

# **Shifting the Traditional Framework: Socio-Economic Impact Analysis and Toronto's New Stadium**

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## ABSTRACT

The first theme of this paper is the development of a simple framework which helps to explain the operation of impact assessment. The framework consists of:

Level One : Conceptual/Statutory  
Level Two : Technical/Analytical  
Level Three: Political/Integrative

The framework shows the pervasive, and necessary, role of political intervention at all levels of the impact assessment process. The integrative aspect of this operation allows direct comparisons between essentially different impacts - and ultimately between different projects (and the interests underlying them) thus contributing to the ongoing stability of a community or larger polity.

Especially when impacts are treated as 'affected interests' can the evaluation of impact assessment proceed using tests already developed for representative political institutions. The framework suggests that the appropriate model for impact assessment is, in the first instance, a pluralist-democratic one, and only secondarily a judicial-adversarial one. At the same time it is possible to estimate some of the prospects for impact assessment on the basis of the existing political framework.

The secondary theme concerns the transferability of a Canadian heritage in impact assessment that is almost exclusively in non-urban areas involving the impacts of resource-related projects on regions of low population density. This fact is illustrated by referring to historical and current practice in Canada. It can be shown that such an emphasis results in an inordinate concern for the natural environment while detracting from the importance of complex social and economic systems in urban areas.

The merging of these two streams points to limitations on policy and methodology resulting from the non-urban bias in EIA history and the apparent continued pre-occupation with non-urban projects. Such tendencies place repeated emphasis on resource **supply**, rather than on demands for resource exploitation that have their origins in urban centres and with urban lifestyles.

The conclusions show the limitations of environmental impact assessment in addressing both the impacts of major projects in urban centres as well as routine, persistent problems of urban poverty, urban intensification, and the effects of rapid changes in urban form and habitat.

## TABLE OF CONTENTS

Acknowledgements .....	ii.
<b>Precis</b> .....	iii.
Abstract .....	iv.
Table of Contents .....	v.,vi.
CHAPTER 1. Introduction .....	<b>p. 1</b>
1.1 The issues .....	p. 1
1.2 Outline of the paper .....	p. 3
1.3 SEIA: The Canadian Experience .....	p. 4
1.4 The Stadium Proposal .....	p. 6
1.5 Summary .....	p. 7
CHAPTER 2. Level One: Some Conceptual/Statutory Aspects .....	<b>p. 8</b>
2.1 Introduction .....	p. 8
2.2 Classes of Impacts .....	p. 9
2.3 'Impacts' in the Statutes .....	p. 11
2.4 Impacts as Interests .....	p. 14
2.5 Conclusions .....	p. 17
CHAPTER 3. Level Two: Some Technical/Analytical Aspects .....	<b>p. 18</b>
3.1 Introduction .....	p. 18
3.2 Cost-Benefit Analysis .....	p. 18
3.3 Life-Cycle Costing .....	p. 23
3.4 Conclusions .....	p. 25
CHAPTER 4. Level Three: Some Political/Integrative Aspects .....	<b>p. 29</b>
4.1 Introduction .....	p. 29
4.2 Impacts as Interests .....	<b>p. 29</b>
4.3 The Political Process and Impact Distribution .....	p. 31
4.4 Other Roles .....	p. 33
4.5 Summary .....	p. 34
CHAPTER 5. Impact Assessment and the City .....	<b>p. 37</b>
5.1 Introduction .....	p. 37
5.2 Forward and Backward Linkages of Impacts .....	p. 37
5.3 Computerized Models .....	p. 38

Table of Contents... cont.

5.4	Changes in Process .....	p. 41
5.5	The Collaborative Approach .....	p. 42
5.6	Conclusions .....	p. 44
CHAPTER 6. The Toronto Stadium Case		p. 46
6.1	Introduction .....	p. 46
6.2	The Macaulay Committee Report - 1984 .....	p. 46
6.3	Important Features of the Planning Process . . .	p. 52
6.3.1	Environmental Issues .....	p. 54
6.3.2	Regional Impacts and a 'Benefits' Study . . .	p. 56
6.3.3	The City as Developer .....	p. 59
CHAPTER 7. Conclusions		p. 62
7.1	Introduction .....	p. 62
7.2	The Value of a Framework .....	p. 62
7.3	The Pluralist Democratic Model of EIA .....	p. 64
7.4	Super-Planning and the Urban Mega-Region ....	p. 65
7.5	Political Impacts of Major Projects .....	p. 66
7.6	Questions Unanswered .....	p. 68
7.7	Suggestions for the Future .....	p. 70
<b>Notes</b> .....		p. 75
Bibliography .....		p. 80

## CHARTER 1

### INTRODUCTION

#### 1.1 The *Issues*

Canada benefits and suffers from its heritage of environmental assessment proceedings in non-urban regions. On the benefit side, the basis has been laid for, amongst other things, some degree of public participation and the application of 'ecological frameworks' and other biologic analogies to the analysis of urban systems. <1> However, the cost has been a tendency to interpret environmental assessment as a matter of the natural environment. This problem is compounded by a pre-disposition no longer to see 'natural' elements in intensely urbanized settings. <2> Moreover, the bulk of formal environmental assessment that has thus far taken place in Canada necessarily (for statutory and other reasons) addresses neither high-density population zones nor the complex nature of urban social and economic regimes.

A recent (1985) research prospectus outlining areas of particular interest to the Canadian Environmental Assessment Research Council, cites only non-urban illustrations: the Mackenzie Valley Pipeline inquiry, a waste management plant, a hydro-electric project and a new highway in a remote region. Moreover, not

once in a discussion of the future of impact assessment is attention **drawn** to the unique problems of urban impact analysis or to possible shortcomings of Canadian case history. <3>

Patterns which give order to our urban communities and which correspond to levels of consumption have distinct implications for the environment, both locally and at a distance in the resource-rich hinterlands. Traditional applications of environmental impact assessment in Canada, with their non-urban biases, tend to focus attention on resource exploitation at the production, extraction and transmission phases rather than at the point, or matrix, of consumption - namely intensely developed and highly populated urban centres. Analysis thus concentrates on projects which respond to demands for energy and raw materials, rather than to the social orderings that drive that demand. <4>

Clearly production and consumption are inextricably linked, and to try to give one causal priority over the other is a challenge for any conceptual framework. However, **it** remains part of our purpose here to trace a connection between urban demand and non-urban resource exploitation; at the same time, we remain concerned with the vast potential for local impacts of major urban proposals for expansion, construction and re-development.

To further these goals, the paper proposes a simple framework for viewing the operation of environmental impact assessment proceedings. **It is** important to note that the framework is not a

prescriptive one: it does not attempt to show how to conduct 'good' environmental assessments. Instead, the model or framework is proposed as an explanatory and organizing tool.

## 1.2 Outline of the paper

Before referring to the case study (Toronto's domed stadium), this paper addresses some of the methodological and conceptual issues that arise in the field of impact assessment. Chapters 2, 3 and 4 develop the three levels of a framework for analyzing the operation of impact assessment and evaluation. These are :

Level One : conceptual/statutory aspects

Level Two : technical/analytical aspects

Level Three: political/integrative aspects

The framework is, necessarily, an abstraction from the complex workings of impact analysis, starting with legislative formulations, through practical questions of application and methodology, to the pervasive role of the political/integrative function in impact assessment proceedings.

Chapter 5 draws further attention to a secondary theme in this paper - the predominance of rural projects in the history of formal impact assessment in Canada. It refers to selected challenges of **Impact** analysis in urban settings and introduces an urban case of recent interest.

**chapter 6** consists of a summary presentation of events



surrounding the proposal of a stadium for Metropolitan Toronto .  
**It** portrays a limited and non-statutory application of impact assessment techniques to a major project in an urban setting under the current legislative provisions.

In Chapter 7, the concluding chapter, an effort is made to **summarize** the underlying elements of this paper's explanatory framework and to identify avenues and opportunities for improvement in socio-economic impact assessment in urban situations.

Impact analysis, as **practiced** in Canada and elsewhere has, in some instances resembled a laundry-list approach for comprehensive evaluation. Examples range from the **Olsen/Merwin** framework which incorporates 55 factors or community characteristics, to the Leopold index containing 8,330 items for consideration in preparing environmental impact statements. As valuable as these efforts may be, this paper pursues another direction. It concentrates on the circumstances - formal and functional - in which impact analysis takes place, and in turn proposes a framework through which its operation can be viewed.

### 1.3 SEIA: The Canadian Experience

Typically, in **Canada**, socio-economic impact assessment (hereafter **SEIA**) has been employed in a context of resource-based projects, and linear developments such as electrical transmission lines or **gas and oil** pipelines. <5> Their **physical setting is normally one**

of rather isolated regions with low population densities. Here, the concern has been primarily for project influence on a small number of local residents and on the 'natural' environment.

Seldom have formal, statutory, applications of socio-economic impact assessment taken place in major Canadian urban centres where projects affect large numbers of people as well as the so-called 'built' or non-natural environment. Leaving aside ambiguous and doubt-provoking distinctions between natural and non-natural environments or physical problems of boundary definition, it is curious that such an emphasis should largely have ignored the potential for greater project impacts in densely-populated urban settings.

The sources of this predisposition are fairly clear. O'Riordan and Sewell have suggested three prime reasons for the evident bias:

- 1) the scale and apparent urgency of major resource development schemes especially in water management, energy supply, transportation, mineral extraction and agricultural improvement

- 2) the explosion of environmental activism (much of which is **centered** on non-urban issues)

- 3) the recognition that public agencies responsible for promoting major schemes and the private resource development corporations whose activities were supposed to be regulated by public authority, were both failing in the areas of co-ordination, evaluation and consultation <6>

Given the rise to prominence of **SEIA**, beginning around 1970, during a period of political activism in Canada and the United States, it is not hard to strike a link between the political/integrative level of SEIA function and the statutory and technical levels. These matters will re-appear in some detail in later chapters.

What remains a matter for further investigation is the remarkable orientation of political activism - expressed eventually in impact assessment legislation - to the natural environment and resource developments, rather than to large urban populations and the possible degradations in urban environments. Environmental impacts (including social and economic) on urban populations, and the very demands for resource exploitation that arise in cities but find their satisfaction in non-urban mega-projects or other resource developments, are of special interest here.

#### **1.4 The Stadium Proposal**

In 1985, William **Davis**, then Premier of Ontario, announced his selection of a site for a new stadium for the Toronto area assuring, at the same time, his government's political and financial support for such a project. For our purposes, the stadium proposal provides an opportunity to review a recent urban case - albeit one that did not undergo formal EIA proceedings. <7>

what was, to some observers, surprising **about the proposal was**

**the choice of site** - an area known as the Railway Lands, adjacent to the city's 'financial district'. There are many points of contrast between the site selection that resulted from the work of the Macaulay Committee, in 1983 and 1984, and the site recommended by Premier Davis in 1985. These differences will, indirectly, be of some interest to us later in this paper. However, what is of greater interest is the process by which the Railway Lands site, and the proposal for a domed stadium, have been analyzed and assessed since 1985. That discussion will emerge in chapter 6.

### 1.5 Summary

The paper will develop a framework based on an analysis of statutes, assessment techniques, and on a review of the history of impact assessment as it has **occured** in Canada to date. The framework reveals the extent of political input at all levels of the process and shows that **EIA emualates** the contest of values and interests that occurs in the greater socio-political order. Throughout, there **is** a concern for the success of a practice that continues to focus on non-urban resource-related projects.

