SOCIO-POLITICAL FACTORS

IN URBAN TRANSPORTATION PLANNING.

WALTER JANCEWICZ

A MAJOR TECHNICAL REPORT

IN THE

FACULTY OF ENGINEERING

Presented in partial fulfilment of the requirements for the

Degree of MASTER OF ENGINEERING

at

Sir George Williams University

Montreal, Canada

Date: January 10, 1972.

© Walter Jancewicz 1972
ABSTRACT

Socio-Political Factors

In Urban Transportation Planning

Development of urban transportation facilities involves changes which affect the habits and influence the lives of the population. Planning constraints are imposed by various levels of government in response to public and private demands and financial limitations.

Transportation planners have to consider socio-political factors, if their efforts are to be effective.

The purpose of this thesis is to examine some of the socio-political factors influencing urban transportation planning. This is done by means of a case study of the development of the expressway systems in the Montreal and Toronto Metropolitan areas.

The discussion leads to the general conclusion that there is a need for a more dynamic and flexible process of urban transportation planning to accommodate rapidly changing public attitudes. The improvement in exchange of the right kind of information between the planners and the politicians and the public seems to be the key issue.
ACKNOWLEDGMENTS.

The writer wishes to express his sincere appreciation to the following persons:

Mr. Ewen Fisher, M.S., his thesis supervisor, for his help and guidance in the preparation of this thesis.

Mr. M.C. Douglas, P.Eng., Chief Engineer, Transportation Division of the Foundation Engineering Corporation of Canada Ltd., Toronto, for valuable information, comments and suggestions.

Mr. J. Croteau, Eng., Senior Partner, Lalonde, Valois, Lamarre and Associates, Montreal, for directing the writer to sources of research material.

Mr. F.I. Hewson, P.Eng., Executive Bridge Engineer, and Mr. R.W. Oddson, P.Eng., Regional Planning Engineer, of the Department of Transportation and Communication of Ontario, Toronto, for many valuable comments.

Mr. K.L. Coldwell, Eng., Chief of Planning and Development Division of the St. Lawrence Seaway Authority, Montreal, the writer's supervisor at work, for his encouragement during the period of studies and preparation of the thesis.

Mrs. Elise Jancewicz, the writer's wife, for typing the thesis and for her patience during the course of the studies.
SOCIO-POLITICAL FACTORS

IN URBAN TRANSPORTATION PLANNING

TABLE OF CONTENTS

LIST OF FIGURES

1. INTRODUCTION
   1.1 Purpose and Scope ........................................... 1
   1.2 The Role of Transportation and Transportation Planning ........... 2
   1.3 Urban Environment ........................................... 3

2. SOCIO-POLITICAL ENVIRONMENT
   2.1 General ....................................................... 6
   2.2 Constitutional Framework ...................................... 7
   2.3 Provincial Division of Authority
      2.3.1 Province of Ontario ....................................... 9
      2.3.2 Province of Quebec ....................................... 10
   2.4 Financial Aspects ............................................ 11
      2.4.1 Province of Ontario ....................................... 12
      2.4.2 Province of Quebec ....................................... 12

3. CASE A - METROPOLITAN TORONTO
   3.1 Background .................................................... 14
      3.1.1 Metropolitan Organization .................................. 14
      3.1.2 The Metropolitan Plan - Transportation Section ............. 16
   3.2 Development of Expressways - Present System .................... 18
      3.2.1 The Provincial Highways .................................... 18
      3.2.2 The Metro Expressways .................................... 19
   3.3 Development of Expressways - Future Plans ....................... 20
3.4 The Spadina Expressway

3.4.1 General
3.4.2 Early History - Feasibility Studies
3.4.3 Detailed Planning
3.4.4 Major Events - 1969-1970
3.4.5 Ontario Municipal Board Hearings - January 1971
3.4.6 The Provincial Government's Decision

3.5 Comments and Conclusions

3.5.1 General
3.5.2 Comments on the Spadina Expressway
3.5.3 Public Attitudes Towards Expressways
3.5.4 Government Response
3.5.5 Socio-Political Factors
3.5.6 Conclusions

4. CASE B - METROPOLITAN MONTREAL

4.1 General

4.2 Background - The Plan

4.2.1 The Participating Governments and their Agencies
4.2.2 Recent Reorganization of Structures

4.3 Development of Expressways - Present System

4.3.1 The Initial Stages
4.3.2 The Role of the Trans-Canada Act and of Expo 67
4.3.3 Decreased Rate of Implementation
4.3.4 The East-West Expressway

4.4 Development of Expressways - Future Plans

4.5 Comments and Conclusions

4.5.1 Political Structures
4.5.2 Role of Events in the Development of Expressways
4.5.3 Public Attitudes and Government's Response
4.5.4 Conclusions

5. COMPARISON OF THE TWO CASES AND DISCUSSION

5.1 General

5.2 Planning of the Expressways

5.3 Public Attitudes - the Similarities

5.4 Political Structures - the Differences
6. CONCLUSIONS

BIBLIOGRAPHY
LIST OF FIGURES.

Between pages

Fig. 2.1 Ontario - Provincial Road Subsidy Rates 11 and 12
Fig. 2.2 Quebec - Provincial Road Subsidy Rates 12 and 13
Fig. 3.1 Toronto Metropolitan Organization 13 and 14
Fig. 3.2 Metropolitan Toronto - Transportation Facilities - Existing and Proposed 17 and 18
Fig. 3.3 The Spadina Expressway 20 and 21
Fig. 4.1 The 1958 Concept of Development of Expressways in Metropolitan Montreal Area 36 and 37
Fig. 4.2 Metropolitan Montreal - Transportation Facilities - Existing and Proposed 38 and 39
1. INTRODUCTION.

1.1 PURPOSE AND SCOPE.

The purpose of this thesis is to identify and discuss some of the socio-political factors which affect the planning of urban transportation facilities and services.

The socio-political factors are defined, for the purpose of this thesis, as the elements and conditions which affect the results of interaction between society and the elected political bodies. The factors influence the process of determination of governmental policies and priorities, and the sequence of their implementation.

The writer has selected the development of the urban expressways in the Metropolitan Areas of Montreal and Toronto as an appropriate focus for this investigation. Recent public opposition towards the development of the urban expressways and the contrasting response of the two Provincial Governments brought forward many significant facts and issues. The study of the development of these expressway systems and of the changing public attitudes to the provision of these facilities provides considerable background for assessing some of the influence of socio-political factors on urban transportation planning.

The interpretation of socio-political events is largely a matter of personal opinion; the process of transportation planning is both an art and a science. Therefore, only general observations have been derived from the appraisal of this two case study.
1.2 THE ROLE OF TRANSPORTATION AND TRANSPORTATION PLANNING.

The role of transportation within the broader context of socio-economic environment is well described in the definition quoted below:

"Transportation of people and goods is not an end in itself but a means to other ends. When highway improvements, for example, lower the cost of producing goods and services, including the cost of time involved in transportation, they make possible new regional and national economic growth. When such transportation improvements increase personal mobility, they also generate broad social benefits. They give people greater freedom to choose where they live, work and shop, and the amount and kind of educational, cultural and recreational activities they pursue. The primary purpose of transportation improvement, then, is not to increase the economy, but to promote broad economic and social progress by increasing the output of those goods and services which are in public demand and by increasing freedom of choice in locations and types of activities." *(1.)*

An efficient transportation system is a result of a continuous process of planning described in the following excerpt:

"The basic objectives of transportation planning are to identify the present and future transport requirements of an area, and to design and adjust as conditions change, functional transportation systems as determined by appropriate studies. The procedures used in such studies are continually being refined and developed through research. The functional transportation system should be designed by a special planning group to provide workable solutions for the movement of persons and goods. They must be consistent with the resources and needs of the inhabitants, and be an important part of the broader plans for the development of the area." *(2.)*

These quotations apply equally to the urban environment. They rightly place transportation within the broader context of service to communities, and transportation planning as an element

* Numbers in parentheses refer to the sources listed in the Bibliography.*
of regional development.

Socio-political factors have an important bearing on urban transportation planning. The implementation of urban transportation facilities and services affects many people. The long range impact is often adverse in terms of disruption of established traffic patterns, and in terms of the impact of expropriations, particularly in densely populated areas. These impacts affect public and private attitudes, and thus the political posture of different levels of government.

Urban transportation planning involves an interdisciplinary effort. Engineers are participants in this process and are responsible for providing technical information to the decision makers. Engineering and other planning organizations interact with political bodies in policy formulation and in the definition of improvement programs and standards. Decisions on programs and standards reflect the socio-political stance of the urban area.

1.3 URBAN ENVIRONMENT.

Canada's largest city, Montreal, is located primarily on a 190 sq. miles island connected to the mainland by twelve highway bridges. The dominant feature of the island is the Mont Royal which contributes to a very irregular arterial street system. Considerable residential and industrial developments are taking place on the South Shore, the North Shore and on Jesus Island.

