy related to the better use of current land assets by the City of Winnipeg, a review is necessary of the relevant policies and directives that now influence or regulate land use within the City. To formulate policy regarding the disposition of land one must understand the mechanics of the existing rules and regulations governing this issue. This particular review will not be limited to the political boundary of the city itself, but will also encompass what is known as the Capital Region, including the City's municipal neighbours, or near-neighbours, in the wider 'city-region'.

4.1 Historical Context

The site of what is now known as the City of Winnipeg has been inhabited since 1812 by fur traders and settlers since 1812, congregating around the confluence (now 'the Forks') of the Red and Assiniboine Rivers. The name Winnipeg is derived from the Cree words *win*, meaning muddy and *nippee*, meaning water and came into general use around 1870. When Manitoba entered Confederation in 1870 Winnipeg's population was approximately 100 (Artibise, 1975) at which time it was rated the 62nd largest city in Canada and subsequently grew to a peak of 3rd in national ranking in 1911, since when it has steadily slipped to its current rank of 8th.

Winnipeg experienced its most rapid growth between 1896 and 1910 (Winnipeg 2000, 1994) when it was a major distribution centre as well as a significant location for

European immigration. Around the early 1920s it was boosted as the 'Chicago of the North', and this was when it became the commercial hub of the Canadian grain trade. Winnipeg still functions as a distribution and manufacturing centre but now shares these roles with other prairie cities to the West. The City of Winnipeg was officially incorporated as a city on November 8, 1873. Its original political structure comprised twelve aldermen (three per ward) and one mayor. Currently, there are 15 councillors for 15 electoral wards (organized into five, 3-councillor, community committees) and one mayor elected at large.

4.1.1 Metro Winnipeg and Unicity

In 1951 a provincial-municipal committee was formed to review the political structure of Manitoba municipalities, with a sub-committee formed in 1952 to look at Winnipeg in particular. This sub-committee recommended that the government appoint a Greater Winnipeg Investigating Commission to review the current municipal structure of the city. Following four years of investigation and review the commission recommended the "establishment of a strong central authority with responsibility for a large number of inter-municipal services" (Levin, 1993). The provincial government introduced, and passed, in 1960, Bill 62, an Act to establish the Metropolitan Corporation of Greater Winnipeg which organized the City and its neighboring 12 municipalities into an upper-tier metro government.

The responsibilities of the previous boards and commissions, thought to provide common services to the whole area, were also organized under the authority of Metro

Winnipeg. One of the first duties of the new political and administrative authority was the production of a development plan, which became the first 'master plan' - the Metropolitan Development Plan - for the region.

On July 27, 1971, the City of Winnipeg Act was passed into law and the current Unicity came into effect on January 1, 1972. This created a new 'unified' single-tier form of municipal government for what had been Metro, or 'Greater Winnipeg'. The Unicity Council replaced all the former lower-tier municipal governments. Unicity was the "first major Canadian city to move beyond the stage of split-level metropolitan government to a single administration for its entire metropolitan area" (Artibise, 1977).

The creation of Unicity may have legally amalgamated the City of Winnipeg with 12 adjacent municipalities but this move is partially responsible for certain impediments that now exist for the adoption of a regional land use perspective by the City and its new set of municipal neighbors, or, as stated by Wight (1999) "when Unicity was created, metropolitan regionalism was effectively killed off". Unicity has, in fact, exacerbated the issue of achieving coordinated regional land use planning. The transformation, from 13 individual municipalities and their individual industrial lands and uses, to Unicity also played a large role in the unusually fragmented land use pattern, and especially in the scattered pattern of industrial lands, that now characterize the City of Winnipeg.

4.2 The City of Winnipeg Act

The City of Winnipeg Act (SM 1989-90 c.10) sets the powers under which the City can operate. The act is the provincial statute that enabled the City of Winnipeg to become a self-governing entity in 1971. By-law 6550/95 (the Organizational By-law) of the Act sets out “the delegation of powers and duties by City Council to the Executive Policy Committee and the Standing Committees and the establishment of the administrative structure of the City and the delegation to it of its administrative powers and duties” (p. 1).

The Planning, Property and Development Services Department of the City of Winnipeg is the current administrative arm responsible for the acquisition and disposal of civic land and buildings. The Department was re-organized in 1997 to “focus on the needs of the development interests within the City of Winnipeg and provide management of the City’s real property assets” (Planning, Property and Development, Organizational Structure, 1999). Simply put, and of especial relevance to this research, the Department buys, sells, plans and regulates the use and/or development of land within the City of Winnipeg.

The Planning, Property and Development Services Department gains its authority from Parts 6, 15 and 20 of the City of Winnipeg Act. Part 6 of the City of Winnipeg Act describes the ‘Acquisition and Disposal of Land’, Part 15 describes ‘Building Standards’ and Part 20 describes ‘Planning and Development’. With regard to the power to acquire and dispose of land, the city may lease, purchase, buy or sell any land that “the city may consider necessary for its purposes” (City of Winnipeg Act, Part 6, Section 156(1)). This power is

currently exercised through City Council, the Executive Policy Committee, and the Standing Committee on Planning, Property and Development, and is partially delegated to the Planning, Property and Development Department in terms of staff function. It should be noted that all matters dealing with 'Economic Development' fall under the jurisdiction of the Executive Policy Committee.

4.3 Current Economic Development and Land Use Policy

To date the City of Winnipeg has no formal Economic Development Policy. There are however some rather general statements in this direction in the September 13, 1999 draft version of Plan Winnipeg 2020 Vision regarding the need to develop a long-term economic development strategy. Land use policy for the City is as outlined in the following 'Plan Winnipeg' documents.

4.3.1 Plan Winnipeg...Toward 2010 (By-law No. 5915/92)

One of the main documents governing the growth and development of Unicity was the (Greater Winnipeg) Metropolitan Development Plan (1968), which laid out a generalized land use pattern for the city through the establishment of land use types. The Winnipeg Tri-Level Committee on Urban Affairs (1978) stated, in reference to the Plan, that:

“because the plan was produced during a period when Winnipeg consisted of several municipalities each vying for an increased tax base, the plan did not attempt to establish growth priorities but rather directed that future suburban growth be contiguous to established areas.”

After a review process the Metropolitan Development Plan was updated through subsequent

planning processes/documents known as Plan Winnipeg and then Plan Winnipeg...Towards 2010, which is the operative comprehensive plan for the City at this time of writing

The authority for Plan Winnipeg lies within the City of Winnipeg Act of 1971, and is mandated by this provincial statute to be re-evaluated and updated every five years to accommodate changing societal values, demographics, etc. The purpose of these documents was to produce a long-term plan for the City of Winnipeg. This was accomplished through the development of policies/guidelines with respect to the social, economic and environmental conditions of the city. Under Plan Winnipeg...Toward 2010 (By-law No. 5915/92) “all other documents, budgets, public works programs or developments initiated or approved by the City must be consistent with this plan as adopted by Council”.

This document, produced by the City of Winnipeg Planning Department and finalised in 1993, is an updated version of Plan Winnipeg, which was adopted in 1986. The 1986 version of Plan Winnipeg was primarily a land use plan dealing almost exclusively with urban development issues. Plan Winnipeg...Toward 2010 was set up in a different format; the issues dealt with were broader and more complex, with more of a focus on social values. The three fundamental concepts that shaped the policies of the plan were: Quality Customer Service; Sustainable Development; and Healthy Community. In addition, the following key issues were identified and used as the foundation for the guidelines and objectives of the final document: Economic Development, Environmental Stewardship, Social Equity, Urban Development Management, and Urban Image.

In addition to the broader societal goals and objectives, identified by the five key areas identified above, there are also three policy plates outlined under the area of Urban Development Management. As many of the issues identified in this plan are specifically related to land use, policy plates were developed to illustrate how these issues relate geographically to the various areas and neighbourhoods of the City. These policy plates define:

- Policy Areas;
- Recommended Transportation System (Street Component), and
- Recommended Transportation System (Transit Component).

The policy plate most directly relevant to this research is entitled the one which illustrates the various policy areas, including 'industrial', located throughout the city. With regard to the use of industrial land and economic development the Plan has the following Statement of Principle:

"The City seeks to establish and maintain an economic environment that encourages industrial growth. Industrial development provides real economic growth. This must be encouraged and supported. The provision of land to accommodate the needs of new and expanding industry must be given full consideration and particular attention paid to those industries that enhance the diversity of the City's economic base" (p. 30).

The above shows that, if a policy is developed to cultivate sustainable economic development through the City's use of its industrial land assets, it is likely to lie within the scope of the 'current' Plan Winnipeg document.

4.3.2 Plan Winnipeg...2020 Vision (Draft Version – September 13, 1999)

This document is intended to replace the previous version of Plan Winnipeg as the City of Winnipeg's official long-term strategic plan. In addition to many of the priorities stated in the previous Plan, new to this version, and of particular relevance from a regional land use perspective, is a section entitled "Promote Regional Consistency in Planning (3A-04). The section states that the City shall promote regional consistency in planning by:

- i) *consulting with neighboring municipalities and the Province to ensure the integration of Plan Winnipeg with the departmental plans of adjacent municipalities without compromising Winnipeg's central role;*
- ii) *encouraging the Provincial government to establish an ongoing forum for dialogue and discussion between Winnipeg, the Province and neighboring municipalities (Draft Version – September 13, 1999), p. 30).*

Another comment made in this document relevant to sustainable development is in Section 5A – "Committing to Environmental Stewardship". It states that the City shall "ensure environmentally-responsible decision-making within the broad community and within its own operations by ... seeking rigorous evaluation of the environmental impact of new development projects in areas adjacent to Winnipeg". These 'official' statements from the City seem to reinforce the notion that sustainable land use policy requires a city-region perspective.⁶

⁶ As of this writing Plan Winnipeg ... 2020 Vision was in draft form and not approved by City Council. One of the stated limitations of this research was that only Council approved policies or directives would be used, and as such only a cursory review of this document has been conducted. It is noted that further research on this document is warranted (for example, the area of 'Progress Indicators').

4.3.3 The City-Region Context

The growing emergence of the post-industrial and global economies, in addition to having to rethink what constitutes industrial land use, is requiring local and provincial governments to think more about regional governance arrangements. In order to compete in this 'new economy,' municipalities must adopt a collaborative regional approach to economic development, and in doing so must consider a regional land use strategy. The ability to mobilize regional resources (instead of competing for them) is seen as a critical component of the globally-contexted competitiveness now required of municipalities in city-region interdependency.