When the framework is applied to a major urban project - the Toronto domed stadium - several points emerge. These raise potentially important questions about the future of impact assessment in intensely-developed urban systems subject to high levels of expansion and re-development.

## CHARTER 2

### SOME CONCEPTUAL/STATUTORY ASPECTS

#### 2.1 Introduction

This chapter deals with both conceptual and statutory directions for the work of impact assessment, with some specific references to Canadian statutes. It illustrates the critical need for an overshadowing political process which is responsible for the on-going integration of diverse interests into a functioning community or national polity. At the same **time, the** chapter serves to illustrate the extent of political intervention at basic levels of EIA.

The first section develops the conceptual foundation, showing specifically the essential role of the political/integrative function in the operation of environmental assessment. After establishing categories or classes of impacts, a bridging - or integrating - process is required to allow direct comparisons of essentially different impacts and, eventually, 'interests'.

The next section briefly reviews portions of several provincial statutes showing the cursory fashion in which important terms - particularly 'impacts' - are specified by their political

authors . **Throughout** the **discussion** we will see that these 'impacts' and 'effects' return to the political sphere for final adjudication and evaluation.

The subsequent section provides evidence of statutory guidance in project selection, in fact limiting scrutiny to a narrow range of project types, and confirms the success of this political direction with evidence from several jurisdictions.

## 2.2 Classes of Impacts

Writing on '**categorial** frameworks', Stephen Korner has observed:

"The manner in which a person classifies the objects of his experience into highest classes or categories, the standards of intelligibility which he applies, and the metaphysical beliefs which he holds, are intimately related. To give an obvious example, the employment of the category of causally determined events, the demand that all or some explanations be causal, and the belief that nature is at least partly a deterministic system so involve each other that they are either all present in a person's thinking or else all absent from **it.**" <8>

These themes of causality and classification of events are central to impact assessment and to other attempts to identify and evaluate the results of contemplated actions. Two such efforts - cost/benefit analysis and life-cycle costing - are discussed briefly in the next chapter. These, too, must yield to politically established agendas and priorities determined within the existing network of political processes and institutions. <9>

Korner goes on to propose three characteristics necessary to the classification of objects which may be helpful in understanding

any of these systems:

**a) all** objects are classified into a finite set of non-empty classes, say  $\alpha_1 \dots \alpha_n$  such that - apart from common borderline cases - any two classes are exclusive of each other

**b)** the objects belonging to each of these classes are again classified in the same manner

**c)** the process of sub-classification is repeated a finite number of times. <10>

Such observations are another expression for what we already know in 'common sense':

**a)** for the purposes of any impact assessment we must agree to work within a limited (i.e. not infinite) number of categories or classes of impacts and that these classes must be identifiable and separable in some relevant and significant way one from another; otherwise we are dealing with an undifferentiated lump or mass of impacts where discussions without distinguishing labels would be impractical

**b)** that within these classes of impacts there may be further sub-classes of impacts that must also satisfy the foregoing test and

**c)** ultimately, for the purposes of our analysis, there must be an identified limit to the number of sub-classes of impacts and parameters whose effect we can reasonably consider.

What is essentially a set of limitations may offend our sense of reality (for instance the belief that some impacts may go on forever both in time and space) but it is necessary to any analysis

that hopes to arrive at evaluations and conclusions manageable in human terms. Moreover, they are conceptual guidelines for specifying spatial, temporal and other limitations to "impacts". When such limits are imposed, as we see in subsequent chapters, they rightly originate in political processes.

### 2.3 Impacts In the Statutes

What is in the nature of an 'impact' as it has been determined in various provincial statutes? Clearly, it is important to have a consensus about definitions amongst practitioners, critics, public officials, entrepreneurs and citizens; a workable agreement must be achieved at all three levels of the analytical framework proposed here.

By looking to statutes, regulations and guidelines of various provincial governments and agencies we gain some idea of the conventional understanding of impacts and the extent of political specification. In much of the discussion involving environmental impact assessment (keeping in mind the role that both 'environment' and 'impacts' customarily play in that debate) definitions of key terms are crucial. Typically, as in Ontario statutes, the 'environment' includes diverse elements:

- i) air, land or water
- ii) plant and animal life, including man
- iii) the social, economic and cultural conditions that influence the life of man or a community <11>

Interestingly the term 'environmental impact' does not occur in



Ontario's Environmental Assessment Act, nor in the secondary material associated with the process such as the Ministry of Environment "General Guidelines for the Preparation of Environmental Assessments".

Consistent with its avoidance of the term 'impacts' the Ontario legislation distinguishes between "direct **effects**" and "indirect effects" on the environment. "Direct effects" are those caused by the building and operation of the undertaking itself and considered to be "generally the immediate physical effects and direct alterations to the environment (as defined in the Act to include social and economic factors) and its components and systems? It should also be noted that direct effects could be unintended effects. <12>

The Environmental Assessment Act of Newfoundland and Labrador employs a definition of the 'environment' very similar to Ontario's and goes on to define an 'environmental Impact' as "**any** change in the present or future environment that would result from an undertaking? <13>

The Saskatchewan guidelines for the conduct of environmental impact assessment represent a concise requirement for proponents. At the same time the guidelines raise and address a number of the themes dealt with here. While impacts are not clearly defined, it is the stated objective of environmental assessment to "**provide** an accurate and comprehensive evaluation of the positive and negative environmental (socio-economic and bio-physical)

changes likely to result from a proposed development . . . ." <14>  
The guidelines refer to the prospect of **minimizing** adverse environmental impacts while enhancing positive ones. However, few hints are given as to reasonable limits for number, scope and detail to be considered in impact evaluation.

Guidelines for the province of British Columbia broadly define social impacts as "effects on the social environment" or on regional or provincial social service requirements. <15>In economic terms, environmental and social impacts refer to external effects "i.e. direct costs or welfare loss (or indeed benefits or welfare gains) which result from a development but which are not borne by (or do not **accrue** to) the developer, but rather by the province or groups of provincial residents". A qualifier is added that it is "important to distinguish between special requirements due to the nature of the construction program or to the time duration of the project, from normal municipal infra-structure requirements associated with long-term growth of a **region**".<16>

From this cursory review of several Canadian examples, it is apparent that responsible public officials, charged with providing practical guidance in the conduct and operation of environmental assessments, have defined key terms only in the broadest terms. Perhaps this is intentional and necessary, passing real responsibility to the technical/analytical level to be managed by expert assessors and researchers. However, this

abdication (or delegation) is either misleading or temporary. Ultimately these effects or impacts return to the political domain where final meaning or significance is discussed, protested and/or negotiated.

## 2.4 Project Types in the Statutes

Statutory instruments in Canada are reflections, however imperfect, of historical concerns about resource exploitation and protection of the 'natural' environment. In turn, they have become formal political prescriptions which limit and condition the scope and conduct of future environmental assessments. Evidence of the initial orientation can be found in the current Alberta guidelines and the types of projects which may be subject to environmental assessment in that province:

- major sour gas processing facilities
- major underground or surface coal mining projects
- hydro and thermal power plants
- oil sands mining projects and associated processing facilities
- in-situ oil sands projects
- large-scale industrial facilities requiring industrial development permits
- major pipelines
- major transmission lines
- major recreation developments
- major water resources projects <17>

Federal guidelines provide for the possible scrutiny of similar projects. These include:

- oil and gas exploration and production
- linear transmission (includes pipelines, power transmission lines, highways and railways)
- hydroelectric and other water development projects
- fossil fuel power generation
- nuclear power generating stations
- airports
- ports

This statutory guidance gives further evidence of the overshadowing role of the **political/integrative** process at all levels of **SEIA**. The success of these prescriptions can be seen in the types of projects actually brought to formal EIA in Canada.

A review of specific projects for which federal guidelines have been issued shows an emphasis on exploration proposals, energy generating facilities and linear developments such as highways in remote areas. <19> A similar review of projects registered under Saskatchewan **environmental** impact regulations between January 1, 1985 and December 31, 1985 shows an emphasis like that of the Federal Government. Most frequent projects are: mine proposals, transmission lines and wetland development; of 68 projects registering during that period, only one, a waste management study by the City of Regina, can be described as an urban project. <20>

A report published by the Ontario Ministry of Environment showing project status between July 1986 and November 1986 reveals few projects affecting densely populated urban areas. <21> Of forty-four active, approved or exempted files, the most frequent categories included transportation and transit facilities (13), land fill sites (4) and power transmission facilities or corridors (4). Projects of a notably urban nature were:

Harbourfront L.R.T.(Toronto), East Metro Transportation corridor, and an energy-from-waste plant (Toronto). In sum, only four or five of the active files could be said to involve urban areas and both exemptions and active files demonstrate the continued preoccupation with the traditional range of environmental impact assessment.

It is interesting to contrast Canadian experience with relevant portions of the U.S. experience under the National Environmental Protection Act (**NEPA**). Ontario legislation includes in the definition of environment such factors as social, economic and cultural conditions that influence the life of man or a community, while NEPA legislation offers a much more constrained definition. <22> In spite of this narrower definition, in practice the NEPA has addressed a wide variety of projects - many of which are urban in nature. To name just a few, these include: the construction of a prison reception and medical **center** in an historical area, a five-block urban renewal project in downtown Washington, D.C., provision of a federal grant and mortgage guarantee to a private developer for the construction of **low-income** housing, construction of a young offenders facility and, of course, hundreds of others. <23>

Evidently, the legislative environment in the U.S.A. has lent itself to the application of impact assessment to urban **projects** and problems. Why the Canadian experience has been slow to follow is a matter of further interest. To what degree each level of the framework proposed here assumes responsibility for

this phenomenon is not clear.

## 2.5 Conclusion

It is not sufficient to say simply that EIA is ultimately a political process, or that it is 'political' in some undefined manner. The analytic framework developed here is intended to show how and **where** the process is 'political' while exposing the 'political/integrative' function to tests of effectiveness and legitimacy. The next chapter will show that political functions are also at the heart of the technical and methodological aspects of EIA.

## CHAPTER 3

### SOME TECHNICAL/ANALYTICAL ASPECTS

#### 3.1 Introduction

The purpose of this chapter is to ascertain the limits of impact studies in weighing or ranking impacts or affected interests which, in themselves, have no a priori ranking. When prior rankings do exist, as a result of terms of reference or other specification, it is clear that these will have originated in political decision-making or are responsible to the political level. The chapter concentrates on techniques which complement impact assessment.

Section 3.2 discusses certain questions that arise in the application of cost-benefit analysis, with particular reference to a classic work by Jerome Rothenberg. Section 3.3 addresses the application of life-cycle costing techniques to matters of broad social significance. Discussion centres on standards and practice established by the U.S. Office of Management and Budget.

#### 3.2 Cost-benefit analysis (CBA)

A comprehensive approach to urban impact analysis can be found in **Rothenberg's 1960's** work entitled Economic Evaluation of Urban

Renewal. <24> In the author's words, the study "attempts to produce an analytic framework for **evaluating** the **urban** renewal program". <25> The book is subtitled 'Conceptual Foundation of Benefit-Cost **Analysis**' and applies a cost-benefit framework to a limited **range** of urban events - namely re-development of 'blighted' or 'slum' areas of U.S. cities federal urban renewal schemes in the **1950's** and **1960's**.

