PROTECTING OUR URBAN ENVIRONMENT: ENVIRONMENTAL IMPACT REVIEW AND THE CITY OF WINNIPEG

by

Curwood Ateah

A thesis

submitted to the Faculty of

Graduate Studies of the University of Manitoba

in partial fulfillment

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To my wife, Christine

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ABSTRACT

This document is concerned with the importance of the environmental impact assessment process. The inquiry is comprised of a literature review and a case study.

The literature review focuses on the development of the environmental impact assessment process in the United States and Canada, (in particular the City of Winnipeg, Manitoba), and the problems associated with it. The case study examines Winnipeg's Fort Garry - St. Vital Transportation Corridor.

This document concludes with a recommendation for the City of Winnipeg on how it can reduce the number of future negative enviornmental impacts.

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CHAPTER 1

INTRODUCTION

A. Problem

For many years environmental considerations were ignored in the development of our cities in the United States and Canada. To try and enhance our cities and protect them from environmental degradation, isolated short-term treatments were used. With the environment unbelievably complex these treatments usually either delayed or mitigated the problem with the problem reoccuring at a later date.

During the late 1960's and part of the 1970's, a new recognition and concern of the dependence that man has on the long-term viability of the environment for continuing human life emerged. This new ethic played a significant role in developing government laws and regulations promoting environmental protection and conscience. Governments created Water and Air Acts or environmental protection bodies, and a plethora of environmentalist groups surfaced.

As a result of this new concern for environmental quality there was a recognition that man must examine his actions so as to ensure the long-term viability of his environment. As a result of this recognition, environmental impact assessment surfaced as a way man could logically assess

his proposed actions prior to making a decision that could harm the environment.

Environmental impact assessment was derived from economic cost-benefit studies with an environmental component added. Environmental impact assessment was praised and touted by some as a way of preserving the environment in a rational manner. However, it was also damned and rejected by others as a way of stifling economic growth and increasing development costs.

With the environment encompassing not only such areas as land, air, and water quality, but less tangible areas such as aesthetics, community needs and sociology, many decisions were very subjective and could not be supported by scientific evidence. As a result, environmental impact assessment was further attacked by its opponents and lost a great deal of its initial appeal to elected government representatives and the public. Another important factor that led to the reduced appeal of the environmental impact assessment process was the question of energy shortage. Environmental impact assessment was perceived as a tool used by environmentalists to stop energy development that was needed for our cities to thrive. The energy shortage eventually led government elected representatives to put the energy question before the environment question.

Environmental impact assessment is still with us, but it is in a stationary state. It is being used to assess

potential environmental impacts, but it is still relatively in an infant state because it has not changed or progressed (over the last five to seven years) from its initial promising beginning in the later 1960s/early 1970s.

The City of Winnipeg was the first municipality in Canada to adopt EIA in 1972. From 1972 to 1977 its performance was awkward, but was beginning to show signs of improvement. In 1977 the Provincial Government repealed the 1972 legislation and replaced it with new discretionary legislation. Since then, no more environmental impact reviews have been prepared and a number of major public works projects have been built. As a result of these public works projects there have been major negative environmental impacts (ie. noise pollution). Could the EIR process have stopped or mitigated these impacts?

B. Statement of Purpose

The purpose of this thesis is to review major aspects of the environmental impact assessment process from when it was first introduced as public policy in the United States in 1970 to its present day application in the City of Winnipeg.

C. State of Art

It has been over ten years since environmental impact assessment (EIA) was first introduced as public policy in the United States. The U.S. legislation, known

as the National Environment Policy Act (NEPA), is regarded as landmark legislation. Over the last ten years its performance has been awkward and uneven, but it has been touted by environmentalists and some public officials as the most important environmental legislation ever enacted in the U.S.

NEPA made the consideration of environmental impacts a legal requirement in public decision-making. Legislation in some other governmental bodies (eg. California) carried the process one step further and required the consideration of environmental impacts in private decision-making.

With the federal legislation, federal agencies (for the first time) were required to prepare and distribute for public comment, an environmental impact statement for all major projects that might significantly affect the environment. The environment impact statements were required to identify the environmental impact of the proposed action; any adverse environmental effects which cannot be avoided should the proposal be implemented; alternatives to the proposed action; assess short-term vs. long-term effects; and any irreversible and irretrievable commitment of resources. These requirements were upheld by the U.S. judicial system and failure to meet these requirements could have meant that the project was illegal.

EIA was an innovation in public decision-making and was soon adopted by other government bodies inside and outside

of the United States. Various EIA requirements can be found at all levels of government in the U.S., Canada, and abroad. With a number of governments in various countries adopting EIA in various forms, a great deal of knowledge and experience has accumulated. However, while the need for EIA has been accepted, it is still being criticized for a number of reasons.

First of all, the majority of environmental impact statements are poorly prepared. Government and private agencies are still unsure of what an adequate statement should entail. Decision-makers and the public must still leaf through detailed documents that are designed to defend legal confrontations rather than to provide information and knowledge about potential environmental impacts. The environmental impact statement techniques are still really in their infancy and agencies are still trying to develop a format suited to both decision-makers and the public.

Second, many of the questions that manifested when federal agencies started to do impact statements in 1970 remain unresolved today. Questions like:

(1) When should an EIS be undertaken?

(2) When should the public be involved in the process?

(3) Should private agencies have to do EIAs?

(4) Should the process be integrated or separate from the planning process?

(5) What environmental questions should be taken into account?

(6) Should the courts be involved?

These and many other questions are still contentious issues. The answers to these questions will eventually determine the adequacy of the EIA process. Until these questions are answered the full potential of the EIA process as a decision-making tool and a way of protecting our environment will not become evident.

Environmental impact assessment has changed over the last ten years with new legislation, policies, and procedures. The legislation, policies, and procedures taken by governments to implement EIA makes a fundamental difference in its effectiveness and outcome. Basically there have been three approaches used to institutionalize EIA into the decision-making process of government and private agencies. The first deals with specific EIA legislation which requires an EIA unless otherwise noted. Examples of this approach includes:

(1) The U.S. National Environmental Policy Act of 1970,
(2) Section 653 of the City of Winnipeg Act of 1972,
(3) Australia's Environmental Protection Act of 1974 and,
(4) Ontario's Environmental Assessment Act of 1975.

The second approach deals with establishing a broad policy and administrative procedure. This approach was chosen in Canada by the Federal Government with the Environmental Assessment and Review Process of 1973; by the federal government in Germany; and by the federal government in New Zealand.

The third approach incorporates the EIA process into

physical planning and pollution control legislation. This approach is favoured by a number of provincial governments in Canada, such as British Columbia and Quebec and OECD countries as Norway, Sweden and Switzerland.

With so many government and private agencies preparing environmental impact statements, a number of EIS techniques have emerged. There are a number of different techniques with a great deal of overlap and variation among the techniques. Whether or not any of these techniques prove to be useful in examining environmental impacts or effectively improving environmental quality relies upon a number of factors like:

(1) whether sufficient money, resources, time and expertise are available; and

(2) whether subjectivity (either intential or unintentional) can be overcome or mitigated.

There are five main impact assessment techniques:

(1) interdisciplinary discussion
(2) checklist
(3) overlays
(4) matrices
(5) networks

No matter what approach or technique is implemented for environmental assessments; for it to be effective it must be incorporated into the planning process so that options for improving or mitigating environmental impacts can be undertaken at the appropriate time. However, the relationship between EIA and the planning process is still unclear. This relationship depends upon the planners' view of EIA and where

in the planning process EIA occurs. Planners who have had involvement with EIA view it in at least three ways:

(1) as a separate decision-making process;
(2) as an addition to the planning process and;
(3) as a new planning approach.

If EIA is perceived by planners as a separate decision-making process, rather than part of the planning process or a new planning approach, it is usually undertaken to "satisfy the requirements" or "to justify decisions already made." As an addition to the planning process, EIA is viewed as a tool for adding more information to the planning process, or as a new planning approach, it can change the present planning process.

Where in the planning process EIA occurs will determine its effectiveness to foresee potential environmental impacts. EIA must be incorporated into the project at the conceptual stage for it to function properly. Failure to involve the EIA process in the initial planning stages will reduce its usefulness.

One of the most difficult problems facing the EIA process is when to involve the public in the assessment and review stages. There is a general feeling that public participation is imperative in the EIA process for it to function properly, but there is no concensus on how this should be accomplished. There are a number of fundamental questions confronting EIA practitioners:

(1) when should the public become involved?

(2) what information should be allowed to the public, and when should it be given?
(3) what are the objectives of public involvement in EIA?

The main criticisms of the present approach to public involvement is directed at the fact that participation is concentrated at the end of the process (usually only for review and criticism). Other less severe problems range from a lack of financial and expert advise to public hearing formats that inhibit public response.

Will EIA overcome or mitigate many of the difficult problems confronting it? Will it emerge from its present stationary state to once again be espoused as a way of protecting and enhancing our environment? These questions must be answered before the EIA process will be a respected and utilized tool.

D. Methodology

The study consists of four themes. The first is a review of existing literature dealing with the United States' experience (Chapter 2) and the Canadian experience (Chapter 4) with environmental impact assessment.

The second theme consists of a literature review of environmental impact assessment techniques (Chapter 3). This chapter is located between the United States' and Canadian chapters because the majority of the techniques have developed primarily from the United States' experiences.

The third theme examines the environmental impact

review process and the City of Winnipeg (Chapter 5). The method of approach consisted of a literature review and personal interviews.

The final theme is devoted to a case study of the Fort Garry - St. Vital Bridge (Chapter 6).

The four themes, collectively will serve as a basis for presenting recommendations regarding the City of Winnipeg's environmental impact review process.

CHAPTER 2

THE UNITED STATES' APPROACH: AN OVERVIEW

A. Introduction

It has been over ten years since environmental impact assessment was first introduced as public policy in the United States. Through the decade, its performance has been uneven, to say the least, but the United States National Environmental Policy Act is still regarded as landmark legislation.

This paper will present an overview of the United States' experience with environmental impact assessment. First, a review of the National Environment Policy Act which was enacted into law on January 1, 1970, will be presented. Second, how federal agencies responded to this legislation will be analyzed. Many federal agencies tried to ignore the National Environmental Policy Act when it was enacted, but through environmentalists' actions and judicial rulings they became more receptive. Third, the manner in which the judicial system became involved to clarify ambiguities in the Act will be reviewed. Finally, a look at state and local governments' versions of their own environmental impact assessment legislation. California will be

presented as an example of state legislation and requirements.

B. National Environmental Policy Act

On January 1, 1970 the President of the United States signed the National Environmental Policy Act (NEPA) into law--a law promoting enjoyable and productive harmony between man and his environment. The Act was brought about as a means of requiring environmental considerations to be comprised in the decision-making processes concerning federal activities and projects. Specifically,

> NEPA requires each federal agency to prepare a detailed statement of environmental impact before proceeding with any major action, recommendation, or report on proposals for legislation that may significantly affect the quality of the human environment.[1]

The then President Nixon accompanied the signing of the National Environmental Policy Act with these remarks:

> The 1970's absolutely must be the years when America pays its debt to the past by reclaiming the purity of its air, its waters and our living environment. It is literally now or never.[2]

NEPA is a federal law that recognizes the dependence that all of society has on the long-term viability of the environment for sustaining life. Section 101 of the Act states the intent of the U.S. Congress:

> The Congress, recognizing the profound impact of man's activity on the interrelationships of all components of the natural environment...declares that it is the continuing policy of the Federal Government to use all practicable means and measures...to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic and other requirements of present and future generations of Americans.

The heart of NEPA is Section 102(2)(c), which requires that:

> ...that to the fullest extent possible...(2) all agencies of the Federal Government shall...
>
> (c) include in every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on...
>
> (i) The environmental impact of the proposed action
>
> (ii) Any adverse effects which cannot be avoided should the proposal be implemented
>
> (iii) Alternatives to the proposed action
>
> (iv) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity
>
> (v) Any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

In order to fulfill NEPA requirements an environmental impact statement is prepared by the federal agency which is undertaking any major action that significantly affects the quality of the human environment or which is controversial because of environmental reasons. An environmental impact statement may be defined as "the documentation of an environmental analysis of a project or action with a potential for environmental impacts which are either significant or highly controversial."[3] The environmental impact statement is required by NEPA to be made available for comment by the appropriate federal, state, local agencies and by the public.

When the NEPA was first discussed by Congress, it was

seen as a comprehensive attack on narrow-minded federal agency decision-making schemes. As Senator Jackson stated in the introduction of a report to a committee on a national environmental policy (which later became NEPA):

> Throughout much of our history, the goal of managing the environment for the benefit of all citizens has often been overshadowed and obscured by the pursuit of narrower and more immediate economic goals....
> This report proposes that the American people, the Congress, and the Administration break the shackles of incremental policy-making in the management of the environment.[4]

NEPA was enacted in the United States just when citizen interest began to emerge over the quality of the environment. The news was full of stories involving environmental degradation such as the Santa Barbara oil spill. The U.S. Congress saw the need for some form of protection for the environment, so it enacted the NEPA. However, they did not realize that they were placing an important weapon in the hands of citizen activists.

It has been no surprise that the NEPA has been the focus of considerable debate:

> A law that declares a sweeping national environmental policy where none existed, provides a statutory mandate for all federal agencies to consider the environmental impact of their actions, and establish an environmental policy coordinating body [the Council on Environmental Quality] in the office of the president must be considered a major piece of legislation of the sort likely to engender broad conflict.[5]

However, despite NEPA implications it was not a rigorously debated piece of legislation in 1969. There was neither substantial news coverage nor lobbyists from resource

development or environmental interests.

From reading early literature on the history of NEPA it is obvious that the Congress, press, resource developers, environmentalists and federal agencies did not realize its future implications. As several congressional staff members who were involved in NEPA's development stated:

> If Congress had appreciated what the law would do, it would not have passed. They would have seen it screwing public works....The timing of the bill complicated the way it worked. Had it passed a year earlier or later, things would have been far different. If Congress had known what it was doing, it would not have passed the bill.[6]

In summary, the congressional intent established by NEPA was: (1) the declaration of a new comprehensive national policy on the environment; (2) the requirement that federal agencies respond more to environmental matters by assessing the environmental impacts of their proposed actions by preparing an environmental impact statement; (3) an order that the President annually assesses the environmental quality of the nation; (4) the creation of the Council on Environmental Quality, which is an independent adivsory body that reports to the President and is responsible for reviewing environmental impact statements created by other federal agencies; and (5) "the massive mobilization of lay and professional talent and private and governmental resources to deal systematically, through scientific and interdisciplinary approaches, with existing and future environmental problems confronting the nations and the world."[7]

C. The Council on Environmental Quality

The Council of Environmental Quality (CEQ) was established in Title 11 of NEPA to oversee environmental concerns in the Executive Office of the President. It consists of three presidentially appointed members, assisted by a small professional staff. "It was given the functions of advising the president, monitoring other agencies' compliance with NEPA, and providing information to the public on environmental matters."[8]

The U.S. Congress created CEQ to assist and advise the President on environmental matters and to be a watchdog of federal agencies to make sure they comply with the Act. CEQ has a number of responsibilities such as developing guidelines for agency implementation of the Act's procedures; review agency environmental impact statements; and act as a public ombudsman. While it could advise, "CEQ had no power to compel agencies to prepare impact statements or revise inadequate draft statements."[9] However, the United States' courts have consistently held that NEPA's requirements are judicially enforceable, so federal agencies usually comply with the CEQ to avoid possible legal assault by citizen groups.

In becoming a presidential advisor, CEQ was to provide a generic evaluation of federal programs and to recommend (when needed) changes in program direction. Also, "CEQ was intended to be a body within the government to which

citizens could turn for objective information on the state of the environment."[10] To accomplish this, CEQ used guidelines, memoranda, and informal meetings to promote compliance with NEPA by federal agencies to promote citizen involvement.

Most of CEQ's time (approximatly two-thirds) was spent on the preparation of the president's environmental program and the writing of an annual report. The report discusses such issues as the economy and the environment, the law and the environment, and international cooperation with other countries such as Japan, Canada and Mexico.

Initially, CEQ was praised by environmentalists as a protector of the environment. However, CEQ lost some of its public appeal when the courts began to capture the spotlight as the most effective body for protecting the environment and assuring the implementation of the NEPA.

Duties and functions of CEQ may be summarized as follows:

1. assist and advise the President in the preparation of the Environmental Quality Report as required by NEPA;

2. gather, analyze, and interpret, on a timely basis, information concerning the conditions and trends in the quality of the environment, both current and prospective;

3. review and appraise the various programs and activities of the federal government in light of the policy of environmental protection and enhancement, as set forth under Title 1 of NEPA;

4. develop and recommend to the President national policies to foster and promote improvement of environmental quality to meet many goals of the nation;

5. conduct research and investigations related to ecological systems and environmental quality;

6. accumulate necessary data and other information for a continuing analysis of changes in the national environment and interpretation of underlying causes;

7. report at least once a year to the President on the state and condition of the environment; and

8. conduct such studies and furnish such reports and recommendations as the President may request.

D. Federal Administration's Response

To the federal agencies, the NEPA's broad policy objective meant that they would have to incorporate environmental goals and information in their decision-making process. To all federal agencies, environmental protection would have to be a high priority. The federal agencies would be responsible for evaluating the environmental impact of their proposed projects and they would have to analyze a wide range of alternatives to such actions. They would also have to assure that any negative environmental effects were understood and compensated for, to the fullest possible extent:

> Agencies would also have to be forthright with the public about their actions' environmental impacts. Impacts would have to be revealed sufficiently early so that environmental protection agencies and the public

would be able to respond meaningfully to agency initiatives.[12]

There were federal administrative attacks against the NEPA by various federal agencies. John Nassikas, Chairman of the Federal Power Commission (FPC) was one of the NEPA's most persistent critics. In his remarks before the National Press Club in April, 1973 he commented:

> There must be a critical reappraisal of the procedural requirements of the National Environmental Policy Act. The detailed, and at times, redundant procedural steps required by that statute have proven to be a windfall for those bent on blocking any and all energy development. Opponents of nuclear power, offshore oil and gas exploration and the development of Alaskan oil and gas resources have succeeded in seriously delaying these vital energy projects by utilizing the procedural roadblocks of NEPA. Often substance yields to form to the prejudice of public interest....The procedural nightmares of current legislation requirements should be carefully re-examined and revised to avoid inordinate delays.[13]

EPC's attitude was shared by the Interstate Commerce Commission (ICC). In a notice titled "Energy Crisis and the Need for Emergency Transportation Legislation" published in the U.S. Federal Register, ICC commented:

> Environmentalists as well as others interested more in economic advantage have used NEPA to delay Federal action. Strained interpretations of NEPA seem to disregard the concept of "justice delayed is justice denied." In this period of severe energy shortages, one need only examine the circumstances surrounding a number of Commission activities to note how damaging delays may be....[14]

However, as strange as it may seem, the comment of Atomic Energy Commission Chairman, Dr. James Schlesiger, differed from EPC-ICC views:

> My remarks are in no way intended to criticize the handling of NEPA by the courts. NEPA, overall, has resulted in a healthy reorientation of governmental perspectives and priorities; and the courts have in various instances played a useful, even sobering role in the process.[15]

The NEPA was basically intended for those federal agencies whose past disregard for environmental matters had produced a number of undesirable environmental consequences. It was directed to coerce agencies such as the Federal Highway Administration and the Agricultural Department

> to become environment conscious, to bring pressure upon them, to respond to the needs of environmental quality,...and to reorient them toward a consciousness of and sensitivity to the environment.[16]

The framers of NEPA felt that federal agencies should be required to consider environmental consequences and the host of environmental controversies that ensue. They saw that many environmental controversies had "been caused by the failure to consider all relevant points of view and all relevant values in the planning and conduct of Federal activities."[17] This failure was directed at technicians who overlooked the

> humanistic point of view concerning the relationship between man and his surroundings; to difficulty in measuring environmental impacts; and to subjugation of environmental management needs to budgetary and fiscal considerations.[18]

The NEPA was intended to make federal agencies more cognizant of unanticipated, long-term environmental costs produced by their actions. Federal agencies could no longer use the incremental approach, but would have to

identify and evaluate environmental impacts from the beginning of the process to the end. It was anticipated that because agencies would be under review by various environmental protection groups, they would minimize future criticism by objectively evaluating environmental impacts in detail.

The environmental impact statement procedure was designed to encourage federal agencies to outline the trade-offs between various actions. It was intended that descriptions of alternatives be provided early enough in the decision-making process and sufficient in detail so that the reviewers of the EIS could consider the principal recommendations along with the alternatives. This would help reduce after-the-fact expenditures for the abatement of negative externalities (i.e., increased property taxes), and reduce environmental degradation.

Under the NEPA each federal agency is required to prepare an EIS (on any proposed actions), containing the following information:[19]

1. prepare an evaluation of the environmental implications of its own proposed policies and actions;

2. determine various alternatives to proposed policies and actions, including the alternative of no action;

3. indicate specific adverse effects which cannot be eliminated;

4. indicate the resources committed to the proposals including depletable natural resources;

5. assess short term and long term implications of the proposals;

6. make tentative draft copies available to the public and to other federal agencies for review and comment;

7. revise the tentative draft to reflect comments from public hearings and from agencies and prepare final EIS copies in a "full disclosure" form suitable for court and administrative agency review when necessary.

In reacting to NEPA's demand for change,

> agencies could develop procedures that would mark a vast departure from their customary forms of operation; or they could attempt to ignore NEPA as much as possible, dampen its impact, and try to carry on business as usual.[20]

With the NEPA not very specific, federal agency decision-makers were left with the task of deciding the manner in which NEPA would be implemented. In general,

> they demonstrated little imagination in interpreting the statute's key message: identify and measure environmental impacts; evaluate various alternatives; involve and advise the public to the greatest possible extent about the bases of agency action.[21]

There were several general patterns of agency response to NEPA requirements, namely:

1. some agencies felt that compliance might interfere with their achievement of their traditional missions (whether it be to build highways or supply energy);

2. some agencies (most notable the Environmental Protection Agency) regarded the NEPA as superfluous because they already implanted environmental considerations in their

decision-making process;

3. some agencies (i.e., the Corps of Engineers), did begin to try and implement NEPA requirements because of environmental pressures; and

4. some agencies saw a minute reward to be gained by allocating scarce agency resources to environment concerns.

In the CEQ's second annual report, it observed that

> ...environmental statements were often written to justify decisions previously made rather than provide a mechanisms for critical review of such decisions; that consideration of alternatives was often inadequate; and that agencies frequently defined their mission so narrowly as to neglect their responsibility to protect the environment.[22]

As much as this criticism is justified, federal agencies were not totally responsible. Because of the vagueness and imprecision of the NEPA, federal agencies had the responsibility to respond to several key questions which were not succinctly identified in the Act. When should statements be prepared? What actions require statements? What analysis should statements contain? How should impact statements be reviewed? How should the public be involved? These and other questions were not spelled out in the NEPA. It was left up to the federal agencies to figure out these questions for themselves.

An example of the problems facing agency decision-makers was, what actions require EIAs? Here a threefold setting was in order to distinguish three causes of action.

First, minor decisions not usually having significant

> impact on the human environment were more or less automatically exempted from environmental review and impact statements preparation procedures. Second, there were those actions that usually had such a great environmental impact they...almost always required impact statements. Sandwiched between those two classes were actions that might require impact statements if the magnitude of their environmental impact was sufficiently large.[23]

Conflict usually precipitated over whether a project belonged in class 1, 2, or 3, with agency actions often leading to environmentalists-agency confrontations in the courts.

To settle some of the perplexing questions encountered by federal agencies, the judicial system was brought on to the scene.

E. NEPA and the Judicial System

On January 1, 1970 the newly enacted NEPA was a sleeper, a law whose future implications had not been perceived either by the President or Congress. As Professor Sax stated:

> At the time this law was enacted it was not obvious to anyone, including the legislators who voted for it, that it would lead to litigation in the courts. The general thought was that it was, in essence, a message from the Congress to administrative agencies, telling them they must think about, study, and report on the environmental effects of any action they proposed to take. It turned out that it was not long before interested organizations and citizen groups began to use the Act to institute litigation.[24]

The growth of NEPA and environmental law was turbulent, to say the least. The NEPA was at times praised and at times damned, as were the environmentalists using it against federal agencies.

The environmentalists' movement to the courts underlay a number of factors, such as

> a general distrust of agencies, a desire to amplify NEPA's vaguely worded action-forcing procedures, and the quest for a new weapon to use against actions of questionable jurisdiction and adverse environmental impact promoted by development-oriented congressional or agency interests.[25]

The judicial system was quite receptive to the environmental cause. This was evident by a lowering of courtroom entry barriers which allowed not only environmentalists, but also other broad interests (such as community or minority groups) to challenge federal agencies. One way that the courts used their discretionary power to assist environmentalists was their refraining from setting high bonds.

Environmentalists sought judicial redress of grievances for a number of reasons.

> They regarded court rooms as more impartial forums than administrative hearing rooms; they believed environmental quality had been given insufficient consideration by mission-oriented agencies....[26]

The environmental movement paralleled the earlier consumer protection movement which also sought redress through the courts: "Both widened the scope of conflict over issues to include the courts when they perceived that nominally responsible government administrators were not acting in what the activists viewed as the public interest."[27] Lawsuits also served the function of bringing legislative and public attention to an issue.

In essence, the courts provided an outlet for those

who felt that federal agencies had abused their discretionary powers. The courts

> could provide access to decision making where it had not been provided before; they could demand inclusion of values that hitherto had been excluded and they could insist on non-arbitrary weighing of values once such values had been deemed relevant to a decision.[28]

Four important court rulings in this regard are: Calvert Cliff's Coordinating Committee v. Atomic Energy Commission;[29] Greene County Planning Board v. Federal Power Commission;[30] Ely v. Velde;[31] and Davis v. Morton.[32]

The early litigation was usually of two kinds. First, that an agency had failed to do an impact statement although the law required them to do one. And second, that if the agency had done an impact statement, it was inadequate because it did not review the issues required by the Act, or did so in a superficial manner so that the requirements of the Act were not fulfilled.

Up to 1973, there were approximately 250 reported court cases under the NEPA. In terms of litigation in the environmental area, this was the most significant environmental statute in the United States. Much of the litigation dealt with two questions. What are the parameters of the statutory requirements of the NEPA? Who must file an EIS?

> The courts have been quite liberal in their reading of the statute in answering both questions. They have also been insisting that the requirements of the statute are not met adequately by a sentence or paragraph which states that there will be no significant, adverse effects which cannot be avoided. The courts require that the statements be quite detailed,

and speak knowledgeably and fully about the issues set out in the law.[33]

The Trans-Alaska pipeline controversy was the first major environmental impact statement case in the courts, and as a result several things have happened. First, a wealth of information regarding environmental and economic problems of the proposed Alaska pipeline were produced. Second, it produces as an offshoot a considerable amount of literature regarding the North, outside of the impact statement itself. Third, it made the Alaska pipeline a public issue. Another area where the NEPA has produced a good deal of litigation is that of nuclear power plant projects. Instead of the U.S. Atomic Energy Commission deciding behind closed doors what is right for the public, nuclear power plants have become very much an open and public issue. "The issues involving atomic energy problems which had not even appeared as issues in the press, have now become very much matters of concern."[34] The issues range from radioactive waste disposal to thermal discharge into water bodies to the problem of disposing tailings from uranium mining.

Since 1973 the courts have ruled on some of the previously mentioned questions facing federal agencies, namely: what actions require EIAs? what analysis should statements contain? when should statements be prepared? how should the public be involved? and, how should statements be reviewed by other agencies?

An example of court ruling on these questions, the question of what analysis should statements contain, will briefly be reviewed. Here, the courts have ruled that

> agency analysis would have to include all known possible environmental consequences; all reasonable foreseeable impacts. Genuine, as opposed to perfunctory compliance with NEPA would require an agency to explicate fully its course of inquiry, its analysis and its reasoning.[35]

For more information, there are a number of important decisions such as NDRC v. Morton;[36] EDF v. Corps of Engineers;[37] and Committee for Nuclear Responsibility v. Seaborg.[38]

In summarizing the NEPA and the judicial system, the early 1970's saw environmentalists manipulating the resources of the judiciary to their own advantage: "The importance of the environmental interests and the seeming lack of agency response to NEPA produced in many instances judicial decisions requiring strict agency compliance with the statute."[39] The courts generally delivered decisions against the agencies, so the agencies could not afford to ignore NEPA blithely.

NEPA's meaning has been clarified in the United States as courts have shown considerable willingness to overrule deliberate agency efforts to undermine the Act. The Act's requirements were further elaborated as the courts decided on environmentalists' lawsuits alleging that federal agencies' procedural efforts do not carry out the congressional

mandate:

> The willingness of the courts generally to define NEPA's procedural requirements, to require impact statements for a broad range of actions, and to set criteria for impact statement adequacy, meant that agencies had to adapt their behaviour to a new legal environment.[40]

F. United States Local and State Environmental Policy Acts

The popularity of the NEPA and the faith its backers have in the process is demonstrated by the proliferation of state environmental policy acts. California has enacted an environmental policy act which enlarges the scope of the federal act to include state, local and private projects judged to have a significant effect on the environment.

State and local governments have recognized that direct actions and indirect sanctions (i.e., the granting of licenses or permits) can advocate growth which may be environmentally destructive. State and local governments are increasingly cognizant of the fact that they must incorporate environmental concerns into their decision-making process. The state and local environmental impact assessment is one element of the manifestation of this growing awareness.

In response to the national trend in the United States for increasing public control over private development, environmental impact assessment has grown and will continue to do so. Environmental assessment first began to appear in liberal land use states and subsequently in the more

conservative states. Environmental impact assessment is becoming more sophisticated and an integrated way to plan and manage growth so as to be less environmentally harmful.

As of 1977, "approximately thirty-two jurisdictions have followed the federal lead and have acted either legislatively or administratively to establish NEPA-equivalents within the confines of their political bounds."[41] State environmental policy acts or guidelines are sometimes referred to as State Environmental Policy Acts (SEPA's) or little NEPA's. States that have adopted legislation similar to the federal approach are California, Connecticut, Indiana, Maryland, Massachusetts, Minnesota, Montana, North Carolina, Puerto Rico, South Dakota, Vermont, Virginia, Washington and Wisconsin. States that have similar legislation but limited applicability are Alabama, Arkansas, Colorado, Delaware, Florida, Hawaii, Mississippi, Nevada, New Hampshire, New Jersey, Pennsylvania, and Rhode Island. Administratively published NEPA equivalents are in the states of Arizona, Michigan, New Mexico, New York, Texas, and Utah. States that are showing some interest in environmental impact assessment legislation are Alaska, Georgia, Idaho, Illinois, Iowa, Kentucky, Louisiana, Maine, Missouri, North Dakota, Oregon, South Carolina, Washington, D.C., and West Virginia. The remaining states of Kansa, Nebraska, Oklahoma and Tennessee have shown little or no concern for environmental impact assessment legislation.

Local and county level governments' environmental impact assessment parallels environmental impact assessment among their state acts (in most instances):

> The counties and localities that impose an environmental impact assessment requirement frequently derive their authority from a "little NEPA" or an administrative equivalent which exists at the state level. The manner in which environmental impact assessment regulations have been implemented varies considerably by county and locality.[42]

Environmental impact assessment requirements vary considerably among the states, cities and counties that require them. However, in most cases,

> the variations are superficial, reflecting particular local environmental concerns or emphasis. All environmental assessment regulations trace their linkage from the same venerable antecedent--NEPA.[43]

The most common environmental technique at the state, city and county level is the checklist approach. In terms of substance of EIS's,

> the quality of the filed EIS seems to vary directly with the longevity of state experience with EIS. Local EIS filed in California and Colorado are better than those filed in Maryland or Pennsylvania. Quality also appears to be related to the size of the city which files the EIS.[44]

Several major problems have confronted state and local agencies charged with EIS responsibility. This has resulted in some cases from a lack of enforcement:

> Typically, an interagency committee, a state environmental council, the state planning agency, or natural resources department is given the responsibility of coordinating the program and reviewing the impact statements, but without any specific authority to insure that all agencies are complying with EIS requirements.[45]

The result is that some agencies are slow to establish the necessary procedures, which causes implementation to be uneven.

A major problem with EIS preparation is the difficulty in finding qualified personnel. "A principal problem at all levels of government where EIS preparation is required is the agency staff time diverted from other important activities to EIS preparation and review."[46] Some local planning agencies in California report that as much as thirty percent of total staff time was devoted to environmental assessment problems in 1973. Another difficulty (that also plagued federal agencies with NEPA) relates to defining what constitutes a "major" action that "significantly affects" the environment at both state and local levels where literally thousands of large and small private and public developments are made annually.

California was the first state to adopt a NEPA-type act when the California Environmental Qualities Act (CEQA) became law on September 17, 1970. CEQA's intent is described as follows:

> It is the intent of the Legislature that all agencies of the state government which regulate activites of private individuals, corporations, and public agencies which are found to affect the quality of the environment, shall regulate such activities so that major consideration is given to preventing environmental damage.[47]

The CEQA requires a finding of

significant effect on the environment if one or more

of the following conditions exist:

(a) a proposed project has a potential to degrade the quality of the environment, curtail the range of the environment, or to achieve short-term, to the disadvantage of long-term, environmental goals;

(b) the possible effects of a project are individually limited but cumulatively considerable; and

(c) the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.[48]

Like the environmental impact statements prepared by federal agencies under NEPA, an environmental impact review is prepared by state, local and private agencies under CEQA. CEQA requires that an environmental impact review must include the following:[49]

a. The environmental impact of the proposed action.

b. Any adverse environmental effects which cannot be avoided if the proposal is implemented.

c. Mitigation measures proposed to minimize the impact.

d. Alternatives to the present action.

e. The relationship between the short-term uses of man's environment and the maintenance of long-term productivity.

f. Any irreversible environmental changes which would be involved in the proposed action, should it be implemented.

g. The growth-inducing impact of the proposed action.