It is argued by Peirce (1993) that national economies are becoming an accumulation of regional economies, each having a "citistate" at its core, with its own set of driving forces. The theory presented by Wallis (1995) is that the way a city-region (or citistate) responds to the new economy largely dictates the continued economic viability of its primary city. Both the City of Winnipeg and the Province of Manitoba are looking towards better-institutionalized forms of regionalism as necessary for competitive positioning in the global economy. However, with this growing focus on regional economic development it is important that to ensure that issues of sustainability are addressed with respect to land use.

When attempting to develop a "new economy"/"new regionalism" economic development strategy for the City of Winnipeg, clearly we must revisit our current highly localized perspective on land use and growth management. Our perspective must not only

change to one of a regional (if not global) nature in a new post-industrial economic context, but our growth management policies should, as stated by Zovanyi (1998), “change from accommodating ongoing growth to ensuring sustainable behavior” (p. xiv).

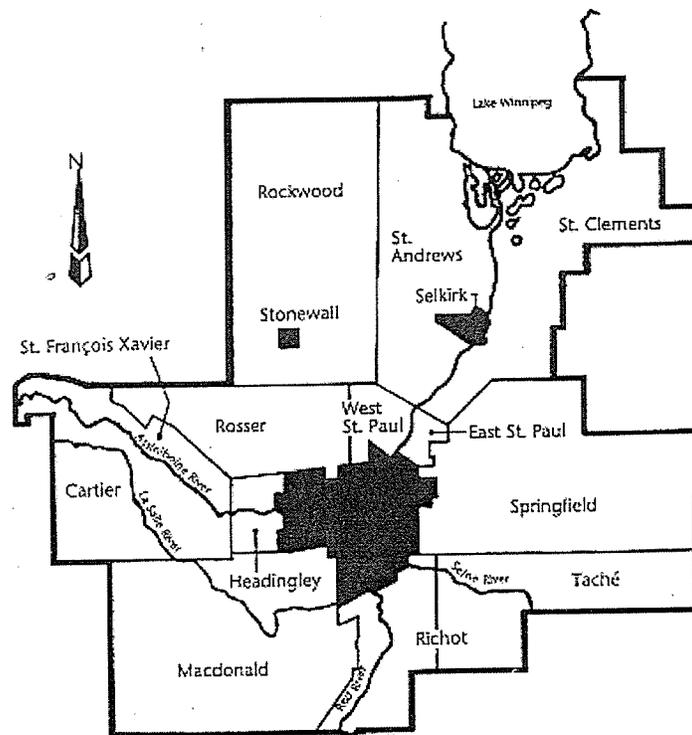
Beatley and Manning (1997) suggest that many of the existing sustainability problems of North American cities/regions stem from the low-density, sprawling spatial development patterns typical of development since the Second World War. These development patterns are land-consumptive, environmentally-harmful, and fail to create livable space. One of the causes that the authors deem responsible is government policy as it relates to land use. They state that “local governments have significant economic and political incentives to act parochially” (p. 72). Thus, one of the key elements of sustainable urban form is the adoption of a regional land use perspective.

There are policies, plans, directives or jurisdictional issues that influence the City of Winnipeg and the local economy, relevant to economic development, that attempt to address the issue of regionalism in the Winnipeg context. They are now examined in order to ascertain other considerations that may be required to develop a sustainable economic development policy for the City of Winnipeg. Of particular interest is the influence of the Province’s Capital Region strategising on the City of Winnipeg, and vice versa.

4.3.3.1 The Capital Region

Manitoba's Capital Region (see Figure 3) is located in the southeast corner of the province and includes the City of Winnipeg, Selkirk and Stonewall, as well the thirteen rural municipalities shown in Figure 3. The Capital Region encompasses an area of approximately 7,500 square kilometers, which is equal to 1.4% of the province's land area (The Capital Region Strategy – Partners for the Future, 1995, p. 5). Approximately 64% of the Province's total population lives within the Capital Region, and 89% of the Capital Region's total population of 697,000 lives in Winnipeg.

Figure 3: The Capital Region



4.3.3.2 The Capital Region Strategy

The document entitled The Capital Region Strategy – Partners for the Future notes the following relevant trends:

- The Capital region will grow at a slow rate over the next two decades but the area of the region outside of Winnipeg will grow at a faster rate than Winnipeg.
- By the year 2011 the population of the region outside of Winnipeg is predicted to grow by 28% (22,000 people) and Winnipeg is predicted to grow by 5% (28,200 people).
- The number of households will grow by 17% and 43% by the year 2011, for the City of Winnipeg and the balance of the Capital Region respectively.
- The fastest growing segment of the population is the aboriginal population of Winnipeg, which is predicted to grow by 65% (12,855 to 21,255) by 2011.

Also identified by The Capital Region Strategy – Partners for the Future were the following issues:

- Out-migration of youth.
- Regional growth outside Winnipeg.
- Aging population.
- Transportation.
- Energy use.

Of particular interest in the sustainable economic development context of this research is the issue of regional growth outside of Winnipeg, underscoring the need for a coordinated regional planning approach. This need for a regional planning approach requires that any City of Winnipeg economic development policy be integrated regionally. This is especially important if a municipal government is to use its land-related assets as an economic development tool.

Regional growth outside of Winnipeg (predicted to be 1.5% a year) will require planning in a collaborative manner by Winnipeg, the Province and the Rural Municipalities, if any attempts at moving towards sustainability are to be successful. The current form of population growth outside of the City of Winnipeg within the region will further strain an already unsustainable regional transportation system, and will also drive even more unsustainable energy use through commuter traffic and the increased construction of single-family dwelling units (the predominant dwelling unit being constructed outside of Winnipeg). A continued trend of dispersed rural housing will also result in a loss of land available for farming.

It should be noted that, according to The Capital Region Strategy – Partners for the Future, 80% of the region's soils are rated as prime agricultural land under the Canada Land Use Inventory. The region also contains two extensive aquifers that supply eleven of the sixteen municipalities with water (some of the areas south and west of Winnipeg do not have

direct access to potable water). The area also has numerous fish and wildlife resources that include several rare and endangered species. All of these issues and trends again reinforce the need for a regional perspective. In particular, the following threats to the sustainability of the region are identified:

- Incompatible land uses.
- Soil degradation and loss of agricultural land.
- Groundwater quality and availability.
- Degradation of air quality.
- Destruction of natural habitat.
- Waterway degradation.
- Energy inefficiency.

It is proposed that all of the above ‘indicators of unsustainability’ can be partially mitigated through a regional land use planning policy. It is also proposed that these ‘indicators of unsustainability’ be used in the development of a sustainable economic development policy for the City of Winnipeg. These indicators would be used to establish criteria for likely impacts of development that would *not* be countenanced under the policy contemplated.

All of the foregoing also reaffirms the need for a regional perspective on the part of the City of Winnipeg, with respect to the possible use of its lands as a means of cultivating sustainable economic development. The Capital Region Strategy – Partners for the Future

recognizes that “the future of Manitoba is closely tied to the future of the Capital Region” and that “the environment, economy and social well-being are interrelated” (p. 14). Given this, it follows that a Capital Region land use policy must be developed, and any sustainable economic development initiative on the part of the City of Winnipeg should have a regional context as its foundation. Recommendations are advanced in The Capital Region Strategy – Partners for the Future regarding goals for the Capital Region, as well as a strategy for the creation of sustainable region. However, these goals and recommendations lack specific implementation detail or strategy. For example, when discussing growth management the document merely states that “growth will be directed to land able to sustain it”.

The development of a Capital Region Land Use Policy will enable the provincial government to fulfill one of its stated policy objectives, namely that “land use shall contribute to the sustainability of the region’s resources and environment, economic growth of communities, and the health and well-being of people” (p. 23). This would also help fulfill an objective of this practicum, namely, to assist the City of Winnipeg to adopt a strategy and related policy towards the goal of cultivating sustainable economic development. The action required to fulfill this objective is to develop a long-term, comprehensive, regional, sustainable, land use plan. A preliminary strategy has been conceived, but seemingly in the absence of broad regional community input, and perhaps relying too much on the “business as usual” ideology criticised by Frankel (1998). This ideology is undoubtedly rooted in the Province’s Sustainable Development Strategy which employs the ambiguous, Brundtland definition of sustainable development. It is not the

objective of this research to develop a Capital Region Land Use Policy but rather to emphasize that any City of Winnipeg Economic Development Policy that has sustainability as a goal must recognize the need for a regional perspective.

Further reinforcement of the requirement for a regional planning perspective came in October 1998 when the Province published Partners for the Future: Working Together to Strengthen Manitoba's Capital Region as a discussion document. This document, prepared to assist the Capital Region Review Panel, stated that "there is no formal mechanism in place to ensure co-ordination of planning and land use decision making between jurisdictions within the Region". In order for the City of Winnipeg to develop policy that strives for sustainable economic development it must incorporate a regional perspective.

4.3.3.3 The Capital Region Review Panel

In June 1998 the Province of Manitoba appointed the Manitoba Capital Region Review Panel to advise on how to implement the Capital Region Strategy. The interim report of the Capital Region Review was published in July 1999 (and the Final Report in December 1999). The mandate of the Panel was to:

"undertake a review and make recommendations to the government, through the Ministers of Urban Affairs and Rural Development, respecting the effectiveness of the existing legislative, policy and procedural framework guiding land use planning and development, and the provision of services in the municipalities in the Capital Region" (p. 1).

This report offers little in the way of concrete policy action or strategies and is little more than a series of generalized observations and vague recommendations. The report seems to be moving in reverse towards a more generalized ideology, it seems in fact that it could have actually been best written prior to The Capital Region Strategy – Partners for the Future.

Continued support for localized land use is what Zovanyi (1998) sees as “irresponsible support for an obsolete ideology, as further growth induces increasing environmental havoc”. The lack of a coordinated regional perspective is one of the main contributing factors to the situation of unsustainable ‘sprawl’ that exists today. The Capital Review Panel’s recognition of this, in its final report, reinforces the need for a regional land use perspective being incorporated into any economic development policy contemplated by the City of Winnipeg. The Final Report of the Capital Region Review Panel (1999) recommended the formation of a ‘Regional Association’ of Mayors and Reeves to “deal with cross-boundary issues in a manner which is both attractive to growth and efficient in its use of its resources and infrastructure” (p. 72).