Rothenberg readily admits that a major challenge of any evaluative system is to **compare** proposed developments not only with the status quo (or projections of **it**) but **with** alternative development scenarios. <2> He notes -

"... evaluation in this policy area cannot be restricted to consideration of single **specialized** types of projects; it should consider the relative merits of different project packages. For another, an evaluation of residential redevelopment is not complete when it is compared only with the status quo. Other alternatives must be considered as well; and some of the alternatives themselves comprise other portions of the urban renewal program." <26> (emphasis in original)

Directly relevant to the scope of this paper is **Rothenberg's** reference to "project packages". Not only are we dealing with alternative projects, but ones that comprise or imply different sets of qualities **or** impacts. Later in this analysis when Impacts are **linked** directly to 'interests', we are confronted with weighing and evaluating possibly conflicting sets (or packages) of interests. Without resort to a value-laden framework (in this case, the political/integrative level), impact assessment techniques cannot attach prior significance to one set of interests over another.



Much of **Rothenberg's** exposition is **laced** with acknowledgements of theoretical problems surrounding cost-benefit analysis although these may be characteristic of other sorts of urban impact analysis. Included are standard reservations about incomplete markets **or** other measures of consumer willingness-to-pay <27>, aggregation of welfare changes across individuals <28>, difficulties in quantifying such things as "social cost of slum living" <29> and group overlap <30>, etc.

Rothenberg addresses the question of "**which** is the 'relevant' population whose well-being should be reflected?? He looks first at the funding for urban renewal projects. Finding it largely federal, he allows an implicit mandate of all Americans to "redistribute real income, by **achieving** certain public purposes, in favour of those metropolitan areas that choose to enter the program". <31> While this confines his area of concern, it is not helpful in answering similar questions for urban projects with other financing.

However, in an important provision concerning efficiency of resource allocation, Rothenberg claims that:

**"In** such situations explicit account is taken of these alternative costs for resource use in any particular locality. The accretion of these resources for use by the locality in question is considered a net benefit only to the extent that its local use in question has a social value in excess of its value in its next most advantageous use elsewhere." <32> (emphasis added)

It is essential to question who determines these social values **and how they operate in any evaluation process.** This **is** a clear

illustration of the political/integrative function in providing **an evaluative link between** impacts that are not themselves directly comparable (for **example** investments in new hospitals versus investments in **preventitive** medicine) in the absence of external standards.

Rothenberg is well aware of the arbitrary, though plausible, limits to relevant populations whose vital interests are thought to be affected. The lines must be drawn somewhere and there are inevitably costs and **benefits** (although particularly the former) which extend beyond the designated borders, geographic or otherwise, that may be of no concern to policy-makers. When boundaries are drawn, they can be determined at any level of the framework, although only the political/integrative can, through the exercise of legitimate authority, impose discretionary control on the others.

The issue of an included central city population and excluded metropolitan population is raised by Rothenberg and directly parallels the Toronto case presented later. Considerable debate, especially at O.M.B. hearings for the Railway Lands proposal, concerned adverse effects of Railway Lands development on planned, long-range development of existing regional sub-centres.

**In this, and** other Instances, we come up **against** a potential conflict between efficient allocation of resources and discretionary social policies. Aligned on one side are

arguments about 'highest and best use' of downtown lands (open railway yards or high-density mixed development) and efficient use of installed services such as roads, sewers, etc. as determined by the operation of open markets; on the other are policy preferences involving non-market commodities such as congestion, neighbourhood deterioration and controlled and directed regional developments.

**We** should note that both values and time parameters are implicated. For one argument is basically about efficient use of resources now - based on relatively free market indicators - and about current discretionary priorities based, for instance, on 'quality-of-life' factors or perceived but unquantified environmental risks. A second order of argument involves claims about planned (but potentially 'efficient') use of resources in the future weighed against unplanned, market-directed resource use in the present. The resolution of these questions is not merely a matter of proper discounting of future benefits; ideological content is evident in many debates about planning interventions such as land banking or the use of infrastructure to direct growth. <33>

Consistent with our interpretation of Korner in Chapter 1, distinctions between classes or sub-classes of impacts must be respected. On this basis, efficient use of resources cannot be compared directly with (or immediately traded against) subjectively-held social goals or priorities. Equally, current efficient use of resources cannot be compared directly with

future (albeit planned) efficient use of resources.

What is needed in any framework is an integrating mechanism that explains and justifies evaluations that cross time-frames or move between classes and sub-classes of impacts or 'project packages'. Such a mechanism routinely lies outside the technical or methodological fields of SEIA.

### 3.3 Life-Cycle **Costing (LCC)**

What can be seen as a limited (or **specialized**) form of impact assessment are life cycle costing (**LCC**) techniques applied by the U.S. government. Required by law, the methods of LCC are continually upgraded by the Department of Energy to "provide methods and procedures to Federal agencies for estimating **life-**cycle costs and savings of proposed energy projects and for comparing their cost effectiveness in a uniform and consistent manner from agency to agency? <35>

while limited, in one sense, to energy conservation investments, these measures are both an obligatory and significant factor in building design. More to our point, they represent **a** routine form of impact assessment which, contrary to first appearances, may have major implications for social policy. These bear indirectly on social and economic impacts and directly on issues such **as** environmental pollution, levels of resource exploitation and balance of payments to name just a few.

In the first instance, government imposed application of LCC evaluation rules represent a priori a formal and uniform standard of performance which a wide range of projects (i.e. the pool of all federal buildings - whether new or retrofitted and, in some cases, leased buildings) are required to achieve. This is clearly **germaine** to an earlier assertion that the historical application of impact assessment in Canada has focussed on resource transformation (including extraction, processing, and transmission) rather than the social and economic forces and patterns that drive that demand. Furthermore, LCC guidelines provide clear evidence of social values ascribed to impacts by political mandate.

Key elements of the "LCC Rule" are worth quoting here:

- i) LCC evaluations should account for all costs that are relevant to long-term cost-effectiveness of decisions
- ii) a discount rate of 7% (excluding inflation) is to be used to adjust all dollar values to present value
- iii) a 25 year maximum is to be used to identify the expected life-cycle
- iv) as an interim adjustment for social benefits of saving non-renewable energy, not reflected in dollar savings, project investment costs are to be reduced to 90% of actual investment for the purpose of estimating life-cycle costs <36>

It would be wrong were LCC standards for building performance seen merely as a matter of building science or technology. They

are evidence of nation-wide standards or criteria for building performance with implied consequences for extraction and consumption of non-renewable resources, oil import levels, balance of payments, air pollution, etc. As well, according to the LCC rule, they entail obligations to future generations and to current accounting of social benefits not easily monetized.

Applied in this manner, LCC methods attempt to account for intangible (or at least **unmonetized**) social benefits that arise from avoided consumption of non-renewable resources. Setting aside the polemics of energy debates (nuclear vs. renewables, etc.) if there are real social and economic benefits of avoided use of non-renewables - not reflected in standard markets - these ought to be included in the impact assessment framework. Such an emphasis complies with other purposes of this report - for instance its re-orientation to city-generated demands for resource exploitation and the opportunities for major urban recycling or conservation programs.

An enhanced LCC program could allow comparisons of project performance through a reasonable life-cycle including, where appropriate, user transportation costs or the additional cost of infrastructure. While there is reason to suggest that economic principles of market-directed resource allocation bridge part of the gap between impact classes, they do not stand alone.

## 2.3 Conclusions

It is impossible to resolve the economic dilemmas raised here, except to say that incomplete markets (particularly for externalities and for intangible social benefits), unanswered technical questions about health and pollution, and remaining moral dilemmas about present generations' obligations to those of the future - amongst a host of reasons - indicate the need for other techniques of evaluation. This need is especially evident when attempting to distinguish apparently similar proposals or when weighing values that benefit present generations against future ones.

Rothenberg is specific on the critical and possibly exclusive role played by formal market indicators:

"Underlying this approach is the assumption that individual preferences (values) are accepted as the measures of changes in well-being. The money value of these changes is obtained wherever possible from actual market transactions or, where such transactions do not occur, from valuations based on actual or hypothetical transactions." <37>

If market preferences are treated as the most important form of social indicator, then they are **biased** to the extent inequities exist **in income** distribution or there are gaps in the array of markets. It is clear, for instance, that rivers, animals, children, some minority groups, the unborn, and often the elderly may not be fully represented in the conventional marketplaces. Typically the political process in its broadest form is called on to protect the interests of minorities or the disenfranchised against the tyranny of the majority. But where economic and/or political power is distributed in a highly inequitable fashion, **the political/integrative function faces a greater challenge in**

protecting the majority against the tyranny of minorities.

U.S. guidelines explicitly require the inclusion of social benefits achieved by avoided use of non-renewable energy whose value is "not fully reflected in the dollar savings", and presumably not traded on standard markets. This is done, as indicated, by factoring the initial project investment costs. Similar applications could provide vital information of end-use energy consumption over a reasonable time-span and could provide decision-makers at the political/integrative level (from voters to premiers) with vital indications of the extent of resource commitments during a project's life-cycle.

While CBA and LCC contain their own constrained value framework (implied in monetization, discount policies and a set of 'decision rules' etc.) they must, along with impact assessment, proceed to the political/integrative framework not only for possible action and implementation, but to establish the significance of study outcomes. Here, in the region of political trade-offs and negotiations involving a wide range of political traditions and institutions, final values or weights are attached to impacts and the interests implied in them - values which may well differ from those of the technical/analytical level of analysis.

**As** we argue in the next chapter, the political/integrative function is responsible for selecting among projects and options



on the basis of values and social priorities expressed or resolved through the political framework. While enabling social and individual diversity, the political/integrative function helps to maintain essential socio-political cohesion.

## CHAPTER 4

### SOME POLITICAL/INTEGRATIVE ASPECTS

#### 4.1 Introduction

This chapter reviews the contribution of the political/**integrative** function in the overall framework. It begins with the idea of impacts as interests and the 'bridging' role of the political/integrative function, enabling comparisons between essentially different sets of impacts and the interests underlying them. Section 4.2 continues with a discussion of the political process with particular reference to impact distribution. Section 4.3 stresses other functions at this level, especially the representation of the disenfranchised, protection of minority rights or interests etc. Finally, Section 4.4 **summarizes** the various involvements of the political/integrative operation in EIA.

#### 4.2 Impacts as Interests

Impacts require an object: that which is impacted. As suggested by Lang and Armour, and others it is possible to treat the objects of impacts as interests. <38> Analogous to the classes of impacts proposed in Chapter 2, these interests may be ordered in a system of classes and sub-classes which range from

individual and group interests to **inanimate interests such as** 'nature', or specifically the rights of animal species or minority interests such as those of children. Classifications on the basis of other parameters are, of course, possible and may involve group overlap and borderline cases.

ultimately projects (or policies) may themselves be classified into exclusive categories or groups each serving different combinations of interests and implying possibly contradictory social and economic priorities. The political process has traditionally been seen as both a forum for the expression and representation of a wide-range of interlocking interests as well as a means of reconciling conflicting social, political and economic agendas that arise from these diverse interests.

At times the political/integrative function in society, besides reconciling and integrating various interests, is called upon to protect minority interests or to speak for the unrepresented. Impact assessments play an integral role in these processes and can, in part, be evaluated on similar bases as the overall framework. While individual **EIA's** obviously lack the permanence and continuity of processes and institutions in a **pluralist-**democratic society, they share inherent qualities, incur similar obligations and face some of the same tests of effectiveness and legitimacy.

