

NHA POLICIES AND PROGRAMS FOR THE SEVENTIES

VOLUME 2

A Policy Overview



**Policy Planning Division
Central Mortgage and Housing Corporation**

NHA POLICIES AND PROGRAMS FOR THE SEVENTIES

VOLUME 2

A POLICY OVERVIEW:
ISSUES, FACTORS AND CHOICES

POLICY PLANNING DIVISION
CENTRAL MORTGAGE AND HOUSING CORPORATION

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I. DIRECTIONS FOR A DECADE

In early 1970, the Minister Responsible for Housing made two submissions to Cabinet, on the urban future of Canada, and on the Federal role in shaping that future. This "Overview" document, the companion Resource Document associated with it, and indeed, the entire set of policy papers produced during the past year form the first major attempt to follow up those submissions with concrete action, action to define a new Federal urban role on-the-ground in our cities and towns.

As its title implies, the present paper is intended to provide in the most concise terms possible, the issues to be addressed, the factors to be considered, and the choices to be made in devising new and modified policies and programs related to the National Housing Act.

The most immediate decisions before us are obviously those associated with the amendment of the NHA in 1972 -- but as will be made clear below -- these do not constitute the only matters on which direction is ultimately required.

WHAT DO WE WANT THE GOVERNMENT TO ULTIMATELY COMMIT ITSELF TO?

For purposes of discussion, a position has been taken here on the ultimate list of items on which Cabinet-level and Parliamentary decisions may be appropriate.

Although each can be taken to different stages (i.e., a Phase I, a Phase II, etc.) and to different levels (from "in principle" to very specific) of commitment, they generally comprise the kinds of directions indicated by Ministerial and other comments to date:

- (1) a number of specific changes in the National Housing Act, completed at an early enough date that programs can begin operation during 1972, e.g., by the end of May
- (2) the provision of increased budgetary expenditure funds (that is, money that does not come back) under the NHA.
- (3) a number of very specific targets and objectives in terms of improving certain programs, acting on individual crises situations, and building certain kinds of institutional arrangements

- (4) a "strategic" approach to dealing with urban problems including the examination of potential Federal levers for improved use (e.g., economic pump-priming) and the employment of a "minimum common program" approach to a national urban policy
- (5) the general outlines of an urban investment strategy for the decade to 1981 including the initiation of close examination of ways of reducing the costs of the present system and the creation of experimental approaches to guiding urban region dynamics
- (6) the decade 1972-1981 as a time frame for planning -- i.e. a period within the political lifetime of most present leadership and within the scope of the present Government to effect
- (7) a general mandate for CMHC organizational development and possibly a revised future role
- (8) a social emphasis for all urban and regional development programs, which might be called a "community-building" emphasis
- (9) the beginnings of a policy leading to growth decentralization and respect for the ecological parameters of any given geographic area
- (10) a different view of the urban future of Canada -- or alternative views -- from the current "more of the same" and "alarmist" views, available for public discussion.

The specifics of these points are, of course, meant to raise issues and to sharpen the areas in which conflict remains.

The focus of this paper is on the first two items -- the changes in the Act, and the financial implications of these changes. But all of the other items come in for examination at various points throughout -- and conclusions about them have been drawn where they seem warranted.

In order to facilitate a rapid review of the contents by the reader, summaries have been provided at the beginning of each chapter which follows.

II. THE NATIONAL HOUSING ACT AND NATIONAL DEVELOPMENT

SUMMARY

This chapter is concerned with the relationship between the kinds of activity promoted via the NHA and the Central Mortgage and Housing Corporation and overall processes of national development. It has the following major points to make:

- * the available empirical studies of housing and urban development stress the importance of the built environment to both economic and social development
- * in the long run, urbanization processes can be expected to strongly affect national sovereignty, unity, and identity. At least three major concepts of Canada and how it should develop are rather widely held today. These have conflicting elements and may in fact lead to a "future nobody wants".
- * in more immediate terms, the construction sector of the economy is an important generator of employment
- * imaginative steps taken to advance the capabilities of the Federal Government to guide new development and to conserve existing residential environments can provide a means of focusing national development efforts. In effect, the greatest known task ahead of Canadians in the Seventies is the construction and improvement of livable communities.

THE BUILT ENVIRONMENT AND NATIONAL DEVELOPMENT

Recent weeks have brought home to Canadians the recognition that existing views of how the nation's development is to be managed are appropriate subjects for searching re-examination. Although the immediate crises posed by the U.S. economic policy decisions of August have perhaps passed, the heightened awareness of possible future vulnerability remains. The "easy ride" to technological advance, to economic growth, and to full employment if it ever existed, may now be subject to shifting international currents.

To the extent that Canadians can develop internal motors for economic, social, and cultural improvement, it is now more pressing than ever to do so. To the extent that they wish to

avoid the "American scenario" in domestic affairs, the time to make basic directional decisions has arrived -- at least if it is conceived as a "time" of two years or so to permit effective phasing and planning.

This document is an attempt to bring what may seem to be ex cathedra challenges -- as just outlined -- closer to the specifics -- what development, what dollars, what organizations, what planning frameworks, what programs?

In his report Urban Canada: Problems and Prospects, Dr. N. H. Lithwick delineates the historical role of urban centres as the major sources of Canadian development -- a role which began with the earliest settlements and continues to the present day. Although urban centres can become depressed and stagnate as a result of international depression (as in the 1930's) in general they are the motors of societal change -- and also the generators of many problems. Rural "under-development" and disparities in regional incomes are attributable in part at least to the dominance of a few larger centres in Canada.

In short, if we are to accept the importance of economic development to overall national development -- especially in the industrial and post-industrial eras, the approach taken to the creation of Canadian communities is an essential aspect of a national development strategy.

CONCEPTS OF CANADA: THEIR IMPLICATIONS FOR URBANIZATION AND NATIONAL DEVELOPMENT

Even a cursory examination of statements by public figures, by university professors and by others given to political education and conceptualization yields the conclusion that there are a variety of underlying concepts of Canadian society extant today each with its adherents and opponents.

While it is difficult to identify such concepts in hard and fast terms as the products of an individual mind or as agreed upon platforms for action, it is possible to organize the various parts into wholes.

The chart on the following page suggests three major concepts of Canada -- all with important consequences for both national development and urbanization. Each emphasizes particular geographic areas, values, futures, interests, and desired end states.

THREE CONCEPTS OF CANADIAN SOCIETY

| | TECHNETRONIC "Canada, a 21st Century state" | FRONTIER "Canada-the-New North" | ECOLOGICAL "Canada, a haven" |
|-----------------------------|--|--|---|
| Geographic areas emphasized | Urban southern Ontario | The North, the West | P.E.I., smaller towns across Canada, the wilderness |
| Values emphasized | Efficiency Expertise Growth | Self-reliance, Mutual aid | Conservationism Communion of man and nature |
| Implicit future emphasized | Advanced, planned megalopolis, based on high technology industry | Developed hinterland, resource exploitation | Controlled development, slowed growth or "zero" growth rate |
| Interests Involved | Multi-national Corporations in manufacturing | Resource extractive industries White northern residents | Southern intelligentsia native peoples small town residents, young American immigrants |
| Urban future desired | Managed megalopolis | New growth | Decentralization of growth, control of growth of any one centre |

There is another concept of Canadian society -- already noted above as the "American scenario" -- one which comprises the worst features of urbanization, ecological conditions, rural development, and national culture. This could be called the "urban future nobody wants" because few are advocating more pollution, crime, congestion, decay, or uncontrolled growth.

It must be recognized however, that the difficulties of American cities exaggerated though they may be in the minds of some, did not arrive as a result of active promotion either. They occurred because governments can have only limited effects on complex social systems -- particularly within a limited time. They occurred because powerful interests had a stake in particular patterns, development, organization and power distribution. They occurred because of the inherent costs and resource limitations associated with large-scale agglomerations. They occurred because many changes can occur almost unnoticed and because complex systems have tremendous "slack" and resilience.

It is the essence of the "hidden hand" theory of economics that the individual working in his own self-interest turns out to be working for the good of all as well. Modern events have now flipped this view on its head -- each individual (or firm) working in his (its) own self-interest comes to work to the detriment of all. This applies both in the case of individual actions which affect a large part of the collectivity (for example, with pollution overspill) and in the case of such actions which affect distinct other individuals.

This is the focus of our case for national development strategies and institutions related to urban change -- that without them, current institutional arrangements will not be able to cope with the burden of demands being placed on them.¹. We will arrive at an end state which was the product of many wills but which few would have anticipated or desired.

¹. See Chapter II of the Resource Document for indications of the order of magnitude of change.

THE CONSTRUCTION OF THE BUILT ENVIRONMENT AS A MOTOR OF DEVELOPMENT

In much more immediate terms, housing and the building of its community contexts have important effects on overall national development -- via the construction and maintenance sectors of the economy, and indirectly via the employment created in, for example, the consumer durables industry.

Residential construction alone is expected to account for 4.4% of the GNP in 1975 as shown in the table below. New housing investment expenditure forms an increasing proportion of all new public and private investment expenditures as illustrated in the chart on the next page.

TABLE 1
-DEMAND COMPONENTS AS PERCENTAGE OF
GROSS NATIONAL PRODUCT

| | 1949 | 1956 | 1961 | 1967 | At Potential in 1975 |
|--|-------------|-------------|-------------|-------------|----------------------------|
| Consumer expenditure..... | 66.8 | 62.0 | 64.3 | 59.4 | 56.6 |
| Government expenditure on goods and services..... | 13.4 | 17.8 | 20.5 | 21.2 | 24.2 |
| <i>Current expenditure.....</i> | <i>10.6</i> | <i>14.1</i> | <i>16.2</i> | <i>16.6</i> | <i>19.1</i> |
| <i>Gross fixed investment.....</i> | <i>2.8</i> | <i>3.7</i> | <i>4.3</i> | <i>4.6</i> | <i>5.1</i> |
| Business gross fixed investment.... | 18.3 | 21.9 | 17.0 | 19.0 | 19.5 |
| <i>New residential construction.....</i> | <i>4.9</i> | <i>5.8</i> | <i>4.6</i> | <i>4.3</i> | <i>4.4</i> |
| <i>Business plant and equipment....</i> | <i>13.4</i> | <i>16.0</i> | <i>12.4</i> | <i>14.7</i> | <i>15.1</i> |
| Non-residential construction... | (5.7) | (8.2) | (6.5) | (6.8) | (6.7) |
| Machinery and equipment..... | (7.7) | (7.8) | (5.9) | (7.9) | (8.4) |
| Value of physical change in inven- tories..... | 0.5 | 3.1 | 0.3 | 0.6 | 1.0 |
| Balance on exports and imports of goods and services..... | 0.9 | - 4.2 | -2.1 | - 0.9 | - 1.3 |
| Residual error of estimate..... | 0.1 | - 0.6 | — | 0.6 | — |
| Gross National Expenditure..... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

SOURCE: Based on data from Dominion Bureau of Statistics and estimates by Economic Council of Canada.

Construction is a highly labour intensive activity as indicated by the charts on Components of Real Output Growth and Capital Stock per person employed. (page 29) On the other hand, most studies of the industry's future, particularly in the residential field suggest a potential for extensive new product and new capital equipment development. It is possible that research and development into the technology and organization of community-building will have comparably greater returns than activity directed elsewhere.

TABLE 2

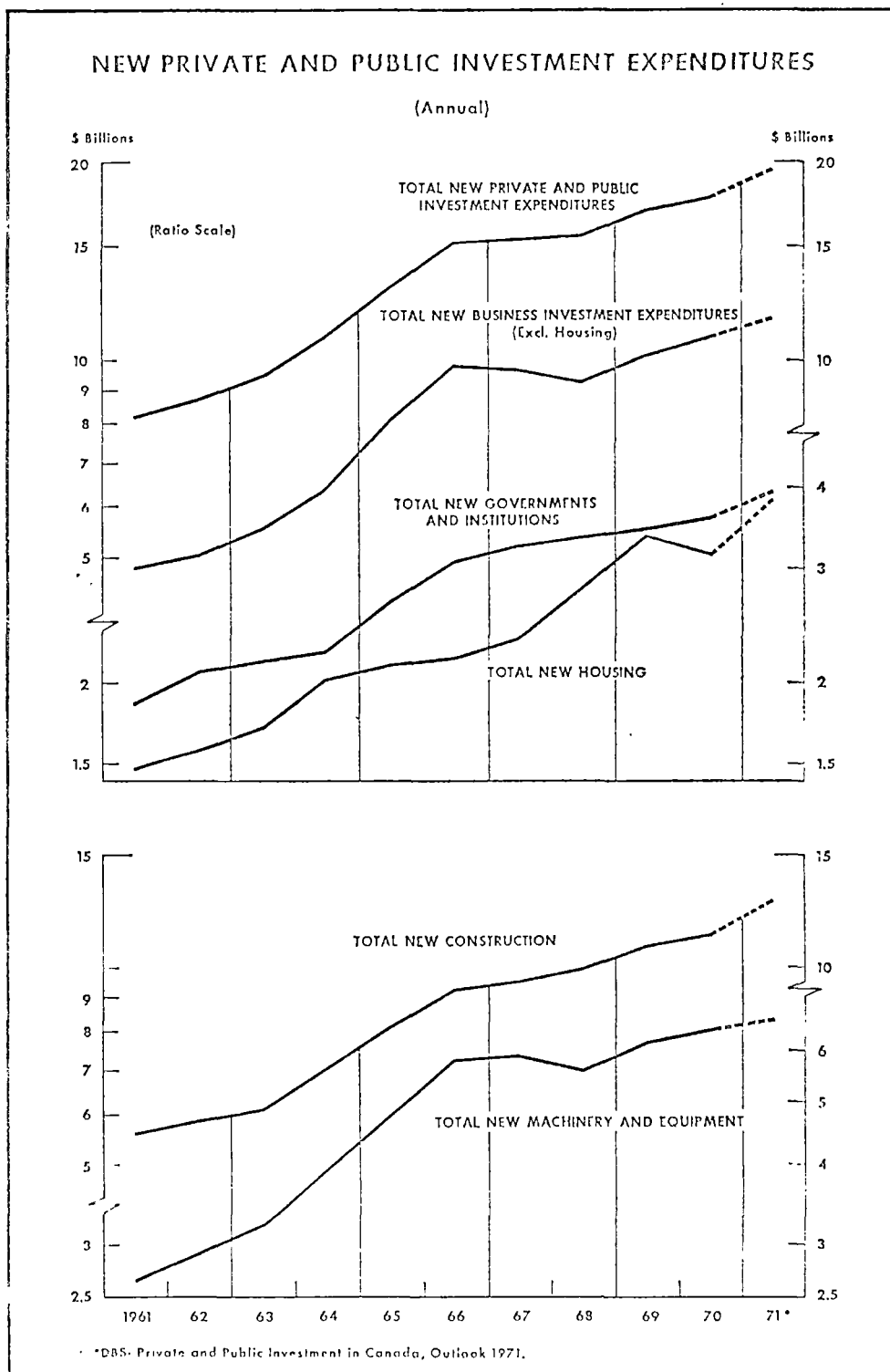
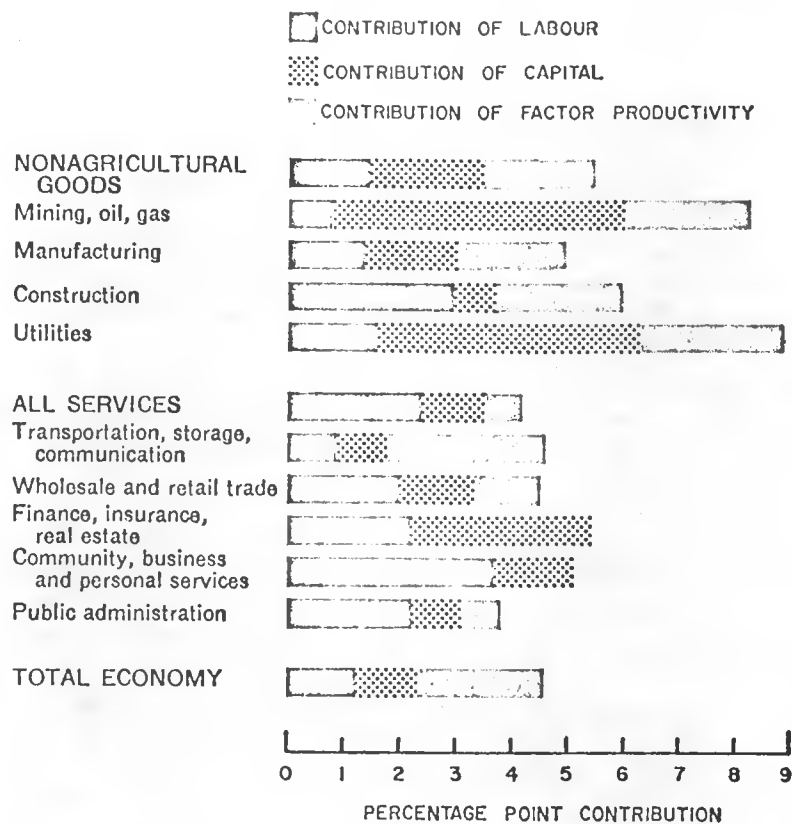


TABLE 3

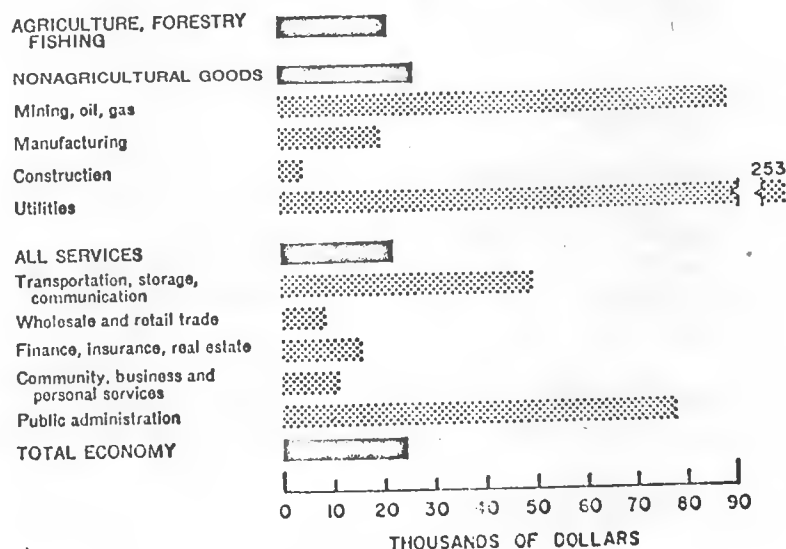
COMPONENTS OF REAL OUTPUT GROWTH, 1946-67



Source: Based on data from Dominion Bureau of Statistics and estimates by Economic Council of Canada.

TABLE 4

CAPITAL STOCK PER EMPLOYED PERSON, 1967



Note: Excludes residential capital stock.
 Source: Based on data from Dominion Bureau of Statistics.

Canada with its more tractable and manageable, and perhaps now politically visible community problems, may have a potential for leading the way in this area.

The policy proposals now before the Minister for decision have substantial implications for the immediate questions of national development. Specifically:

- * the rehabilitation proposals will result in the creation of an entire new industry and in the development of new employment skills, technological improvements, and professional talents accordingly
- * the proposals to assist in the improvement of urban management, manpower training, information systems, and planning can result in the creation both of new jobs which did not previously exist and of additional positions along present lines. In effect, the emphasis of current proposals on building institutional arrangements (as elaborated in the next chapter) will involve the devotion of substantially more resources to employment of community benefit. The effort is to prepare people now for careers of the future.
- * the housing proposals -- particularly those for subsidizing home ownership, will create additional employment and economic activity locationally even if no funds beyond those already allocated are provided. This is the result both of the increased Federal capacity to respond to presently ineffective demand by virtue of the new programs -- i.e., to go where no housing would have been provided before, and of the increased provincial capacity to employ the programs.

THE TASK OF "COMMUNITY-BUILDING"

To conclude what we have said in this chapter then, if we place housing and services to it in a global "community-building" context -- covering settlements of varying sizes from small to metropolitan -- they can be powerful tools for national development. In order to make this kind of proposition work however, we need to:

- * consciously consider the costs of the "American scenario" and the contradictions in our presently conflicting views of Canada

- * recognize the immediately beneficial effects of community-building investment not just for "jobs" per se but for long-term employment creation
- * develop national strategies for community-building including investment plans, institution-building plans, and leveraged programs.

III. THE URBAN CONTEXT: PLANNING AND ACTION

SUMMARY

In this chapter, we are concerned to move from the rather general discussion of built environment problems as they relate to national development into a more focused attack on the questions at hand. Specifically:

- * some of the most critical problem areas of the decade are identified -- all of which point to a series of crises for present institutions
- * the longer term possibilities leading to the end of the century are briefly noted
- * the question of "urban guidance" in the face of problems, uncertainties and possibilities is addressed. A phased approach to increased intergovernmental control over current dynamics is envisaged, based on a "minimum common program" of which current proposals form the starting point
- * in the most immediate terms, a review of the intergovernmental issues related to the proposals.

CRITICAL PROBLEMS OF THE DECADE

A variety of recent studies, governmental and non-governmental, ranging from the Task Force on the Cost of Health Services to the Hall-Dennis Report on Education, have noted the problems associated with developing institutions adequate to the tasks posed by an urban Canada. If one major conclusion can be drawn from the review of "critical problem areas" on the next page, it is that, while we may avoid severe physical, economic, and ecological dislocations during the 1970's, the stresses on governments at all levels just in order to "cope" are, and are going to be, severe.

URBAN CANADA: 1971-1981
SOME CRITICAL PROBLEM AREAS

- * The relevance and responsiveness of municipal organization
- * Land and Housing costs
- * Relationship between labour force and employment positions
- * Development of rural areas and the national "hinterland"
- * Modes of in-city urban transport
- * Health services cost and quality particularly for lower income groups
- * Native people migration and adjustment to city life
- * Welfare costs related to hard core urban poverty, rural migrants, and employment structure
- * Public safety (police and fire) costs
- * Educational costs related to quality of service and expectations of public
- * Environmental pollution
- * Resource and investment supply and allocation among levels of governments
- * Leisure services
- * Endemic drug addiction and related theft

THE CUMULATIVE RESULTS OF ACTION AND INACTION

As implied above in Chapter II, the longer term effects of current government actions and failures to act may be quite different from any current desire or will. In fact the characteristics of the country at the end of the century may range along the following lines:

1. an authoritarian society of enforced homogeneity to a spontaneous, diverse society;
2. a built environment in a "megapolis" form to a decentralized network of communities;
3. a society of unconstrained economic growth or of socially directed growth;
4. governments which react to problems to those which anticipate them;
5. governments which support private investment to those which control it;
6. governments which are in the grip of high-cost urban systems to those which actively develop alternatives
7. governments which leave current local government finances alone to those which restructure its fiscal base;
8. a Federal Government which acts unilaterally to one which acts on the basis of intergovernmental consensus.

THE NEW DIMENSIONS OF A FEDERAL "URBAN" ROLE

During the past year and a half, the Minister of State for Urban Affairs, in a number of public addresses, and in a variety of contexts, has stated and elaborated on the concept of an "Urban Policy for Canada" -- a national consensus about the future of our cities as a basis for planning that future.

In selecting directions for legislation and budget, the Government may be stating for the first time in a concrete programmatic fashion what values and objectives it intends to support, and what kind of Federal urban role is envisaged. This is one of the alternatives open at the present time. There are two others:

- * to hold all action on NHA amendment until a generally agreed upon framework for urban policy has been established, either through tri-level consultation or otherwise, and to adopt accordingly a "marking time" budget,
- * to announce discrete programs with associated budgets separated from but possibly consistent with an overall direction.

Either of the latter choices would be a difficult one -- the first because of mounting pressures for action, the possible dependency of the framework itself on action, and the second, because it would cast doubt on the seriousness of the whole effort to discuss the urban future and to co-ordinate Federal activity in line with such.

If the most feasible choice is one of giving leadership and attempting to define, no matter how tentatively, a new Federal role, what does such a choice entail?

This chapter seeks to advance, as a basis for debate and further elaboration, a form of institutional "framework" for policy which can be utilized to suggest the outlines of an evolving Federal approach to urban problems.

The framework, as presently conceived, has the following elements:

- (1) a view of how we can best deal with the inevitable uncertainties associated with taking action which will have its major effects at some future time, and with the more soluble problems of information gaps and lack of historical knowledge
- (2) a view of how we can take into account the natural limitations of government as an instrument of will, how we can avoid the widespread assumption generated by the welfare state and the "R & D" approach to complex questions that government can "solve" most problems. (The latter view seems to be as much a conventional wisdom of scientists as of the man in the street.)
- (3) a view of how the rationale for any Federal role has changed as a result of the way society has changed -- particularly in regard to urban intervention
- (4) a view, resulting from the previous conception, of the ways in which the Federal role will change, and of the instruments which will characterize its activities at successive times over the decade.

In more direct terms, we are attempting to present a framework:

- (1) which allows us to act in a situation of imperfect knowledge, to systematically deal with uncertainty
- (2) which recognizes the limited effects government action -- even planned, concerted government action -- can have on as vast and complex a system as the urban system, and which accordingly provides for most effective use of those limited effects
- (3) which regards governmental organizations and roles as being integral parts of a framework for action -- along with concepts, problem definitions, and objectives, and therefore seeks to explore the possibilities of those roles and organizations

- (4) which is based on a comprehension of the most critical problems to receive attention and the sequence in which they should receive attention
- (5) which seeks to emphasize a strategic concept of governmental action -- directed to key influence points¹ (or "leverage" points) not to the exclusion of other "regular" activities, but as a supplement to them.

The assumptions on which the kind of framework outlined rests include:

- * in the housing and community-building field we need immediate action and an overall rationale simultaneously
- * an overall rationale and set of objectives, given the diversity of interests and perceptions involved, can now and in the foreseeable future consist only of a "minimum common program" i.e., what can be agreed upon by major actors concerned, not of a general plan
- * actions by governments are generally constrained by the possibilities for and consequences of errors in judgement. Comprehensive planning with effects on the main determinants of urbanization is thus largely ruled out for the foreseeable future at least until the possibilities for error have been reduced
- * because of the limited talent, skills, resources, and will, at all levels of government, a socio-political "staging" of increased control over urban forces is needed
- * an inherent aspect of the recognition that governments can have only limited effects on the basic direction of society is that governments themselves are subject to the prevailing value systems and contradictions of a society even more than other sectors are

¹ "Influence points" is the term employed by Jay W. Forrester to denote sensitive points in social systems "where pressure will change the system". The Futurist, (August, 1971) p.153.

- * the institutions of governments need to be reshaped as well as the programs they provide. In fact, as suggested in Chapter IV, the primary crisis of urban change in Canada seems to be that present institutional arrangements are no longer capable of bearing the weight of demands being placed on them, of people's expectations.

In the most concise terms, we are speaking of a policy framework which seeks to work within the inherent limits and "search" the possibilities of government planning and action. Perhaps this viewpoint has been best expressed by Aaron Wildavsky in a recent Public Interest article.

"... planning is a social process. Control of the future in significant ways requires the mobilization of knowledge, power, and resources throughout a society. It does no good to propose measures that require non-existent information, missing resources, and unobtainable agreement. The planner cannot create, at the moment he needs them, the things his society does not possess. He can, however, assume them to be true in the artificial world he creates in the plan. But planning is not a policy. It is presumably a way of creating policies and relating them to one another over time so as to achieve desired objectives."¹.