4.4 Summary

A review of policies, by-laws and external forces that impact the City of Winnipeg reinforces the view that how Winnipeg chooses to use its industrial land assets, for economic development purposes, impacts on its ability to be sustainable. It also reinforces what a powerful tool the City of Winnipeg’s discretionary ability to regulate land use can be with

regard to sustainable economic development policy. An equally important lesson learned is the need for any policy contemplated by the City of Winnipeg, with regard to land use and economic development, to incorporate a regional perspective.

Chapter 5: The Economic Context

A review of the local economy has been conducted, as well as a review of some recent relevant economic assessments. Insights can be gained from the economic statistics as well from the assessments thereof, in terms of various interpretations and recommendations. For example, a critical part of the policy to be developed is the determination of how it will be assessed. To be able to measure 'progress' a set of measurements or indicators must be developed. In order to make policy recommendations to the City of Winnipeg, aimed at the cultivation of sustainable economic development, a general understanding of some of the forces that shape and influence the local economy should be arrived at. As discussed in section 2.3 (Measures of Sustainable Economic Development) a set of measures or indicators must be established and monitored. It is also important to understand the role that industrially zoned land presently plays in the local economy before contemplating policy recommendations that may impact that role.

A review of recently determined economic indicators, Gross Domestic Product and labour force has been conducted. Although these economic indicators may not provide the best insights into the evaluation of the effectiveness of any contemplated sustainable economic development policy they are the yardsticks currently used by the City of Winnipeg and the Province of Manitoba for measuring economic performance. Numerous studies have been conducted on the local economy but the most recent (and the most relevant to this research) was the KPMG Study conducted in 1999, for Economic Development Winnipeg. Some of the strategies offered in the KPMG report will be used as the basis for testing some

of the recommendations offered in this practicum.

5.1 The Local Economy – Statistical Indicators

5.1.1 Gross Domestic Product

The autumn 1999 Report of the Conference Board of Canada indicates that the City of Winnipeg contributes approximately 70 per cent of the Province of Manitoba's Gross Domestic Product. The predicted growth of the local GDP is 2.5% annually for the next four years and it is also predicted that the actual figure will be \$18.4 billion dollars for the year 2000 (Economic Development Winnipeg, January 2000 Economic Report For Winnipeg, p. 1). The January 2000 Economic Report for Winnipeg states that Winnipeg's GDP growth is made up of a few key industrial sectors as illustrated below:

Table 2: Winnipeg GDP by Industry Sector (Millions \$1992)

<i>Industry Sector</i>	<i>1999</i>	<i>% Total</i>	<i>2000</i>	<i>% Change</i>	<i>2001 to 2004 Average Annual Compound Growth Rate</i>
<i>All Industries</i>	17,989	100.0	18,438	2.5	2.5
Goods Producing	4,462	24.8	4,608	3.3	3.2
<i>Primary</i>	122	0.7	126	3.2	3.9
<i>Manufacturing</i>	2,651	14.7	2,752	3.8	3.5
<i>Construction</i>	987	5.5	1,007	2.1	3.8
<i>Utilities</i>	702	3.9	723	2.9	1.3
Service Producing	13,528	75.2	13,831	2.2	2.3
<i>Transport & Communications</i>	2,294	12.8	2,352	2.5	3.1
<i>Wholesale & Retail Trade</i>	2,207	12.3	2,256	2.2	2.1
<i>Finance, Insurance & Real Estate</i>	3,165	17.6	3,235	2.2	2.3
<i>Commercial</i>	1,914	10.6	1,973	3.1	2.3
<i>Non-Commercial</i>	2,708	15.1	2,743	1.3	1.4
<i>Public Administration</i>	1,240	6.9	1,272	2.6	3.2

Source: Conference Board of Canada, Autumn 1999

Although Gross Domestic Product does not give any indication as to either 'quality of life' or sustainability it does point to the fact that in 1999 'Goods Producing' industries 'primary' and 'manufacturing' account for approximately 15% of the local GDP. The industries identified in this category are generally those that would be assigned industrial zoning under the City of Winnipeg Zoning By-law (see Appendix 1), resulting in a significant portion of the Winnipeg economy being located on industrially zoned land. The primary and manufacturing portions, of this industry sector are also showing two of the highest compound growth rates at 3.9% and 3.5%.

5.1.2 Employment

Winnipeg's total employment has increased by 11.1% (36,100 workers) in the period from 1987 to 1998. The sector showing the largest increase was the services sector at 40.1%, of which business management showed a 78% increase and the health and social services sub-sectors 35% (January 2000 Economic Report For Winnipeg). As can be seen from the table below the second largest growth has occurred in the manufacturing sector, a sector of the economy that, in Winnipeg, requires land with an industrial zoning designation. The growth in this sector is made up of transportation equipment, furniture and fixtures, wood and machinery industries.

Table 3: Winnipeg Employment by Industry Sector 1987 to 1998

<i>Employment ('000)</i>	<i>1987</i>	<i>1998</i>	<i>Change 1987-98</i>	<i>% Change 1987-98</i>
<i>Total Employment</i>	326.4	362.5	36.1	11.06
<i>Primary</i>	4.4	4.1	-0.3	-6.8
<i>Manufacturing</i>	44.8	51.6	6.8	15.2
<i>Construction</i>	17	17.5	0.5	2.9
<i>Transport, communications & other utilities</i>	36.2	32.3	-3.9	-10.8
<i>Wholesale and Retail Trade</i>	62.9	64.6	1.7	2.7
<i>Finance, Insurance & Real Estate</i>	22.8	20.4	-2.4	-10.5
<i>Services (Commercial and Non-Commercial)</i>	110.2	150.3	40.1	36.4
<i>Public administration</i>	28.1	21.8	-6.3	-22.4

Source: Statistics Canada Labour Force Division, 1999

5.2 The Local Economy – Analytic Review

Of the studies conducted on the Winnipeg economy, The Winnipeg Economy – Strategic Research Initiative produced by KPMG was found to be the most current and directly relevant to this research. This study, conducted in 1999, by Economic Development Winnipeg, was intended to “provide Economic Development Winnipeg with a socio-economic profile of the City of Winnipeg, on which to base future economic development initiatives.” (KPMG, 1999, pp 5). The study comprised extensive economic and demographic research on the City of Winnipeg and contains numerous recommendations and strategies with regard to future economic development threats and opportunities.

It is important to note that this study barely makes reference to issues regarding quality of life, the environment or sustainable economic development, but it does provide the only recent ‘official’ research on economic development policy recommendations for the

City of Winnipeg (through an arms-length agency, Economic Development Winnipeg). It is the only recent research initiative, conducted to investigate possible economic development strategies, that has been presented to Winnipeg City Council. There is no regional context nor is there any attempt at providing a means to measure and assess any recommended initiative. The study does provide basic economic and demographic information regarding the threats and opportunities existing for Winnipeg, that should be reflected in the policy recommendation targeted in this research. However, the policy recommendations need to go beyond the 'business as usual' approach that seems to be the basic assumption of the KPMG Study. The objectives of the KPMG study were to:

- Develop a current profile of the Winnipeg economy that included socio-economic indicators.
- Analyze the data gathered and forecast the city's economic outlook.
- Identify key priority issues
- Provide city council with insights required to develop new economic development initiatives

5.2.1 Critical Strategies and Opportunities for Winnipeg

In her book, The Economy of Cities, Jane Jacobs (1979) stated that "Economies that do not add new kinds of goods or services, but continue only to repeat old work, do not expand much nor do they, by definition, develop".⁷ Land use policy that enhances incentives for the strengthening and development of specific industry clusters, as well as the

⁷ For elaboration on the concept of 'new work' see Section 3.2.1

commercialization of knowledge, could enable the creation of what Jacobs calls “new work”. The KPMG report quotes Jacobs and identifies strategies that it believes to be key to the development of Winnipeg’s economic sector strengths. Using Jane Jacob’s notion of ‘new work’ as a foundation of their strategy, the authors recommend two inter-related strategies:

i) Industry Cluster formation; The development of special industrial clusters (for example, the grain trade or aerospace industry) would, “help Winnipeg differentiate itself from other competing cities”, by developing “expert knowledge, specialized infrastructure and competitive advantage” (KPMG, 1999). The aerospace industry is a significant user of industrial land and a major component of Winnipeg’s economy. This type of strategy would be fairly easy for the City to implement through either an industrial land pricing policy, targeted at this type of development.

ii) Commercialization of Knowledge; The commercialization of knowledge made through research attracts funding for more research and helps create new, more (technologically) sustainable industry and jobs, or “new work”. The KPMG study (1999) found that Winnipeg “has an active research sector in different areas of specialization” (p. 11). Once again, an industrial land pricing policy targeting the commercialization of knowledge would be a logical approach for the City to take with a view to the cultivation of sustainable economic development.

5.2.2 Concerns and Threats for Winnipeg

Research elaborated in the KPMG study found the following threats to the future economic development prospects for the city:

- High taxes
- Skilled labor shortage
- Preparedness of young people to compete in a knowledge-based economy
- The city's negative image
- Downtown decline
- Aging demographic and out-migration of young people
- Lack of clear vision for the city.

Sustainable economic development policy needs to engage these issues, and blunt or weaken their threatening effects.

5.3 Summary

It is proposed that a combination of an aggressive tax incentive policy, or reduction of the sale price of city-owned industrial land, could help counteract all of the above noted concerns as well as facilitate capitalization on the opportunities presented by the local and regional context. Based on theoretical research and localized context it seems possible that a strategy to use the City of Winnipeg's industrial land assets as a tool to cultivate sustainable economic development is possible. Industries that require industrial land, and the uses enabled by its zoning designations, currently play a significant role in the Winnipeg economy. It seems this role can be modified and used to present a policy, to the City of

Winnipeg, that could facilitate the cultivation of sustainable economic development. This strategy must, however, be focused in particular on the two opportunity areas identified: industry cluster formation and the commercialization of knowledge. What is now needed is to survey relevant precedents and informed experience to help craft a policy plan of action.

Chapter 6: Relevant Precedent and Informed Experience

Before finalizing and proposing possible policy recommendations to the City of Winnipeg, regarding sustainable economic development policy, a further investigation is required, focusing on relevant precedent elsewhere and informed local interests. To accomplish this, an Internet survey, and several key informant interviews, were conducted.