Toronto, situated on the shores of Lake Ontario, has a geographic characteristic quite different from that of Montreal. The
city spreads in a semi-circle from the centre core, and it has some natural obstacles to traffic in the form of deep ravines.

While the respective populations of the two areas differ by some 1/4 million, i.e. approximately 10%, and their urbanized areas of some 200 sq. miles are nearly the same, there are many differences in their way of life. The preference for multiple family living made Montreal the most densely populated urban area in Canada; the central core of the City is inhabited by almost a million and a half; while the central city of Toronto has a population of less than one million. The ownership of single family dwellings is high in Toronto - some 50% own their homes; in Montreal the percentage is only 16.

Toronto is highly automobile oriented with the highest number of registered automobiles per capita of any large population centre in Canada. The existing arterial streets follow a well-defined pattern with some discontinuities at the larger ravines. The present expressways fit into this general grid pattern; the wide spacing of expressways, however, results in very high volumes on Highway 401. Because of the grid pattern of the streets and circumferential expressways, traffic volumes are not concentrated in the central city as severely as they are in Montreal where traffic densities are higher.

The Montreal arterial street system has the lowest miles per capita ratio of any Metropolitan area in Canada. The arterials are irregular in spacing and have many discontinuities. The traffic volume per square mile is the highest in Canada. The combination of the most dense traffic and irregular arterial street system
produces in Montreal a serious congestion problem.

The sharp increase in ownership of automobiles is reflected in the percentage of change of automobile registrations between 1945 and 1965, and the number of dwelling units with cars in 1961, which were some 400% and 700%, and 72% and 55% for Toronto and Montreal respectively. Toronto with a larger number of cars (some 700,000 in 1965), and Montreal with less cars (some 570,000 in 1965) due to their respective urban characteristics, experienced generally in the mid-fifties, the same dire need of an expressway system.

There are, at present, in the Montreal area, 5.5 miles of expressways per each 100,000 Metropolitan population, with a projected 7.1 miles to be attained by 1980. Toronto statistics indicate corresponding figures of 4.4 and 6.8 miles respectively. (22.)
2. SOCIO-POLITICAL ENVIRONMENT.

2.1 GENERAL.

Major issues of urban transportation planning are resolved, as public decisions, by political bodies.

Ideally, public decisions should reflect the socio-political climate of the area and community objectives. Frequently the public bodies function under many restrictions, making response to the public demand a relatively slow and cumbersome process. Socio-political environment, on the other hand, is a product of a very dynamic interaction of all levels of society. The environment reflects changes in attitudes and aspirations of society which have been occurring at an ever increasing rate in the last few decades.

The response of political bodies to public demand is dependent on many factors. Economic constraint and political consideration impose upon the decision makers the necessity of establishing priorities. These limitations often result in trade-offs between objectives; at one time economic development may be given priority over increase in social benefits, while at another time provision of transportation facilities may take precedence over low cost housing.

The development of the expressway system in the urban areas of Ontario and Quebec has been taking place as a result of the initiative taken by political bodies in response to apparent needs.
The division of authority and responsibility for provision of roads in the two provinces will be the subject of the remaining sections of this chapter.

2.2 CONSTITUTIONAL FRAMEWORK.

The British Northern America Act 1867 is the basis of federal legislative authority in some aspects of transportation.

The Act reflects the era of Canadian history when the main transportation concerns were navigation and shipping, and railways, and when the roads played a secondary part.

Section 91 of the B.N.A. Act states that:

"...the exclusive legislative Authority of the Parliament of Canada extends to all Matters coming within the Classes of Subjects next hereinafter enumerated; that is to say,....
" 9. Beacons, Buoys, Lighthouses, and Sable Island,
10. Navigation and Shipping;"
and
"13. Ferries between a Province and any British or Foreign Country or between Two Provinces. (3.)

Section 92 decrees that:

"In each Province the Legislature may exclusively make laws in relation to Matters coming within the Classes of Subjects next hereinafter enumerated; that is to say,....
10. Local Works and Undertakings other than such as are of the following Classes:--
a) Lines of Steam and other Ships, Railways, Canals, Telegraphs, and other Works and Undertakings connecting the Province with any other or others of the Provinces, or extending beyond the Limits of the Province;"
b) Lines of Steam Ships between the Province and any British or Foreign Country:
c) Such Works as, although wholly situate within the Province, are before or after their Execution declared by the Parliament of Canada to be for the general Advantage of Canada or for the Advantage of Two or more of the Provinces. ............." (3.)

The parts of the B.N.A. Act referring to transportation have been quoted to underline various possibilities of interpretation of the Act relative to road transportation. The Roads are not mentioned in it at all; they are implied in Section 92 presumably in such terms as ".....Works and other Undertakings connecting the Province .....", and "Such Works as ....."

So far, Federal Government involvement in road building was limited to the responsibility for: roads in the Yukon, North-West Territories and National Parks, subsidizing expenses connected with the construction of the Trans-Canada Highway, Roads to Resources Programs, and other special projects of national importance. The Federal Government has used development of transportation facilities as a means of promoting Canadian unity, for example, the Trans-Canada Highway.

Over a period of years, the B.N.A. Act has been interpreted and enacted by assigning the responsibilities for roads, within provinces, to Provincial Governments, which in turn delegated some authority to Urban and Rural Municipalities.

During the mid-sixties, the importance of transportation to Canadian economy prompted enacting of the National Transportation Act 1967 (4.). The purpose of the Act is to define and to establish
means of implementation of a national transport policy. The duties of the Canadian Transport Commission include advising the Federal Government on the overall balance between expenditure programs of Government Departments and Agencies for the provision of transport facilities.

Reorganization of the Federal Ministry of Transport, announced during 1970, assigns to the Canadian Surface Transportation Administration the programming and planning for federal participation in the operation and coordination of highway, rail and ferry transportation. (5) The C.S.T.A is, at present, in the stage of organizing its structure and defining its functions in details. The results of this reorganization, therefore, cannot be determined at this time.

2.3 PROVINCIAL DIVISION OF AUTHORITY.

In Canada, the provision of roads in the provinces is a provincial responsibility. Initially, this responsibility was delegated entirely by the Provincial Governments to the Municipalities.

With the introduction of the automobile and the rapid increase in number of vehicles, it became necessary for the Provincial Governments to create Highway Departments to assume responsibilities for construction, maintenance and operation of the most important rural roads. As motor vehicle travel increased and convenient motor vehicle transportation became more apparent, the responsibilities of the Provincial Highway Departments were extended.

When, relatively recently, traffic problems became most acute
in urban areas, systems of provincial subsidies were established
to help finance street improvements, where municipal revenues were
inadequate (6.).

2.3.1 Province of Ontario.

In the Province of Ontario the Provincial Government is
directly responsible, through the Department of Transportation and
Communications (D.T.C.), for construction and maintenance of all
Provincial Highways.

Routes of Provincial Highways through Urban Municipalities
remain, with some exceptions, under municipal jurisdiction. The
major Provincial Highways 27, 400, 401 and Q.E.W. within the Metro-
politan Toronto boundaries are such an exception and are under the
jurisdiction of the D.T.C. (20.)

The Municipality of Metropolitan Toronto has authority over
all major arterial roads and the Metro Expressways. Minor arterial
roads and local streets are the responsibility of the Metro municipal-
ities. (8.)

2.3.2 Province of Quebec.

The Provincial Government of Quebec assumes direct respons-
ibility, through the Quebec Roads Department, for construction and
maintenance of all provincial highways (6.).

Urban municipal roads are under the jurisdiction of munici-
palities. Provincial Government, however, may designate a municipal
road as part of the Provincial Highway system and assume all respons-

iblity for construction and maintenance of such roads (6., 9.).

The expressways on the Montreal Island generally fall within this category and are, with some exceptions, under the authority of the Quebec Roads Department. The above mentioned exceptions, such as the urban part of the Laurentian Autoroute and the Bonaventure Expressway, will be discussed in Chapter 4.

Review of Bill 75 indicates that the jurisdiction of the lately incorporated Montreal Urban Community over the roads within its boundaries is limited to matters related to traffic regulations and traffic control (12.).

2.4 FINANCIAL ASPECTS.

Provincial Government expenditures for highways and for municipal road assistance are budgeted annually from consolidated revenue.

The expenditures seem to bear some general relationship with the receipts from the provincially collected "road user taxes" (gasoline tax, motor vehicle licence fees, and motor carrier taxes). The capital expenditures on road construction and maintenance amounted in 1970 to approximately $500 million in Ontario and $290 million in Quebec; the corresponding provincial revenue from "road user taxes" was $565 million and $405 million.