To this point, we have outlined in rather general terms, the kind of approach which has been taken to the problem of a "framework" for NHA legislative and budget policy. In effect, we have said that we have a very complex operating environment and the opportunity to move toward the conscious influence on that environment and to change the Federal role and programs as a result. The alternative is to be borne along by it.

In the remainder of the chapter, we will examine how the Federal urban role and the rationale for such a role have altered, actually and potentially over the recent past.

We will then proceed to the identification of which key problems the government might most usefully tackle during

¹. "Does Planning work?", The Public Interest, (No. 24, Summer, 1971), p. 104.

the period between now and 1980 and how the institutions of government might evolve in the process or addressing those problems.

THE CHANGING RATIONALE FOR FEDERAL INVOLVEMENT IN COMMUNITY-BUILDING

Immediately following the Second World War, a strong Federal role in most aspects of life was an integral part of the Canadian scene. This was the case not only because of momentum built up during the regime of wartime controls and initiatives, but also because of the need for "reconstruction" following the hiatus of the Depression-War period.

It was possible at that time for the highly regarded Curtis Report to recommend that a Dominion Town Planning Agency be established to promote and coordinate town planning throughout the country.¹

The "Urban Affairs Study" indicated in general terms the breadth and depth of current Federal involvement in shaping the patterns and processes of urban centres.² It is an involvement based on a wide variety of constitutional rationales -- including the "spending power", the Federal responsibility for the economy, the Federal responsibility for research in the national interest, and the accumulation of Federal roles occasioned by the emergence of new technological developments -- the airplane, electronic communications, etc.

From all of these activities, we can draw several conclusions about actual and potential Federal roles in the community-building field:

- * the Federal government clearly continues to have a viable direct involvement in the problems of urban centres via the "spending power" to the extent that the absence of funds or the judicious use of extra

1. Advisory Committee on Reconstruction, Volume IV, Housing and Community Planning (Ottawa, 1946), p. 16.

2. See also Volume 6, Urban Assistance Study

funds are "the problem"

- * on matters of multi-national concern -- technology, private corporate decision-making, immigration, the Federal role is a paramount one -- it can shape, if it chooses, most of the important "macro-determinants" of urban problems and values
- * although Federal control over the economy is entrenched and far-reaching, recent events make it clear that this is a severely constrained role, buffeted by the actions of both external and internal governments

In view of the expressed desire of several major provinces to remove themselves from shared cost programs, the "spending power" via the shared cost routes to housing and community-building and, therefore, local administrative involvement, will probably be increasingly curtailed over the decade.

The other kinds of roles will continue if the nation survives as an entity, but it is essential that a new, forward-looking face be put on them.

For example:

- * the Federal role in providing support for community planning, housing, and infrastructure needs increasingly to be seen as a "leading edge" support, in line with the R & D power
- * an emerging Federal role, to be extensively dealt with in the next chapter, which can only be played at such a level, is social capital investment planning for the long term (although most critical investments are actually made by provinces and municipalities)
- * Federal "control" over macro-determinants of urban development means little if, in fact, the amount of use actually made of this is limited to simple responses -- e.g., pump-priming, population market-seeking, etc., of the type already mentioned above.

What is needed is a set of directions or priorities.

STRATEGIC OBJECTIVES FOR THE SEVENTIES: INSTITUTION-BUILDING

We are thus concerned with the creation of a basis for strategic planning -- to deal effectively with the key elements of the future environment which can and should be changed if general improvement is to result, if all, some, or any, of the kinds of needs emerging are to be met.

Based on the synthesis of a variety of reports and viewpoints presented, the following kinds of needs or problems seem to be the most important as a basis for strategic planning to improve institutional capabilities in the 1970's:

- * the crises of governmental responsiveness and capacity to cope with mounting problems outlined already
- * the problem of change in individual urban centres and regions which is giving rise to pressures on governmental capability. Some of this problem of change is occasioned by the high social and economic cost of current urban technologies and ways of doing things, e.g., redevelopment processes.
- * the problem of guidance over overall dynamics of urban growth and decline, stressed in the "Urban Affairs Study". This, in turn, feeds back on local change pressures and governmental capacity and responsiveness. It becomes, in addition, a problem of urban values -- because the daily realities and pressures of urban living strongly affect the expectations and personalities of the inhabitants of cities.

We can, however, turn each of these problems into a strategic objective, which can be pursued through pressure on selected, multiple influence points for institutional change.

Stated as objectives, they become:

- * to promote governmental innovation at the local level to increase the level and effectiveness of urban democracy, to develop the capacities of urban institutions

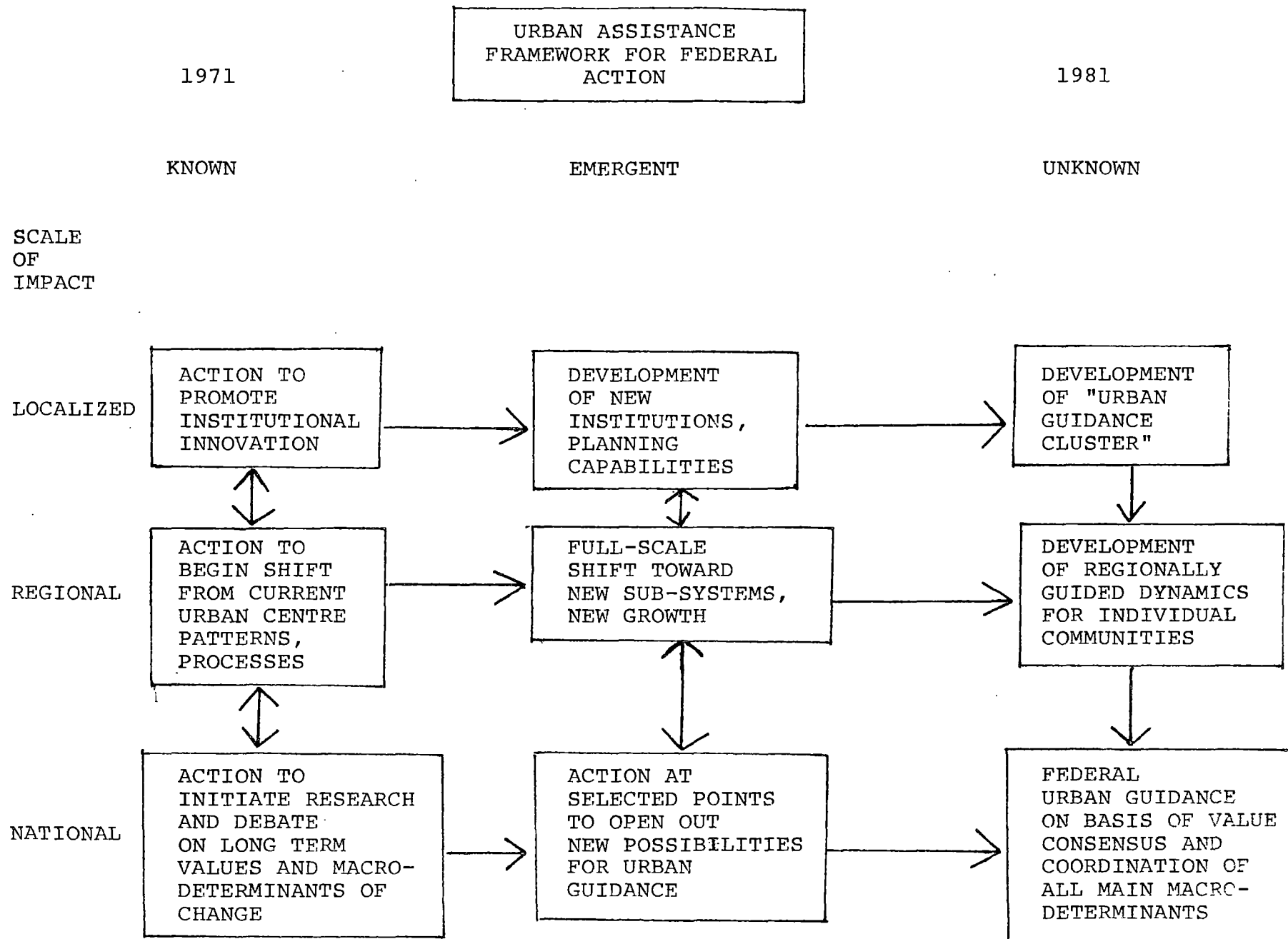
* to promote a shift away from current patterns and processes of urban centre development and decline which are proving highly costly and to create alternative technologies, processes, and systems to those of the present

* to increase national control over the macro-determinants of urbanization and to guide the values associated with an improved urban environment.

Viewed this way, we can see that:

- (1) each successive level of objectives requires increasing amounts of information since it potentially affects an increasingly irreversible type of decision, i.e., we can change local institutions and fail "safely" but a national attempt to say, direct population growth, has much more serious consequences
- (2) each set of objectives forms a kind of prerequisite to the next
- (3) a wide range of presently isolated programs start to fall into place in such a context:
 - (a) efforts to promote municipal information systems, management training and citizen participation all relate to the first
 - (b) efforts directed to development of new communities to shifting away from automobile transport and gravity-feed sewers relate to the second
 - (c) efforts directed to controlling economic growth, population distribution and national transport modes relate to the third
- (4) each is successively less amenable to fairly immediate change because of the way current investment and commitments have been made.

If we interrelate all of these, over a ten-year time-frame, we have the kind of action framework illustrated in the diagram on the next page.



This "framework for Federal action" is based on the assumption that the long-term objective of an urban policy for Canada is to create a multi-level system for "urban guidance". By "urban guidance" it is meant that:

- * the programs which can apply leverage to promote urban change are under effective control rather than being relatively diffused and marginal as at present
- * the situation of urban centres is such that, while all problems may not be resolved--more in fact may exist--none have been allowed to move into totally irreversible patterns of either megalopolitan growth or disorderly decline. The scope for conscious change and the tools to shape that change both exist and have been strengthened
- * the concept of what community and urban governments are about has sufficiently altered that both repressive and "housekeeping" ideologies have been dispensed with. (As the recent Vancouver situation illustrates, the two can go hand in hand). That is, we are talking about urban guidance rather than urban occupation or urban maintenance. A variety of repositories of authority and expertise are recognized as legitimate, from the individual inhabitant up, rather than from the official down
- * in line with such a concept, the participation of formally constituted governments in urban guidance is predicated not on their constitutional powers narrowly defined, but on their capacity to contribute to problem resolution, in the problem's terms. A sufficient consensus has been reached that initiative rather than protective actions tend to be rewarded

MAJOR ISSUES RAISED BY CURRENT PROPOSALS

In more immediate terms, the kinds of issues identified in the charts on pages 24 and 25 face the Minister and Management in their negotiations with the provinces regarding the amendments to the National Housing Act. The way they are stated they form in fact a cross-section of the continuing questions to be resolved.

A COMPILATION OF MAJOR INTERGOVERNMENTAL
ISSUES RELATED TO NHA AMENDMENT

| <u>ISSUES</u> | <u>SPECIFIC SUB-ISSUES</u> |
|--|---|
| 1. Rationale for Federal Involvement | a. conditionality of programs especially urban assistance b. use of spending power and conflict with provincial municipal priorities |
| 2. Federal Role | a. program delivery and detailed administration b. degree of public acceptance of high profile Federal position in urban affairs and housing c. <u>evolving</u> Federal role and rationale |
| 3. Federal Investment Strategy | a. leverage effectiveness of different programs in securing sound investment b. effects on provincial and municipal finances c. relative contribution toward creation of a long term social investment approach |
| 4. Coordination of NHA Programs with other Federal resources | a. relationship of inter-departmental and inter-governmental consultations e.g. re DREE b. tie-in of Federal operating contribution with NHA capital cost support c. long term Federal urban resource approach |

5. Program Delivery
 - a. transfer of NHA funds to provinces and municipalities
 - b. degree of discretion allowed at each stage
 - c. provincial and municipal enabling legislation
 - d. contractual arrangements for CMHC delivery in some provinces
6. Urban Region Planning
 - a. degree to which this provides context for NHA program delivery and differences in provisions
 - b. mechanisms for Federal involvement in regional decision making
 - c. long term approaches to use of Federal programs as leverage measures in urban region "guidance"
7. Urban Region Data Base
 - a. use of Federal data to improve other levels of government capability to use programs
 - b. building up an intergovernmental, open access data base
 - c. building up consultation around data base

IV. THE ALLOCATION OF RESOURCES

SUMMARY

Having discussed the institutional context in which future investment decisions may be made, we turn here to the problem of allocating governmental resources to housing and more generally to community building.

The specific points covered include:

- * a discussion of various investment concepts leading up to the notion of a Federal investment strategy
- * the current pattern of housing investment in Canada and the forecast capital available over the decade
- * the key investment issue at stake with the present proposals -- whether Federal housing is a "social" or an "economic" tool
- * the steps to be taken toward a national housing strategy, including the priority groups to receive NHA programs
- * the rationale for the immediate implications of all the proposals being made -- increased budgetary expenditure under the NHA.

INTRODUCTION

Investment concepts -- especially means of establishing priorities and yardsticks of success -- are not nearly so well developed for public agencies as they are for private ones. It would seem that as far as setting priorities is concerned, the size of previous budget, the employment situation (related to investment dollars per job ratio), and the relative "clout" of the agency involved are among the most important determining factors. Certainly conscious attempts to weigh alternatives on a rationalist basis are rather recent.

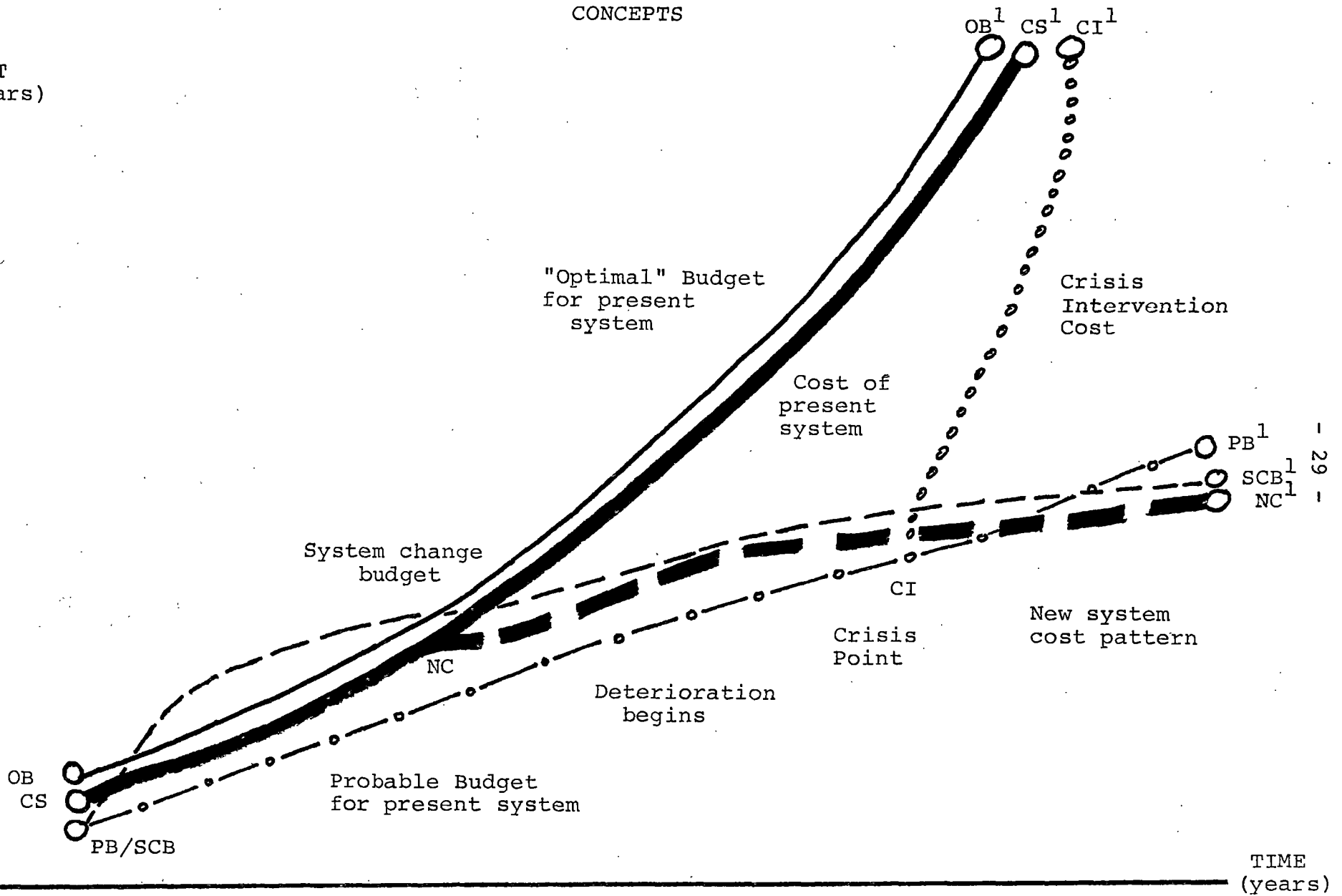
The private yardstick of investment success is the comparatively simple one of rate of return, particularly vis-à-vis the "competition". Despite the numerous attempts at cost/benefit analysis of public investment projects, we must conclude that complete and precise measures will never exist, just as it is impossible to simultaneously measure a wave and a particle in physics. The greatest overall indicator of public investment success, and the one of greatest relevance to urban growth as noted in the "Urban Affairs Study", is the adequate servicing of industrialization with resultant economic "progress".

The diagram on the next page suggests the following approach to deciding among different investment alternatives on a long-term basis:

- * each major sub-system of the total urban "system" (and indeed the system as a whole) is conceived as having a cumulatively rising cost curve, as the available information on education, health, road construction, land, and other costs indicates
- * the "optimal budget" to meet these costs would clearly be one which either increased at exactly the same rate as the costs themselves -- or ahead of the costs to cover improvements beyond those associated with simple quantitative augmentation
- * but the traditional and inescapable nature of budget-making in the face of scarce resources leads to a growth curve more along the lines of a relatively uniform annual increment -- especially when the increase is expressed in constant dollars. Actual decreases are more common in the case of capital investment than they are in the case of, for example, transfer payments and programs designed to maintain a particular standard of "soft" services, because of the more elastic nature of investment outlays. (The old plant can be made to hold on a while longer -- in the American case this applies to entire core cities.) Both are interrelated in one system, however.
- * If the inherent system costs continue over a period of time to be unmet (as was the case in many Canadian municipalities during the Depression and World War II), deterioration will begin. This may carry on until a breakdown occurs and a very costly crisis intervention is needed to regain a situation approximating the true investment requirements of the system. (This would be required, for example, if Lake Erie's eutrophication were to be halted and its ecological balance righted. The present industrial production system -- one not generally geared to recycling -- would need massive in-plant or municipal treatment facilities.)
- * the essence of an investment strategy -- as contrasted with straight "meet all system costs" or "5% a year" approaches must essentially boil down to a promise that it can deliver more for less or more for the same.

BASIC INVESTMENT STRATEGY CONCEPTS

COST
(dollars)



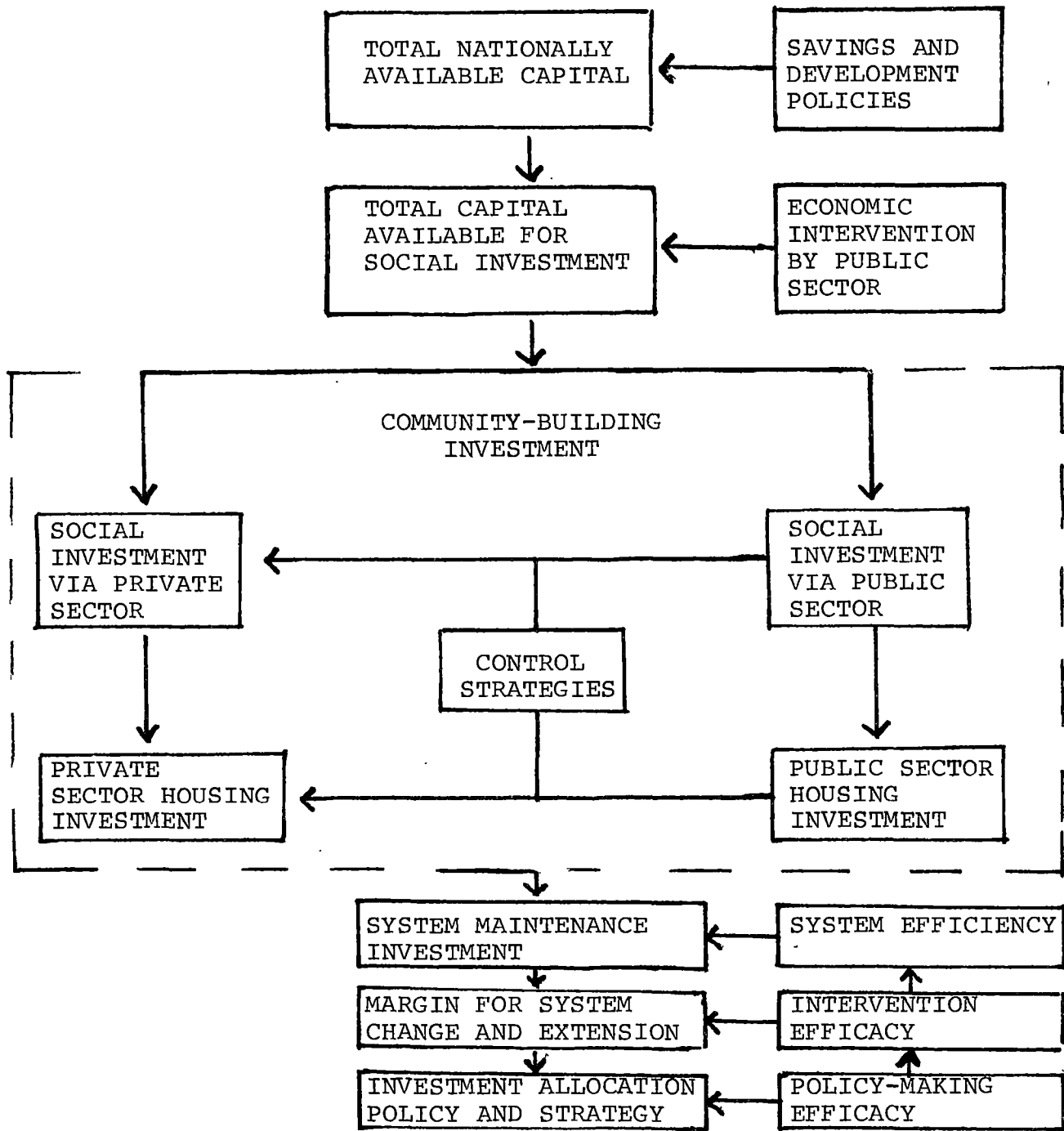
- * this is where individual investment and indeed general budgetary choices mesh with urban change strategy -- in the selection of actions which while conceivably more costly in the short run are resource-conserving in the long run. Funds poured into a congenitally resource consuming system, e.g., the private automobile urban transport system, without simultaneous development of alternatives, can only continue to produce deterioration either in themselves or in other systems stripped of resources to maintain them.

With this groundwork covered, we can proceed to the creation of an overall framework for Federal investment in housing and urban development (or if rural areas and small towns are included, "community-building")

As diagrammed on the next page, this framework has these characteristics:

- (1) the outside boundaries of community-building investment are set by the total capital available, public and private, at the national level. This amount is influenced directly to some extent by the savings and development policies of the various governments as well as indirectly by the policies of the major pools of private investment
- (2) within this amount and competing for priority with business capital is the total capital available for social investment. This is clearly dependent up to a point on the extent to which the public sector intervenes via taxation, nationalization, etc., to influence the nation's priorities. But even in countries where all capital is "social" in the sense of being within the public domain, the functions included in social capital here -- schools, housing, waterworks, hospitals -- must compete for a slice of the total.
- (3) if we add to this total intra-community investment in utilities and remove from it items which are not essential elements of all community complexes (e.g., universities), we have the amount available for "community-building investment", public and private. Because of the limitations of the presently available data, it has not been possible to do so for this paper.
- (4) within the total community investment available to both sectors (and subject to public control strategies such as loan insurance, establishment of interest rates, etc.) is housing investment.

A FRAMEWORK FOR FEDERAL HOUSING
AND URBAN INVESTMENT VIA CMHC



- (5) all of community-building investment can be seen to break down into that which can be provided for system maintenance and added to this, that margin provided for change and extension
- (6) this leads to the need for an investment allocation policy -- that is what substantive goals are to be chosen: housing for low income people, universal sewage treatment, etc., and an investment allocation strategy -- how these goals are to be attained, via what levers.

Affecting each of the three levels of investment activity just mentioned are three levels of "strategic objectives", three ways of improving the overall community-building investment plans, and the programs through which these are carried out. In effect, they are a sequence of questions which can be asked prior to the adoption of policy objectives and a series of hypotheses about the way complex systems work to be tested and elaborated with concrete experience. (p.33)

It should be noted that while the objectives have been stated in order of overall scope and importance, each feeds into the one above it as indicated in the diagram. We cannot improve efficiency at the system level without increasing intervention efficacy and this in turn cannot be achieved without the improvement of policy-making itself.

Two major assumptions of what we have outlined here should be made crystal clear:

- * by using the term "investment" in reference to CMHC lending operations under the National Housing Act, we have substantially shifted the perspective currently applied to them. Even though the funds come back with interest and are thus not capital expenditure in the traditional sense, they are, as Department of Finance officials are increasingly aware, a claim on the borrowing capacity of the government and on the capital resources of the nation at a given moment. Furthermore, because of equity requirements, large lending to other governments, and most important, the necessity for additional capital investment (primarily at the municipal level) generated by NHA funds, they can validly be treated as investment in the nation's economic and social well-being.

STRATEGIC OBJECTIVES FOR FEDERAL INVESTMENT
IN COMMUNITY-BUILDING, 1971-1981

OBJECTIVE 1: INCREASING SYSTEM EFFICIENCY

- * By shifting away from inherently costly systems
- * By overcoming lags between service organization and technological potential, eg. for decentralization
- * By controlling growth
- * By promoting social equity and personal security
- * By promoting open communication on system operation and effects

OBJECTIVE 2: INCREASING INTERVENTION EFFICACY

- * By broadening the range of available program tools and funding arrangements
- * By developing delivery capability in currently underserved areas
- * By grouping programs around common strategies
- * By focussing programs on given targets of feasible magnitude
- * By improving rewards for local opportunity-taking
- * By applying leverage at selective points in the system

OBJECTIVE 3: INCREASING POLICY-MAKING EFFICACY

- * By improving the quality of information created as part of system operation and used as a basis for future decisions
- * By encouraging development of policy analysis capabilities as part of the investment process
- * By creating information on the opportunity costs of current system patterns and the potential of alternatives
- * By rewarding future-oriented investment plans
- * By advancing the state-of-the-art in policy methodology as it related to community-building investment

- * although the term "efficiency" has been used for want of a better synonym, system efficiency is quite a different thing from program or activity efficiency. Some critics of current policy-making processes have suggested that governments may tend to do the wrong things very well. System efficiency refers to the quality of the total products and effects of a system. A system which works to the detriment of its surrounding environment, e.g., the unchecked industrial production system, is inefficient at any level above that of the individual activity in isolation.