6.1 Internet Survey/Questionnaire

Certain North American cities have emerged from the literature review as having comparatively notable sustainable economic development policies, or providing examples of sustainable economic development practice that might be of relevance to this research. These cities are: Chattanooga, Tennessee; Minneapolis/St. Paul, Minnesota; Berkeley, California; Portland, Oregon; Seattle, Washington; and Calgary, Alberta.

In addition to the cities noted above the questionnaire was also distributed to a number of other Canadian cities to determine if further relevant insights could be gained from a Canadian perspective. These cities were: Vancouver, British Columbia; Victoria, British Columbia; Edmonton, Alberta; Regina, Saskatchewan; Saskatoon, Saskatchewan; Toronto, Ontario; Hamilton, Ontario; Ottawa, Ontario; Montreal, Quebec; Fredericton, New Brunswick and Halifax, Nova Scotia.

An Internet-based exploration of the sustainable development practices was conducted for these cities. The review was conducted using the questionnaire shown in

Appendix 2. Responses ranged from detailed answers to the questions posed, as was the case for Portland, Oregon and Chattanooga, Tennessee, to no response at all. Detailed responses were not received from any Canadian city. The majority of the cities surveyed provided helpful documentation, addresses of relevant Internet sites, or contact people. Of the seventeen cities that were sent the questionnaire only two did not respond in any manner. The cities of Austin, Chattanooga and Portland, Oregon provided the most directly relevant feedback and documentation. A summary follows of the insights pertinent to this research from these cities.

6.1.1 Austin, Texas

The City of Austin uses the Brundtland Commission's definition of sustainable development and references the 'three legs' or 'three E's' of sustainable development: equity, economy and the environment. The goals elaborated in their policies regarding the creation of a sustainable community are fairly vague. Although they lack either clear definition or measurability the need for such indicators has been recognized. The 'Sustainability Indicators Project' is projected to be complete in draft form by mid-2000. Similar to Chattanooga (see section 6.1.2) they employ the report of the Presidents Council on Sustainable Development (1999), Towards a Sustainable America, as the foundation for the principles they have adopted regarding sustainability.

Austin also has a 'Sustainable Communities Initiative' which exists to "help the greater Austin region achieve economic prosperity, social justice and ecological health – the

highest possible quality of life in the best possible environment” (City of Austin, Sustainable Communities Initiative, 1999, p. 1). This initiative uses the aforementioned ‘three E’s’ in recognition of their interdependence. Of particular interest for this research are the following issues, identified by Austin as key strategies for moving toward the achievement of sustainability:

- Maintaining and optimizing existing infrastructure.
- Reduction of sprawl.
- Improvement of inter-modal transportation.
- Minimizing impacts on ecologically-sensitive areas.

Austin has a Capital Improvement Program Matrix that ranks proposed capital improvement projects according to sustainability. Although this process and its resulting ranking does not ensure these projects will be prioritized in the same manner by the public budget review/approval process, it does prescribe how administrators prioritize and plan capital projects.

With regard to land use and development, Austin has developed a ‘Smart Growth Initiative’ whereby ‘Smart Growth Zones’ are established to allow ‘smart’ development (i.e. development that will improve the quality of life and enhance the tax base). Austin seems to have adopted an economic development strategy that is coincident with Beatley and Manning’s (1997) description of a sustainable community, “as one that seeks to promote an economic base that has minimal impact on the environment and is ideally restorative of it”.

6.1.2 Chattanooga, Tennessee

The City of Chattanooga is the fourth largest city (total municipal area population is approximately 212,000) in the State of Tennessee. Chattanooga has an economic vision for the future that incorporates the concept of sustainable growth. It is important to note that Chattanooga makes the distinction between development and growth. The city wants to be recognized as the “one mid-sized city in America where economic growth and job creation are balanced with a sense of responsibility for the future” (The Chattanooga Story, The Chattanooga Area Chamber of Commerce, p. 1). This is outlined in the several ‘belief’ statements they have adopted, the most relevant here being, “We believe in Sustainable Growth”. This is elaborated by stating that, “to achieve Chattanooga’s vision some things must grow – such as jobs, income, profits and knowledge ... and others must not – such as pollution, waste and poverty”(p. 1). The city’s economic development strategy focuses on the strengthening of local business, the use of regional resources and the redevelopment of abandoned or under-utilized land and buildings.

When discussing sustainability and economic development Chattanooga uses the same principles and objectives as those stated in the 1999 report of the Presidents Council on Sustainable Development, Towards a Sustainable America. Its definition of sustainability is that of the Brundtland Commission, but in this instance Chattanooga provides an excellent example of how to use generalized and vague goals or definitions to a positive advantage. Vagueness can be a ‘two-edged sword’; it can be used as an unmeasurable (success or failure) status quo objective or, in the case of Chattanooga, interpreted as a call to action.

Chattanooga representatives believe that, although their economic development policy is not directly linked to environmental policy, on a project by project basis they have made progress towards that end. They have no 'indicators of sustainability' that they measure on a regular basis, nor do they have a formal economic development plan. They characterize their approach to economic development as being on an ad hoc basis, but following some general guidelines regarding sustainability. The Chamber of Commerce is presently working on an economic development policy that will recognize the city's land assets as an economic development tool.⁸ The Chamber of Commerce also takes the position that it should play a direct interventionist role in certain aspects of economic development, as well as the more passive role associated with streamlining civic processes (removing 'red-tape'), and the like.

Why look to Chattanooga for answers? In the early 1960s Chattanooga had a downtown in decline, and the dubious distinction of having the worst air pollution in the United States (as cited by the U.S. Department of Health Education and Welfare in 1969). Less than twenty years later, in 1986, Partners for Livable Places recognized the city as one of the most livable in North America. This recognition was also accorded in 1994. The city has also achieved national recognition for the redevelopment of the downtown and riverfront. In 1996, Chattanooga was selected as one of the world's "Best Practices" cities at the U.N. Conference on Human Settlements (Habitat II) in Istanbul, Turkey, and was also selected by the Center for Manufacturing Practices as the first Environmental Best Management Practice Study Model. Perhaps key to all this acclaim, Chattanooga has also been recognized as one

⁸ The City of Chattanooga is currently developing an economic development policy that would use the city's land assets as an economic development tool. Further research could be done to more fully investigate the policy when it is completed, to determine appropriateness in the Winnipeg context.

of the first American cities to effectively use a citizen visioning process to determine its long-range strategic goals, thus reinforcing the need for extensive citizen involvement in the development of an economic development policy for the City of Winnipeg.

6.1.3 Portland, Oregon

The City of Portland's Bureau of Planning has produced, and adopted by city ordinance, a long range planning document entitled Comprehensive Plan: Goals and Objectives. This (last revision in 1996) document is intended to guide the "future development and redevelopment of the city" (p. 4). The plan was originally produced in 1980 and has been modified several times to reflect changing conditions and ideals. Comprehensive municipal planning has been mandated by state law in Oregon since 1973. This mandate also reflects state-wide planning goals and objectives. There are ten elements associated with the "Land Use Goals and Policies" section of The Portland Plan, of which two ('Economic Development' and 'The Environment') are especially pertinent to this research.

The stated goal of the City of Portland regarding economic development is to "foster a strong and diverse economy which provides a full range of employment and economic choices for individuals and families in all parts of the city" (p.33). The city uses various forms of incentives (from discounted land to public investments in infrastructure) when striving to encourage 'targeted industries' to locate, stay or expand within the city, but is careful to stipulate that these incentive programs "ensure citizen involvement in the policy

development and decision-making process on publicly-funded economic development projects and activities” (p. 34).

Portland’s comprehensive plan also outlines specific goals regarding the environment, including an objective to “maintain and improve the quality of Portland’s air, water and land resources” and to protect neighbourhoods and business centers from detrimental noise pollution” (p.68). The co-ordination of day-to-day land use regulation and long-term planning is specifically mentioned when discussing environmental goals.

The City of Portland has also adopted “Sustainable City Principles”, the goal of which is to “promote a sustainable future that meets today’s needs without compromising the ability of future generations to meet their needs and accept their responsibility to:

- Support a stable, diverse and equitable economy.
- Protect the quality of the air, water, land and other natural resources.
- Conserve native vegetation, fish, wildlife habitat and other ecosystems.
- Minimise human impacts on local and worldwide ecosystems.

(City of Portland Sustainable City Principles – November 1994).

The goals and principles presented are a clear recognition of the importance Portland places on sustainability. The City also has a set of criteria relating to sustainability that staff and elected officials must adhere to.

In 1958, by municipal vote, the Portland Development Commission was created as a city agency to “deliver projects and programs which achieve the City’s housing, jobs and revitalization priorities” (p. 1), with the objective of providing “sustained liveability” for the city and region. It is important to note that as far back as 1958 economic development in the City of Portland was approached employing a regional perspective. The Portland Development Commission has developed a Five-Year Business Plan. This document lays out how the city will “focus our housing, jobs, and revitalization activities in geographic and program areas” (Portland Development Commission, Five Year Development Plan: 1999 – 2004, p. i.). The document is derived from an even longer-term planning document entitled “Metro Region 2024”. In addition to the lessons learned regarding the importance of short and long-range planning the City of Portland also has measurable indicators (see section 6.1.3.1) that quantify the goals it is trying to achieve with respect to economic development and the environment. Examples of these that may have relevance to Winnipeg are: employment statistics, per capita income, air passenger traffic, air pollution index, educational attainment, poverty rates, crime rates and ‘neighbourhood liveability’.

When describing economic development strategies the City of Portland has a specific program associated with the use of land assets for the creation of jobs. One specific strategy, entitled ‘Land Acquisition and Development’, focuses on the acquisition and development of land for the primary purpose of creating or retaining jobs in targeted industries, and on what has been found to be key local strengths or targeted market sectors. It is interesting to note that their economic development literature repeatedly focuses on two natural advantages

of the city: a pure and plentiful water supply and cheap hydroelectric power. These are two of the advantages that the City of Winnipeg usually cites when discussing economic development. Also, like Winnipeg, Portland is developing a major industrial park adjacent to their airport.