Municipal funds for road construction, maintenance and administration are derived from local taxes (principally real property) and from provincial government grants and subsidies.
Ontario Road and Street Administration

<table>
<thead>
<tr>
<th>Provincial subsidy rates</th>
<th>Number of units</th>
<th>Miles of road or street</th>
</tr>
</thead>
<tbody>
<tr>
<td>331/3% R &amp; B</td>
<td>1</td>
<td>479</td>
</tr>
<tr>
<td>75% constr. on CL</td>
<td>33</td>
<td>230</td>
</tr>
<tr>
<td>75% TS</td>
<td></td>
<td>2,191</td>
</tr>
<tr>
<td>331/3% R &amp; B</td>
<td></td>
<td>2,979</td>
</tr>
<tr>
<td>75% constr. on CL</td>
<td></td>
<td>7,247</td>
</tr>
<tr>
<td>75% TS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Provincial</td>
<td>13,126</td>
<td></td>
</tr>
<tr>
<td>50% R &amp; B</td>
<td>1</td>
<td>10,535</td>
</tr>
<tr>
<td>50% R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80% 'B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>90-100% constr. &amp; maint. on CL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75% TS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Urban</td>
<td>10,535</td>
<td></td>
</tr>
<tr>
<td>50-80% R</td>
<td>557</td>
<td>48,903</td>
</tr>
<tr>
<td>80-100% B</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Townships, Improvement Districts, Indian Reserves</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td>50% R</td>
<td>37</td>
<td>7,857</td>
</tr>
<tr>
<td>80% B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suburban Road Commissions</td>
<td>35</td>
<td>1,390</td>
</tr>
<tr>
<td>Road Boards in Unincorporated Townships</td>
<td>230</td>
<td>4,019</td>
</tr>
<tr>
<td>Total Rural Local</td>
<td>62,169</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>85,830</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
TS: Trans. studies - cost of report.
CL: Connecting links for King's Highway extensions.
R: Road and streets, constr. and maint.
B: Bridges, constr. and maint.
Under federally supported road construction programs, such as the Trans-Canada Highway, the Provincial Government is reimbursed for the part of expenditure sharable under the Federal-Provincial Agreement (13., 23.).

2.4.1 Province of Ontario.

In the Province of Ontario, the Department of Transportation and Communications budgets its expenditures to provide funds for construction and maintenance of Provincial Highways and for the road subsidies to municipalities. The provincial road subsidy rates, shown in Fig. 2.1, were established on the basis of a study of financial capabilities of various municipalities.

The cost of construction and maintenance of the Provincial Highways in the Toronto Metro Area was borne by the Province, while the Metro Expressways were subsidized at the rate of 50%. The annual capital expenditures on the Expressways and major Provincial Highways in the Metro Area were estimated at $20.00 per capita in 1965; the provincial and the Metro share was $15.00 and $5.00 respectively (22.).

2.4.2 Province of Quebec.

In the Province of Quebec, the Quebec Roads Department bears the cost of construction and maintenance of Provincial Highways (23.).

The Expressways on the Montreal Island are generally declared part of the Provincial Highway System and, in accordance with the Quebec Roads Act, shared with the municipalities through which the Expressway passes (Fig. 2.2); municipal contributions are negotiated for each expressway and generally amount to about 20% of the total cost.
Quebec—Provincial Road Subsidy Rates

FIG. 2.2

Quebec Road and Street Administration

<table>
<thead>
<tr>
<th>Provincial subsidy rates</th>
<th>Number of units</th>
<th>Miles of road or street</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial Department of Roads</td>
<td>1</td>
<td>Rural Arterial 8,001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other Rural 38,301</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total Rural 46,302</td>
</tr>
<tr>
<td>Cities</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>Towns more than 5,000</td>
<td>70</td>
<td>Total Urban 8,750</td>
</tr>
<tr>
<td>Towns less than 5,000</td>
<td>111</td>
<td></td>
</tr>
<tr>
<td>Villages</td>
<td>308</td>
<td></td>
</tr>
<tr>
<td>Townships &amp; Parishes</td>
<td>1,103</td>
<td></td>
</tr>
<tr>
<td>Counties</td>
<td>74</td>
<td></td>
</tr>
</tbody>
</table>

- May share cost of construction and maintenance of designated roads and bridges on arterial highway connections.
- Road dept. constructs & maintains pavement & bridges on main hwy. extensions.
- Municipalities do winter maint. on "other" rural road network under annual subsidy of $275 to $400 per mile depending on location of road.

1,730 Grand Total 55,052

FROM "ROAD ADMINISTRATION IN CANADA: 1968"
PUBLISHED BY CANADIAN GOOD ROAD ASSOCIATION
The Province, through the Quebec Autoroutes Authority, also provides the necessary funds for the provincial toll roads called Autoroutes (23.).

The Federal Government reimburses the Provincial Government 50% of the cost of construction of the Trans-Canada sections of the Expressways and bore all the cost of construction and maintenance of the Champlain Bridge and its approaches (11., 23.). The Federal Government also shared the capital costs for construction of the Bonaventure Expressway with the City of Montreal; the Expressway is maintained by the City and the National Harbours Board (11.).

The annual capital expenditure on the Expressways in the Metropolitan Montreal Area were estimated to be $17.00 per capita in 1965; the Federal, Provincial and Municipal Governments' shares were $5.00, $11.00 and $1.00 respectively (22.).
3. CASE A - METROPOLITAN TORONTO.

3.1 BACKGROUND.

Metro Toronto, like many other American metropolises, experienced rapid post-war growth which taxed heavily the existing transportation facilities. The automobile registration increased some 400% in twenty years between 1945 and 1965. The modifications and improvements to the existing road system did not suffice any longer by the early 1950's. It had become necessary, at that time, to superimpose over the original road and rail network, new, more efficient facilities in the form of rapid transit and the expressways.

When the Municipality of Metropolitan Toronto came into existence in 1954, one of its responsibilities, and an urgent task, was to initiate extensive research into transportation needs for the Metro area. To carry out this task, Metro relied on the organization which by 1968 was structured as shown below.

3.1.1 Metropolitan Organization. (See Fig. 3.1)

The Executive Committee of the Metropolitan Council is the chief administrative body of the Metropolitan Corporation. It is assisted on matters pertaining to Transportation by the standing committees:

The Transportation Committee which formulates transportation policy and recommends programs for implementation of the Metropolitan Transportation Plan, and
The Legislation and Planning Committee, which advises on the administration of the Metropolitan Plan. (8.)

The recommendations of these standing committees are reviewed by the Executive Committee and may be amended before presentation to the Council for adoption.

Transportation Planning for the Metropolitan area is done by:

the Roads and Traffic Department which is responsible for the planning, design, construction and maintenance of the Metropolitan roads and for the operation of the traffic control system. The Department reports directly to the Transportation Committee.

the Metropolitan Toronto Planning Board, responsible for the preparation of the Metropolitan Plan adopted by the Council in 1966. Since then the Board reports to the Legislation and Planning Committee on the administration of the Metropolitan Plan. The Board also participates in relevant work of the Transportation Committee.

the Toronto Transit Commission, which is responsible for the planning and provision of public passenger transportation in the Toronto Metropolitan area other than by railway or taxi. (8.)

Ontario Municipal Board approval is needed, in addition to the Metro Council vote, for any capital expenditure incurring public debt. The financing of the transportation facilities generally falls in this category. (19.)
3.1.2 The Metropolitan Plan - Transportation Section.

The Metropolitan Plan of the Metropolitan Planning Area, adopted by the Metro Council on December 15, 1966, is not an official plan. An ad hoc Committee, established by the Council in 1965 to study the proposed plan, recommended that the plan not be submitted to the Ontario Minister of Municipal Affairs for approval necessary to make it official within the meaning of the Planning Act. The Committee questioned the propriety of the Metro Council regulating urban development in the area beyond its own borders. The Metropolitan Planning Area was about twice the size of the official Metro area. The Plan, therefore, was adopted as a statement of the policy of the Metropolitan Corporations for the planning of future works and services, and as a guide for future development in the Metropolitan Toronto Planning Area. (8.18.)

The Plan includes a comprehensive transportation development program, based on the 1980 projection of population, employment and land use. The Metropolitan Plan - Transportation Section conveys all transportation facilities in the Metropolitan Toronto Planning Area to function as a single transportation system. The development policies and programs are fully integrated even though different governments or agencies may be responsible for providing and operating different parts of the system.

The Plan provides for subways to be provided in locations where there is sufficiently high demand for mass transit to support the facility. They are designed to converge on the central area, thereby permitting reasonable access to the densest employment concentration.
The expressway system, shown in Fig. 3, is composed of expressway rings which facilitate movement within and throughout the entire Metropolitan area. The inner ring of the expressway system, which would frame the entire central area, including Downtown Toronto, has been planned to have a large diameter approximating 2½ to 3 miles. The outer ring, located primarily in the suburbs, comprises Highway 27, Highway 401, the Queen Elizabeth Way, the Gardiner Expressway and the proposed Scarborough Expressway. The inner ring and the outer ring are connected by radial facilities such as the Highway 400 Extension, the Spadina Expressway and the Don Valley Parkway.