In order to provide a set of quantitative indicators of the magnitudes subject to investment decisions now and in the planable future, a series of projections from available capital expenditure data have been made. These are presented in the table below and (in more detail) in the Resource Document.

PROJECTIONS OF MAJOR COMPONENTS OF NATIONAL
INVESTMENT: 1970-1980 (\$ Millions)

| COMPONENT | 1970 | 1975 | 1981 | TOTAL 1972-1981 |
|--|--------|--------|--------|--------------------|
| TOTAL PUBLIC AND PRIVATE CAPITAL & REPAIR EXPENDI- TURES | 23,101 | 30,224 | 38,355 | 322,569 |
| TOTAL PUBLIC AND PRIVATE CAPITAL INVESTMENT | 17,640 | 23,373 | 29,837 | 249,894 |
| SOCIAL CAPITAL | 6,770 | 8,868 | 11,205 | 94,526 |
| HOUSING CAPITAL | 3,077 | 4,095 | 5,233 | 43,795 |
| HOUSING REPAIR | 858 | 1,065 | 1,320 | 11,289 |
| TOTAL HOUSING CAPITAL AND REPAIR | 3,935 | 5,160 | 6,553 | 55,084 |
| FEDERAL GOVERNMENT CAPITAL AND REPAIR | 1,483 | 2,025 | 2,624 | 21,749 |
| PROVINCIAL GOVERNMENTS CAPITAL AND REPAIR | 3,207 | 4,405 | 5,702 | 47,290 |
| MUNICIPAL GOVERNMENTS CAPITAL AND REPAIR | 1,888 | 2,475 | 3,078 | 26,255 |

HOUSING AS AN INSTRUMENT OF SOCIAL POLICY

There is a need to consider the real priorities that the Federal Government has in the housing field and in the infrastructure field, and to raise fundamental issues regarding the relationship between "economic policy" and "social policy." There is also a need in current circumstances to review the case for changing the values which have guided the Government for so long in resolving these issues. For example:

- * How does the "ideal" economic policy distribution of housing activity differ from that which would be considered most viable from a social policy standpoint?
- * How do long-term economic and social goals conflict with regard to housing production and conservation?
- * To what degree should the Federal Government see housing as having primarily social objectives?
- * What is the Federal Government to do about long-term planning for housing and for social capital investment generally?

The present paper cannot examine all of these questions exhaustively. It can make and elaborate briefly on the following points, however:

- * from a short-term "pump-priming" standpoint, the ideal distribution of activity to improve the nation's housing stock is quite different from that distribution which may most effectively meet social and cultural needs
- * we do have social problems in this country which are housing problems in addition to being income or political or social services problems
- * in setting short-term economic policy goals -- and using housing funds to achieve them, the Federal Government may also be damaging the effectiveness of longer-term economic goals to the extent that these are served by the provisions of an increasingly good housing stock

- * in cutting back on housing expenditure at the present time, the Government may well curtail and dampen some very important policy changes under way using the margins of the present funds. It is the margin for change that is of primary concern, not the main bulk of the funds
- * in order to achieve both economic and social long-term objectives in the housing field, the Federal Government needs a plan for overall social capital supply and investment. And it needs some operational objectives in regard to the hard-core housing problems we face in Canada.

A look at the kind of housing produced under Section 58 of the National Housing Act provides some indication of the effects of using housing funds solely to promote increased economic activity. If one could draw a picture of the ideal pump-priming distribution of housing activity, it would probably look like this:

- * it would be composed of new units
- * these would be directed to wage-earners with incomes of \$10,000 - \$20,000 per year
- * they would be sizeable, to use a maximum of materials and to require extensive consumer durable investment, but they would have a low bedroom count
- * the units would be located in areas of unemployment, but temporary unemployment
- * they would be located in areas where serviced land is readily available
- * they would be located in areas of relatively high construction industry productivity.

In contrast with this is the probable activity pattern which would most effectively deal with the hard-core social housing problems in the country:

- * it would rehabilitate a substantial number of houses in addition to providing new units

- * the units would be directed to those with incomes ranging from \$3,000 to \$9,000 per year, to those of even lower incomes in the case of rural residents and individuals
- * they would be of modest size but have a large number of bedrooms
- * they would be located in some areas of chronic under-employment, in larger urban centres, in areas of relatively high employment but low wage levels
- * they would be located in some areas where extensive upgrading and improvement of services are required, and in some areas where competition for land is relatively strong
- * they would be located in areas of variable construction productivity and in some regions of relatively low productivity.

It is not possible to be hard and fast about either of these images -- but they do serve to illustrate a potential conflict in priorities. It is a conflict which this Government has recognized during the past several years by increasing the amount and proportion of public funds going into housing with social objectives, specifically housing for lower income people.

It is becoming increasingly clear that there is a need for an overall long-term plan for housing capital investment and social capital investment in Canada generally. The Federal Government needs to set goals on both the demand and supply side. To attain the objective of decent housing in a good environment for all Canadians, there is a need to tackle the hard-core problems, to determine their overall dimensions and to say, in the present decade the nation will accomplish this and that, in an operationally defined way.

People in Government know enough about the dynamics and the realities of the housing system and the urban system to realize that trust in "trickling down" as an effective means of stock adjustment is misplaced. They know, and are increasingly having thrust upon them, the fact that the services to housing and land for housing, and the services to people, chiefly education, that go along with the placement of a unit on the ground, are often of more importance than the units themselves as any municipality will testify.

The supply, and distribution of national investment are important Federal responsibilities -- unless there is a plan for the longer term, the nation is doomed to a situation of conflicting objectives and high costs, economic and social.

As part of the establishment of an investment framework then, there is a pressing requirement to move toward conclusions on the subjects of:

- * the place of housing among Federal and national priorities
- * the need to consciously choose among levers, for maximum benefit and policy change
- * the need to set long-term objectives for investment in the basic components of community, economic, and social development in this country.

A more detailed outline of the steps to be taken toward a national housing strategy has been presented on pages 39 & 40.

RATIONALE FOR INCREASED BUDGETARY EXPENDITURE UNDER NHA

The basic case to be made before the department of Finance and Treasury Board concerning the current policy proposals is one for increased Federal funds which to not return with interest. This case can be argued along the following lines:

- * Non-budgetary funds require companion increments of budgetary funds in order to "work" - for example, assistance with project development costs permits access to non-budgetary funds to be increased
- * the Federal Government has a responsibility for minimum standards across Canada, a responsibility which can only be performed with budgetary funds as the rehabilitation experience demonstrates
- * budgetary funds for consumer orientation and for research and development, are needed to get maximum sound investment from non-budgetary funds by way of unit quality and cost control
- * budgetary funds are required to directly improve the living conditions of specific priority groups, e.g., the aged
- * additional budgetary funds will have substantial employment impact, both directly and indirectly - in the latter case, for example, by broadening the distribution of housing activity in areas of high unemployment.

STEPS TOWARD A NATIONAL
HOUSING STRATEGY

1. Identification of first priority housing needs based on current information
2. Creation of long term research program to cover gaps in information and to evaluate investment rationale and program attempts as they develop
3. Establishment of decade - long quantitative goals for meeting needs of various sub-groupings of the population - on the basis of location, stock type, delivery methods, subsidy levels, etc.
4. Establishment of a balance among new stock, existing stock and conversion approaches to supply, with a shifting pattern of distribution related to demographic and historical trends
5. Establishment of decade-long quantitative goals for production and delivery system cost control and rationalization
6. Establishment of a balance among cost control, cost reduction, system change, and system rationalization approaches to the production and delivery systems
7. Establishment of decade-long quantitative goals for meeting ecological, anthropometric, social and aesthetic needs and desiderata
8. Establishment of a balance among standards enforcement, demonstration, planning process democratization, and other approaches to qualitative goal attainment

9. Identification of total maximum available resources for housing and closely related purposes
10. Identification of assumptions on basis of which a larger or smaller portion of the total or smaller portion of the total available could be topped:
 - (a) over the entire decade
 - (b) in any given year.
11. Formulation of investment availability - goal attainment relationship over time
12. Formulation of annual allocation within the investment total for the decade
13. Development of annual allocation rationale in relation to the whole

PRIORITY GROUPS TO RECEIVE NHA HOUSING PROGRAMS (IN ORDER OF PRIORITY)

1. "GROUPS" NOT CURRENTLY WITHIN THE HOUSING MARKET AT ALL, E.G., PRAIRIE METIS
2. "GROUPS" WITH SPECIAL CHARACTERISTICS NOT ADEQUATELY SERVED BY MARKET PRODUCTION AND WITH LOW INCOME, E.G., HANDICAPPED, LARGE FAMILIES
3. "GROUPS" CURRENTLY CONTRIBUTING TO STOCK MALDISTRIBUTION BY THEIR IMMOBILITY, E.G., ELDERLY IN SINGLE DETACHED UNITS
4. "GROUPS" WITH GENERALLY LOW INCOME AND WITH FAMILY RESPONSIBILITIES
5. "GROUPS" WITH SPECIAL CHARACTERISTICS NOT ADEQUATELY SERVED BY MARKET PRODUCTION, BUT WITH ADEQUATE INCOME E.G., STUDENTS, EX-CONVICTS, ALCOHOLICS
6. "GROUPS" WITH ADEQUATE INCOME BUT SUBJECT TO A RISING PORTION REQUIRED TO MAINTAIN CURRENT HOUSING STANDARD (DUE TO RISING HOUSING COSTS) E.G., WORKING PEOPLE, LOWER MIDDLE INCOME PEOPLE
7. "GROUPS" WITH ADEQUATE INCOME BUT UNABLE TO IMPROVE HOUSING SITUATION BECAUSE OF RISING OWNERSHIP COSTS, E.G., LOWER MIDDLE, AND MIDDLE INCOME PEOPLE
8. "GROUPS" WITH ADEQUATE INCOME BUT SUBJECT TO AN INADEQUATE QUALITY OF COMMUNITY ENVIRONMENT AND AMENITIES, UNCERTAINTY ABOUT CONTEXT OF CURRENT RESIDENTIAL LOCATION, ETC., E.G., HIGH RISE APARTMENT DWELLERS, CENTRAL CITY RESIDENTS

V. THE FUTURE OF CMHC

The present document does not attempt to go into detail on the subject of the future role and responsibilities of CMHC. It provides a brief review of the current and long term issues facing the Corporation. It sets out entirely for discussion purposes a set of "feasible objectives" for the Corporation over the decade. Finally, it diagrams the overall alternatives for organizational development which may need to be explored during the coming two years.

The cumulative effect of the proposals being made in the various policy documents associated with this overview is to add substantial new dimensions to CMHC's role and objectives.

CURRENT ISSUES FACING CMHC MANAGEMENT

1. FUTURE OF "RESIDUAL LENDING" ACTIVITY VIA SECTION 52 (40) IN VIEW OF CURRENT TRENDS
2. PROJECTION OF PROFITS DECLINE BELOW POINT OF RETURN IN A YEARS' TIME
3. SLOWNESS OF COMMITMENTS UNDER FEDERALLY INITIATED LENDING PROGRAMS IN 1971
4. INCREASING TREASURY BOARD/DEPARTMENT OF FINANCE INTEREST IN NON-BUDGETARY FUNDS AND CMHC CASH FLOW SITUATION
5. PUBLIC CRITICISM OF CMHC ENFORCEMENT OF HOUSING STANDARDS EG. RICHMOND SQUARE, ST. JEAN VIANNEY, ROCHDALE
6. RAPID INCREASE IN SUBSIDY-BASED, NEAR-BORROWING RATE, LOCKED-IN, INTERGOVERNMENTAL PROGRAMS IE. PUBLIC HOUSING, SEWAGE TREATMENT
7. GROWTH OF NEW THRUSTS BY OTHER DEPARTMENTS AFFECTING CMHC PROGRAMS, EG. ENVIRONMENT, D.P.W., D.R.E.E.
8. RAPID INCREASE IN BOTH ABSOLUTE AND PER TRANSACTION OPERATING EXPENDITURES
9. INCREASING BOARD OF DIRECTORS DESIRE TO BE INVOLVED, TO SCRUTINIZE
10. PROBLEMS ASSOCIATED WITH ACCELERATED \$113 M COMMITMENTS UNDER FEDERAL EMPLOYMENT PROGRAM

LONG-TERM ISSUES FOR CONTINUING
MANAGEMENT CONSIDERATION

1. The effects of CMHC delivery of funds on the economy of Canada.
2. The expenditure pattern of Federal funds on housing and urban development -- the disbursement of funds which do not return.
3. The methods by which funds are provided to consumers and to producers.
4. The equity of distribution of CMHC funds among provinces and municipalities.
5. The effects of CMHC funding and incentive mechanisms on provincial and municipal priorities.
6. The relationship of CMHC activity to the private housing market.
7. The relationship of CMHC delivered urban assistance measures to private development and redevelopment processes.
8. The effects of CMHC programs in producing intergovernmental and interdepartmental co-operation.
9. The role of citizens and non-governmental organizations in CMHC decision-making.
10. CMHC's role in environmental improvement and the advancement of environmental quality standards.
11. The future of CMHC as an organization.

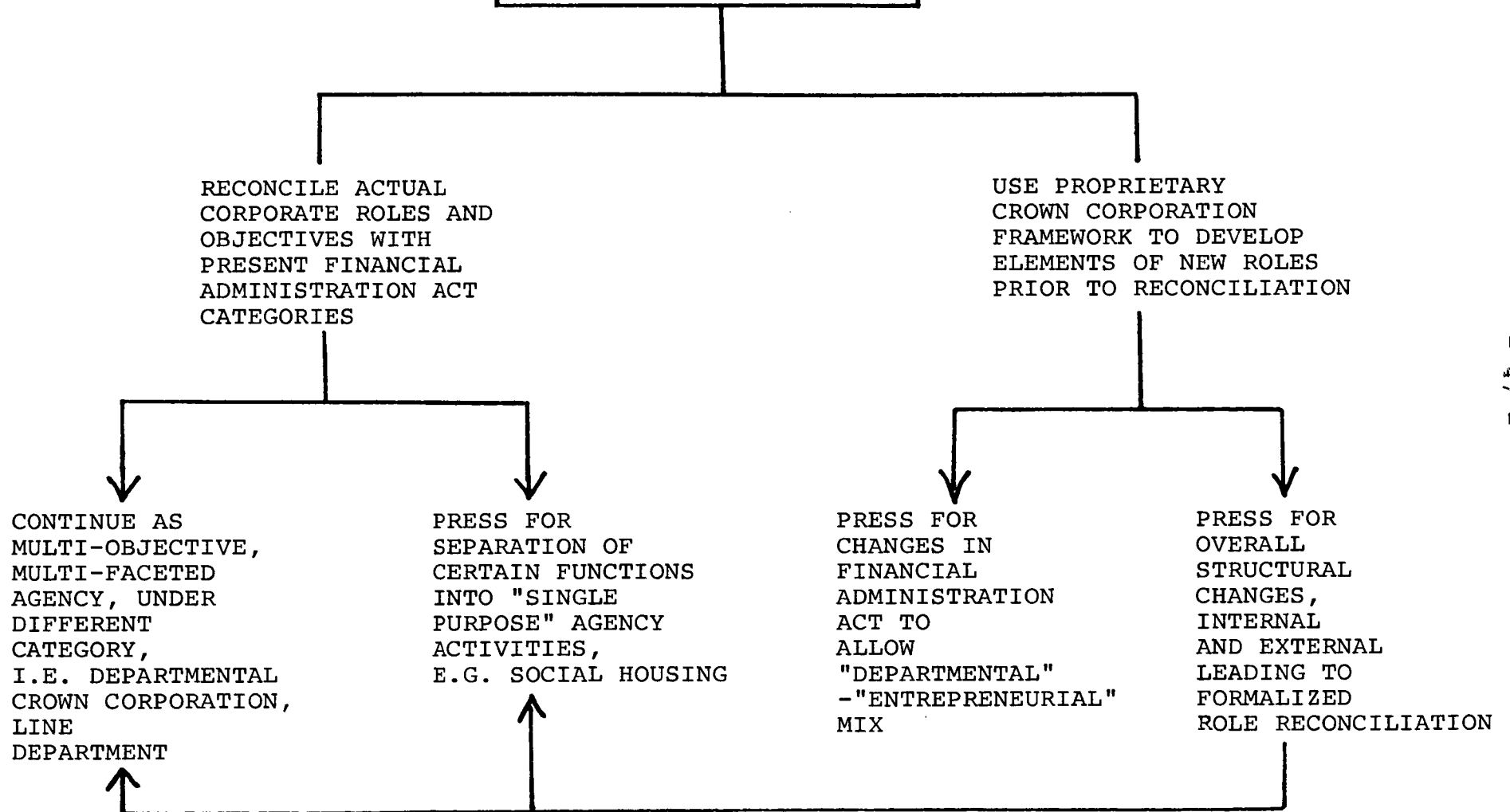
FEASIBLE OBJECTIVES FOR CMHC

1972 - 1981

- OBJECTIVE 1: TO ENSURE THE EXPRESSION OF INEFFECTIVE DEMAND FOR HOUSING SO THAT BY THE END OF THE DECADE ALL MAJOR GROUPS IN SOCIETY HAVE ACCESS TO THE HOUSING MARKET
- OBJECTIVE 2: TO ENSURE THE ATTAINMENT OF MINIMUM STANDARDS OF HOUSING AND CLOSELY RELATED COMMUNITY SERVICES ACROSS CANADA BY THE END OF THE DECADE
- OBJECTIVE 3: TO SECURE, IN CO-OPERATION WITH OTHER GOVERNMENTS, COST REDUCTIONS IN LAND, SERVICING AND HOUSING PRODUCTION WITH THE OBJECT OF ENSURING THAT SHELTER COST INCREASES TO THE CONSUMER DO NOT EXCEED THE AVERAGE CONSUMER PRICE INCREASE OVER THE DECADE
- OBJECTIVE 4: TO SECURE, IN CO-OPERATION WITH OTHER DEPARTMENTS AND GOVERNMENTS, A REDUCTION IN SHELTER COSTS PAID BY LOW INCOME GROUPS TO THE EXTENT THAT NO FAMILY WITH CHILDREN IS PAYING MORE THAN 30% OF ITS GROSS INCOME FOR SHELTER, AND TO THE EXTENT THAT NO HOUSEHOLD IS PAYING MORE THAN 40% OF ITS GROSS INCOME
- OBJECTIVE 5: TO ENSURE, IN CO-OPERATION WITH OTHER GOVERNMENTS AND THE PRIVATE SECTOR, THE MAINTENANCE AND IMPROVEMENT OF BASIC HOUSING QUALITY STANDARDS AND TO INSTITUTE GENERALLY APPLIED CONSUMER QUALITY GUARANTEES FOR NHA-SPONSORED UNITS

- OBJECTIVE 6: TO ENSURE, IN CO-OPERATION WITH OTHER DEPARTMENTS AND GOVERNMENTS, THAT NEW GROWTH IN MAJOR BUILT-UP REGIONS ACROSS CANADA TAKES PLACE IN AN ORDERLY PUBLICLY PLANNED MANNER AND THAT BY THE END OF THE DECADE ALL SUCH GROWTH TAKES PLACE WITHIN AN OVERALL DEVELOPMENT STRATEGY
- OBJECTIVE 7: TO DEFINE IN CO-OPERATION WITH THE URBAN MINISTRY AND OTHER FEDERAL DEPARTMENTS, A STRATEGIC FEDERAL ROLE IN URBAN AFFAIRS AND TO SECURE A PLACE IN THE OPERATIONAL GUIDANCE PROCESSES OF INDIVIDUAL URBAN REGIONS
- OBJECTIVE 8: TO ENCOURAGE TO A SUCCESSFUL CONCLUSION THE CREATION OF HOUSING TECHNOLOGY AND DESIGN GEARED TO RURAL AND HINTERLAND CONDITIONS AND ECONOMIC DEVELOPMENT
- OBJECTIVE 9: TO PROMOTE TO A SUCCESSFUL CONCLUSION THE DEVELOPMENT OF ALTERNATIVE SEWAGE COLLECTION AND TREATMENT FACILITIES WHICH PERMIT DECENTRALIZED FORMS OF LAND DEVELOPMENT AT LOWER SERVICING COSTS
- OBJECTIVE 10: TO RESOLVE CORPORATE ROLE DEFINITION AND FINANCIAL ADMINISTRATION STATUS PROBLEMS AND ESTABLISH A NEW POLICY EQUILIBRIUM WHICH BALANCES CAPABILITIES AND RESPONSIBILITIES

ORGANIZATIONAL
DEVELOPMENT ALTERNATIVES
FOR CMHC



VI. TOWARD RESOLUTION: A REVIEW OF THE ISSUES, FACTORS, AND CHOICES

SUMMARY

In this chapter, the attempt is to isolate the major hard issues facing the Minister and Management at this time, to identify the key factors to be considered in resolving them, and to set out in brief terms the hard choices to be made. Time has not permitted the more extensive review of issues which would have been desirable.

The major theme of the chapter is that more than legislative policy questions are at stake -- the use of new and existing programs and the initiatives to be taken within current mandates are also up for decision.

ISSUES

As identified in a large number of meetings on the policy documents concerned, the following issues face us at the present time:

1. The overall scope of what is to be undertaken in 1972.

Are the minimum or the maximum number of initiatives to be taken and what criteria define each of these
2. The relationship of what is to be undertaken to overall Federal urban objectives - whether the present actions are to advance or to be neutral towards these objectives
3. The extent to which political factors are to be allowed to override normal constraints on the budgetary activity under the NHA
4. Within the low income housing field - whether this is a declining or an increasing problem.
5. Further, whether more tools for the same funds or the generation of additional housing to the present annual increment is to receive emphasis
6. Within the urban assistance field whether a broad front or narrow front is to be adopted
7. Further, whether the locality is to be given a package from which it makes its choice or alternatively a Federal "leverage" approach involving Federal objectives is to be adopted.

8. Whether public intervention to control land costs is to be made a major issue.

These are of course not exhaustive.

FACTORS

Flowing from these issues are the following factors:

1. the capability of CMHC to mount and deliver more than a limited number of new programs in any one year
2. the losses, gains, or holding positions which may result from current action - and inaction
3. the willingness of Cabinet to approve major initiatives in the housing and urban fields at this time.

CHOICES

Shaped in turn by the issues and factors -- and subject to detailed elaboration in the Appended resource document (Chapter IV) are the following basic choices:

1. between setting long term directions by seeking Cabinet commitment to a social emphasis in housing investment, the wind-down of public housing, and an extensive urban assistance and land assembly package and adopting a more cautious approach
2. between getting a commitment to an overall housing and community building strategy related to a national development strategy and avoiding such a commitment at the present time
3. between clarifying CMHC's future role and objectives in the context of current discussions and returning with more detailed plans on this subject at a later date
4. between a wide-ranging NHA which includes general loans for day care and broad urban assistance measures and a specific housing act.

This brief review is a starting point for discussion and debate.

Appendix A

RESOURCE DOCUMENT
FOR DECISION-MAKING

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I. INTRODUCTION

This document is intended to serve as a reference piece for decision-making and as a companion to the main Overview paper. It does not purport to be the last word on any of the subjects covered by the chapters which follow. But it does bring together for the first time a wide range of quantitative and other information relevant to NHA policies and programs for the period 1971-1981. It also provides for the options developed by the Policy Planning Division a "cross-impact matrix" which is designed as a tool for testing the policy effects of what is proposed.

In this introductory statement, we will review each of the subsequent chapters in order to describe briefly the nature and purpose of their contents.

FORECASTS OF THE DECADE, 1971-1981

This is a compilation of projections and forecasts from a variety of recent Federal studies including those prepared by N. H. Lithwick, J. W. MacNeill, and the National Energy Board. In effect these forecasts set boundaries for the immediately relevant planning time frame -- a time frame well within the life of the present Government and within the political careers of the present Canadian leadership. They also presage continuing problems and emergent difficulties of the decade. Growth, change, and institutional stresses are the constants of the period to come.

CAPITAL INVESTMENT PROJECTIONS, 1971-1981

Another sort of "boundary" for the period ending 1981 is the nationally available capital from all sources and for all purposes. Based on the annual statistics prepared by the Department of Industry, Trade and Commerce and Statistics Canada, a series of projections has been made of national, social capital and housing investment and of the investments to be made by the various levels of government. While some of the amounts concerned can clearly be influenced by governmental action, the larger figures are subject to overall limitations given the present high propensity of Canadians to save.

In effect, housing must compete with businesses, with public institutions such as universities and hospitals, and with other forms of community-building endeavours - roads, industrial construction, etc., for the available capital.

POLICY IMPACT MATRIX

This portion of the document describes the categories used to develop a "matrix" of effects for different policy options developed over the course of the past year. The matrix itself has been included as a separate item along with the Resource Document.

In the briefest terms, the chart provided attempts to provide in one place an assessment of the positive, negative, or uncertain effects of the policy proposals on land, housing stock, equity, subsidy levels, tenure, decision control, citizen participation, "high cost" urban systems, planning capability, city growth, rural communities, as well as more general environmental and social aspects of Canadian society. A "no change" category for the policies is also provided. The attempt of the matrix is to allow the "gains" to be made with the policies to be consciously checked.

INDICATORS OF PROGRAM NEED AND POTENTIAL IMPACT

Finally, a selection of the available indicators of need for and potential impact of the current program proposals has been presented. These include statistics on the housing conditions of low income people, on land cost effects, on neighbourhoods in need of improvement, etc. The attempt is to provide a readily grasped review of the pressing realities of the situation across Canada right now.

CHAPTER II. FORECASTS OF THE DECADE, 1971-1981

As part of the process of exploring the "boundaries of the future", a number of recent forecasts of the decade from a variety of sources have been assembled. Although the qualitative aspects of Canadian communities ten years from now have not received a great deal of attention, the major quantifiable elements have been probed by one or another of the Federal agencies during the past two years.

The essential characteristic of all the forecasts is of course growth -- in fact, it is doubtful that the methods employed would permit much else to "occur" in the future because:

- * most of the forecasts are of single variables without cross-impact assessment. It is thus not possible for an increase in one element in the future to lead to a decrease in another
- * many of the forecasts are also linear within themselves so that cyclical fluctuations and similar multi-variate changes are ruled out.

The following is a list of the contents of the appendix:

POPULATION

1. Canada Total, Rural and Urban Population, Estimates and Projection, 1951-1981 (Millions)
2. Percentage Composition, Rural and Urban
3. Growth of Total, Urban and Rural Population, Canada and its Regions, 1966-1981
4. Population Estimates (in thousands) by Province: 1966, 1975, 1980
5. Persons per Household by Province: 1966, 1975, 1980
6. Projected Population for Canada and the Provinces, Quinquennially 1966-1981
7. Projected Family and Household Formation for Canada (and for individual provinces)
8. Projected Population for Selected Census Metropolitan Areas, Quinquennially 1966-1981
9. Projected Percentage Growth in Population, Selected Metropolitan Areas, 1971-1981.