If you refer back to Section 102 of the NEPA, items a, b, d, and e are taken directly from it. As a result California agencies have also had problems interpreting the Act.

The problem of local and state agencies being unclear

with regard to the requirements of CEQA was particularly due to the generic wording of the Act and also because it focussed on issues that had no administrative or legal precedent. "It was not clear whether EIR was applied only to governmental projects or whether it also applied to those projects which were authorized under government licenses and permit procedures."[50] The persistent question of what the term "significant effect on the environment" which has plagued agencies throughout the United States since NEPA and its progeny were enacted was also a problem with CEQA.

As with NEPA the courts have had to clarify CEQA. The first major clarification of CEQA occurred when the California Supreme Court ruled a precedent-setting decision in what has become known as the Mammouth case.[51] However, although the case resolved some conflict, within a week of the decision more confusion ensued. As a result, Assembly Bill 889 was passed:

> The legislature required in Assembly Bill 889 that the California Resources Agency prepared guidelines for implementing the Act. These guidelines, which include eleven explanatory articles and four informational appendices, are essential to defining and understanding the intent and specific application of CEQA.[52]

The Mammouth decision and subsequent guidelines and amendments of CEQA has meant that the requirements of the EIR affect both private and public projects at local and state levels.

In summarizing state and local government response

to environmental assessment legislation, environmental impact statement (or EIR) preparation and review has become a major concern of most local planning agencies. Where EIS has been integrated into the normal planning routines the quality of planning decisions regarding the environmental policies undoubtedly improved.

G. Conclusion

The National Environment Policy Act clearly established itself as one of the most controversial environmental measures of all time. It was likely that no federal act of modern times was read by a greater proportion of federal officials. However, NEPA's ambiguities appear to have been at the bottom of much of the conflict regarding the Act. With state and local governments following in the footsteps of the federal government and implementing their own environmental impact assessment acts, these same ambiguities have manifested. The judicial system in both instances has had to try and clarify these ambiguities because of litigation by environmentalists' who felt that the government agencies had not complied with the NEPA.

NOTES TO CHAPTER 2

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4. S. Comm. on Interior and Insular Affairs, 90th Cong., 2d Sess., "A National Policy for the Environment" (Comm. Print 1968), cited in "Hearing On S. 1075, S. 237 and and S. before the Senate Comm. on Interior and Insular Affairs," 91st Cong., 1st Sess. 30, (1969).

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13. "The National Energy Crisis Revisited," speech delivered April 10, 1973.

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30. Refer to 455 F. 2d 412, 2ELR 20017 (2d Cir.), cert. denied, 41 U.S.L.W. 3184 (October 10, 1973).

31. Refer to 321 F. Supp. 1088, 1 ELR 20082 (E.D. Va.), rev'd, 451 F. 2d 1130, 1 ELR 20612 (4th Cir. 1971).

32. Refer to 335 F. Supp. 1258, 2 ELR 20003 (D.N.M. 1971), rev'd 469 F. 2d 593, 2 ELR 20758 (10th Cir., 1972).

33. Sax, op. cit., p. 173.

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35. Liroff, op. cit., p. 167.

36. Refer to 458 F. 2d 827, 2 ELR 20029 (D.C. Cir., 1972).

37. Refer to 325 F. Supp. 728, 1 ELR 20130 (E.D. Ark, 1971).

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CHAPTER 3

TECHNIQUES

A. Introduction

After ten years, environmental impact statements remain the awkward progeny of the U.S. National Environmental Policy Act. Although the intent of EIS preparation has virtually remained the same (except for a slight variation in some other assessment acts) these goals are usually lost in the actual environmental statement preparation process.

In this chapter the development of environmental impact techniques will be examined. This survey of techniques includes some of the many ways environmental impact statement preparation is being approached. There are a number of different categories and much variation and overlap among the categories. Whether or not any of these techniques prove to be useful in examining environmental impacts or effectively improving environmental quality relies upon a number of factors:

1. whether sufficient money, resources, time, and expertise are available;

2. whether adequate information is collected;

3. whether subjectivity (either intentional or unintentional) can be overcome or mitigated;

4. whether sufficient knowledge of basic environmental interaction exist; and

5. whether EIS preparation can be synthesized into the overall comprehensive planning process.

There are five main environmental impact assessment techniques. The five EIS techniques are: interdisciplinary discussion, checklist, overlays, matrices, and networks. There are other EIS techniques but they are usually an offspring of one of the aforementioned techniques. The five main techniques are not mutually exclusive, but overlap. They range from fairly simplistic techniques to combination computer-aided techniques that use a combination of various techniques such as matrices and networks.

Depending upon the specific needs of the proponent agency and the type of development being done, one particular technique may be more beneficial than another. Each proponent agency must decide which technique or combination of techniques suit the various tasks.

B. Interdisciplinary Discussion

> One of the simplist and potentially most comprehensive methods of environmental analysis is the discussion of the problem by a group of interdisciplinary experts, each educating and learning from others, working out difficulties and misconceptions until a decision is reached by concensus.[1]

The interdisciplinary discussions are usually composed of professionals from various fields such as geological engineering, social psychology, political

science, urban economics, community planning, zoology, wildlife ecology, environmental law, and statistics. The specialists come from a wide spectrum of agencies such as research institutions, governmental bodies, universities, corporations and consulting organizations.

The idea of an interdisciplinary discussion team to analyze a project and predict any environmental impacts is to have professionals from various fields research, analyze and document information for the final decision-makers (usually either politicians or a review board). It is perceived that by having a wide range of specialists examine a project that they will be able to do a comprehensive detailed report.

There are some obvious advantages in this approach. The interdisciplinary discussion group has a wide range of talents and usually have no personal ties to the project so that they should have a sincere interest in finding the best solution. This way the evaluating and/or priorizing process is not dependent upon the subjective opinions of one or two people in one or two areas of specialization, but is the outcome of the combined efforts of a number of people representing a whole range of opinions andinterests. The end result is an assessment not fraught with in-house generated justification, but a product of a respected team of professionals.

There are also a number of disadvantages with this

technique. There is the problem that the technique is only practical with a large scale project (such as the Alaska pipeline or the James Bay hydro development). A team of experts from a wide variety of fields could only be brought together for short periods of time, if they were expected to be employed elsewhere. Also, it would be difficult in some cases to find enough competent specialists in appropriate fields to make the study worthwhile. Finally, there may be personality and ideological conflicts concerning the various members.[2]

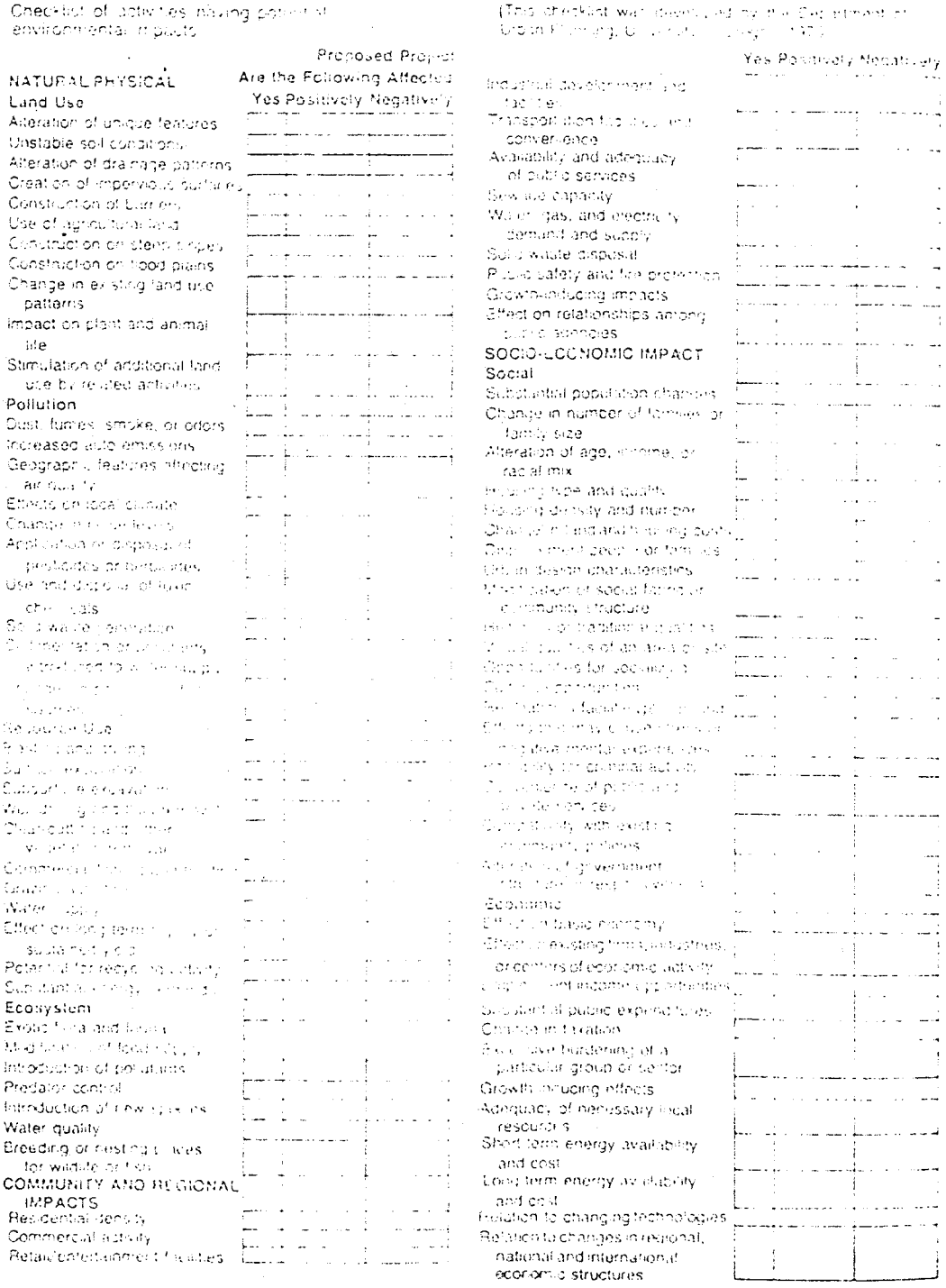
C. Checklist

Checklist is viewed as the easiest technique of environmental analysis. There is no universally applicable checklist. Checklists may take a variety of forms.

> Some identify activities which may cause environmental impact to ensure that a statement preparer examines the possible effects of all primary and secondary development actions and consequences (as shown in figure 1). Others list environmental conditions and factors which may be affected by development. This type of checklist gives the statement preparer the opportunity to note whether the proposed development will have a positive, negative or neutral effect on the environment (as shown in figure 2). A third type of checklist may list questions concerning the environment and the proposed action and seek to identify relationships between actions (see figure 3).[3]

In general, the checklist technique lists a number of potential environmental impacts and forecasts whether a project will affect them in any way. The statement preparers who list the potential environmental impacts and

FIGURE 1



Source: University of Oregon, The Oregon Environment: A Citizen's Guide to Environmental Planning Analysis and Planning Procedures, 1975, p. 20.

FIGURE 2

CHECKLIST OF POSSIBLE AESTHETIC RESOURCES

___ Rock outcroppings, ridges, cliffs, hills, mountains, or valleys

___ Forest, wild flowers, meadows, or marsh land

___ Bodies of water, shorelines, waterfalls, or islands

___ Well-maintained farmsteads, pasture, filled land, crops, or orchards

___ Cityscapes, civic buildings, churches, squares

___ Harbor scenes

___ Historic buildings, distinctive structures

___ Milestone, historic road markers

___ Covered bridges, other bridges

___ Canals and locks

___ Old country cemeteries, old stone walls

___ Monuments

___ Dams, reservoirs

___ Golf courses, landscaped areas

___ Trails

___ Long, distant, open view

___ Broad, wide, open view

___ Treelined right-of-way

___ High degree of visual variety

Source: *Cayuga County Highway Improvement Program, Phase II: An Initial Set of Highway Improvement Priorities.* Auburn, N.Y., Cayuga County Planning Board. 1974.

Source: Burchell and Listokin, The Environmental Impact Handbook, New Brunswick, NJ: Center for Urban Policy Research, 1975, p. 120.

IMPACT SUMMARY

San Mateo County Guidelines for Private Development Projects

Yes No

I [illegible] of the Natural Environment

Does the project site involve a unique landform or biological area, such as beaches, sand dunes, marshes, tidelands, or San Francisco Bay?

A. Land (topography, soils, geology)

Will the project involve construction on slopes of forty percent or greater?

Is the project to be located in an area of soil instability (subsidence, landslide or severe erosion)?

Is the project site located on or adjacent to a known earthquake fault?

B. Water

Is the proposed project located within a floodplain?

Does the proposed project involve a natural drainage channel or stream [illegible]?

C. Biota

Are there any rare or endangered species of plant life in the project area?

Will [illegible] mature trees be removed or relocated?

Is the project site adjacent to or does it include a [illegible] source of [illegible] or [illegible] breeding place for [illegible] rare or endangered wildlife species?

Could the project's [illegible] affect fish, wildlife, [illegible]?

Is the project located inside or within [illegible] of a [illegible] refuge or reserve?

D. [illegible] Alteration of Natural Features

Will the proposed project result in the removal of a natural resource for commercial purposes (including rock, sand, gravel, oil, trees, or minerals)?

Will the project involve grading in excess of 5,000 cubic yards?

II. Pollution (air, water, noise, land)

Will the project create dust, fumes, smoke, or odors?

Will the project involve the burning of any material, including brush, trees, and construction materials?

Is the project expected to result in the generation of noise levels in excess of that currently existing in the area?

Will the project involve the application, use, or disposal of potentially hazardous materials, including pesticides, herbicides, other toxic substances, or radioactive material?

III. Applicable Pollution Controls and Standards

Will the proposed project require a permit or other approval from any of the following agencies?

State Water Resources Control Board

Regional Water Quality Control Board

State Department of Public Health

Bay Area Air Pollution Control District

San Francisco Bay Conservation & Development Commission

Metropolitan Transportation Commission

Yes No

U. S. Environmental Protection Agency

County Airport Land Use Commission

Does the project require variance from established environmental standards (e.g., air, water, noise, etc.)?

IV. Impact on Infrastructure

A. Circulation

Is the project expected to cause noticeable increase in pedestrian traffic or a change in pedestrian patterns?

Will the project result in noticeable changes in vehicular traffic patterns or volumes (including bicycles)?

Will the proposed project involve the use of off-the-road vehicles of any kind (such as trail bikes)?

B. Water Supply and Sewage Disposal

Will the project entail the acquisition of water from wells or surface sources for commercial and/or non-domestic use?

Will septic tanks be utilized for sewage disposal?

C. Demand for Service from Special Districts and/or Municipalities or County

Will the project require the extension of existing public utility lines?

Will the proposed project require public services from an agency, district, or public utility that is currently operating at or near capacity?

V. Social Effect

Is the project apt to result in the congregating of more than fifty people on a regular basis?

Will the project result in the introduction of activities not currently found within the community?

VI. Miscellaneous

Will the project employ equipment that could interfere with existing communication and/or defense systems?

Is the project located within the flight path or noise impact area of an airport?

VII. Land Use

Is the proposed project expected to result in other changes in land use, either on or off the project site?

Could the project serve to encourage development of presently undeveloped areas or increases in development intensity of already developed areas (examples include the introduction of new or expanded public utilities, new industry, commercial facilities, or recreation activities)?

Does the project involve the construction of more than twenty dwelling units?

Is the project adjacent to or within [illegible] public facility or [illegible]?

Does the project require variance [illegible] community [illegible] policies or goals?

Does the [illegible] the Williamson Act [illegible] open space easement?

VIII. [illegible]

Is the [illegible] proposed project [illegible] estimated [illegible] higher [illegible] than [illegible]?

Will [illegible]

Source: Dickert and Domeny (eds.), Environmental Impact Assessment: Guidelines and Commentary. Berkeley: University of California, 1974, pp. 42-43.

forecast the possible effects are usually composed of either the proponent agency, government officials, an independent review committee or a combination of these groups.

As previously mentioned, there is a wide variety of checklist techniques. Although the various checklist techniques share the same basic approach to environmental assessment, they differ immensely in scope, procedures, purpose, replicability, and applicability. Because of this, the advantages and disadvantages of the checklist technique must be broadly generalized.

The main advantage is that it is a relatively inexpensive and comprehensive technique. The approach is also very flexible (eg. using one checklist for related type projects). "The checklist can focus attention on important parameters to ensure that they are not forgotten or ignored. Thus, it can serve as a common structure for comparing a wide variety of project alternatives."[4] The costs, in terms of time and manpower are also very flexible and can be adopted to the resources and needs of the statement preparer.

However, flexibility of the checklist approach can also be viewed as a disadvantage. "It can require great skill and expertise in a wide variety of fields to draw up a satisfactory checklist, as well as determine appropriate weighting systems, and to effectively utilize the checklist."[5] Also when drawing the checklist, a statement preparer may insert an accidental or intentional bias. The

comprehensiveness of the checklist may be questioned because of a wide rangeof variables. There is also the problem of most checklists not showing secondary or indirect impacts of projects.[6]

D. Overlay

This technique

> ...relies upon a set of maps of a project area's environmental characteristics (physical, social, ecological, aesthetic, etc.). The maps are overlaid to produce a composite characterization of the regional environment. Impacts are identified by noting the impacted environmental characteristics within the projected boundaries.[7]

The overlays consist of the mapping of environmental characteristics on specific base maps, and then overlapping the maps upon each other. The overlapped maps are then examined to determine various compatibilities and conflicts between these characteristics and the proposed development.

The overlay maps may be produced either by a computer or manually. The benefits of using a computer are that it speeds up analysis time and facilitates the making of subsequent changes in the data. However, the computer also has a major drawback in that it is very expensive, not only in regard to finances, but also in terms of skilled computer analysts and computer technology requirements. For computer mapping to be feasible either very large projects must be involved, or a locality has already developed a computerized information base.

The overlay technique--whether manual or computerized--does have certain advantages.

> They show both natural and man-made characteristics and features in the spatial environment clearly, both to the statement preparer, and to the concerned citizen or review agency. The manual technique can be utilized with minimal resources, provided adequate data is available. The computer technique can make use of developing data bank and environmental information systems, to the benefit of the advancement of technology in each area.[8]

Also, the technique is useful in that it can be more succinctly understood because many factors are graphically portrayed. Certain interrelationships may become more apparent because of this visual summary.

However, there are several drawbacks with the overlay technique. As an environmental impact technique, the overlay is somewhat inadequate. "It is only an overview of existing conditions, not necessarily in relation to a proposed action. Impacts are shown only spatially, in terms of subjectively-chosen zones. Time is not considered, nor are indirect and secondary impacts."[9] These factors would all have to be studied before an environmental impact statement could be written on the basis of a composite map. Also considerable training would be necessary to produce and use overlay maps (particularly the computerized version).[10]

E. Matrices

This technique incorporates a list of project activities with a checklist of possible impacted environmental

characteristics.

> The two lists are related in a matrix which identifies cause-effect relationships between specific activities and impacts. Matrix methodologies may either specify which actions impact with environmental characteristics, or may simply list the range of possible actions and characteristics in an open matrix to be completed by an analyst.[11]

Basically, the matrix technique is an extension of the checklist concept.

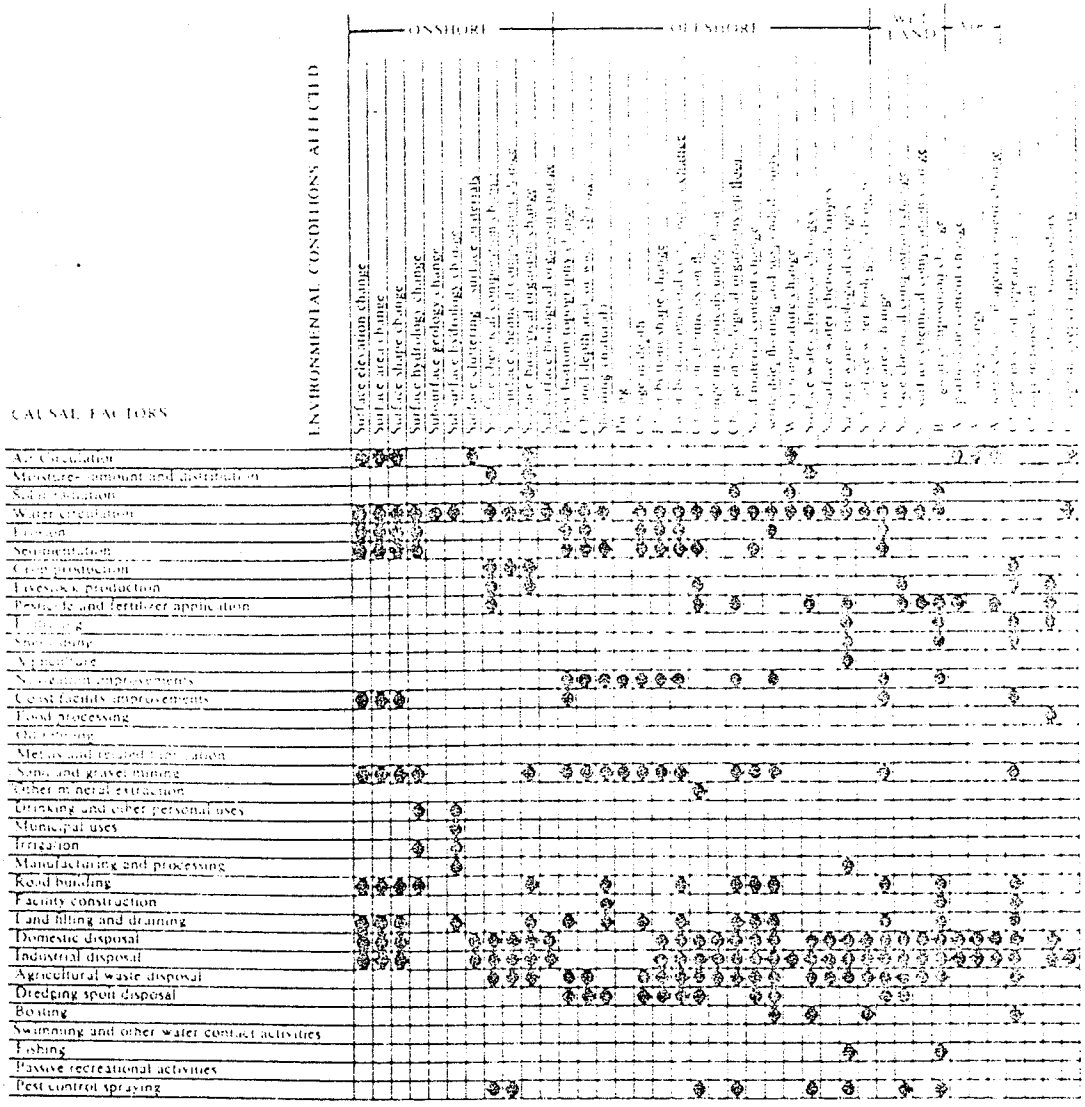
> Matrices are essentially two checklists on perpendicular axes, one to identify possible actions and a second to identify aspects of the environment that may be affected by such actions. They are designed, generally, to ensure not only that certain specific environmental features be considered, but that the two are related.[12]

Each project will have different effects on a number of environmental features, and, in turn, these environmental features are affected differently by a variety of project actions. These relationships are either noted on a matrix or weighted signifying their potential impact. An example of a matrix technique used for an environmental analysis is shown in figure 4.

There are several inadequacies with the matrix technique. Matrices usually do not show secondary and indirect effects (which must be dealt with in the text) and they do not differentiate between short and long-term effects. In addition, "the format chosen may result in a built-in bias in the assessment; impact uncertainty is visually not measured, and guidelines for preparing a matrix and for assigning weights and ratings are generally minimal."[13]

FIGURE 4

MATRIX-CAUSAL
FACTORS/ENVIRONMENTAL CONDITION



Source: Dickert and Domeny (eds.), Environmental Impact Assessment: Guidelines and Commentary, Berkeley: University of California, 1974, p. 133.

In general, the matrix technique does have some good points. "Matrices can help identify cause and effect relationships; they ensure that a fairly comprehensive range of actions and impacts will be considered; and they serve as a valuable graphic summary of the environmental impact statement for presentation."[14]

F. Networks

This technique works from a list of project activities to determine cause-condition-effect relationships. The network technique attempts to recognize that a relationship of impacts may be caused by a project action. The approach "...generally defines a set of possible networks and allows the user to identify impacts by selecting and tracing out the appropriate actions."[15]

Basically, the network technique is an extension of the checklist and matrix approaches but includes indirect and secondary impacts.

> Networks seek to illustrate the multitude of inter-relationships in the environment by considering the whole range of impacts which result from a project action; the series of reactions which may be brought about; and the changes in the system that may take place over a long period of time.[16]

The network technique may be either a simple framework for the organization of research or a complex predictive computer model. The network techniques that have been worked out are generally for a specific project. They differ in comprehensiveness of scope, purpose, and detail

of format. Figures 5, 6a, 6b, and 7 show an overall network technique (which was developed by William M. Berenson, Lawrence D. Goldstein, and Keene Taylor, "A Systematic Method for Organizing Data for the Utilization of the Environmental Impact Statement as a Decision-Making Instrument," a paper presented at the 75th Annual Conference of the American Institute of Planners, San Antonio, Texas, October 1975).

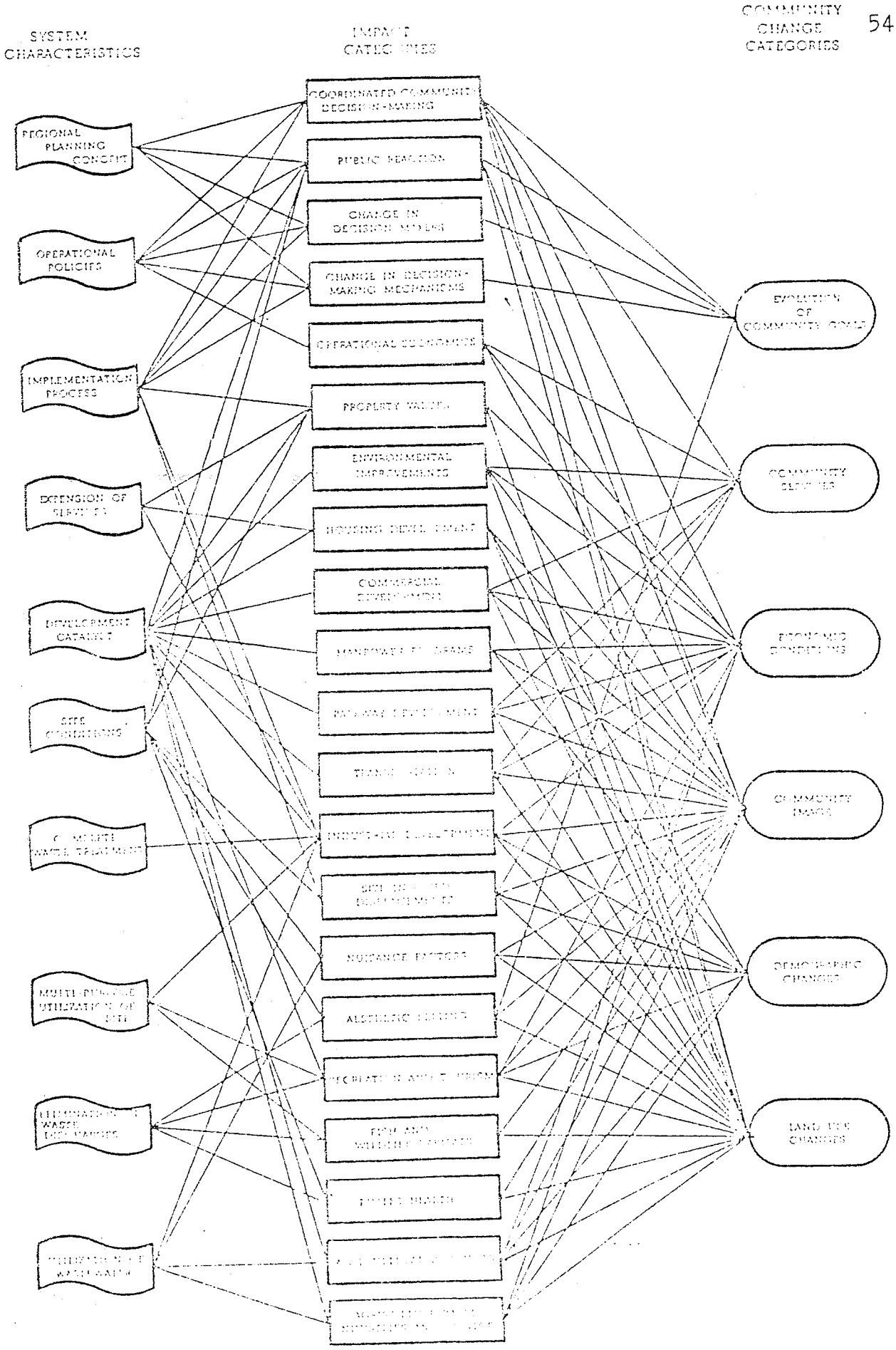
Advantages of the network technique are:

> ...it provides a framework for the display of all data currently required by (various governmental guidelines. It allows the E.I.S. preparer to examine impacts in their logical sequence of occurence and in relation to other impacts, causes, and consequences of impacts. The (various matrices provide a useful breakdown and classification of data, more easily comprehensive to the public and E.I.S. reviewers than one massive matrix or checklist.[17]

There are also a number of perceived disadvantages to the network technique. "It requires a great deal of time and effort to adapt the network to a specific project, to develop adequate indicators of the extent of impact, and to collect the vast amount of data and information required."[18] With the amount of time and data needed for the development of the network system, a computer program is required to accomplish it efficiently.[19]

This concludes the review of the five main environmental impact techniques that have developed since the U.S. National Environmental Policy Act was passed in January, 1970. With these main techniques (as well as other techniques such as the combination of computer-aided technique

FIGURE 5



Source: "Muskegon Wastewater Management System Socio-Economic Study." Chicago: Sheaffer and Roland, 1976 (monograph).

Figure 6a: PROPOSED SYSTEM FOR ORGANIZING IMPACTS

RESIDENTIAL

Long-term Impacts	PRIMARY	SECONDARY		TERTIARY
	Direct Fundamental	Human Resources	Ecological System	
LAND USE	* Number of acres taken * Permanent disruption of existing traffic patterns	* Deviation from land use plan * Number of structures destroyed and value ($) * Number of people displaced - Special groups * Disruption of residential amenities * Possible effects on scenic resources	* Potential marginal loss of habitat and animal life	* ± tax base * ± income input to GNP * Community fragmentation * Costs of adapting to secondary impacts (mitigating measures)
WATER	* Stream modification or impoundment * Change in surface water area * Flood hazard consideration * Changes in water quality	* Public health * Aesthetics * Changes in quantity and/or quality of water available for residential purposes, including recreation	* Degradation of aquatic habitat and effects on species * Effects on rare or endangered species	* Costs of adapting to secondary impacts (mitigating measures) * ± recreation opportunities * ± residential amenities
AIR/NOISE	* Changes in air quality * Changes in noise levels	* Public health * Aesthetics	* Degradation of terrestrial habitat and effects on species * Effects on rare and endangered species	* Costs of adapting to secondary impacts (mitigating measures) * ± recreation opportunities * ± residential amenities

Source: Berenson, Goldstein, and Taylor, "A Systematic Method for Organizing Data for the Utilization of the EIS..." 1975

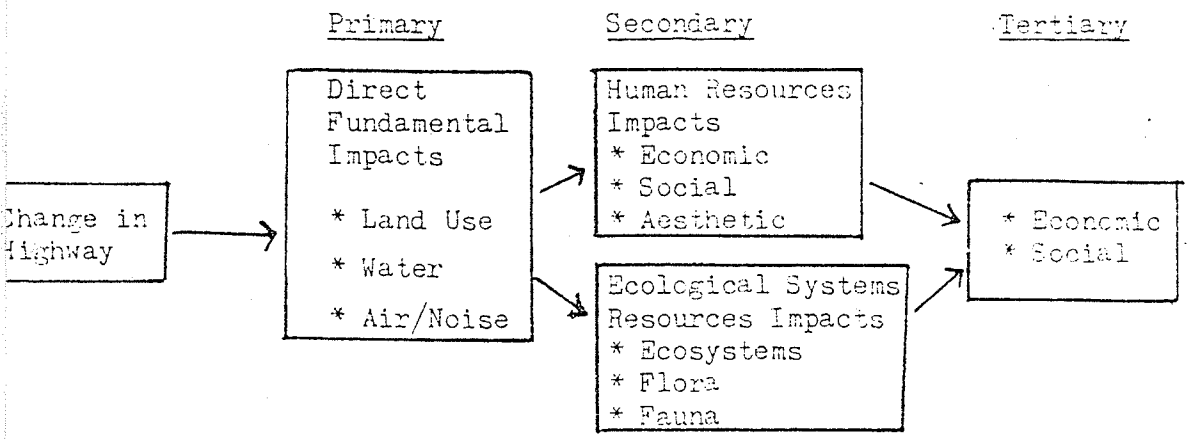
Figure 6b: PROPOSED SYSTEM FOR ORGANIZING IMPACTS

INDUSTRIAL AND COMMERCIAL

Short-term Impacts	PRIMARY	SECONDARY		TERTIARY
	Direct Fundamental	Human Resources	Ecological System	
LAND USE	* Number of acres taken temporarily * Temporary disruption of existing traffic patterns	* Number of businesses disrupted * Number of jobs temporarily lost	* Potential marginal disruption of habitat and animal life	* Costs of adapting to temporary secondary impacts (mitigating measures) * ± tax base * ± income input to GNP * Extent of temporary community fragmentation
WATER	* Temporary stream modification or impoundment * Temporary change in surface water area * Temporary flood hazard * Temporary changes in water quality	* Public health * Occupational health and safety * Aesthetics * Changes in quantity and/or quality of water used for industrial and commercial purposes	* Temporary degradation of aquatic habitat and effects on species * Effects on rare or endangered species	* Costs of adapting to temporary secondary impacts (mitigating measures) * Potential temporary closure of affected businesses, disruption of employment and/or services
AIR, NOISE	* Temporary changes in air quality * Temporary changes in noise levels	* Occupational health and safety * Aesthetics * Public health	* Temporary degradation of terrestrial habitat and effects on species * Effects on rare or endangered species	* Costs of adapting to temporary secondary impacts (mitigating measures) * Potential temporary closure of affected businesses, disruption of employment and/or services

Source: Berenson, Goldstein, and Taylor, 1975

FIGURE 7



Source: Berenson, Goldstein, and Taylor, "A Systematic Method for Organizing Data for the Utilization of the Environmental Impact Statement as a Decision-Making Instrument." Paper presented at the 57th Annual Conference of the American Institute of Planners, San Antonio, Texas, October 1975.

or the ad hoc technique) one consistently nagging problem that plagues environmental impact preparers is how to acquire and utilize the necessary data. A tremendous amount of information is required for most environmental impact statements.