Since its adoption in 1966, the Transportation Section of the Plan was supplemented by the following studies:

The Metropolitan Toronto and Region Transportation Study (MTARTS) was prepared for the Provincial Government in 1967. The study forecasts the 1980 travel demand on the Metropolitan area and surrounding region for the morning period.

The Central Area Transportation Study of 1966, which supported construction of the Spadina Expressway as first priority, and the Scarborough Expressway.

The 1995 Travel Demand Study, which was carried out as a continuing study of the transportation system in the Metro area (16.)
LEGEND

<table>
<thead>
<tr>
<th>Type</th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freeways</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rapid Transit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Railways</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central Business District</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metro Boundary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eisenhower Area Boundary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ADAPTED FROM "URBAN TRANSPORTATION DEVELOPMENT IN ELEVEN CANADIAN METROPOLITAN AREAS" - M.O. LEA AND ASSOCIATES (19.)
3.2 DEVELOPMENT OF EXPRESSWAYS - PRESENT SYSTEM.

As shown on the Plan Fig. 3.2, Metro Toronto is served, at present, by seven expressway facilities:

- the Queen Elizabeth Way - known as Q.E.W. - (jurisdiction of Department of Transportation and Communications - D.T.C.)

- Highway 400 (D.T.C.)

- Highway 401 (D.T.C.)

- Highway 27 (D.T.C.)

- The Frederic G. Gardiner Expressway (Metro)

- The Don Valley Parkway (Metro)

- The Spadina Expressway (later known as the William R. Allen Expressway), completed section in the vicinity of Highway 401 (Metro)

(20.)

3.2.1 The Provincial Highways.

The first constructed components of the present expressway system, serving the Metropolitan Area, were the Provincial Highways: the Q.E.W., Highway 400 and Highway 401. The highways were planned and constructed by the D.T.C. The Q.E.W. was opened to traffic between Toronto and Hamilton in 1940; the highways 400 and 401 were opened in the early 1950's. (22.)

Highway 401 was intended to serve long distance traffic passing Toronto, and as a peripheral collector and distributor for the traffic in and out of the city. Shortly after the opening of the facility, it became apparent that the volume of traffic was
increasing well ahead of projections. The increasing number of users travelled relatively short distances. D.T.C., in cooperation with the Metro Road and Traffic Department, carried out studies to determine the projections of the volume and characteristics of future traffic. The first draft of the Metropolitan Plan, 1959, provided information regarding expected land use characteristics, population, employment and automobile registration for 1980 (16). The reconstruction of the highway increased the number of lanes to 6 in each direction; three lanes were provided for long distance traffic and three lanes for local use.

The reconstruction of Highway 27 between Highway 401 and the Q.E.W. closed, partially, the outer expressway ring described in section 3.1.2.

3.2.2 The Metro Expressways.

When the Municipality of Metropolitan Toronto assumed its responsibilities on January 1st, 1954, it decided to concentrate on the so-called Lakeshore Expressway, later on known as the Frederic G. Gardiner Expressway. The Expressway connected the eastern terminus of the Q.E.W. with the centre of town.

Later on, the Metro selected the Don Valley Parkway for feasibility studies, as a practical project to follow construction of the Gardiner Expressway, and to link the latter with Highway 401. During the planning stage of the Don Valley Parkway, the idea for provision of a radial expressway system connecting Highway 401 with the centre of town received further impetus. This principle, with some modifications, has been accepted as the basis for future
planning of the expressway system (17). The completion of the Don Valley Parkway provided the first radial connection from the centre of town to Highway 401.

In the meantime, the traffic survey indicated the necessity of provision of the second radial component of the system, within the corridor centered on Spadina Road. The planning for the Expressway was completed in the late 60's, and the first two miles were constructed prior to the halting of all work late in 1969. Planning of the Expressway and the event leading to cancellation by the Provincial Government of the project are described, in some detail, in the next section of this chapter.

Work was also started on the Scarborough Expressway to connect the Gardiner Expressway with Highway 401 in Scarborough, but was stopped in May 1971. This decision was taken as a result of the Provincial Cabinet ruling on the Spadina Expressway.

3.3 DEVELOPMENT OF EXPRESSWAYS - FUTURE PLANS.

Preliminary studies have been carried out which indicate that, due to projected demands in various traffic corridors, the following expressways will be needed in the future:

- The Scarborough Expressway, which would connect the Gardiner Expressway to Highway 401;
- The extension of Highway 400 southward to connect with the Gardiner Expressway;
- The Crosstown Expressway, needed to distribute traffic in the East-West direction among Highway 400, Spadina Expressway and Don Valley Parkway;
THE SPADINA EXPRESSWAY

FIG. 3.3

THE ALIGNMENT OF THE EXPRESSWAY
TRANSPPOSED FROM AN UNNAMED PLAN RECEIVED FROM FOUNDATION ENGINEERING CO. OF CANADA LTD.
- The Richview Expressway, planned to link the Highway 400
  extension with the future Highway 403;
- The Don Valley Parkway Extension to Highway 404;
- Highway 407, planned to serve the northern periphery of
  the Metro Planning Area.

The Expressways are shown, in green, on Map Fig. 3.2.

3.4 THE SPADINA EXPRESSWAY.

3.4.1 General.

The well publicized controversy over the Spadina Express-
way stimulated considerable interest among the general public and
particularly among transportation planners; the facts and inform-
ation became more readily available than usual. The events leading
to the significant decision of the Provincial Government to cancel
the project touched the basic issues of urban transportation planning.
The events will, therefore, be examined and described in some detail.
The alignment of the Expressway is shown on the Plan Fig. 3.3.

3.4.2 Early History -
Feasibility Studies.

The early history of the Expressway can be traced to the
1953 Report #5 of the Roads and Traffic Committee of the City of
Toronto. The report covered functional planning for a road connect-
ing Dupont Avenue with Wilson Avenue. ※)

※) Unless otherwise shown, all information in the sections on the
Spadina Expressway is based on source #21 of the Bibliography.
In 1954, it was decided that the North York Municipality was to establish the roadway within the township, and that Metropolitan Toronto would be responsible for the planning and implementation of this project. The same year, North York Council passed a bylaw establishing right-of-way for the expressway.

In 1957, further discussions were held, culminating in the Metro Roads and Traffic Committee Report #17, with the eventual authorization for an expressway located in North York; the provision for a rapid transit line formed part of this authorization.

In 1958, bylaws establishing the criteria for planning of the expressway were approved by the Metropolitan Council.

In the early sixties, the Metro Commissioner of Planning submitted to the Roads and Traffic Committee of the Metro Council a report called "Analysis of Study for the proposed Northwest Drive Spadina Expressway and Extension of Highway 400". The report resulted in the Metropolitan Council granting authorization for studies of an Expressway from the Gardiner Expressway to Steele's Avenue.

In 1961, the Executive Committee of the Metro Council referred the matter back for further consideration to the Metro Department of Roads and Traffic. A functional Report for the Spadina Expressway was then prepared by Consulting Engineers. During the latter part of 1961 the Metro Roads and Traffic Committee submitted, for Metro Council's consideration, a report summarizing the studies, and submitting their recommendations. The Roads and Traffic Committee, at that time, considered also briefs from various taxpayers' groups.
In December 1961 the Metropolitan Council adopted, in principle, the recommendations pertaining to the construction of the Spadina Expressway. The balance of the report, however, was referred back to the Roads and Traffic Committee for reconsideration and resubmission to Metropolitan Council. A new report, submitted to the Roads and Traffic Committee in the early part of 1962, was approved by Metro Council.

The Metro application, submitted to the Ontario Municipal Board, was heard at public hearings in June 1963. The Board order, issued in September 1963, approved the financing for the Expressway from Bloor Street to Wilson Heights Boulevard, with provision for a future rapid transit line, at an estimated cost of some $66 million.

The Board order signified the acceptance of the project by all levels of governments concerned; the detailed planning could then commence.

3.4.3 Detailed Planning.

The description of the detailed planning would be too voluminous to include in this thesis. Several significant activities and events have, therefore, been selected to portray some of the salient issues encountered at this stage.

Studies - Bloor Street to St. Clair Avenue. Since 1963, and continuing through 1965, studies were made to resolve the design problems of the Expressway from Bloor Street to St. Clair Avenue. Staff of the Metro Planning Board, the Metro Department of Roads, the City of Toronto Planning Board, the Toronto Public Works Department and the Consultants participated in these studies.
The studies formed the basis of the report from the Metro Commissioner of Roads, presented to the Transportation Committee of the Metro Council in 1965. Metro Planning Board reviewed the report and approved the plans for the section from Sussex Street to St. Clair Avenue and referred the Arwold Gate and Spadina Road section for further studies. The Ratepayers Association attended the Board Meeting, and the Annex Ratepayers Association endorsed the plans.