ECONOMY

10. Projected Year 1967 Output, Doubled, Tripled and Quadrupled by Industry, 1967-2000
11. Projected Production by Selected Industries, 1967 and 1980 (Billions - \$ 1967)
12. Labour Force Forecasts (Method N-1)
13. Labour Force Forecasts (Method N-4)
14. Labour Force Forecasts (Method N-5)

HOUSING

15. Households or Occupied Dwellings (in thousands)
16. Number of Apartments (in thousands)
17. Number of Single, Double and Row Housing Units (in thousands)
18. Apartment Ratio
19. Forecast Housing Demand, Metropolitan Areas 1971-1981
20. Residential Land Requirements 1971-81, Land Acreage by Dwelling Type
21. Projected Cost of Land in 1981 in Major Canadian Cities (in dollars per frontage foot)
22. Residential Land Requirements for Low-Income Housing, 1971-81

TRANSPORT

23. Forecasts of Car Ownership and Car Mileage in Canada, 1970 to 1980 (E.C.C. Medium Population Forecast)
24. Vehicle Mileage by Commercial Vehicles (Vehicle Mileage, Billions)
25. Estimates of Demand for Road Facilities (Billions of Vehicle Miles per Annum)

26. Automobile Stock (in thousands)
27. Persons per Automobile
28. Private Automobiles - First Cars (in thousands)
29. Private Automobiles - Second Cars (in thousands)
30. Demand for Road Investment in Canada (1970 Prices, \$ Billion)
31. Total Demand for Highway Expenditure 1970-1990 (\$ Billion, 1970 Prices)
32. Demand for Road Expenditure in Urban Areas, 1970-1990 (\$ Billion, 1970 Prices).

ENERGY

33. Residential Space-Heating Allocation, Canada
34. Residential and Commercial Fuel Demand, Canada, (in BTU 10^{12})
35. Residential and Commercial Fuel Consumption, Canada
36. Transportation Fuel Consumption, Canada
37. Electricity Demand and Supply, Canada (in GWH)
38. Estimated Installed Generating Capacities by Province (in MW)

POLLUTION CONTROL

39. Emissions in Thousands of Tons Due to Fossil Fuels 1966-1990
40. Projected Urban Expenditures on Solid Waste Treatment
41. Annual Expenditure for Municipal Waste Water Pollution Abatement under Alternate Assumptions: 1966-1981

TABLE 1

CANADA TOTAL, RURAL AND URBAN POPULATION
ESTIMATES AND PROJECTION, 1951-1981
(Millions)

| | <u>Rural</u> | <u>Urban</u> | <u>Total</u> |
|------|--------------|--------------|--------------|
| 1951 | 5.2 | 8.8 | 14.0 |
| 1966 | 5.3 | 14.7 | 20.0 |
| 1981 | 3.7 | 21.7 | 25.4 |

TABLE 2

PERCENTAGE COMPOSITION

| | <u>Rural</u> | <u>Urban</u> |
|------|--------------|--------------|
| 1951 | 37 | 63 |
| 1966 | 26 | 74 |
| 1981 | 15 | 85 |

TABLE 3

GROWTH OF TOTAL, URBAN AND RURAL POPULATION
CANADA AND ITS REGIONS
1966-1981

| | <u>Total</u> | <u>1966 Urban</u> | <u>Rural</u> | <u>Total</u> | <u>1981 Urban</u> | <u>Rural</u> |
|------------------|--------------|-----------------------|--------------|--------------|-----------------------|--------------|
| CANADA | | | | | | |
| Medium | 20.0 | 14.7 | 5.3 | 25.3 | 21.7 | 3.7 |
| % Canada | 100 | 73.6 | 26.4 | 100 | 85.4 | 14.6 |
| High | - | - | - | 27.1 | 23.2 | 3.9 |
| Low | - | - | - | 24.8 | 21.2 | 3.6 |
| ATLANTIC REGION | | | | | | |
| Medium | 2.0 | 1.1 | 0.9 | 2.1 | 1.4 | 0.7 |
| % Canada | 10.0 | 5.5 | 4.5 | 8.3 | 5.5 | 2.8 |
| % Region | 100 | 55.0 | 45.0 | 100 | 66.9 | 33.1 |
| High | - | - | - | 2.3 | 1.5 | 0.8 |
| Low | - | - | - | 2.0 | 1.3 | 0.7 |
| QUEBEC | | | | | | |
| Medium | 5.8 | 4.5 | 1.3 | 7.3 | 6.5 | 0.8 |
| % Canada | 28.9 | 22.5 | 6.5 | 28.6 | 25.7 | 3.2 |
| % Province | 100 | 78.3 | 21.7 | 100 | 89.4 | 10.6 |
| High | - | - | - | 7.6 | 6.8 | 0.8 |
| Low | - | - | - | 7.1 | 6.4 | 0.7 |
| ONTARIO | | | | | | |
| Medium | 7.0 | 5.6 | 1.4 | 9.3 | 8.3 | 1.0 |
| % Canada | 34.8 | 28.0 | 7.0 | 36.8 | 32.8 | 4.0 |
| % Province | 100 | 80.4 | 19.6 | 100 | 89.1 | 10.9 |
| High | - | - | - | 10.1 | 8.9 | 1.2 |
| Low | - | - | - | 9.2 | 8.1 | 1.1 |
| PRAIRIE REGION | 3.4 | 2.1 | 1.3 | 3.9 | 3.1 | 0.8 |
| % Canada | 17.0 | 10.5 | 6.5 | 15.4 | 12.2 | 3.1 |
| % Region | 100 | 61.9 | 38.1 | 100 | 79.6 | 20.4 |
| High | - | - | - | 4.3 | 3.4 | 0.9 |
| Low | - | - | - | 3.8 | 3.0 | 0.8 |
| BRITISH COLUMBIA | | | | | | |
| Medium | 1.9 | 1.4 | 0.5 | 2.8 | 2.4 | 0.4 |
| % Canada | 9.4 | 7.0 | 2.5 | 11.1 | 9.5 | 1.6 |
| % Province | 100 | 75.3 | 24.7 | 100 | 84.4 | 15.6 |
| High | - | - | - | 2.9 | 2.4 | 0.5 |
| Low | - | - | - | 2.7 | 2.3 | 0.4 |

TABLE 4

POPULATION ESTIMATES¹
(in thousands)

| | 1966 | 1975 | 1980 |
|----------------|--------|--------|--------|
| Nfld..... | 493 | 564 | 607 |
| P.E.I..... | 109 | 117 | 122 |
| N.S..... | 756 | 791 | 811 |
| N.B..... | 617 | 651 | 671 |
| Que..... | 5,781 | 6,610 | 7,121 |
| Ont..... | 6,961 | 8,393 | 9,312 |
| Man..... | 963 | 1,044 | 1,092 |
| Sask..... | 955 | 1,008 | 1,038 |
| Alta..... | 1,463 | 1,733 | 1,904 |
| B.C..... | 1,874 | 2,382 | 2,721 |
| Y & N.W.T..... | 43 | 56 | 56 |
| Canada..... | 20,015 | 23,349 | 25,464 |

¹ 1966 DBS. Forecast: NEB Staff Estimate

TABLE 5

PERSONS PER HOUSEHOLD²

| | 1966 | 1975 | 1980 |
|----------------|-------|-------|-------|
| Nfld..... | 5.082 | 4.866 | 4.746 |
| P.E.I..... | 4.360 | 4.252 | 4.192 |
| N.S..... | 4.086 | 3.870 | 3.750 |
| N.B..... | 4.345 | 4.075 | 3.925 |
| Que..... | 4.164 | 3.892 | 3.742 |
| Ont..... | 3.709 | 3.601 | 3.541 |
| Man..... | 3.718 | 3.610 | 3.550 |
| Sask..... | 3.673 | 3.583 | 3.533 |
| Alta..... | 3.713 | 3.623 | 3.573 |
| B.C..... | 3.451 | 3.433 | 3.423 |
| Y & N.W.T..... | 4.778 | 4.508 | 4.358 |
| Canada..... | 3.864 | 3.711 | 3.626 |

² 1966 Derived from DBS Census. Forecast: NEB Staff Estimate

PROJECTED POPULATION FOR CANADA AND THE PROVINCES,
QUINQUENNIALLY 1966-1981
(Medium fertility, 1961-66 Rate of Net Migration)
(000's)

| | 1966* | 1971 | 1976 | 1981 |
|----------------------|--------|--------|--------|--------|
| Canada | 20,015 | 21,656 | 23,399 | 25,362 |
| Newfoundland | 493 | 523 | 551 | 580 |
| Prince Edward Island | 109 | 111 | 113 | 114 |
| Nova Scotia | 756 | 764 | 765 | 763 |
| New Brunswick | 617 | 625 | 628 | 629 |
| Quebec | 5,781 | 6,268 | 6,750 | 7,261 |
| Ontario | 6,961 | 7,679 | 8,449 | 9,333 |
| Manitoba | 963 | 992 | 1,015 | 1,040 |
| Saskatchewan | 955 | 971 | 979 | 988 |
| Alberta | 1,463 | 1,582 | 1,703 | 1,841 |
| British Columbia | 1,874 | 2,140 | 2,446 | 2,813 |

* DBS Census 1966

TABLE 7

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR CANADA

(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 4,526 | 5,008 | 5,609 |
| Marriages | 857 | 1,019 | 1,162 |
| Net Migration of Married Females | 82 | 96 | 116 |
| Deaths of Married Persons | 398 | 439 | 483 |
| Divorces | 59 | 76 | 95 |
| Net Family Formation | 482 | 601 | 699 |
| Final Stock of Families* | 5,008 | 5,609 | 6,308 |
| Family Households* | 4,861 | 5,484 | 6,203 |
| Non-Family Households* | 926 | 1,136 | 1,410 |
| Total Households* | 5,787 | 6,620 | 7,613 |

* Stock at end of period shown.

TABLE 7A

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR NEWFOUNDLAND
(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 97.0 | 104.9 | 114.3 |
| Marriages | 20.5 | 23.1 | 24.4 |
| New Migration of Married Females | -5.3 | -5.8 | -5.9 |
| Deaths of Married Persons | 7.3 | 7.8 | 8.4 |
| Divorces | 0.1 | 0.1 | 0.1 |
| Net Family Formation | 7.9 | 9.4 | 10.0 |
| Final Stock of Families* | 104.9 | 114.3 | 124.3 |
| Family Households* | 97.7 | 107.0 | 117.3 |
| Non-Family Households* | 7.3 | 8.4 | 9.5 |
| Total Households* | 105.0 | 115.4 | 126.9 |

* Stock at end of period shown.

TABLE 7B

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR PRINCE EDWARD ISLAND

(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 22.7 | 22.8 | 23.0 |
| Marriages | 3.5 | 3.8 | 3.9 |
| Net Migration of Married Females | -0.8 | -0.8 | -0.9 |
| Deaths of Married Persons | 2.6 | 2.7 | 2.6 |
| Divorces | 0.1 | 0.1 | 0.1 |
| Net Family Formation | 0.0 | 0.2 | 0.3 |
| Final Stock of Families* | 22.8 | 23.0 | 23.3 |
| Family Households* | 21.9 | 22.2 | 22.6 |
| Non-Family Households* | 3.8 | 4.1 | 4.3 |
| Total Households* | 25.6 | 26.3 | 27.0 |

* Stock at end of period.

TABLE 7C

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR NOVA SCOTIA

(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 166.2 | 169.5 | 173.6 |
| Marriages | 29.6 | 31.7 | 32.4 |
| Net Migration of Married Females | -8.0 | -8.2 | -7.8 |
| Deaths of Married Persons | 16.2 | 16.8 | 17.7 |
| Divorces | 2.2 | 2.6 | 3.0 |
| Net Family Formation | 3.2 | 4.1 | 4.0 |
| Final Stock of Families* | 169.5 | 173.6 | 177.6 |
| Family Households* | 162.9 | 168.2 | 173.2 |
| Non-Family Households* | 28.0 | 31.0 | 34.2 |
| Total Households* | 190.9 | 199.2 | 207.4 |

* Stock at end of period.

TABLE 7D

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR NEW BRUNSWICK
(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 129.3 | 135.4 | 141.8 |
| Marriages | 25.9 | 27.8 | 28.0 |
| Net Migration of Married Females | -7.2 | -7.6 | -7.1 |
| Deaths of Married Persons | 11.8 | 12.6 | 13.3 |
| Divorces | 0.9 | 1.1 | 1.3 |
| Net Family Formation | 6.0 | 6.5 | 6.3 |
| Final Stock of Families* | 135.4 | 141.8 | 148.1 |
| Family Households* | 130.4 | 137.6 | 144.5 |
| Non-Family Households* | 19.4 | 22.0 | 24.8 |
| Total Households* | 149.8 | 159.5 | 169.3 |

* Stock at end of period shown.

TABLE 7E

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR QUEBEC

(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 1229.3 | 1394.1 | 1587.3 |
| Marriages | 260.5 | 302.3 | 336.4 |
| Net Migration of Married Females | 12.1 | 13.1 | 14.6 |
| Deaths of Married Persons | 102.2 | 115.4 | 129.8 |
| Divorces | -5.5 | 6.8 | 8.2 |
| Net-Family Formation | 164.8 | 193.2 | 213.1 |
| Final Stock of Families* | 1394.1 | 1587.3 | 1800.4 |
| Family Households* | 1363.4 | 1563.2 | 1781.8 |
| Non-Family Households* | 234.2 | 304.2 | 393.9 |
| Total Households* | 1597.6 | 1867.4 | 2175.7 |

*Stock at end of period.

TABLE 7F

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR ONTARIO
(in Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 1657.9 | 1852.0 | 2099.6 |
| Marriages | 299.5 | 367.6 | 432.3 |
| Net Migration of Married Females | 69.2 | 78.2 | 88.1 |
| Deaths of Married Persons | 150.8 | 167.0 | 184.8 |
| Divorces | 23.9 | 31.2 | 39.7 |
| Net Family Formation | 194.1 | 247.6 | 295.8 |
| Final Stock of Families* | 1852.0 | 2099.6 | 2395.5 |
| Family Households* | 1788.8 | 2046.6 | 2351.7 |
| Non-Family Households* | 333.1 | 412.8 | 516.7 |
| Total Households* | 2121.9 | 2459.3 | 2868.4 |

* Stock at end of period.

TABLE 7G

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR MANITOBA
(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 222.7 | 232.4 | 245.5 |
| Marriages | 38.5 | 43.5 | 46.6 |
| Net Migration of Married Females | -6.1 | -6.0 | -6.0 |
| Deaths of Married Persons | 19.8 | 21.0 | 22.1 |
| Divorces | 2.9 | 3.5 | 4.1 |
| Net Family Formation | 9.7 | 13.0 | 14.4 |
| Final Stock of Families* | 232.4 | 245.5 | 259.9 |
| Family Households* | 226.6 | 240.5 | 255.9 |
| Non-Family Households* | 47.2 | 55.5 | 65.6 |
| Total Households* | 273.8 | 296.0 | 321.5 |

* Stock at end of period shown.

TABLE 7H

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR SASKATCHEWAN

(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 216.7 | 219.5 | 225.1 |
| Marriages | 34.8 | 38.6 | 40.9 |
| Net Migration of Married Females | -10.3 | -10.3 | -10.1 |
| Deaths of Married Persons | 19.8 | 20.5 | 21.2 |
| Divorces | 1.8 | 2.2 | 2.5 |
| Net Family Formation | 2.8 | 5.6 | 7.0 |
| Final Stock of Families* | 219.5 | 225.1 | 232.1 |
| Family Households* | 216.3 | 222.3 | 229.9 |
| Non-Family Households* | 49.7 | 53.9 | 59.5 |
| Total Households* | 266.0 | 276.3 | 289.4 |

* Stock at end of period shown.

TABLE 7I

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR ALBERTA

(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 331.2 | 364.7 | 407.6 |
| Marriages | 64.8 | 78.2 | 91.1 |
| Net Migration of Married Females | 2.8 | 3.6 | 4.5 |
| Deaths of Married Persons | 25.1 | 27.5 | 30.2 |
| Divorces | 9.0 | 11.4 | 14.1 |
| Net Family Formation | 33.5 | 42.9 | 51.3 |
| Final Stock of Families* | 364.7 | 407.6 | 458.8 |
| Family Households* | 358.6 | 402.4 | 454.7 |
| Non-Family Households* | 76.8 | 88.6 | 104.8 |
| Total Households* | 435.4 | 491.0 | 559.5 |

* Stock at end of period shown.

TABLE 7J

PROJECTED FAMILY AND HOUSEHOLD FORMATION FOR BRITISH COLUMBIA
(In Thousands)

| | 1966-71 | 1971-76 | 1976-81 |
|-------------------------------------|---------|---------|---------|
| Initial Stock of Families | 445.3 | 505.0 | 583.3 |
| Marriages | 79.8 | 102.3 | 125.4 |
| Net Migration of Married Females | 35.1 | 40.3 | 46.6 |
| Deaths of Married Persons | 42.7 | 47.4 | 53.1 |
| Divorces | 12.5 | 16.9 | 22.2 |
| Net Family Formation | 59.7 | 78.3 | 96.7 |
| Final Stock of Families* | 505.0 | 583.3 | 80.0 |
| Family Households* | 494.7 | 573.9 | 671.7 |
| Non-Family Households* | 126.4 | 155.9 | 196.2 |
| Total Households* | 621.1 | 729.7 | 868.0 |

*Stock at end of period shown.

TABLE 8

- 21 -

PROJECTED POPULATION FOR SELECTED CENSUS METROPOLITAN
AREAS, QUINQUENNIALY 1966-1981

(Medium fertility, 1961-1966 net migration rate)

| Census Metropol- itan Area | 1966 | 1971 | 1976 | 1981 |
|-------------------------------|-------|-------|-------|-------|
| Calgary | 331 | 386 | 445 | 511 |
| Edmonton | 401 | 471 | 546 | 630 |
| Halifax | 198 | 211 | 224 | 239 |
| Hamilton | 449 | 505 | 564 | 628 |
| London | 205 | 230 | 258 | 290 |
| Montreal | 2,437 | 2,784 | 3,145 | 3,528 |
| Ottawa | 495 | 562 | 634 | 711 |
| Quebec | 413 | 473 | 536 | 602 |
| Regina | 131 | 151 | 172 | 195 |
| Toronto | 2,158 | 2,531 | 2,926 | 3,354 |
| Vancouver | 892 | 1,003 | 1,121 | 1,250 |
| Windsor | 212 | 229 | 247 | 266 |
| Winnipeg | 509 | 537 | 567 | 599 |

TABLE 9

TABLE 13 - 15
PERCENTAGE GROWTH IN POPULATION

| | 1971 | - | 1981 | |
|-------------|-----------|-----------|-----------|------------|
| <hr/> | | | | |
| METHOD: | | | | |
| | <u>N1</u> | <u>N4</u> | <u>N5</u> | <u>SRG</u> |
| Calgary | 45.4 | 28.5 | 21.4 | 32.9 |
| Edmonton | 45.1 | 31.0 | 28.5 | 34.5 |
| Hamilton | 52.1 | 28.7 | 20.1 | 24.6 |
| London | 50.1 | 32.9 | 27.3 | 26.5 |
| Montreal | 50.2 | 28.4 | 19.7 | 27.2 |
| Ottawa | 42.3 | 33.3 | 33.7 | 26.9 |
| Quebec City | 46.8 | 33.4 | 33.7 | 27.7 |
| Regina | 44.5 | 30.6 | 26.6 | 29.1 |
| Toronto | 50.2 | 29.6 | 19.9 | 32.9 |
| Vancouver | 49.4 | 32.6 | 27.6 | 25.1 |
| Windsor | 51.3 | 30.5 | 26.0 | 16.6 |
| Winnipeg | 47.1 | 28.9 | 20.8 | 11.7 |

PROJECTED YEAR 1967 OUTPUT
DOUBLED, TRIPLED AND QUADRUPLD BY INDUSTRY
1967-2000

| | <u>Year Industry Output</u> | | |
|----------------|-----------------------------|----------------|-------------------|
| | <u>Doubled</u> | <u>Tripled</u> | <u>Quadrupled</u> |
| Utilities | 1976 | 1981 | 1985 |
| Manufacturing | 1979 | 1986 | 1991 |
| Transportation | 1980 | 1988 | 1993 |
| Construction | 1984 | 1994 | 2000 |
| Mining | 1979 | 1985 | 1990 |
| Agriculture | 1996 | - | - |
| Forestry | 1984 | 1995 | - |

TABLE 11

PROJECTED PRODUCTION BY SELECTED INDUSTRIES
1967 and 1980
(Billions-\$ 1967)

| | <u>1967</u> <u>Actual</u> | <u>1980</u> <u>Medium Estimate</u> |
|----------------|------------------------------|---------------------------------------|
| Manufacturing | 14.5 | 31.1 |
| Mining | 2.3 | 5.1 |
| Construction | 3.8 | 8.1 |
| Utilities | 1.6 | 4.3 |
| Transportation | 5.2 | 10.4 |
| Agriculture | 2.3 | 3.2 |
| Forestry | 0.6 | 0.9 |

TABLE 12

LABOUR FORCE FORECASTS

METHOD N-1

| | 1971 | | 1981 | |
|-----------|----------|----------|----------|----------|
| | <u>M</u> | <u>F</u> | <u>M</u> | <u>F</u> |
| Calgary | 12.1 | 5.1 | 19.5 | 8.0 |
| Edmonton | 14.4 | 6.4 | 23.1 | 10.1 |
| Hamilton | 17.9 | 6.9 | 30.0 | 11.2 |
| London | 7.8 | 3.9 | 12.7 | 6.3 |
| Montreal | 91.8 | 38.3 | 151.0 | 63.5 |
| Ottawa | 17.4 | 8.4 | 27.4 | 13.1 |
| Quebec | 13.7 | 6.4 | 22.0 | 10.2 |
| Regina | 4.8 | 2.5 | 7.8 | 3.9 |
| Toronto | 85.5 | 41.5 | 140.2 | 66.4 |
| Vancouver | 32.6 | 14.1 | 52.8 | 22.3 |
| Windsor | 8.1 | 3.1 | 13.6 | 5.0 |
| Winnipeg | 20.7 | 10.2 | 33.7 | 16.3 |

TABLE 13

LABOUR FORCE FORECASTS

METHOD
N-4

| | 1971 | | 1981 | |
|-----------|------|------|------|------|
| | M | F | M | F |
| Calgary | 10.0 | 7.0 | 13.4 | 7.0 |
| Edmonton | 12.0 | 8.1 | 16.3 | 9.3 |
| Hamilton | 14.1 | | 18.7 | 9.3 |
| London | 6.5 | 3.7 | 8.8 | 5.5 |
| Montreal | 74.3 | 34.5 | 99.9 | 50.9 |
| Ottawa | 15.4 | 8.2 | 21.7 | 12.6 |
| Quebec | 11.6 | 6.1 | 15.9 | 9.4 |
| Regina | 4.1 | 2.4 | 5.5 | 3.5 |
| Toronto | 69.8 | 37.1 | 94.3 | 54.2 |
| Vancouver | 26.9 | 13.2 | 36.4 | 19.9 |
| Windsor | 6.5 | 2.9 | 8.7 | 4.4 |
| Winnipeg | 16.9 | 9.4 | 22.5 | 14.0 |

TABLE 14

LABOUR FORCE FORECASTS

METHOD N-5

| | 1971 | | 1981 | |
|-----------|------|------|------|------|
| | M | F | M | F |
| Calgary | 9.7 | 4.3 | 12.7 | 5.9 |
| Edmonton | 11.9 | 5.9 | 16.2 | 8.7 |
| Hamilton | 13.5 | 9.8 | 17.1 | 7.8 |
| London | 8.4 | 3.4 | 8.9 | 4.7 |
| Montreal | 72.7 | 31.0 | 95.5 | 40.4 |
| Ottawa | 16.2 | 8.0 | 23.7 | 11.8 |
| Quebec | 11.7 | 6.1 | 16.4 | 9.3 |
| Regina | 4.0 | 2.3 | 5.3 | 3.3 |
| Toronto | 68.8 | 32.7 | 91.5 | 41.3 |
| Vancouver | 26.4 | 12.4 | 35.4 | 17.4 |
| Windsor | 6.3 | 2.8 | 8.3 | 4.0 |
| Winnipeg | 16.3 | 8.7 | 21.2 | 11.7 |

TABLE 15

HOUSEHOLDS OR OCCUPIED DWELLINGS¹
(in thousands)

| | 1966 | 1975 | 1980 |
|-----------------|---------|---------|---------|
| Nfld..... | 97.0 | 115.8 | 128.0 |
| P.E.I..... | 25.0 | 27.5 | 29.1 |
| N.S..... | 185.0 | 204.3 | 216.2 |
| N.B..... | 142.0 | 159.8 | 170.9 |
| Que..... | 1,389.0 | 1,698.3 | 1,902.9 |
| Ont..... | 1,877.0 | 2,330.7 | 2,629.7 |
| Man..... | 259.0 | 289.2 | 307.5 |
| Sask..... | 260.0 | 281.3 | 293.9 |
| Alta..... | 394.0 | 478.3 | 532.9 |
| B.C..... | 543.0 | 693.8 | 795.0 |
| Y. & N.W.T..... | 9.0 | 12.4 | 14.9 |
| Canada..... | 5,180.0 | 6,291.4 | 7,021.0 |

¹ 1966 DBS Census. Forecast: NEB Staff Estimate

TABLE 16

NUMBER OF APARTMENTS²
(in thousands)

| | 1966 | 1975 | 1980 |
|-----------------|---------|---------|---------|
| Nfld..... | 9.0 | 14.7 | 18.3 |
| P.E.I..... | 3.0 | 3.8 | 4.2 |
| N.S..... | 31.0 | 36.8 | 40.3 |
| N.B..... | 29.0 | 34.3 | 37.7 |
| Que..... | 719.0 | 904.6 | 1,027.4 |
| Ont..... | 453.0 | 679.9 | 829.5 |
| Man..... | 48.0 | 60.1 | 67.4 |
| Sask..... | 34.0 | 41.4 | 45.9 |
| Alta..... | 75.0 | 112.9 | 137.5 |
| B.C..... | 114.0 | 189.4 | 240.0 |
| Y. & N.W.T..... | 1.0 | 2.0 | 2.8 |
| Canada..... | 1,516.0 | 2,079.9 | 2,451.0 |

² 1966 DBS Census. Forecast: NEB Staff Estimate

TABLE 17

NUMBER OF SINGLE, DOUBLE AND¹
ROWHOUSING UNITS
(in thousands)

| | 1966 | 1975 | 1980 |
|-----------------|---------|---------|---------|
| Nfld..... | 88.0 | 101.1 | 109.7 |
| P.E.I..... | 22.0 | 23.7 | 24.9 |
| N.S..... | 154.0 | 167.5 | 175.9 |
| N.B..... | 113.0 | 125.5 | 133.2 |
| Que..... | 670.0 | 793.7 | 875.5 |
| Ont..... | 1,424.0 | 1,650.8 | 1,800.2 |
| Man..... | 211.0 | 229.1 | 240.1 |
| Sask..... | 226.0 | 239.9 | 248.0 |
| Alta..... | 319.0 | 365.4 | 395.4 |
| B.C..... | 429.0 | 504.4 | 555.0 |
| Y. & N.W.T..... | 8.0 | 10.4 | 12.1 |
| Canada..... | 3,664.0 | 4,211.5 | 4,570.0 |

¹1966 DBS Census, Forecast: NEB Staff Estimate.