> Even though adequate data may be collected for the preparation of one E.I.S., there may not be an easy way to relate the data in its final form to another project within the same region. Data must be recollected and re-analyzed and an unnecessary waste of time, money and expertise.[20]

To overcome this problem it has been advocated by various people (i.e., R. K. Jain and Marilyn Rowland) to develop an environmental information system. An information system provide a standardized and accessible means of organizing, storing, and evaluating environmental information.

This information system has obvious benefits. It provides a way to organize and utilize a large amount of information. By using a computer, information could be centrally stored so as to be readily available to environmental impact statement preparers. The computer would also save time and resources and is flexible to the demands of its users. The information system could also improve the objectivity of the E.I.S. by mitigating biases.

There are a number of drawbacks of the information system as well, particularly the expense of the operation. Initially, this would be hardest felt, when the perceived costs of such a system outweigh the perceived gains. It

will no doubt take time to produce an information system that is appropriate to the conditions in the locality where it is to be used and to collect the necessary data. Also the expertise and money needed may be insufficient in many areas.

One information system was developed by John Lyle and Mark von Wodtke, "An Information System for Environmental Planning," Journal of the American Institute of Planners, November, 1974, pp. 394-413.

> The system is intended to enable users to make predictions concerning environmental impact and to identify areas in which information may be used in a variety of ways, easily updated and adaptable to new information, and able to incorporate changing goals and priorities.[21]

The implementing of an environmental information system would greatly benefit the environmental impact assessment process. Governments who already do environmental impact assessments or are intending on adopting the process would be wise to study (and hopefully implement) an environmental information system.

G. Conclusion

The tool of the environmental impact assessment process is the environmental impact statement. The EIS has taken many forms, but the perceived end result is a report that attempts to predict problems that may unfold from a project or combination of projects. The EIS techniques are still in the infancy state, but through

innovative ideas such as the environment information system, they will evolve in a comprehensive way to examine the environment.

NOTES TO CHAPTER 3

1. Marilyn Rowland, Environmental Impact Assessment: A Review, Regional Economic Development Centre, Memphis State University, August 1978, p. 13.

2. An example of the use of the interdisciplinary discussion technique is given by Dorn C. McGrath Jr. in examining the then proposed expansion of Kennedy International Airport, New York, in "Multidisciplinary Environmental Analysis: Jamaica Bay and Kennedy Airport," Journal of the American Institute of Planners, July 1971, pp. 243-252.

3. Rowland, op. cit., p. 17.

4. Ibid., pp. 22-23.

5. Ibid., pp. 29-30.

6. There are a number of examples where the checklist technique is used. Some examples are: "Environmental Evaluation System for Water Resource Planning," in Norbert Dee et al., Planning Methodology for Water Quality Management: Environmental Evaluation Systems, Battelle Memorial Institute, July 1973; William L. Smith, Quantifying the Environmental Impact of Transportation Systems, Van Doren-Hayard-Stallings-Schnacke, undated; Lloyd V. Stover, Environmental Impact Assessment: A Procedure, Saunders and Thomas, 1972; Walton L. Ellis Jr. and James E. Lewis, A Manual for Conducting Environmental Impact Studies, Virginia Highway Research Council, 1971.

7. Rowland, op. cit., p. 30.

8. R. K. Jain et al., Environmental Impact Analysis: A New Dimension in Decision Making, Van Nostrand Reinhold Company, 1977, p. 73.

9. Rowland, op. cit., p. 23.

10. Examples of studies that have used the overlay technique are: Thomas Krauskopf and Dennis C. Bunde, "Evaluation of Environmental Impact Through a Computer Modelling Process," Environmental Impact

Analysis: Philosophy and Methods, Robert Dutton and Thomas Goodale (eds.), University of Wisconsion Sea Grant Program, 1972, pp. 107-125; and Ian McHarg, Desing with Nature, Natural History Press, Garden City, New York, 1969, pp. 31-41.

11. Rowland, op. cit., p. 27.

12. Ibid., p. 27.

13. Jain, op. cit., p. 73.

14. Rowland, op. cit., p. 31. The matrix technique has had extensive review by a number of authors. Examples are: R. K. Jain et al., Handbook for Environmental Analysis, Technical Report E-59/ADA006241, CERL, September 1974; Luna B. Leopold et al., A Procedure for Evaluating Environmental Impact, Geological Survey Circular 645, Government Printing Office, 1971; and John L. Moore et al., A Methodology for Evaluating Manufacturing Environmental Impact Statements for Delaware's Coastal Zone, report to the state of Delaware, Battelle Memorial Institute, June 1973.

15. Rowland, op. cit., p. 38.

16. Ibid.

17. Ibid., p. 39.

18. Ibid.

19. Two publications which present a network approach usable for environmental impact analysis are: Jens Sorensen, A Framework for Identification and Control of Resource Degradation and Conflict in Multiple Use of the Coastal Zone, University of California, Berkeley, Department of Landscape Agriculture, 1970; and Jens Sorensen and James E. Pepper, Procedures for Regional Clearinghouse Review of Environmental Impact Statements-Phase Two, Report to the Association of Bay Area Governments, April 1973.

CHAPTER 4

THE CANADIAN APPROACH: AN OVERVIEW

A. Introduction

In Canada political action for protecting our environment did not really become evident until the early 1970's. There are two main reasons for this. First,

> ...with regard to structure, the Canadian Prime Minister is hindered in his agenda-setting activity by the Constitution. In the case of the environment, no national policy can be launched until the constitutionality and the jurisdictional matters have been clarified, and an agreement reached between the Prime Minister and his peers, the Prime Ministers [sic] of the provinces, since the jurisdiction is a shared one.[1]

Second, the seriousness of environmental concerns were restricted by Canadians' belief in the richness and vastness of their resources.

If the federal government were to propose national legislation on environmental matters it would have to move very carefully because of provincial jurisdiction over land, and matters of a local nature. However,

> ...the increasing concern for the environment has led to the recognition that many land use decisions have ramifications of a national character. Efforts have therefore been made to develop policies which would make possible both various economic uses and ecologically wise management of natural resources, at the same time trying to avoid changes in existing jurisdictional arrangements.[2]

To try and cope with some of the environmental problems, Canada has followed the United States' approach and introduced environmental impact assessment. The need for some form of environmental impact assessment has been generally recognized and has been written into formal requirements. Ontario has followed the United States' NEPA approach with the Ontario Environmental Assessment Act, while most of the other provinces and the federal government have chosen internal administrative procedures. Irrespective of the approach,

> ...all processes include some initial determination of the likely impact of the proposed development, a detailed assessment, government and public review, and, on the basis of the preceding, a decision to proceed or not to proceed.[3]

A review of the approaches taken to institutionalize EIA in Canada will be presented. First, the federal government's activity in this area will be examined. It has through administrative procedure, enacted the Environmental Assessment and Review Process. Second, an examination of what provincial governments are doing; most provinces have also instituted board policy and administrative procedures, but Ontario has legislated EIA. The Ontario Environmental Assessment Act will be analyzed. Third, what municipal governments have been doing to implement EIA will be discussed. Here, two case studies of municipalities that have initiated environmental assessment will be presented.

B. Federal Government
Environmental Assessment

The Canadian federal government environmental impact assessment policy originated with the report of an Environment Canada Task Force in 1972. The Task Force reviewed environmental impact assessment experience elsewhere, especially the United States model. However, the group noted the institutional and constitutional differences between Canada and the United States. As previously mentioned, the main difference is that in Canada much of the jurisdiction over environmental matters rests with the provincial governments. As cited by Reg Lang, Canada-United States comparisons are further complicated by:

(a) differences in the way the two federal governments operate internally, for example, the relatively greater control the Canadian Cabinet, compared with the executive branch of Congress, exercises over programs of federal departments;
(b) differences in the role of the courts which play a policy-making role in the United States not assumed by their Canadian counterparts;
(c) the relatively greater degree of secrecy and government restrictions on public information in Canada;
(d) more constraints placed by the provinces on Canadian municipal governments compared with U.S. municipalities which, in some states, enjoy considerable autonomy; and
(e) the presence of a strong public demand for environmental action when NEPA was introduced, and the absence of such concern in Canada at the time.[4]

When the Canadian federal government's version of environmental impact assessment was introduced it was very evident that the officials who drafted it had borrowed freely from its United States counterpart (NEPA), but its

institutional form was different. Whereas NEPA in the United States operates from federal legislation, the Canadian Environmental Assessment and Review Process (EARP), which was created by a federal cabinet directive in December, 1973, operates through administrative policy and procedure (EARP was later amended by the federal cabinet on February 15, 1977).

EARP embodies Canada's policy on environmental assessment as it relates to the actions of the federal government. It is a means of predicting the potential environmental impacts of all federal projects, programs and actions. The Minister of the Environment and his Cabinet colleagues have the final responsibility for the decisions resulting from EARP.

The role of the Minister of the Environment as cited in the Government Organization Act of 1979 is to

> ...initiate, recommend and undertake programs and coordinate programs of the Government of Canada, that are designed...to ensure that new federal projects, programs and activities are assessed early in the planning process for potential adverse effects on the quality of the natural environment and that a further review is carried out of those projects, programs and activities that are found to have probable significant adverse effects and results thereof taken into account...

The purpose of EARP is "to ensure that the environmental effects of federal projects, programs, and activites are assessed early in their planning, before any commitments or irrevocable decisions are made."[5] Federal agencies are directed to:

a) Take environmental matters into account throughout the planning and implementation of projects, programs and activities that are initiated by a department or agency or for which federal funds are solicited or which federal property is required.

b) Undertake or procure an assessment of potential environmental effects before commitments or irreversible decisions are made for all projects which may have an adverse effect on the environment.

c) Submit the assessment made for all major projects that will have significant effect on the environment to the Department of the Environment for review.

d) Incorporate the results of environmental assessments and reviews in the design, construction, implementation, and operation of projects, giving environmental problems the same degree of consideration as that given to economic, social, engineering, or other concerns.

e) Include in program forecasts and annual estimates the funds necessary to carry out the intent of this policy and program.[6]

The operation of the Environment Assessment and Review Process is the responsibility of Environment Canada's Federal Environment Assessment and Review Office (FEARO), working through its Environmental Assessment Panels and its Co-ordinating and Screening Committees. EARP's stated intentions are:

> (1) to leave the management of environmental assessment and review in the hands of the proponent in order to avoid delay and decision-making responsibility; (2) to provide an arm's length system of review and advice and expertise; and (3) to inform the public and, where appropriate, to involve the public in decision-making.[7]

If federal agency activities are deemed to have potentially significant environmental effects, then they are submitted to the Minister of the Environment for review by an Environmental Assessment Panel. The Environmental Assessment Panel is a group of approximately four to six members (a different EAP is named for each project) plus a secretary. The Panel members are usually civil servants, with one member from the proponent agency. Based on the Panel's review, a decision is made on how a project should proceed or if it should proceed at all:

> All federal departments and agencies are bound by the Process with the exception of proprietary Crown Corporations and federal regulatory agencies which are invited, rather than directed, to participate in the Process.[8]

Federal projects are defined as those initiated by federal departments and agencies, those for which federal funds are solicited and those involving federal property.

EARP involves three sequential review stages. However not all of these stages will necessarily occur in examining each project.

> The first two stages involve self-assessment by the federal agency initiating the project. The third step is a more formal review of projects considered, on the basis of department self-assessment, to have potentially significant environmental impacts. The Federal Environmental Assessment Review Office (FEARO) is responsible

> for the establishment of Environmental Assessment Panels to review referred projects and for the provision of secretarial support to those Panels. Once established, an Environmental Assessment Panel is independent and reports, during the course of its project review, directly to the Minister of the Environment.[9]

As previously mentioned, EARP automatically applies when a project is conceived and is largely a self-assessment approach to environmental assessment. This means that federal agencies are responsible for initial assessment, establishing significance of environmental impacts and the implementation of any mitigation measures. It is the responsibility of technical and scientific experts within the initiating agency to take into consideration not only technical information and data, but also public concerns and interests. In other words, "what may not be significant in a purely scientific or technical way, may be significant to those living in the area of the project for other reasons,"[10] (i.e., a concern that the lifestyle of the community may be disrupted). Public reaction is cited by the federal government's Revised Guide as a major factor in determining significance.

Federal government departments and agencies must screen proposed projects in the planning stage as early as possible. Screening can result in one of three decisions by the initiating department:

> 1. The department may conclude that the proposal has no potentially adverse environmental effects or that such effects are known and are not considered significant. If this decision is made, the department concerned is

> responsible for implementing the measures required to prevent or mitigate the environmental effects identified, and for satisfying all other legislative, regulatory and Cabinet requirements related to the development and implementation of the project.
>
> 2. The department may conclude that the project's potential environmental effects appear to be significant. In this case the project is referred to the Minister of the Environment for a formal review under the Process.
>
> 3. The department may conclude that the nature and scope of potential environmental effects cannot be determined readily by this procedure. If this is the decision, the proponent is subjected to a more detailed examination, known as an Initial Environmental Evaluation (IEE).[11]

Diagram 1 shows the federal environmental assessment and review process.

The IEE includes a description of the action, a description of the present environmental and resource use, an outline of potential environmental impacts and the proposed remedy to mitigate or prevent predicted environmental effects. An important element of IEE is the examination of alternatives and identification of the preferred alternatives.

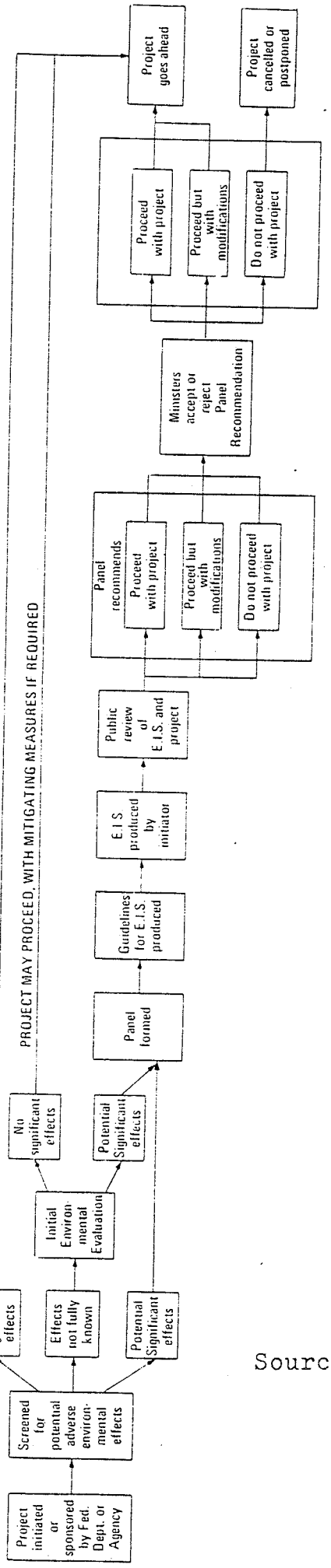
Once the IEE has been completed and reviewed by the initiating agency, the question of significance should be resolved.

> If the effects are not considered to be significant, the initiating department may proceed with the project with the understanding that environmental design measures specified in IEE must be implemented. If, on the other hand, the environmental effects of the project are thought to be significant, the project is referred to the Minister of the Environment for a formal review under EARP.[12]

When, as a result of the screening procedure of IEE, the department concerned refers the project to the Minister

Diagram 1

SCHEMATIC DIAGRAM OF THE FEDERAL ENVIRONMENTAL ASSESSMENT AND REVIEW PROCESS



Source: Canada, Federal Environmental Assessment Review Office, Revised Guide to the Federal Environmental Assessment and Review Process, Ottawa, May 1979.

of the Environment for a formal review by the Environmental Assessment Panel (at this point in the Process the Environmental Assessment Panel takes over from the Federal Environmental Assessment Review Office), the Environmental Assessment Panel does an independent and comprehensive review of the project which involves several stages including sceintific, technical and public review. This review finally leads to a decision by the Minister of the Environment and his Cabinet colleagues as to the acceptability of the proposal.

In EARP's initial years, action had been slow in coming. Up to 1976 only in the Lepreau Nuclear Generating Plant in New Brunswick had an impact study been completed (and only eleven others were in preparation or were being completed). However, this has slightly changed over the last few years with EARP officials becoming a little more aggressive. As shown in Table 1, the June 1978 Federal Registry shows four projects completed and twenty-one environmental assessment panels now in operation across Canada. These environmental assessment panels are analyzing a wide range of proposed activities from Banff National Park Highway Improvement in Alberta to the Hamilton Airport Expansion in Ontario.

Even though countless federal projects escape assessment, EARP is bringing a number of federal projects under environmental and public surveillance. Recently,

Table 1

Federal Environmental Assessment and Review Process:
Projects Completed, Underway, and Proposed

COMPLETED

Alaska Highway Gas Pipeline, Yukon, 1977
Point Lepreau Nuclear Power Station, N.B., 1975
Wreck Cove Hydroelectric Power, N.S., 1976
Eldorado Nuclear Ltd. Uranium Refinery, Ont., 1978

UNDERWAY and PROPOSED

Arctic Natural Gas Pilot Project
Banff National Park Highway Improvements, Alta.
Bay of Fundy Tidal Power, N.S.
Boundary Bay Aerodrome, B.C.
C.N. Telecommunications System, Alta. and N.W.T.
Dempster Pipeline, N.W.T. and Yukon.
Eastern Arctic Offshore Drilling
Eldorado Nuclear Ltd. Uranium Refineries, Ont. and Sask.
Deepening of Fraser River Shipping Channel, B.C.
Gull Island Hydroelectric Generation, Nfld.
Hamilton Airport Expansion, Ont.
Labrador/Nfld. Electric Power Transmission and Tunnel
Lancaster Sound Offshore Drilling, N.W.T.
Mackenzie Delta Gas Gathering System
Mackenzie River Dredging Program
Polar Gas Project, N.W.T. to southern Canada
Roberts Bank Bulk Loading Facility, B.C.
Shakwak Project, Alaska Highway
Vancouver International Airport Expansion, B.C.
South Yukon Transportation Study.

Source: Environment Canada, Federal Environment Assessment Review Office, Federal Environmental Assessment and Review Process, Register of Panel Projects and Bulletin, no. 4, June 1978.

EARP had a first--a Panel recommended against a uranium refinery project proposed by Eldorado Nuclear Ltd. at Port Grandly on the North Shore of Lake Ontario. The Panel ruled against the proposed action because it was concerned about the loss of prime agricultural land, disposal of low level radioactive waste, and air pollution. The Minister of the Environment and his Cabinet Colleagues agreed, so a new site will have to be found.

However, since EARP was introduced there has been a flurry of abuse directed at it. This attack against EARP has been led by various environmentalists and public interest groups. Groups such as the Canadian Environmental Law Association and the Canadian Arctic Resources Committee have labelled the entire process ans inefficient and unsound. Criticism has also come from various elected government officials (such as Robert Wenman, the former Progressive Conservative environment critic) who do not think that EARP is protecting the environment from negative impacts.

The criticism of EARP falls into five major categories--the principle of self-imposed environmental assessment, the non-legislative status of EARP, the limited application of the EARP, the role of the public, and the makeup and activities of the Environmental Assessment Panels.

As previously outlined, the EARP gives the proponent agency the right to decide whether or not a proposed

project should be reviewed. If a proponent agency does not want the action to be reviewed, it can state that the action will have no significant environmental effects, or just go through the motions of complying with the EARP and do an inadequate IEE. The proponent agency may then proceed to construct the proposed development which may or may not be an environmental calamity.

The second major criticism of the EARP is its non-legislative status. Without this legislative status there is no way of requiring various federal agencies to live up to the rules that the government has set for itself.

> If the Minister of the Environment agrees with a proponent that an impact assessment need not be done, or that an existing assessment is sufficient, there are no steps that members of the public can take to require that the assessment be done, or to require additional research where an assessment has been completed.[13]

Even the Environmental Assessment Panel lacks the force of law because it is only an advisory body. What has resulted from this lack of legislative responsibility for the EARP is that it does not have any real credibility.

The third problem with the EARP is its limited application. As mentioned before, the EARP is supposed to apply to "all federal departments and agencies for projects or groups of projects initiated by the federal government, or where federal funds are solicited, or where federal property is required." However, federal government agencies have found ways of getting around this statement by

circumscribing their interpretation of its intent. One way federal departments have done this is by denying sponsorship of a project in which it is involved. Seeing the EARP has no legal basis, the only person who could stop a proponent agency from denying sponsorship of a project is the Minister of the Environment. However, this is seldom done.

The fourth criticism of the EARP deals with the role of the public. The main problem here is that the role of the public is poorly defined. Public participation is commenced after the initial screening has been done, the IEE has been completed, the decision whether to do an EIS has been formulated, and the Environmental Assessment Panel has been chosen. When the public finally does get involved, it

> may see the guidelines issued to the initiator for the preparation of the EIS--unless, the Minister of the Environment and the initiating Minister think that the guidelines should not be made public. After an EIS is submitted to the Panel, the Panel is required to make the EIS public--unless the two Ministers direct otherwise. Finally, the Panel holds a public hearing to evaluate the EIS--unless, of course, the Ministers deem that inappropriate.[14]

Actually, the public has no rights under the Process. The Ministers can use their discretion at any time to limit or stop public involvement.

The fifth major criticism of the EARP is the makeup and activities of the Environmental Assessment Panel. Here most of the criticism is directed at the fact that most of the Panel members are civil servants, and one is a member of the initiating agency. This has been condemned by Heather

Mitchell, former counsel with the Canadian Environmental Law Association:

> An evaluation panel should contain more than civil servants. If it is simply civil servants, it cannot possibly be perceived as independent however much good will each civil servant brings to the task. First of all, civil servants take an oath under which they promise not to reveal any information which has come to them in the course of their official duties, but the whole of the Environmental Assessment Review Procedure and that of the public hearings is designed to get out all relevant information. Any civil servant sitting on a review panel therefore has an immediate conflict of interest between his or her duty to keep secret, and to make available that information which is necessary for the public to have in order to participate in the hearing. Futhermore, civil servants may have an unconscious bias towards proponent federal departments, particularly if the civil servants who sit on a review panel are senior officers of a department which sees the review merely one taken in an overall negotiation strategy between their department and the proponent department.[15]

There is a movement within the federal government to have the Panel composed of outside government members. Clearly, an independent Panel is the most preferable so as to safeguard against potential conflicts as illustrated by Heather Mitchell.

The Canadian federal government has not given much priority to environmental issues: "The Cabinet seems to have concluded that public concern for environmental degradation does not match political risks."[16] The federal government does not appear willing to risk the uncertain outcome of legislating environmental impact assessment if court action ensues on environmental projects (i.e., Eastern Arctic Offshore Drilling or Vancouver International Airport Expansion).

C. Provincial Government Environmental Assessment

Environmental impact assessment has also emerged at the provincial level. "By 1976 each province had some form of EIA in place. Most provinces have proceeded under existing legislation, with new policies and procedures."[17] There are two provinces that have general legislative requirements for the preparation of environmental impact assessments, namely, Alberta and Ontario. In Alberta the legislative authority governing the preparation and submission of EIA reports is contained in section 8 of the Land Surface Conservation and Reclamation Act, 1973. The Act authorizes the Minister of Environment to mandate the preparation and submission of reports assessing the perceived environmental impacts of a proposed action. Generally,

> ...the Act also specified factors to be included in the reports, such as impacts on the conservation, management, and utilization of natural resources; the prevention and control of pollution; economic factors that relate to environmental matters; and preservation of natural resources for their aesthetic value.[18]

The Act also cites the consideration of alternatives to the proposed action as being part of the EIA report.

Ontario is the only province to have specific legislation dealing with environmental impact assessment. The legislation is incorporated in the 1975 Environmental Assessment Act, which was proclaimed in force for the public sector on October 20, 1976. The purpose of the Act is to make public agencies embody environmental considerations

early in their decision-making process so as to negate harmful environmental impacts (there will be more discussion on Ontario's assessment legislation later). Ontario also passed the Environmental Protection Act in 1972 which is the main statute with respect to pollution control, and the Water Resources Act which looks after the control of water pollution.

A brief review of the other eight provinces that do not have general legislative requirements for the preparation of EIAs will highlight what they are doing to preserve the environment.

In British Columbia there is no one piece of legislation requiring the preparation of an EIA prior to carrying out a major development. However, there are four Acts under the administration of the Minister of the Environment which provide the statutory basis for requiring environmental assessments. They are

> ...the Environmental and Land Use Act, which is a general Act providing broad powers to a Committee of Cabinet, and three more specific Acts--the Land Act and Water Act, under which proponents must obtain permits for the use of Crown land and water resources; and the Pollution Control Act, which regulates the emission of pollutants.[19]

In Saskatchewan there is no legislation dealing specifically with environmental impact assessment. The basis of an environmental policy rests with the Department of the Environment Act, which states that:

For the purposes of enhancing and protecting the

> quality of the environment, the Minister may...require a government agency, municipality or person to obtain specified data with respect to the environment within an area surrounding the location of an undertaking proposed by an agency, municipality or person and to file the data with the Minister.

The legislation also requires the holding of public meetings.

In Manitoba, the Clean Environment Act of 1972 provides the Minister of Environment with "general supervision and control over all matters relating to the preservation and improvement of the environment and the prevention and control of contamination of the environment." The Act also instituted a Clean Environment Commission that has limited scope and which is charged with considering all proposals which may result in the discharge or emission of contaminants into the environment.

Manitoba is also committed to the carrying out of environmental impact assessments for major developments by Provincial departments and Crown corporations. An Environmental Assessment and Review Process was established for this purpose.

In Quebec the statutory authorization for requiring environmental assessment is section 22 of the Environmental Quality Act. The Minister of Environment is responsible for the co-ordination, elaboration, and implementation of the environmental protection policy. While the Act is primarily pollution control legislation, its general provision provides the statutory authority for requiring environmental

assessment. The Act states:

> The Director shall, in support of an application relating to certain classes of industries, projects or activities determined by regulation of the Lieutenant-Governor-in-Council, require a study to be made on the impact that the carrying out of the project will have on the environment...and may require the applicant to carry out certain research or experiments which he indicates respecting the project, the whole in accordance with the terms and conditions prescribed by regulation of the Lieutenant-Governor-in-Council. He may, finally, require from the applicant any supplementary information he considers to be the object of the application.

In New Brunswick the Health Act and the Clean Environment Act establish certain requirements that have to be met by prospective developers. The government also adopted a policy on environmental assessment procedures in October, 1975. The policy directs all major developments being contemplated by provincial agencies to have an environmental impact assessment carried out before a decision on implementing the project is made.

In Nova Scotia, both the Water Act and the Environmental Protection Act provide the legislative authority to do environmental impact studies. There are certain sections of the Environmental Protection Act which empower the Minister of the Environment to require EIAs prior to a development project.

In Prince Edward Island, control of air, land, and water pollution is provided in the Environmental Protection Act. The Act requires that

....all departments and agencies of government [are]

> directed to have Environmental Impact Statements prepared by the Department [of Environment] as part of any development proposals where there are environmental issues relating to air, land, and water.[20]

In Newfoundland and Labrador there is no legislation which specifically requires an environmental assessment (however, the Province is in the process of drafting an Environmental Assessment Act and accompanying regulations). Presently, the Department of Consumer Affairs and Environment requests the proponents of major resource development actions to do an environmental assessment, on a voluntary basis. The province will provide assistance in doing the environmental assessment.

A general overview of federal and provincial policies regarding the environment, and a summary of legislation and guidelines applicable to environmental impact assessment are shown on the following pages.

Because Ontario is the only province that has enacted an Environmental Assessment Act that defines legal procedures, duties and rights of applicants and other proponents, and public access, it will be examined further, in greater detail.

The Ontario Environmental Assessment Act has been noted as the most important piece of environmental legislation ever enacted in Canada.[21] Its potential scope could almost cover all new development in Ontario. The importance of the Act was expressed by Dennis Caplice (Director of the

SUMMARY OF LEGISLATION AND GUIDELINES APPLICABLE TO ENVIRONMENTAL IMPACT ASSESSMENT

Government	Minister and Departments Responsible for Environmental Impact Assessments	Major Environmental Assessment Legislation/Policies	Guidelines Completed or in Preparation
CANADA	ENVIRONMENT Screening and Co-ordinating Committees. Environmental Review Board. Environmental Assessment Panels.	*Government Organization Act, 1970.* Cabinet decision 20/12/73 establishing Environmental Assessment and Review Process (EARP).	General Guidelines for the preparation of initial environmental evaluation reports for: Oil and Gas Exploration and Production. Linear Transmission— Highways and Railways. Electrical Power Transmission Lines. Oil and Gas Pipelines. Hydro-electric and Other Water Development Projects. Nuclear Power Generation Projects. Airports. Ports. Mining Developments. Industrial Developments.
	NATIONAL ENERGY BOARD	*National Energy Board Act,* R.S. 1970.	Environmental Information Guidelines for Pipelines.
	ATOMIC ENERGY CONTROL BOARD	*Atomic Energy Control Act,* R.S. 1970.	Guide to the Licensing of Uranium and Thorium Mine-Mill Facilities.
BRITISH COLUMBIA	ENVIRONMENT Environment and Land Use Committee Secretariat (major co-ordination). Land Management Branch (use of Crown lands). Water Rights Branch (use of water resources). Pollution Control Branch (pollution objectives). Mines and Petroleum Resources Reclamation Division..	*Environment and Land Use Act,* 1971. *Land Act,* 1970. *Pollution Control Act.* *Water Act,* R.S. 1960. *Coal Mines Regulation Act,* 1969. *Mines Regulation Act,* 1967 (for land surface reclamation).	Guidelines for Environmental Impact Assessment of Power Projects. Coal Development Guidelines. Guidelines for Linear Developments. Guidelines for Environmental Impact. Control of Development on B.C. Crown Lands.
ALBERTA	ENVIRONMENT Environmental Co-ordination Service.	*Land Surface Conservation and Reclamation Act, 1973.*	Alberta Environmental Impact Assessment System Guidelines.

SASKATCHEWAN	ENVIRONMENT Environmental Impact Assessment Branch.	*Department of the Environment Act.*	Environmental Impact Assessment Policy and Guidelines. Administrative Procedures being prepared. Content Guidelines being prepared.
MANITOBA	MINES, RESOURCES AND ENVIRONMENTAL MANAGEMENT Clean Environment Commission. Environmental Management Division. Environmental Council. Manitoba Environmental Assessment and Review Agency. Mineral Resources Division (land surface reclamation).	Manitoba Environmental Assessment and Review Process established by Cabinet. *Clean Environment Act, 1972.* *Mines Act* (land surface reclamation).	Guidelines for the Environmental Impact Assessment of electrical transmission-lines, nuclear power plants, gas pipelines, heavy water plants, and highways.
ONTARIO	ENVIRONMENT Environmental Assessment and Planning. Environment Assessment Board.	*Environmental Assessment Act, 1975.* *Mining Act* (for land surface reclamation). *Environmental Protection Act, 1972.* *Ontario Water Resources Act.*	Environmental Assessment Guidelines: Content of the Environmental Assessment Document.
QUEBEC	ENVIRONMENT Environment Protection Services. Advisory Council on the Environment. QUEBEC PLANNING DEVELOPMENT BUREAU	*Environment Quality Act, 1972.*	Environment Quality Act (General) Regulations.
NEW BRUNSWICK	ENVIRONMENT Environmental Services Branch.	*Clean Environment Act.*	Environmental Impact Assessment in New Brunswick.
NOVA SCOTIA	ENVIRONMENT	*Environmental Protection Act, 1973.* *Water Act, 1967.*	Guidelines for pit, quarry, and mining operations being prepared. Guidelines for Asphalt Plants. *Pesticide Control Act.* Guidelines for Environmental Assessment.
PRINCE EDWARD ISLAND	ENVIRONMENT	Executive Council Minute 14/2/73 requiring Environmental Impact Statements. *Environmental Protection Act.*	Guidelines for Livestock Manure and Waste Management. Guidelines for Asphalt Plants. Guidelines for Gravel Pits and Sand Mining Operations.
NEWFOUNDLAND AND LABRADOR	CONSUMER AFFAIRS AND ENVIRONMENT	*Provincial Affairs and Environment Act, 1973.*	Guidelines for Environmental Impact Statements.