**As** suggested in Chapter 2, the ways in which individual impacts in the various classes or sub-classes vary is critical to impact

assessment. However, especially when impacts are seen as affecting 'interests', it is impossible for any level of operation, except the political/integrative level, to determine which interest **or** set of interests ought to prevail when conflict arises between them. If such standards do exist, a priori, they do so within a political framework.

There is a long and developed tradition of reconciling diverse interests in the plural society. And while impact assessment relies critically on scientific and thorough analysis of impacts, it is ultimately only as 'good' as the political institutions that govern it.

#### 4.3 The Political Process and Impact Distribution

Impact assessment, implicitly at least, deals regularly with conflicts between interests. When used as a device for comparing and weighing affected interests, and ultimately for evaluating projects and policy alternatives, it has clearly entered the political domain. How for instance can the need for greater hydro-generating facilities be immediately weighed against the damage to the natural environment or the Interests of animal species? How can the welfare of expanding urban populations be directly compared to the loss of valuable farm land?

**Limits** on the scope and duration of impact analysis can be imposed at any level of the simple model constructed here, and may involve - among others - **limitations** by way of statute,

methodology and political fiat. Typically this occurs, at the technical level, through budget and time constraints, limited terms of reference, political expediency, availability of additional public resources, intervenor funding, legislative mandate, and combinations of these and other factors. However, more important limitations on the range of affected interests to be considered (~~or~~ excluded), should also take place only at the political level where a chain of responsibility exists and access is provided to citizens.

When cities (and ultimately nations) are treated as agglomerations of 'interests' it is important to observe the distribution of impacts. Not only does this provide some measure of equity, but is instrumental in assigning **responsibility** when compensation and/or mitigation follow an impact assessment. In a broader sense, it can be argued that the distribution of residual benefits of a project is reflective of the distribution of power, and of the system of checks and balances, within the political/integrative function.

How well the political/integrative level performs **its** functions in impact assessment can be evaluated using criteria applied to representative and constituted institutions in a pluralist democracy. (A separate set of tests may possibly exist for non-democratic governance.) These range from standards of openness and access to legislative protection of minority rights to constitutional provisions for review and recall of responsible

officials.

**Models** such as the 'community development ' model (based on 'impacts as interests') can be evaluated on a similar basis. Particularly important are the following issues: correct identification of affected groups, individuals and 'interests', appropriate levels of education and information provided to affected interests, legislative or other provisions for access to decision-making processes and tribunals, satisfactory legal and expert guidance for affected groups, interests, etc., disinterested arbitrators, mediators and key officials, and rights of notice and appeal to name a few.

When **EIA** involves a brokerage of 'interests', along lines of a community development model, the challenges are myriad in cities with large and diverse populations, changing membership, group overlap, etc. This contrasts sharply with the bulk of EIA experience in Canada to date.

#### 4.4 Other Roles

Ontario guidelines in '**Pre-Submission** Consultation Associated with the Environmental Assessment Act' allude to the community development model when pointing out that "**concerns** raised during early consultation are less likely to become crises in the formal review process because a proponent can modify an environmental assessment and undertaking in light of the concerns that others express". <40>

However, **weare** dealing here with more than **simply** models of environmental assessment. **Is** the community merely a collection of interests to be **brokered** or **reonciled** by the environmental assessment process? Are impacts only impacts when they are perceived as such? If concerns are alleviated, do the impacts that gave rise to them disappear? Is '**arm's** length' the appropriate address for governments in their dealings with proponents of controversial projects?

We will see, in Chapter 5, that there is a role for 'impacts as interests' expressed in community participation as well as a role for expert assessment of impacts. But there are interests not necessarily represented in the marketplace - children, nature, animals, the elderly, minorities and the unborn among them - who must also be assured a hearing. There are observed traditions for resolving differences amongst social groups and our attention will turn to the political institutions which govern these exchanges and which, hopefully, represent the unspoken interests. The Toronto case is especially illustrative - here we see the **City's** planning department - and eventually the City itself - assuming the role of project proponent on behalf of a consortium of private developers.

#### 4.5 Summary

To review, the political/integrative level portrayed in this paper operates in the following ways:

1) through it., the statutory basis for environmental assessment proceedings is provided

i) it provides, by statute, regulation etc., limited direction in defining critical variables and terms and in identifying impacts

ii) by mandates, terms of reference, budgets and other mechanisms, the political/integrative level sets limits on the nature, duration and scope of environmental assessments

iii) it provides a set of legitimated institutions and processes whereby affected interests may protect and pursue their own welfare either directly through impact assessment proceedings and, Indirectly, through other legal (and sometimes illegal) means - both formal and informal; these include lobbying, **public** campaigns of protest, civil disobedience, consultation and negotiation, political reform, court redress etc.

iv) functionally, through political, legal and other processes and institutions, the political/integrative function is responsible for the evaluation and arbitration of diverse interests and selecting between alternative projects, proposals, and policies and ultimately between the sets of contesting interests underlying them

v) acts as a surrogate by representing and guarding the welfare of groups and individuals when these are not represented directly in the environmental assessment process; ideally, the **political/integrative** function protects the interests of minorities, the poor, the unborn, and other interests not represented in standard market-places

vi) performs a technical (or bridging) function allowing



direct comparisons between classes and sub-classes of impacts and sub-classes of **impacts**, projects and interests that differ in essential ways

viii) identifies and establishes social policy regarding **resource exploitation** (such as a national energy policy), regional development etc. on the basis of a hierarchy of prevailing interests of which it is itself an expression; these policies include obligations to future generations through discounting, conservation etc. and are manifest in legislative applications of impact assessment and in the **current** orientation to non-urban project analysis

ix) finally, the **political/integrative** function contributes vitally to the ongoing maintenance and integration of communities and society as a whole.

## CHAPTER 5

### IMPACT ASSESSMENT AND THE CITY

#### 5.1 Introduction

This chapter will review several of the particular challenges of applying SEIA in urban settings. The chapter also underlines the secondary theme of this paper - the relevance and transferability of expertise in non-urban cases to their urban counterparts.

Section 5.1 raises briefly the analogy of forward and backward linkages of impacts and the source of resource exploitation in consumer demand. It is followed by a review of a recent effort to develop a computer model of a major resource-based project, and raises the prospect of much greater complexity in modelling urban impact systems. Sections 5.3 and 5.4 discuss several theoretical approaches to the conduct of impact assessments, with reference to cities, and **attempts** to incorporate these into the framework presented here.

#### 5.2 Forward and Backward Linkages of Impacts

Just as the role and function of an industrial waste treatment facility is joined to the industries and processes that generate the waste, it is self-evident that a linkage exists between

extracted resources and the products and uses that eventually consume them. More importantly, both processes are initiated by a consumer demand that precedes either the creation of industrial wastes or the exploitation of resources.

It is a recurrent argument throughout this paper that consumer demand is expressed in a concise fashion in major urban projects and that urban systems **epitomize** the need for further resource exploitation. The question arises: is the application of impact assessment more appropriate (and more productive) at this level, rather than the levels typically addressed thus far in the Canadian experience and documented in the first chapter of this paper?

At the least, large urban projects represent important sources of information about the forces and **tendencies** that so intimately co-relate with demands for resources, energy use and environmental degradation - whether local or distant.

### 5.3 Computerized models

In light of the complexity of real life, the multitude of variables, the speculative nature of forecasting, continuously changing baseline conditions, alterable rates of impact by variables over time, etc., it is difficult to see how urban systems can be modelled without the use of a computer.

**One** illustrative model, developed within the past decade at

Arthur D. Little Inc., is relevant to socio-economic impact assessment. The system was constructed in the late 1970's as part of a formal environmental assessment of a four billion dollar steel-making facility and applied directly to that analysis. <41>

Computable systems models are not a **panacea**; nevertheless, they have some **unique** advantages:

1) a methodical development of a **computerized** system **requires** comprehensive collection, analysis and **organization** of data

2) such systems require the specification not only of relevant variables but a **modelling** of relationships between them, thus emulating the real world, including complex urban systems

3) once a simulated model has been constructed for a particular case, it can provide ready means for sensitivity testing

4) models can be designed to permit discounting of costs and benefits or a similar appropriate treatment of impacts

5) parametric values within the model can be made **time-**dependent to reflect changes in technology, environmental conditions, etc.

For purposes of **socio-economic impact assessment the greatest benefit may be additional.** The exercise of **system building not only generates results or 'answers' but is itself a model of an intellectual process we use to understand the operation of urban systems. Computer modeling of these systems can contribute to**

our comprehension of the actual operation of local social and economic **impacts in densely populated** regions, and distant impacts in resource-rich hinterlands.

The Little model (known as '**Simpact**') simulated a project that was anticipated to cause extensive secondary activity and to have important affects on a largely rural area. Emphasis was placed by its creators on the increased need for modelling **"the** severe social and economic disruptions caused by large-scale projects In relatively rural communities? Some of the general impacts anticipated were:

- rapid population increase
- intolerable stress on school, water, sanitation and other social services
- escalated housing costs
- traffic congestion
- friction between residents and in-migrants. <42>

Many of these impacts, though at first less detectable, may occur in urban, densely populated areas. As well, immediate and obvious project impacts on undeveloped rural areas place different demands on analysts than more subtle, but also disruptive changes taking place in urban settings.

We might question whether city inhabitants **are** thought to have different thresholds of tolerance for change or, until now, undefined capacities for adaptation to relentless urban progress. **More to** our point - is the readiness to profile non-urban **impacts, as witnessed in Canada,** simply a result of the **self-evident nature of** impacts there, or **are** urban systems **so**

intimidating in their complexity that we hesitate to try? Some portion of the answer is found **in** history and **statute** as suggested in this paper. Moreover it is clear that the 'Simfact' system - while admirably comprehensive in modelling a non-urban project - would doubtless require **major** reconstruction when applied to an urban project.

#### **5.4** Changes **In** Process

Some commentators have argued strenuously in favour of changes in emphasis which raise important questions of technique and costs of **EIA's** in cities. These changes would lead away from impact assessment to an impact assessment process:

"This shift should be away from sole reliance on the more speculative forecasts and toward a process of experimental research to gain an understanding of the relationships involved in social impacts. This experimentation focuses on the systematic observation and assessment of the actual impacts over time, with deliberate manipulation and control in order to ameliorate any adverse consequences that might **occur**." <43>

Evidently this is an elaboration on the process of monitoring actual impacts and is combined with an on-going program for impact mitigation. Soderstrom *suggests* that his proposed change in orientation would alleviate what other critics have called "**one** of the biggest current **failings**" of impact assessments: that the whole effort is merely a reaction to projects rather than an effort to design and shape them.

There is probably evidence to the contrary - that impact assessments have indeed lead to conceptual or design changes in

projects. Soderstrom goes on to conclude -

“Rather than performing in the role of a one-time review of the potential consequences of a proposed action, this new paradigm follows a more efficient course of continuous public review of actual impacts. This effort should not only assist future generations of impact forecasts, but also lead to **a more active** role in formulating and implementing mitigative responses to manage adverse effects .” <44>

If this is a call for more fundamental research of project impacts and for more useful means of dealing with them, few in the field are likely to disagree **with** Soderstrom. Still, **Soderstrom's** suggestion does not help with the main question raised about prospective impact assessments and asked by decision-makers everywhere - ought a particular proposal be modified or even **rejected?**

**Soderstrom's reasoning takes on greater cogency when emphasis** shifts to the perpetual maintenance of **an urban** database for baseline calculations, or where environmental **impact assessment moves beyond urban project** evaluation to address chronic problems of incremental change, urban intensification, persistent economic deprivation or progressive loss of a 'human habitat' in urban communities. At the same time, urban challenges to EIA surpass those of non-urban projects - and at what cost?