During the period 1965-1967 other studies were carried out, delaying considerably the finalization of the design. A meeting was held with the Arwold-Spadina Ratepayers Association in February 1967. The ratepayers' representatives agreed with some proposed solutions, but strongly opposed the construction of Spadina Road through Casa Loma Hill and the widening of Spadina Road between St. Clair Avenue and Bloor Street.

The Alignment of the Expressway at Eglinton Ave. West.

Studies regarding this matter were initiated as a result of a request from the Borough of York to the Metro Planning Board in 1961. Several attempts to accomodate this request were made in the period between 1962 and 1965.

The report from the Commissioner of Roads of June 1965 proposed shifting the centre line of the Expressway to improve the local road system. After further negotiations with the Borough of York and Forest Hill Village, Metro approved the report in February 1968.
Cedarvale Park - Replacement of Parkland.

During the detailed planning stage, it was decided that the Expressway would pass through Cedarvale Park. Negotiations were undertaken with the representatives of the Borough of York to determine the exact acreage of parkland which was to be affected by the Expressway.

The Metro Commissioner of Property reported in 1966 to the Executive Committee that the cost of acquisition of land to replace the $13\frac{1}{2}$ acres in Cedarvale Park would be some $4,000,000.

The Borough of York held meetings with the Ratepayers Associations in the area, and encountered strong opposition to the purchase of homes for the creation of parks. The Borough then requested the Metro Commissioner of Roads to consider a tunnel through Cedarvale Park. As a result of a study carried out by Consultants, Metro Council accepted this proposal and the additional cost that it entailed.

The Scarborough Expressway. During 1968 a study was undertaken to determine if the Spadina Expressway and the Scarborough Expressway could be concurrently constructed within the current capital allotment for the construction of expressways. The Department of Roads recommended to the Metro Transportation Committee that the available funds be used to complete the Spadina Expressway and the integral construction for the Rapid Transit Line, before commencing on the Scarborough Expressway. Metro Council adopted this recommendation in February, 1969.

3.4.1 Major Events during 1969-1970.

Early in 1969 Metro Council adopted the Transportation Committee's recommendation that the City of Toronto be consulted on all matters pertaining to the planning of the Expressway. A report on the design,
operation and location of all facets of the Expressway and the Rapid Transit facilities was prepared, and submitted to the City for review. The report also included plans for the Expressway from Harbord Street to the Lakeshore Road. Almost all the major changes, suggested by the City, were incorporated in the design.

In June, the Metro Roads and Traffic Department requested Metro Council permission to apply to the Ontario Municipal Board for additional expenditure of $23 million; this expenditure was approved by Council in 1968. In August, Council referred the matter back to the Executive Committee to hear representations from groups of interested citizens.

In September, Metro Council decided to stop all new works to allow time for full consideration. In November, however, the Metro Roads and Traffic Department was authorized to advertise tenders for the structural work for the Cedarvale Tunnel. The advertisement was later cancelled at the request of the Chairman of Metro Council.

A joint report, prepared by the City and the Metro Departments, was submitted to the Metro Transportation Committee in March 1970. At that time the Committee requested interested citizens groups, the City and the Boroughs, to submit written briefs. The Transportation and the Executive Committee heard the representations from the citizens groups in April 1970. The Metro Commissioner of Roads and the Commissioner of Planning then prepared a report which also included a summary of the public hearings held in April.

In June, Metro Council approved in principle the functional design of the Expressway and the Rapid Transit Line as shown in the
joint report. The Council also ruled that further submissions be invited from property owners directly affected by this project. Approvals were also given for calling of tenders for the Cedarvale Tunnel and completion of the work between Lawrence and Eglinton.

In September 1970, Metro Council authorized the application to the Ontario Municipal Board for the balance of the financing of the Expressway and integral provisions for the Rapid Transit Line. When in response to this application the Board decided on a public hearing, the Executive Committee did not open the above mentioned tenders, when received.

3.4.5 Ontario Municipal Board Hearings - January 1971.

During late 1970, the Municipality of Metropolitan Toronto made application to the Ontario Municipal Board (O.M.B.) for the approval of:

- the construction of the Spadina Expressway extending from Bloor Street to Wilson Heights Boulevard, with provisions for future Rapid Transit facilities, at an estimated cost of $74,680,000 (previously approved by O.M.B. in 1955 and 1963);

- the extension of the southerly limits of the Expressway to Bancroft Avenue and the additional estimated expenditure of $66,320,000;

- the construction of those parts of the Rapid Transit Line that have to be constructed simultaneously with the Expressway at an estimated cost of $26,000,000;
- the borrowing of the above mentioned sums of money.

At the same time the Annex Ratepayers Association and eleven other Ratepayers Associations applied to the O.M.B. for a variation or rescission of the previous Board orders (18.).

The application to O.M.B. gave opportunity to the dissenting Ratepayers Associations to voice their objections during the 16-day hearings in January 1971.

The difference in circumstances of 1971 and those of 1963 when the Spadina Expressway was initially approved reflect in the following points brought up during the hearings:

- the costs have risen considerably;
- the Expressway as proposed in 1970 has been extended South of Bloor Street to Bancroft Avenue;
- there has been an increased concern for environment;
- there has been growing awareness of social costs of provision of expressways in densely populated urban areas. This has led to a cut-back on construction of expressways through built-up areas in the United States and to implementation of rapid transit systems instead;
- there has been a growing appreciation of the importance of the inner-city residential areas which makes Toronto unique among North American cities;
- the optimistic reports of traffic movement contained in the 1964 Metropolitan Transportation Report presented to the O.M.B. have been re-evaluated and found to be too optimistic by the "1995 Travel Demand Study" - the report submitted by the same traffic consultants;
the absence of an official plan was criticized, as it deprives citizens of an opportunity to participate in planning;

- the adoption of an Official Plan and submission to the Minister of Municipal Affairs for approval would lead to correlation in land use and transportation planning in Metro. (27.).

The Ontario Municipal Board, by a majority decision, has dismissed the application from the Ratepayers Associations and granted the Board order to the Municipality of Metropolitan Toronto in February 1971.

3.4.6 The Provincial Government's Decision.

The Ratepayers Associations launched, subsequent to the O.M.B. hearing, a cabinet appeal. In their petition they set out a number of reasons why the decision of the Ontario Municipal Board should be reversed. Among the reasons, the need for further studies of comparative costs of Expressways and Rapid Transit, and a study of measures to limit the automobile access to the downtown area, were the most significant. The request that the approval to Metro application be withdrawn until an Official Plan containing provisions for land use and transportation is adopted by Metro Council and approved by the Minister of Municipal Affairs, was reiterated.

On June 3rd, 1971, the Provincial Premier announced that the Government of Ontario will not support the plan for the Spadina Expressway and proposes, instead, to cooperate with the appropriate Municipal Authorities in the development of alternate transportation facilities.
The major reasons for the decision were given by the Premier as:

- the conclusion that transportation needs of the Toronto area will be better served by means which will not encourage use of passenger cars as the basic means of transportation;
- the doubling of the estimated costs in seven years;
- the public concern with pollution and environment;
- the need to preserve the quality of urban life, ravines and parks, and to conserve residential communities.

(27.)

3.5 COMMENTS AND CONCLUSIONS.

3.5.1 General.

The events leading to the cancellation of the Spadina Project have dominated the field of urban transportation planning in the Metro area for the last few years; this will reflect in the following comments and conclusions.

3.5.2 Comments on the Spadina Expressway.

It is evident from the collected information that all the important decisions regarding the feasibility and the alignment of the Expressways were made, as public decisions, by the Metro Council. The intense interaction of the Metro organization with various levels of Municipal Governments, and with the Consultants, indicates constant supervision by political bodies. The numerous studies, undertaken at the request of member municipalities, show the Council's willingness
to accommodate reasonable demands.

Yet, eventually, the opposing vocal minority managed to have the project delayed for two years and finally cancelled after an expenditure of some $70 million.

Considerations of the reasons brought up by the opposing Ratepayers Groups, apparently recognized by the Provincial Government, raise many questions:

- have the decision makers been supplied with the right kind of information to make the necessary decisions;

- have they dwelt too much on the immediate problems and details, instead of concentrating on basic issues (such as selection of the most suitable mode of transportation);

- have the process of planning and the structures provided sufficient flexibility to effect changes in response to changed public attitudes;

- have the planners carried on continuous studies of the basic issues, instead of reviewing the plan;

- has there been sufficient dialogue between politicians and public, and politicians and planners?

The number of questions is almost endless .......

3.5.3 Public Attitudes towards Expressways.

The construction of expressways in the Metro Toronto area encountered no significant opposition until the late sixties. The provincial highways and the Metro expressways were, until then, located in areas which required minimal expropriations and inter-
ference with residential developments.