(v) In most provinces environmental assessments apply only to developments initiated by provincial agencies or Crown Corporations. In others they apply to all major developments of a specific type such as power plants, railways, pipelines, etc., over a certain size.

(vi) The level at which decisions are taken on major projects varies from province to province. In most cases Cabinet provides an "umbrella" decision to determine whether a project should or should not be developed, followed by detailed land use and environmental decisions made by appointed officials under specific legislation.

(vii) Most provinces are in the process of establishing procedures for ensuring the implementation and enforcement of the findings of environmental impact studies.

Source: Environmental Impact Assessments in Canada, A Review of Current Legislation and Practice prepared for the Canadian Council of Resource and Environment Ministers, Victoria, B.C., February 1977, pp. 8-9.

A General OVERVIEW of Federal-and Provincial Policies Regarding the Environment

(i) All Provincial Governments in Canada and the Federal Government have commenced a program of environmental impact assessments.

(ii) With the exception of the Environmental Assessment Act, 1975, of Ontario and section 8 of the Land Surface Conservation and Reclamation Act, 1973, of Alberta, there is no legislation in Canada specifically requiring environmental impacts to be assessed. Thus, with the noted exceptions, existing environmental policies are wholly dependent upon administrative and executive decisions of the Federal and Provincial Cabinets.

(iii) In many instances, environmental impact assessments are viewed as part of an overall planning process for the development of large-scale projects, progressing from overview feasibility studies through more detailed design and assessment to a stage where permits and approvals are required. In these cases, an integration of engineering and environmental data at an early date is encouraged as a means of achieving a balance between the proposed development and environmental quality.

(iv) Most provinces are in the process of establishing guidelines to indicate the procedures to be followed and types of study needed to satisfy provincial requirements.

Environmental Approvals Branch):

> The Environmental Assessment Act is an important new decision-making tool designed to see that all potentially significant effects of proposed undertakings are identified at a stage when alternative solutions, including remedial measures and the alternative of not proceeding, are still available.
>
> ...The Act is intended to bring about a consideration not just of the possible effects of a project on the natural environment--the air, land, water, and plant and animal life--but to consider also the effects on man, the man-made environment, and on society, including economic factors. That is why the Environmental Assessment Act is more than a pollution control statute.[22]

The Act is being declared in sections with the first provision applying to the actions of provincial government agencies, then to bring it to municipal government, and finally to apply to the private sector. Section 5(3) states that an environmental assessment shall consist of:

a. a description of the purpose of the undertaking;

b. a description of and a statement of the rationale for (i) the undertaking, (ii) the alternative methods of carrying out the undertaking, and (iii) the alternatives to the undertaking;

c. a description of (i) the environment that will be affected or might reasonbly be expected to be affected, directly or indirectly, (ii) the effects that will be caused or that might reasonably be expected to be caused to the environment, and (iii) the actions necessary or that may be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment by the undertaking, the

alternative methods of carrying out the undertaking and the alternatives to the undertaking; and

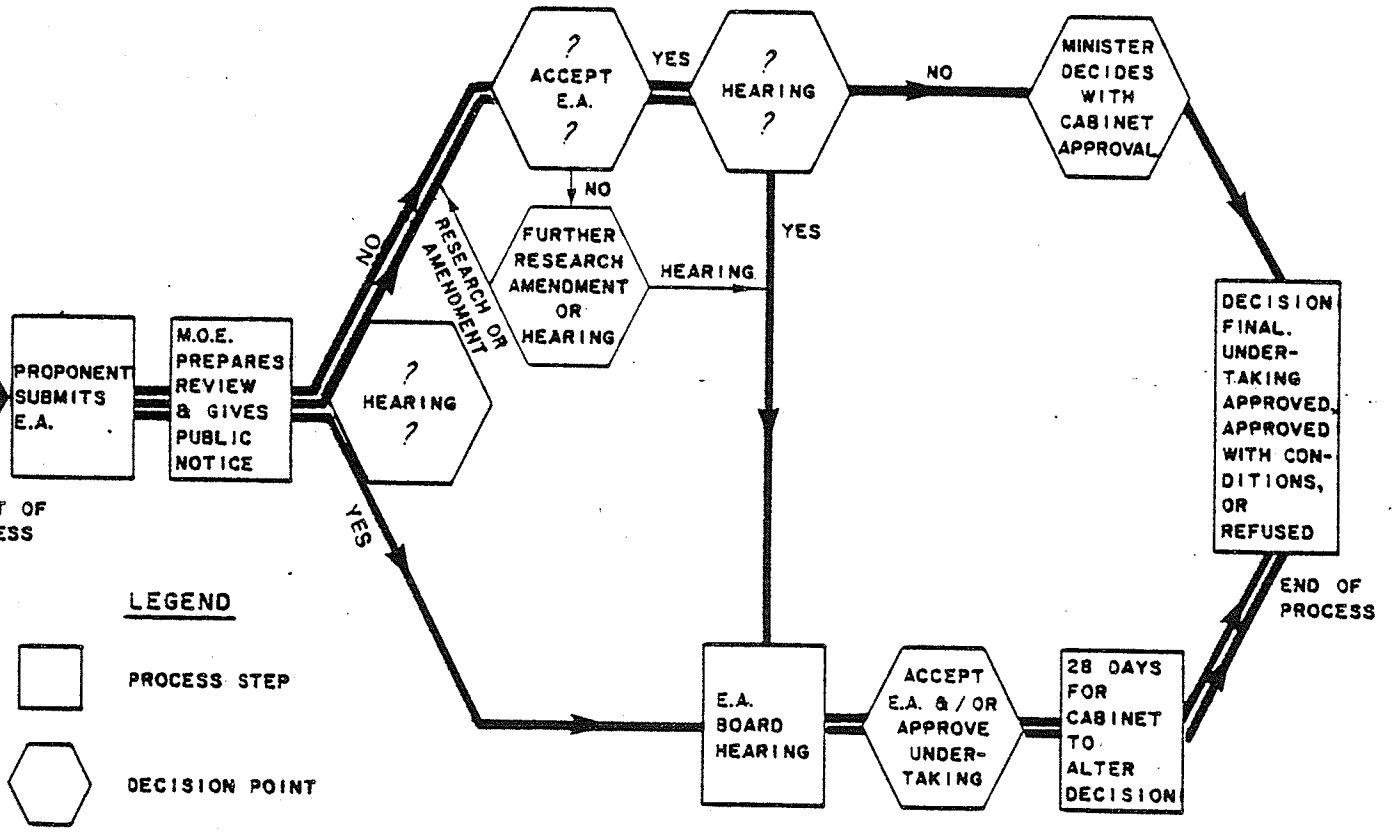
d. an evaluation of the advantages and disadvantages to the environment of the undertaking, the alternative methods of carrying out the undertaking and alternatives to the undertaking.

The part of the Act applicable to provincial departments and agencies became law in October, 1976. With respect to the municipal governments, a provincial-municipal study is well behind the original schedule, so it will probably be some time before the sections of the Act that apply to municipalities come into effect. The private sector still remains unaffected by the Act.

The general plan of the Act is shown in the following flow diagram. First, the government proponent agency must decide whether or not the Act applies to the proposed action (unless an exemption order under section 30 or an exempting regulation under section 41 applies). If the Act applies to a government agency's proposed development than it must prepare or procure an environmental impact assessment. When the EIA is completed it is submitted to the Minister of the Environment. The Minister of the Environment (through his ministry) co-ordinates a review of the environmental assessment. Then both the assessment and review are put on public record and the public has a minimum of thirty days to respond. Anyone who makes a written submission has the

Diagram 2

BASIC FLOW DIAGRAM OF THE ENVIRONMENTAL ASSESSMENT ACT 1975



Source: Paul Emond, Environmental Assessment Law in Canada, Emond - Montgomery Limited, 1978, p. 33

option of requesting (subject to the Minister of the Environment's approval under s. 12(2)), a hearing by the Environmental Assessment Board.

The Environmental Assessment Board is composed of not fewer than five members, who are appointed by the Ontario Cabinet by the way of orders-in-council for one, two, or three year terms. Board members may not be employed in the public service of Ontario, however some are former civil servants. If a hearing by the Board is required, then the Board must decide first whether the assessment and review documents are complete and acceptable, and secondly, whether the proposed undertaking should proceed.

However, if no one requests a hearing or the Minister of the Environment decides not to hold one, then the Minister must decide whether to accept, or to amend the environmental assessment. If the assessment is accepted, the public is notified and has fifteen days to request a hearing before the Environmental Assessment Board:

> If no one requests a hearing or if the Minister decides not to have a hearing, the Minister, with Cabinet approval, must decide whether to approve, approve subject to terms and conditions, or not approve the proposed undertaking. On the other hand, if a hearing is held, both the acceptance and approval decisions are made by the EAB [Environmental Assessment Board] subject to an overriding Ministerial power (requiring Cabinet approval) to alter the Board's approval decision within twenty-eight days.[24]

The Ontario legislation does not appear to be living up to its intent of promising new opportunities for

protecting the environment. The Act is devoted to the "betterment of the people" as a whole or any part of Ontario by providing for the protection, conservation and wise management of the environment in Ontario. The Minister who introduced the Act called it "one of the most important pieces of legislation ever introduced in Ontario." However, everything does not appear to be turning out as first planned. As an editor in the Toronto Globe and Mail observed:

> And this month, as we celebrate the third anniversary of the passage of the Environmental Assessment Act, there is no alternative to the conclusion that the Act has withered on the vine, been subverted from the outset, is a sham, a subterfuge, a bust. All show, no go.[25]

There have been so many actions allowed to bypass the Act that it has become known as the Environmental Exemption Act in Ontario. There have been hundreds of projects exempted from an EIA, with no public hearings. A prime example of a large-scale project which has escaped an EIA is the huge Darlington nuclear power plant (which is forecasted to cost $3.5 billion).

> These are precisely the actions which carry the greatest environmental risk. They also have long lead times and tend to be committed well before they become public knowledge. And they are the most politically hazardous, dealing with long-term futures, basic human needs, fundamental conflicts, and issues of who gets what.[26]

D. Municipal Government
Environmental Assessment

Environmental degradation poses a severe problem

not only to the federal and provincial governments, but the municipal governments as well. Many environmental related decisions are felt at the local level of government:

> ...the effective participation of local urban government is crucial but its role is weak, under-utilized and poorly understood. Without both a concern for and a capacity to incorporate environmental goals at the local and regional levels within [provinces], a major portion of public policy and its influence on urban decisions will be void of purposeful, systematic and explicit concern for environmental quality.[27]

Many municipalities are confronted with increasingly complex problems ranging from protecting the environment to providing an adequate infrastructure. "The solutions require both value choices on matters such as population growth and expansion and more practical decisions regarding budget, locations and technologies to be used in any given project."[28] Public officials must resolve the conflicts between economic feasibility and community objectives. The public has been demanding that more concern be given to the "quality of life" and the "humanizing" of urban environments.

The application of EIA has been espoused as a way of mitigating many of the foregoing problems facing Canadian municipal governments. Sharon Earn cites that an environmental assessment approach can assist in:[29]

(1) examining alternatives which could rarely have been predicted at the time the official plans were formulated;

(2) ensuring that a broad range of biological, physical, social, economic and community factors is considered;

(3) establishing a framework for making tradeoffs among environmental, community and economic goals;

(4) enalyzing widespread and secondary or indirect environmental effects;

(5) evaluating the effects of a project and establishing procedures for minimizing impact;

(6) developing a clearly defined, flexible process which can be responsive to public input and the need for public information programs;

(7) laying the groundwork for environmental data and evaluation systems; and

(8) integrating local municipal planning with provinical environmental policies and management programs.

Environmental assessment at the municipal level in Canada is emerging as a result of municipal initiative:

> Of the four ways in which U.S. municipalities became involved in EIA--federal and state assessments that involve local government consultation, federal and state cost-sharing programs requiring EIA as a condition of assessment, state legislation mandating local EIA, and municipal initiative--only the last category properly applies to Canadian municipalities at this time.[30]

Only a few municipalities--such as the Regional municipalities of Waterloo, Peel, Durham and Halton in Ontario, Area municipalities such as the City of Mississauga, Town of Caledon, and the Town of Oakville in Ontario, and the City of Winnipeg in Manitoba--have so far integrated EIA into their planning process.

To illustrate what these municipalities have done

with environmental assessment, a brief review of the efforts of the Regional Municipality of Waterloo and the Town of Oakville will be presented.

The Regional Municipality of Waterloo is a two-tier municipality under Ontario's regional municipality system and came into being in 1973. There are seven area municipalities that comprise the Regional Municipality of Waterloo. These seven area municipalities are required to prepare an Official Plan which states specific responsibilities for the provision of public services that are deemed to be more effectively provided at the regional level.

In November, 1975, the Council of the Regional Municipality of Waterloo adopted an Official Policies Plan. The content of the Plan demonstrated innovation in two particular respects:

> explicit policies to protect Environmentally Sensitive Policy Areas; and the use of environmental impact studies, among others, in connection with these areas. In both respects, the Regional Municipality set itself apart from other municipalities in Ontario; at the time only one other municipality in a draft plan, was attempting a similar approach.[31]

Environmentally Sensitive Policy Areas include such land areas as river bottoms, woodlands, bogs and marshes. Also included are sixty-nine remnant natural areas, totalling about 19,450 acres or about six percent of the Region, as designated in the Official Policy Plan.

The environmental impact studies are required for

developments in designated environmentally sensitive areas when

> ...proposals to change the legal use of land and buildings through admendments to official Plans and zoning by-laws or add new buildings or structures through land severances, subdivision applications or variances or when a new trunk, primary or regional road or utility is proposed, or other Senior Governments and their agencies' public works may cause an adverse environmental impact...[32]

The environmental impact studies are examined by the Environmental and Ecological Advisory Committee which makes a recommendation to the Regional Committee of Planning and Development in regard to the study. A public meeting may be held by the Planning and Development Committee before sending a recommendation to the Regional Council for action.

In March, 1976, the Town of Oakville, Ontario, started to draft an Environmental Plan to allow the municipality to develop the capabilities for environmental problem-solving. "The initial thrust of the Environmental Plan is to integrate environmental assessment techniques into the existing planning process."[33] It was recognized that environmental assessment would provide the municipality with a more sophisticated approach to planning.

"The emphasis of the Environmental Plan is on a workable strategy or process to resolve unforeseen environmental problems in the municipality; it is a distinct area of interest in the overall corporate management of the town."[34] The main reason for the environmental plan is to incorporate

environmental sensitivity into the decision-making process. It is perceived as a way of preserving the natural environment from the perspective both of energy and materials consumed and of wastes produced.

To achieve these goals the following activities were pursued:[35]

(1) The development of an environmental data base and inventory from which land capability can be identified. This will permit the town to have a description of the existing "environment" of Oakville.

(2) The development of a municipal environment review process which will bring environmental assessment into the town's planning, decision-making, and corporate management processes; and

(3) The formulation of innovative policies for energy, vegetation, wildlife, stormwater management, growth, density, and environmentally sensitive areas to be included in future official plan reviews or amendments as desired.

The Oakville approach is creative in that it is trying to bridge the gap between environmental assessment, the development of housing, and planning in Ontario. Oakville's environmental plan process "is a good indication that environmental assessment has the potential to become the most comprehensive planning and management tool available to the local government."[36]

E. Conclusion

Most provincial governments and the federal government have chosen internal administrative procedures, while Ontario followed the United States' NEPA approach with the Environmental Assessment Act. Through municipal initiative a few municipalities have incorporated environmental impact assessment into their planning process.

There appears little doubt that EIA has arrived on the Canadian scene, but its record is blemished. However, the majority of Canadian governments appear reluctant to opt for separate environmental assessment legislation. Most governments have preferred to introduce it under existing Acts and administer it by administrative arrangement. The Canadian approach is considerably less accessible to the public because the judicial system is not an integral component as it is in the United States. The Canadian judicial system has not helped to shape the environment impact assessment as the United States' judicial system did with NEPA. The main reason for this is that in most cases judicial review is expressly excluded from interfering with the environmental assessment process (as illustrated by section 19(19) of the Ontario Environment Assessment Act). Also the very lack of enshrinement in law in Canada (and the enormously discretionary role of public officials and representatives) severely curtails the role of the courts.

NOTES TO CHAPTER 4

1. Lennart Lundquist, Environmental Policies in Canada, Sweden, and the United States: A Comparative Overview, Sage Publications, 1974, p. 13.

2. Ibid., p. 23.

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4. Reg Lang, "Environmental Impact Assessment: Reform or Rhetoric," in Ecology versus Politics in Canada, Bill Leiss (ed.), University of Toronto, 1979, p. 241.

5. Revised Guide to the Federal Environment Assessment and Review Process, Government of Canada, May 1979, p. 1.

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9. Ibid., p. 2.

10. Ibid., p. 3.

11. Ibid.

12. Ibid., p. 4.

13. Emond, op. cit., p. 227.

14. Ibid., p. 229.

15. H. Mitchell, "The Incredible EARP," an unpublished report prepared for the Deaprtment of Fisheries and the Environment, July 22, 1976, p. 8.

16. Lang, op. cit., p. 245.

17. Ibid., p. 240.

18. Environment Impact Assessment in Canada: A Review of Current Legislation and Practice, prepared for the Canadian Council of Resources and Environment Ministers, Victoria, B.C., 1977, p. 18.

19. Ibid., p. 15.

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21. See David Estrin and John Swaigen, Environment on Trial: A Handbook of Ontario Environmental Law, Canadian Environmental Law Research Foundation, Toronto, 1978.

22. D. Caplice, "Ontario's Environmental Assessment Act: What It Is and How It's Going to Work," a paper presented to the Professional Engineering Association, June 1976, p. 1.

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24. Ibid., p. 34.

25. "Hollow as a Promise," Toronto Globe and Mail, July 12, 1978.

26. Lang, op. cit., p. 247.

27. Edward J. Kaiser et al., Promoting Environmental Quality Through Urban Planning and Controls, Washington: U.S. Environmental Protection Agency, 1974, p. 31.

28. Sharon L. Earn, "Environmental Assessment and Municipal Planning: Problems and Prospects," Plan Canada, March 1977, p. 42.

29. Ibid., pp. 42-43.

30. Lang, op. cit., p. 241.

31. Audrey Armour and John Walker, "Canadian Municipal Environmental Impact Assessment: Three Case Studies," Plan Canada, March 1977, p. 34. For more information on environmental planning approaches in Ontario municipalities, see Reg Lang and Audrey Armour, "Municipal Planning and the Natural Environment," a report to the Ontario Planning Act Review Committee.

32. Regional Municipality of Waterloo, The Official

Policies Plan, approved by the Minister of Housing, December 1, 1976.

33. Armour and Walker, op. cit., p. 35.

34. Ibid., p. 36.

35. Ibid.

36. Ibid., p. 37.

CHAPTER 5

ENVIRONMENTAL IMPACT REVIEW AND THE CITY OF WINNIPEG

A. Introduction

The City of Winnipeg was the first municipality in Canada to have formal requirements for environmental impact assessment on public projects. First, the chronological highlights of the assessment process will be documented, from the initial wording of Section 653 in the 1972 to 1977 amendments. Second, the assessment process guidelines will be analyzed. Third, a review of the assessment process from its initial beginning to 1977 will be presented. (The assessment process did not really materialize until January of 1974 when the Executive Policy Committee of the City of Winnipeg council realized that they had a legal requirement to perform certain duties.) Fourth, a review of how the Manitoban courts reacted to the assessment process will be presented. Finally, what went wrong with the assessment process will be analyzed.(there were many factors that played an integral part in the demise of the assessment process in the City of Winnipeg and they will be analyzed).

B. Chronological Highlights of Winnipeg's Environmental Impact Review Process

Significant highlights of Winnipeg's Environmental Impact Review process will now be presented. They will be explained in greater detail in the other sections of the chapter.

January 1, 1972 - The City of Winnipeg Act came into full force, which included Section 653. Section 653(1) of the City of Winnipeg Act states:

> In addition to the duties and powers delegated to the Executive Policy Committee by this Act or by council, the Committee shall review every proposal for the undertaking by the city of a public work which may significantly affect the quality of the human environment and shall report to the council before such work is recommended to council on,
> a) the environmental impact of the proposed work;
> b) any adverse environmental effects which cannnot be avoided should the work be undertaken; and
> c) alternatives to the proposed action.
> 653(2) Prior to a time in 1973 fixed by council and thereafter annually, the executive policy committee shall present a written report to the council concerning the work of the committee under subsection (1) to the end of the preceding December.

February, 1973 - The City of Winnipeg Council passes the Capital Budget without a report from the Executive Policy Committee on whether any proposed public works may significantly affect the quality of the human environment.

August, 1973 - The City of Winnipeg administration official warns of the need for environmental impact study guidelines.

August 30, 1973 - An environment impact study for the Sherbrook-McGregor Overpass is completed.

January 29, 1974 - The executive Policy Committee directed the Board of Commissioners to prepare environmental impact studies on four proposed public works: the Fort Garry-St. Vital Bridge; Grant Avenue Extension; Silver Avenue Corridor; and the Underground Pedestrian Concourse at Portage and Main.

January 31, 1974 - The four environmental impact studies that were directed by the Executive Policy Committee for the Board of Commissioners to perpare are completed in two days.

February 14, 1974 - The executive Policy Committee passed the motion:

> That the Board of Commissioners be instructed to prepare guidelines for the timing, content, methodology and resources relative to the preparation of future Environmental Impact Reviews required under Section 653 of the City of Winnipeg Act.

April, 1974 - An environmental impact study for the proposed Osborne Street Bridge Replacement Project is completed.

May 2, 1974 - Winnipeg Tribune reports that Pollution ...e (an environmental group) is going to take the City of ...ipeg to court because no environmental impact study was

prepared on the Proposed Public Parking Structure at Portage and Main.

May 15, 1974 - Brian Corrin, a solicitor for the law department, City of Winnipeg, submits his report to the Board of Commissioners titled, "General Reflections on the Legal Requirements of Section 653 of the City of Winnipeg Act."

May 30, 1974 - The Commissioner of Environment, D. H. Henderson released the environment impact study guidelines, titled, "Guidelines for the Preparation of Environmental Impact Reviews Under Section 653 of the City of Winnipeg Act."

June 6, 1974 - The court case involving the Proposed Parking Structure at Portage and Main is settled out of court. The Executive Policy Committee instructed the city planning department to prepare an environmental impact review so Pollution Probe dropped its charges.

June 1974 - The first court case involving the Section 653 of the City of Winnipeg Act goes before the courts. The case is Stein v. The City of Winnipeg.

August, 1974 - The environmental impact review for the Proposed Public Parking Structure at Portage and Main is completed.

September, 1974 - Section 653(3) and (4) were added to Section 653 stating:

> 653(3) In this section "public work" does not include the maintenence of streets, parks, boulevards, water systems, sewer systems, electrical utilities or buildings or appurtenances thereto owned by the city.
> 653(4) Where, after January 1, 1972, a public work has been undertaken following the approval of a proposal therefor by The Clean Environment Act, subsection (1) is deemed to be satisfied for all purposes.

October 16, 1974 - The "Guidelines for the Preparation of Environmental Impact Reviews Under Section 653 of the City of Winnipeg Act" are adopted by the City of Winnipeg Council.

December 19, 1974 - The first public hearing to discuss an environmental impact review was held. The environmental impact review that was discussed was the "Proposed Public Parking Structure at Portage and Main."

February, 1975 - An "Appendum" [sic] was added to the original environmental impact review for the "Proposed Public Parking Structure at Portage and Main."

February 19, 1975 - The Executive Policy Committee in its report to the City of Winnipeg recommended:

> ...that the official delegation of the City approach the Provincial Government requesting that this section of the Act [Section 653] be repealed in its entirety and that the Provincial Government, in conjunction with the City review all implications of EIRs with the view to establishing in the future a more adequate legislative framework for the protection of the urban environment.

February 20, 1975 - The Winnipeg Free Press reports

that the recommendations by the Executive Policy Committee were withdrawn and instead a motion is called for a review by the Provincial Government on Section 653. The Winnipeg Free Press also reported that a number of delegations made representations praising Section 653.

June 30, 1975 - A second court case, Miller v. The City of Winnipeg, goes before the courts regarding Section 653.

July 9, 1976 - a third (and final) court case, Easton v. The Executive Policy Committee and the City of Winnipeg, goes before the courts.

October, 1976 - The Committee of Review (Taraska Report) on The City of Winnipeg Act recommended that Section 653,

> ...would more appropriately be located in the Greater Winnipeg Development Plan than in the City of Winnipeg Act
> ...we recommend that the Development Plan be amended to include a section requiring the preparation and submission of reports evaluating the anticipated effects of development proposals. The section should name the various types of effects which must be considered in these reports. These types of effects should not be limited to physical and financial considerations but should also include the social implications. The reports should be prepared for all development proposals, public or private, which fall within the jurisdiction of the Greater Winnipeg Development Plan.

October, 1976 - The environmental impact review for the proposed District #6 Works and Operations Building and

Police Building is completed.

March, 1977 - An environmental review is prepared on the proposed Public Works and Operations Building at Wilkes and Waverly.

March, 1977 - An environment impact review is prepared on the proposed Works and Operations Facility for District #3.

June, 1977 - The Provinical Government passed Bill 62 amending Various sections of the City of Winnipeg Act, which included Section 653. Section 653 was repealed and replaced with the following:

> 653(1) The council may require a report on the environmental impact of a proposed public work.
> 653(2) Where the council requires a report on the environmental impact of a proposed public work,
> (a) it shall be the sole determining authority of the adequacy of the report or any part of it; and
> (b) It may establish such procedures as it may deem necessary.
> [emphasis added]

August 23, 1977 - The City of Winnipeg staff wrote a report to the Board of Commissioners recommending the environmental impact review process be continued.

December 14, 1977 - The Board of Commissioners rejected the staff recommendations of August 23, 1977. Since then no more environmental impact reviews have been prepared by the City of Winnipeg officials.

C. Environmental Impact Review Guidelines

The original 1971 wording of Section 653(1) of the City of Winnipeg Act provides the mandate for environmental impact studies, but it does not specify what an environmental study should incorporate. Early practitioners who had to fulfill the requirements of Section 653 were faced with the perplexing questions such as what are the full content requirements, or standards or procedures are to be applied. To mitigate this problem, the requirements were clarified to some extent by guidelines.

On February 14, 1974, the Executive Policy Committee (EPC) instructed the Board of Commissioners to prepare guidelines for timing, content, methodology and resources relative to the preparation of future environmental impact reviews (EIR) required under Section 653 of the City of Winnipeg Act. The guidelines were written by City of Winnipeg officials (mainly from the Department of Environmental Planning) and approved by the Board of Commissioners. On May 30, 1974, the Commissioner of Environment, D. H. Henderson, released the guidelines, titled "Guidelines for the Preparation of Environmental Impact Reviews Under Section 653 of the City of Winnipeg Act" (hereafter referred to as Guidelines).

The City of Winnipeg (hereafter referred to as the City) officials who wrote the Guidelines had to address the

questions of what an adequate review involved; when should an EIR be undertaken; and when should the public be involved in the process. The City officials looked to the United States' experience with environmental impact statements, but found most of the information was addressed towards resource-oriented projects (i.e., nuclear power plants) rather than more urban-oriented projects such as an office building. The City officials had to be innovative and try to write guidelines that could be used in an urban context.

When the Guidelines were finally prepared the City officials had divided them into three sections:

1. the timing of stages in a recommended Review Process.
2. the allocation of resources necessary to prepare consistently adequate Reviews.
3. recommended Guidelines for the methodology and content of all Environmental Impact Reviews.[1]

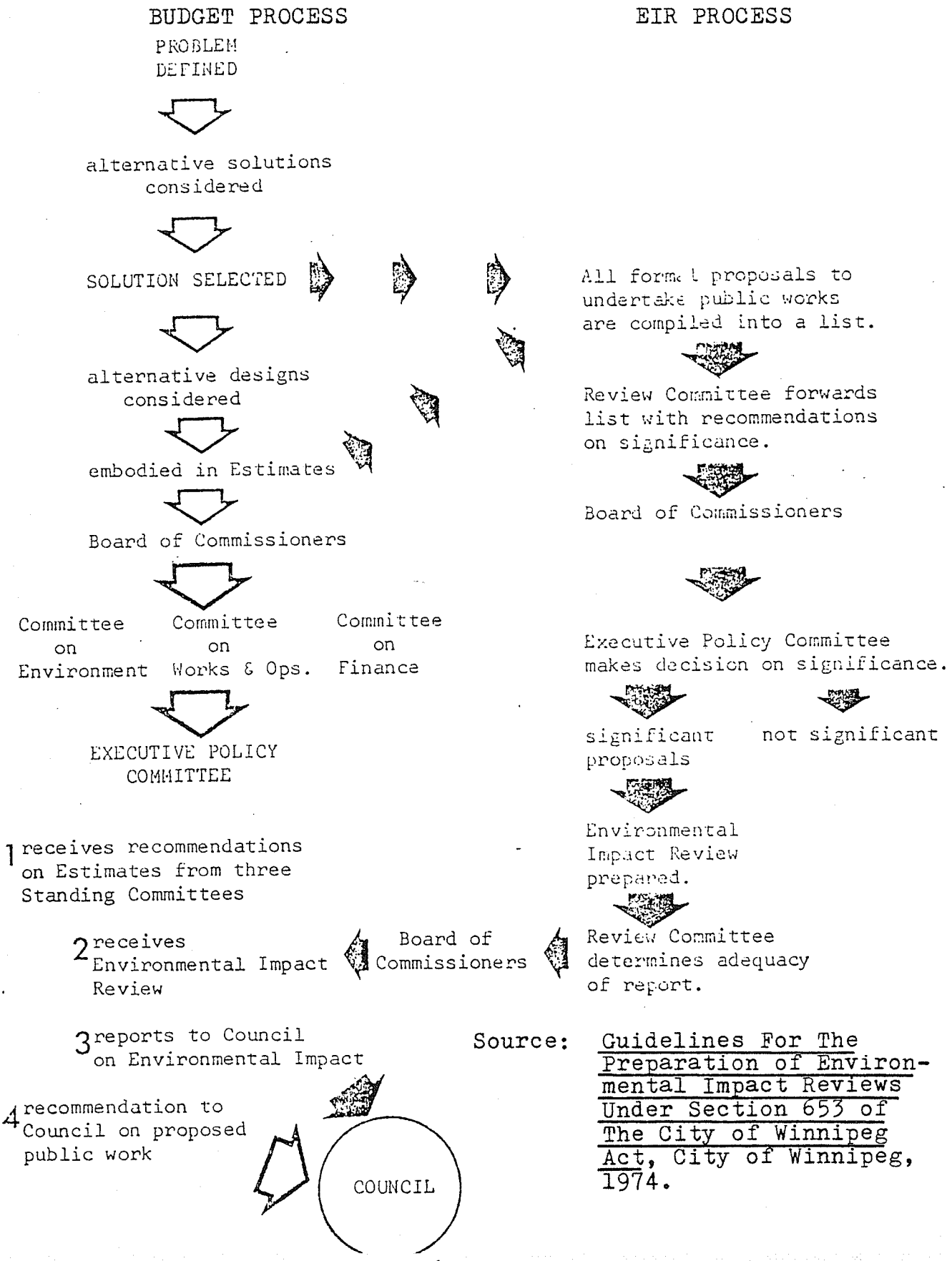
The three stages of the guidelines will now be discussed.

(i) Review Process

The Guidelines set out a seven-stage review process (see Diagram 3). The review process only covers City proposed public works. A "public work" is defined as:

(a) a concept only becomes a formal proposal when it is included in the Current Budget Estimate;
(b) "undertaking" includes the committment of monies to any phase of implementation of a public work such as a design or land acquisition.[2]

Diagram 3



Source: Guidelines For The Preparation of Environmental Impact Reviews Under Section 653 of The City of Winnipeg Act, City of Winnipeg, 1974.

Stage one

The first stage of the review process is the identification of all proposals for the undertaking as a public action, for submission to EPC. With every proposed public work by the City having to be submitted to EPC for a ruling on its environmental significance, the authors of the Guidelines saw a need for an inter-departmental Review Committee to identify whether proposals from various civic departments should be reviewed by EPC.

The Review Committee was composed of a member of the Law Department; Director of Operations, Department of Works and Operations; the Chief Plannner, Environmental Planning Division; and the Assistant Director of Public Welfare, Welfare Department. The rationale behind the composition of the Review Committee was to have a member from the Law Department and Welfare Department whose departments do not undertake public works projects so they should not be biased for or against any proposed undertakings (also the law department member could act as a consultant if any City litigation arose and the member from the Welfare department could ensure that the social component of the environment is considered). A member of the Department of Works and Operations was included because a great majority of public works proposals are generated by this department. The member from the Department of Environmental Planning was chosen because a substantial

portion of any potential environmental effects would occur in areas currently under the Department's responsibility.