The responses to the questionnaire reinforced the notion of the strong link between economic development and land use. Also important to this linkage is the regional perspective used for policy decisions regarding land use. This is all tied very closely with specific measurable indicators of both the state of the environment and the economy, as laid out in the document entitled Portland-Multnomah Benchmarks. As previously stated the City's policy regarding sustainability relies on a 'Brundtlandian' definition of sustainability, but the recognition of the need for long-range (+40 years) planning that integrates measurable land use and economic development objectives is an extremely positive step forward from the all too prevalent 'business as usual' approach.

6.1.3.1 Progress Indicators (Benchmarks) – The Oregon Progress Board

The State of Oregon has been at the forefront of the development and implementation of measurable indicators of inter-relationships between the economy and the environment. In the late 1980s the State of Oregon was coming out of a long recession and was looking for a new method with respect to the strategic planning. State leaders determined the need for both a long-range strategic plan and a method for measuring the results of the planning.

The Oregon Progress Board is an independent state-planning agency created by the Oregon State legislature in 1989. The Board is responsible for the implementation of the state's 20-year strategic plan entitled Oregon Shines and tracks a series of 92 indicators. These indicators known as the Oregon Benchmarks are a series of quantifiable measurements of "social, economic and environmental health indicators, including K-12 student achievement, per capita income, air quality, crime rates, employment and infant health" (Oregon Progress Board Home Page, www.econ.state.or.us). Since 1991 the Progress Board has issued a bi-annual report that reports on the progress of each of the pre-defined 92 indicators. The benchmarks were created with extensive community involvement and form the foundation for strategic planning for the state.

The City of Portland has adopted a similar method of measuring progress as the Oregon Progress Board, but with a more regional focus. In 1993 the City of Portland and the County of Multnomah introduced the Portland-Multnomah Progress Board, to identify a series of benchmarks for the area. Two important lessons can be learned from this initiative: the importance of measurable indicators developed in conjunction with extensive public input and secondly, the need for a regional perspective. With respect to benchmarks the Portland-Multnomah Progress Board states that:

"Benchmarks tell us what we have or have not achieved. Benchmarks place a high priority on measuring results rather than efforts. Community indicators are more meaningful signs of achievement than are expenditures on programs. They tell us whether our strategies are working to get results. By focussing on and monitoring the outcomes, community leaders and citizens can reset priorities and adapt and modify programs as they learn what works"
(p.1)

The Internet Survey was particularly informative (within the context of the responding cities), with respect to the following aspects of the study questions set out in Chapter 1:

- The Brundtland Commission's definition of sustainable development is still prevalent, but it appears its specific interpretation in a given context is what leads to elements of sustainable economic development policy.
- None of the apparent successes are happenstance; they are the result of a long-range vision that is clearly articulated in an approved plan.
- An environmental ranking of proposed infrastructure projects can be used to prioritize such projects within a context that anticipates ecological sustainability.
- The use of a city's land assets as an economic development tool is not uncommon but should only be conducted in a well-developed and carefully-respected policy context.
- Any plan that sets out to achieve the long range goals of the public should have extensive public input into the development of that policy, and the goals of that policy must be monitored and measurable, with an emphasis on results (outputs, not inputs; outcomes not 'incomes').

6.2 Key Informant Interviews

Key informant interviews were conducted with local relevant professionals to provide a perspective on the information that was derived from the literature review and the survey of relevant experience and precedents involving other cities. These interviews were conducted, along the general line of questioning outlined in Appendix 3, with local

- The previous point regarding the City becoming actively involved in economic development was qualified with the following caveats:
 - The policy must be clearly defined, with measurable outcomes, monitored regularly.
 - The policy should strive to reflect a regional (city-region) context.
 - Some form of community input is required into whatever goals or strategies are developed (such as the visioning in Chattanooga, or the benchmarking in Portland).
 - Any strategy adopted should be either 'revenue-neutral' (defined as no net negative impact on the City's tax revenues) or show a measurable "pay-back" to the citizens of Winnipeg.
 - The process of developing and implementing any economic development strategy that involves the use of taxpayers' money and/or the City's assets must be seen as an open, equitable and transparent process.
- With respect to sustainability there was general consensus the City of Winnipeg clearly has a role in the pursuit of sustainability.
- It was noted that there is a strong link between the environment and the local economy but there was no strong notion of how to integrate the two (although it was clearly articulated that the City should 'do something').
- When pressed with respect to 'do what?' the concept of "sustainable communities" (Roseland, 1998) or "sustainable places", as advanced by

Beatley and Manning (1997), were viewed positively as a possible economic development strategy.

6.3 Summary:

It appears that cities that have had 'success' with regard to the creation of a policy environment conducive to sustainable economic development share some commonalities. These and the experiences of the municipal government agencies studied, provide points to help shape and influence a possible policy for the City of Winnipeg. When these are tested against local 'expert opinion' (via key informant interviews) it is possible to strategize in a local context how the City of Winnipeg can cultivate sustainable economic development, by using its discretionary ability to regulate and set land values. The general lessons learned, from the iterative process of testing theory against relevant experience and key informant knowledge, were that:

- The City of Winnipeg should have a formal, Council-approved, economic development policy.
- The City's industrial land assets, and especially matters pertaining to their disposition, should form part of that policy.
- The policy should be measurable via 'progress indicators', in relation to 'benchmarks'.
- The policy should at least recognize the need for regional perspective.
- The policy should recognize, and ultimately strive for, the ideal of ecological sustainability but initially should, at the very least, be environmentally

benign, if not environmentally-restorative (i.e. be at least environmentally sustainable, even this entails reliance on technological fixes and ongoing financial outlays to 'manage' or 'mitigate' any environmental problems that may be associated with economic development).

Chapter 7: Synthesis

Prior to formulating formal policy recommendations to the City of Winnipeg, with regards to the steps it can take to move forward an agenda promoting land use as a tool for the implementation of sustainable economic development, a synthesis of the information gathered in the course of the research must be attempted. The information was gathered through a process of hypothesizing possible roles and strategies a municipal government might undertake in the area of sustainable development. These initial hypotheses were tested iteratively against further literature review, examination of other cities' relevant experience, as well as a collection of local 'expert' opinion to better inform recommendations for the specific Winnipeg context. This synthesis provides a general summary of the lessons learned to date (what is known) and provides the understanding required to provide strategy and policy recommendations. Of equal importance is the determination of what information is still required (what is not known) to provide complete answers to the questions posed at the outset of this research in Chapter 1, or other questions that arose from this research.

7.1 What is Known

Throughout the process of researching this topic common themes and strategies arose regarding the cultivation of sustainable economic development and the roles a municipal government (similar to the City of Winnipeg) might take in this regard. Key lessons learned from this research are:

- A clear recognition of the importance and interdependence of environment, equity and the economy (the 'Three E's'), but not necessarily a clear

appreciation of the ecological context.

- Land, and the regulation, acquisition and disposal thereof, is a valuable component of economic development. Particularly valuable is a municipal government's discretionary ability to buy and sell industrial land assets, and to set values and tax levels.
- Successful outcomes of municipal government intervention are generally characterized by:
 - Job creation and economic diversification (as opposed to strictly growth) in the quantity of a relatively narrow range of jobs.
 - Increased property tax revenue.
 - An improved quality of life.
 - An increased level of competitiveness and innovation for the city.
 - No detrimental environmental impact.
- 'Business as usual' with regard to the limited integration of the environment in the development of economic development programs cannot continue. A possible step forward is to move toward a 'gardening' approach to economic development strategy, as opposed to the present 'mining'-like strategy.
- The 'official'/standard definition of sustainable development, as formulated by that of the Brundtland Commission, although widely employed is, as Daly (1996) has stated, "dangerously vague".
- The concept of 'technological sustainability', although by no means the ultimate solution to the issues of sustainability in an economic development

context, represents a positive step away from 'business as usual'. Innovation, and Jane Jacobs' 1969 concept of 'new work', can play key roles in the cultivation of technological sustainability.

- It appears that local government intervention in economic development is almost universal. However, it is not universally conducted with a clear set of publicly approved and measurable criteria. This vacuum of formal policy and specific criteria is recognized generally as a shortcoming that should be rectified in part through research such as this, specifically in the City of Winnipeg.
- Any sustainable economic development policy that is contemplated should have publicly-approved goals and objectives that are quantifiable and measurable. The establishment of an independent board to assess the performance of the goals and objectives brings greater credibility to this process.
- The City of Winnipeg does not have any formal policy with regard to economic development but tackles such matters on an ad hoc basis. The City of Winnipeg does have, subject to City Council approval, the discretionary ability to set and regulate land values vis-a-vis targeted industry sectors. Some modifications to Plan Winnipeg land use policy may be required (such as reducing the apparent over-provision for conventional industrial land, in a post-industrial economy context).
- Any economic development policy undertaken by the City of Winnipeg

should be done in a regional context, in collaboration with its municipal neighbours and/or the provincial government.

- Any strategy contemplated should first focus on the cultivation of the existing industry sectors, and businesses presently located in Winnipeg, but with a sensitivity to the promotion of 'new work'.
- The City of Winnipeg does have strategic advantages in some key emerging industry sectors that could be enhanced by a differential industrial land pricing and policy. These industries could be expected to reflect the definition of, at least, technological sustainability, with heightened policy 'dividends' for industries aiming to advance into the realm of ecological sustainability.

7.2 What Needs To Be Known – Future Research Considerations

Although much useful information has been gathered in the process of determining an appropriate sustainable economic development strategy for the City of Winnipeg, there are also a number of issues that remain unresolved with respect to the questions originally posed in Chapter 1. These issues are:

- Given that certain industry sectors that reflect at least technological sustainability are to be targeted by an economic development policy that uses the City of Winnipeg's land assets, and given that City Council has the legislative ability to do so, what level and nature of public input is required in the determination or ratification of:

- The input and approval process required for the adoption and subsequent implementation of the policy.
- Acceptance of environmental sustainability as first step towards at least technological sustainability and then ecological sustainability as the ultimate essence of a sustainable city.
- The actual industrial sectors to be targeted respecting the need for flexibility as the new/next industrial revolution is unfolding.
- The manner in which such a policy will be measured and assessed.

7.3 Summary

With the understanding achieved to date, regarding how the City of Winnipeg might positively cultivate sustainable economic development, some policy planks can now be fashioned. This has been accomplished through an iterative process of postulating various strategy and policy ideas regarding this subject, and repeatedly testing/refining them against current theory, precedents and experience. Areas requiring further research have also been identified. It is now possible to propose a general strategy and specific policy for the City of Winnipeg that might better facilitate (the actual cultivation of) sustainable economic development, focusing for now on the City's discretionary ability to set and regulate land values, especially in relation to its own industrial land assets.