The alignment of the Spadina Expressway, however, bisected for most of its length densely populated residential areas, and it required expropriation of some 770 properties. The Ratepayers Associations were, therefore, invited as early as in 1961 to submit their briefs, and were periodically given opportunities, from thereon, to express their opinions and complaints.

The first significant opposition to this project was not encountered until February 1967, when the Arwold-Spadina Ratepayers Association strongly objected to some aspects of the project. The alignment details in the Casa Loma area were finalized, at that time, thus spurring the Association into action. It seems also that the changing public attitudes contributed towards the stance taken by the Association; the idea of direct intervention was becoming the issue of the times recognized by the general public. The time lag between the feasibility studies, detailed planning stage and implementation of construction, may be mentioned here as a contribution to the sudden public reaction.

Eventually, the opposition grew in force and exerted considerable pressure, resulting in the O.M.B. hearings. The hearings brought forward the underlying causes of public resistance to the project - one of them being the significant change of public attitudes during the lengthy period of planning and implementation.

3.5.4 Government Response.

The events during the latter part of 1969 and during 1970
indicate the degree of hesitation on the part of Metro Council faced with what seemed to be an unexpected and novel situation: an organized opposition to the provision of a transportation facility. The stop-go situation that developed since September 1969, the eventual approval given to the project by the Ontario Municipal Board, and the Provincial Government's decision to stop the construction in 1971, provides further evidence of cross-current of differing opinions.

It has to be admitted that the Metro Council had a very difficult decision to make. Once committed to a definite system of expressways, it wanted to pursue its implementation on the basis that only a fully implemented system can function efficiently. During the many years it took to plan and implement this system, public attitudes underwent a considerable change and this was taken under consideration by the Provincial Government in arriving at their decision.

3.5.5 Socio-Political Factors.

In 1971, the Ontario Municipal Board brought to the fore many socio-political factors which affect urban transportation planning. Some of the opinions of the Board Commissioners listed below, attest to their influence in this field (18.):

Changing public attitudes were reflected in the concern with:
- high social cost of locating expressways in densely populated areas;
- economical and social effects of dislocation of people;
- the escalation of cost;
- noise and air pollution;
- the effect on existing recreational facilities.
Metro Plan and its basic concepts were questioned, particularly the principle of free selection of mode of transportation (use of cars or public transport). The reliability of traffic volume forecasts was under criticism.

Impact of pressure groups and their right to supplant the elected decision making authorities was examined, and found unacceptable.

Professional opinions on urban transportation were reviewed, supported or rejected.

3.5.6 Conclusions.

The following observations and conclusions were arrived at as a result of appraisal of the collected information:

- Major decisions in the planning of the Spadina Expressway were made by Metro Council as public decisions; the decisions, in view of subsequent events, may not have been the right ones;
- the Council, through the Metro organization, exercised close supervision over the project, all through different phases of planning and construction; perhaps the Council should have limited their supervision of detailed planning, and concentrate on major issues at an early stage;
- the planning of the Expressway commenced in 1953 and continued through 1970; in the meantime public attitudes and planning methods have been undergoing significant evolution;
- the Spadina was the first Expressway of the system located in the densely populated Metro areas;
- the change of public attitudes reflected in increasing
concern with social values and added significant impetus to the opposition against the Expressway;

- the escalation of costs gave the opposing Citizens Associations an opportunity to challenge the Metro Council decision to continue with the construction of the Expressway during the hearings of the Ontario Municipal Board in 1971;

- the Metro Plan seemed to be rigidly adhered to, irrespective of the vigorous opposition to the Expressway; this suggests a need for more flexible and responsive process of planning;

- the expressways are a very rigid and inflexible transportation facility; the present process of planning and implementation is very lengthy.
4. CASE B - METROPOLITAN MONTREAL.

4.1 GENERAL.

The information regarding expressways in the Montreal Metropolitan area is relatively scarce; it is, however, sufficient for the intended purpose of this thesis.

The information included in this chapter, and the discussion which follows, is generally limited to the Montreal Island area; when essential, the scope is extended to Jesus Island and to the North and South Shore.

4.2 BACKGROUND - THE PLAN.

The Montreal Metropolitan area, as all the other large Canadian population centres, experienced a vigorous rate of growth in the post-war era. Automobile registrations increased some 700% in the twenty years between 1945 and 1965. As the traffic volumes increased, the Provincial Government, in the 1950's, set up the Metropolitan Corporation to study road needs on Montreal and Jesus Islands. The Corporation was composed of members of various agencies concerned with transportation, such as the Municipalities, the Montreal Transport Commission and the Railways. The Corporation produced a report in 1958 which recommended an expressway program to be implemented by 1961 (22.).

The general concept of the proposed expressway network was based on the system of three loops centered around the central
METROPOLITAN MONTREAL
Transportation Facilities
Existing and Proposed
FIG. 4.2

LEGEND

- Existing
- Proposed

Adapted from "Urban Transportation Development in Eleven Canadian Metropolitan Areas"—N.B. LEA AND ASSOCIATES (1973)
core of Montreal. The loops were to be connected to the network of radial expressways and major arterial streets, radiating in all directions from the centre loop. (See map Fig. 4.1)

The above mentioned report appears to be the only attempt to introduce comprehensive regional transportation planning. The absence of a comprehensive transportation plan, embracing all modes of transportation and their interaction, is one of the negative features of the development of transportation on the Montreal Island and in the Montreal region. (23.)

4.2.1 The Participating Governments and their Agencies.

Until lately, in the absence of a Regional Municipal Government, one of the characteristics of the development of the expressways on the Montreal Island was the participation of many levels of Government and their agencies in the planning and construction of expressways.

The Quebec Roads Department has generally been responsible for the planning, implementation and maintenance of the expressway system on the Montreal Island.

The Montreal Metropolitan Corporation was responsible for the preparation of a comprehensive transportation plan on the Island and for implementation of some of the initial stages of the construction of expressways. (9.)

The City of Montreal planned the Decarie and the "East-West" Expressways and contributed funds towards their implementation. The
City participated in the planning and financing of the Bonaventure Expressway (10.).

The Quebec Autoroutes Authority was responsible for planning and construction of the Laurentian Autoroute, including the section on the Montreal Island (10.).

The National Harbours Board planned and constructed the Champlain Bridge, its approaches on the Island and, jointly with the City, the Bonaventure Expressway (11.).

The Federal Government reimbursed the Provincial Government the share stipulated by the Trans-Canada Highway Act of the costs of the expressways falling in this category (10.).

4.2.2 Recent Reorganization of Structures.

The Montreal Island was divided, until recently, into municipalities of which the City of Montreal was the largest administrative entity.

The Provincial Government recognized the need for a regional administration over certain aspects of the municipal services and facilities and for a unified development planning.

The Montreal Urban Community (M.U.C.) was created when Bill 75 was adopted by the Quebec National Assembly in December 1969. The Community is the first Metropolitan Government with jurisdiction, over certain aspects, over all Municipalities of the Montreal Island. On matters related to transportation, the Community is charged with
the preparation of a development plan for the Island, including approximate routes of main thoroughfares; it is also empowered to regulate traffic on the inter-municipal roads. The Montreal Urban Community Transit Commission, responsible for the public transit, reports to the Community Council (12.).

The Development Commission for the Region of Montreal *), was organized in 1970 by the Office of Planning and Development of Quebec *). The Commission has been charged with defining the broad line of development of the whole region, consulting the M.U.C. and other municipalities (26.).

The possible influence of the above mentioned reorganization on the process of planning of expressways on the Montreal Island is a matter of conjecture at present.

4.3 DEVELOPMENT OF EXPRESSWAYS - PRESENT SYSTEM.

As shown on the Plan Fig. 4.2, the Montreal Island is served, at present, by seven expressway facilities:

- Expressway #140 - the West Island Section and the Metropolitan Boulevard Section - jurisdiction of the Quebec Roads Department (Q.R.D.);
- Expressway #520 - Cote de Liesse (Q.R.D.);
- The Decarie Expressway (Q.R.D.);

*Translated from the French "La Commission de Développement de la Région de Montréal" and "Le Bureau de Planification et de Développement du Québec".
- The Expressway Section of Highway #20 and the connection to Mercier Bridge (Q.R.D.);
- Expressway #25 - the Boulevard to Lafontaine Tunnel (Q.R.D.);
- The Laurentian Autoroute - jurisdiction of the Quebec Autoroutes Authority;
- The Bonaventure Expressway - one section under jurisdiction of the City of Montreal, one section under jurisdiction of the National Harbours Board.

1.3.1 The Initial Stages.

The development of the expressway system in the Montreal Metro area commenced with the construction of the first section of the Metropolitan Boulevard and the Laurentian Autoroute, carried out during the period 1958-1960. The first one was financed, initially, by the Metropolitan Corporation, the second by the then newly created Quebec Autoroutes Authority. The Metropolitan Boulevard was declared a Provincial Highway in 1961, and the responsibility for its further construction and maintenance taken over by the Quebec Roads Department. The Montreal Metropolitan Corporation and the City of Montreal were fully reimbursed for the costs of construction by the Provincial Government (9.).