## 5.5 The Collaborative Approach

Dulnker and Beanlands, in a **1983** study for the Federal Environmental Assessment Review Office, reached the following

**conclusion** for improvements in the **application** of **EIA** techniques:

**"The** best chance for implementation lies in **having** the requirements form the basis for joint planning of the **impact** assessment between proponents and the government agency administering the assessment review process? <45>

This would lead to agency representatives working closely with proponent groups, scientific staff and consultants with a view to developing a "mutually agreeable" design for the assessment before the individual studies are undertaken. The study authors rightly observe that **"this** degree of co-operation will undoubtedly be **criticized** by those concerned with maintaining an arm's length philosophy on the part of the agencies administering assessment procedures". <46> Such a discussion Implicitly refers to different models of environmental impact assessment, and ultimately to the notion of impacts themselves.

A distinction between two models is drawn in a recent document published by the federally funded 'Canadian Environmental Assessment Research Council@. The document is entitled Social Impact Assessment: A Research Prospectus. <47> The first model, the **"technical/planning** approach", **emphasizes** the value of the scientific method as an objective means for generating information for decision-makers. The technical approach emphasizes rigorous analysis, methods grounded in the social sciences, and clear, 'unbiased' accounts of social **gains** and losses. <48>

The second, described as a **"political/community** development"



model (and discussed in Chapter 3), is based on the belief that 'interests' lie at the heart of decisions **affecting** the environment. The model emphasizes the "dynamic nature of impacts which are determined in part by people's perceptions of whether the anticipated changes will be in their best interest? <49>

The framework presented in this paper differs by not presenting dichotomous alternatives. Thus, the community development model (based on affected 'interests') can be integrated into the technical/analytical level of operation and may even be stipulated at that level by the statutory level of operation. In any case, the political/integrative level, operating as it does in and through representative political institutions **is**, at a minimum, a surrogate for community involvement. Ideally, 'interests' are assured representation when this does not occur directly at the technical/analytical level.

## 5.6 Conclusions

**Socio-economic** impacts of major projects in underdeveloped regions tend to be dramatic in nature. And while not easily evaluated their impact may be relatively noticeable. However, where changes are marginal and incremental **in** densely populated urban areas already subject to high levels of transformation, socio-economic impacts of a particular project may be harder to detect. Such qualities of urban systems pose special challenges for baseline data collection, projections, the **isolation** of project impacts from complex and dynamic urban systems, the

identification of groups and individuals affected by a project, and the inclusion of large numbers of **people** in effective assessment proceedings.

The forms and patterns of human **civilization**, the ways in which we consume resources and transform energy, are observed most intensely in urban life and are **epitomized** in major urban projects. In this sense at least, supply cannot be detached from demand (or increased production from expanded consumption and growing urban populations), and large urban projects, whether commercial, industrial or recreational are - indirectly - resource-extractive projects analogous to mines, hydro-electric projects etc.

## CHAPTER 6

### THE TORONTO STADIUM CASE

#### 6.1 Introduction

This chapter **summarizes** certain features of the review and approval process undertaken by various bodies responsible for the domed stadium proposal. It begins with an analysis of the work of the Macaulay Commission to give a sense of continuity from previous work on stadium development and to provide a contrast in techniques. The chapter closes with a reference to the City of Toronto's role as co-developer and promoter of the project and questions the consequences in terms of the framework developed in preceding chapters.

Throughout we will focus on the formal sector - both in terms of planning approvals and the public involvement of political officials and institutions in the province. While it is clear from the case presented here that the informal political/integrative function may play a key role in project determination (and implicitly, in the final weighing and treatment of impacts and 'interests') its study is beyond our scope.

#### 6.2 The Macaulay Committee Report - 1984

In the 30 years prior to the successful venture, numerous proposals of varying credibility had been advanced before the people of Metropolitan Toronto. These are documented elsewhere and are not all germane to this account. <50> Only the most recent - the Macaulay Committee in 1984 - will bear some reference.

Representing a **sizeable** expenditure of public funds (both on the part of the Committee and municipal proposals) and private resources, the provincially-appointed Committee was assigned the task of making recommendations "relative to a possible new stadium in or near Metropolitan Toronto? <51> The group received submissions from approximately 200 persons and organizations including fourteen regional and/or local municipalities.

The Committee's specific mandate required recommendations in the following areas:

- uses the stadium could and should accommodate
  - the type of structure and specifically the mode of enclosure
  - location of the stadium, with **particular** emphasis on transportation
  - estimated capital costs of the stadium and necessary supporting facilities
  - methods of financing construction
  - sources of operating revenues and operating expenses
  - concepts of ownership and management
  - timing
- <52>

As a further mandate the Committee was instructed to receive submissions, but not to entertain formal bids or to select a particular proposal although site selection was within its

mandate. <53>

In addition to objections and other interventions, the Committee received 34 concrete proposals displaying varying degrees of planning and commitment. These were weighed and compared on the basis of the specified criteria; for our purposes, 'location' best represents the standard field of socio-economic impact estimation.

Following six months of hearings, Macaulay concluded that the preferred site should satisfy the following eight site-related criteria:

- centrally located (with reference to market area)
- reasonably accessible to rapid transit
- served by at least one existing major expressway and several arterial roads
- situated so that it would not impact unreasonably on its immediate neighbors and neighborhood
- available and be capable of development quickly
- a location that would enable the stadium to be readily marketed for various uses
- a site large enough to accommodate ancillary uses
- served by a transportation system that would work well on opening day and into the foreseeable future at an acceptable cost

<54>

Without leaving the impression that any of the sites was analyzed in detail, or even preliminary socio-economic impact studies performed (for they were not), some of the Committee's specific conclusions on 'location' should be reported:

" Impact on the surroundings would result from the appearance of the structure and its associated parking areas, the glare from lighting at night events, the noise generated and the induced traffic congestion on local streets, arterial streets and the transit service in the vicinity.

The impact can be mitigated by the aesthetics of design and, perhaps, by putting part of the structure below grade. But, it cannot be eliminated. If there is to be a new stadium, it will be because it is perceived to be in the best interests of the greater Metropolitan Toronto area generally. We believe that the ideal location would enable a stadium to be built that does not impact to an unreasonable extent on immediately adjoining land users and owners or on the quality of the general environment. " <55> (emphasis added)

At the end of its deliberations the Macaulay Committee recommended a site in an area of relatively low population density in the north of Metro Toronto. Two other sites were suggested as alternatives. However the Committee had, during its tenure, investigated the possibility of a site within the downtown railway lands:

" As our work progressed, increasingly we became intrigued by the idea of a site within walking distance of the amenities of downtown Toronto, well served by public transportation yet accessible by automobile and with adequate parking available. After visiting Vancouver and Seattle, we **realized** that, just as **underutilized** railway lands . . . had become the sites for B.C. Place and the **Kingdome** respectively, perhaps there was an opportunity to build our new stadium somewhere on the lands owned by **CN/CP** railways ...." <56>

Ultimately the Macaulay group determined that the railway lands were not, under existing conditions, a viable site because of anticipated difficulties in assembling sufficient land, the cost of the land, potential rezoning problems, induced congestion, the immediate impact of the structure on the district and "the potential that the stadium could be crowded out over the years". <57> The foregoing conclusion is stated without reference to corroborating studies.

It is difficult to ascertain whether the 1985 selection of the Railway Lands site was a logical outcome of the Macaulay Committee proceedings, or a contradiction of them. Macaulay's hearings and report can be characterized as part of a conventional planning exercise. In this case, the idea for a major public facility arose from the political arena, proceeded to the public forum for hearings and submissions, and disappeared once again from public view. What re-emerged in more-or-less final form was a chosen site different from any of the three preferred sites of the advisory committee.

Here, in summary, we see a role for the political/integrative level of the impact assessment process. In terms of the framework outlined in Chapters 2 and 3, the Macaulay Committee can be seen to operate at the technical/analytical level; because the hearings proceeded outside of formal environmental assessment requirements, they refer only marginally to the conceptual/statutory level.

The Macaulay report is especially illustrative because it shows a private mode of operation for the political/integrative function. In the broadest sense, we can question the extent to which a society ought to tolerate unexpressed criteria for project evaluation or 'private' political agendas as a basis for arriving at certain decisions. The role such factors play in general life is beyond this paper; however, it is an argument here that political factors are inherent and central to

environmental impact evaluation.

The conduct of the Macaulay Committee and its terms of reference display other important characteristics. A priori the public terms of reference of such a panel contain political preferences - this is clearest in the selection of criteria for distinguishing **sites** and in the transportation requirements. Of course these criteria could have sound analytical bases, objective to the extent that basic research and expertise allow, although this is not always clear.

There are explicit welfare **judgements** - expressed as factual observations - in the report. These are evident in the statement quoted above: "If there is to be a new stadium, it will be because it is perceived to be in the interest of the greater Metropolitan Toronto area generally". No bases for **judgement** - objective or otherwise - are provided to determine either the physical limits of the 'greater Metropolitan Toronto area', or its greater good.

Such platitudes nevertheless raise serious questions that require resolution; on what basis, for instance, will relevant decision-makers determine that the intended stadium "**does** not impact to an unreasonable extent on immediately adjoining land users and owners or on the quality of the general **environment**". Implicit in this is the belief that a committee, independent of certain market indicators, can determine what is the highest



and/or best use of a major building site or commit a vast amount of resources during the life-cycle of a major project.

In the Toronto case, as it proceeded, we will be able to follow several issues important for socio-economic impact estimation in urban settings. One point - the separation of project impacts from routine incremental changes and the assignment of costs to a project - is a problem largely outside this effort. However it is a point on which other urban impacts - and possibly an important part of the future of impact assessment - may turn.

### 6.3 Some Important Features of the Planning Process

The Railway Lands site was announced by Premier Davis in 1985 in apparent confidence that the stadium project **would** be confirmed and approved by the appropriate municipal authorities at several levels. Intentionally, we will not attempt to trace the private or informal decisions, agreements and alliances that underlie a venture of this nature, however they comprise part of the private mode of the political/integrative function.

In a more formal sense, we can outline the bureaucratic process that is part of a conventional system of municipal planning approval. The basis of this system, as it applied in Toronto, **is** described in a document entitled 'Railway Lands Part II: Implementation Strategy', from the office of the Commissioner of Planning, City of Toronto. <58> As a necessary limitation, much of the earlier analysis of Railway Lands development, prior to

the stadium proposal, will be ignored.

Nevertheless, it is important to point out that the City of Toronto commissioned, in 1983, a 'Cost and Benefits Analysis of the Proposed Railway Lands'. That document outlined, from the city's point of view, costs and benefits (primarily in terms of infrastructure provision, taxation etc.) that would accrue as direct result of development on the former railway lands. <59> However, on the basis of this research, it is not clear what role - if any - the 1983 analysis played in the eventual approval of the domed stadium proposal in 1986. A report by the Commissioner of Planning suggests it was largely irrelevant:

"On January 16, 1985 former Ontario Premier Davis announced the decision to locate a new covered stadium and multi-purpose facility west of the CN Tower in the Railway Lands. Following this announcement, the plans for the Railway Lands included in the Railway Lands Part II: Development Concept report were revised to accommodate the proposed stadium." <60> (emphasis added)

In outline, the planning and approval process employed a development control strategy with three main components:

- 1) a Part II Official Plan
- 2) appropriate zoning by-laws to regulate development on individual precincts within the Railway Lands
- 3) a Memorandum of Conditions at the precinct level to govern provision of local services, provision of parks and housing, environmental safeguards etc. <61>

Approval of stadium construction by the City of Toronto required prior amendment to the 'Railway Lands Zoning By-Law' to permit the development of the Stadium Precinct in accordance with the provisions of the Railway Land Part II Plan.