The Review Committee was under the aegis of the Board of Commissioners (who forward the Review Committee's recommendations to EPC). The criteria used by the Review Committee in making its recommendations on the potential environmental effects of proposed public works are:

1. A proposal should be recommended as significant if it is likely to produce any major deleterious change in the existing human environment.
2. A proposal should be recommended as significant if it is likely to produce both major positive and major negative changes in the existing environment but the balance of such change appears to be positive, or is not readily evident.
3. A proposal should be recommended as significant if it is likely to be controversial.
4. A proposal, or group of proposals, should be recommended as significant if the overall or cumulative effects of the proposal or proposals, in conjunction with existing works, or with each other, is likely to produce any major deleterious change in the existing human environment.[3]

Stage one is completed when the Review Committee forwards its recommendations to the Board of Commissioners who then forward them to EPC.

Stage two

In stage two the EPC makes the decision (based on the Review Committee's recommendations) as to which proposed public works have in their opinion potential for significant environmental effects. It then issues directives for EIRs to be prepared for those projects. Public notification of the decision is given at this stage of the

process so that citizens can make representations to EPC regarding its decision on whether an EIR should be prepared for the various proposed public works.

Stage three

In the third stage of the review process the actual EIR is prepared by a Task Force (more about the Task Force in the Resources section). The EIR is to contain:

(a) project description;
(b) an environmental inventory which includes physical, social, demographic, economic, and cultural components.
(c) the relationship of proposed public work to existing policies and programs affecting the project environment;
(d) alternatives to the proposed action;
(e) potential impacts of the proposed work on the quality of the human environment including beneficial and deleterious, direct and indirect, individual and cumulative, quantitative and qualitative, temporary and permanent, avoidable and unavoidable effects;
(f) limitations of future options;
(g) concrete indication that substantial submissions in response to the draft form have been considered.[4]

Stage four

In stage four the EIR is submitted to the Review Committee for examination of its adequacy. According to the Guidelines:

> ...it is hoped that the communication between the Review Committee and the Task Force preparing the actual Review would obviate the need to redraft a report but cases may arise in which legislative requirements have not been fulfilled. The Review Committee would ensure, at this stage, that completed reports submitted to the Board of Commissioners and the EPC were indeed, sufficient to permit a proposal if this be the decision of EPC.[5]

Stage five

In stage five the EIR and the Review Committees recommendations of its adequacy are presented to EPC. EPC discusses both the report and recommendations and then decides whether the proposed public work should be included in the Current Capital Estimates.

Again, the public must be notified in order that any citizen can make a representation to EPC or Council with respect to the EIR or EPC's recommendations. By notifying the public it is hoped that any meaningful public reaction is brought forth now in the review process, instead of later on in the council chambers or even in the courts.[6]

Stage six

In stage six City Council approves or disapproves the proposed public work based upon the recommendations from EPC regarding the potential environmental impact.

Stage seven

In stage seven an on-going review is carried out through the final design stages of the project in order to provide for all possible mitigation of harmful effects. The review process ends with the completion of the public work.

(ii) Resources

The Resources section of the Guidelines are devoted

to the requirements and composition of the Task Force. The Task Forces' should satisfy the following requirements;

(1) It must be so constituted that it does not jeopardize confidentiality in those cases where this is essential to the expeditious evolution of the proposal.
(2) It must both be, and appear to be, unbiased and objective.
(3) It should be able to develop consistency with respect to methodologies employed and impacts evaluated.
(4) It should compromise, or have at its disposal, the necessary expertise in all appropriate fields.
(5) It should be so constituted that it facilitates the establishment of environmental objectives as an integral part of the conceptual stage of development of a public work.[7]

The Task Forces' were established within the City's own administration so as to meet the requirement of confidentiality. The Task Force members for the various EIRs were chosen because they were judged to have the relevant expertise needed to examine the issue under review. However, when the needed expertise was not internally available, the provision was made to employ the appropriate consultants.

To guarantee consistency in approach and method and to use the experience gained from doing previous EIRs, a permanent Core Committee was established around which each Task Force was composed.

The Core Committee "would co-ordinate the inputs from the various Task Force members and initiate further research which may be required as a response to these inputs."[8] The Core Committee also helped to complete the actual EIR.

The Core Committee was drawn from the staff of the Department of Environmental Planning. The staff members of the Core Committee were four incumbents in the positions of Urban Development and Special Projects Officer, Head of Research, District Plan Co-ordinator, and Central Development Plan Co-ordinator. "These positions afford both the required general overview and the interdepartmental contacts, at the operational level, necessary to the expeditious establishment of a Task Force possessed of the requisite expertise."[9]

In order to consolidate experience and ensure consistency in approach the Head of Research from the Department of Environmental Planning was directed to maintain and update a library of materials on environmental impact review.

(iii) Methodology and Content

The Guidelines were drafted so as to be "sufficiently comprehensive to ensure adequate consideration of the various components of the human environment, yet at the same time, sufficiently general and flexible to apply to any proposal for a public work."[10] A general set of guidelines were drafted that were not directed towards each particular class of public works, but were intended to apply to all EIRs concerning any type of public work.

The Guidelines were intended to ensure that the

City fulfills its legal requirements under Section 653 of the City of Winnipeg Act and to give some direction to the various bodies involved in the Review Process (i.e., the Review Committee).

There are ten guidelines for the actual preparation of EIRs:[11]

1. Intelligibility
   The Environmental Impact Review Shall Be Prepared In Such A Way That It May Be Fully Understood By The Layman.
2. Assumptions
   The Environmental Impact Review Shall Explicity State Any Major Qualitative Or Quantitative Assumptions Central To The Justification And Assessment Of The Proposed Public Work.
3. Precision
   The Environmental Impact Review Shall, Wherever Appropriate, Substantiate Conclusory Statements By Reference To Any Underlying Reports, Studies, Or Other Information Used In Their Preparation.
4. Project Description
   The Environmental Impact Review Shall Contain A Complete Description Of The Proposed Act, Including Its Purposes, Location, Extent, Scope, Staging And Methods And Materials To Be Used In Its Construction Or Alteration.
5. Environmental Inventory
   The Environmental Impact Review Shall Contain A Comprehensive Description Of The Project Environment As It Currently Exists, Including Physical (Built and Non-Built), Social And Demographic, Economic, And Cultural Components.
6. Existing Public Policy
   The Environmental Impact Review Shall Make Explicit The Relationship Of The Proposed Public Work To Existing Public Policies And Programs Affecting The Project Environment.
7. Alternatives
   The Environmental Impact Review Shall Include An Evaluation Of Alternatives To the Proposed Action Including Both Conceptual And Design Alternatives.
8. Impacts
   The Environmental Impact Review Shall Include A Discussion Of the Potential Effects Of The Proposed Public Work On the Quality Of The Human Environment

Including Beneficial And Cumulative, Qualitative And Quantitative, Temporary And Permanent, Avoidable And Unavoidable Effects.

9. Limitations Of Future Options
The Environmental Impact Review Shall Make Explicit Any Irreversible Or Irretrievable Commitment Of Resources, Or Irrevocable Public Policy Commitment, Entailed In The Implementation Of The Proposed Public Work.

10. Responsibilities
The Final Environmental Impact Review Shall Contain Some Concrete Indication That Substantive Submissions In Response To The Draft Form Have Been Considered.

The Guidelines prepared by the City officials were comprehensive and up-to-date. According to the Commissioner of Environment, D. Henderson, they were the best prepared in Canada and officials from other cities have asked for them. It is regretable that these well researched, comprehensive guidelines are no longer giving direction to City officials regarding the methodology and content of EIRs.

D. Legal Implications of EIR

Accompanying the EIR Guidelines, was Appendix B, pertaining to the legal requirements of Section 653 of the City of Winnipeg Act, written by Brian Corrin.[12] By comparing the United States legislation (which had been judicially tested) to the Winnipeg legislation, Mr. Corrin tried to predict how the Manitoba courts would react to Section 653. The United States NEPA is much more comprehensive than the City legislation, but this did not rule out the possibility of the United States judicial experience being followed by the Manitoba courts.

In examining when the courts may actually review the actions of the public authority, Mr. Corrin states:

> In the present instance, the City is given great latitude in the exercise of its duty. The City's Executive Policy Committee is given a statutory discretion and is not bound or otherwise inhibited in the exercise thereof. Rather, it would appear that the mere exercise of this committee's discretion in deciding whether a matter may or may not significantly affect the quality of the human environment suffices to place a matter beyond the scope of judicial review.[13]

The second question reviewed, is whether the courts can review the qualitative adequacy of an EIR. Mr. Corrin believed that the courts could exercise their powers of review if a report to Council with respect to subsections (a), (b), and (c) of Section 653(1) were not made, but the situation of qualitative aspects of the EIR was not quite so clear. After reviewing United States case law, Mr. Corrin felt that "the leading U.S. cases on compliance are not...germane to our discussion as the language of NEPA is much more comprehensive than that of Section 653...." Because of this, Mr. Corrin believed that the Manitoba courts would not likely be inclined to probe the contents of the EIR's as their United States' counterparts did.

Mr. Corrin as well reviewed subsection (c) of Section 653(1) on the "alternatives to the proposed action." He discussed how the United States courts have ruled that the range of alternatives that must be discussed has to be fairly wide (including the alternative of "Do-Nothing

Approach"). However, he did not speculate on how the Manitoba courts may react.

Mr. Corrin also reviewed Subsection 653(1)(b) that makes it mandatory that the EIR note any adverse environmental effects which cannot be avoided should the work be undertaken; and Subsection 653(1)(a) which requires that the environmental impact of the proposed work be noted. With respect to Subsection 653(1)(b) it was cited that the Manitoba courts could judicially review an EIR if EPC had failed to do an exhaustive report on any adverse effects which cannot be avoided. With regard to Subsection 653(1)(a), Mr. Corrin reviewed United States case law, but did not state how the Manitoba courts may react to this subsection.

In concluding, Mr. Corrin states:

> ...it is noted that the simple rationale behind the requirement of an environmental impact statement (or review) is that is should provide for a heightened awareness of environmental consequences within a decision-making process. In so doing, it is hoped that minimum it will contain such information as will necessarily alert the public as well as Council representatives to all possible environmental consequences of the proposed action.[15]

With environmental law having little judicial precedent to guide environmental impact assessment practice, Winnipeg served as a testing ground.

> Judicial review and decisions in the conflicts and controversies of Section 653(1) not only serve to reveal the main strengths and weaknesses of the requirement and Winnipeg's approach, but also...the development of needed standards and measures of effectiveness for municipal impact review procedures.[16]

There were three court cases brought about by private citizen litigation against the City regarding Section 653. The cases were Stein v. City of Winnipeg;[17] Miller et al. v. City of Winnipeg;[18] and Easton et al. v. Executive Policy Committee of the City of Winnipeg and the City of Winnipeg.[19]

In the Stein case, Mrs. Stein charged that the EPC did not review the proposal for spraying methoxychlor (a chemical which kills tree leaf-eating insects) nor did it report to the City pursuant to Section 653 of the City of Winnipeg Act.

The judicial decision was significant in two regards. First, the fact that the courts allowed Mrs. Stein the legal standing to bring a class action for statutory non-compliance.[20] In making the decision, the judge stated:

> Section 653 must be read in the context of the whole Act. One of the important aspects of the legislation is an expressed intention to involve citizen participation in municipal government, eg. Sections 23 and 24 on citizen committees, Sections 609 et seq. on zoning. Section 653 has created an obligation to review the environmental impact of any proposal for a public work which may significantly affect the quality of the human environment. If that Section is not to be considered as a mere pious declaration, there must be inferred a correlative right, on the part of a resident, in a proper case, to have a question arising out of the Sections adjudicated by the court.[21]

The second significant decision was that Section 653 created an obligation to review any proposal for a public project which may significantly affect the quality of the human environment. As Chief Justice Freedman of

the Manitoba Court of Appeal stated:

> It seems to me that the spraying program was and is a "proposal for the undertaking by the City of a public work which may significantly affect the quality of the human environment"...moreover there is enough evidence before the court to indicate that methoxychlor spraying may significantly affect the quality of the human environment. Here it is worth noting that Section 653(1) comes into play even if a proposal may have the effect in question. It is not incumbent on a plaintiff to show that the proposal will have the effect.
>
> At the root of this case is the requirement of Section 653(1). It's object is to ensure, as far as possible, that no project which may impair or endanger the human environment is undertaken by the city without a prior environmental impact review. That obligation is fundamental; but in the present case, it appears to have been entirely ignored or overlooked. Without the requisite environmental impact review, the spraying project stands unauthorized in law.[22]

The methoxychlor spraying was allowed because in comparison to the possible adverse affects on Mrs. Stein (and others), if there was spraying, against the affect on the general environment (i.e., dying trees if there were no spraying).

The Stein case provided a strong beginning for the EIR requirement. This initial optimism did not last too long as a result of the court decisions in the following two cases.

The court case involving Miller et al. v. City of Winnipeg occured as a result of a capital expenditure resolution for the reconstruction and realignment of Wellington Crescent. On February 20, 1975, EPC decided that a portion of the capital resolution dealing with the realignment of Wellington Crescent could have negative

environmental effects (i.e., noise pollution) and ordered that an EIR be prepared. Then, on March 5, 1975, EPC reversed its decision on the EIR. That evening, City Council passed a resolution approving the capital estimates in total which included the reconstruction and realignment of Wellington Crescent.

Miller et al. argued that once EPC had passed a resolution requiring an EIR be undertaken, then no further action could be taken until the EIR was completed.

The judge ruled that:

> ...it was found that Section 653 does not impose any limitations on the legislative power of the Council of the City of Winnipeg, but merely imposes on the Executive Policy Committee a duty that it cannot recommend the construction of the public work without first recommending the impact on the quality of the human environment.[23]

Paul Emond criticizes this decision in stating:

> By interpreting the section to mean the City Council may proceed on environmentally sensitive projects prior to receiving the EPC report, the Court... betrays its lack of understanding of the assessment process. According to Mr. Justice Solomon's interpretation of the Section, the City may completely circumvent the process by proceeding before they receive any recommendation from the EPC, or by simply ignoring a recommendation that they find unacceptable.[24]

The issue of the duties of EPC regarding the EIR process and the implications of non-compliance to Section 653 surfaced again in the Easton case.

In the Easton et al. v. EPC of the City of Winnipeg and the City of Winnipeg, again, the contentious issue was whether the EPC had performed its statutory duty under Section

653. The court case involved the construction of a bridge across the Seine River. Easton et al. argued that EPC did not perform its statutory duty by not holding a public hearing or preparing an EIR on the matter.

In making his ruling, Justice Hall cited several pertinent weaknesses in Section 653:

> Section 653(1) makes no provision to preclude, limit, or provide for judicial review. No standard is laid down for determining what proposals require an environmental impact review and report. No procedure for enforcement of the section is provided. The Guidelines...which suggest that if any controversy has or is likely to arise, a review and report should be made...do not have the force of the law.[25]

However, the court ruled that a decision by EPC not to undertake an EIR is in every case open to judicial review. The contentious issue is whether there had been compliance by EPC under Section 653. Justice Hall ruled:

> While the Court felt that the EPC's decision not to proceed with an environmental review and report without a full scale hearing was both perfunctory and cursory, nevertheless, the Section was in fact complied with. The ex post facto consideration of impact after the work had been recommended to Council constitutes compliance with the requirement of the statute.[26]

From an environmental standpoint, the three court cases were very discouraging. In most cases, the judges did not seem to comprehend the full intent of Section 653. However, as was pointed out by Paul Emond, it is unfair to put all the blame on the court for the demise of the EIR process. If EPC would have complied with Section 653 and the Guidelines, then the cases would have never

reached the courts.

In examining judicial response to the environmental impact assessment issue by the United States courts and the Manitoba courts, there is a salient fundamental difference. Whereas the United States' courts took the initiative by ruling on pertinent questions such as when should assessments be undertaken or the adequacy of the EIR contents; the Manitoba courts have been more adept at asking their own questions. As in the court case involving Easton v. Winnipeg (which was the issue over construction of a bridge over the Seine River), Justice J. F. O'Sullivan of the Manitoba Court of Appeal raised many questions:

1. Is the bridge in question a public work "which may significantly affect the human environment"? Suppose EPC decides that it is not. Is the decision of the Committee on this threshold question subject to judicial review? If it is, are those who attack the decision entitled to bring new evidence to show that the bridge may significantly affect the quality of the environment, or is the court limited to the material considered by the Committee. Is the court's review of the Committee's decision on this threshold question on the merits, or is the court only to satisfy itself that the Committee has not acted arbitrarily or capriciously?
2. Assuming that the bridge is a public work which may significantly affect the quality of the environment, can the court be called on the review the EIR to see if it conforms to the requirements of the statute? Is the court to satisfy itself that the impact study is adequate and that it covers all the points raised in Section 653(1)? Should the court review evidence to show that the environmental impact study that has been made is not adequate?
3. Assuming that Section 653 applies to the bridge in question and assuming that the provisions of the section have not been complied with, what is the

effect of the non-compliance? Is the work undertaken by the City without an EIR a wholly illegal project? Suppose a bridge is built without complaince with Section 653, must the bridge be ordered to be demolished is some citizen complains that the bridge was erected illegally? Does the passage of time validate what would otherwise be invalid?

4. Assuming that an EIR is required, at what stage is it required? Is it required before specifications are prepared? If the specifications are prepared, must there be further EIR before tenders are called?[27]

In Canada, (and particularly Manitoba) the courts have been reluctant to substitute their opinion for that of municipal councils. As a result, important legislation such as Section 653 of the City of Winnipeg Act have been left to the whims of public officials who appeared to be more concerned about being re-elected than protecting and enhancing the environment.

E. Performance of EIR

When the legislators wrote Section 653 of the City of Winnipeg Act, they adopted the principle that if any public development is going to affect a neighborhood, or the City at large, the public should have the proper information regarding the action before it is started. This provision was without precedent in Canada at the time of its enactment.

However, in the first two years of the City of Winnipeg Act's existence (from January 1, 1972 until January, 1974), the section had only been applied on one occasion, the Sherbrook-McGregor overpass. The EIR on

the Sherbrook-McGregor overpass just reviewed transportation and engineering aspects of the proposed action with no reference made to the potential environmental effects on the people in the community.

In his column in the Winnipeg Tribune on February 2, 1974, Val Werier states,

> ...why hasn't the impact on the human environment taken priority in developments (i.e., the Sherbrook-McGregor overpass)? Could it be that the Executive Policy Committee is development-oriented, and so tends to overlook aspects that might materialize as an obstacle to the project?[28]

Mr. Werier also stated that "the provincial legislation should be extended beyond any public works undertaken by the city. It should include all major projects, whether public or private development. The issue is not who initiates the development, but how it affects the people."[29] Mr. Werier would also like to see the provincial government extend the legislation to the private sphere. "The quality of life should be preserved and improved because that's what a city is all about. No group should be allowed to harm the environment, and they should be answerable to the public before they embark on a potentially injurious cause."[30]

As previously outlined, four major proposed public works had environmental impact studies prepared in January 1974. They were the Silver Avenue corridor, Grant Avenue extension, Fort Garry-St. Vital corridor, and the underground pedestrian concourse at Portage and Main. As unlikely as

it may sound, the environmental studies were prepared in two days. "[The] official studies were an afterthought. The studies were ordered in a great hurry...when it was discovered the city had overlooked the requirement of the Winnipeg Act."[31] As stated by Robert Matas:

> This group of environmental impact reports, released in January, 1974, were filled with generalities which could have been applied to the projects regardless of where they were located. Detailed effects on specific locations were sketchy; in some cases, alternatives were not studies. Considerable space was spent on how to enhance the surroundings after the expressway had destroyed the neighborhood it crossed.[32]

The actions by EPC and the content of the prepared EIR made a charade out of the whole process. As one City employee stated, "obviously they couldn't prepare a proper environmental report in two days."

According to Section 653 the EPC was under the obligation to report to council regarding public actions that may significantly affect the quality of the human environment. Moreover, it had to report to council on environmental impact; alternatives to the proposed action; and any adverse environmental effects which cannot be avoided should the work be undertaken. On no account were these duties that are imposed on it by Section 653, fulfilled by EPC.

Another example of the calibre of the EIRs becomes apparent when analyzing the EIR prepared for the Osborne Street Bridge Replacement. The EIR practitioners finally

started to present alternatives to the proposed action, but to a limited extent.

> Two alternative plans were considered: $1.4 million simple replacement scheme and a $2.8 million more elaborate bridge crossing. What has been ignored is a $700,000 scheme to renovate the present facility and extend its life at least another 20 years.[33]

According to Robert Matas:

> ...the environmental impact report..., in effect, ruled out the possibility of renovating the present structure. Absence of serious concern for alternatives, other than what is suggested by elected officials, suggest administration's hostility to the provincial legislation still survives.[34]

Major proposed public works that should have had EIRs prepared were the $23.7 million Winnipeg Convention Centre and the $8 million Centennial Library. Both projects were endorsed by City council without receiving EIRs.

City administration tried to ease criticism that was forthcoming by pointing to the fact that it was still adjusting to the new Unicity concept and by warning that "there are few guidelines which have been developed to assist in the evaluation and preparation of an environmental impact report."[35] As stated in the report on the Sherbrook-McGregor overpass:

> ...city staff has not as yet devised a definite method to combine engineering, physical and social science inputs into the production of a study... this report, due to time and resource limitations, represents only a limited input by various expertise.

The City administration should have looked to the

United States where the idea of conducting environmental impact studies had already been reviewed and tested in more than 250 court cases.

As noted earlier, at the February 19, 1975 City council meeting EPC recommended the scrapping of Section 653 of the City of Winnipeg Act. On a motion from councillor Ken Galanchuk (Environmental Committee Chairman) the recommendation was withdrawn. Instead, "council passed the motion which calls on the province and city to review all implications of environmental impact reviews with a view to establishing in the future a more adequate legislative framework for the protection of the urban environment."[36] This instigated criticism from a number of councillors such as Morris Kaufman who claimed the amendment "made the resolution 'dishonest' because it just provides a convenient argument against those who accuse the city of trying to get rid of environmental reviews of public works projects."[37]

Councillor Joe Zuken "chastized the city's board of commissioners for last fall proposing guidelines for environmental impact reviews and then, in the resolution ...saying that it is practically impossible to operate under the City of Winnipeg Act's environmental review section." Mr. Zuken then stated:

> ...the crisis is in the board of commissioners flip-flopping and reversing themselves; and in the policy committee for trying to get rid of the section. He accused the councillors who once held office in the former Metro municipalities of using this issue to

> sabotage the act, attempting to take on the province in a battle they lost when the act passed the legislature in 1971.[38]

The Council meeting brought environmentalists out in force in an attempt to persuade councillors that the EIR section was worthwhile. For example, Dr. David Punter, vice-chairman of the Manitoba Environment Council, said "an environmental impact review can be a preventive remedy against environmental calamities (that can) occur through sheer ignorance. The review can be done for about one per cent of the projects cost...."[39]

Donald Epstein, of the University of Winnipeg's Institute of Urban Studies, stated, "that section 653 is admired in civic circles around the country and can be one of the more effective, enforceable and powerful citizens' rights provisions in all Canada."[40]

F. Lloyd Lenton, executive director of the Social Planning Council of Winnipeg, said, "Section 653's function as a disclosure law was an important aspect of...accountability between council and citizens. It is also important to citizen participation in city planning--one of the aims of the City of Winnipeg Act."[41]

A number of City journalists were also devoted followers of the EIR process. According to Ron Kustra from the Winnipeg Tribune:

> What our councillors have to realize is that Section 653 is probably the most effective tool given to the public.

> Although it can be abused, it also offers legal recourse for the man in the street who may not accept the collective wisdom of council.
>
> Some city officials don't like the environmental impact statement idea, but my fear is too many councillors just want it removed or watered down to suit their own purposes.
>
> The minimum our citizens deserve is several public meetings to discuss all aspects of such studies before the provincial government is asked to amend the act.
>
> As history has shown repeatedly, the public sometimes requires legislation for protection against its own legislators.[42]

From 1975 to 1977 a number of EIRs were prepared by City staff. With the City staff gaining needed experience and knowledge of the EIR process the content and adequacy of the reports were improving.

However, in the spring of 1977, Bill 62 by the Provincial Government amended the City of Winnipeg Act. Amid all the excitement about mayor's status, the reduction in the number of councillors, and other issues of concern, a potentially important piece of legislation was virtually emasculated: City council was granted sole authority in requiring and reviewing EIRs.

As previously mentioned, in 1972, the Provincial Government imposed the potentially rigorous piece of legislation on the City's public works, but did not introduce the same rigorous process to other municipalities or provincial projects. In 1977, with Bill 62, Premier Ed Schreyer moved to resolve this contradiction. However, from a government that was presumably environmentally conscientious, the move was not in the direction which

environmentalists had hoped for. Bill 62 repealed section 653 and replaced it with the following:

> 653(1) The Council may require a report on the environmental impact of a proposed public work;
> (2) Where the Council requires a report on the environmental impact of a proposed public work,
> a. it shall be the sole determining authority of the adequacy of the report or any part of it; and
> b. it may establish such procedures as it may deem necessary.
> [emphasis added]

By giving City council the discretionary power to decide whether EIRs should be prepared and the adequacy of a review if one is prepared, the provincial government removed the strongest incentive for conducting EIRs. No longer will citizens be able to challenge the EIR process on such matters as whether an EIR should be prepared or its adequacy.

The most important aspect of the new section regarding EIRs are the few curt lines giving council ultimate authority. The new clause stated that council "may require", whereas previously it said "shall require" a report on a proposed public action. As before, the council was free to establish its own guidelines for preparing an EIR, but now it was the "sole determining authority of the adequacy of the report..."

As reported in the Winnipeg Tribune on July 1, 1977, regarding the amendments to the EIR process:

> What the end result of this shift might be...is

> the subject of one of the more interesting city hall guessing games in an otherwise dull summer. The cynics among us are certain that we've seen the last of environmental impact reviews, that the pro-growth ethic on city council now will be able to proceed unhindered by what more than a few politicians have come to see as a cumbersome, bureaucratic waste that simply holds up projects.
>
> The more optimistic point out that the new structure is more flexible and can more easily lead to a situation in which environmental impact assessment is an on-going part of the planning process right from the start.
>
> Given city council's track record, the cynics probably have the edge, at least in the short run. Few people would accuse the present council of having an environmental conscience.[43]

In reviewing how some of the City councillors reacted to the new freedom given to them by Bill 62, Councillor B. Norrie was "certain environmental impact reviews won't be abandoned. Most councillors will want all information available prior to making a big decision--information on costs, possible effects and alternatives that such a review can give." He also added "that to be useful, the impact study must be initiated very early on in the process, rather than surfacing at a later date. This is where the greater flexibility of the new legislation might prove beneficial."[44]

NDP councillor Brian Corrin was "uncertain about the immediate prospects of environmental impact studies. There is a chance that council will ratify the existing guidelines and continue to abide by them."[45] Mr. Corrin hoped for the establishment of a province-wide environmental review body. This review body could possibly be

a "beefed up" version of the Clean Environment Committee. If the public accepts such regulatory bodies as the Municipal Board or the Public Utilities Borad, why not a powerful environmental review board?

Following Bill 62 amendments to the City of Winnipeg Act affecting the EIR process, a report was written by City staff in August, 1977, outlining the effects of the amendments and whether the EIR guidelines are sufficient. The amendments to Section 653 meant that whether or not to conduct an EIR on a public action was totally within council's discretion.

> The courts will no longer have the authority they formerly possessed to scrutinize this decision. Moreover, should Council decide to prepare an EIR the adequacy of the report cannot be questioned legally. Finally, Council may establish whatever procedures it wishes for the preparation and consideration of the EIR document.[46]

With the changes to Section 653, the legal requirement to do EIRs was removed, but two questions remained:

1. Should Council continue to conduct EIRs as a decision-making tool notwithstanding, and if so,
2. What changes, if any, should be made to the current review process.[47]

The report examined the case for and the criticisms against the EIR process. On the affirmative the EIR process was touted as a way of improving the quality of decision making:

By examining comprehensively the various implications,

> projected impacts, and alternatives to a proposed decision, EIR can help ensure that Council has a complete a decisional-information base as possible. This in turn should enable Council to modify its plan beforehand in order to minimize any adverse impact and ensure maximum benefit. It is almost invariably cheaper and easier to make these adjustments beforehand, rather than attempting to rectify a problem after it has been created.[48]

The report then pointed to the EIRs that were done on various public projects that could have rectified potential negative impacts. An example was the public parking structure at Portage and Main. In the EIR prepared on the parking structure in August 1974, (on pp. 12-13) the report recommended that a second exit was needed to reduce potential congestion from only having one ingress and egress points. "On July 20 [1977],...long after construction of the project had commenced, Council directed the Board of Commissioners to instruct the project architects to design a second exit from the 980-car garage before construction is too far advanced."[49] If City Council had taken into consideration this exact point raised by the EIR in August, 1974, this last minute modification could have been avoided with corresponding savings in construction costs.

The second major advantage of the EIR process advocated by the report was that "whatever the objective quality of the decision the EIR process can ensure that it will be more acceptable to the public and reflective of public attitudes."[50] With the EIR adopted guidelines the

public was an integral component of the process. From being involved in the determination of which public actions require EIRs to presenting information to the Task Force doing a particular EIR, the public was embodied into the process.

> By facilitating public input, politicians will be provided with much better knowledge of the attitudes and values of their constituents. This will assist him [sic] to make trade-offs involving economic, social, and environmental values in a more systematic manner; and thereby set priorities for development.[51]

The report demonstrated several other examples where EIRs improved decision-making in Winnipeg. Three examples quoted were: the Osborne Bridge replacement; District #6 Works and Operations and police buildings; and the Works and Operations facility for District #3.

An example of the benefits purported by the report for the EIR process that will be presented is the Osborne Bridge replacement project. Here, the report states:

> In April, 1974, the environmental impact review of the Osborne Bridge replacement was completed. At the time, one option under serious consideration would have provided a direct underpass road link between Assiniboine Avenue and Mostyn Place. At pp. 8 and 9, the EIR explicitly indicted that alternative in two respects. Both eastern and western sections of the underpass would remove large and strategic portions of riverbank parkland and permanently impair the integrity of both the park and the Legislature/park interface. Secondly, the inevitable increase in through traffic along Mostyn and Balmoral could be expected to have a decidedly deleterious impact on neighborhoods in the area. At least partly in response to these concerns, Council rejected this alternative and the completed project jeopardizes neither.[52]

The report also raises some criticisms against the EIR process. The criticism focusses on the excessive demands environmental impact assessment places on the resources of money and time. Impact assessment has been allegedly viewed as placing heavy demands on the time of an already busy municipal planning staff. According to the report:

> ...while this argument has some merit, it is a minimal relevancy in the case of larger municipalities like Winnipeg. Municipalities of this size normally already have on staff sufficient expertise to at least co-ordinate, if not actually undertake, the EIR. What will be required is an internal re-alignment of priorities, but the need to hire additional staff should be minimal.[53]

The second major criticism of the EIR process dealt with the amount of time consumed preparing an assessment. The length of the planning approval process is long enough without adding another bureaucratic dimension. The report viewed this criticism as not being very relevant to Winnipeg because the EIR legislation only applies to the City's own projects. "For this reason not only is planning permission either unnecessary or somewhat academic, but since the project planning is done in-house anyway, co-ordination between the proponent and reviewer is much easier to achieve."[54]

According to the City staff's report, the EIR process in Winnipeg caused neither needless delay or high monetary costs.

The report concluded by answering the question: are the current Guidelines adequate? To this end the report stated:

> Having examined both the city's own experience with EIR and the administrative procedures associated with EIR elsewhere in Canada, one concludes that the city's Guidelines compare favourably. Their coverage of the recommended review process and document content is as comprehensive as any in Canada, and more realistic and precise than several.[55]

The report was forwarded to the Board of Commissioners and on December 14, 1977, it was rejected by a vote of 4-0. Even D. Henderson, the Commissioner of Environment voted against it because he "...reasoned that the process should be rejected in favour of his own suggestion of expanding the purview to embrace private sector projects as well."[56] The City staff was later told by the Board of Commissioners that they were preparing their own recommendations regarding the EIR process. The City staff have still not received a report from the Board of Commissioners regarding this matter. Since the December 14, 1977 vote by the Board of Commissioners the EIR process has come to a standstill; the various review committees (i.e., the Core Committee) have disbanded; there has been very little administration and political discussion regarding the EIR process; and no EIRs have been prepared.[57] Examples of major proposed public works that escaped the EIR process since the Fall of 1977 are:

1. the expansion of the Winnipeg Arena;

2. the expansion of the Winnipeg Stadium; and
3. the transit garage on Osborne Street.

F. What Went Wrong?

The EIR process was doomed to failure when it was first initiated by the Provincial Government. Like other novel concepts in the City of Winnipeg Act such as Community Committees and Resident Advisory Groups (RAG), the EIR process was good in theory but failed in its application. The original Section 653 was too vague and ambiguous and did not specify the City's duties and responsibilities. City councillors and the administration had to overcome these problems but did not know where to start. This left the City in a very precarious position because it was left wide open to legal assault.

If the EIR process is viewed as a scenario, there are a number of important actors:

1. the original committee who wrote the City of Winnipeg Act;
2. the Provincial Government (from 1971-1977);
3. City councillors;
4. the Executive Policy Committee;
5. the Board of Commissioners;
6. the City staff who were involved in the EIR process;
7. the Manitoba courts; and
8. the general public.

Each group played an important role in the demise of the EIR process. Some because of their eagerness to see it work; others because of their dogmatic rejection of it; and others because of their sheer ignorance of what it was intended to do. In examining each group they cannot be divided into for and against categories; when reviewing the roles played by the various actors, the categorizing is very general and has been pieced together from personal interviews, newspaper articles, and various reports and documents.