In 1955, the Federal Ministry of Transport decided that a bridge would be built over Nun's Island to the South Shore. The responsibility to build and administer this toll bridge was vested in the National Harbours Board with funds made available from the Federal Ministry of Finance.
The Board, the City of Montreal and the Quebec Roads Department decided, in late 1955, on the location of the bridge and the alignment of its approaches. The bridge and the approaches were completed and opened to traffic in 1962. At that time the only approach to the bridge on the Island was from Wellington Street.

In the meantime, discussions carried out with the City of Montreal resulted in an agreement to build the Bonaventure Expressway as a joint project with the City, and to extend the north-west approaches to meet the Expressway from the Turcot Interchange which was being built at that time by the Quebec Roads Department.

The Expressway was opened to traffic in early 1967 as a Section of the Expressway system providing direct access to the Expo 67 site (ll.).

4.3.2 The Role of the Trans-Canada Act and of Expo 67.

The planning of the Decarie and East-West Expressways was initially undertaken by the City of Montreal Planning Department in 1958. Not until 1962, however, were there major steps taken towards their partial implementation.

The Federal Government, after adoption of the Trans-Canada Highway Act by the Federal Parliament, considered in their initial studies the alignment of the Trans-Canada Highway passing North of Montreal. Negotiations carried out by the Federal, Provincial and Municipal Governments resulted in acceptance of the present alignment consisting of Fxpressway#40 (West Island), Decarie Expressway,
East-West Expressway and the Lafontaine Tunnel as part of the Trans-Canada Highway system (10.). The agreement entailed the cost sharing for the construction of the expressways by the Federal Government, in accordance with the Trans-Canada Highway Act.

The events of "Expo 67" gave further impetus to the construction of the Decarie Expressway, needed as one of the links of the system providing direct access to the exhibition. This became a matter of prestige to have the system opened to traffic on time. The Expressway was opened, as scheduled, early in 1967.

The completion of the Lafontaine Tunnel with its approaches and auxiliary roads, and the extension of the Metropolitan Boulevard East, to connect to the North Shore Autoroute completed the pre-Expo work program.

The timely completion of the Expressways and Rural Highways allowed a motorist approaching Montreal from any direction to reach the Expo 67 site by the then existing expressway network.

4.3.3 Decreased Rate of Implementation.

Once the intermediate goal of providing satisfactory access to Expo had been achieved in early 1967, the Provincial Government allocated most of the road building funds to other areas of the Province.

Nevertheless, the implementation of the Metropolitan Corporation's recommendations of 1958 were being pursued by the Quebec Roads Department, although on a much smaller scale.
On the Montreal Island, the Côte de Liesse Expressway #520, connecting Highway #20 with the Metropolitan Boulevard, was opened to traffic in 1968, while the Papineau Bridge provided an additional link with Île Jesus when completed a year later.

While the rate of construction on the Montreal Island decreased considerably, the Quebec Roads Department was concentrating their efforts on the extension of the highway network around Montreal. On the North Shore, part of Highway #640, and on the South Shore a section of Highway #30 were constructed. Both of these highways, when completed, will form part of the outer loop of highways encircling the periphery of the Metropolitan areas mentioned in section 4.1.2.

4.3.4 The East-West Expressway.

In the fall of 1970, the Provincial Government decided to reactivate the construction of the East-West Expressway. The construction had been stopped in 1967 as a result of austerity measures introduced by the Provincial Government and had been planned to restart sometime in 1972-1973. The advancing of the construction schedule was caused by the Government's inclusion of this project in the Provincial Program to alleviate unemployment and to stimulate the provincial economy. As the plans had been ready, the Quebec Roads Department was able to award the contracts for the first section, between the Turcot Interchange and St. Denis, in December 1970, a few days before expiry of the Trans-Canada Highway Act. The total cost of the project was reported to be some $300 million (31.).
The first announcement of the construction brought on a wave of criticism from groups of citizens living in areas affected by the Expressway. It was reported in the press that by the beginning of January, fifteen Residents' Associations, from Westmount to the East End of the Island, banded together to form the "Front Commun Contre l'Auto-route". By April 1971, this organization made claims that it grew to represent a total of forty member groups. Demonstrations and representations from the organization did not, so far, influence the Provincial Government's decision to carry on with the project.

4.4 DEVELOPMENT OF EXPRESSWAYS - FUTURE PLANS.

At present the Quebec Roads Department is completing the planning of the East-West Laval Expressway and a so far unnamed Expressway crossing the West Island from Roxboro via Lachine to the South Shore. These Expressways will, in time, when interconnected with Highways #9C and #3, compose the middle loop shown on plan Fig. 4.1.

The present planning of the Expressways on the Montreal Island is influenced by two events:

- by the decision of the Federal Government to construct the new International Airport at St. Scholastique, and

- by the Olympic Games planned to take place in Montreal in 1976.

While the first one spurred research to establish the most efficient access to the new Airport, located in a north-westerly direction from the centre of town, the second may prompt construction of an
Expressway within the corridor centered around Papineau Avenue, to provide speedy access to the Olympic activities to be located to the north of it.

4.5 COMMENTS AND CONCLUSIONS.

It is quite apparent from the assessment of the information brought forward in this chapter that the influence of the political environment pervades into the process of transportation planning. The following comments and conclusions will give predominant consideration to such issues.

4.5.1 Political Structures.

The political institutions seemed to have experienced difficulties in adapting their structures to the rapidly changing political environment of the Province and to the growing complexities of administering large population centres. Until lately, there was no Regional Municipal Government on the Montreal Island to plan the urban development for the area, and compatible with it, transportation system, and to administer the implementation of such plan.

The absence of a unifying influence of a Regional Government contributed to the involvement of many levels of Government and their agencies in the expressway planning and implementation. This also explains the predominant role of the Quebec Roads Department in the planning and construction of the expressways on the Island. While the City of Montreal actually planned the Decarie and the East-West Expressways, and thus exerted considerable influence on the major issues, the role of the remaining Municipalities on the Island was limited to
consultation on matters pertaining to the planning and to financial contribution towards the projects.

Bill 75, establishing the Montreal Urban Community, is not very specific in matters pertaining to transportation planning. For the time being it seems safe to assume that the Quebec Roads Department will maintain its presently prominent position in the planning and construction of the Expressways on the Island.

4.5.2 The Role of Events in the Development of Expressways.

During the course of planning of the Expressways on the Island, a few events occurred which influenced considerably the implementation of the construction programs.

The Federal Government's decision regarding the Champlain Bridge and the Bonaventure Expressway contributed towards development of expressways on the Island. The agreement with the Federal Government to accept some of the proposed expressways as a part of the Trans-Canada Highway system contributed substantial funds towards implementation of the program. The event of "Expo 67" created a situation where construction of some of the planned expressways became a necessity and a matter of prestige. Under such circumstances the required funds were provided by the participating levels of Government.

It seems that the absence of a Regional Government on the Montreal Island did not prevent other levels of Government to take advantage of opportunities that presented themselves to advance the development of the expressways.
4.5.3 Public Attitudes and Government's Responses.

The political bodies concerned with transportation have been carrying out, in response to apparent need, the development of the expressway system on the Montreal Island for over a decade. Initially, the public attitude towards implementation of the construction programs was very favourable; the resulting improvement of traffic conditions was met with general approval. Inconvenience caused by the construction to the affected minority was taken as a matter of necessity.

Eventually, the public attitude changed to such an extent that the announcement by the Provincial Government of reactivation of the construction of the East-West Expressway was met with vigorous opposition from the affected citizens. A series of public demonstrations, with the concurrent organization of citizens' groups, indicated the concern with the matter and the strength of the opposition to the project.

A spokesman for the Front Commun Contre l'Autoroute, an organization representing some 40 groups of citizens opposing the construction,, quoted the following complaints during a press interview (31.):

"-the overpass will be ugly;
-it will congest streets;
-it will not solve the traffic problems;
-money should have been spent on sewage treatment plants;
-it was initially planned with Expo in mind and is now no longer needed;
-it is causing too much hardship through expropriations."
The press reported that some action was taken by the Government in the field of expropriations, in response to complaints from the affected citizens' groups. The Provincial Government, however, decided to continue with the project reactivated as part of the Provincial Program to create employment and to stimulate the provincial economy. The Government's firm stand on the issue may be interpreted that their appraisal of the situation indicates a change of public attitudes, where concern with unemployment takes precedence over social issues.