TABLE 18

APARTMENT RATIO²

| | 1966 | 1975 | 1980 |
|-----------------|-------|-------|-------|
| Nfld..... | 9.28 | 12.65 | 14.29 |
| P.E.I..... | 12.00 | 13.66 | 14.52 |
| N.S..... | 16.75 | 18.01 | 18.66 |
| N.B..... | 20.42 | 21.48 | 22.04 |
| Que..... | 51.76 | 53.26 | 53.99 |
| Ont..... | 24.14 | 29.17 | 31.54 |
| Man..... | 18.53 | 20.77 | 21.92 |
| Sask..... | 13.08 | 14.73 | 15.61 |
| Alta..... | 19.03 | 23.61 | 25.80 |
| B.C..... | 20.99 | 27.30 | 30.19 |
| Y. & N.W.T..... | 11.11 | 16.34 | 18.61 |
| Canada..... | 29.27 | 33.06 | 34.91 |

²Tables 3,4.

TABLE 19

FORECAST HOUSING DEMAND, METROPOLITAN AREAS
1971-1981

| Metropolitan Area | Type of Demand | Forecast Additions to Housing Stock (thousands) | |
|----------------------|-------------------|--|----------------|
| | | <u>1961-71</u> | <u>1971-81</u> |
| Halifax | Family | | |
| | <u>Non-Family</u> | n/a | n/a |
| | Total | | |
| Quebec | Family | 27.0 | 36.3 |
| | <u>Non-Family</u> | <u>11.9</u> | <u>16.7</u> |
| | Total | 38.9 | 53.0 |
| Montreal | Family | 170.1 | 238.6 |
| | <u>Non-Family</u> | <u>95.3</u> | <u>123.1</u> |
| | Total | 265.4 | 361.7 |
| Ottawa | Family | 32.8 | 43.1 |
| | <u>Non-Family</u> | <u>16.5</u> | <u>22.3</u> |
| | Total | 49.3 | 65.4 |
| Toronto | Family | 170.5 | 234.2 |
| | <u>Non-Family</u> | <u>60.9</u> | <u>84.6</u> |
| | Total | 231.4 | 318.8 |
| Windsor | Family | 7.4 | 14.4 |
| | <u>Non-Family</u> | <u>3.8</u> | <u>4.6</u> |
| | Total | 11.2 | 19.0 |
| Winnipeg | Family | 18.0 | 19.1 |
| | <u>Non-Family</u> | <u>14.7</u> | <u>15.6</u> |
| | Total | 32.7 | 34.7 |
| Regina | Family | 7.8 | 12.6 |
| | <u>Non-Family</u> | <u>6.3</u> | <u>8.1</u> |
| | Total | 14.1 | 20.7 |
| Edmonton | Family | | |
| | <u>Non-Family</u> | n/a | n/a |
| | Total | | |
| Calgary | Family | | |
| | <u>Non-Family</u> | n/a | n/a |
| | Total | | |
| Vancouver | Family | 50.9 | 69.7 |
| | <u>Non-Family</u> | <u>42.3</u> | <u>54.4</u> |
| | Total | 93.2 | 124.1 |
| Total MTV* | Family | 391.5 | 542.5 |
| | <u>Non-Family</u> | <u>198.5</u> | <u>262.1</u> |
| | Total | 589.0 | 804.6 |

* Montreal, Toronto, Vancouver

TABLE 20

RESIDENTIAL LAND REQUIREMENTS 1971-81¹

| | <u>Land Acreage by Dwelling Type</u> | | | | |
|------------------|--------------------------------------|----------------|-----------------|----------------|--------------|
| | <u>TYPE I</u> | <u>TYPE II</u> | <u>TYPE III</u> | <u>TYPE IV</u> | <u>TOTAL</u> |
| Canada | 215,967 | 10,807 | 4,445 | 24,184 | 255,403 |
| PROVINCES | | | | | |
| Newfoundland | 3,361 | 47 | 36 | 25 | 3,469 |
| P.E.I. | 706 | 29 | 15 | 8 | 758 |
| Nova Scotia | 3,989 | 107 | 40 | 159 | 3,295 |
| New Brunswick | 3,115 | 87 | 45 | 95 | 3,342 |
| Quebec | 46,623 | 3,597 | 536 | 7,233 | 57,989 |
| Ontario | 87,843 | 5,005 | 2,799 | 10,625 | 106,272 |
| Manitoba | 5,207 | 168 | 119 | 423 | 5,917 |
| Saskatchewan | 4,346 | 137 | 13 | 164 | 4,660 |
| Alberta | 19,671 | 594 | 331 | 1,451 | 22,047 |
| British Columbia | 42,106 | 1,036 | 511 | 4,001 | 47,654 |
| CITIES | | | | | |
| Calgary | 4,526 | 266 | 58 | 410 | 5,260 |
| Edmonton | 4,533 | 94 | 135 | 502 | 5,264 |
| Halifax | 456 | 56 | 16 | 103 | 631 |
| Hamilton | 6,079 | 89 | 181 | 804 | 7,153 |
| London | 3,112 | 154 | 173 | 395 | 3,834 |
| Montreal | 17,132 | 2,460 | 355 | 5,752 | 25,699 |
| Ottawa-Hull | 6,266 | 484 | 512 | 866 | 8,128 |
| Quebec City | 4,157 | 153 | 30 | 547 | 4,887 |
| Saint John | 474 | 26 | 8 | 23 | 531 |
| St. John's | 635 | 28 | 15 | 11 | 689 |
| Toronto | 19,600 | 2,454 | 1,111 | 5,952 | 29,117 |
| Vancouver | 17,156 | 311 | 181 | 2,971 | 20,619 |
| Victoria | 3,863 | 123 | 35 | 550 | 4,571 |
| Winnipeg | 3,280 | 172 | 86 | 430 | 3,968 |

1. Joseph H. Chung, "Land and Low Income Housing", Low Income Housing Research Group Report, 1971, Table II.

Dwelling Types: I - single or semi-detached; II - duplex or triplex; III - row house; IV - apartment.

PROJECTED COST* OF LAND IN 1981 IN MAJOR¹
CANADIAN CITIES
(In dollars per frontage foot)

| | <u>1970 Price</u> | <u>Residual</u> | <u>1981 Price</u> | <u>% Increase</u> |
|------------|-------------------|-----------------|-------------------|-------------------|
| | \$ | \$ | \$ | |
| Calgary | 105 | -3 | 167 | + 59 |
| Edmonton | 136 | 28 | 200 | + 47 |
| Halifax | 109 | 28 | 169 | + 55 |
| Hamilton | 207 | 75 | 287 | + 39 |
| London | 80 (1967) | -23 | 174 | + 118 |
| Montreal | 40 (1967) | -95 | 191 | + 378 |
| Ottawa | 102 (1967) | -20 | 199 | + 95 |
| Quebec | 54 | -13 | 117 | + 117 |
| Saint John | 38 | -28 | 81 | + 113 |
| St. John's | 106 | 35 | 174 | + 64 |
| Toronto | 321 | 73 | 448 | + 40 |
| Vancouver | 168 | 34 | 322 | + 92 |
| Victoria | 71 | 15 | 219 | + 208 |
| Winnipeg | 88 | -22 | 155 | + 76 |

1. Ibid., Table XII.

(Research Group calculations and CMHC statistics)

TABLE 22

RESIDENTIAL LAND REQUIREMENTS FOR LOW-INCOME¹
HOUSING, 1971-81

| | <u>Land Acreage</u> |
|------------------|---------------------|
| Canada | 32,582 |
| REGIONS | |
| Maritimes | 3,150 |
| Quebec | 9,278 |
| Ontario | 12,753 |
| Prairies | 3,589 |
| British Columbia | 3,812 |
| CITIES | |
| Calgary | 473 |
| Edmonton | 526 |
| Halifax | 183 |
| Hamilton | 858 |
| London | 192 |
| Montreal | 3,341 |
| Ottawa | 894 |
| Quebec | 684 |
| Saint John | 165 |
| St. John's | 165 |
| Toronto | 3,785 |
| Vancouver | 1,237 |
| Victoria | 320 |
| Winnipeg | 476 |

1. Ibid., Table IIB.

TABLE 23

URBAN TRANSPORT FORECASTS¹

FORECASTS OF CAR OWNERSHIP AND
CAR MILEAGE IN CANADA, 1970 TO 1980
(ECC Medium Population Forecast)²

| | <u>Estimates of Car Ownership per head</u> | <u>Total Car Population (millions)</u> | <u>Estimated Car Mileage (billions)</u> | <u>Rate of Increase over the Decade</u> |
|------|--|--|---|---|
| 1970 | 0.23 Quebec and Atlantic | 7.0 | 67 | 60% |
| | 0.37 Rest of Canada | | | |
| 1980 | 0.38 Quebec and Atlantic | 11.0 | 107 | |
| | 0.45 Rest of Canada | | | |

TABLE 24

VEHICLE MILEAGE BY COMMERCIAL
VEHICLES
(Vehicle Mileage, Billions)

| | <u>Urban</u> | <u>Inter-City and Rural</u> | <u>Total</u> |
|------|--------------|---------------------------------|--------------|
| 1970 | 4 | 13 | 17 |
| 1980 | 6 | 19 | 25 |

TABLE 25

ESTIMATES OF DEMAND FOR ROAD
FACILITIES
(Billions of Vehicle Miles per Annum)

| <u>Mode</u> | <u>Urban</u> | | <u>Rural</u> | |
|---------------------|--------------|-------------|--------------|-------------|
| | <u>1970</u> | <u>1980</u> | <u>1970</u> | <u>1980</u> |
| Car | 38 | 61 | 29 | 46 |
| Truck | 4 | 6 | 13 | 19 |
| Bus | 0.2 | 0.2 | 0.1 | 0.2 |
| Other Road Vehicles | <u>2</u> | <u>3</u> | <u>2</u> | <u>3</u> |
| Total | 44 | 70 | 44 | 68 |

1. Adapted from N.M. Lithwick, Urban Policy Paper, Chapter 14, "Urbanism in the Unconstrained Future: Problems and Prospects".
2. 1970 population 21.3 M
1980 population 25.1 M

TABLE 26

AUTOMOBILE STOCK¹
(in thousands)

| | 1966 | 1975 | 1980 |
|-------------------------|-------|-------|-------|
| Newfoundland..... | 75 | 125 | 162 |
| Maritime Provinces..... | 346 | 495 | 568 |
| Quebec..... | 1,186 | 1,910 | 2,374 |
| Ontario..... | 2,235 | 3,144 | 3,624 |
| Manitoba..... | 270 | 370 | 412 |
| Saskatchewan..... | 273 | 360 | 420 |
| Alberta..... | 445 | 633 | 732 |
| British Columbia..... | 665 | 927 | 1,088 |
| Yukon & N.W.T..... | 6 | 13 | 24 |
| Canada..... | 5,498 | 7,977 | 9,371 |

¹ DBS The Motor Vehicle, Part III. NEB Staff Estimate

TABLE 27

PERSONS PER AUTOMOBILE¹

| | 1966 | 1975 | 1980 |
|-------------------------|------|------|------|
| Newfoundland..... | 6.85 | 4.50 | 3.75 |
| Maritime Provinces..... | 4.28 | 3.15 | 2.82 |
| Quebec..... | 4.87 | 3.46 | 3.00 |
| Ontario..... | 3.11 | 2.67 | 2.57 |
| Manitoba..... | 3.57 | 2.82 | 2.65 |
| Saskatchewan..... | 3.50 | 2.80 | 2.64 |
| Alberta..... | 3.29 | 2.74 | 2.60 |
| British Columbia..... | 2.82 | 2.57 | 2.50 |
| Yukon & N.W.T..... | 6.72 | 4.40 | 3.70 |
| Canada..... | 3.64 | 2.93 | 2.72 |

¹ Tables "Population Estimates" and "Automobile Stock"

TABLE 28

PRIVATE AUTOMOBILES-FIRST CARS¹
(in thousands)

| | 1966 | 1975 | 1980 |
|-------------------------|-------|-------|-------|
| Newfoundland..... | 49 | 79 | 100 |
| Maritime Provinces..... | 247 | 310 | 333 |
| Quebec..... | 848 | 1,274 | 1,427 |
| Ontario..... | 1,458 | 1,807 | 2,038 |
| Manitoba..... | 191 | 231 | 246 |
| Saskatchewan..... | 199 | 239 | 250 |
| Alberta..... | 298 | 383 | 426 |
| British Columbia..... | 417 | 555 | 636 |
| Yukon & N.W.T..... | 4 | 7 | 10 |
| Canada..... | 3,711 | 4,885 | 5,466 |
| % of Stock..... | 67.5 | 61.2 | 58.3 |

¹DBS Household Facilities and Equipment, NEB Staff Estimate.

TABLE 29

PRIVATE AUTOMOBILE-SECOND CARS¹
(in thousands)

| | 1966 | 1975 | 1980 |
|-------------------------|------|-------|-------|
| Newfoundland..... | 6 | 16 | 24 |
| Maritime Provinces..... | 32 | 86 | 121 |
| Quebec..... | 86 | 247 | 472 |
| Ontario..... | 315 | 708 | 861 |
| Manitoba..... | 37 | 81 | 102 |
| Saskatchewan..... | 33 | 67 | 84 |
| Alberta..... | 66 | 135 | 173 |
| British Columbia..... | 123 | 198 | 247 |
| Yukon & N.W.T..... | 1 | 3 | 5 |
| Canada..... | 699 | 1,541 | 2,089 |
| % of Stock..... | 12.7 | 19.3 | 22.3 |

¹ DBS Household Facilities and Equipment.
NEB Staff Estimate.

TABLE 30

DEMAND FOR ROAD INVESTMENT
IN CANADA
(1970 Prices, \$ Billion)

| | <u>1970-1980</u> | <u>1980-1990</u> | <u>Total</u> |
|----------------------------------|------------------|------------------|--------------|
| Urban Investment | 6 | 4 | 10 |
| Expansion of inter-city arteries | 4 | 3 | 7 |
| Upgrading of rural road system | <u>3</u> | <u>3</u> | <u>6</u> |
| Total | 13 | 10 | 23 |

TABLE 31

TOTAL DEMAND FOR HIGHWAY
EXPENDITURE 1970-1990
(\$ Billion, 1970 Prices)

| <u>Item</u> | <u>1970-1980</u> | <u>1980-1990</u> | <u>Total</u> |
|---|------------------|------------------|--------------|
| Total investment demand | 13 | 10 | 23 |
| Demand for maintenance and administration | <u>7</u> | <u>10</u> | <u>17</u> |
| Total | 20 | 20 | 40 |

TABLE 32

DEMAND FOR ROAD EXPENDITURE
IN URBAN AREAS, 1970-1990
(\$ Billion, 1970 Prices)

| | <u>1970-1980</u> | <u>1980-1990</u> | <u>Total</u> |
|--|------------------|------------------|--------------|
| Urban investment demand | 6 | 4 | 10 |
| Demand for maintenance and administration in urban areas | <u>2</u> | <u>3</u> | <u>5</u> |
| Total | 8 | 7 | 15 |

TABLE 33

RESIDENTIAL SPACE-HEATING ALLOCATION*, CANADA

| | 1966 | 1975 | 1980 |
|--------------------|---------|---------|---------|
| Apartments -- | | | |
| Coal..... | 165.6 | 82.5 | 48.8 |
| Oil..... | 1,022.2 | 1,100.0 | 1,137.4 |
| Gas..... | 299.0 | 724.4 | 997.3 |
| Electric..... | 29.2 | 173.0 | 267.5 |
| Total..... | 1,516.0 | 2,079.9 | 2,451.0 |
| Other Dwellings-- | | | |
| Coal..... | 96.8 | 25.8 | 3.9 |
| Oil..... | 2,041.4 | 2,084.2 | 2,086.4 |
| Gas..... | 1,070.2 | 1,536.1 | 1,826.9 |
| Electric..... | 56.8 | 243.9 | 365.9 |
| Wood..... | 331.8 | 219.6 | 165.6 |
| Other..... | 67.0 | 101.9 | 121.3 |
| Total..... | 3,664.0 | 4,211.5 | 4,570.0 |
| All Dwellings-- | | | |
| Coal..... | 262.4 | 108.3 | 52.7 |
| Oil..... | 3,063.6 | 3,184.2 | 3,223.8 |
| Gas..... | 1,369.2 | 2,260.5 | 2,824.2 |
| Electric..... | 86.0 | 416.9 | 633.4 |
| Wood..... | 331.8 | 219.6 | 165.6 |
| Other..... | 67.0 | 101.9 | 121.3 |
| Total..... | 5,180.0 | 6,291.4 | 7,021.0 |
| Distribution --%-- | | | |
| Coal..... | 5.1 | 1.7 | 0.8 |
| Oil..... | 59.1 | 50.7 | 45.9 |
| Gas..... | 26.4 | 35.9 | 40.2 |
| Electric..... | 1.7 | 6.6 | 9.0 |
| Wood..... | 6.4 | 3.5 | 2.4 |
| Other..... | 1.3 | 1.6 | 1.7 |

*Provincial or Regional data may not add due to rounding.

¹ NEB Staff Estimate

TABLE 34

RESIDENTIAL AND COMMERCIAL FUEL DEMAND, CANADA¹
(in Btu 10¹²)

| | 1966 | 1975 | 1980 |
|-------------------------------------|---------|---------|---------|
| Residential | | | |
| Coal..... | 37.2 | 14.7 | 6.3 |
| Oil..... | 440.1 | 460.4 | 467.6 |
| Gas..... | 211.2 | 329.5 | 403.5 |
| Electric..... | 4.9 | 23.8 | 35.8 |
| Wood..... | 62.8 | 41.4 | 31.3 |
| Other..... | 10.6 | 16.1 | 19.2 |
| Total..... | 766.8 | 885.9 | 963.7 |
| Commercial | | | |
| Coal..... | 36.0 | 12.7 | 5.5 |
| Oil..... | 304.1 | 373.4 | 416.3 |
| Gas..... | 99.8 | 200.1 | 264.6 |
| Total..... | 439.9 | 586.2 | 686.4 |
| Residential & Commercial | | | |
| Coal..... | 73.2 | 27.4 | 11.8 |
| Oil..... | 744.2 | 833.8 | 883.9 |
| Gas..... | 311.0 | 529.6 | 668.1 |
| Electric..... | 4.9 | 23.8 | 35.8 |
| Wood..... | 62.8 | 41.4 | 31.3 |
| Other..... | 10.6 | 16.1 | 19.2 |
| Total..... | 1,206.7 | 1,472.1 | 1,650.1 |
| Commercial Demand Ratio - %..... | 36.5 | 39.8 | 41.6 |

¹ NEB Staff Estimate

TABLE 35

RESIDENTIAL AND COMMERCIAL FUEL CONSUMPTION, CANADA¹

| | 1966 | 1975 | 1980 |
|--------------------------------|---------|---------|---------|
| COAL -- (MTons)..... | 2,800 | 1,038 | 451 |
| OIL -- (MBbls.) | | | |
| Kerosene..... | 16,941 | 15,870 | 15,340 |
| Diesel..... | 7,531 | 9,860 | 11,540 |
| Light..... | 72,193 | 80,400 | 84,540 |
| Heavy..... | 29,131 | 34,580 | 37,630 |
| Total..... | 125,796 | 140,710 | 149,050 |
| OIL -- (Btu 10 ¹²) | | | |
| Kerosene..... | 96.2 | 90.2 | 87.2 |
| Diesel..... | 44.0 | 57.5 | 67.3 |
| Light..... | 420.7 | 468.5 | 492.6 |
| Heavy..... | 183.3 | 217.6 | 236.8 |
| Total..... | 744.2 | 833.8 | 883.9 |
| GAS -- (Bcf)..... | 311.0 | 529.6 | 668.1 |
| ELECTRICITY* | | | |
| (GWH)..... | 1,487 | 6,945 | 10,506 |

* Residential space-heating only

¹ NEB Staff Estimate

TABLE 36

TRANSPORTATION FUEL CONSUMPTION, CANADA¹

| | 1966 | 1975 | 1980 |
|--------------------------|---------|----------------------------|---------|
| Automobile..... | 99,085 | 146,620 | 173,510 |
| Motor Gasoline..... | 99,085 | 146,620 | 173,510 |
| Commercial..... | 41,881 | 62,410 | 78,220 |
| Motor Gasoline..... | 37,057 | 55,490 | 69,780 |
| Diesel Fuel..... | 4,824 | 6,920 | 8,440 |
| Rail..... | 11,307 | 15,590 | 18,660 |
| Diesel Fuel..... | 11,307 | 15,590 | 18,660 |
| Marine..... | 16,309 | 21,670 | 25,390 |
| Diesel Fuel..... | 5,009 | 7,980 | 10,250 |
| Heavy Fuel..... | 11,300 | 13,690 | 15,140 |
| Aviation..... | 11,840 | 25,780 | 39,720 |
| Aviation Gasoline.... | 1,773 | 1,440 | 1,290 |
| Turbo Fuel..... | 10,067 | 24,340 | 38,430 |
| Total Oil..... | 180,422 | 272,070 | 335,500 |
| Total Coal (M Tons)..... | 556 | 180 | 80 |
| | | (in Btu 10 ¹²) | |
| Motor Gasoline..... | 710.9 | 1,055.5 | 1,270.3 |
| Diesel Fuel..... | 122.5 | 177.1 | 216.4 |
| Heavy Fuel..... | 71.2 | 86.2 | 95.2 |
| Aviation Gasoline..... | 9.0 | 7.5 | 6.7 |
| Turbo Fuel..... | 54.4 | 131.9 | 208.1 |
| Total..... | 968.0 | 1,458.2 | 1,796.7 |
| Coal..... | 13.5 | 4.7 | 2.1 |
| Total Transport..... | 981.5 | 1,462.9 | 1,798.8 |

¹ DBS Refined Petroleum Products, Vol.II, NEB Staff Estimate

TABLE 37

ELECTRICITY DEMAND AND SUPPLY, CANADA¹
(in GWH)

| | 1966 | 1975 | 1980 |
|--|---------|---------|---------|
| Resid. & Comm..... | 55,765 | 101,525 | 138,808 |
| Industrial..... | 88,234 | 146,259 | 189,874 |
| Total Net Use..... | 143,999 | 247,784 | 328,682 |
| Exports..... | 4,397 | 1,000 | 1,000 |
| Imports..... | 3,218 | - | - |
| Losses&Unaccounted..... | 12,957 | 22,449 | 29,908 |
| Required Generation..... | 158,135 | 271,233 | 359,590 |
| Industries..... | 32,137 | 33,836 | 34,730 |
| Hydro..... | 27,966 | 28,706 | 29,206 |
| Thermal..... | 4,171 | 5,130 | 5,524 |
| Net Generation | | | |
| Utilities..... | 125,998 | 237,397 | 324,860 |
| Hydro..... | 101,868 | 162,640 | 186,244 |
| Thermal..... | 24,130 | 74,757 | 138,616 |
| Nuclear..... | 161 | 17,150 | 38,150 |
| Oil..... | 2,886 | 4,594 | 10,567 |
| Natural Gas..... | 5,229 | 5,980 | 9,436 |
| Coal..... | 15,854 | 47,033 | 80,463 |
| Net Transfers..... | - | - | - |
| Fuel Use - Utilities | | | |
| Bituminous (M Tons)..... | 5,069 | 13,052 | 21,747 |
| Sub-bituminous (M Tons)..... | 1,725 | 6,490 | 10,340 |
| Lignite (M Tons)..... | 1,085 | 3,661 | 8,220 |
| Diesel fuel (MBbls)..... | 939 | 1,130 | 1,436 |
| Light fuel (MBbls)..... | 200 | 564 | 633 |
| Heavy fuel (MBbls)..... | 4,845 | 6,753 | 17,452 |
| Natural Gas (MMcf)..... | 64,274 | 86,668 | 133,658 |
| Uranium (Tons U ₃ O ₈)..... | 3 | 343 | 763 |

¹ DBS Electric Power Statistics, Vol. II.

TABLE 38

ESTIMATED INSTALLED GENERATING CAPACITIES¹
BY PROVINCE
(in MW)

| | 1966 | 1975 | 1980 |
|--|--------|--------|--------|
| Newfoundland (including Labrador..... | 544 | 5,300 | 6,900 |
| P.E.I..... | 58 | 100 | 150 |
| Nova Scotia..... | 626 | 1,080 | 1,400 |
| New Brunswick..... | 679 | 1,220 | 1,700 |
| Quebec..... | 10,566 | 13,000 | 17,200 |
| Ontario..... | 8,790 | 19,100 | 25,500 |
| Manitoba..... | 1,363 | 2,200 | 2,900 |
| Saskatchewan..... | 996 | 2,400 | 3,400 |
| Alberta..... | 1,491 | 3,300 | 4,900 |
| British Columbia..... | 3,741 | 7,200 | 9,900 |
| Yukon & N.W.T..... | 79 | 140 | 190 |
| Total Canada..... | 28,933 | 55,040 | 74,140 |

¹ 1966 DBS Electric Power Statistics.
Estimated capacities for 1975 and later based
on peak load estimates with allowances for
reserve generation requirements.

TABLE 39

EMISSIONS IN THOUSANDS OF TONS DUE TO FOSSIL FUELS
1966-1990

| <u>Source</u> | <u>Carbon Monoxide</u> | <u>Oxides of Sulphur</u> | <u>Carbon Dioxide</u> |
|---|----------------------------|------------------------------|---------------------------|
| Residential & Commercial | 75.3 | 973.9 | 82,664.9 |
| Industrial | 351.7 | 1,029.0 | 68,725.0 |
| Transportation | 8,460.5 | 199.8 | 71,702.9 |
| Electricity Generation | <u>1.7</u> | <u>332.6</u> | <u>20,790.0</u> |
| Totals | 8,889.2 | 2,535.3 | 243,882.8 |
| Percentage Total Without CO ₂ | 57.8 | 16.6 | |
| 1975 | | | |
| Residential & Commercial | 32.0 | 989.9 | 100,999.2 |
| Industrial | 332.8 | 1,154.1 | 98,393.6 |
| Transportation | 12,446.0 | 346.9 | 109,293.5 |
| Electricity Generation | <u>4.8</u> | <u>803.5</u> | <u>49,320.0</u> |
| Totals | 12,815.6 | 3,294.4 | 358,006.3 |
| 1990 | | | |
| Residential & Commercial | 7.3 | 1,122.8 | 142,888.2 |
| Industrial | 377.5 | 1,650.1 | 173,392.3 |
| Transportation | 20,853.8 | 922.4 | 208,930.9 |
| Electricity Generation | <u>11.2</u> | <u>1,403.5</u> | <u>127,500.0</u> |
| Totals | 21,249.8 | 5,098.8 | 652,711.4 |

TABLE 40

URBAN WASTE DISPOSAL FORECASTS

PROJECTED URBAN EXPENDITURES
ON SOLID WASTE TREATMENT
(Millions of Constant Dollars)

| | Annual Operations & Maintenance <u>Land Fill or Incineration</u> | | | <u>% Treated</u> | <u>Incineration</u> | | <u>Total</u> |
|------|--|-----------------|-------------|------------------|--------------------------------------|-----------------------------|--------------|
| | <u>Low</u> | <u>#/Capita</u> | <u>High</u> | | <u>Annual Capital Investment</u> | <u>Annual O & M</u> | |
| 1971 | 241.8 | 4.6 | 246.1 | 25.0 | 14.0 | 23.0 | 37.0 |
| 1981 | 344.7 | 5.6 | 368.8 | 50.0 | 27.2 | 69.0 | 96.2 |

TABLE 41

ANNUAL EXPENDITURE FOR MUNICIPAL
WASTE WATER POLLUTION ABATEMENT UNDER
ALTERNATE ASSUMPTIONS: 1966 - 1981
(Millions of 1967 Dollars)

| <u>Period</u> | | <u>Primary</u> | <u>Secondary</u> | | |
|---------------|--------------|----------------|------------------|-------------|-------------|
| | | | <u>N-10</u> | <u>N-20</u> | <u>N-35</u> |
| 1966 | O & M | 8.8 | 19.7 | 19.7 | 19.7 |
| | Total Annual | 22.9 | 52.9 | 52.9 | 52.9 |
| 1971 | | 8.2 | 52.6 | 43.7 | 39.9 |
| | | 19.9 | 141.1 | 117.3 | 107.1 |
| 1976 | | 7.5 | 69.6 | 70.5 | 62.6 |
| | | 17.3 | 186.9 | 189.4 | 167.9 |
| 1981 | | 6.9 | 89.6 | 101.4 | 88.8 |
| | | 15.0 | 240.6 | 272.2 | 238.2 |

CHAPTER III. CAPITAL INVESTMENT PROJECTIONS 1971-1981

In this chapter, projections of national investment (capital expenditure) public and private, have been presented, based on survey figures compiled by Statistics Canada and the Department of Industry, Trade and Commerce. These are published in Public and Private Investment in Canada Outlook [Year]. (Catalogue No. 61-205) Before presenting the tables of projections, the chapter briefly discusses the alternative forecasting methodologies attempted.