### 6.3.1 Environmental Issues

In addition to this 'Stadium Precinct By-Law', the city's development control strategy for the Stadium Precinct involved a 'Precinct Agreement' and an 'Environmental Agreement'. It was a requirement of the Railway Land Part II Plan that forms of these agreements be submitted as part of the rezoning application for the Stadium Precinct. <62> Suffice it to say that the Environmental Agreement was to be a product of joint consultation involving primarily C.N. Real Estate, the provincial Ministry of the Environment, the City's Medical Officer of Health, Metropolitan Commissioner of Planning and others.

The objectives of the Environmental Agreement are expressed in Section 9 of the Railway Lands Part II Plan. They are to ensure that "satisfactory environmental conditions consistent with those elsewhere in the Central Area are established for people working and living within and adjacent to the Railway Lands". In passing it is interesting to note that no standards are prescribed by responsible authorities, except those of consistency with conditions elsewhere. In themselves such apparently arbitrary standards are evidence of the integral role the political function plays in impact evaluation, though not necessarily in formal proceedings.

The 'Environmental Report for Precinct A (the Stadium Precinct)' was submitted in the fall of 1985 by consultants on behalf of the

project proponents, including CN Realty, Marathon Realty, The Stadium Corporation and City of Toronto. That submission complied with Section 9 of the Railway Lands Part II Plan and addressed the following concerns:

- noise and vibration
- microclimatic studies (including pedestrian-level wind studies, air quality, sun/shade)
- subsoils investigation and contaminant studies
- stormwater management and stormwater quality
- risk management (primarily with respect to transportation and handling of hazardous goods by rail through the railway lands, near the stadium) <63>

Each of these areas, important in its own right, is not vital to socio-economic impact analysis as it is conventionally performed. Only risk management, noise and vibration (especially as they relate to the extensive transportation impacts) contain elements of direct social impact.

A draft version of the stadium precinct Environmental Agreement called for "an assessment of the appropriate means of ensuring that the urban stadium and multi-purpose facility . . . be developed in a manner which is environmentally compatible with surrounding land uses and open spaces, with particular attention to the light, noise and traffic generated by the urban stadium and multi-purpose facility." <64> Again the arbitrary nature of standards and geographical bounds is evident and it is necessary to look elsewhere, to another level of analysis, to discover ultimate prevailing values.

Treated as an exercise in ad hoc or informal impact assessment, the case cited here is handicapped by the fact that both the site and the project were essentially confirmed before specific

testing and analysis took place. This is therefore not an example of either site or project evaluation. Nor, unfortunately, is it an exercise in site comparison which might have better brought out the usefulness of impact assessment or allowed an expanded application of Life Cycle Costing, as suggested in Chapter 3. It is evident that the range of socio-economic concerns was not a broad one. Pertinent issues arise implicitly, as in the commitment to district heating, without reference to efficiency of resource use or other economic criteria.

Transportation and related infrastructure was the focus of greatest planning interest, especially as a pre-emptive strategy. The intensity of concern no doubt springs from the obvious need for good transportation planning and the scale of budgets involved in numerous changes and additions to transport infrastructure required by the Railway Lands development and, to a lesser extent, by the stadium. Indeed, it is the impacts of these very changes that is of greater interest to the impact analyst, rather than the changes themselves. The pro-transit planning strategy evident through all stages of the approval process, is the clearest and most emphatic attempt to express broader social, economic and environmental values.

### 6.3.2 Regional Impacts and a 'Benefits' Study

One area that **is** more clearly a matter of socio-economic concern arose before the O.M.B., and while it does not relate to the stadium specifically, bears on points raised in this paper.

Witnesses on behalf of private objectors raised the issue of impacts, by the Railway Lands' substantial addition to retail/commercial floor space, on regional sub-centres. <65> Programmed development of several regional sub-centres, outside the city's main commercial/financial core, had been specified in 'Metroplan', the Official Plan of Metropolitan Toronto, and is well under way.

It was a contention of objectors to the Railway Lands development (though not of the stadium itself) that the economic viability of the regional centres would be **jeopardized**. Heated debate over a functional definition of 'viability' took place at the Board? hearings conducted under sections 17(11) and 34 of the Planning Act. The Board, in its ruling of September 1986, appeared not to accept the claims of the intervenors. It is also a matter of fact that the municipal governments whose interests were potentially affected did not choose to pursue this line of argument before the Board. In this sense, the operational definition of 'economically viable' may have been 'politically acceptable '.

Before leaving the area of economic impacts, it is necessary to *comment* on a document entitled 'An Analysis of Economic Benefits of a New Stadium to Metropolitan Toronto and Ontario'. <66> Commissioned in late 1985 by the Dome Corporate Partnership, the study, true to its billing, presents an analysis only of estimated benefits of the proposed stadium project.

The study concentrated on several key economic areas:

- job creation as a result of stadium construction and associated infrastructure
- revenue generated by stadium attendance and ancillary jobs created
- taxes accruing to federal and provincial governments as a result of stadium operation

From an objective point of view, there are methodological shortcomings of this promotional effort. For instance, the study fails to identify losses in revenue and jobs at competing facilities and venues such as Exhibition Stadium. Likewise, tax losses from supplanted facilities and activities are not subtracted from expected taxes generated by the stadium.

These and other shortcomings raise serious doubts about the usefulness of this particular benefits study, except to stadium promoters in their lobbying efforts. It is unclear what role this study played in official decisions at the political/integrative level; likewise, it is disappointing that such a limited analysis was the only comprehensive economic evaluation by any group - public or private - that was discovered in an extensive research of the stadium proposal.

What the study, commissioned by the provincially-established Stadium Corporation, does show is the relatively narrow range of 'project packages' considered in formal benefit studies. This is further evidence of the intrusion of political mandates into all levels of the assessment process - even the relatively scientific.

### 6.3.3 The City as Developer

A feature of the planning and approval process most relevant to our framework is the City of Toronto's role as a proponent and co-developer, along with landowners and private developers, of the Railway Lands and eventually of the stadium itself. This role and relationship is described in 1984 article by a senior City planner in charge of negotiations:

"Usually municipal planners either respond to proposals put forward by developers or produce guidelines and regulations designed to elicit proposals which they then address. With the Development Concept, however, the Planning Department took a more direct and less passive approach.

Although it was prepared in consultation with the railways, and not presented until there was general agreement as to its appropriateness, the Concept was brought forward not by the railways but by the Planning and Development Department. It was also presented to the public and to City Council by the Commissioner of Planning and Development and the team of City planners and urban designers who helped shape it, rather than by the railways and their consultants. This shift from the municipal planner's typical role as a regulator and mediator to that of initiator and proponent is one of the most intriguing, and provocative, aspects of the Development Concept. " <67>

The implications of this role, and some serious questions raised by it, warrant further examination. If, as argued here, SEIA should not be abstracted from a framework of operation which is ultimately political in nature - how are affected interests identified and given 'fair' representation in the SEIA process?

There is of course no easy answer; however it is possible that the resolution of this question begins with imposing similar tests of representation and responsibility as would be applied to



political institutions and processes at the broad societal level. Is it sufficient to rely, in this case, on the established chain of representation through elected municipal councils, requisite public meetings and other statutory recourses such as appeal to the Ontario Municipal Board?

A wide variety of contacts and means of access to the planning and approval process were available to objectors of the stadium proposal. Counsel's argument for the City of Toronto, throughout O.M.B. hearings, was that intervenors had sufficient opportunity to present their concerns to appropriate officials during the routine planning process. <68>

However the issue is clouded, and complicated, by the fact that very early in the process, the City of Toronto became a leading proponent and co-developer of the Railway Lands and eventually the stadium itself. Such a stance, while "intriguing and provocative" as suggested, above, by a senior City planner, is possibly an ambiguous gain and one worthy of careful examination.

with the City as a co-developer and proponent of the project, at least some portion of the duty for public scrutiny and criticism shifted outside the municipal organization to the public in general. This division of interests and obligations - proponent vis-a-vis examiner - is one of the most important aspects of the Toronto case.

Key planning documents and directly relevant consultants' reports for the stadium alone, comprise thousands of pages of complex legal and technical data from widely dispersed sources. The period between important phases of the planning/approval process were of a few weeks in some cases. And there is evidence that crucial documents were only available shortly before key meetings. <69> One must question whether civic 'interest groups, ratepayers associations and individual citizens could be expected to have the time or expertise to stay abreast of developments.

Perhaps the most vital stage of public intervention was the hearings conducted by the O.M.B. Proceeding on an adversarial basis, objectors to the stadium project, or the Railway Lands as a whole, were entirely dependent on volunteer efforts and charitable donations to provide legal counsel and expert witnesses. Leading organizers of public objections at the hearings, and many of the expert witnesses were academics from the University of Toronto. It is hard to imagine who else might have had the time, financial independence, or expertise to mount a voluntary effort that included approximately 15 weeks of full-time hearings and a court case. For these reasons, one must also question how broad was the spectrum of interests represented by effective public opposition.

## CHARTER 7

### CONCLUSIONS

#### 7.1 Introduction

At the political/integrative level of impact assessment we see the inter-connectedness of individual acts of consumption leading eventually to demands for resources. Likewise, collective societal decisions on resource allocation represent the effort to consider the welfare of groups and society as a whole. This web of connections and inter-dependence extends to all parts of a nation, and the planet ultimately, but is woven most intricately into an urban fabric.

This final chapter reviews some of the ground covered thus far, and offers a few concluding remarks about the usefulness of a comprehensive framework for viewing the work of impact assessment.

#### 7.2 The Value of a Framework

When SEIA is placed in a multi-layered framework of operation we see that the phases of impact identification and impact evaluation differ - just as the technical/analytical and the political/integrative levels differ. A means or process is required for making evaluative comparisons, first, between

categories of impacts that differ in character, quality or other parameters, second, between alternative proposals that differ in essential ways, **and** finally between classes of affected interests.

In the framework portrayed here, that role is assigned the political/integrative level of operation. As well, it assumes other responsibilities which have been discussed throughout this **paper and summarized** in Section 4.5. The most important of these is the provision of a legitimate, constitutional structure for assembling and arbitrating the diverse interests that comprise a pluralist society. Ultimately, these must be reconciled and integrated into an on-going social and political structure. While impacts may be assessed at other levels of operation, they are evaluated, in real social terms, at the political level.

By documenting the extent of political investment at all levels of the EIA process, we are more aware of potential biases in the orientation of statutes and applications of EIA. There are historical and institutional factors discussed in this paper that may explain some of the orientation of EIA in Canada to non-urban projects and the 'natural' environment.