Chapter 8: Conclusions and Recommendations

This practicum, in order to investigate the stated research questions, has employed an iterative process of postulating various strategies regarding the subject and repeatedly testing/refining them against current theory, precedents and experience. This has resulted in a focused analysis of one particular area of the wide-ranging field of economic development, namely, an investigation of how a municipal government might use its industrial land assets to specifically cultivate sustainable economic development. The research conducted has furnished some answers to the questions initially posed and, coupled with the personal knowledge and experience of the author, has provided the basis for policy recommendations to the City of Winnipeg.

8.1 Conclusions

The City of Winnipeg should develop a formal economic development plan as opposed to the current ad hoc approach. This policy can target the industrial land assets currently owned and regulated by the City of Winnipeg to leverage movement away from the current 'business as usual' approach towards a process that will consciously cultivate *sustainable* economic development. Put another way, from an ad-hoc land 'mining' strategy to a carefully monitored 'gardening' of key plots of land. In policy monitoring terms the recommendation is to focus on 'genuine progress' measurement (progress towards greater sustainability) rather than continued reliance on 'gross production' measures.

This policy should be developed with significant public input, and ultimately be approved by City Council. A fundamental philosophy of this economic development policy would be the incorporation of principles that would initially be, at minimum, environmentally benign, and ultimately strive for ecological sustainability. The policy would have a regional context to the greatest feasible extent and should focus on the nurturing of new work/innovation by locally-based firms as a first priority. The policy proposed here is entirely within the current legislative ability of the City of Winnipeg, but requires Council approval.

8.2 Recommendations

8.2.1 City Policy Framework

It is recommended that the City of Winnipeg develop a sustainable economic development policy using the framework recommended. The framework to be used by the City of Winnipeg to fully develop a sustainable economic development policy, that uses its land assets as a prime focus, would contain the following elements:

Development of Winnipeg 'Genuine Progress' Indicators

- Indicators, similar to those developed in the State of Portland, need to be established in order to regularly measure and evaluate the policy recommended. These indicators must provide a method of comparing predicted policy benefits with actual results and should, to the greatest extent possible, be cognizant of regional concerns.

Establishment of 'environmentally benign' development criteria.

- Criteria are required to ascertain eligibility of the targeted industry sectors. These criteria will promote the development of industry that, at the very least, has minimal environmental impact, but can be assessed as striving towards the ultimate concepts of ecological sustainability as follows:
 - Initial Goal - Environmental Sustainability
 - Intermediate Goal - Technological Sustainability
 - Ultimate Goal - Ecological Sustainability

Monitoring process.

A publicly acceptable and accountable process must be established to regularly evaluate and modify, if necessary, the results of the policy against the stated goals of the policy.

Market opportunity verification.

- The targeted industry sector opportunities identified by KPMG study, although produced in 1999, should be verified and updated if necessary. For example, the rapidly burgeoning sector of e-commerce is not fully addressed.

Return on investment

- Although the primary intent of this policy is to move the City of Winnipeg in the direction, albeit slowly, of ecological sustainability the costs (environmental and financial) as well as anticipated revenues of each proposal must be known to facilitate a transparent public process. A method of financially evaluating each proposal based on its 'return on investment' must be established. The optimal method for use of land assets need not necessarily be through price or tax reduction. Methods such as long-term leasing may also be investigated. It is recognized that a strictly monetary analysis should only be used until other 'quality of life' factors can be incorporated (see Further Research – section 8.2.2).

Stakeholder input.

- Extensive stakeholder (public) input is required into the development and implementation of the policy. This stakeholder input would not be limited to citizens of the City of Winnipeg, as any policy contemplated of this nature must attempt to reflect an appreciation of the regional context.

Council input and approval.

- A final step in the process of developing and implementing the policy is review and approval by Council. This is the final step in the development of the initial policy but only a 'first step' towards the development of a

sustainable (economic) development policy that more fully incorporates the concepts of ecological sustainability. This process will be one of constant review and revision that will eventually move the City's economic development policy from one of being merely 'environmentally benign' to one that is at least 'environmentally restorative' en route to the ultimate goal of ecological sustainability.

8.2.2 Further Research

Further research in the area of municipal government intervention in the explicit cultivation of sustainable economic development could be conducted. It is possible that there are other methods, besides the use of its land assets, at the City of Winnipeg's disposal that may provide equal or better results than those featured in this practicum. Beyond the initial 'baby steps' towards ecological sustainability recommended within this practicum further research could be conducted on how, and if, a municipal government alone can move towards the cultivation of true ecological sustainability.

Literature Review

- There were references, discovered late in the process of this research, not fully incorporated in this practicum, that might provide further insights into how a municipal government in general, or the City of Winnipeg specifically, might further move toward the cultivation of sustainable economic development. They are:

- Bernard, T. & Young, J. (1997) The Ecology of Hope. New Society Publishers.
- Gratz, R. B. & Mintz, N. (1998) Cities Back From the Edge: New Life for Downtown. New York, NY.: John Wiley and Sons Inc.
- Jacobs, J. (2000) The Nature of Economies. Random House.
- Roseland, M. (1998) Towards Sustainable Communities: Resources for Citizens and Their Governments (2nd Edition). New Society Publishers.
- Van der Ryn, S. & Cowan, S. (1996) Ecological Design. Island Press.

Relevant Precedents

- It is likely that there are other municipal agencies that have made greater strides towards this end than the ones uncovered in this research. In addition to a further general search for relevant precedents, some of the cities initially contacted had experience in certain initiatives that warrant further detailed review. For example:
 - The City of Chattanooga's Chamber of Commerce and their 'in-progress' economic development policy that will incorporate land use as a component.
 - The Portland-Multnomah Progress Indicators seem to have direct applicability to the City of Winnipeg. The development of such indicators for Winnipeg (or the Capital Region) should first look, in greater detail, to the Portland-Multnomah work in this area. These indicators would enable the City to wean itself off the strictly monetary 'return on investment' calculation to determine policy eligibility that is currently preferred. The factors of sustainability and quality of life can, and should, be

eventually incorporated into criteria that would determine policy eligibility.

- The City of Austin's 'Capital Improvement Program Matrix' should be further investigated to determine the applicability of this (sustainability) prioritizing method for the City of Winnipeg.

Zoning Review

- The City of Winnipeg should review its industrial zoning policy and evaluate its compatibility with the 'new economy' and any policy that contemplates using industrial land as a component of a sustainable economic development policy.

Plan Winnipeg...Vision 2020

- This document, although presently in the draft stage, warrants further review upon final Council approval. The notions of sustainability and quality of life are incorporated into the document but it would be worth monitoring what finally receives Council approval and how the recommendations will be implemented and evaluating.

Appendix 1: City of Winnipeg Industrial Zoning Districts

The following definitions are provided as a guideline only. Specific zoning by-laws for individual districts should be consulted in making locational decisions. The new City of Winnipeg Zoning By-law No. 6400/94, effective February 1, 1995, unified all existing by-laws excepting lands covered by the Downtown Winnipeg Zoning By-law No. 4800/88.

INTENT AND PURPOSE

- 1) The "M1" Industrial District provides for higher standard industrial development with all operations contained within an enclosed building. There is a height limitation of 50 feet.
- 2) The "M2" Industrial District provides for industrial development allowing for some limited outside operations in addition to storage. Residential uses are not permitted except staff, as in the "M3" District. There is a maximum height limitation of 100 feet.
- 3) The "M3" Industrial allows for heavy industrial development of a potentially noxious nature. No residential uses are permitted except for staff/family employed upon the premises, not more than one (1) in conjunction with a non-residential use. There is a height limitation of 150 feet.
- 4) The "MR" Industrial District accommodates industrial development of a land-intensive nature on a limited service basis. There is a maximum height limitation of 30 feet.
- 5) The "MP-1" and "MP-2" Industrial Districts provide for development to industrial park standards, with the "MP-1" District providing a somewhat higher standard. There is a maximum height limitation of 50 feet for the "MP-1" and 85 feet for the "MP-2" Industrial District.
- 6) The "MP-S" Industrial District provides for certain recreational facilities and a limited number of manufacturing, retail and service uses. There is a maximum height limitation of 50 feet.
- 7) The "M1-B" Light Industrial District is intended to provide for industrial development subject to a higher level of development standards as well as performance standards. There is a maximum height limitation of 85 feet.
- 8) The "CF" Commercial Fabrication District is intended to provide a transitional zone between an industrial area and a commercial or residential district, to accommodate existing industrial uses that have continued within the surroundings of a residential neighbourhood. And to provide land for the commercial services required by an industrial area. There is a maximum height limitation of 35 feet.

Appendix 2: Internet Survey/Questionnaire

Appendix 2.1: Letter of Introduction

Dear Planning Professional:

Re: The Role of Municipal Government in Cultivating Sustainable Economic Development

This e-mail is a request for assistance regarding my current thesis/practicum research. My name is Alex Robinson and I am a Graduate Student in the Department of City Planning at the University of Manitoba. The title of my research work is "The Role of Large Municipal Government Corporations (Cities) In Cultivating Sustainable Economic Development". The purpose of this research is to identify how a municipal government (city) can cultivate sustainable economic development by using its discretionary ability to regulate and set land values.

To date I have conducted an extensive literature review that has produced much useful information and theoretical background but I now need the insights that can only be gained from practical experience. To this end I have produced the following questionnaire which I feel will help me to put theory into municipal planning policy and action. I would be extremely grateful if you would take a few minutes to complete the following and return it to me by the e-mail, fax or address shown below.

I know your time is valuable so please only endeavour to answer those questions you feel relevant to your experience. If you feel that there is a person better suited to reply I would appreciate that you either forward this to them or inform me of how I might get in touch with them. Also, if you have any relevant printed material (by-laws, policies, guidelines etc.) please either mail it to me or let me know how I may obtain a copy.

In closing I would like to stress that the only information I would ask that you provide is that which you would consider to be in the public domain and would feel comfortable with being included in the results of this research. If you have any questions please don't hesitate to contact me.