The following items are included among the projections:

1. Total Capital Expenditures - National
2. Total Repair Expenditures - National
3. Total Capital and Repair Expenditures - National
4. Social Capital Expenditures
(Includes housing; institutional services - churches, universities, schools, hospitals and others; government departments, government-owned enterprises, government-operated institution and housing; water-works)
5. Housing Capital Expenditure
6. Housing Repair Expenditure
7. Housing - Total Capital and Repair Expenditure
8. Federal Government Capital Expenditure
9. Federal Government Repair Expenditure
10. Federal Government - Total Capital and Repair Expenditure
11. Provincial Governments Capital Expenditure
12. Provincial Governments Repair Expenditure
13. Provincial Governments - Total Capital and Repair Expenditure
14. Municipal Governments Capital Expenditure
15. Municipal Governments Repair Expenditure
16. Municipal Governments - Total Capital and Repair Exp.

FORECAST METHODOLOGY FOR NATIONAL INVESTMENT AND CMHC INDICATORS

Forecasting of economic and social phenomena is a highly complex task. To do a thorough job, the analyst must search for some natural growth constraints in the societal system in which he is interested. Once the growth trajectory of these underlying natural forces has been identified and mapped, then the analyst can connect this growth path to the variables that he wishes to analyse directly. In the highest form of forecasting it is necessary to describe a general system in which forces interact with one another, decisions are influenced by feedback of previous changes, and so on. The whole system works together to produce changes -- to expand or contract over time, to grow at different rates in different sectors. Clearly, this is a very complex problem, which if it were to be tackled in a general equilibrium analysis, would involve an enormous research input.

For instance, in the present case of attempting forecasts of sub-sectors of capital expenditure, particularly as related to residential building activity and of CMHC investments, a very large model of the Canadian construction sector would be called for to achieve consistent interlocking forecasts. An econometric model of the type produced by L. B. Smith for RDX-1, Bank of Canada, or in his contribution¹ to N. H. Lithwick's study, gives the beginnings of an inter-connected economic framework through which spending, income and cost estimates of CMHC activity might be forecast. But Smith's models were not designed expressly for the type of forecasting problem that, for instance, has to embrace regional CMHC expenditure to 1981. To redesign these models and then relate them back to some natural exogeneous growth parameter which drives the construction market, such as net family formation or population growth, would involve immense expense and a long research lag. What can be done to overcome this problem and attempt reasonable forecasts?

To obtain reasonable forecasts with the minimum of expense and research lag we can adopt a partial systems analysis. On balance, this method is likely to show a much higher benefit-cost ratio than the general equilibrium system approach. The shortcomings of the simpler somewhat

¹ "Housing in Canada", Research Monograph 2, Urban Canada Problems and Prospects, Ottawa, 1971, Parts III and IV.

more naive partial forecast approach are not so great that they are not greatly out-weighed by the costs of the elaborate econometric system forecast procedure. In this set of results we adopt a forecast technique which centres on a single equation temporal extrapolation method using a number of different model specifications. The choice of forecast model is based upon the applicaiton of several simple statistical criteria.

- (1) How well does the model fit the data of the nineteen-sixties?
- (2) How large is the implied forecast error?
- (3) Does the model appear to be "on track" with recent data or is it veering off, suggesting persistent under or over estimates?

With these three yardsticks at hand, we tried three basic types of simple inter-temporal forecast models and have chosen the results which seem to us to best measure up. Within present constraints, all actual results given are linear regression. To summarize then, our approach is pragmatic and quite simple, but we do insist that our results more than satisfy the usual statistical conventions. For this reason we believe our results are valid and acceptable where indicated within the confines of the type of methodology which we are using.

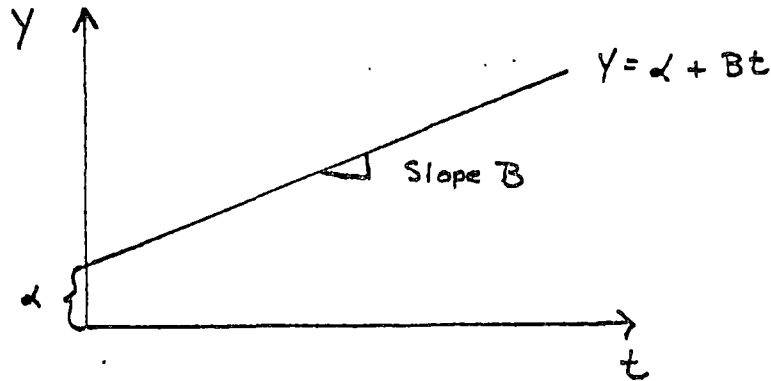
The three models attempted are as follows:

(1) Linear Inter-temporal Forecast Model

The basic assumption of this model is that the variable under forecast (\underline{Y}) will expand along a straight line path of slope B , and intercept α , e.g., Total Canadian Capital Expenditures for social purposes. Thus we fit a regression plan of the form:

$$(a) \quad Y = \alpha + Bt + \epsilon$$

where Y is the value of the variable under forecast and t is time measured in years, e.g., 1961 = 1, 1962 = 2 etc., and ϵ is an error term. If we plot this function, we might get:-



(2) Polynomial Inter-Temporal Forecast Model

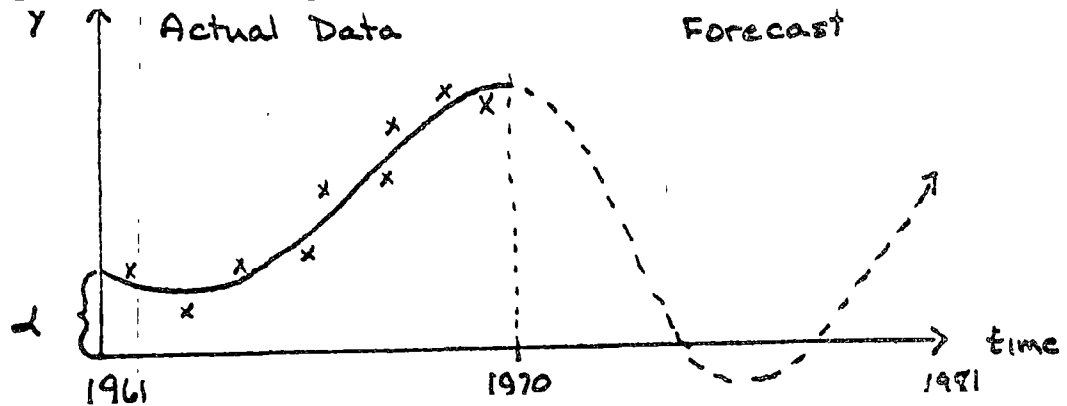
This model is a general case, of which model A is a sub-case. Compare equations (a) and (b):

$$(a) \quad Y = \alpha + Bt + \epsilon_a$$

$$(b) \quad Y = \alpha + B_1 t + B_2 t^2 + B_3 t^3 \dots B_n t^n + \epsilon_b$$

Equation (b) is an n-th degree polynomial, but it is obvious that if the degree were only one, then specifications (a) and (b) would effectively co-incide.

The importance of the polynomial form (b) is that it can fit, with a very high degree of precision, a series which describes a non-linear path over time. In our experiments, the highest degree polynomial used was three. Although the polynomial model has the capacity to produce precise results, it also has a very basic drawback. There are a large number of cases, even for second order equations, where the estimated model structure may imply a cyclical forecast.¹ As a result, an estimated polynomial can produce a wildly swinging forecast series particularly if the data to which it was fitted showed signs of reading an inflexion point. This argument is illustrated below:



¹

This is the case for all such models with imaginary roots, and of some with negative roots. The cycles implied may be implosive or explosive.

Because some of the data dealt with in our forecasts was strung out over time in the manner illustrated in the left hand portion of the previous diagram, we were very wary in accepting polynomial results. In those cases in which polynomial results were presented, there is no hint of cycling. The results simply depict rather sophisticated non-linear growth.

(d) Exponential Inter-temporal Forecast Model

Unlike models A and B above, this model cannot be estimated from untransformed data. Instead of being basically additive in form, it is multiplicative. Therefore data must be converted into logarithms before the standard regression techniques can be applied. Our model is as follows:

$$(c) \quad Y = \alpha \cdot t^B \cdot \epsilon$$

which becomes

$$(d) \quad \text{Log } Y = \text{log } \alpha + B \text{ Log } t + \text{log } \epsilon$$

Upon retransformation, the results of such regression yield a curvilinear regression plane. An example is as follows:



This model has the convenient property that it can closely approach the case where the forecast series is growing at a constant percentage rate over time.

To briefly explain the notes at the bottom of each page, all data are presented as yearly totals from 1960 to 1970. Linear regressions were computed on this data base.

In all tables the intercept value is given as α , and the co-efficient as B. Y is the equation for computing the value for any given year with "t" being equal to zero in 1960. R values may range up to 1.0. The closer to 1.0 the value the better the fit of the estimated regression. The Standard Error of Estimate (S.E.E.) indicates the percentage variation up or down which might occur in any given year of the projections.

This introduction and the forecasts themselves were prepared by Elizabeth Hay, Concept Development Group, with assistance from K. A. J. Hay, Economics Department, Carleton University, who acted as consultant on the methodology for forecasts and interpretation of the results, and the Economics and Statistics Division, CMHC who processed the data.

CAPITAL EXPENDITURES - NATIONAL

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 8,262.0 | 7,213.96 | 1971 | 19,064.25 |
| 1961 | 8,109.0 | 8,291.25 | 1972 | 20,141.55 |
| 1962 | 8,715.0 | 9,368.56 | 1973 | 21,218.85 |
| 1963 | 9,393.0 | 10,445.86 | 1974 | 22,296.15 |
| 1964 | 10,827.0 | 11,523.16 | 1975 | 23,373.45 |
| 1965 | 12,865.0 | 12,600.45 | 1976 | 24,450.75 |
| 1966 | 15,090.0 | 13,677.75 | 1977 | 25,528.05 |
| 1967 | 15,322.0 | 14,755.06 | 1978 | 26,605.35 |
| 1968 | 15,455.0 | 15,832.36 | 1979 | 27,682.65 |
| 1969 | 16,927.0 | 16,909.65 | 1980 | 28,759.95 |
| 1970 | 17,640.0 | 17,986.95 | 1981 | 29,837.25 |

TOTAL 1972 - 1981 = 249,894.0

$$a = 7213.96$$

$$B = 1077.30$$

$$Y = 7213.96 + 1077.3t$$

$$\text{Standard Error} = 76.545$$

$$T \text{ Value} = 14.075 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.978$$

NOTE: Very good predictor with high "t" and "r" values, well strung out residuals and S.E.E. of only 6%

TOTAL REPAIR EXPENDITURES - NATIONAL
(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 2985 | 2680.0 | 1971 | 5736.9 |
| 1961 | 2986 | 2957.9 | 1972 | 6014.8 |
| 1962 | 3161 | 3235.8 | 1973 | 6292.7 |
| 1963 | 3356 | 3513.7 | 1974 | 6570.6 |
| 1964 | 3543 | 3791.6 | 1975 | 6848.5 |
| 1965 | 3927 | 4069.5 | 1976 | 7126.4 |
| 1966 | 4365 | 4347.4 | 1977 | 7404.3 |
| 1967 | 4700 | 4625.3 | 1978 | 7682.2 |
| 1968 | 5018 | 4903.2 | 1979 | 7960.1 |
| 1969 | 5263 | 5181.1 | 1980 | 8238.0 |
| 1970 | 5461 | 5459.0 | 1981 | 8515.9 |

TOTAL 1972 - 1981 = \$72,653.5

$$\begin{aligned} \alpha &= 2680.046 \\ B &= 277.899 \\ Y &= 2680 + 2779t \end{aligned}$$

Standard Error = 15.314

T Value = 18.147 T = 2.228 at 5% level, 10 D.F.

R = 0.987

* S.E.E. = \pm 4%, very significant "t", "r" indicates good fit.

TOTAL CAPITAL & REPAIR EXPENDITURES - NATIONAL

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 11,247.0 | 9,894.0 | 1971 | 24,801.2 |
| 1961 | 11,095.0 | 11,249.2 | 1972 | 26,158.5 |
| 1962 | 11,876.0 | 12,604.4 | 1973 | 27,513.7 |
| 1963 | 12,749.0 | 13,959.6 | 1974 | 28,868.9 |
| 1964 | 14,370.0 | 15,314.8 | 1975 | 30,224.1 |
| 1965 | 16,792.0 | 16,670.0 | 1976 | 31,579.3 |
| 1966 | 19,455.0 | 18,025.2 | 1977 | 32,934.5 |
| 1967 | 20,022.0 | 19,380.4 | 1978 | 34,289.7 |
| 1968 | 20,473.0 | 20,735.6 | 1979 | 35,644.9 |
| 1969 | 22,190.0 | 22,090.8 | 1980 | 37,000.1 |
| 1970 | 23,101.0 | 23,446.0 | 1981 | 38,355.3 |

TOTAL 1972 - 1981 = \$322,569.0

$$\alpha = 9894.00$$

$$B = 1355.2$$

$$Y = 9894.0 = 1355.2 t$$

$$\text{Standard Error} = 86.525$$

$$T \text{ Value} = 15.663 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.982$$

NOTE: Standard Error of Estimate of approx. 16%. Good "t" and "r" values but might overestimate overtime.

- 55 -
SOCIAL CAPITAL
EXPENDITURES

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 3388.0 | 3027.5 | 1971 | 7310.85 |
| 1961 | 3405.0 | 3416.9 | 1972 | 7700.25 |
| 1962 | 3743.0 | 3806.3 | 1973 | 8089.65 |
| 1963 | 3930.0 | 4195.7 | 1974 | 8479.05 |
| 1964 | 4327.0 | 4585.1 | 1975 | 8868.45 |
| 1965 | 4928.0 | 4974.5 | 1976 | 9257.85 |
| 1966 | 5428.0 | 5363.9 | 1977 | 9647.25 |
| 1967 | 5718.0 | 5753.3 | 1978 | 10036.65 |
| 1968 | 6232.0 | 6142.7 | 1979 | 10426.05 |
| 1969 | 6850.0 | 6532.1 | 1980 | 10815.45 |
| 1970 | 6770.0 | 6921.5 | 1981 | 11204.85 |

TOTAL 1972 - 1981 = \$94,525.5

$$a = 3027.45$$

$$B = 389.4$$

$$Y = 3027.45 + 389.4t$$

$$\text{Standard Error} = 20.37$$

$$T \text{ Value} = 19.115 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.988$$

NOTES: Good fit with high "t" and "r" values. The Standard Error of Estimate within any year is only $\pm 5\%$

Residuals well strung out.

HOUSING CAPITAL EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 1456.0 | 1250.3 | 1971 | 3336.42 |
| 1961 | 1467.0 | 1440.0 | 1972 | 3526.04 |
| 1962 | 1587.0 | 1629.6 | 1973 | 3715.71 |
| 1963 | 1713.0 | 1819.3 | 1974 | 3905.36 |
| 1964 | 2028.0 | 2008.9 | 1975 | 4095.00 |
| 1965 | 2133.0 | 2198.5 | 1976 | 4284.66 |
| 1966 | 2181.0 | 2388.2 | 1977 | 4474.29 |
| 1967 | 2352.0 | 2577.8 | 1978 | 4663.94 |
| 1968 | 2806.0 | 2767.5 | 1979 | 4853.58 |
| 1969 | 3384.0 | 2957.1 | 1980 | 5043.23 |
| 1970 | 3077.0 | 3146.8 | 1981 | 5232.87 |

TOTAL 1972 - 1981 = \$43,794.68

$$A = 1250.32$$

$$B = 189.65$$

$$Y = 1250.32 + 189.65t$$

$$\text{Standard Error} = 18.6$$

$$T \text{ Value} = 10.18 \quad T = 2.228 \text{ at } 5\% \text{ level with}$$

$$R = 0.959 \quad 10 \text{ degrees of freedom}$$

NOTE: A good fit with S.F.E. of only 4%. High "t" and "r" values -- good projection.

HOUSING REPAIR EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 457 | 428.64 | 1971 | 895.44 |
| 1961 | 484 | 471.07 | 1972 | 937.88 |
| 1962 | 513 | 513.51 | 1973 | 980.32 |
| 1963 | 544 | 555.95 | 1974 | 1022.76 |
| 1964 | 577 | 598.38 | 1975 | 1065.20 |
| 1965 | 618 | 640.82 | 1976 | 1107.64 |
| 1966 | 661 | 683.25 | 1977 | 1150.08 |
| 1967 | 713 | 725.69 | 1978 | 1192.52 |
| 1968 | 780 | 768.13 | 1979 | 1234.96 |
| 1969 | 844 | 810.56 | 1980 | 1277.40 |
| 1970 | 858 | 853.00 | 1981 | 1319.84 |

TOTAL 1972 - 1981 = 11,288.6

$$\alpha = 428.64$$

$$B = 42.44$$

$$Y = 428.64 + 42.44 t$$

$$\text{Standard Error} = 2.018$$

$$T \text{ Value} = 21.026 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.990$$

NOTE: Extremely good fit. High "t", high "r", and S.E.E. of only 3% -- very good estimator.

HOUSING - TOTAL CAPITAL & REPAIR EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 1913 | 1678.96 | 1971 | 4231.87 |
| 1961 | 1951 | 1911.04 | 1972 | 4463.97 |
| 1962 | 2100 | 2143.12 | 1973 | 4696.07 |
| 1963 | 2257 | 2375.20 | 1974 | 4928.17 |
| 1964 | 2605 | 2607.28 | 1975 | 5160.27 |
| 1965 | 2751 | 2839.36 | 1976 | 5392.37 |
| 1966 | 2842 | 3071.45 | 1977 | 5624.47 |
| 1967 | 3065 | 3303.53 | 1978 | 5856.57 |
| 1968 | 3586 | 3535.61 | 1979 | 6088.67 |
| 1969 | 4228 | 3767.69 | 1980 | 6320.77 |
| 1970 | 3935 | 3999.77 | 1981 | 6552.87 |

TOTAL 1972 - 1981 = 55,084.2

$$\alpha = 1678.95$$

$$B = 232.08$$

$$Y = 1678.95 + 231.1 X$$

$$\text{Standard Error} = 20.305$$

$$T \text{ Value} = 11.430 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.967$$

NOTE: Standard Error of Estimate of 7.5% -- a good "t" and "r" values, residual well spread out. Very good estimator.

FEDERAL GOVERNMENT

CAPITAL EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 353.7 | 357.20 | 1971 | 1104.78 |
| 1961 | 604.6 | 425.16 | 1972 | 1172.74 |
| 1962 | 331.4 | 493.12 | 1973 | 1240.70 |
| 1963 | 516.6 | 561.08 | 1974 | 1308.66 |
| 1964 | 543.2 | 629.05 | 1975 | 1376.62 |
| 1965 | 656.2 | 697.01 | 1976 | 1444.58 |
| 1966 | 922.5 | 764.97 | 1977 | 1512.54 |
| 1967 | 887.7 | 832.93 | 1978 | 1580.50 |
| 1968 | 904.0 | 900.90 | 1979 | 1648.46 |
| 1969 | 912.5 | 968.86 | 1980 | 1716.42 |
| 1970 | 1034.7 | 1036.82 | 1981 | 1784.38 |

TOTAL 1972 - 1981 = 14785.6

$$\begin{aligned} a &= 357.20 \\ B &= 67.96 \\ Y &= 357.20 + 68t \end{aligned}$$

Standard Error = 10.070

T Value = 6.749 T = 2.228 at 5% level, 10 D.F.

R = 0.914

NOTE: Standard Error of Estimate of 15% -- a good predictor

FEDERAL GOVERNMENT

REPAIR EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 88.8 | 173.06 | 1971 | 518.66 |
| 1961 | 320.3 | 204.47 | 1972 | 550.08 |
| 1962 | 89.0 | 235.89 | 1973 | 581.50 |
| 1963 | 319.0 | 267.31 | 1974 | 612.92 |
| 1964 | 350.1 | 298.73 | 1975 | 644.34 |
| 1965 | 364.7 | 330.15 | 1976 | 675.76 |
| 1966 | 386.4 | 361.56 | 1977 | 707.18 |
| 1967 | 416.0 | 392.98 | 1978 | 738.60 |
| 1968 | 411.9 | 424.40 | 1979 | 770.02 |
| 1969 | 444.8 | 455.82 | 1980 | 801.44 |
| 1970 | 440.6 | 487.24 | 1981 | 832.86 |

TOTAL 1972 - 1981 = 6,914.7

$$A = 173.05$$

$$B = 31.42$$

$$Y = 173.05 - 31.4t$$

$$\text{Standard Error} = 7.261$$

$$T \text{ Value} = 4.327 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.822$$

NOTE: Standard Error of Estimate of 23%. Only a fair fit:
- tends to overestimate
- should predict quite well in the long run

FEDERAL GOVERNMENT

TOTAL CAPITAL AND REPAIR EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 442.5 | 529.16 | 1971 | 1626.35 |
| 1961 | 924.9 | 628.90 | 1972 | 1726.09 |
| 1962 | 420.4 | 728.65 | 1973 | 1825.83 |
| 1963 | 835.6 | 828.39 | 1974 | 1925.57 |
| 1964 | 893.3 | 928.14 | 1975 | 2025.31 |
| 1965 | 1020.9 | 1027.88 | 1976 | 2125.05 |
| 1966 | 1308.9 | 1127.63 | 1977 | 2224.79 |
| 1967 | 1303.7 | 1227.37 | 1978 | 2324.53 |
| 1968 | 1315.9 | 1327.14 | 1979 | 2424.27 |
| 1969 | 1357.3 | 1426.86 | 1980 | 2524.01 |
| 1970 | 1483.3 | 1526.61 | 1981 | 2623.75 |

TOTAL 1972 - 1981 = 21,749.2

$$\alpha = 529.16$$

$$b = 99.74$$

$$Y = 529 + 99.7t$$

$$\text{Standard Error} = 15.472$$

$$T \text{ Value} = 6.447 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.907$$

NOTE: Good fit. S.E.E. of only 9% with high "t" and "r" values.

PROVINCIAL GOVERNMENTS

CAPITAL EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 1124.7 | 966.22 | 1971 | 3007.83 |
| 1961 | 1107.2 | 1151.82 | 1972 | 3193.43 |
| 1962 | 1196.0 | 1337.42 | 1973 | 3379.03 |
| 1963 | 1320.7 | 1523.02 | 1974 | 3564.63 |
| 1964 | 1584.0 | 1708.63 | 1975 | 3750.23 |
| 1965 | 1953.4 | 1894.23 | 1976 | 3935.83 |
| 1966 | 2363.7 | 2079.83 | 1977 | 4121.43 |
| 1967 | 2561.7 | 2265.43 | 1978 | 4307.03 |
| 1968 | 2413.2 | 2451.03 | 1979 | 4492.63 |
| 1969 | 2504.4 | 2636.63 | 1980 | 4678.23 |
| 1970 | 2707.5 | 2822.23 | 1981 | 4863.83 |

TOTAL 1972 + 1981 = 40,286.30

$$a = 966.22$$

$$B = 185.60$$

$$Y = 966.2 + 185.6t$$

$$\text{Standard Error} = 17.62$$

$$T \text{ Value} = 10.53 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.962$$

NOTES: Good fit. S.E.E. of 10%. Good "t" and "r" values.
-- good estimator in the long run but not for any particular year.

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PROVINCIAL GOVERNMENTS

REPAIR EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 240.9 | 196.84 | 1971 | 532.56 |
| 1961 | 243.3 | 227.36 | 1972 | 563.08 |
| 1962 | 249.6 | 257.88 | 1973 | 593.60 |
| 1963 | 264.9 | 288.40 | 1974 | 624.12 |
| 1964 | 250.9 | 318.92 | 1975 | 654.64 |
| 1965 | 317.5 | 349.44 | 1976 | 685.16 |
| 1966 | 399.3 | 379.96 | 1977 | 715.68 |
| 1967 | 443.6 | 410.48 | 1978 | 746.20 |
| 1968 | 458.1 | 441.00 | 1979 | 776.72 |
| 1969 | 475.5 | 471.52 | 1980 | 807.24 |
| 1970 | 500.4 | 502.04 | 1981 | 837.76 |

TOTAL 1972 - 1981 = 7,004.2

$$A = 196.84$$

$$B = 30.52$$

$$Y = 196.8 + 30.5 t$$

$$\text{Standard Error} = 3.217$$

$$T \text{ Value} = 9.488$$

$$R = 0.953$$

$$T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

NOTE: Good fit. S.E.E. of 10%

PROVINCIAL GOVERNMENTS

TOTAL CAPITAL & REPAIR EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 1365.6 | 1163.06 | 1971 | 3540.38 |
| 1961 | 1350.5 | 1379.18 | 1972 | 3756.50 |
| 1962 | 1445.6 | 1595.30 | 1973 | 3972.62 |
| 1963 | 1585.6 | 1811.42 | 1974 | 4188.74 |
| 1964 | 1834.9 | 2027.54 | 1975 | 4404.86 |
| 1965 | 2270.9 | 2243.66 | 1976 | 4620.98 |
| 1966 | 2763.0 | 2459.78 | 1977 | 4837.10 |
| 1967 | 3005.3 | 2675.90 | 1978 | 5053.22 |
| 1968 | 2871.3 | 2892.02 | 1979 | 5269.34 |
| 1969 | 2979.9 | 3108.14 | 1980 | 5485.46 |
| 1970 | 3207.9 | 3324.26 | 1981 | 5701.58 |

TOTAL 1972 - 1981 = 47,290.4

$$A = 1163.06$$

$$B = 215.12$$

$$Y = 1163.1 + 216.1t$$

$$\text{Standard Error} = 19.69$$

$$T \text{ Value} = 10.97 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10D.F.$$

$$R = 0.965$$

NOTE: Good fit; S.E.E. of only 9% with high "t" and "r" values

MUNICIPAL GOVERNMENTS

CAPITAL EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 757.0 | 759.97 | 1971 | 1746.34 |
| 1961 | 771.0 | 849.64 | 1972 | 1836.01 |
| 1962 | 947.5 | 939.31 | 1973 | 1925.68 |
| 1963 | 1051.7 | 1028.98 | 1974 | 2015.35 |
| 1964 | 1010.9 | 1118.65 | 1975 | 2105.02 |
| 1965 | 1278.2 | 1208.32 | 1976 | 2194.69 |
| 1966 | 1462.4 | 1297.99 | 1977 | 2284.36 |
| 1967 | 1457.0 | 1387.66 | 1978 | 2374.03 |
| 1968 | 1479.4 | 1477.33 | 1979 | 2463.70 |
| 1969 | 1506.5 | 1567.00 | 1980 | 2553.37 |
| 1970 | 1569.7 | 1656.67 | 1981 | 2643.04 |

TOTAL 1972 - 1981 = 22,395.3

$$\alpha = 759.967$$

$$B = 89.666$$

$$Y = 759.97 + 89.67t$$

$$\text{Standard Error} = 8.186$$

$$T \text{ Value} = 10.954 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10D.F.$$

$$R = 0.964$$

NOTE; Good fit. High "t" and "r" values. S.E.E. of only 7%.