This should not suggest that the explanation for a non-urban bias is entirely political. Other forces are doubtless at work, although these of course, may find expression at the political level. One might question the willingness of urban Canadians to make the changes in lifestyle and consumption that would reduce

or eliminate the need for certain projects or demands on resources. This would require an unprecedented examination of urban projects including an analysis of resource requirements during a reasonable project life-cycle. More importantly, it may entail an intensive self-examination by citizens leading to sacrifices in income and short-term welfare.

### 7.3 The Pluralist-Democratic Model of EIA

The community development model has been discussed elsewhere in this paper. It has been argued that communities, cities and presumably nations, comprise groups of 'interests' and that EIA ought to engage these interests in assessment proceedings. On this basis it is apparent that the appropriate model for EIA is, in the first instance, the pluralist democratic one, and only secondarily the judicial/adversarial one. We have examined whether the assumption of the role of project promoter by the City of Toronto in any way prompted a breakdown of the representative structure and process. Following assessments of this sort, remedial measures may be possible. Only then need we examine whether affected interests were properly represented and defended in adversarial proceedings, such as the Ontario Municipal Board hearing, that followed. Some of the specifics of this issue were discussed in Section 6.3.3.

Clearly, governments have the right to establish mandates and terms of reference for the conduct of EIA's. When the political qualities of even the most technical aspects of impact assessment

are recognized - for instance in the scope of impacts to be considered or the ' interests ' whose welfare is to be excluded - the legitimacy of the assessment process is, at least in part, an examination of the legitimacy of the over-riding political structure itself.

#### 7.4 Super-Planning and the Urban Mega-Region

The context of planning for major urban projects is routine and consists of normal economic activity and ambient social change where impacts arise regularly from land-use policy, population growth, industrial expansion, regional development, to name just a few sources. Impact significance is determined by the actions of public officials, the success of private intervention and specifically by the results of land use regulation, efforts towards compensation or mitigation, public and corporate **enter-prise**, and by overall policies affecting redistribution of wealth.

However a renewed reality emerges in the Toronto case and is illustrated particularly in the work of the Macaulay Committee and in current patterns of regional transportation planning involving Metropolitan Toronto and adjacent regional municipalities. <70> The regional governing structure as we know it, in Canada's most populous area, is being challenged - if not surpassed.

New levels of consumption, lifestyle opportunities, altered **work-home** patterns, and burgeoning populations, to name just a few factors, are pressing towards super-regional planning processes

and institutions that go beyond traditional management **structures**. How urban life is ordered, major urban problems solved, projects selected and approved, is clearly of great **significance** to Canada's resource-rich hinterlands. And how EIA will adapt to these demands for new patterns of Integrated urban planning is an intriguing question. The history of preparing for a major regional facility - a stadium for instance - may provide part of the answer.

### 7.5 Political Impacts of Major Projects

Some impacts become operational only when individuals and groups within a society perceive their welfare to be threatened, directly or Indirectly, by a specific project or by a set of social conditions however vaguely defined. Traditional techniques of environmental impact assessment are already **hard-**pressed to deal with small communities in non-urban areas. And they are, in Canada, virtually untried in the field of urban environmental impact assessment. **Yet** the most challenging prospect may lie ahead: the assessment of social and economic impacts that arise from the relentless process of urban intensification, changing land uses, congestion, loss of natural environmental qualities in cities, etc.

This paper has merely broached the problem of Isolating urban project impacts from the mass of data produced by ambient social, economic and environmental change. Baseline projections are difficult in relatively uniform non-urban areas, even those not already undergoing major changes or intrusions. The complexity

of these projections is compounded in urban areas.

We have also suggested that major urban projects are, at least by virtue of their context, regional projects and that SEIA is implicitly a tool of regional planning. However it is also an assertion of this paper that some major urban projects take on inter-regional or national qualities simply as a result of their scale-and the magnitude of the resources they will predictably requisition over a reasonable life-cycle.

Impact assessment methodology and techniques of practical application can be progressively improved. With great advantage, their results can be made less ambiguous; their conclusions, more easily conveyed to private and public individuals alike as part of formal and informal debate and negotiation. However, the final **recognizing** and weighing of affected interests remains entrusted to the **political/integrative** level. Ultimately some of the most consequential research of impact assessment may occur here, at the political level, where non-impacts are changed into impacts and - with luck or good planning - back again.

The political importance of legal limits to space, the relations between and within levels of government is acknowledged by Rothenberg in his work on urban re-development:

The implication of a significant divergence between the scope of the planning responsibility and that of project effect is that planning choices may well be seriously suboptimal. Hence, a supplementary purpose in the decision to focus on the broader population is to throw into relief the consequence of operating the program with the present set of



jurisdictional boundaries. It serves, therefore as further evidence of the desirability of additional techniques of governmental co-operation and/or integration on a metropolitan level. <71>

Similar views are held by Amitai Etzioni, with equally prescriptive undertones <1>:

"Another reason that legislatures are losing some of their capacity to participate effectively in societal guidance is that units which their members represent are often regional while the action and planning units are functional or national; in either case, they are **trans-regional**." <72>

When major urban projects are involved, this argument can be reduced, where it is probably more emphatic, to the local or municipal level.

On a broader scale once again, Etzioni observes that totalitarian societies tend to act first and to look for a consensus later while in capitalistic democratic societies "there is a tendency to build up consensus first and then to implement a policy? <73>

SEIA and other forms of pre-project evaluation, particularly as public forums, can be seen as part of that process of consensus building - further enforcing the political nature of the process. Done successfully, they probably strengthen the social and political fabric as well. If Etzioni is correct, to do otherwise in this culture is to engage, at the extreme, in trade-offs of deeply held values.

## 7.6 Questions Unanswered

have presumed to indicate some of the limitations of impact assessments ' ability to perform the tasks assigned to it in an urban context. Some of these weaknesses fall into the areas of regional boundary definition, the problems of database acquisition and maintenance, isolating project impacts from ambient socio-economic change, restructuring of regional government and planning processes, identification of impacted groups within large, overlapping population groups, and the fair representation of affected interests in impact assessment proceedings.

The question remains - can impact assessment be refined and progressively modified to address these problems? The Toronto case presented here is illustrative: if impact assessment continues to be applied in Canadian urban projects to the extent witnessed in the 'Dome' proceedings, then weaknesses in application will not be easily remedied.

We have not, thus far, asked any questions that relate economic principles to ultimate social ethics or governing principles; that is, while SEIA may tell us about who pays or who benefits, at the technical/analytical level it cannot tell us who ought to pay or about distribution problems in general. Nor have we measured the ability of impact assessment techniques to inform us about opportunity costs or the alternative social investments that might (or ought to) be made in place of a domed stadium or any other project. Ultimately, like it or not, the operation of environmental impact assessment confronts ethical and welfare

distribution questions only at the political/integrative level. To attempt this at another level, by convention, moves one to a political realm.

The framework presented here indicates that the traditional field of SEIA operation (the technical/analytical level) is founded on a conceptual/statutory basis. It is only reasonable to acknowledge the political elements in the conceptual and statutory areas of operation. These can be seen in the Toronto case. As suggested earlier, environmental impact assessment arose at a time of environmental activism in North America and it is, presumably, a norm that statutes will reflect political and social values. To what extent the statutes, in this case, reflect prevailing social ethics or implicit views on welfare distribution are interesting questions, though ones not pursued here.

### 7.7 Suggestions for the Future

The future of impact assessment in Canada is not clear. Its popularity may be a trait of a society that is not only modern but already wealthy. In the world, few countries have the luxury of seriously questioning major projects - urban or non-urban - that hold out the promise of job creation, new wealth and opportunity, etc.

O'Riordan and Sewell have characterised the prospects for EIA on the basis of national political styles. <74> These range from quasi-dictatorial governments with low accountability and low

interest group activity, through representative democracies to pluralist democracies with high political accountability and highly active interest groups who have a prospect of influencing the political process.

Much of what happens to SEIA, whether in town or country, depends on the social consensus achieved on several points and expressed eventually through the political framework:

i) the role of government intervention in private corporate planning

ii) policies and attitudes towards redistribution of wealth

iii) identification of 'public' resources (including environmental and quality-of-life factors) that are to be protected by governments

iv) the role of land use controls in pro-active planning (and the evaluation systems designed to help that process)

v) the willingness of society as a whole to incur at least short-term costs of delay and investigation, **in** favour of possible long-term '**gains**'- economic and otherwise.

Ideally, what is needed is a system that progressively makes clearer a full range of project consequences. This prospect becomes clearer as we develop national policies on database management, as essential sources of information are organized and shared. This need is especially critical in urban areas where economic **modeling** has probably surpassed social system representation, but where both are in early stages of

development. It is not enough, as with the one privately commissioned study produced in the Toronto case, to present a limited range of economic benefits of the proposed stadium while failing to address any of the costs - social or economic. With only a modicum of authority, and reliant on volunteer resources, groups and individuals opposing the stadium were hard pressed to bring any socio-economic arguments before decision-makers.

In Ontario, given the skeletal nature of impact assessment requirements in statute and regulation, and the dearth of urban experience, it is difficult to guess what will, or must, be provided in an urban-based impact assessment. Similar observations appear to apply to the rest of Canada. However, what is likely is that when the occasion for controversy arises - impact assessment in Canadian cities will face many of the familiar questions, but with greater intensity:

- what are reasonable time and space limits on impacts?
- who ought to participate in the evaluation process?
- where does the final adjudication of compensation and mitigation measures take place?
- who attaches final values to non-monetary costs and benefits?
- how do we give priority to one set of social values and interests over another?

Of course, much work in these traditional areas has already been done. Some of what remains is to re-orient part of the teaching of impact assessment and other evaluative techniques to place greater emphasis on urban case studies. The regional aspects of

these applications must be examined in light of the structure of local and regional government in Ontario and elsewhere.

Computer simulations of impact systems are needed which deal specifically with highly developed urban systems. Threshold analysis, ecological analogies and other techniques need to be employed in acquiring further intellectual and functional understanding of human populations in urban systems. Artificial and exclusive distinctions between natural environment and built environment must be carefully applied.

It is also apparent that greater care must be given to identifying project types. Some projects have 'regional' implications solely as a result of their characteristics (e.g. transmission lines, reservoirs, etc.). Others, including major urban projects are regional as a result of their context. The implications of these differences, and the role played by relatively dense populations, diverse overlapping interest groups, unique urban economic structures, regional political structures and so on, need specific attention.

It is instructive to look at two of the most recent publications of the C.E.A.R.C.: Social Impact Assessment - A Research Prospectus <75> and Learning from Experience: A State-of-the-Art Review and Evaluation of EIA Audits <76>. Both deal with the generic problems of EIA methodology but neither makes specific reference to the unique challenges of urban analysis, nor do they acknowledge the limitations of Canada's experience in

urban centres. In fact, the latter document (Learning from Experience) - in reviewing **ten** post-project audits, all eminently rural in nature - dramatically portrays that heritage. What it then fails to address is a critical point - what are the limitations of such case studies and what will we not learn about urban impact analysis from experience with projects in rural regions?

Large projects in rural regions readily become a focus of exclusive attention where, in cities, they may merge into a background of intense economic and social activity. Toronto, for instance, while officially examining the domed stadium project was also engaged in formal consideration of North **America's** largest commercial/retail development (the Railway Lands proposal), an ambitious bid for the 1996 Olympics, and a possible World's Fair application. At the same time it is one of North America's most active commercial markets, and has an expanding population, moving rapidly into adjacent municipalities.