Sincerely,

Alex Robinson

Winnipeg, Manitoba
Canada, R3L 0N6

Appendix 2.2 Questionnaire

Re: The Role of Municipal Government in Cultivating Sustainable Economic Development

Economic Development

- 1) Does your agency have a formal economic development policy or are you contemplating one? If you have a formal policy, can a copy of it be obtained?
- 2) Does your jurisdiction over land regulation and development play a part in this policy?

Sustainable Economic Development

- 1) What does your agency use as a definition of sustainability or sustainable development?
- 2) Is your economic development policy integrated with environmental policy?
- 3) Do you have a policy regarding *sustainable* economic development?
- 4) Would you characterize your approach to sustainable economic development to be successful?
- 5) What does your agency feel is an appropriate role for municipal government in cultivating sustainable economic development?
- 6) Do you use incentives to attract new business or foster/stimulate existing business?

Measurement of Success / Desired Outcomes

- 1) Do you feel local government should play a direct interventionist role in economic development or should it take a more passive role (e.g. streamlining processes, providing better information and eliminating 'red tape')?
- 2) How does your agency make a decision to intervene in the economy? Do you have a formal set of criteria that you use to make this decision?
- 3) Do you have a prescribed set of "indicators of sustainability"? How would you define a 'positive' and 'negative' impact?
- 4) Do you focus on fostering growth of local companies or the attraction of new business or both? Do you have separate strategies/policies for each?
- 5) It has been argued that one strategy that would produce sustainable economic development is the promotion of innovation. Does your agency have a policy or strategy to promote 'innovation'?
- 6) What are the desired outcomes of your economic development policy?

Please forward your responses/supplementary material to:

Alex Robinson

Winnipeg, Manitoba
Canada, R3L 0N6

Appendix 3: Key Informant Interviews

Appendix 3.1 Letter of Introduction

Dear Planning Professional:

Re: The Role of Municipal Government in Cultivating Sustainable Economic Development

This memo is a request for assistance regarding my current thesis/practicum research. My name is Alex Robinson and I am a Graduate Student in the Department of City Planning at the University of Manitoba. The title of my research work is "The Role of Large Municipal Government Corporations (Cities) In Cultivating Sustainable Economic Development". The purpose of this research is to identify how a municipal government (city) can cultivate sustainable economic development by using its discretionary ability to regulate and set land values.

To date I have conducted an extensive literature review that has produced much useful information and theoretical background but I now need the insights that can only be gained from practical experience. To this end I have produced the following questionnaire which I feel will help me to put theory into municipal policy and action.

This 'key informant survey' will be conducted with local relevant professionals such as you to provide a broader perspective of that derived from the literature review as well as a compilation of relevant cities' experience and precedents. This survey will be conducted in person with local practitioners of land development, planning professionals and politicians. I would be extremely grateful if you would consent to give me approximately one hour of your time to conduct the required interview. I will be contacting you shortly to arrange a mutually agreeable time. If you have any questions please don't hesitate to contact me.

Sincerely,

Alex Robinson

Winnipeg, Manitoba
Canada, R3L 0N6

Appendix 3.2 Interview Guide for Key Informants

Re: The Role of Municipal Government in Cultivating Sustainable Economic Development

Economic Development

- 1) Should the City of Winnipeg have a formal economic development policy? If so what should its focus be?
- 2) What are the strengths, weaknesses, threats and opportunities for the city with respect to economic development?

Sustainable Economic Development

- 1) What should the City of Winnipeg use as a definition of sustainability?
- 2) How should economic development policy be integrated with environmental policy?
- 3) Why should the City of Winnipeg pursue sustainable economic development and what do you feel is an appropriate role for the City of Winnipeg in cultivating sustainable economic development?
- 4) Should the City of Winnipeg use incentives to attract new business or foster/stimulate existing business?

Measurement of Success / Desired Outcomes

- 1) An underlying assumption relating to local government involvement in economic development is that this involvement is, in fact warranted. Under what conditions should the City of Winnipeg be involved in economic development? Do you have a formal set of criteria that you use to make this decision? If not what should they be?
- 2) Should the City play a direct interventionist role in economic development or should it take a more passive role (e.g. streamlining processes, providing better information and eliminating 'red tape')?
- 3) When should the City intervene in the economy? Do you have a prescribed set of "indicators of sustainability"? How would you define a 'positive' and 'negative' impact?
- 4) Do you focus on fostering growth of local companies or the attraction of new business or both?
- 5) It has been argued that one strategy that would produce sustainable economic development is the promotion of innovation. Does the City have a policy or strategy to promote 'innovation'?
- 6) What should the desired outcomes of an economic development policy be?

Enabling Legislation

- 1) What enabling legislation and policy is in effect and what, if any changes are required?

Bibliography

- Area Development (1997) Directory Of State Incentives. Area Development Sites and Facility Planning. January. pp. 69-134.
- Artibise, A. (1975) . Winnipeg: A Social History of Urban Growth 1874- 1914. Montreal, Quebec: McGill-Queen's University Press.
- Austin, City of (1999) City of Austin: Smart Growth Guide. The City of Austin: Austin, Texas. [http\\www.ci.austin.tx.us/smartgrowth/smart.htm](http://www.ci.austin.tx.us/smartgrowth/smart.htm).
- Austin, City of (1999) City of Austin: Sustainable Communities Initiative. The City of Austin: Austin, Texas. [http\\www.ci.austin.tx.us/sustainable/sustdec.htm](http://www.ci.austin.tx.us/sustainable/sustdec.htm).
- Bank of Boston (1997) MIT: The Impact of Innovation. Boston, Massachusetts: Bank of Boston.
- Barber, J. (1995) Mending Our Lovely Metros. The Toronto Globe and Mail. September 9. Section D. pp. 1 - 5.
- Beatley, T. & Manning, K. (1997) . The Ecology of Place: Planning for Environment, Economy and Community. Washington, D.C.: Island Press.
- Bernard, T. & Young, J. (1997) The Ecology of Hope. Gabriola Island, B.C.: New Society Publishers.
- Bingham, R. & Mier, R. (1997) Dilemmas of Urban Economic Development - Issues In Theory and Practice, Urban Affairs Annual Reviews 47. Thousand Oaks, C.A.: Sage Publications.
- Boston Consulting Group (Canada) (2000) Fast Forward: Accelerating Canada's Leadership in the Internet Economy, Report of the Canadian E-Business Opportunities Roundtable. Toronto, Ontario: The Boston Consulting Group.
- Bunting, Trudi and Filion, Peirre (eds.). (1991) Canadian Cities In Transition. Toronto: Oxford University Press.
- Canadian Industrial Property Guide. (1999) Canadian Industrial Property Guide: 1999. Mississauga, Ontario: RLP Publications.
- Canup, C. R. (1997) Site Selection Factors: What Factors Shape Corporate Decisions. Area Development. December, pp. 37-48.
- Casey, T. (1995) Bioregionalism and the Concept of Place. The Regionalist. Vol. 1, No. 3. pp. 51-59.

- Centre of Excellence for Sustainable Development. (1997) Sustainability Indicators in Action. Internet: <http://www.sustainable.doe.gov/indicate.html>.
- Chattanooga, Chamber of Commerce. (1999) The Chattanooga Story.
<http://www.rivervalleypartners.com/cstory/>
- Chattanooga, City of. (1999) The City of Chattanooga Homepage.
<http://www.chattanooga.gov/>
- Coffey, W.J. (1994) The Evolution of Canada's Metropolitan Economies. Institute For Research On Public Policy. Montreal: IRRP.
- Colgan, C. S. (1997) Sustainable Development and Economic Development Policy: Lessons Learned From Canada. Economic Development Quarterly. Vol.11, No.2, pp. 107-137.
- Daley, R. (1998) Chicago's Approach to Economic Development. Economic Development Commentary, Council for Urban Economic Development. Spring, pp. 16 - 19.
- Daly, H, and Cobb, J. (1989) For the Common Good - Redirecting the Economy Toward Community, the Environment and a Sustainable Future. Boston: Beacon Press.
- Daly, H. (1996) Beyond Growth: The Economics of Sustainable Growth. Boston: Beacon Press.
- Dewar, E. D. (1998) Why State and Local Economic Development Programs Cause So Little Economic Development. Economic Development Quarterly. Vol.12, No.1, pp.68-87.
- Elkington, J. (1998) Cannibals With Forks: The Triple Bottom Line of 21st Century Business. Gabriola Island: New Society Publishers.
- Ernst and Young. (1998) 1997 Business Cost Comparison Survey: Results Summary. Ernst and Young: Edmonton, Alberta.
- Fainstein, S. S. & Stokes, R. J. (1998) Spaces For Play: The Impacts of Entertainment Development On New York City. Economic Development Quarterly. Vol.12, No.2, pp. 150-165.
- Feltmate, B. W. (1997) Making Sustainable Development A Corporate Reality. CMA Magazine, March, pp. 9-16.

- Fowler, E. P. (1992) Building Cities That Work. Montreal: McGill - Queen's University Press.
- Frankel, C. (1998) In Earth's Company: Business, Environment and the Challenge of Sustainability. Gabriola Island: New Society Publishers.
- Frieden, B. & Sagalyn, L. (1989) Downtown Inc. - How America Rebuilds Cities. Boston, Massachusetts. The MIT Press.
- Gertler, M.S. (1996) City Regions in the Local Economy: Choices Facing Toronto. Policy Options, September. IRPP. pp. 12 - 16.
- Gordon, L. G. (1998) Measuring Economic Development Success: An Examination of What, How and Why Communities Assess Their Performance: Washington D.C. Council For Urban Economic Development.
- Government Finance Officers Association. (1997) Recommended Practices For State and Local Government. March. GFOA: Washington, DC.
- Gratz, R. B. (1994) The Living City: How America's Cities are Being Revitalized by Thinking Small in a Big Way. New York, NY.: John Wiley and Sons Inc.
- Gratz, R. B. & Mintz, N. (1998) Cities Back From the Edge: New Life for Downtown. New York, NY.: John Wiley and Sons Inc.
- Griffin, C.E. (1995) Best Cities For Small Business. Entrepreneur, October, Boulder, Colorado. pp. 122 - 143.
- Hart, M. (1997) Indicators of Sustainability. Internet:[http:// www.subjectmatters.com/indicators/htmlsrc/indicators.html](http://www.subjectmatters.com/indicators/htmlsrc/indicators.html).
- Healey, P. (1997) Collaborative Planning - Shaping Places In Fragmented Societies. Vancouver: University of British Columbia Press.
- Holbrook, D. (1998) How Useful Are City Ratings. Commentary, Spring. pp. 37 - 44.
- Howland, M. (1997) Identifying Footloose Enterprises. Economic Development Commentary. Spring, pp. 6-11.
- International Institute For Sustainable Development. (1998) Report On Quality Of Life Indicators For The City Of Winnipeg. Winnipeg: IISD.
- Jacobs, J. (1961) The Death and Life of Great American Cities. New York, New York: Random House Inc.