MUNICIPAL GOVERNMENTS

REPAIR EXPENDITURE

(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 217.5 | 204.63 | 1971 | 325.52 |
| 1961 | 218.9 | 215.62 | 1972 | 336.51 |
| 1962 | 237.3 | 226.61 | 1973 | 347.50 |
| 1963 | 227.8 | 237.60 | 1974 | 358.49 |
| 1964 | 238.3 | 248.59 | 1975 | 369.48 |
| 1965 | 231.5 | 259.58 | 1976 | 380.47 |
| 1966 | 255.5 | 270.57 | 1977 | 391.46 |
| 1967 | 291.2 | 281.56 | 1978 | 402.45 |
| 1968 | 328.2 | 292.55 | 1979 | 413.44 |
| 1969 | 290.6 | 303.54 | 1980 | 424.43 |
| 1970 | 318.6 | 314.53 | 1981 | 435.42 |

TOTAL 1972 - 1981 = 3,859.65

$$a = 204.63$$

$$B = 10.99$$

$$Y = 204.6 + 11t$$

$$\text{Standard Error} = 1.757$$

$$T \text{ Value} = 6.256 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10D.F.$$

$$R = 0.902$$

NOTE: Good fit. S.E.E. of 7%

MUNICIPAL GOVERNMENTS
TOTAL CAPITAL & REPAIR EXPENDITURE
(\$ Millions)

| YEAR | Y OBSERVED | Y ESTIMATED | YEAR | Y PROJECTED |
|------|------------|-------------|------|-------------|
| 1960 | 974.5 | 964.6 | 1971 | 2071.8 |
| 1961 | 989.9 | 1065.3 | 1972 | 2172.5 |
| 1962 | 1184.8 | 1165.9 | 1973 | 2273.2 |
| 1963 | 1279.5 | 1266.6 | 1974 | 2373.8 |
| 1964 | 1249.2 | 1367.3 | 1975 | 2474.5 |
| 1965 | 1509.7 | 1467.9 | 1976 | 2575.1 |
| 1966 | 1717.9 | 1568.5 | 1977 | 2675.8 |
| 1967 | 1748.2 | 1669.2 | 1978 | 2776.5 |
| 1968 | 1807.6 | 1769.9 | 1979 | 2877.1 |
| 1969 | 1777.1 | 1870.5 | 1980 | 2977.8 |
| 1970 | 1888.3 | 1971.2 | 1981 | 3078.4 |

TOTAL 1972 - 1981 = \$26,254.7

$$a = 964.59$$

$$B = 100.66$$

$$y = 964.5a + 100.7t$$

$$\text{Standard Error} = 8.053$$

$$T \text{ Value} = 12.499 \quad T = 2.228 \text{ at } 5\% \text{ level, } 10 \text{ D.F.}$$

$$R = 0.972$$

NOTE: Standard Error of Estimate = 6%, significant "t" and "r" indicates good fit.

CHAPTER IV.

POLICY IMPACT MATRIX

Basically the policy impact matrix is a tool for checking and discussing the effects of policy choices to be made, in immediate and longer term contexts. Various possible actions are considered as having either a positive, a negative, an uncertain or no effect on such major aspects of society as land price, the locus of decision control, and urban growth. Naturally, there are limitations in the method chosen -- but it is meant as a focus for debate, as a testing ground for philosophy, not as a hard "decision machine".

In the first part of the chapter all of the options are summarized as they appear down the left hand side of the chart. Then the different "effects" placed across the top of the chart are explained briefly. Taken together, effects and option choices can then be tested for "fit" with overall goals and values and for congruence with immediate decision priorities.

SUMMARY OF OPTIONS

LOW INCOME HOUSING

PUBLIC HOUSING

1. The Corporation would refrain from making any major policy or legislative change until policy on the program's future is formulated.
2. Discontinue the use of section 40 (previously 35A). Increase the ratio of subsidies under section 44 (formerly 35E) to 75/25. Provide professional/technical services to provinces on request.
3. Section 40 (e.g. 35A) would be amended to provide 75% loans and 75% federal share of subsidies.
4. The Corporation would provide capital grants to provinces in lieu of operating subsidies.
5. The interest rate on the loan would be written down (including part of principal if required). The write-down would equate operating subsidies which would otherwise be provided.

ENTREPRENEUR AND L.D. HOUSING.

1. The Corporation would develop and impose environmental quality standards which would become a loan condition.
2. For projects constructed in accordance with minimum environmental standards, interest subsidies (lowering the interest rate below that of Section 15 or its equivalent) would be allowed during an initial period -- say five years -- possibly on a decreasing scale.
3. The current "mortgage out" feature of the program (15 years) would be extended to 20/25 years.

CO-OPERATIVE HOUSING.

1. The Corporation would continue considering co-operatives as a form of home ownership and would maintain the requirement that 80% of units be occupied by shareholders. Individual low income co-operative members benefit from the same advantage (e.g. assisted home ownership) as are available to other low income home owners.

2. The requirement that 80% of units be occupied by shareholders would be removed.
3. Cooperative ownership would be considered as a distinct form of tenure. In the case of low income groups, specific lending facilities with conditions similar to Section 16 loans would be made available, (i.e. lower interest rates, 50 year amortization, waiver of application and insurance fees).
4. Eliminate the equity requirement in cooperative low income projects where the cooperative's constitution prevents capital gain by shareholders at its termination.

NON-PROFIT HOUSING.

1. The equity requirement in non-profit low income housing projects would be eliminated.
2. The Corporation would provide a capital grant equal in amount to the equity or other capital funds contributed to the project by the sponsor, province or municipality. The grant would be written off the loan amount and limited to 10% of the cost of the project.

ASSISTED HOME OWNERSHIP.

1. Direct action by the Corporation. Such a program would simply supplement existing direct lending techniques. The minimum qualifying income GDS limits would be lowered by a reduction in interest rates as required to the CMHC borrowing rate. The program would be expandable through further reductions in the minimum interest rate to 5%, 3% or 0%. Mortgages could be discounted and sold to approved lenders.
2. Several of the Provinces have already taken direct action to assist home ownership. British Columbia makes grants to home owners; Alberta and Quebec make a 2% interest rate rebatement; and Ontario dispose of serviced lots under leasehold tenure at favourable terms. These various programs could be amplified and supported by Federal sharing in these costs on a bulk accounting basis.

3. Encourage loans on shell housing, self help and cooperatives. By policy, mortgages would be opened and advances would be made on the basis of work-in-place.

MOBILE HOMES.

1. The present policy of experimentation would be continued until the result of experimental projects are known. The development of mobile homes would thus be considered as an evolutionary process best supported under current programs.
2. The mobile home would be formally and publicly recognized as a house for NHA lending purposes provided it is located on an appropriate site and meets NHA minimum standards. The Corporation would insure approved lenders' loans, make direct loans and adapt its appraisal, inspection and advancing techniques.
3. CMHC would provide loans to private industry, similar to that provided government bodies, for land assembly and for the development of properly designed subdivisions which can accommodate the mobile home.
4. The Corporation would finance mobile homes under chattel mortgages, independently from the mobile home park.

SENIOR CITIZENS' HOUSING.

1. The Corporation would continue its existing program, with greater emphasis on:
 - a) Design guidelines, and quality of the output.
 - b) Greater participation by the elderly in the design, management and administration of projects.
2. In addition to financing housing projects (option 1), CMHC would recognize that the provision of facilities and services is an integral part of the shelter package, would participate with other federal departments and government levels and would finance the construction or renovation of community facilities and service centres.

STUDENT HOUSING.

1. CMHC would continue the present program under Section 47 (36B) with about the same level of commitment until the federal task force on education has completed its report.
2. CMHC would withhold its support until the federal task force on education has completed its report.
3. CMHC would have a major responsibility in student housing and would develop a new program for students who would be considered a special group.
4. CMHC would consider students as another low income group and include student housing support in its overall low income housing program.

RURAL HOUSING.

1. Maintain present position.
2. CMHC would initiate a small high level interdepartmental steering committee to develop a coordinated and integrated federal policy for the rural poor. This steering committee would encourage existing general farm organizations to take rural housing into their terms of reference as a particular project so that they could reflect the views, needs and aspirations of the rural community. Thus, the steering committee could arrange closer contact with the rural poor and develop more appropriate policy.
3. CMHC would fund essential improvements in Rural Housing on an agency loan basis through Chartered Banks and Credit Unions. The rate of interest to be charged would relate to income of borrower similar to the home owner assisted program.
4. CMHC would provide home improvement loans plus grants based on income as part of an overall provincially assisted rural/outlying area improvement program.
5. CMHC would fund and promote an across the country program of pilot projects of new housing for rural and outlying areas and their service centres. The object would be to develop and test building, planning, loan and credit criteria relating and best suited to the life-style and environment of the various regions.

6. CMHC would fund projects on the basis of actual use rather than on the basis of proposed use. Agreement can be reached with the province and municipality for the Corporation to initially finance or insure a specific number of modest housing units. These units would be offered for sale by the builder at an agreed price. The units not sold after three months could be acquired by an entrepreneur or non-profit organization and rented at Section 16 rentals. The balance, if any, could be used as public housing.

NATIVE PEOPLES HOUSING

1. Native peoples housing will be considered a regular part of the low income housing picture with no special provisions made for it.
2. Native peoples housing will be considered a completely separate question, for which a completely different set of policies and implementation structures would be created.
3. Native peoples housing would be a special thrust added to the low income housing sector, by adding provisions to allow for the particular nature of the native housing question.

RESIDENTIAL REHABILITATION

1. Pilot/Demonstration. Under this option the program would be limited to a series of pilot and/or demonstration projects in a selection of large, medium and small urban areas, as well as rural areas.
2. Universal distribution. Rehabilitation assistance would be available in all parts of the country.
3. Universal/Priority. Under this option, rehabilitation assistance would be generally available throughout the country but certain areas would be excluded. Such exclusion would most usually be based on evidence of lack of confidence. If this option is taken, special exceptions would have to be made in the case of rural areas unless they are to be placed at a disadvantage.

URBAN ASSISTANCE POLICY

REPLACEMENT FOR URBAN RENEWAL

1. Statutory Limitation on Urban Renewal

This is a legal formality to repeal those sections of the act under which no further commitments will be made.

2. Community Assistance Program

This involves a program directed to the conservation and improvement of both stable and transitional in-city neighbourhoods, and small communities. It would seek to rehabilitate dwellings, services, and commercial concerns in stable areas, and to provide a higher standard of amenities and community facilities. In more stable neighbourhoods and communities, the focus would be on conservation. In "transitional" areas it would be on maintenance of basic services and reduction of social costs. Federal assistance would be available for the program which will operate on the basis of a minimum common program of planning and action set by the municipalities and residents jointly. The program would be administered by the provinces, implemented by the municipalities and citizens and monitored and reviewed annually by the Federal Government.

3. Non- Residential Area Revitalization Program

A pilot program of loans to municipalities for 90% of the cost of acquiring, and clearing or rehabilitating/converting critical non-residential sites, and for relocating former occupants, is proposed. Federal contributions to the cost of preparing plans for the improvement of non-residential areas and to assist with employee adjustment grants could also be made. Re-use of suitable cleared sites for parks and other amenities, for public facilities and for low income housing would be encouraged by a forgiveness of 25% of the loan amount expended on such items. The loan term would be 20 years with the possibility of a ten-year extension at CMHC discretion.

4. Urban Amenities Program

A pilot program to support 25% of the cost of planning and implementing urban amenities is proposed. A program of short term (10 years) loans for improvement of commercial facades would be offered. The long-term strategy associated with this program is one of building the provision of amenities into urban redevelopment processes.

PROGRAMS FOR NEW URBAN GROWTH

1. Urban Regional Planning Assistance

A program directed to the encouragement of dynamic, future-oriented urban region plans, directed primarily to the 26 metropolitan and major urban areas outside of DREE jurisdiction is proposed. The Federal contribution to the support of such plans would cover the cost of the provincial or regional government process of plan development -- public hearings, futures workshops, etc. Federal support for pilot projects in inter-governmental co-operation on a 100% basis and Federal funds and research resources to study urban region "guidance" systems would also be offered.

2. New Community Development Planning Assistance

It is proposed that the Federal Government share the cost of developing new community plans with provincial, regional or new community agencies. Such support would normally be provided in the context of an urban region plan and on condition that public control over the process of development be retained and on condition that residents of the locality affected and to the maximum extent possible, the residents of the new community be involved in the planning process. Up to 100% of the planning costs for northern new communities would be provided to development agencies and a program of comparative research on new communities initiated with Federal funds.

3. New Community Land and Servicing Program

A pilot program of loans for public new community development is proposed to support examples of socially and economically viable growth points and to test organizational managerial, and design concepts in real life circumstances. For such communities, 100% loans would be provided to provinces or new community development agencies for land acquisition and servicing. One half of the cost of land used for public buildings, open space, and transit facilities would be forgiven. Loans would also be provided for up to 100% of the cost of acquiring and preparing corridors of land to be used for rapid transit links.

PROGRAMS FOR GOVERNMENTAL INNOVATION

1. Urban Management and Manpower Assistance

It is proposed that a program directed to the support of increased local capabilities and leading to new concepts of "urban guidance" by all levels of government, be adopted. This would include provision of resources for urban management research, reviews of local government needs, university chairs of urban management, etc. - all with provincial approval and/or active support.

2. Municipal Research and Development Assistance

This program is proposed to increase our level of knowledge about urban problem-solving, to increase the research and evaluative capabilities of local governments, particularly in regard to NHA programs. It specifically includes aid for local R & D projects, selected on the basis of an understanding of both local and national priorities. Results would be nationally published and distributed and periodic conferences on municipal R & D problems and methods sponsored. The program funds would be provided both to individual municipalities and to municipal associations.

3. Urban Demonstration Program

This program is proposed both to "kick off" new urban assistance measures and to provide a basis for co-ordination of Federal urban resources to some defined objectives for at least a limited period of time. It is envisaged that an "opportunities for neighbourhoods" operation would be mounted for 1972 only. This would be followed by a co-ordinated interdepartmental approach to several agreed upon urban centres or subsystems, e.g., the improvement of public transportation in 1973-74. Provincial and municipal approval and involvement would be solicited.

4. National Urban Information Systems

It is proposed that Federal initiative be taken to bring together the concerned interests, to secure agreement on a user-oriented national reference system and a series of pilot local systems. Federal efforts to improve the relevance of Federally generated urban data and information could also be initiated.

INFRASTRUCTURE

SEWAGE TREATMENT PROGRAM

1. Emphasis on Environmental Program now, Urban Orientation deferred

This option would not introduce a major re-orientation because of current national emphasis on pollution-abatement and consequent heavy demands on national capital. The program would retain its residual and responsive role while the government attempted to clean up a large part of the environment. CMHC would continue to accept priorities for spending as established elsewhere, and increased budget allocations would be sought only in response to additional Department of Environment Program needs.

2. Urban Orientation Now, Parallel with the Environmental Program

This option takes the position that the re-orientation of the Sewage Treatment Program, from an anti-pollution to a directive urban/housing policy support role, should begin now. It recognizes the necessity to take action in concert with an appropriate Land Assembly policy in order to meet the projected needs of urban growth and housing over the next decade. It also maintains that to secure maximum benefit from funds committed, Federal involvement must become less responsive and more directive.

LAND ASSEMBLY

1. Immediate Full Scale Intervention

- Public land banking, tax tools, expropriation tools and transfer payments to force price stabilization.

2. Policy Directed At Medium Sized Cities

- Public land banking in medium sized cities to force price stabilization.

3. Residual Functions Only

- Land Assembly to operate where market does not operate.

4. Phased Policy Leading to Public Dominance

- Use public land banking to stabilize price after building information, education and planning base.

5. Federal financial support to private land development.

SOCIAL DEVELOPMENT PROGRAMS

DAY CARE

1. A. Continue responding under present NHA;
B. Facilitate access to information about existing programs;
C. Participate in the formulation of a co-ordinated Federal policy.
2. Expand the Corporation's day care program to serve both housing projects and existing communities. At the same time, CMHC will participate on the interdepartmental committee on Day Care to ensure that there is congruence between the developing federal policy and CMHC's expanded program.

AID TO CITIZEN GROUPS

1. The development of a CMHC support policy for citizen groups while continuing to seek the development of a co-ordinated federal policy. A support policy will be developed through research, the initiation of on-going activity in areas where knowledge is already available and through assistance for new activities on an experimental basis. This process will allow CMHC to gain valuable information both for its own use in developing an expanded program and as a contribution to the formulation of a co-ordinated federal policy.

RESEARCH AND DEVELOPMENT

1. Retreat-Absorptive Role - This future has CMHC withdrawing completely or almost completely from conducting or supporting R & D activities. It conceives of the Corporation making use of research and development done elsewhere, to the extent that it is aware of such work. The Urban Secretariat has the sole or major responsibility in the Ministry for providing the research base for policy and program and the Corporation functions as an implementation mechanism.

2. Laissez-Faire - Adaptive - CMHC funds research under Part V and continues its fellowship, study grants, and institutional support activities along the same lines as at present. It emphasizes directed research, however, in place of the current responsive mode. It channels its research efforts into areas which assume priority from time to time and findings are made available upon request. Research is conducted primarily through external agents by means of grants and R & D activities are controlled centrally with all proposals approved by senior management.
3. Expanded - Pre-emptive - CMHC attempts to build a widespread network of R & D relationships in the fields of housing and planning with the academic community, with other agencies and other levels of government, with industry and with community groups; the main thrust is in directed applied research. CMHC develops long and short-term R & D objectives in precise terms and communicates these to all interested parties. In-house research is conducted and CMHC contracts external work; all research results are shared and their use and application actively promoted. CMHC provides for evaluation studies for all new projects undertaken and evaluates existing policies and programs. There is a central coordinating mechanism to plan and use research findings.

A SUMMARY DESCRIPTION OF THE EFFECTS CATEGORIES

It is necessary to begin the description of the effects categories by specifying that they are not purely objective. Most have a value connotation which allows one to immediately determine the nature of the impact of a policy at any point of intersection.

Land

- * Land price stable -- a stabilization of the end price of a serviced lot.
- * Land supply up -- increasing the volume of serviced land available for building on.

Housing Stock

- * Quantity -- increasing the stock
- * Quality -- the upgrading or improvement in present stock.

Borrowing Capability Up

Refers to change in the mortgage procedure as it relates to either eligibility or equity requirements such that additional groups can avail themselves of mortgages. It implies only legal or administrative changes.

Access Up

Refers to increased access to home ownership or rental accommodation by low-income families, native people or special groups. This increase results from either better subsidy, better borrowing capability, a higher level of government investment or a combination of the preceeding.

Level of Subsidy to

- * Low Income Families
- * Native Peoples
- * Special Groups

Refers to the amount of money the government is prepared to give away in order to either reinforce the disposable income of these groups or to purchase necessary goods and services for them. The assumption is that they are presently ineffective consumers whose buying power must be reinforced. The effect refers to any additional support to be given beyond that which is provided now.

Tenure

Refers to the form of tenure or occupancy which is encouraged.

- * Rental
- * Ownership

Decision Control by

- * Federal
- * Provincial
- * Municipal
- * Local/Neighbourhood

Articulates where the key decisions are made to implement or operate a particular policy or program. Also reflects where needs are defined and the program is tuned in order to make it specifically relevant to these needs.

Citizen Participation

The process of allowing, encouraging or facilitating the meaningful involvement of citizens in determining their own future.

Out of High Cost Systems

An action which tends to reduce the high capital or maintenance cost of a physical or technological system. Included in such a positive change would be altering the unidimensional, specific need focus of such a system and adapting it to other additional uses.

Planning Capability

The planning jurisdiction is broken into:

- * Urban Regional
- * Urban

Refers to upgrading the capability of other levels of government to plan urban environments. The effect is concerned with the provisions of tools, mechanisms or levers which will be a positive addition to this process.

City Growth

Identifies the demographic growth trend in three general categories of cities.

- * Mega down (Megalopoli down) -- Refers to Montreal Region, Toronto centred region and Vancouver centred region including the accessible Fraser Valley. The assumption is that a decrease in the growth trend is desirable.
- * Medium up -- Refers to cities of less than 60,000, to 800,000. The assumption is that an increase in their size is desirable.
- * Small up -- Refers to cities of less than 60,000. The assumption is that an increase in their size is desirable.

Rural Areas and Communities

- * Improvement In -- Refers to a process by which the basic physical and socio-economic structure of a community is reinforced. No comment is made on whether this is improvement in their own terms, or if it is imposed as a necessary concomitant of eco/technological momentum.
- * Growth -- Refers to a process by which the rural centre or area is encouraged to grow economically, physically and socio-culturally. No comment is made on whether that growth is on its own terms or if it is imposed as a necessary concomitant of eco/technological momentum.

Environmental Concern

An action which tends to reduce pollution or interference with the ecological system. The action is seen as qualitative.

Health Quality

The physical and mental well-being of an individual because he has access to both basic good clean shelter and the environment.

Social Stability

A societal or group condition which arises from the recognition of the citizens that their needs are being seriously addressed.

Condition of Deteriorating and Transitional Areas

Refers to the quality of the environment both social and physical in these areas. A transitional area is that part of a city which is undergoing redevelopment which change will change its characteristics. The change implies dislocation of inhabitants.

A deteriorating neighbourhood is one whose physical environment is of low quality due to lack of investment in the area.

Experimentation

The process of developing and testing new ideas and alternative approaches or methods of doing things in order to achieve a better product or result.

IV. INDICATORS OF NEED AND POTENTIAL PROGRAM IMPACT

On a number of occasions during the discussion of the policy options for 1972, the Minister has asked that as much as possible by way of "hard information" be provided in order to provide indications of the magnitude of problems we face and the potential impact that the various program proposals can have on these problems. On what items can we advance? On which problems can we merely "hold the line"? Where are there going to be actual reversals in progress previously made unless we act now?

The present chapter is not the most complete or definitive response to this question. It is a collection of what facts, figures, and projections are presently available. It is subject to supplementation and correction as the process of policy development advances.

A. LOW INCOME HOUSING

In 1967, there were 5.4 million households in Canada, of which an estimated 2.2 million were "low income". Of the households composed of single individuals, 44% were earning under \$2000 per annum. 40% of the families were earning under \$6,000 a year.

The following additional measures of the incidence of low income, the requirements for low income housing, and the potential financial implications of the latter have been provided in the tables below:

1. Most Recent Measure of Incidence of Low Income in Canada
2. Estimated Unmet Housing Stock Requirements for Low-Income Households, 1981
3. Priority Groups for Low-Income Housing
4. Selected Statistics of low-income and other families classified by size of place of residence, 1967.
5. Households by Income Class - 1981
6. Estimated numbers of persons and children under 16 in low-income family units by province, 1967

7. Selected statistics of low income families classified by region of residence, 1967
8. Pattern of Expenditures and Finances, all families and individuals - 1967
9. Shelter expenditure by quintile groups for all Canada
10. Housing Conditions of Native People
11. Household Facilities of households by selected quintile groups, persons 65 years and older - 1967
12. Shelter Expenditures of the Elderly by Income Class - 1967
13. Primary Non-Family Households 65 years of age and over in single detached units, 1969
14. Indicators of rehabilitation needs
15. Costs of Rehabilitation Subsidies and Works in Montreal as at July 31, 1971
16. Effects on employment: Montreal Rehabilitation
17. Annual Per/Unit Capital Requirements for Public Housing, Given Varying Rates of Increase in Residential Construction Costs, 1972 - 1981
18. Annual Capital Requirements for 50,000 Public Housing Units Built Per Year, Given Varying Annual Rates of Increase in Residential Construction Costs, 1972-81
19. Estimated Federal Subsidies for Public Housing, 1971 - 1980

TABLE 1.

MOST RECENT MEASURE OF INCIDENCE OF LOW INCOME IN CANADA

Poverty rates by family unit size, 1969

| Family unit size | Senate Committee poverty line income | Number of family units below poverty line (Total: 2,767,000) | Number of individuals below poverty line (Total: 5,135,000) | Poverty rate |
|------------------|--------------------------------------|--|---|--------------|
| | \$ | (thousands) | (thousands) | % |
| 1 | 2,140 | 629 | 629 | 38.7 |
| 2 | 3,570 | 408 | 816 | 28.4 |
| 3 | 4,290 | 161 | 483 | 16.8 |
| 4 | 5,000 | 157 | 628 | 15.6 |
| 6.2 | 6,570 | 416 | 2,579 | 28.5 |

TABLE 2. Estimated Unmet Housing Stock Requirements

For Low Income Households, 1981

(all figures in thousands)

| New Unmet Housing Stock Requirements (1972-81) | Existing Housing Stock Gap | | |
|--|----------------------------|--------|------|
| | Low | Middle | High |
| | Est. | Est. | Est. |
| | 223 | 325 | 428 |
| Optimistic View | | | |
| -91 | 132 | 234 | 337 |
| Modest View | | | |
| 0 | 223 | 325 | 428 |
| Pessimistic View | | | |
| 350 | 573 | 675 | 778 |

TABLE 3.

PRIORITY GROUPS FOR LOW INCOME HOUSING

- 0.6 million rural residents;
- 0.6 million elderly;
- 0.5 million single individuals;
- 0.2 million residents of the Atlantic provinces;
- 0.2 million single parent families;
- 0.2 million large families having four or more children;
- 0.3 million social welfare recipients;
- 0.1 million native people; and
- 0.5 million working poor.

After eliminating double counting, we find that these nine groups constitute a total of 1.9 million people, or 35 per cent of all households.