Clearly, resource related projects are and will be important. And if they represent a response to demands for resource exploitation, then much of that demand originates with people, in cities. How people collectively, in cities, organize their lives and take on projects - big and little - produces ripples of effect that go out in **space and time.**

## NOTES

1. In addition to statutory **requirements** for public input, the **Berger Commission inquiry Into the Mackenzie Valley Pipeline** set a remarkable precedent In Canada. Recent work in the **application** of ecological frameworks to environmental assessment is **summarized in publications** by the Federal Environmental Assessment Review Office (**F.E.A.R.O.**) especially by Duinker and Beanlands
2. This fact **was** evident **in discussions with Ontario Ministry of Environment** concerning the site of the Toronto domed stadium. According to one **official**, the only remaining 'natural@ element on the site was a stream - even that **relegated to** the status of "**open sewer**". (**personal communication**)
3. **Similar** comments can be made about another recent document Philosophy and Themes for Research (CEARC, 1986)
4. Impact assessment technology has not focussed, for instance, on the nature of complex urban **distribution** systems, on issues raised by high urban levels of dependence on public goods, on the impacts of major urban projects on urban rents and other complex shiftings of benefits and costs, or on altered spatial relations between workplace and **home, to name** just a few.
5. Please see the discussion in this paper - section 2.4.
6. Timothy **O'Riordan** and W.R.D. Sewell eds., (Chichester: John Wiley & Sons, 1981) p. 10.
7. Reasons for this exemption are provided **in** a letter from Ontario Minister of Environment, James Bradley, to Alderman Dale Martin, City **Council**, dated **May 14, 1986**. It was argued that as a crown corporation, the Stadium Corporation was exempt from statutory review.
8. Stephen Korner, Cateqorial Frameworks (Oxford: Blackwell, 1970) p. lx.
9. It is important to **emphasize** at this point that in the area of cause and effect (**i.e.** the attribution of impacts to events or projects, **but not their signlficance**) the political/integrative level is least relevant. Such questions **are dealt with** more properly at the conceptual and technical levels described **here**.
10. Korner, op. cit., p. 2.
11. R.S.O., ch. 140, p. 1.
12. Ontario Ministry of Environment, General Guidelines for the Preparation of Environmental Assessments (1982) p. 26.



13. Newfoundland, The Environmental Assessment Act 1980, p. 3.
14. Saskatchewan Environment, General Guidelines for Conducting an Environmental Impact Assessment (1984) p. 1.
15. British Columbia, Environmental & Land Use Committee Secretariat, Environmental & Social Impact Compensation/Mitigation Guidelines (1980) p. 3.
16. Ibid, p. 3. (footnote)
17. Alberta Environment, Environmental Impact Assessment Guidelines (1985) p. 2.
18. F.E.A.R.O., Guide for Environmental Screening (1978) p. 12.
19. F.E.A.R.O., Publications (1986).
20. Saskatchewan, Environmental Assessment Branch, Registry of Projects (1985).
21. Environmental Assessment Update, Vol. IX, No. 3, 1986.
22. David Estrin in Canadian Encyclopedic Digest (Title 54), p. 197.
23. The early history of NEPA is reviewed by Coop in James McEvoy and Thomas Dietz, eds., Handbook For Environmental Planning: The Social Consequences of Environmental Change (New York: Wiley & Sons, 1977) Ch. 1.
24. Jerome Rothenberg, Economic Evaluation of Urban Renewal (Washington: The Brookings Institution, 1967).
25. Ibid., p. 4.
26. Ibid., p. 5.
27. Ibid., p. 13.
28. Ibid., p. 20.
29. Ibid., p. 17.
30. Ibid., p. 24.
31. Ibid., p. 25.
32. Ibid., p. 26.
33. This latter issue was debated hotly at O.M.B. hearings in relation to programmed development of regional sub-centres.
34. The wide variety of social discount rates, and the reasons

offered for them, **suggest political factors in their determination.** Discount rates as low as 3% have been justified in certain applications.

35. U.S Department of Commerce, Life-Cycle Costing Manual for the Federal Energy Management Programs (Washington 1980) p.iii.
36. Ibid., p. 2.
37. Rothenberg, o p. cit., p. 20.
38. See for instance Reg Lang and Audrey Armour, The Assessment and Review of Social and Impacts (Ottawa: F.E.A.R.O., 1981) and Gordon Beanlands and Peter N. Dulnker, An Ecological Framework for Environmental Impact Assessment in Canada, (Ottawa: F.E.A.R.O., 1983).
39. The political framework provides both substantial and procedural bridges, **permitting direct comparisons of differing sets of impacts or interests.** The former are **specified priorities or value preferences contained, for example, in terms of reference, while the latter may consist of hearings, appeals etc.**  
  
At this point we see clearly the distinction between **impact assessment** and **impact evaluation** the former takes place at technical levels of analysis while the latter (evaluation) occurs throughout the framework and culminates in the political/integrative function.
40. Environmental Assessment Branch, Guidelines for Pre-Submission Consultation Associated with the Environmental Assessment Act (1985) p. 2.
41. The development of '**Impact**' is described in Glenn R. Desouza, System Methods for Soclo-economic and Environmental Impact Assessment Analysis (Lexington:Lexington Books, 1979)
42. Desouza, op. cit., p. 1.
43. E.J. Soderstrom, Social Impact Assessment (New York: Praeger 1981) p. 98.
44. Ibid., p. 98.
45. Dulnker and Beanlands, o p. cit., p. 92.
46. Ibid., p. 92.
47. F.E.A.R.O. (Ottawa) 1985.
48. Ibid., p. 3.
49. Ibid., p. 3.

50. **Please see this author's article - Globe & Hail, Oct.7, 1986.**
51. The Stadium Study Committee Report (Queen's Park, Toronto 1984) p.2.
52. Ibid., p. 2.
53. Ibid., p. 2.
54. Ibid., p. 7.
55. Ibid., p. 11.
56. Ibid., p. 52.
57. Ibid., p. 53.
58. City of Toronto, March 1985.
59. **Summarized in Railway Lands -Part II:- Implementation Strategy.**
60. City of Toronto, Railway Lands Part II: Report of the Motions Adopted by Council at its meeting of June 17 and 21, 1985, August 1985, p.17.
61. Railway Lands Part II: Implementation Strategy, p. 2.
62. City of Toronto, Railway Lands Part II: Report on Environmental Agreement for Precinct "A" (The Stadium Precinct), February 1986, p. 2.
63. op. cit., pp. 27-28.
64. op. cit., p. 28.
65. Personal notes - Ontario **Municipal** Board hearings, June 1986.
66. Coopers and Lybrand, Toronto 1985.
67. Eudora Pendergrast, City Planning, Spring 1984.
68. Personal notes - Ontario Municipal Board hearings, June 1986.
69. For instance, lengthy documents for a crucial **public** meeting on the Stadium Precinct were unavailable at a first meeting and available only one week before a second meeting. Please see City of Toronto official notice - Toronto Star, February 27, 1986.
70. For a discussion, please see David **Lewis** Stein, Toronto Star, June 23, 1986.
71. Rothenberg, op. cit., p. 27.

72. **Amitai Etzioni, The Active Society(New York: Macmillan, 1968), p. 488.**

73. **Ibid., p. 483.**

74. **O'Riordan and Sewell, op. cit., p. 9.**

75. Ottawa, 1985.

76. Ottawa, 1986.

## BIBLIOGRAPHY

### A. Planning documents pertaining to the domed stadium and Railway Lands proposal:

- city of Toronto, Railway Lands Part II: Proposals, March 1985.
- city of Toronto, Railway Lands part II: Implementation Strategy, March 1985.
- city of Toronto, Railway Lands Part II: Report. Official Plan Statements and Zoning By-Law, July 1985.
- city of Toronto, Railway Lands Part II: Report on the Motions Adopted by Council at its meeting of June 17 and 21, 1985, August 1985.
- city of Toronto, Railway Lands Part II: Memorandum of Conditions, August 1985.
- city of Toronto, Railway Lands Part II: Final Report on Zoning Application for Precinct "A" - The Stadium Precinct, January 1986.
- city of Toronto, Railway Lands Part II: Report on Environmental Asreement for Precinct "A" - The Stadium Precinct, February 1986.
- city of Toronto, Railway Lands Part II: Report on Precinct Agreement for Precinct "A" - The Stadium Precinct, February 1986.
- city of Toronto, Technical Amendments to Draft By-Law . . . Respecting the Stadium Precinct, Land Use Committee, February 1986.

### B. Reports etc., providing background information:

- An Analysis of Economic Benefits of a New Stadium to Metropolitan Toronto and Ontario, The Coopers and Lybrand Consulting Group, October 1985
- Environmental Overview Study Group for Railway Lands Steering Group, DeLeuw Cather Canada Ltd., November 1984.
- Environmental Overview Study for Railway Lands Steering Group - Addendum: Dome stadium Impact, DeLeuw Cather Canada-Ltd., July 1985.
- Extended Sports Facilities at the C.N.E.: A Cost-Benefit Marani, Rounthwaite and Dick for Toronto Baseball Co. Ltd. 1974.
- Notes for a Statement by the Hon. W.G. Davis, Premier of Ontario; Re: A New Stadium for Ontario, Toronto 1985.
- Railway Lands Precinct "A" Bylaw Environmental Report, C.N. Real Estate, February 1986.
- The Onakawana Project: An Example of the Environmental Assessment Process-u Ontario, Royal Commission on the Northern Environment, 1983.
- The Stadium study Committee Report - To The Hon. William G. Davis, Premier of Ontario, Toronto 1984.

The stadium study committee Report - Appendices, Toronto 1984,

**C. Books, monographs etc. providing theoretical background:**

- Block, E.B. An Approach Toward Determining the Impact of Large Projects for Regional and National Planning. Stanford Research Institute, 1973.
- Christensen, Kathleen. Social Impacts of Land Development. Washington: The Urban Institute, Washington, 1976.
- Desouza, Glenn R. System Methods for Soclo-economic and Environmental Impact Analysis. Lexington: Lexington Books, 1979.
- O'Riordan, Timothy and Sewell, W.R.D. eds, Project Appraisal and Policy Review. Chichester: Wiley & Sons, 1981.
- Rothenberg, Jerome. Economic Evaluation of Major Projects: Conceptual Basis of Benefit-Cost Analysis. Washington: The Brookings Institution, 1967.
- Schaenman, Philip S. and Muller, Thomas. Measuring Impacts of Land Development: An Initial Approach. Washington: The Urban Institute, 1974
- Soderstrom, E. 3. Social Impact Assessment. New York: Praeger 1981

**D. Monographs, reports, etc. detailing research and work of the Federal Environmental Assessment Review Office:**

- Beanlands, Gordon and Dulnker, Peter N. An Ecological Framework for Environmental Impact Assessment, F.E.A.R.O., Ottawa 1983.
- C.E.A.R.C. Social Impact Assessment, Ottawa 1985.
- Dulnker, Peter N. and Beanlands, Gordon. Ecology and Environmental Impact Assessment: An Annotated Bibliography, F.E.A.R.O., Ottawa 1983.
- Grima, A.P. et al. Risk Management and EIA: Research Needs and Opportunities, C.E.A.R.C., Ottawa 1986.
- Lang, Reg and Armour, Audrey. The Assessment and Review of Social Impacts, F.E.A.R.O., Ottawa 1981.
- Munro, David et al. Learning from Experience: A State-of-the-Art Review and Evaluation of Environmental Impact Assessment Audits, C.E.A.R.C., Ottawa 1986.