4.5.4 Conclusions.

The appraisal of the information brought forward in this chapter leads to the following observations and conclusions:

- the major issues in the planning and implementation of the Expressway facilities on the Montreal Island have been resolved by the Provincial Government;

- the absence of a Regional Municipal Government on the Island, until lately, affected the process of planning characterized by: lack of a comprehensive regional transportation plan, the predominant role of the Quebec Roads Department in the planning of expressways, and the generally limited participation in planning by the individual municipalities;

- the City of Montreal having the necessary structure, participated actively in the planning of some of the expressways;

- the Provincial Government has taken advantage of the events, such as Expo 67 and adoption by the Federal Government of the Trans-Canada Highway Act, to obtain additional funds for implementation of some of the expressway programs;
- in addition to eventual transportation benefits, the reactivation of construction of the East-West Expressway is being used as part of the Provincial Program to stimulate economy and help create employment;
- there has been a considerable time lag between the planning stage and implementation of construction of the East-West Expressway;
- there have been, so far, no official hearings regarding the complaints from the citizens' groups opposing the construction of the Expressway;
- the firm stand of the Provincial Government faced with vigorous opposition against the East-West Expressway may indicate a further change of public attitudes where concern with unemployment is predominant over other issues.
5. COMPARISON OF THE TWO CASES AND DISCUSSION.

5.1 GENERAL.

The Metropolitan Toronto and Montreal areas developed, over a period of some twenty years, an expressway network to alleviate vehicular traffic congestions, and to provide for the projected volumes. While the two expressway systems attained, in some measure, their common goal, each was planned within different socio-political environments. This is reflected in their similarities of public attitudes towards the development of their respective expressway systems, and in the differences in response of their respective political structures to the opposition to the expressways.

The two socio-political factors - public attitudes and the political structures - were, therefore, chosen for discussion in this chapter.

5.2 PLANNING OF THE EXPRESSWAYS.

Development of expressway systems in the two Metropolitan areas has taken many years to plan.

The pattern of implementation of the construction followed generally the same trend: the sections on the Metropolitan peripheries were constructed first, leaving the sections through densely populated areas to be implemented later. The consequences of such a sequence of implementation are very evident now in the public reactions to the construction of the East-West and the Spadina Expressways. The large scale expropriations and the disturbance to the affected areas seems
not to be acceptable to the public.

The large sums of money involved in implementation of such facilities further induced the general public to question the good judgement of the political bodies responsible for such decisions.

5.3 PUBLIC ATTITUDES - THE SIMILARITIES.

When, in response to the apparent need in the 1950's, the Governments concerned initiated and implemented programs of construction of expressways, the general public responded very favourably to such events. Any improvement of traffic conditions was met with their approval. Adverse effects of the construction of expressways, such as expropriation, change of character of an area, and temporary inconvenience to the public, were generally accepted as a fair price to be paid for progress. In time, the general public started taking for granted the provision of higher levels of service of expressways, basing their expectations on the rapid progress of technology.

Public attitudes have been changing, however, during the many years the planning and construction of expressway has taken. By the mid-sixties the public concern and interest turned from technology towards social issues, such as social justice, individual liberty, preservation of a healthy environment. The period of questioning and attempts at re-evaluation of established values created a different socio-political environment.

The change of public attitude towards construction of expressways was very noticeable in the two Metropolitan areas under discussion.
In Toronto, the events described in Chapter 4 led eventually to the cancellation of the Spadina Expressway project, after some 15 years of planning and construction and an expenditure of some 66 million dollars. The Lawrence-Wilson Heights section has been in use for some time, while the almost completed section Lawrence-Eglinton will remain unopened.

In Montreal, the announcement by the Provincial Government of commencement of construction of the East-West Expressway created an immediate series of protests from the people affected by the Expressway. The Provincial Government, however, undeterred by the protests, has been carrying on with the construction, seemingly giving priority to the alleviation of unemployment and to economic considerations.

The arguments, brought forward against the Expressways, stress in each case the elements of social values, the hardships of expropriation, the adverse effects on adjacent areas, and the high and escalating costs of such facilities. Moreover, the need of Expressways and the selection of this type of facility over rapid transit was seriously questioned. The pattern of the opposition seems to reflect, both in Toronto and in Montreal, the changing attitudes of the general public towards the development of expressways.

In each of the cases there seemed to be a lack of effective communications and dialogue between the general public and the politicians; it is suggested that this contributed appreciably to the public attitudes towards the construction of the East-West and the Spadina Expressways.
5.4 POLITICAL STRUCTURES - THE DIFFERENCES.

The need for planning and implementation of the construction of expressways was well recognized in the early 1950's by the political structures of both Metropolitan areas.

In Toronto, the Municipality of Metropolitan Toronto, in existence since 1954, was charged with the responsibility for planning, construction and operation of major transportation facilities, including the major arterial streets and expressways. The Provincial Government was involved, through the Department of Transportation and Communications, in the planning and construction of the Provincial Highways passing through the Metropolitan area.

The appraisal of the information and events described in Chapter 4 suggests that in Ontario, the stability and continuity of political structures, dealing with the planning of the expressways, might not have stood well the test of a rapid change of public attitudes towards expressways. The well established procedures and a too rigid reliance on the Metropolitan Transportation Plan may have created a relatively static planning environment where accommodation to dynamic changes of public attitude was difficult to effect. The various levels of Government concerned with the Spadina Expressway responded to the novel situation of opposition to the needed facility by indecision and hesitation, and later on by the extreme measure of abandonment of the project.

The structures, however, provided for means of formal registering of opposition to the Expressway, and for review of the supporting reasons during the Ontario Municipal Board hearings.
In Montreal, the absence of a Regional Municipal Government, until recently, was a predominant feature of local politics. The initiative in the field of planning and construction of the expressways remained largely with the Provincial Government. There was, however, most of the time, direct or indirect participation of other levels of Government in the implementation of the programs. The Federal Government and the City of Montreal planned and contributed funds towards construction of some of the expressways. The implementation of expressways, therefore, while in the hands of the Quebec Roads Department, was often dependent on the outcome of individual negotiations between various levels of Government. In such circumstances the process of the planning of the expressway had to be very sensitive and responsive to the political issues of the time.

In Quebec, the dynamic changes in public attitudes have been taking place for some time, the political bodies have been under constant pressure and had to be sensitive to changes of public attitudes. The handling of the protest against the construction of the East-West Expressway may indicate that the Provincial Government of Quebec is very sensitive to public attitudes. The refusal of the Provincial Government to stop construction of the Expressway, and the lack of significant response of the protesters to that decision may be interpreted in that fashion. It may also indicate a new change of public attitudes, where alleviation of unemployment takes precedence over other issues.

It is worth noting that political structures of Quebec do not provide formal means for lodging complaints from disaffected citizens groups and for official reviewing of their case.
6. CONCLUSIONS.

Urban transportation planning is both science and art. This fact is recognized in drawing the following conclusions, some of which, in consequence, are of a very general nature.

All major decisions in the field of urban transportation planning are public decisions and as such are made by the elected public bodies. The political structures which initiate the planning are relatively rigid, due to may constraints imposed upon them. The degree of response of the structures to the changes of public attitudes depends on the socio-political environment of the area.

The process of transportation planning is dependent directly on the political structures, and indirectly on the socio-political environment which evolves them. Urban transportation planners must, therefore, be cognizant of the socio-political factors and knowledgeable of the modus operandi of various levels of Governments concerned with transportation.

The predominant influence of the two socio-political factors - public attitudes and political structures - on the process of urban transportation planning is evident from the appraisal of the information and events described and discussed in this thesis. The similarity of the public attitudes of the two Metropolitan Areas and the difference of their political structures underline their importance.

The different response of the respective Provincial Governments towards vigorous opposition to construction of the East-West and the Spadina Expressways points towards an important conclusion. It suggests
that well organized and stable political structures, evolved within a relatively stable socio-political environment, may not be responsive enough to rapid changes of public ideas. This may be further extended into the field of transportation planning by suggesting that the Master Plan Concept of Urban Transportation Planning may not be dynamic and flexible enough to accommodate rapidly changing public attitudes.

A study of changing public attitudes towards construction of expressways indicates a possibility that many difficulties could have been avoided, had some meaningful dialogue existed between the politicians and the public at an early stage of the planning of these facilities. It is, therefore, suggested that any modification of the existing process of planning should include facilities for a meaningful dialogue between the politicians and the public, and improvement of the dialogue between politicians and planners. The key issue seems to be improvement of communication, quality of information exchanged and the participation of the public in the process of planning.

A prediction of the course of evolution of the planning process is beyond the scope of this thesis. However, it seems safe to assume that, from now on, the socio-political factors will be given more consideration in the planning of urban transportation.


9. Roads Act 1966, Quebec Roads Department, Roch Lefebvre, Queen's Printer.

10. Service d'Urbanisme, Ville de Montréal, Cahiers d'Urbanisme No. 3 Octobre 1965, publié par le Service d'Urbanisme de Montréal.


20. Department of Roads and Traffic (Metropolitan Toronto Municipality), Information Letter Regarding Transportation and Traffic in the Metro Area, Department of Roads and Traffic, City Hall, Toronto (undated).