The original committee who wrote the City of Winnipeg Act was composed primarily of a group of theoreticians (lawyers and academics). They endeavoured to emulate the NEPA in the United States and to use it as a base for an innovative concept for Winnipeg. They copied the U.S. legislation with all of its ambiguities without researching the legislation to find out about the many problems confronting United States' federal agencies.

The committee did not find it necessary to consult the City councillors or administrators on any of its proposals to find out their reaction. No doubt the City administration would have seen to what extent Section 653 was fraught with amorphous statements and could have offered some constructive criticism. The committee members' theoretical and dogmatic approach, rather than a pragmatic one, hurt many of their novel concepts.

The provincial government passed the legislation but did not seem to fully comprehend what the legislation embodied. They were as much at fault as the committee for not consulting with the City more than they did on this monumental legislation, the City of Winnipeg Act. As expressed by City councillor Abe Yanofsky and the Commissioner of Environment, Dave Henderson, there was no consultation between the Province and the City when the City of Winnipeg Act was instituted in a hurry, with provincial officials expounding it to City councillors in the Summer of 1971 and it being implemented in the Fall of 1971. With legislation of this nature the City administration just could not incorporate the new procedures in such a short time frame. The City was faced with so many major changes that it did not know what to do, so the legislation became an administrative nightmare. This cost the city taxpayer dearly with the budget doubling from 1972 to 1976. With the City administration more concerned about immediate problems such as police and firemen amalgamations, many innovative but not urgent sections such as Section 653 suffered.

If the Provincial government had had more discussion with the City and formed a review committee of Provincial and City officials before the City of Winnipeg Act came into force, the problems and prospects of sections such as Section 653 (on EIRs) would have surfaced earlier. The

EIR process may have been removed at this stage because of its vagueness, or it may have emerged with City officials understanding its implications (and maybe some of its ambiguities mitigated) and still be functioning today.

City councillors were not to blame for their negative attitude toward the EIR process when it was first legislated. Like many of the other sections, City councillors just did not know what it meant (or didn't even know it existed). What they can be criticized for is in their tardiness to act in a responsible fashion to Section 653 within the first few years of its enactment. It took the City councillors over two years to respond to the legislation and only after litigation charges emerged did the City begin to fulfill its obligations.

There was a schism in the City council chambers between two competing factions with one for and the other against the EIR process. Neither faction helped the EIR process. The faction against the EIR process were the ones who were labelled as "pro-growth oriented" such as councillors Jim Ernst and Abe Yanofsky. They were against the EIR process because they saw it as another bureaucratic dimension that could stop development and consumed a great deal of money and time from the City's coffers.

The other faction were the ones who used the EIR process to defer or stop development. Councillors such as L. Cherniak, Morris Kaufman and Joe Zuken were members of

this faction. With these councillors using the EIR process as a way to defer or stop development they were not using it as it was intended, namely; as a measure to prevent potential negative environmental impacts. By using the EIR process as they did, they irritated the other councillors who took a more negative, revengeful viewpoint.

Section 853 delegated the EPC the duties and powers to "review every proposal for the undertaking by the City of a public work which may significantly affect the quality of the human environment." Throughout the years EPC neglected its delegated responsibilities and only performed them to fulfill the legal requirements of Section 653. Generally, members of EPC viewed the EIR process as a waste of the City's resources. They did not comprehend the benefits and intent of the EIR process and felt that through the present planning process and citizen complaints that any potential environmental impact would manifest itself early enough to rectify the situation.

With EPC being delegated the powers and duties to administer the EIR it was a very important component in the process. With these responsibilities and its negative attitude, EPC's decisions ultimately affected the whole process. They way they acted was deplorable and it did not give the EIR process a chance to function properly. On most occasions EPC would not take the advice of its administrative officials on whether an EIR should be

prepared on a proposed public work, but would act unilaterally and irresponsibly. The members of the EPC are the ones to blame the most for the inept performance and eventual demise of the EIR process.

As reported by Ron Kustra in the Winnipeg Tribune on February 22, 1975, EPC usually paid token adherence to the Review Committee's recommendations:

> The committee [EPC] agreed that only one project offered in the city's 1975 capital estimates requires an environmental review before being forwarded to council for approval or rejection.
>
> In doing so, executive policy members rejected the advice of its administration review committee which had proposed four other projects also have impact studies.
>
> In two cases, several committee members argued previous impact statements prepared before the new guidelines, were adequate.
>
> Both of them, $21.85 million Fort Garry-St. Vital bridge and $3.15 million Silver Avenue extension have been promoted by area councillors [as previously mentioned the EIRs prepared on these two projects plus another two were prepared in two days].
>
> The committee also recommended that a $2.9 million public works building at McPhillips Street and Templeton Avenue and street improvements at Edmonton Street, Cumberland and Notre Dame Avenues intersection, didn't require study.[58]

The Board of Commissioners also possessed a negative attitude toward the EIR process. Generally, the Board of Commissioners also perceived the process as redundant and a waste of time and money. In the EIR process it was the overseer who watched over the City staff to make sure they performed their assigned duties. The most damaging action by the Board of Commissioners was when it rejected the City's staff recommendation on December 14, 1977 to

continue with EIRs.

The actions of Commissioner of Environment, Dave Henderson, were surprising. With the position of Commissioner of Environment, one would assume that he would represent and advocate the protection and enhancement of our urban environment. As previously mentioned, his rationale for voting against the City's staff recommendations was that he felt the EIR process should be extended beyond City projects to embrace other government and private projects. During a personal interview with him on February 20, 1980, he stated that he viewed the EIR process as a waste of time and it was hindering development. He saw no need for other levels of government or the private sector to prepare EIRs on their proposed projects.

The City staff who were involved in the EIR process were in general very keen and enthusiastic. They performed their duties diligently and the content and adequacy of the EIRs were improving as they gained valuable experience.

In the case of the four early environmental impact studies prepared (for the Fort Garry-St. Vital Bridge, Grant Avenue extension, Silver Avenue corridor, and the underground parking structure at Portage and Main) however, the City staff didn't put their employment before planning ethics. To prepare a proper environmental impact study in two days[59] is beyond comprehension. Also the City staff could have been more vocal against the criticism directed

toward the EIR process and advocated the usefulness of the EIR process.

Without the courts performing in a manner similar to those of the United States the process was left to the vagaries of municipal politics. The judges did not fully appreciate the intent of Section 653 and some of their decisions were perplexing. Instead of putting some teeth into the legislation by answering some of the germane questions confronting City staff, the judges confused the issues even more by asking additional questions.

The Manitoba courts cannot be too severely condemned for their actions because they were following a judicial precedent of not interfering with Municipal Council decisions. As previously mentioned, if the EPC had performed their duties and responsibilities properly the whole EIR debate probably would have never made it to the courts.

The general public can be criticized for not taking an active part in the affairs of their City; unless it is of immediate threat to their neighbourhood or parochial interests. Public interest groups who used the EIR process to stop development or for their own self-interest stifled the process (the same way as some City councillors did) in adding fuel to the fire and giving anti-assessment officials another reason for wanting to see the demise of the EIR process.

With the original wording of Section 653, the public

had a legislated right to expect the City to predetermine if a proposed public work may affect the quality of the human environment. By not participating and voicing their concerns to their public representatives this right has been forfeited.

G. Conclusion

The City of Winnipeg was the first municipality in Canada to have formal requirements for environmental impact reviews of public works projects. This legislation was included in the 1972 City of Winnipeg Act. The first few EIR's prepared by City officials made a charade of the process because of their inadequacy and the fact that they were done to justify decisions already made. After a few years the adequacy of the reports did begin to improve.

Generally, City councillors regarded the EIR process as a waste of time and money. There was also hostility against the EIR process because the City was the only governmental body in Manitoba that had to prepare EIR's. Even the Provincial Government who initiated the legislation did not have to do EIR's on their own public works projects. With pressure from City councillors the Provincial Government changed the original legislation in 1977. The new legislation gave City Council the discretionary power to decide if an EIR should be prepared and be the sole determining authority of its adequacy. This

new legislation rendered the EIR process totally ineffective.

NOTES TO CHAPTER 5

1. Guidelines For The Preparations of Environmental Impact Reviews Under Section 653 of the City of Winnipeg Act, p. 4.

2. Ibid.

3. Ibid., pp. 7-8.

4. Audrey Armour and John Walker, "Canadian Municipal Environmental Impact Assessment: Three Case Studies," Plan Canada, March 1977, p. 29.

5. Guidelines, op. cit., p. 9.

6. The first time EPC held a public meeting to discuss an EIR was on December 19, 1974. The EIR was prepared for the Proposed Public Parking Structure at Portage and Main, in August 1974. The adequacy of the report was criticized and an environmentalist group was going to take the City to court if it did not do a more thorough report. As result, City Council commissioned another report and an appendum [sic] in February 1975 was added to the original EIR prepared for the parking structure.

7. Guidelines, op. cit., p. 11.

8. Ibid., p. 13.

9. Ibid.

10. Ibid., p. 14.

11. Ibid., pp. 15-21. The explanatory paragraphs have been omitted. For more information see Guidelines, pp. 15-21.

12. Brian Corrin, "General Reflections On The Legal Requirements of Section 653 of The City of Winnipeg Act. Brian Corrin was a solicitor in the Law Department of the City of Winnipeg. He also helped to write the "Guidelines."

13. Ibid., p. 4.

14. Ibid., p. 9.

15. Ibid., pp. 13-14.

16. Armour and Walker, op. cit., pp. 29-30.

17. Irene Stein v. Winnipeg in the Court of Appeal, Justice J. A. Matas, majority opinion. June 10, 1974 [1974] 5. W.W.R. 484, 480.l.r. (3d) 223 (Man. C.A.)

18. Harry Garrison Miller et al. v. Winnipeg. In the Queen's Bench. Justice Solomaon. June 30, 1975.

19. William Easton v. the Executive Policy Committee of Winnipeg and Winnipeg. In the Court of Appeal, Justice J. A. Hall. July 9, 1976. (1976), 69 D.L.R. (3d) 585 (C.A.)

20. This was an important decision because traditionally before an action can be brought before the courts the appellant(s) must show property ownership or special damages beyond anyone elses.

21. Stein v. Winnipeg, op. cit.,

22. Ibid.

23. Miller et al. v. Winnipeg, op. cit.,

24. Paul Emond, Environmental Law in Canada, Emond-Montgomery Limited, 1978, p. 174.

25. Easton v. EPC and Winnipeg, op. cit.

26. Ibid.

27. Ibid.

28. Val Werier, Winnipeg Tribune, February 2, 1974.

29. Ibid.

30. Ibid.

31. Winnipeg Tribune, March 12, 1974.

32. Robert Matas, Winnipeg Tribune, May 25, 1974.

33. Ibid.

34. Ibid.

35. Ibid.

36. Reported in the Winnipeg Free Press, February 20, 1975.

37. Ibid.

38. Ibid.

39. Ibid.

40. Ibid.

41. Ibid.

42. Ron Kustra, Winnipeg Tribune, February 22, 1975. Other Winnipeg journalists who have advocated the EIR process are Val Werier, Robert Matas, and Tom Shillington.

43. Tom Shillington, Winnipeg Tribune, July 4, 1977.

44. Ibid.

45. Ibid.

46. A report written by City staff on the effects of Bill 62 Amendments to the City of Winnipeg Act, 1977, p. 1.

47. Ibid.

48. Ibid., p. 2.

49. Ibid., p. 1.

50. Ibid., p. 2.

51. Ibid., pp. 2-3.

52. Ibid., pp. 3-4.

53. Ibid., p. 6.

54. Ibid., p. 7.

55. Ibid.

56. Emond, op. cit., p. 186. From a personal interview with D. Henderson he stated, "...that he sees no need for the City, Province or private developers to do EIRs. They are redundant and a waste of time and money."

57. From a personal interview with Councillor Abe Yanofsky he felt that there had been no more EIRs prepared because there have not been any major public works for the last few years that would need an EIR.

58. Ron Kustra, Winnipeg Tribune, February 22, 1975.

59. The City officials who prepared these EIRs had pressure from the Board of Commissioners to prepare the reports in two days.

CHAPTER 6

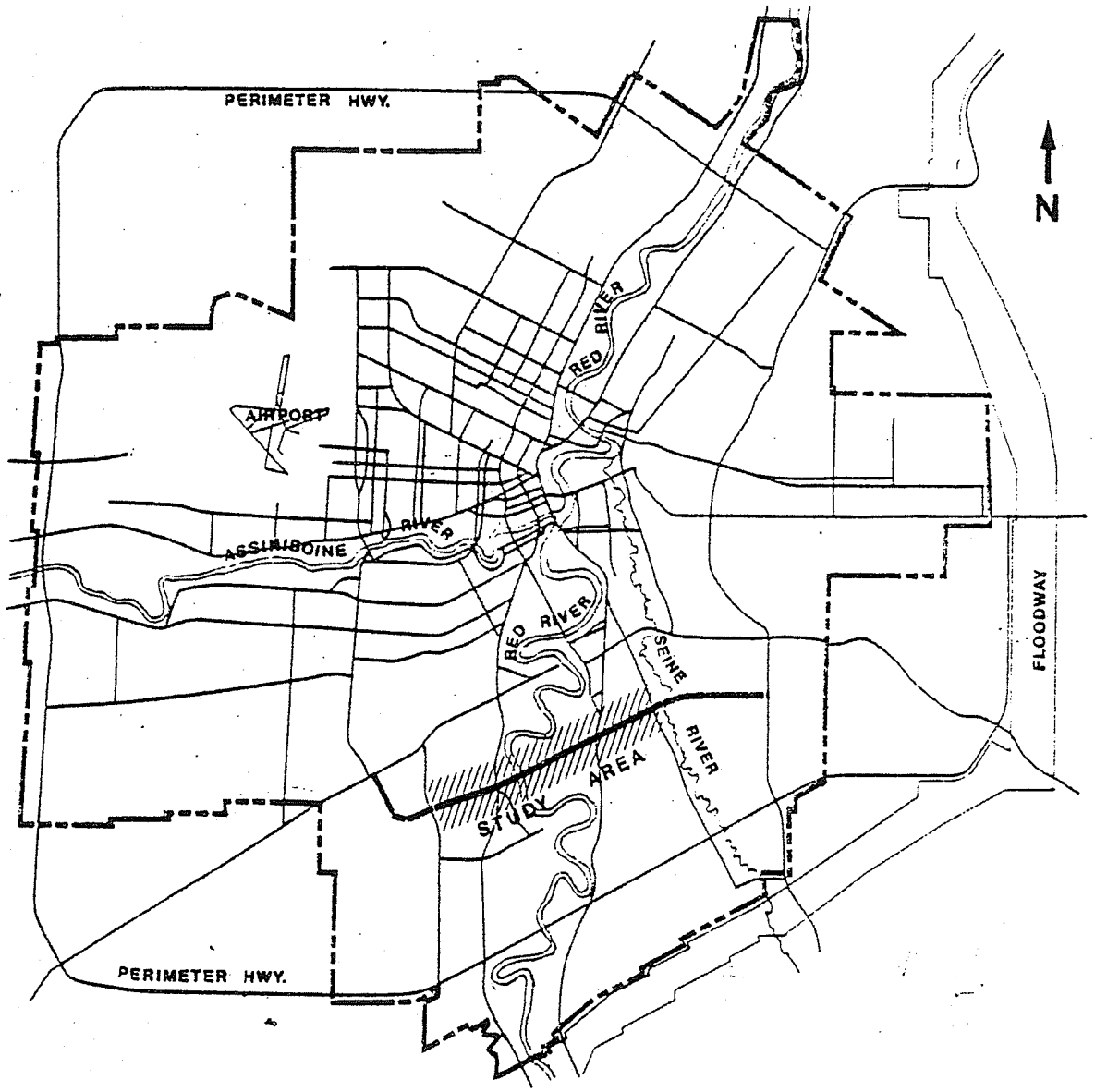
CASE STUDY: THE ST. VITAL-FORT GARRY BRIDGE

A. Introduction

For the past fifteen to twenty years, the City has considered building a Fort Garry-St. Vital bridge near the intersection of Pembina Highway and University Crescent (see Map 1). In 1973, the City announced its intention to proceed with the development of the Fort Garry-St. Vital thoroughfare based on a plan developed by the Streets and Transportation Division. A group of residents residing along the south edge of the corridor in Fort Garry, objected to the plan because of the proximity of the roadway to their properties. The residents, through their elected representatives in City Council, suggested a number of design options for the facility, which they felt might lessen the impact on their community.

There were two studies prepared in 1974 regarding the community impact of the proposed Fort Garry-St. Vital bridge and approach roadways. The first report was an environmental impact study prepared in January, 1974, by the City's Environmental Planning Department. The second report was prepared by Underwood-McLellan and Associates.

Map 1



CORRIDOR LOCATION

Source: Underwood - McLellan and Associates, Transportation Corridor Study - Fort Garry - St. Vital Final Report, 1974.

This report was principally a cost-benefit analysis of various design alternatives, but had included in the term of reference that an environmental impact study was to be done.

In 1976, the Fort Garry-St. Vital bridge was included in the City's budget. The construction of the bridge commenced in the Spring of 1977, and was opened in November 1978.

Recently, there have been citizen complaints regarding negative environmental impacts caused by the bridge, such as noise pollution and devaluation of homes and property. These are the types of environmental impacts that environmental impact studies are supposed to foresee so that the necessary steps can be taken to alleviate or mitigate them. In this chapter, first the two aforementioned reports will be analyzed for the completeness and thoroughness of the environmental impacts predicted. Second, the present environmental impacts of the Fort Garry-St. Vital thoroughfare area will be discussed. Third, a comparison of the two studies' predictions and what actually happened will be presented. Finally, there will be a summary description of what an environmental impact study of this nature should contain.

B. What Was Done

1. The Department of Environmental Planning (refer to Appendix C)

The environmental impact study prepared by the City's Environmental Planning Department in January, 1974 for the Fort Garry-St. Vital bridge (hereafter called "the bridge") described the project description as:

> ...a four lane divided major thoroughfare south of and adjacent to the existing Hydro transmission lines. The project would include a railway grade separation over the CNR Letellier subdivision, traffic interchange with Pembina Highway, a bridge crossing the Red River, and an overpass over River Road, which would be relocated to the west of its current alignment.[1]

The project description of the proposed bridge left many questions unanswered. How far east and west will this four lane major thoroughfare extend? What will the speed limit be? Will it be a limited access freeway-type expressway? How will the thoroughfare intersect St. Anne's Road and St. Mary's Road? How far west of its current alignment will River Road be relocated? These and many more questions were left unanswered by the brief description of the proposed project.

The description of the environmental effects was equally inadequate. In regards to an increase in the anticipated noise levels, the report stated, "...noise levels affecting homes (existing and proposed) on lots abutting the facility would obviously increase." How serious will the anticipated noise levels be? Loud enough to keep

residents of the area awake at night? Will the sound levels be harmful to public health? The report recommended that sound barriers should be constructed in the area between the edge of the pavement and private property. What does the construction of sound barriers involve? How high and wide will these sound barriers be? Will the sound barriers effectively offset the anticipated noise levels? What will be the cost of the sound barrier?

The report states that the bridge "...would increase accessibility from the area to other parts of Winnipeg, including the regional shopping centre proposed in St. Vital for which this facility would act as a catalyst." Will there be an increase in carbon monoxide as a result of increased traffic? Has there been any testing done to determine if an increase in such pollutants would present a danger to public health? Will the construction of a sound barrier confine pollutants to the area or adjoining areas? Will residential streets become major thoroughfares as the public commutes to and from the St. Vital shopping centre? Is there a need for another major shopping centre? How will it affect the present retail establishments? Will there be added pressure to re-zone residential or agricultural land to commercial?

The report makes the following statement in regard to the adverse environmental effects which cannot be avoided should the proposed project be undertaken:

> In general, the adverse environmental effects of the proposed Fort Garry-St. Vital Bridge would be those normally associated with major thoroughfares; however, the width of the right-of-way and of the adjoining open corridor would mean that these adverse impacts would be relatively minor in comparison to the majority of existing regional streets.[2]

What are those environmental effects normally associated with major thoroughfares? Loss of privacy? High accident rates? The splitting up of neighborhoods? What is the width of the right-of-way and adjoining open corridor? Is the open area wide enough to decrease anticipated noise levels so that it will not disturb any residents?

A number of major environmental effects that were not even considered in the study, such as vibration, land use patterns, natural vegetation, community needs, accident rates, smell, to mention but a few.

The report did not even deal with alternatives to the proposed project design. It stated, "from the environmental point of view, no distinct alternatives are proposed."

The environmental impact report was so filled with generalities, that it could have been applied to any transportation project, regardless of where its location. The report concentrates mainly on how to enhance the area once the thoroughfare had disrupted the neighbourhoods it affected.

This is one of the environmental impact studies that EPC deemed adequate on February 21, 1975, and rejected

the Review Committee's recommendations that an official EIR be prepared. As reported in the Winnipeg Tribune, "...committee (EPC) members argued the previous impact statement, prepared before the new guidelines, were adequate."[3] How anyone could deem this environmental impact study as adequate when it is fraught with so many generalities and void of any significant analysis of potential negative externalities (i.e., air pollution), is beyond comprehension.

2. Underwood-McLellan and Associates

On February 13, 1974 City Council directed the Board of Commissioners to report to EPC on the following detailed design options (in order to minimize the environmental impact of the proposed Fort Garry-St. Vital Bridge on the residential area between Waverly Street to St. Anne's Road):

(1) Moving the most southerly Hydro transmission line to the north in order to move the alignment of the proposed project to the north,

(2) Underpassing the Pembina Highway rather than overpassing it,

(3) Twin spanning the Red River in order to move the alignment to the north by locating the northerly span north of the most southerly Hydro transmission line,

(4) Level grade crossing at Pembina Highway,

(5) Depressing Pembina Highway,

(6) Expropriating the homes on the northernly side of

Glengary and the two most northernly homes on Agassiz Drive in order to provide adequate berming and landscaping,
(7) Any other alternatives to the proposed action which the Board of Commissioners may wish to consider, and
(8) Moving the alignment to the north of the most northernly Hydro transmission line.

Underwood-McLellan and Associates were retained in March, 1974 by the Streets and Transportation Division of the City to investigate design options and to prepare an environmental impact study.

The study was divided into three principal phases, namely:
(1) preliminary assessment of design options;
(2) preparations of cost alternatives; and
(3) detailed analysis of alternatives.

The report examined the existing conditions in the proposed transportation corridor giving a physical description of the corridor, property ownership (private, Hydro, and City), present land use, and utilities in the corridor (hydro lines, feeder mains, aqueduct, and interceptor sewer).

In the preliminary analysis, the report projected traffic volumes generated by the Fort Garry area; University of Manitoba; St. Vital area; and the Proposed Regional Shopping Centre in St. Vital. The report then reviewed a general description of the present City design alternative (that the environmental impact study was prepared

for by the Environmental Planning Department). The study also analyzed a review of interchange types (i.e., modified cloverleaf, signalized intersections); and initial design alternatives (there were originally nine alternatives ranging from the initial City alternative to depressing Pembina Highway to tunneling under the Red River).

In the second phase of the report, the cost estimates of the various design alternatives were examined. The cost estimates were classified into six general categories:

1. Roadways
2. Drainage
3. Underground
4. Overhead Utilitites
5. Structures
6. Property

The cost estimates of the various alternatives were produced showing the original City alternative the least expensive at $22,852,000 and the tunneling under the Red River as the most expensive at $53,440,000.

The third phase of the report presented a detailed analysis of the remaining alternatives (two of the most expensive alternatives were deleted including tunneling under the Red River). For each remaining seven alternatives the following objectives were identified:[4]

(1) Economics--provide a transportation facility which would minimize total cost and minimize disruption to existing

commercial development.

(2) Transportation--develop and operate a transportation facility which would be safe, convenient, and flexible.

(3) Pollution--minimize noise and air pollution from transportation sources.

(4) Aesthetics--design a facility which will reflect positive values to the community and roadway user.

(5) Recreation--preserve and provide accessible recreational facilities and open space.

(6) Community--minimize community disruptions and allow people the opportunity for interaction.

(7) Implementation--attain early project commencement and minimize construction time and disruptions to existing community and traffic.

The report stated:

> ...in framing the evaluation procedure for the Fort Garry-St. Vital Corridor emphasis was placed on identifying major trade-offs among alternatives. No attempt was made to identify absolute impacts of factors which were relatively constant for each of the alternatives. For example air quality is basically constant for all alternatives, and should not be a major factor in the selection process; therefore, was not analyzed in any detail.[5]

The report also identified negative environmental impact of the anticipated noise level. "The purpose of the noise study was to evaluate the acoustic impact of various alternate plans for the Fort Garry-St. Vital Corridor."[6]

No doubt the environmental impacts resulting from

the various design alternatives would be more than just noise pollution. In one of the design alternatives, houses had to be expropriated, is this not an environmental impact? What about the difference between having a modified cloverleaf or a signalized interchange at Pembina Highway, would that not make a major difference regarding sound, vibration, aesthetics or air pollution? In examining Alternative 1, a level grade crossing at Pembina Highway, the report stated "it would create safety problems, long queues and delays." Are these not environmental impacts? Also, "steep grades would be undesirable on an intersection approach, especially during icy conditions." Would this design alternative cause more traffic accidents? With alternative 3 the report stated, "there would be substantial costs associated with relocating the overhead hydro towers and additional commercial property requirements to the north of the corridor." Would relocating the overhead hydro towers affect the natural vegetation or riverbank erosion? With alternative 5 the report stated, "the wide median in the St. Vital segment would create intersection problems at St. Mary's Road, Dakota Street and St. Anne's Road." Would this not affect traffic flow differently than another design; or traffic accidents; or neighbourhood disruption? Alternative 7, would require extensive expropriation of commercial property along Pembina Highway north of the corridor. This would greatly affect the owners of the commercial

properties, is this not an environmental impact? What about the resident who uses these establishments?

It is hard to understand why Underwood-McLellan and Associates had examined the "noise impact" as the only environmental impact that would not be constant for each of the alternatives. Even if environmental impacts were constant for the various alternative designs they still should have been examined. In their term of reference Underwood-McLellan and Associates were supposed to "minimize the environmental impact of the proposed Fort Garry-St. Vital Bridge on the residential area." What they did was an economic cost-benefit analysis of the design alternatives and ignored the environmental impact assessment!

The Underwood-McLellan report concluded by examining the seven remaining alternatives giving a general description, transportation impact, and community impact (which in essence is noise impact). During the evaluation process, a composite alternative was developed because the consultants recognized the need to:

(a) minimize costly right-of-way requirements on Pembina Highway;
(b) provide a direct ramp to accomodate the heavy westbound to southbound movement at Pembina Highway;
(c) locate the roadway to minimize noise impact;
(d) align the roadway to avoid costly hydro relocations;
(e) develop an overpass configuration which would provide more flexibility than the underpass configuration at the C.N.R. tracts at Pembina Highway and;
(f) provide for the future possible interchange at St. Mary's Road and Dakota Street.[7]

Alternate 9, the composite alternative, was eventually chosen by City Council as the most advantageous design. The general description of the design is:

> ...an at-grade T intersection...at Waverly Street. This intersection will be signalized and channelized. The...thoroughfare will overpass the railway tracks and Pembina Highway. At Pembina Highway a directional interchange...with a direct ramp provided for the heavy westbound and southbound traffic. Twin bridge structures are provided over the Red River. At River Road, an overpass grade separation is proposed without access from or to River Road. The roadway alignment in the St. Vital section of the corridor...was selected to minimize the noise impact on both sides of the corridor....Signalized at-grade intersections...at St. Mary's Road and Dakota Street.[8]

The projected cost of the project was $25,400,000 in 1974.

The Provincial Government and the City had a cost-sharing arrangment, but the Provincial Government would not agree with the proposed alternative unless there were substantial changes in design. The Provincial Government wanted to modify the alternative because of ideological differences (the former NDP government was against any freeway-type design) and financial restraint. Because of the cost-sharing arrangement, the City reluctantly agreed to the Province's modified alternatives design. This design was basically alternative 9 with the proposed Waverly Street to Pembina Highway Section abandoned; having a signalized intersection at Pembina Highway rather than an interchange; and a signalized at-grade crossing at River Road.

The construction of the thoroughfare commenced in the Spring of 1977 and was opened in November, 1978. The cost of the project was $17 million from Pembina Highway to St. Anne's Road.

C. What Is Happening

Presently, a number of major environmental impacts have surfaced as a result of the Fort Garry-St. Vital bridge and thoroughfare. They are:

(1) noise pollution

(2) decline in house and property values

(3) decrease in commercial business for neighbourhood stores

(4) an oversupply of retail establishments

(5) increased traffic on residential streets

(6) lighting pollution

(7) loss of privacy

(8) large predicted increase in aprtment buildings

The Winnipeg Tribune and Winnipeg Free Press reported over the last few months that the residents in the area are concerned:[9]

> Provincial government stinginess has cost 100 home-owners south of Bishop Grandlin Boulevard about $1 million in devalued housing prices.
>
> ...residents are demanding that city council take immediate steps to reduce noise pollution from traffic in the area--pollution which is above levels identified by the U.S. government as being dangerous to health.
>
> ...trees and shrubs [should] be planted to block out the light problem and to return the degree of privacy...

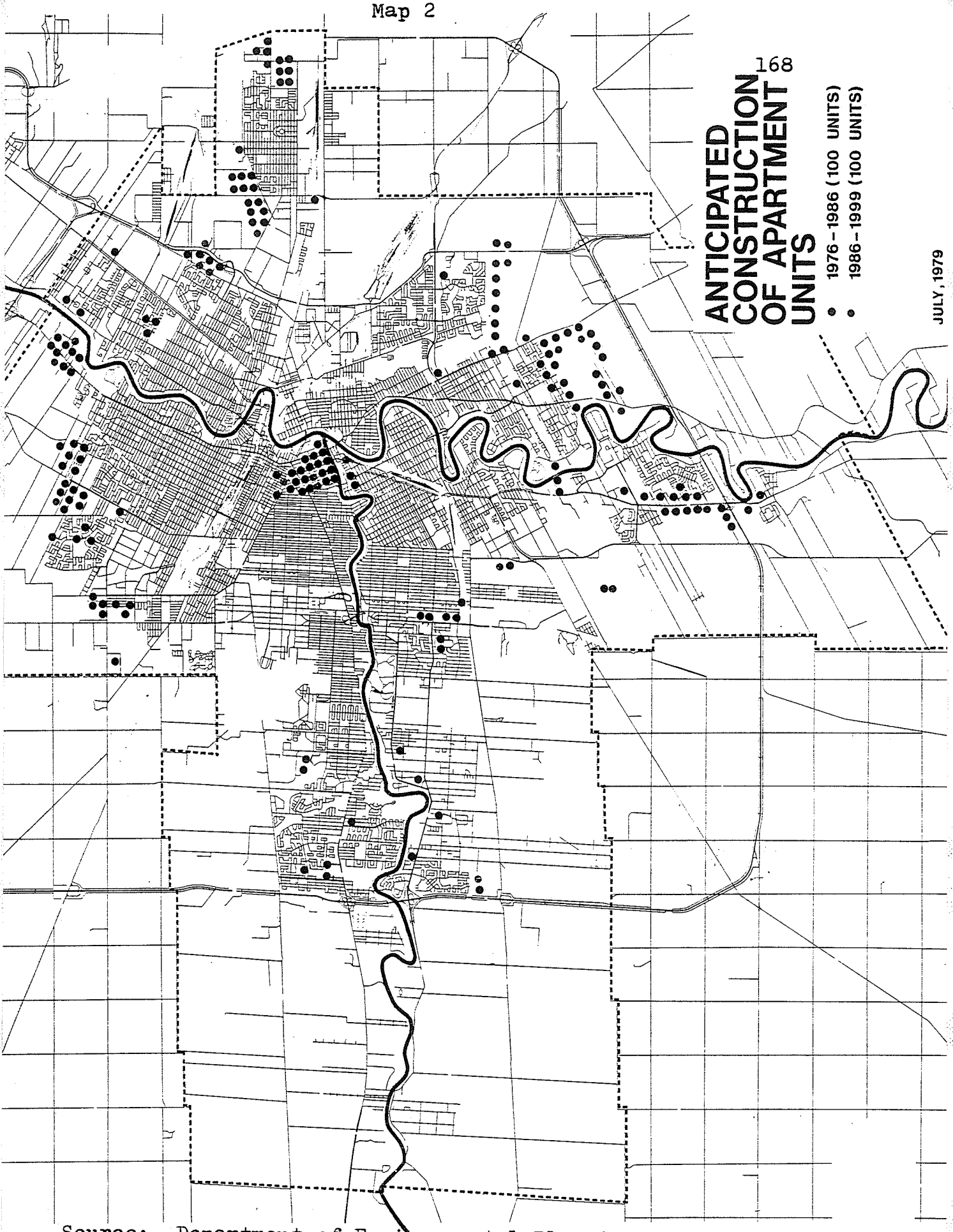
enjoyed before the road was constructed.

> Residents along the north side of Avalon Road between St. Mary's Road and River Road have asked the city to build a noise, glare and safety barrier to shield their homes from traffic along Bishop Grandin Boulevard.
>
> Residents along the south side of Bishop Grandin Boulevard asked the city...to build a $300,000 concrete wall to block out some of the noise that has robbed them of sleep and devalued property.
>
> Route 165 has brought a detriorated environment to our neighbourhood....What was residential is now taking on aspects of an overcrowded downtown area.
>
> ...assaults by light and by noise are the results of decisions made by counicl and you have damaged... all of us.
>
> Bishop Grandin Boulevard itself is a ludicrous example of incompetent planning. The posted speed limit is 80 kn/hr., the traffic lights are frequent (at that speed) and close together. But they are not set for the posted speed limit.