- Jacobs, J. (1969) The Economy of Cities. New York, New York: Random House Inc.
- Jacobs, J. (1985) Cities and the Wealth of Nations - Principles of Economic Life. New York, New York: Random House Inc.
- Kitchen, H. (1985) The Role for Local Governments in Economic Development. Toronto, Ontario: Ontario Economic Council.
- Kotler, P. & Haider, D. & Rein, I. (1993) Marketing Places: Attracting Investment, Industry and Tourism to Cities, States and Nations. New York, New York: The Free Press.
- KPMG. (1998) The Winnipeg Economy - Strategic Research Initiative. Winnipeg, KPMG.
- Kunstler, J. (1993) The Geography of Nowhere: The Rise and Decline of America's Man Made Landscape. New York, New York: Simon and Schuster.
- Kysiak, R. (1999) Technology-Based Economic Development Economic Development Commentary, Council For Urban Economic Development. Spring, pp. 20 - 25.
- Levin, E.A. (1993) City History and City Planning: The Local Historical Roots of the City Planning Function in Three Cities of the Canadian Prairies. Winnipeg: Doctoral Thesis, Faculty of Graduate Studies, The University of Manitoba
- Luke, S. L. (1988) Managing Economic Development - A Guide to State and Local Leadership Strategies. San Francisco: Jossey-Bass Publishers.
- Maclaren, V.W. (1996) Urban Sustainability Reporting. Journal of the American Planning Association. Vol.62, No.2. pp. 184-202.
- Maclaren, V.W. (1996) Developing Indicators of Urban Sustainability: A Focus on the Canadian Experience. Intergovernmental Committee on Urban and Regional Research. Toronto: ICURR Press.
- Maclaren, V.W. (1992) Sustainable Economic Development in Canada: From Concept to Practice - Volumes 1 - 3. Intergovernmental Committee on Urban and Regional Research. Toronto: ICURR Press.
- Manitoba, Province of. (1971) The City of Winnipeg Act. S.M. 1971. Ch.105. Winnipeg, Manitoba.
- Manitoba, Province of. (1995). The Capital Region Strategy - Partners for the Future. Manitoba Round Table on Environment and the Economy. Winnipeg, Manitoba.

- Manitoba, Province of. (1996) White Paper on the Sustainable Development Act.
Province of Manitoba: Winnipeg, Manitoba.
- Manitoba, Province of. (1997) Framework For Economic Development: Policy Directions For Manitoba. Economic Development Board: Winnipeg, Manitoba.
- Manitoba, Province of. (1998). Partners for the Future: Working Together to Strengthen Manitoba's Capital Region. Province of Manitoba: Winnipeg, Manitoba.
- Manitoba, Province of. (1999a). Capital Region Review; Interim Panel Report. Province of Manitoba: Winnipeg, Manitoba.
- Manitoba, Province of. (1999b). Capital Region Review; Final Panel Report. Province of Manitoba: Winnipeg, Manitoba.
- Mills, E. & McDonald, J. (1992) Sources of Metropolitan Growth. New Brunswick, New Jersey: Center For Urban Policy Research.
- Morris, D. (1982) The New City-States. Washington, DC: The Institute For Self Reliance.
- National Council for Urban Economic Development. (1996) What Is Economic Development?: A Primer. Washington, D.C.: Economic Development Administration.
- National Council for Urban Economic Development. (1996) Urban Economic Development Policy: Looking to the 21st Century. Washington, D.C.: Economic Development Administration.
- National Council for Urban Economic Development. (1996) Incentives: A Guide to an Effective and Equitable Policy. Washington, D.C.: Economic Development Administration.
- National Council for Urban Economic Development. (1989) A Salute to Imaginative Economic Development Programs. Washington, D.C.: Economic Development Administration.
- O'Connor, T. (1993) Building a New Boston: Politics and Urban Renewal, 1950 - 1970. Boston: Northeastern University Press.
- Oregon Progress Board. (2000) The Oregon Progress Board.
<http://www.econ.state.or.us/opb>.
- Orr, D. (1992) Ecological Literacy: Education and the Transition to a Postmodern World. Albany, New York: State University of New York.

- Osborne, D. & Gaebler, T. (1993) Reinventing Government. New York: Penguin.
- Paul, K. (1997) The Effects Of Urban Sprawl on Sustainability. The New Planner. Fall. pp. 9.
- Peirce, N. R. (1993) Citistates: How Urban America Can Prosper in a Competitive World. Washington, D.C.: Seven Locks Press.
- Porter, M. E. (1995) The Competitive Advantage of the Inner City. Harvard Business Review. May/June pp. 55-71.
- Portland, City of. (1994) City of Portland: Sustainable City Principles. The City of Portland: Portland, Oregon.
- Portland, City of. (1999) Comprehensive Plan: Goals and Objectives. The City of Portland: Portland, Oregon.
- Portland, City of. (1999) City of Portland: Five Year Business Plan. Portland Development Commission: Portland, Oregon.
- Portland, City of. (1999) Portland, Oregon Facts: Facts You Should Know About Doing Business in Portland. Portland Development Commission: Portland, Oregon.
- Portland Multnomah Progress Board. (2000) The Portland Multnomah Progress Board. <http://www.p-m-benchmarks.org/>
- Presidents Council on Sustainable Development. (1999) Towards a Sustainable America: Advancing Prosperity, Opportunity and a Healthy Environment for the 21st Century. Washington , D.C., The White House.
- Price Waterhouse. (1990) Economic Development Strategy: The City of Winnipeg. Winnipeg, Manitoba: Price Waterhouse.
- Redefining Progress. (1996) The Genuine Progress Indicator: Summary of Data and Methodology. San Francisco, California.
- Reese, L. A. & Fasenfast, D. (1994) What Works Best? Values and the Evaluation of Local Economic Development Policy. Economic Development Quarterly. Vol.11, No.3, pp.195-207.
- Richardson, N. (1992) Sustainable Cities: Urbanization and the Environment in International Perspective. pp.145-167. Boulder: Westview Press.

- Roseland, M. (1997) Eco-City Dimensions, Healthy Communities-Healthy Planet. Gabriola Island, British Columbia: New Society Publishers.
- Roseland, M. (1998). Towards Sustainable Communities: Resources for Citizens and Their Governments. Gabriola Island: New Society Publishers.
- Sancton, A. (1994) Governing Canada's City Regions: Adapting Form to Function. Montreal: Institute For Research On Public Policy.
- Semradek, J. J. (1998) Prioritizing Incentives To Make A Smart Move. Area Development. January, pp. 50-55.
- Simon, D. (1989) Sustainable Development: Theoretical Construct or Attainable Goal. Environmental Conservation. 16 (1): 41-48.
- Skelly, M. (1995) The Role of Canadian Municipalities In Economic Development. Intergovernmental Committee on Urban and Regional Research. Toronto: ICURR Press.
- Skelly, M. (1995) The Future Role of Municipalities In Economic Development. Plan Canada. November. PP 30-32.
- Skelly, M. (1996) Alternative Service Delivery In Canadian Municipalities. Intergovernmental Committee on Urban and Regional Research. Toronto: ICURR Press.
- Stegman, M. & Turner, M. (1996) The Future of Urban America in the Global Economy. Journal of the American Planning Association. Vol. 62, No.2. pp. 157-164.
- Urban Quality Communications (1996) Urban Quality Indicators. Summer 1996.
- Van der Ryn, S. & Cowan, S. (1996) Ecological Design. Washington, D.C.: Island Press.
- Wallis, A. (1995) Regional Governance and the Post-Industrial Economy. The Regionalist. Vol. 1, No. 3. pp. 1-11.
- Wallner, H., & Narodoslawsky, M., Moser, F. (1996). Islands of Sustainability: A Bottom-Up Approach Towards Sustainable Development. Environment and Planning, Volume 28, pp. 1763 – 1778.
- World Commission on Environment and Development (1987) Our Common Future. Oxford: Oxford University Press.

- Wight, I. (1999). Building a Strong Capital Region Community: Common-Place-making on a Grand Collaboration Scale. Winnipeg, Manitoba. Submission to the Capital Region Review Panel.
- Winnipeg Tri-Level Committee on Urban Affairs. (1978). Urban Growth. Background paper on urban growth management in the city of Winnipeg. Winnipeg Development Plan Review. Winnipeg, Manitoba
- Winnipeg, City of. (1980). Plan Winnipeg. The City of Winnipeg Planning Department. Winnipeg, Manitoba
- Winnipeg, City of. (1993). Plan Winnipeg...Toward 2010. The City of Winnipeg Planning Department. Winnipeg, Manitoba
- Winnipeg, City of. (1997) Economic Indicators: 1996. City of Winnipeg: Winnipeg, Manitoba.
- Winnipeg, City of. (1998) Winnipeg Into the New Millennium: Generating Economic Opportunities and Jobs. City of Winnipeg: Winnipeg, Manitoba.
- Winnipeg, City of. (1999). Plan Winnipeg...2020 Vision (Draft Version). The City of Winnipeg, Chief Executive Officer Secretariat. Winnipeg, Manitoba.
- Winnipeg, City of. (2000) Corporate Organization Structure and Bylaws: By-law No. 7100/97. City of Winnipeg: Winnipeg, Manitoba.
- Winnipeg 2000. (1993) Building Winnipeg's Economic Future. Winnipeg 2000: Winnipeg, Manitoba.
- World Commission on Environment and Development (1987) Our Common Future. Oxford: Oxford University Press.
- Young, D. & Charland, J. (1992) Successful Local Economic Development Initiatives. Intergovernmental Committee on Urban and Regional Research. Toronto: ICURR Press.
- Zovanyi, G. (1998). Growth Management for a Sustainable Future: Ecological Sustainability as the New Growth Management Focus for the 21st Century. Westport, Connecticut: Praeger