It was also reported that a St. Mary's Road Merchant Association was formed in the Fall of 1979 to combat declining sales caused by new shopping centres. Some merchants along St. Mary's Road, St. Anne's Road and Pembina Highway have had their business cut in half. As one store owner stated in regard to the new shopping centres (particularly St. Vital Centre) "it's like fighting against Goliath."

As shown on map 2 prepared by the City's Environmental Planning Department, the St. Vital side of the thoroughfare is expected to have a large influx of apartment blocks. This will no doubt affect community facilities, land use patterns and transportation routes, to name a few.

Map 2



Source: Department of Environmental Planning, City of Winnipeg

D. Comparison

A comparison of the two aforementioned studies' predicitions and what is actually happening is presented in Table 2.

E. What Should Have Been Done

For a project of this size and cost, a more thorough environmental impact review should have been prepared. The EIR should have at least presented the following:[10]

A. Project Description

1. Purpose of Action	1. Identify and describe all purposes of the project
2. Description of Action	1. Identify and describe all project activities 2. Relate each activity to the projects purpose 3. Provide a location map 4. Describe structures to be built
3. Environmental Setting	1. Describe environmental quality prior to proposed action based on: - air - physical/chemical quality - land - land-use pattern - soil erosion - noise conditions - aesthetic quality (i.e., appearance)

B. Environmental Impacts

1. Positive and Negative	1. Quantify impact of the project upon: - air - physical/chemical quality

TABLE 2

IMPACTS	Department of Environmental Planning	Underwood McLellan and Associates	Actual Environmental Impacts
NOISE	- noise levels would increase but did not state by how much - may need sound barriers	- evaluated the acoustic impact of various design alternatives at immediate site	- residents are demanding that city council take immediate steps to reduce noise pollution - residents want sound barriers erected
HOUSE VALUES	- no mention	- no mention	- residents claim $1 million lost in devaluation of homes and property
TRANSPORTATION	- increased accessibility for residents	- evaluated the transportation impact of various design alternatives at immediate site	- increased amount of traffic on residential streets - rush hour congestion at major intersections
LOSS OF PRIVACY	- no mention	- no mention	- loss of privacy caused by increased traffic
LIGHT POLLUTION	- no mention	- no mention	- light pollution along Bishop Grandin from automobiles and highmast sodium lights

TABLE 2 (continued)

COMMERCIAL BUSINESS	- broaden the range of shopping facilities for residents	- with certain design alternatives some commercial businesses may be expropriated	- loss of business for neighbourhood stores - oversupply of retail establishments
VIBRATION	- no mention	- no mention	- vibration along residential streets from increased trunk and bus traffic
AIR POLLUTION	- no mention	- no mention	- increased amount of carbon monoxide in the air caused by increased automobile traffic
RESIDENT'S ATTITUDES	- the bridge would unlikely change residents' attitudes	- residents' attitudes toward the design alternatives were incorporated into the selection process	- some residents feel that the bridge has brought a deteriorated environment to the neighbourhood

	- land land use patterns soil erosion - noise conditions - aesthetic quality
2. Direct and Indirect	1. Quantify (if possible) primary effects upon: human health ecology vegetation 2. Quantify (if possible) secondary effects upon: transportation commercial business taxes 3. Describe the significance of the above effects
C. Unavoidable Effects	1. Identify unavoidable impacts 2. Justify why the unavoidable impacts cannot be eliminated 3. Identify mitigation alternatives 4. Assess costs and benefits of these alternatives 5. Select a set of feasible alternatives
D. Alternatives	1. Identify a set of selected alternatives in terms of: location equipment operation procedure engineering design 2. Assess costs and benefits of each alternative 3. Environmental impacts of each alternative 4. Identify feasible alternatives

F. Conclusion

This case study examined the environmental impact study prepared by the City's Department of Environmental Planning and the Underwood-McLellan and Associates report; for the then proposed Fort Garry-St. Vital bridge. Neither report did an adequate assessment of the potential environmental impacts that may occur as a result of the bridge.

In examining the present situation confronting area residents and businessmen in the bridge area, many negative environmental impacts have been manifested (as shown in Table 2). Most of these negative environmental impacts (i.e., vibration, loss of privacy) were not even considered in the two reports. One, more thorough environmental impact review, should have been prepared that could have predicted these negative environmental impacts. Hopefully, the City would have implemented the proper measures to alleviate or mitigate some or all of the negative impacts.

NOTES TO CHAPTER 6

1. Fort Garry-St. Vital Bridge Environmental Impact Study, prepared by the City of Winnipeg's Environmental Planning Department, January, 1974, p. 1.

2. Ibid., p. 3.

3. Ron Kustra, Winnipeg Tribune, February 22, 1975.

4. Transportation Corridor Study--Fort Garry-St. Vital Final Report, for the City of Winnipeg, by Underwood-McLellan and Associates, 1974, p. 11.

5. Ibid., p. 12.

6. Ibid., p. 13.

7. Ibid., p. 19.

8. Ibid., pp. 19-20.

9. Taken from the following editions of the Winnipeg Tribune and Winnipeg Free Press:
   Winnipeg Tribune, January 22, 1980
   Winnipeg Tribune, October 25, 1979
   Winnipeg Free Press, October 18, 1979
   Winnipeg Free Press, October 25, 1979.

10. Based on an illustration of a review procedure in R. K. Jain et al., Environmental Impact Analysis: A New Dimension in Decision Making, Van Nostrand Reinhold Co., 1977, pp. 110-122.

CHAPTER 7

CONCLUSION AND RECOMMENDATIONS

Environmental impact assessment has been a very controversial subject. From the time the National Environmental Policy Act (NEPA) was first introduced as public policy in the United States in 1970, to the present, its overall performance in protecting and preserving the environment has been irregualr. When it was first introduced it was intended as a 'reform bill' aimed at the decision-making process in federal agencies. It forced federal agencies to consider not only economic benefits of a decision, but also long term vs. short term environmental benefits and costs, unavoidable effects, and alternatives to the proposed project.

As a result of the pervasive concern for the environment in the United States in the late 1960s and early 1970s, many state and local governments followed the federal initiative and instituted their own environmental legislation. The environmental legislation enacted by the various state and local governments was taken almost verbatim from the Federal Government's legislation.

This environmental awareness was not only occuring in the United States, but also in Canada and abroad. In Canada, the Federal Government and most provincial governments

adopted the environmental impact assessment process through administrative procedures. Ontario and Alberta followed the United States' experience and have set in place legislation dealing with environmental impact assessment.

The government bodies that have emulated NEPA have been beset with all the problems and difficulties encountered by the United States' federal agencies, moreover they had to face some of their own. The original United States' NEPA legislation was good in theory, but not in its practical form because it was too vague and ambiguous, and left too many questions unanswered. In the United States, the courts have answered some of the questions confronting practitioners; as a result many environmental impact statements are designed to withstand legal assault, rather than to protect the environment.

In Canada, the judicial system has not played the same role as their United States' counterparts because of dissimilar constitutional frameworks, precedents, and traditions. In most instances this has left the process to the whims of elected or appointed government officials. With more immediate problems such as energy costs, and the high cost of housing, the priority assigned to protecting the environment has decreased.

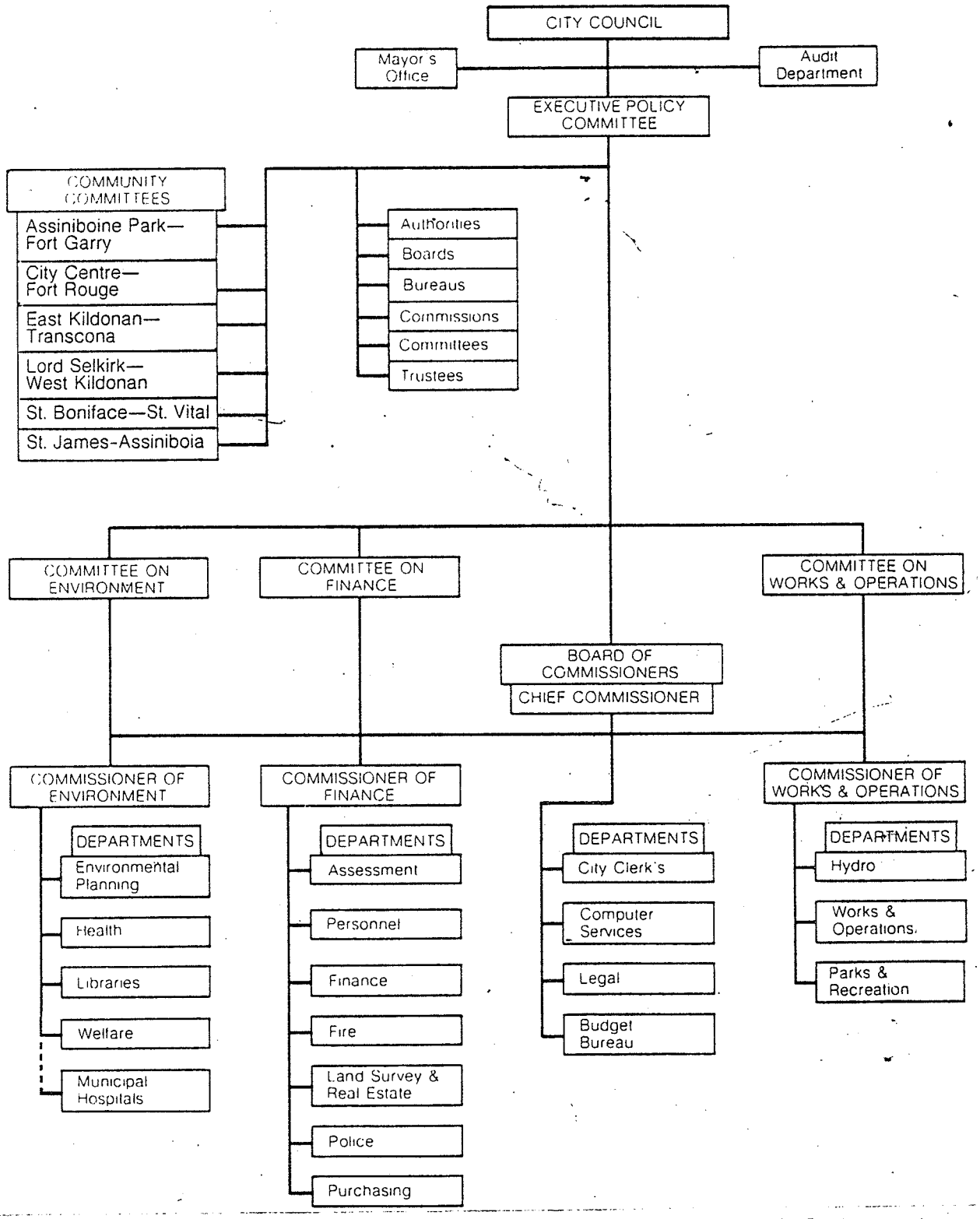
The City of Winnipeg was the first municipal government in Canada to adopt formal requirements for environmental

impact review (EIR) for public projects. The legislation was similar to NEPA, by virtue of the City of Winnipeg Act, 1972. As a result, early practitioners had to overcome many procedural, administrative and legal difficulties. These difficulties and general lack of appreciation for the legislation from elected representatives and senior administration led to its eventual demise through amendments to the City of Winnipeg Act in 1977. By that time however, the City's Environmental Planning Department had finely tuned the process and devised reasonably workable guidelines for EIRs.

There are a number of public and private projects that are causing negative environmental impacts (as the devaluation of homes and property and the loss of privacy confronting residents of Fort Garry and St. Vital because of the Fort Garry - St. Vital Transportation Corridor). This is partially due to the fact that there is no real or effective co-ordinating body at the departmental level that provides a structured liason between the various civic departments. Diagram 4 shows the City's administrative hierarchy with no linkages between the departments (ie. between the Legal Department and the Works and Operations Department), as at the political and senior administrative levels.

At present, the departments do review proposed projects, such as the Environmental Planning Department forecasting

The City of Winnipeg



Source: The City of Winnipeg, Annual Financial Reports, 1977, p. 4

new house construction, or the Transportation Department predicting traffic rates, but there is no agency that co-ordinates the information. As a result, information is disseminated piecemeal instead of comprehensively to City Council who may make decisions without knowing all the facts. This has caused City Council to pass potentially environmentally harmful projects without the proper design changes or mitigation measures (eg. the Fort Garry - St. Vital Transportation Corridor).

What, if anything, should be done to rectify this situation?

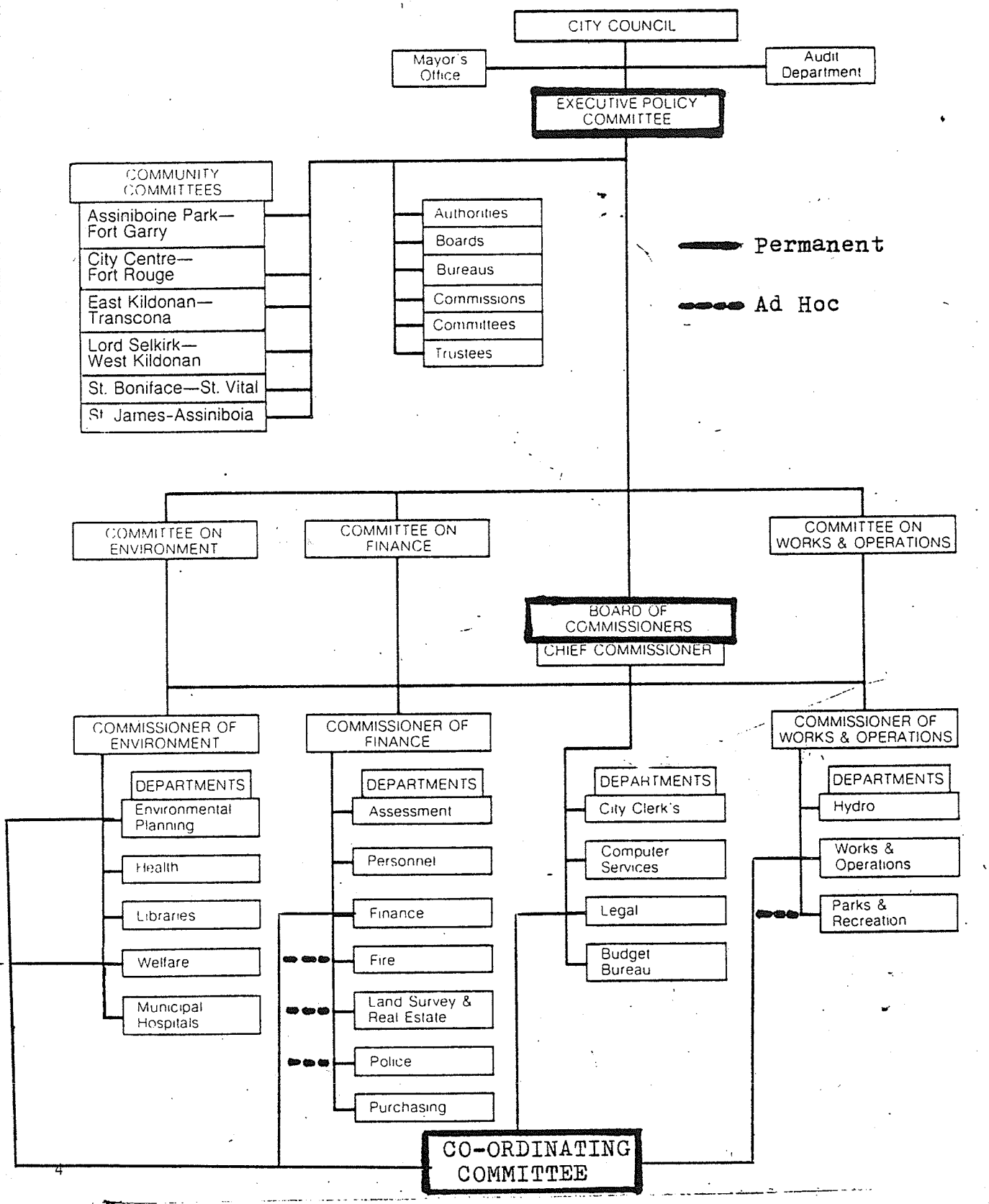
RECOMMENDATION

With the present political and senior administration's attitude toward the City's EIR process, it will no doubt stay in its impotent state for a number of years. However, environmental problems are occuring and they must be confronted. As previously mentioned, with the present political and administrative hierarchy, there are direct linkages at the political and senior administrative levels, but none at the departmental level. In order to alleviate this problem (which will improve decision-making) the City must immediately set up a Co-ordinating Committee (see Diagram 5) whose mandate is to:

a. provide structural liason between the various civic departments;

Diagram 5

The City of Winnipeg



Source: The City of Winnipeg, Annual Financial Reports, 1977, p. 4

b. review any major or controversial proposed private or public projects; and

c. assess environmental impacts.

The Co-ordinating Committee would report to the Board of Commissioners, who will then report to the Executive Policy Committee.

The Co-ordinating Committee would be composed of permanent and ad hoc members (as need arises) from:
(see Diagram 5)

i. one member of the Legal Department;

ii. one member of the Works and Operations Department;

iii. one member of the Environmental Planning Department;

iv. one member of the Welfare Department;

v. one member from the Finance Department; and

vi. ad hoc members if jurisdiction is involved (ie. Parks and Recreation Department).

The rationale behind the composition of the Co-ordinating Committee is as follows;

The member from the Works and Operations Department is included because a majority of the public works proposals are generated by their department.

The member from the Finance Department is included so as to ensure that all the facts relating to the financial aspect of the proposed project are analyzed.

The member from the Legal Department is included so as to act as a consultant regarding any potential City litigation.

The member from the Environmental Planning Department is included because a substantial portion of any potential environmental effects would occur in areas currently under the Department's responsibilities.

The member from the Welfare Department is included to ensure that the social component of the environment is considered.

The Co-ordinating Committee would function similarly to the previous Interdepartmental Review Committee that was set up under the EIR process from 1974 to 1977. The Interdepartmental Review Committee encountered limited administrative and political difficulties, so there should not be any major hostility directed toward the recommended Co-ordinating Committee.

With our environment so complex, we need to acquire more and more information to sensibly manage it. Environmental Impact Assessment is a mode of gaining this invaluable information. It needs time and dedication from the professions involved for its nurturance and growth. Hopefully in time it will be an accepted and adopted method to help preserve our environment.

APPENDIX A

THE NATIONAL ENVIRONMENTAL POLICY ACT—PUBLIC LAW 91-190

(As Amended by PL 94-83)

PURPOSE

Sec. 2. The purposes of this Act are: To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.

TITLE I
DECLARATION OF NATIONAL ENVIRONMENTAL POLICY

SEC. 101. (a) The Congress, recognizing the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and new and expanding technological advances and recognizing further the critical importance of restoring and maintaining environmental quality to the overall welfare and development of man, declares that it is the continuing policy of the Federal Government, in cooperation with State and local governments, and other concerned public and private organizations, to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

(b) In order to carry out the policy set forth in this Act, it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may

(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

(2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings;

(3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;

(4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;

(5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and

(6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

(c) The Congress recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment.

SEC. 102. The Congress authorizes and directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United

States shall be interpreted and administrated in accordance with the policies set forth in this Act, and (2) all agencies of the Federal Government shall --

(A) utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decisionmaking which may have an impact on man's environment.

(B) identify and develop methods and procedures, in consultation with the Council on Environmental Quality established by title II of this Act, which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on

(i) the environmental impact of the proposed action,

(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(iii) alternatives to the proposed action,

(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and

(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

Prior to making any detailed statement, the responsible Federal official shall consult with and obtain the comments of any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved. Copies of such statement and the comments and views of the appropriate Federal, State, and local agencies, which are authorized to develop and enforce environmental standards, shall be made available to the President, the Council on Environmental Quality and to the public as provided by section 552 of title 5, United States Code, and shall accompany the proposal through the existing agency review processes;

(D) Any detailed statement required under subparagraph (C) after January 1, 1970, for any major Federal action funded under a program of grants to States shall not be deemed to be legally insufficient solely by reason of having been prepared by a State agency or official, if:

(i) the State agency or official has statewide jurisdiction and has the responsibility for such action,

(ii) the responsible Federal official furnishes guidance and participates in such preparation.

(iii) the responsible Federal official independently evaluates such statement prior to its approval and adoption, and

(iv) after January 1, 1976, the responsible Federal official provides early notification to, and solicits the views of, any other State or any Federal land management entity of any action or any alternative thereto which may have significant impacts upon such State or affected Federal land management entity and, if there is any disagreement on such impacts, prepared a written assessment of such impacts and views for incorporation into such detailed statement.

The procedures in this subparagraph shall not relieve the Federal official of his responsibilities for the scope, objectivity, and content of the entire statement or of any other responsibility under this Act; and further, this subparagraph does not affect the legal sufficiency of statements prepared by State agencies with less than statewide jurisdiction.

(E) study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources;

(F) recognize the worldwide and long-range character of environmental problems and, where consistent with the foreign policy of the United States, lend appropriate support to initiatives, resolutions, and programs designed to maximize international cooperation in anticipating and preventing a decline in the quality of mankind's world environment;

(G) make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment;

(H) initiate and utilize ecological information in the planning and development of resource-oriented projects; and

(I) assist the Council on Environmental Quality established by title II of this Act.

Sec. 103. All agencies of the Federal Government shall review their present statutory authority, administrative regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of this Act and shall propose to the President not later than July 1, 1971, such measures as may be necessary to bring their authority and policies into conformity with the intent, purposes, and procedures set forth in this act.

Sec. 104. Nothing in Section 102 or 103 shall in any way affect the specific statutory obligations of any Federal agency (1) to comply with criteria or standards of environmental quality, (2) to coordinate or consult with any other Federal or State agency, or (3) to act, or refrain from acting

contingent upon the recommendations or certification of any other Federal or State agency.

Sec. 105. The policies and goals set forth in this Act are supplementary to those set forth in existing authorizations of Federal agencies.

TITLE II
COUNCIL ON ENVIRONMENTAL QUALITY

Sec. 201. The President shall transmit to the Congress annually beginning July 1, 1970, an Environmental Quality Report (hereinafter referred to as the "report") which shall set forth (1) the status and condition of the major natural, manmade, or altered environmental classes of the Nation, including, but not limited to, the air, the aquatic, including marine, estuarine, and fresh water, and the terrestrial environment, including, but not limited to, the forest dryland, wetland, range, urban, suburban, and rural environment; (2) current and foreseeable trends in the quality, management and utilization of such environments and the effects of those trends on the social, economic, and other requirements of the Nation; (3) the adequacy of available natural resources for fulfilling human and economic requirements of the Nation in the light of expected population pressures; (4) a review of the programs and activities (including regulatory activities) of the Federal Government, the State and local governments, and nongovernmental entities or individuals, with particular reference to their effect on the environment and on the conservation, development and utilization of natural resources; and (5) a program for remedying the deficiencies of existing programs and activities, together with recommendations for legislation.

Sec. 202. There is created in the Executive Office of the President a Council on Environmental Quality (hereinafter referred to as the "Council"). The Council shall be composed of three members who shall be appointed by the President to serve at his pleasure, by and with the advice and consent of the Senate. The President shall designate one of the members of the Council to serve as Chairman. Each member shall be a person who, as a result of his training, experience, and attainments, is exceptionally well qualified to analyze and interpret environmental trends and information of all kinds; to appraise programs and activities of the Federal Government in the light of the policy set forth in title I of this Act; to be conscious of and responsive to the scientific, economic, social, esthetic, and cultural needs and interests of the Nation; and to formulate and recommend national policies to promote the improvement of the quality of the environment.

Sec. 203. The Council may employ such officers and employees as may be necessary to carry out its functions under this Act. In addition, the

Council may employ and fix the compensation of such experts and consultants as may be necessary for the carrying out of its functions under this Act, in accordance with section 3109 of title 5, United States Code (but without regard to the last sentence thereof).

Sec. 204. It shall be the duty and function of the Council—

(1) to assist and advise the President in the preparation of the Environmental Quality Report required by section 201;

(2) to gather timely and authoritative information concerning the conditions and trends in the quality of the environment both current and prospective, to analyze and interpret such information for the purpose of determining whether such conditions and trends are interfering, or are likely to interfere, with the achievement of the policy set forth in title I of this Act, and to compile and submit to the President studies relating to such conditions and trends;

(3) to review and appraise the various programs and activities of the Federal Government in the light of the policy set forth in title I of this Act for the purpose of determining the extent to which such programs and activities are contributing to the achievement of such policy, and to make recommendations to the President with respect thereto;

(4) to develop and recommend to the President national policies to foster and promote the improvement of environmental quality to meet the conservation, social, economic, health, and other requirements and goals of the Nation;

(5) to conduct investigations, studies, surveys, research, and analyses relating to ecological systems and environmental quality;

(6) to document and define changes in the natural environment, including the plant and animal systems, and to accumulate necessary data and other information for a continuing analysis of these changes or trends and an interpretation of their underlying causes;

(7) to report at least once each year to the President on the state and condition of the environment; and

(8) to make and furnish such studies, reports thereon, and recommendations with respect to matters of policy and legislation as the President may request.

Sec. 205. In exercising its powers, functions, and duties under this Act, the Council shall

(1) consult with the Citizens' Advisory Committee on Environmental Quality established by Executive Order numbered 11472, dated May 29, 1969, and with such representatives of science, industry, agriculture, labor, conservation organizations, State and local governments, and other groups as it deems advisable; and

(2) utilize, to the fullest extent possible, the services, facilities, and information (including statistical information) of public and private

agencies and organizations, and individuals, in order that duplication of effort and expense may be avoided, thus assuring that the Council's activities will not unnecessarily overlap or conflict with similar activities authorized by law and performed by established agencies.

Sec. 205. Members of the Council shall serve full time and the Chairman of the Council shall be compensated at the rate provided for Level II of the Executive Schedule Pay Rates (5 U.S.C. 5313). The other members of the Council shall be compensated at the rate provided for Level IV of the Executive Schedule Pay Rates (5 U.S.C. 5315).

Sec. 207. There are authorized to be appropriated to carry out the provisions of this Act not to exceed $300,000 for fiscal year 1970, $700,000 for fiscal year 1971, and $1,000,000 for each fiscal year thereafter.

APPENDIX B

The Environmental Assessment Act, 1975

PART I

INTERPRETATION AND APPLICATION

1. In this Act,

(*a*) "air" includes enclosed air;

(*b*) "Board" means the Environmental Assessment Board established under Part III;

(*c*) "environment" means,

(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,

(iv) any building, structure, machine or other device or thing made by man,

(v) any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from the activities of man, or

(vi) any part or combination of the foregoing and the interrelationships between any two or more of them,

in or of Ontario;

(*d*) "environmental assessment", when used in relation to an undertaking, means an environmental assessment submitted pursuant to subsection 1 of section 5;

activity by or on behalf of Her Majesty in right of Ontario, by a public body or public bodies or by a municipality or municipalities, or

(ii) a major commercial or business enterprise or activity or a proposal, plan or program in respect of a major commercial or business enterprise or activity of a person or persons other than a person or persons referred to in subclause i that is designated by the regulations;

(*p*) "water" means surface water and ground water, or either of them. 1975, c. 69, s. 1.

Purpose of Act

2. The purpose of this Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment. 1975, c. 69, s. 2.

Application of Act

3. This Act applies to,

(*a*) enterprises or activities or proposals, plans or programs in respect of enterprises or activities by or on behalf of Her Majesty in right of Ontario or by a public body or public bodies or by a municipality or municipalities on and after the day this Act comes into force;

(*b*) only on and after a day to be named in a proclamation of the Lieutenant Governor, major commercial or business enterprises or activities or proposals, plans or programs in respect of major commercial or business enterprises or activities of a person or persons, other than a person referred to in clause *a*, designated by the regulations. 1975, c. 69, s. 3.

The Crown

4. This Act binds the Crown. 1975, c. 69, s. 4.

PART II

ACCEPTANCE, AMENDMENT, APPROVAL

Submission of environmental assessment

5.- (1) The proponent of an undertaking to which this Act applies shall submit to the Minister an environmental

assessment of the undertaking and shall not proceed with the undertaking until,

(*a*) the environmental assessment has been accepted by the Minister; and

(*b*) the Minister has given his approval to proceed with the undertaking.

Exception

(2) Subsection 1 does not prohibit a feasibility study, including research, or any action necessary to comply with this Act before the approval of the Minister is given to proceed with an undertaking.

Content of environmental assessment

(3) An environmental assessment submitted to the Minister pursuant to subsection 1 shall consist of,

(*a*) a description of the purpose of the undertaking;

(*b*) a description of and a statement of the rationale for,

(i) the undertaking,

(ii) the alternative methods of carrying out the undertaking, and

(iii) the alternatives to the undertaking;

(*c*) a description of,

(i) the environment that will be affected or that might reasonably be expected to be affected, directly or indirectly,

(ii) the effects that will be caused or that might reasonably be expected to be caused to the environment, and

(iii) the actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate or remedy the effects upon or the effects that might reasonably be expected upon the environment,

by the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking; and

(*d*) an evaluation of the advantages and disadvantages to the environment of the undertaking, the alternative methods of carrying out the undertaking and the alternatives to the undertaking. 1975, c. 69, s. 5.

Where licences, etc., not to be issued

6.- (1) Where a proponent is required under this Act to submit to the Minister an environmental assessment of an undertaking,

(*a*) a licence, permit, approval, permission or consent that is required under any statute, regulation, by law or other requirement of the Province of Ontario, an agency thereof, a municipality or a regulatory authority, in order to proceed with the undertaking shall not be issued or granted; and

(*b*) if it is intended that the Province of Ontario or any agency thereof will provide a loan, a guarantee of repayment of a loan, a grant or a subsidy with respect to the undertaking, the loan, guarantee, grant or subsidy shall not be approved, made or given,

unless,

(*c*) the environmental assessment has been submitted to and accepted by the Minister; and

(*d*) the Minister has given approval to proceed with the undertaking

Exception

(2) Subsection 1 does not apply to,

(*a*) a licence, permit, approval, permission or consent;

(*b*) a loan, guarantee, grant or subsidy,

in relation to a feasibility study, including research, or for any action necessary to comply with this Act before the approval of the Minister is given to proceed with the undertaking. 1975, c. 69, s. 6.

Preparation of review and notice

7.- (1) Where an environmental assessment of an undertaking is submitted by a proponent to the Minister, the Minister,

(*a*) shall cause a review of the assessment to be prepared; and

(*b*) shall give notice of,

(i) the receipt of the assessment,

(ii) the completion of the preparation of the review,

(iii) the place or places where the assessment and review may be inspected, and

(iv) such other matters as the Minister considers necessary or advisable,

to the proponent, the clerk of each municipality in which the undertaking is being or will be carried out and, in such manner as the Minister considers suitable, to the public and to such other persons as the Minister considers necessary or advisable.

Inspection of environmental assessment

(2) Any person may inspect an environmental assessment of an undertaking and the review thereof in accordance with the terms of the notice referred to in subsection 1 and may, within thirty days of the giving of the notice or within such longer period as may be stated in the notice,

(*a*) make written submissions to the Minister with respect to the undertaking, the environmental assessment and the review thereof; and

(*b*) by written notice to the Minister, require a hearing by the Board with respect to the undertaking, the environmental assessment and the review thereof.

Withdrawal of environmental assessment

(3) A proponent may withdraw or amend an environmental assessment at any time prior to the day on which notice is given under subsection 1 and thereafter may withdraw or amend an environmental assessment subject to such terms and conditions as the Minister may by order impose. 1975, c. 69, s. 7.

Matters to be considered by the Minister

8. The Minister, in determining whether to accept or to amend and accept an environmental assessment shall consider the purpose of this Act, the environmental assessment submitted to him, the review thereof, the written submissions, if any, made with respect thereto, any reports required by and submitted to him, and any further review that the Minister has caused to be prepared. 1975, c. 69, s. 8.

Notice of acceptance of environmental assessment

9. Where a hearing is not required,

(*a*) pursuant to clause *a* of subsection 2 of section 12; or

(*b*) pursuant to clause *b* of subsection 2 of section 12 after receipt of a notice pursuant to clause *b* of subsection 2 of section 7,

and the Minister, after considering the matters set out in section 8, is of the opinion that the environmental assessment is satisfactory to enable a decision to be made as to whether approval to proceed with the undertaking with respect to which the environmental assessment is submitted should or should not be given or should be given subject to terms and conditions, the Minister shall accept the assessment and give notice thereof to the proponent and in such manner as the Minister considers suitable, to any person who has made a written submission to the Minister pursuant to subsection 2 of section 7. 1975, c. 69, s. 9.

Notice of proposal to amend environmental assessment

10. (1) Where a hearing is not required,

(*a*) pursuant to clause *a* of subsection 2 of section 12; or

(*b*) pursuant to clause *b* of subsection 2 of section 12 after receipt of a notice pursuant to clause *b* of subsection 2 of section 7,

and the Minister, after considering the matters set out in section 8, is of the opinion that the environmental assessment does not comply with this Act or the regulations, is inconclusive or is otherwise unsatisfactory to enable a decision to be made as to whether approval to proceed with the undertaking with respect to which the environmental assessment is submitted should or should not be given or should be given subject to terms and conditions, the Minister shall give notice to the proponent and in such manner as the Minister considers suitable, to any person who has made a written submission to the Minister pursuant to subsection 2 of section 7 that the Minister proposes to amend the environmental assessment, together with written reasons therefor including particulars of the amendments that the Minister proposes to make to the environmental assessment and, after considering any further written submissions of the proponent and of any such person, the Minister, where a hearing is not required pursuant to clause *a* of subsection 2 of section 12 or to clause *b* of subsection 2 of section 12 after receipt of a notice pursuant to subsection 1 of section 12, shall accept or amend and accept the environmental assessment.

Notice of amendment and acceptance of environmental assessment

(2) The Minister shall give notice of the acceptance or the amendment and acceptance of the environmental assessment pursuant to subsection 1 to the proponent, and in such

manner as the Minister considers suitable, to any person who has made a written submission to the Minister pursuant to subsection 2 of section 7, and where the assessment is amended a copy of the assessment as amended and accepted together with written reasons therefor, to the proponent. 1975, c. 69, s. 10.

Minister may order research, etc., and reports

11.—(1) Where, before accepting an environmental assessment, the Minister is of the opinion that the environmental assessment as submitted does not comply with this Act or the regulations, is inconclusive or is otherwise unsatisfactory to enable a decision to be made as to whether approval to proceed with the undertaking with respect to which the environmental assessment is submitted should or should not be given or should be given subject to terms and conditions, the Minister shall give notice to the proponent that he proposes, by order, to require the proponent to carry out such research, investigations, studies and monitoring programs related to the undertaking in respect of which the environmental assessment is submitted as are mentioned in the notice, together with written reasons therefor.

Written submissions

(2) The Minister, after considering any written submissions of the proponent made within fifteen days of the giving of the notice or within such longer period as may be stated in the notice, may by order require the proponent to carry out such research, investigations, studies and monitoring programs related to the undertaking in respect of which the environmental assessment is submitted and to submit such reports thereon as the Minister considers necessary.

Notice of order

(3) The Minister shall, in such manner as the Minister considers suitable, give notice of the order to any person who has made a written submission to the Minister pursuant to subsection 2 of section 7.

Reports to be incorporated in environmental assessment

(4) Upon submission of the reports to the Minister they shall be incorporated as part of the environmental assessment and the review thereof that the Minister caused to be prepared may be revised accordingly. 1975, c. 69, s. 11.

Notice

12. (1) A notice that the Minister proposes to amend an environmental assessment shall state that the proponent or any person who has made a written submission to the Minister pursuant to subsection 2 of section 7 may, by written notice delivered to the Minister within fifteen days after the giving of the notice of proposal to amend, require a hearing by the Board and the proponent or the person may so require such a hearing.

(2) The Minister, by notice in writing, Hearing

(*a*) may, where he considers it advisable; or

(*b*) shall, upon receipt of a notice requiring a hearing pursuant to subsection 1 or pursuant to subsection 2 of section 7, unless in his absolute discretion he considers that the requirement is frivolous or vexatious or that a hearing is unnecessary or may cause undue delay,

require the Board to hold a hearing with respect to,

(*c*) the acceptance or amendment and acceptance of the environmental assessment;

(*d*) whether approval to proceed with the undertaking in respect of which the environmental assessment was submitted should or should not be given; and

(*e*) whether the approval mentioned in clause *d* should be given subject to terms and conditions and, if so, the provisions of such terms and conditions.

(3) Upon receipt from the Minister of a notice pursuant Idem to subsection 2, section 13 or clause *c* of subsection 1 of section 24, the Board shall appoint a time for the hearing, shall give reasonable notice thereof to the proponent and to the Minister and in such manner as the Minister may direct, notice to the public, to any person who has made a written submission to the Minister pursuant to subsection 2 of section 7 and to such other persons as the Minister considers necessary or advisable, and such other notice as the Board considers proper, and shall hold the hearing and decide the matters referred to it in the notice of the Minister.

(4) The parties to any proceedings before the Board in Parties respect of the undertaking are,

(*a*) the proponent;

(*b*) any person, other than the Minister, who has required the hearing; and

(*c*) such other persons as,

(i) the Board, in its opinion, specifies have an interest in the proceedings, and

(ii) the Board, having regard to the purpose of this Act, may specify. 1975, *c.* 69, *s.* 12.

Other hearings

13. Where an environmental assessment has been accepted or amended and accepted, and no hearing has been held pursuant to section 12, the proponent or a person who has made a written submission pursuant to subsection 2 of section 7 may, by written notice delivered to the Minister within fifteen days after the giving of the notice mentioned in section 9 or the notice mentioned in subsection 2 of section 10, require a hearing by the Board with respect to,

(*a*) whether approval to proceed with the undertaking in respect of which the environmental assessment was submitted should or should not be given; and

(*b*) whether the approval mentioned in clause *a* should be given subject to terms and conditions and, if so, the provisions of such terms and conditions, and

the Minister, by notice in writing,

(*c*) may, where he considers it advisable; or

(*d*) shall, upon receipt of any such notice requiring a hearing, unless in his absolute discretion he considers that the requirement is frivolous or vexatious or that a hearing is unnecessary or may cause undue delay,

require the Board to hold a hearing. 1975, c. 69, s. 13.

Approval to proceed

14. (1) Where the Minister has accepted an environmental assessment of an undertaking, the Minister may, with the approval of the Lieutenant Governor in Council or of such Ministers of the Crown as the Lieutenant Governor in Council may designate,

(*a*) give approval to proceed with the undertaking;

(*b*) give approval to proceed with the undertaking subject to such terms and conditions as the Minister considers necessary to carry out the purpose of this Act and in particular requiring or specifying,

(i) the methods and phasing of the carrying out of the undertaking,

(ii) the works or actions to prevent, mitigate or remedy effects of the undertaking on the environment,

(iii) such research, investigations, studies and monitoring programs related to the undertaking, and reports thereof, as he considers necessary,

(iv) such changes in the undertaking as he considers necessary,

(v) that the proponent enter into one or more agreements related to the undertaking with any person with respect to such matters as the Minister considers necessary,

(vi) that the proponent comply with all or any of the provisions of the environmental assessment as accepted by the Minister that may be incorporated by reference in the approval,

(vii) the period of time during which the undertaking, or any part thereof, shall be commenced or carried out; or

(*c*) refuse to give approval to proceed with the undertaking.

Matters to be considered by the Minister

(2) In determining whether to give approval, give approval subject to terms and conditions or refuse to give approval to proceed with an undertaking in accordance with subsection 1, the Minister shall consider,

(*a*) the purpose of this Act;

(*b*) the environmental assessment of the undertaking as accepted by the Minister;

(*c*) the submissions, if any, made to the Minister with respect to the environmental assessment.

Notice of approval

(3) The Minister shall give notice, together with written reasons therefor, of his approval, approval subject to terms and conditions or refusal to give approval to proceed with the undertaking to the proponent, and in such manner as

the Minister considers suitable, to any person who has made a written submission to the Minister pursuant to subsection 2 of section 7 and to such other persons as the Minister considers necessary or advisable. 1975, c. 69, s. 14.

Proceedings under other Acts

15. An approval by the Minister pursuant to this Act to proceed with an undertaking does not preclude any proceeding in relation to a contravention of any provision of *The Environmental Protection Act, 1971*, *The Ontario Water Resources Act* or the regulations made under either of those Acts. 1975, c. 69, s. 15.

1971, c. 86
R.S.O. 1970, c. 332

Effect of approval

16. (1) No person shall proceed with an undertaking contrary to any term or condition imposed by the Minister in giving approval to proceed with the undertaking.

Idem

(2) No person shall give, make, issue, interpret or apply any licence, permit, approval, permission, consent, loan, guarantee of repayment of a loan, grant or subsidy that is required in order to proceed with an undertaking contrary to any term or condition imposed by the Minister in giving approval to proceed with the undertaking. 1975, c. 69, s. 16.

Where proponent proposes to change undertaking

17. Where a proponent of an undertaking proposes to make a change in the undertaking,

(*a*) before the Minister has given approval to proceed with the undertaking, that does not conform to the environmental assessment of the undertaking as accepted by the Minister; or

(*b*) after the Minister has given approval to proceed with the undertaking, that does not conform to any term or condition imposed upon the approval to proceed with the undertaking,

this Act applies to the proposal to make the change in the undertaking as though the proposed change were itself an undertaking to which this Act applies. 1975, c. 69, s. 17.

PART III

ENVIRONMENTAL ASSESSMENT BOARD

Composition of Board

18. (1) A board to be known as the Environmental Assessment Board is established and shall be composed of not fewer than five persons who shall be appointed by the Lieutenant Governor in Council and shall not be employed in the public service of Ontario in the employ of any ministry.

(2) The Lieutenant Governor in Council shall designate a chairman and one or more vice-chairmen from among the members of the Board. Chairman and vice-chairman

(3) In the case of the absence or inability to act of the chairman or of there being a vacancy in the office of the chairman, a vice-chairman shall act as and have all the powers of the chairman and, in the absence of the chairman and vice-chairman or vice-chairmen from any meeting of the Board, the members of the Board present at the meeting shall appoint an acting chairman who shall act as and have all the powers of the chairman during the meeting. Acting chairman

(4) The members of the Board, other than the chairman, shall be appointed for a term of one, two or three years so that as nearly as possible one-third of the members, other than the chairman, shall retire each year. Term of members

(5) The chairman of the Board shall be appointed to hold office during pleasure. Term of chairman

(6) Every vacancy on the Board caused by the death, resignation or incapacity of a member may be filled by the appointment by the Lieutenant Governor in Council of a person to hold office for the remainder of the term of such member. Vacancies

(7) Three members of the Board constitute a quorum. Quorum

(8) Such employees as are necessary to carry out the duties of the Board shall be appointed under *The Public Service Act*. Employees R.S.O. 1970, c. 386

(9) The Board may appoint from time to time one or more persons having technical or special knowledge of any matter to inquire into and report to the Board and to assist the Board in any capacity in respect of any matter before it. Expert assistance

(10) The members of the Board shall be paid such remuneration and expenses as are determined by the Lieutenant Governor in Council. Remuneration

(11) The powers of the Board shall be exercised by resolution and the Board may pass resolutions governing the calling of and the proceedings at meetings and specifying the powers and duties of employees of the Board and generally dealing with the carrying out of its function. Exercise of powers

(12) The Board may determine its own practice and procedure in relation to hearings and may, subject to section 28 of *The Statutory Powers Procedure Act, 1971* and Practice and procedure 1971, c. 47

the approval of the Lieutenant Governor in Council, make rules governing such practice and procedure and the exercise of its powers in relation thereto and prescribe such forms as are considered advisable.

Conduct of hearings by less than quorum

(13) The chairman may, in writing, authorize less than a quorum of the Board to conduct a hearing and the member or members conducting the hearing shall have all the powers of the Board for the purposes of the hearing.

Only members at hearing to participate in decision

(14) No member of the Board shall participate in a decision of the Board pursuant to a hearing unless he was present throughout the hearing and heard the evidence and argument of the parties and, except with the consent of the parties, no decision of the Board shall be given unless all members so present participate in the decision.

Board may appoint class representative

(15) For the purpose of proceedings before the Board, the Board may appoint from among a class of parties to the proceedings having, in the opinion of the Board, a common interest, a person to represent that class in the proceedings, but any other member of the class for which such appointment was made may, with the consent of the Board, take part in the proceedings notwithstanding the appointment.

Minister entitled to take part in proceedings

(16) The Minister is entitled, by counsel or otherwise, to take part in proceedings before the Board.

Giving of decision

(17) The Board shall give a copy of its decision together with written reasons therefor to the Minister, to the parties, or where an appointment has been made pursuant to subsection 15, to the appointee on behalf of the class, and to such other persons as have made written submissions pursuant to subsection 2 of section 7 and to the clerk of each municipality in which the undertaking is being or will be carried out.

When decision is effective

(18) No decision of the Board is effective until it becomes final pursuant to section 24.

Decisions, etc., of Board not subject to review

(19) No decision, order, direction, resolution or ruling of the Board shall be questioned or reviewed in any court and no proceeding shall be taken in any court by way of injunction, declaratory judgment, *certiorari*, *mandamus*, prohibition, application for judicial review, *quo warranto*, or otherwise to question, review, prohibit or restrain the Board or any of its decisions, orders, directions, resolutions or rulings.

Application of 1971, c. 47

(20) Except as otherwise provided in this Act, *The Statutory Powers Procedure Act, 1971* applies to the proceedings of the Board. 1975, c. 69, s. 18.

Hearings to be public, exceptions

19. A hearing conducted by the Board or a member or members of the Board shall be open to the public except where the Board or the member or members of the Board conducting the hearing is or are of the opinion that matters may be disclosed at the hearing that are of such a nature, having regard to the circumstances, that the desirability of avoiding disclosure thereof in the interest of any person affected or in the public interest outweighs the desirability of adhering to the principle that hearings be open to the public, in which case, the Board or the member or members of the Board conducting the hearing may hold the hearing concerning any such matters *in camera*. 1975, c. 69, s. 19.

Effect of decision of Board

20. Any decision of the Board that becomes final pursuant to section 24 shall be deemed to be the decision of the Minister or of the Minister with the approval required by section 14. 1975, c. 69, s. 20.

Testimony by member, employee or appointee of Board

21. No member, employee or appointee of the Board shall be required to give testimony in any proceeding with regard to information obtained by him in the discharge of his duties as a member, employee or appointee of the Board. 1975, c. 69, s. 21.

Hearings under R.S.O. 1970, c. 332

22. Where the Environmental Hearing Board, established under *The Ontario Water Resources Act*, proposed to hold or commenced but did not complete a public hearing or did not report thereon under *The Ontario Water Resources Act* or *The Environmental Protection Act, 1971*, immediately 1971, c. 86 before this section came into force, the hearing shall be held or continued or the report may be made by the Environmental Assessment Board or, where it is necessary or advisable in the opinion of the chairman of the Environmental Assessment Board, the Environmental Assessment Board may hold a fresh hearing and any action or notice taken or given by the Environmental Hearing Board shall be deemed to have been taken or given by the Environmental Assessment Board. 1975, c. 69, s. 22.

Inspection of premises

23. For purposes relevant to the subject-matter of a hearing, the Board, its employees and appointees may enter and inspect any land or premises other than a dwelling at any reasonable time. 1975, c. 69, s. 23.

Variation or rescission of decisions

24.—(1) Within twenty-eight days after receipt by the Minister of a decision of the Board on any matter referred to it by notice of the Minister pursuant to subsection 2 of section 12 or section 13 or made pursuant to clause *c*, or within such longer period as may be determined by the

Minister within such twenty-eight day period, the Minister, with the approval of the Lieutenant Governor in Council or such Ministers of the Crown as the Lieutenant Governor in Council may designate, may,

(a) vary the whole or any part of the decision;

(b) substitute for the decision of the Board, such decision as he considers appropriate; or

(c) by notice to the Board require the Board to hold a new hearing of the whole or any part of the matter referred to the Board by the notice of the Minister and reconsider its decision.

Idem

(2) Subject to subsection 3, a decision of the Board is final after the expiration of the period or periods mentioned in subsection 1 unless, pursuant to subsection 1, the decision is varied or a decision is substituted for the decision of the Board or a new hearing is required.

Idem

(3) A decision of the Board that has been varied pursuant to clause *a* or a decision that has been substituted for the decision of the Board pursuant to clause *b* of subsection 1, is final.

Idem

(4) The Minister shall give notice, together with written reasons therefor, of any variation, substitution or requirement of a new hearing pursuant to subsection 1, to every person entitled to receive a copy of the decision of the Board pursuant to subsection 17 of section 18. 1975, *c.* 69, s. 24.

PART IV

PROVINCIAL OFFICERS

Designation of provincial officers

25.—(1) The Minister may designate in writing one or more employees of the Ministry or other persons as provincial officers for the purposes of any section or Part of this Act or any regulation or section of any regulation made under this Act that is referred to in the designation and in a designation may limit the authority of a provincial officer in such manner as the Minister considers necessary or advisable.

Certificate of designation

(2) The Minister shall issue to every provincial officer a certificate of his designation and every provincial officer, in the execution of his duties under this Act and the regulations, shall produce his certificate of designation upon request. 1975, *c.* 69, s. 25.

Powers of provincial officer

26.—(1) Where a provincial officer has reasonable grounds for believing that it is necessary, for the purpose of the administration of this Act and the regulations, he may, upon production of his certificate of designation, enter at any reasonable time any building, other than a dwelling, or any structure, machine, vehicle, land, water or air and make or require to be made such surveys, examinations, investigations, tests and inquiries, as he considers necessary for such purpose, including examinations of books, records and documents and may make, take and remove or may require to be made, taken or removed samples, copies or extracts.

Order authorizing

(2) Where a provincial judge is satisfied, upon an *ex parte* application by a provincial officer, that there is reasonable ground for believing that it is necessary to enter any building, including a dwelling, structure, machine, vehicle, land, water or air for the administration of this Act or the regulations, the provincial judge may issue an order authorizing a provincial officer to enter therein or thereon and to make or require to be made such surveys, examinations, investigations, tests and inquiries and to take the other actions mentioned in subsection 1 but every such entry, survey, examination, investigation, test, inquiry and other such action shall be made or taken between sunrise and sunset unless the provincial judge authorizes the provincial officer, by the order, to so act at another time. 1975, c. 69, s. 26.

Obstruction of provincial officer

27. No person shall hinder or obstruct a provincial officer in the lawful performance of his duties or knowingly furnish a provincial officer with false information or refuse to furnish him with information required for the purposes of this Act and the regulations. 1975, c. 69, s. 27.

Matters confidential

28. (1) Every provincial officer shall preserve secrecy in respect of all matters that come to his knowledge in the course of any survey, examination, test or inquiry under this Act or the regulations and shall not communicate any such matter to any person except,

(*a*) as may be required in connection with the administration of this Act and the regulations or any proceedings under this Act or the regulations;

(*b*) to his counsel; or

(*c*) with the consent of the person to whom the information relates.

Idem

(2) Except in a proceeding under this Act or the regulations, no provincial officer shall be required to give testimony in any civil suit or proceeding with regard to

information obtained by him in the course of any survey, examination, test or inquiry under this Act or the regulations. 1975, c. 69, s. 28.

PART V

ADMINISTRATION

Application to Divisional Court

29. The Minister, in addition to any other remedy and to any penalty imposed by law, may apply to the Divisional Court for an order,

(*a*) enjoining any act to proceed with an undertaking contrary to this Act; or

(*b*) invalidating any licence, permit, approval, permission or consent issued or granted contrary to subsection 1 of section 6,

and the court may make the order on such terms and conditions as the court considers proper. 1975, c. 69, s. 29.

Exemption

30. Where the Minister is of the opinion that it is in the public interest, having regard to the purpose of this Act and weighing the same against the injury, damage or interference that might be caused to any person or property by the application of this Act to any undertaking, the Minister, with the approval of the Lieutenant Governor in Council or of such Ministers of the Crown as the Lieutenant Governor in Council may designate, may by order,

(*a*) exempt the undertaking or the proponent of the undertaking from the application of this Act or the regulations or any matter or matters provided for in this Act or the regulations subject to such terms and conditions as the Minister may impose;

(*b*) suspend or revoke an exemption referred to in clause *a*;

(*c*) alter or revoke any term or condition of an exemption referred to in clause *a*. 1975, c. 69, s. 30.

Disclosure

31. Notwithstanding any other provision of this Act, where the Minister is of the opinion that compliance with any provision of this Act is causing, will cause or will likely cause the disclosure of matters that are of such a nature that the desirability of avoiding disclosure thereof in the interest of any person affected or in the public interest outweighs the desirability of disclosing such matters to the public, the Minister may make such order for the protection of such person or the public interest as he considers necessary or advisable. 1975, c. 69, s. 31.

32.—(1) The Minister shall cause to be maintained a record of every undertaking in respect of which an environmental assessment has been submitted under this Act that, subject to any order of the Minister pursuant to section 31, shall consist of the environmental assessment, the review of the environmental assessment that the Minister caused to be prepared, any written submissions, any decision of the Board or the Minister together with written reasons therefor, if any, made under this Act, any notice under section 9, subsection 2 of section 10, subsection 3 of section 14, subsection 4 of section 24 and section 30 and any order of the Minister pursuant to this Act together with the written reasons, if any, therefor. Record

(2) The Minister shall, upon the request of any person, make available for the inspection of such person any record referred to in subsection 1 including any document forming part of the record as soon as practicable after issuance or receipt of the document. 1975, c. 69, s. 32. Inspection

33. The Minister, for the purposes of the administration and enforcement of this Act and the regulations may, Powers and duties of Minister

(*a*) conduct research with respect to the environment or environmental assessments;

(*b*) conduct studies of the quality of the environment;

(*c*) conduct studies of environmental planning or environmental assessments designed to lead to the wise use of the environment by man;

(*d*) convene conferences and conduct seminars and educational and training programs with respect to the environment or environmental assessments;

(*e*) gather, publish and disseminate information with respect to the environment or environmental assessments;

(*f*) make grants and loans for research or the training of persons with respect to the environment or environmental assessments in such amounts and upon such terms and conditions as the Minister, subject to the approval of the Lieutenant Governor in Council, may determine;

(*g*) appoint committees to perform such advisory functions as the Minister considers advisable;

(*h*) make such investigations, surveys, examinations, tests and other arrangements as he considers necessary; and

(*i*) with the approval of the Lieutenant Governor in Council, enter into an agreement with any government or person with respect to the environment or environmental assessments. 1975, c. 69, s. 33.

Protection from personal liability

34. (1) Except in the case of an application for judicial review or an action or proceeding that is specifically provided for with respect to a person referred to in this subsection in any Act or in a regulation under this or any other Act, no action or other proceeding for damages or otherwise lies or shall be instituted against an employee of the Ministry, a member of the Board or a Crown employee within the meaning of *The Public Service Act* who is a provincial officer or is acting under the direction of an employee of the Ministry, or such member or provincial officer, for any act done in good faith in the execution or intended execution of any duty or authority under this Act or for any alleged neglect or default in the execution in good faith of any such duty or authority.

R.S.O. 1970, c. 386

Crown not relieved of liability R.S.O. 1970, c. 365

(2) Subsection 1 does not, by reason of subsections 2 and 4 of section 5 of *The Proceedings Against the Crown Act*, relieve the Crown of liability in respect of a tort committed by an agent or servant of the Crown to which it would otherwise be subject and the Crown is liable under that Act for any such tort in a like manner as if subsection 1 had not been enacted. 1975, c. 69, s. 34.

Hearings under other Acts

35. Where a proponent is required under this Act not to proceed with an undertaking until an environmental assessment of the undertaking has been accepted by the Minister and a public hearing is required or permitted under *The Environmental Protection Act, 1971* or *The Ontario Water Resources Act* other than by the Environmental Appeal Board or the Ontario Municipal Board with respect to the undertaking, the Minister shall order,

1971, c. 86
R.S.O. 1970, c. 332

(*a*) that the public hearing under such other Act may be proceeded with and that this Act or the regulations or any matter or matters provided for in this Act or the regulations that is specified in the order does not apply to the undertaking or proponent; or

(*b*) that this Act applies to the undertaking and proponent and the public hearing under such other Act shall be deemed not to be required or permitted. 1975, c. 69, s. 35.

False information

36. No person shall knowingly give false information in any application, return or statement made to the Minister, the Board, an employee or appointee of the

Board, a provincial officer or any employee of the Ministry in respect of any matter under this Act or the regulations. 1975, c. 69, s. 36.

Certificates, etc., as evidence

37. In any prosecution, proceeding or hearing under this Act or the regulations, the production of,

(*a*) a certificate or report of an analyst in the employ of the Crown in right of Ontario designated by the Minister as to the analysis, ingredients, quality, quantity or temperature of any material, whether solid, liquid or gas or any combination of them; or

(*b*) any document under this Act purporting to be signed by the Minister or by or for the Board, or any certified copy thereof,

is *prima facie* evidence of the facts stated therein and of the authority of the person making the document without any proof of appointment or signature. 1975, c. 69, s. 37.

Service

38.—(1) Any notice, order, approval or other document under this Act or the regulations is sufficiently given or served if delivered personally or sent by registered mail addressed to the person to whom delivery or service is to be made at the latest address appearing on the records of the Ministry.

Notice to clerk of municipality

(2) A notice,

(*a*) given by the Minister pursuant to section 9, section 10 or subsection 3 of section 14;

(*b*) given by the Board pursuant to subsection 3 of section 12; or

(*c*) of the order of the Minister pursuant to section 11,

shall be given to the clerk of each municipality in which the undertaking is being or will be carried out.

Idem

(3) Where notice is given or service is made by registered mail, the giving or service shall be deemed to be made on the seventh day after the day of mailing unless the person to whom notice is given or on whom service is being made establishes that he did not, acting in good faith, through absence, accident, illness or other cause beyond his control receive the notice, order, approval or other document until a later date.

Leaf blank to correct

numbering

Public notice

(4) Where the Minister or the Board is of the opinion that because the persons who are to be given any notice or document under this Act are so numerous, or for any other reason it is impracticable to give the notice or document to all or any of the persons individually, the Minister or the Board, as the case may be, may instead of doing so, cause the notice or reasonable notice of the contents of the document to be given to the persons by public advertisement or otherwise as the Minister or the Board may direct, and the date on which such notice or reasonable notice of the contents of the document is first published or otherwise given as directed, shall be deemed to be the date on which the notice or document is given.

Inspection of documents

(5) The making available by the Minister of a copy or reproduction made by any means of a document is compliance with the provisions of this Act authorizing the inspection of the document.

Destruction of certain documents

(6) Notwithstanding any provision of this Act, a document may be destroyed by or under the authority of the Minister when it has been completely recorded or copied and the recording or copy is retained for the purpose of inspection under this section. 1975, c. 69, s. 38.

Where notice to be given to Minister

39. Where a proponent of an undertaking in respect of which an environmental assessment has been accepted by the Minister and for which approval to proceed has been given by the Minister receives notice of any fact, situation, event, order, proceeding or application the result of which or compliance with which has affected, affects or may affect the ability of the proponent to proceed with the undertaking in accordance with any term or condition to which the approval of the Minister to proceed with the undertaking is subject, the proponent shall forthwith give notice thereof to the Minister. 1975, c. 69, s. 39.

Offence

40. Every person, whether as principal or agent, or an employee of either of them, who contravenes any provision of this Act or the regulations or fails to comply with an order or a term or condition of an approval issued or given under this Act is guilty of an offence and on summary conviction is liable on a first conviction to a fine of not more than $5,000 and on a subsequent conviction to a fine of not more than $10,000 for every day or part thereof upon which the offence occurs or continues. 1975, c. 69, s. 40.

PART VI

REGULATIONS

Regulations

41. The Lieutenant Governor in Council may make regulations,

(*a*) defining any enterprise or activity as a major commercial or business enterprise or activity;

(*b*) defining enterprises or activities as classes of major commercial or business enterprises or activities;

(*c*) defining any body other than a municipality as a public body;

(*d*) designating any major commercial or business enterprise or activity or class of major commercial or business enterprises or activities as an undertaking or class of undertakings to which this Act applies;

(*e*) designating any proposal, plan or program or any class of proposals, plans or programs in respect of any major commercial or business enterprise or activity or any class of major commercial or business enterprises or activities as an undertaking or class of undertakings to which this Act applies;

(*f*) exempting any person, class of persons, undertaking or class of undertakings from the provisions of this Act, the regulations or any section or part of a section thereof and designating any enterprise or activity or class of enterprises or activities or any proposal, plan or program or any class of proposals, plans or programs in respect of any of them by or on behalf of Her Majesty in right of Ontario, by a public body or public bodies or by a municipality or municipalities as an undertaking or class of undertakings to which this Act applies notwithstanding any exemption under this clause;

(*g*) prescribing additional information that shall be contained in environmental assessments submitted to the Minister;

(*h*) prescribing forms for the purposes of this Act and providing for their use. 1975, c. 69, s. 41.

Class of undertakings

42. A class of undertakings under this Act or the regulations may be defined with respect to any attribute, quality

or characteristic or combination thereof and may be defined to include any number of undertakings under one ownership or more than one ownership and whether or not of the same type or with the same attributes, qualities or characteristics. 1975, c. 69, s. 42.

Scope of regulations

43. Any regulation may be general or particular in its application, may be limited as to time or place or both and may exclude any place from the application of the regulation. 1975, c. 69, s. 43.

Adoption of codes in regulations

44. Any regulation may adopt by reference, in whole or in part, with such changes as the Lieutenant Governor in Council considers necessary, any code, formula, standard or procedure, and may require compliance with any code, standard or procedure so adopted. 1975, c. 69, s. 44.

Application of regulations

45. (1) A regulation is not effective with respect to an enterprise or activity that is commenced before the regulation comes into force.

Idem

(2) Notwithstanding subsection 1, a regulation is effective with respect to,

(*a*) any major commercial or business enterprise or activity that is commenced after the coming into force of this Act and that is being carried on or is not completed when the regulation comes into force;

(*b*) a significant change made in any major commercial or business enterprise or activity after the coming into force of this Act and that is being carried on or is not completed before the regulation comes into force; or

(*c*) any proposal, plan or program in respect of any major commercial or business enterprise or activity or any class of major commercial or business enterprises or activities proposed or made before the coming into force of the regulation whether the proposal, plan or program is proposed or made before or after the coming into force of this Act.

Idem

(3) Notwithstanding subsection 1, a regulation made under clause *f* of section 41 is effective whether the enterprise or activity, or class of enterprises or activities, or proposal, plan or program or class of proposals, plans or programs in respect of any of them is commenced, carried on, made or proposed before or after the coming into force of this Act. 1975, c. 69, s. 45.

PART VII

MISCELLANEOUS

Commencement

*46. This Act comes into force on a day to be named by proclamation of the Lieutenant Governor.

Short title

47. This Act may be cited as *The Environmental Assessment Act, 1975*.

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*NOTE: The Act was proclaimed in force on the following dates: ss. 18 (1-11, 13), 19, 21 to 23, 46, 47 (20th April, 1976), ss. 1 (*a-n*), (*o*) (i), (*p*), 2, 3, (*a*), 4 to 17, 18 (12, 14-20), 20, 24 to 40, 41 (*c, f, g, h*), 42 to 44, 45 (1, 3) (20th October, 1976); ss. 1 (*o*) (ii), 3 (*b*), 41 (*a, b, d, e*), 45 (2) (16th January, 1977)

APPENDIX C

Department of Environment Planning

Fort Garry - St. Vital EIR

Construction of the Fort Garry - St. Vital Bridge and the related approach roads would create a four lane divided major thoroughfare south of and adjacent to the the existing Winnipeg Hydro and Manitoba Hydro transmission lines. The project would include a railway grade separation over the CNR Letellier Subdivision, traffic interchange with Pembina Highway, a bridge crossing of the Red River, and an overpass over River Road, which would be relocated to the west of its current alignment. Landscaping associated with the facility would not be confined to the specific right-of-way, but would be integrated with more intensive development of the hydro rights-of-way for active and passive park purposes, incorporating pedestrian and cycle features, playgrounds, sports facilities and diversified landscaping proposals.

The facility has been proposed for approximately a decade in largely the form currently shown on preliminary functional plans; these plans have, however, been comprehensively updated to conform with Winnipeg City Council's recently-enunciated policy on transportation development. Alternative alignments substantially removed to

the north and to the south of the hydro corridor were considered approximately seven years ago and were rejected in view of their extremely disruptive effect on established residential development (in the case of the more southerly alternative) and on established residential and commercial development and on a major regional park (in the case of the more northerly alternative).

Environmental Effects

West of the Red River, the facility would skirt the north side of an established residential neighbourhood. The facility would be unlikely to impair attitudes of area residents to their community. There is a potential for adversely affecting the environmental quality for homes immediately adjacent to the south property line of the west approach road to the structure in the forms of noise levels and visual effects; these problems could be offset and alleviated through sound barriers which could be constructed on the area between the edge of pavement and the private property as part of the landscaping proposals to be developed in the course of detailed design. The facility would increase accessibility from the subject area to other parts of Winnipeg, including the regional shopping centre proposed in St. Vital for which this facility would act as a catalyst; existing north-south vehicular and pedestrian corridors of communication would not be

disrupted by the proposal and might well be enhanced in terms of pedestrian and cycle facilities on the west bank of the Red River.

East of the Red River, the introduction of the facility would make the developing south St. Vital residential area more accessible by car to other parts of Winnipeg. The possible development of a regional shopping centre in the area, prompted by the major bridge construction, would broaden the range of shopping and other services. Access provided from the area to the Victoria General Hospital would constitute a social benefit to area residents, as would the opportunities to travel by automobile and possibly transit in order to make increased use of cultural and educational facilities available at the University of Manitoba. Community facilities would be planned to permit neighbourhoods north and south of the proposed major road to function independently; movements in a north-south direction would be confined to the arterial and collector street crossings as is presently the case, with the possible and desirable addition of pedestrian and cycle crossings involving no direct conflict with east-west vehicular traffic. Resident attitudes toward the adjoining neighbourhoods are positive and likely to remain so. Noise levels affecting homes (existing and proposed) on lots abutting the facility would obviously increase.

In general, the adverse environmental effects of the proposed Fort Garry - St. Vital Bridge would be those normally associated with major thoroughfares; however, the width of the available right-of-way and of the adjoining open corridor would mean that these adverse impacts would be relatively minor in comparison to the majority of existing regional streets. In addition, the aforementioned width would afford part of the area necessary to develop earth mounds, wall-type sound barriers and landscaping plantings and features which could provide visual separation as well as sound buffering. It is important that the ongoing subdivision process provide adequate buffer strips to ensure the opportunity to construct these separators.

From the environmental point of view, no distinct alternatives are proposed; it is presumed that detailed design of the facility and of future nearby subdivisions will be successful in optimizing environmental aspects of the facility. Some action in terms of acquiring land within recently-approved subdivisions in the design of which these considerations have not been satisfactorily resolved may have to be contemplated.

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