TABLE 4

Selected statistics of low-income and other families classified by size of place of residence, 1967

| Size of place of residence | Families | Average family income | Average transfer payments received | Average size of family | Average number of children under 16 years | Home-owners* | Families with female head† |
|----------------------------|-------------|-----------------------|------------------------------------|------------------------|---|--------------|----------------------------|
| | (thousands) | \$ | | (persons) | | % | |
| Low-income families | | | | | | | |
| Metropolitan centres: | | | | | | | |
| 500,000+..... | 149 | 2,438 | 884 | 3.5 | 1.4 | 36.9 | 24.1 |
| 100,000-499,999..... | 101 | 2,474 | 889 | 3.7 | 1.6 | 46.8 | 27.2 |
| 30,000-99,999..... | 40 | 2,497 | 979 | 3.3 | 1.3 | 45.7 | 25.6 |
| Other Cities: | | | | | | | |
| 15,000-29,999..... | 48 | 2,530 | 942 | 3.9 | 1.7 | 64.4 | 19.0 |
| Small urban areas..... | 119 | 2,521 | 1,057 | 3.7 | 1.5 | 71.4 | 15.1 |
| Rural areas..... | 375 | 2,392 | 747 | 4.3 | 1.9 | 90.7 | 5.9 |
| Totals..... | 832 | 2,442 | 851 | 3.9 | 1.7 | 69.3 | 14.8 |
| Other families | | | | | | | |
| Metropolitan centres: | | | | | | | |
| 500,000+..... | 1,305 | 9,638 | 327 | 3.8 | 1.3 | 57.1 | 6.8 |
| 100,000-499,999..... | 856 | 8,910 | 360 | 3.9 | 1.4 | 67.2 | 6.9 |
| 30,000-99,999..... | 288 | 8,644 | 351 | 4.0 | 1.5 | 68.7 | 4.5 |
| Other Cities: | | | | | | | |
| 15,000-29,999..... | 259 | 8,210 | 367 | 4.1 | 1.6 | 68.8 | 5.2 |
| Small urban areas..... | 426 | 7,915 | 437 | 4.1 | 1.6 | 73.5 | 5.6 |
| Rural areas..... | 551 | 7,460 | 487 | 4.5 | 1.8 | 85.4 | 3.3 |
| Totals..... | 3,686 | 8,766 | 376 | 4.0 | 1.5 | 67.3 | 5.9 |

*Proportion of families who own their home.

†Proportion of families with female heads.

SOURCE: D.B.S., *Statistics on Low Income in Canada, 1967* (Cat. No. 13-536), Table 8.

TABLE 5

HOUSEHOLDS BY INCOME CLASS -- 1968

| LOCALITY | Percentage Distribution | | | | | |
|----------------------|-------------------------|------------------|------------------|------------------|------------------|------------------|
| | Under \$1000 | \$1000 - 2000 | \$2000 - 3000 | \$3000 - 4000 | \$4000 - 5000 | \$5000 - 6000 |
| CANADA | .02 | .91 | 3.74 | 6.92 | 9.69 | 9.79 |
| MARITIMES | .17 | 3.74 | 10.09 | 13.51 | 13.66 | 12.12 |
| QUEBEC | .03 | 1.48 | 5.87 | 10.03 | 11.96 | 11.94 |
| ONTARIO | .00 | .33 | 1.95 | 4.49 | 6.77 | 8.20 |
| PRAIRIES | .01 | .58 | 2.99 | 6.18 | 8.90 | 9.70 |
| B.C. | .01 | .44 | 2.47 | 5.42 | 7.43 | 9.15 |
| Number of Households | | | | | | |
| CANADA | 1,790 | 74,670 | 307,130 | 567,520 | 730,180 | 802,990 |
| MARITIMES | 920 | 20,250 | 54,650 | 73,170 | 73,980 | 65,640 |
| QUEBEC | 650 | 32,120 | 127,380 | 217,650 | 259,530 | 259,100 |
| ONTARIO | 0 | 10,640 | 62,860 | 144,740 | 210,240 | 264,340 |
| PRAIRIES | 120 | 7,010 | 36,140 | 74,700 | 104,710 | 117,240 |
| B.C. | 100 | 4,650 | 26,100 | 57,260 | 87,720 | 96,670 |

Continued...

TABLE 5 cont'd

HOUSEHOLDS BY INCOME CLASS -- 1981

| LOCALITY | Percentage Distribution | | | | | |
|-----------|-------------------------|--------------------|----------------------|---------------------|---------------------|------------|
| | \$ 6000 - 7000 | \$ 7000 - 10000 | \$ 10000 - 15000 | \$ 15000 - 20000 | \$ 20000 - 25000 | \$ 25000 + |
| CANADA | 9.62 | 23.71 | 21.36 | 8.61 | 3.49 | 2.79 |
| MARITIMES | 10.06 | 19.27 | 12.10 | 3.48 | 1.11 | .63 |
| QUEBEC | 10.82 | 23.21 | 16.63 | 5.23 | 1.73 | 1.07 |
| ONTARIO | 8.75 | 24.12 | 24.99 | 11.26 | 4.90 | 4.27 |
| PRAIRIES | 9.77 | 24.62 | 22.41 | 8.92 | 3.53 | 2.74 |
| B.C. | 9.45 | 24.72 | 23.61 | 9.78 | 3.98 | 3.14 |
| | | | | | | |
| | | | Number of Households | | | |
| CANADA | 789,270 | 1,944,340 | 1,752,310 | 705,470 | 286,230 | 229,600 |
| MARITIMES | 54,480 | 104,370 | 65,530 | 18,850 | 6,010 | 3,750 |
| QUEBEC | 234,790 | 503,660 | 360,870 | 113,490 | 37,540 | 23,220 |
| ONTARIO | 282,070 | 777,560 | 805,600 | 362,990 | 157,960 | 136,700 |
| PRAIRIES | 118,090 | 297,580 | 270,870 | 107,820 | 42,670 | 32,750 |
| B.C. | 99,840 | 261,170 | 249,440 | 103,320 | 42,050 | 33,130 |

Source: Anh, Table 11-D.

TABLE 6

Estimated numbers of persons and children under 16 in low-income family units by province, 1967

| Province | Number of persons in low income family units | Distribution | Number of children under 16 in low-income family units | Distribution |
|---------------------------|--|--------------|---|--------------|
| | (thousands) | % | (thousands) | % |
| Newfoundland..... | 197 | 5.1 | 90 | 6.4 |
| Prince Edward Island..... | 54 | 1.4 | 20 | 1.5 |
| Nova Scotia | 223 | 5.8 | 87 | 6.2 |
| New Brunswick..... | 188 | 4.9 | 81 | 5.8 |
| Quebec | 1,232 | 31.9 | 486 | 34.6 |
| Ontario | 902 | 23.3 | 298 | 21.3 |
| Manitoba | 204 | 5.3 | 72 | 5.1 |
| Saskatchewan | 253 | 6.5 | 82 | 5.9 |
| Alberta | 299 | 7.7 | 99 | 7.1 |
| British Columbia | 312 | 8.1 | 85 | 6.1 |
| Canada | 3,863 | 100.0 | 1,404 | 100.0 |

SOURCE: D.B.S., *Statistics on Low Income in Canada, 1967* (Cat. No. 13-536), Statement C.

TABLE 7

Selected statistics of low-income families classified by region of residence, 1967

| Region of Residence | Total low-income families | Average family income | Average family size |
|-------------------------|---------------------------------|-----------------------------|---------------------------|
| | (thousands) | \$ | |
| Atlantic Provinces..... | 132 | 2,655 | 4.5 |
| Quebec | 248 | 2,627 | 4.3 |
| Ontario | 203 | 2,310 | 3.6 |
| Prairie Provinces | 175 | 2,188 | 3.7 |
| British Columbia | 73 | 2,400 | 3.2 |
| Canada | 832 | 2,442 | 3.9 |

SOURCE: D.B.S., *Statistics on Low Income in Canada, 1967* (Cat. No. 13-536), Table 5.

TABLE 8

PATTERN OF EXPENDITURES AND FINANCES, ALL FAMILIES AND INDIVIDUALS -- 1967

| | 1st Quintile < \$4,000 | 2nd Quintile \$4-6,000 | 3rd Quintile \$6-8,000 | 4th Quintile \$8-10,000 | 5th Quintile > \$10,000 | Total |
|---------------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|-------------------------------|-------|
| Percentage of Family Units: % | 18.3 | 17.9 | 22.0 | 15.2 | 26.6 | 100.0 |
| Average Family Size: No. | 1.8 | 2.9 | 3.5 | 3.9 | 4.1 | 3.3 |
| Average Age of Head: Years | 58.0 | 43.9 | 42.2 | 40.0 | 45.1 | 45.8 |
| Families with Children Under 16: % | 14.8 | 45.7 | 59.1 | 66.0 | 58.0 | 49.0 |
| Families with Persons Over 65: % | 45.7 | 15.1 | 10.2 | 7.0 | 11.0 | 18.0 |
| Average Number of Earners: No. | 0.5 | 1.1 | 1.4 | 1.8 | 2.0 | 1.4 |
| Incidence of Homeownership: % | 39.0 | 32.6 | 45.4 | 55.0 | 73.0 | 50.0 |

Continued...

TABLE 8 (Continued)

| | 1st Quintile <\$4,000 | 2nd Quintile \$4-6,000 | 3rd Quintile \$6-8,000 | 4th Quintile \$8-10,000 | 5th Quintile >\$10,000 | Total |
|---|-----------------------------|------------------------------|------------------------------|-------------------------------|------------------------------|-------|
| Shelter Expenditure: \$ | 752 | 1,035 | 1,244 | 1,399 | 1,803 | 1,273 |
| Shelter as % of Income: % | 31 | 21 | 18 | 16 | 13 | 16 |
| Rental Expenditure: \$ | 885 | 1,093 | 1,238 | 1,350 | 1,720 | 1,221 |
| Rental as % of Income: % | 35 | 22 | 18 | 15 | 12 | 15 |
| Ownership Expenditure: \$ | 672 | 940 | 1,133 | 1,247 | 1,506 | 1,210 |
| Ownership as % of Income: % | 27 | 19 | 16 | 14 | 10 | 15 |
| Income: \$ | 2,450 | 5,027 | 6,982 | 8,920 | 14,288 | 8,172 |
| Net Change in Assets and Liabilities: \$ | -198 | -157 | +317 | +211 | +1,507 | +419 |

Note: Ownership and rental expenditures have been reweighted here to represent averages over owners or renters taken separately. These figures include expenditure for fuel, light and water, as do the figures for all shelter.

Source: DBS 62-530, Urban Family Expenditure, 1967 (Ottawa: DBS, 1971).

TABLE 9

SHELTER EXPENDITURE BY QUINTILE GROUPS FOR ALL CANADA

| | | <u>SHELTER</u> <u>% of</u> <u>Income</u> | <u>RENTAL</u> <u>% of</u> <u>Income</u> | <u>OWNERSHIP</u> <u>% of</u> <u>Income</u> |
|-------------------------------------|------------|--|---|--|
| <u>ALL FAMILIES AND INDIVIDUALS</u> | | | | |
| Bottom Quintile | (<\$4,000) | 31 | 35 | 27 |
| Bottom Two Quintile | (<\$6,000) | 24 | 26 | 21 |
| Top Quintile | (>\$10000) | 13 | 12 | 10 |
| Average | | 16 | 15 | 15 |
| <u>ALL FAMILIES</u> | | | | |
| Bottom Quintile | (<\$4,000) | 27 | 30 | 24 |
| Bottom Two Quintile | (<\$6,000) | 24 | 26 | 21 |
| Top Quintile | (>\$10000) | 12 | 12 | 10 |
| Average | | 15 | 14 | 14 |

TABLE 10

HOUSING CONDITIONS OF NATIVE PEOPLE

| | | |
|---------------------|----------------|---------|
| PRESENT POPULATION: | Status Indians | 251,431 |
| | Metis | 270,775 |
| | Eskimo | 16,819 |

INCOME:

- 78% - less than \$3000/year/family
- 40% on welfare
- Seasonal employment
- Average income \$2000

HOUSING CONDITIONS:

- 90% of Metis housing needs total replacement or major repairs

PRESENT HOUSING:

1. For Indians - DIAND - 9000 new homes in last 5 yrs.
CMHC(59) 900 new homes in last 5 yrs.
2. Housing in North predominantly for Eskimos
 - DIAND - 2300 homes
3. Housing for Metis
 - no specific federal programs
 - provincial programs
 - 375 in 6 years

TABLE 10 cont'd

TO CLOSE HOUSING GAP BY 1981

| | <u>NEW HOUSING NEEDED</u> | <u>REHABILITATION NEEDED</u> |
|-----------------------|-------------------------------|----------------------------------|
| ESKIMOS | 800 | 0 |
| METIS -Fringe Areas | 18,000 | 4,000 |
| -White Communities | 4,500 | 12,000 |
| INDIAN | <u>9,000</u> | <u>10,300</u> |
| TOTAL | 32,300 | 26,300 |
| NEW FAMILY CREATION | <u>23,000</u> | <u>3,200</u> |
| TOTAL NEED 1981 | <u><u>55,300</u></u> | <u><u>29,500</u></u> |

TABLE 11

HOUSEHOLD FACILITIES OF HOUSEHOLDS BY SELECTED QUINTILE GROUPS
PERSONS 65 YEARS AND OLDER - 1967

| | NO. OF HOUSEHOLDS 000's | AGE OF DWELLINGS | | WITHOUT WATER % | WITHOUT TOILET % | WITHOUT FURNACE % |
|---------------------------|-------------------------------|------------------|------------|-----------------------|------------------------|-------------------------|
| | | Pre 1940 % | 1960+ % | | | |
| <u>INDIVIDUALS</u> | | | | | | |
| Bottom Quin. (<\$1,000) | 42.7 | 68 | 13 | 17 | 14 | 38 |
| Bottom 2 Quin (<\$2,000) | 209.8 | 62 | 14 | 13 | 17 | 44 |
| Top Quin. (>\$5,000) | 19.1 | 49 | 28 | 10 | 11 | 18 |
| AVERAGE | 301.8 | 60 | 15 | 11 | 13 | 35 |
| <u>FAMILIES</u> | | | | | | |
| Bottom Quin (<\$4,000) | 296.1 | 60 | 11 | 8 | 10 | 36 |
| Bottom 2 Quin. (<\$6,000) | 408.4 | 58 | 11 | 7 | 9 | 33 |
| Top Quin. (>\$10000) | 59.7 | 56 | 15 | 0.2 | 0.1 | 14 |
| AVERAGE | 558.3 | 57 | 17 | 6 | 7 | 29 |
| <u>MULTI-UNIT</u> | | | | | | |
| AVERAGE | 63.0 | 72 | 6 | 3 | 4 | 18 |

TABLE 12

SHELTER EXPENDITURES OF THE ELDERLY BY INCOME CLASS -- 1967

| <u>Income Class</u> | <u>Family Units in Class</u> % | <u>Average Income</u> \$ | <u>Average Shelter Expenditure</u> \$ | <u>Shelter as % of Income</u> % |
|---------------------|---|---------------------------------|--|--|
| Under \$2,500 | 39 | 1,638 | 707 | 43 |
| \$2,500-3,000 | 14 | 2,731 | 767 | 28 |
| (Under \$3,000) | (53) | (1,904) | (712) | (37) |
| \$3,000-4,000 | 12 | 3,476 | 1,167 | 33 |
| \$4,000-5,000 | 8 | 4,442 | 990 | 22 |
| \$5,000-6,000 | 5 | 5,502 | 1,179 | 21 |
| \$6,000-7,000 | 3 | 6,538 | 1,046 | 16 |
| \$7,000-8,000 | 6 | 7,535 | 1,148 | 15 |
| \$8,000-10,000 | 4 | 9,053 | 1,293 | 14 |
| Over \$10,000 | 10 | 16,673 | 1,641 | 10 |
| Average | 100 | 4,830 | 959 | 20 |

Source: DBS, unpub. Urban Family Expenditures, 1967, Tables 90-92.

PRIMARY NON-FAMILY HOUSEHOLDS
(000's)
65 years of age and over in single detached units*
(June, 1969)

| <u>PROVINCE</u> | <u>NUMBER</u> |
|----------------------|---------------|
| Newfoundland | 3.3 |
| Prince Edward Island | 2.0 |
| Nova Scotia | 10.5 |
| New Brunswick | 7.7 |
| Quebec | 15.2 |
| Ontario | 49.1 |
| Manitoba | 9.8 |
| Saskatchewan | 11.9 |
| Alberta | 26.0 |
| British Columbia | 21.8 |

* Estimates prepared for Policy Planning Division by
Educational and Economic Systems, Inc.

Housing for senior citizens also involves a significant stock adjustment problem. The available data show large numbers of single detached units occupied by the elderly, units which would be potentially available for family accommodation should good alternative housing for senior citizens become available.

INDICATORS OF REHABILITATION NEEDS

TABLE 14A

| | <u>Lacking a Bath or Shower, 1961</u> | <u>Lacking a Furnace, 1961</u> |
|--------|---|--|
| Canada | 1,042,000 | 1,482,000 |
| Owned | 741,000 | 907,000 |
| Rented | 301,000 | 575,000 |
| Rural | 682,000 | 824,000 |
| Owned | 572,000 | 598,000 |
| Rented | 110,000 | 226,000 |
| Urban | 360,000 | 757,000 |
| Owned | 169,000 | 309,000 |
| Rented | 191,000 | 348,000 |

TABLE 14 B

| <u>Distribution by Tenure</u> | | |
|-------------------------------|------------------------|------------------------|
| | <u>Survey</u> | <u>Population</u> |
| <u>Large cities</u> | <u>Percent Renters</u> | <u>Percent Renters</u> |
| Ottawa | 96.5 | 50.9 |
| Toronto | 91.7 | 33.5 |
| Winnipeg | 98.3 | 36.7 |
| Edmonton | 81.3 | 39.2 |
| Vancouver | 88.3 | 37.0 |
| Halifax-Dartmouth | 67.6 | 34.4 |
| Other: | | |
| Alberta | 53.0 | 18.1 |
| N.S. | 49.3 | 11.7 |

TABLE 14C

| <u>Percent of Dwelling Units Without Bath or Shower, 1961</u> | | | <u>Rating of Interior</u> | | | |
|---|---------------|-------------|---------------------------|------------------|------------------|------------------------------|
| <u>Large Cities</u> | <u>Survey</u> | <u>Pop.</u> | <u>0</u> | <u>2-4 minor</u> | <u>5-9 major</u> | <u>10 or more, extensive</u> |
| Ottawa | 10.7 | 6.0 | 55.4 | 19.0 | 18.6 | 6.6 |
| Toronto | 28.7 | 1.2 | 54.9 | 23.2 | 14.6 | 7.3 |
| Winnipeg | 34.0 | 4.3 | 43.4 | 24.2 | 22.6 | 9.8 |
| Edmonton | 14.6 | 3.2 | 62.6 | 12.2 | 17.1 | 8.1 |
| Vancouver | 16.0 | 1.6 | 62.8 | 14.3 | 15.1 | 7.8 |
| Large Urban | 24.2 | 1.4 | - | - | - | - |
| Other: | | | | | | |
| Alberta | 70.7 | 13.8 | 40.0 | 16.9 | 26.7 | 16.4 |
| N.S. | 47.2 | 24.4 | 33.8 | 13.5 | 41.4 | 11.3 |

TABLE 15.

COST OF REHABILITATION SUBSIDIES AND WORKS
IN MONTREAL AS AT THE 31ST JULY 1971

The total amount committed by the city for subsidies amounts to \$807,887.04 namely:

\$402,039.14 for rehabilitation (\$539. on the average per housing unit);

\$273,605 for demolition-reconstruction (\$746 on the average per housing unit);

\$132,242.90 for demolition-clearance (\$218 on the average per demolished housing unit);

It is interesting to note the equities of the owners, directly generated by these subsidies: works in the order of \$5,006,000. have been undertaken, namely:

\$1,488,000. in rehabilitation;

\$3,343,000. in demolition-reconstruction

\$175,000. in demolition-clearance;

In other words, each dollar (\$1.00) granted in subsidy has produced seven dollars (\$7.00) of works.

In other respects, for the 4,000 housing units rehabilitated without a subsidy from the city, the cost of works is estimated at approximately \$4,000,000.

TABLE 16.

Effects on employment: Montreal Rehabilitation

In a general way, jobs created in the field of construction may be estimated as follows:

| <u>Cost of works</u> | <u>Type of works</u> | <u>Jobs created</u> |
|--------------------------|--------------------------|-------------------------|
| \$1,000,000.00 | General construction | 100 jobs/year |
| \$1,000,000.00 | Major rehabilitation | 150 jobs/year |
| \$1,000,000.00 | Minor rehabilitation | 170 jobs/year |

TABLE 17

Annual Per/Unit Capital Requirements For Public Housing,
Given Varying Rates of Increase In Residential Construction
Costs, 1972 - 1981

TABLE A-1

| 1972 Construction Cost per Dwelling Unit | Annual Rates of Increase in Residential Construction Costs (%) | | | | | |
|---|---|--------|--------|--------|--------|--------|
| | Year | 0 | 3 | 5 | 6 | 8 |
| \$14,000 | 1972 | 14,000 | 14,000 | 14,000 | 14,000 | 14,000 |
| | 1973 | 14,000 | 14,420 | 14,700 | 14,840 | 15,120 |
| | 1974 | 14,000 | 14,853 | 15,435 | 15,730 | 16,329 |
| | 1975 | 14,000 | 15,298 | 16,206 | 16,674 | 17,636 |
| | 1976 | 14,000 | 15,757 | 17,017 | 17,674 | 19,047 |
| | 1977 | 14,000 | 16,230 | 17,868 | 18,735 | 20,570 |
| | 1978 | 14,000 | 16,717 | 18,761 | 19,860 | 22,216 |
| | 1979 | 14,000 | 17,218 | 19,700 | 21,050 | 23,996 |
| | 1980 | 14,000 | 17,734 | 20,684 | 22,313 | 25,916 |
| | 1981 | 14,000 | 18,267 | 21,718 | 23,652 | 27,990 |
| \$17,000 | 1972 | 17,000 | 17,000 | 17,000 | 17,000 | 17,000 |
| | 1973 | 17,000 | 17,510 | 17,850 | 18,020 | 18,360 |
| | 1974 | 17,000 | 18,035 | 18,743 | 19,101 | 19,829 |
| | 1975 | 17,000 | 18,576 | 19,680 | 20,247 | 21,415 |
| | 1976 | 17,000 | 19,134 | 20,664 | 21,462 | 23,128 |
| | 1977 | 17,000 | 19,708 | 21,697 | 22,749 | 24,978 |
| | 1978 | 17,000 | 20,298 | 22,782 | 24,114 | 26,977 |
| | 1979 | 17,000 | 20,907 | 23,921 | 25,560 | 29,135 |
| | 1980 | 17,000 | 21,534 | 25,117 | 27,095 | 31,466 |
| | 1981 | 17,000 | 22,180 | 26,373 | 28,720 | 33,983 |

Annual Capital Requirements for 50,000 Public Housing
Units Built Per Year, Given Varying Annual Rates of
Increase in Residential Construction Costs, 1972-81
 (millions of \$)

TABLE A-2

| 1972 Construction Cost per Dwelling Unit | Annual Rates of Increase in Residen- tial Construction Costs (%) | | | | | |
|---|---|-----|-------|-------|-------|-------|
| | Year | 0 | 3 | 5 | 6 | 8 |
| \$14,000 | 1972 | 700 | 700 | 700 | 700 | 700 |
| | 1973 | 700 | 721 | 735 | 742 | 756 |
| | 1974 | 700 | 743 | 772 | 787 | 816 |
| | 1975 | 700 | 765 | 810 | 834 | 881 |
| | 1976 | 700 | 788 | 851 | 884 | 952 |
| | 1977 | 700 | 811 | 893 | 937 | 1,028 |
| | 1978 | 700 | 836 | 938 | 993 | 1,111 |
| | 1979 | 700 | 861 | 985 | 1,053 | 1,199 |
| | 1980 | 700 | 887 | 1,034 | 1,116 | 1,296 |
| | 1981 | 700 | 913 | 1,086 | 1,183 | 1,400 |
| \$17,000 | 1972 | 850 | 850 | 850 | 850 | 850 |
| | 1973 | 850 | 875 | 893 | 901 | 918 |
| | 1974 | 850 | 902 | 937 | 955 | 991 |
| | 1975 | 850 | 929 | 984 | 1,012 | 1,071 |
| | 1976 | 850 | 957 | 1,033 | 1,073 | 1,156 |
| | 1977 | 850 | 985 | 1,085 | 1,137 | 1,249 |
| | 1978 | 850 | 1,015 | 1,139 | 1,206 | 1,349 |
| | 1979 | 850 | 1,045 | 1,196 | 1,278 | 1,457 |
| | 1980 | 850 | 1,077 | 1,256 | 1,355 | 1,573 |
| | 1981 | 850 | 1,109 | 1,319 | 1,436 | 1,700 |

TABLE 19

- 106 -
ESTIMATED FEDERAL SUBSIDIES:¹.

1971-1980

| | SECTION 40 | | SECTION 44 | | TOTAL | |
|------|--------------|---------|--------------|---------|--------------|---------|
| | Units U/A | (\$000) | Units U/A | (\$000) | Units U/A | (\$000) |
| 1971 | 15,056 | 11,274 | 35,298 | 19,484 | 50,354 | 30,758 |
| 1972 | 16,652 | 13,355 | 52,985 | 33,552 | 69,637 | 46,907 |
| 1973 | 18,302 | 15,557 | 73,905 | 49,610 | 92,207 | 65,167 |
| 1974 | 19,952 | 17,977 | 93,405 | 66,455 | 113,375 | 84,432 |
| 1975 | 21,602 | 20,630 | 111,405 | 84,008 | 123,007 | 104,638 |
| 1976 | 23,252 | 23,531 | 129,405 | 103,406 | 152,657 | 126,937 |
| 1977 | 24,902 | 26,720 | 147,405 | 124,881 | 172,307 | 151,601 |
| 1978 | 26,552 | 30,190 | 165,405 | 148,467 | 191,957 | 178,657 |
| 1979 | 28,202 | 33,983 | 183,405 | 174,550 | 211,607 | 208,533 |
| 1980 | 29,852 | 38,121 | 201,405 | 203,161 | 231,257 | 241,282 |

¹. Projections prepared by Economics and Statistics and Urban Renewal and Public Housing Division

B. URBAN ASSISTANCE

The needs for and potential impact of the urban assistance proposals geared to planning improvement, growth decentralization, and institutional innovation can be inferred from the overall urban forecasts provided in Chapter II. Here we have illustrated the potential of the Community Assistance Program by giving the results of a preliminary survey of neighbourhoods across Canada.

A SURVEY OF POTENTIAL AREAS FOR THE COMMUNITY ASSISTANCE PROGRAM¹.

VANCOUVER

False Creek - Fairview Slopes: population of 3,300, mixed residential-industrial, 140 acre area. Citizen group is the Fairview Ratepayers Association.

Kitsilano - Central West Side: population of 20,000, mixed residential-commercial, citizen group is the Kitsilano Area Resources Council

Adanac Park: 82 single family residential units, 58 acres, considerable vacant land which can be put to use, present plan calls for mixed residential, commercial and park use, citizen group is the Hastings Sunrise Action Council.

Grandview - Woodland: active area resource council.

CALGARY

Inglewood - Ramsay: strong community group in this area already working with professional, technical consultants.

Victoria Park: future of this area is uncertain, strong community association in conflict with city and Calgary Stampede Board which wants to expand into the area. Meets all criteria for program.

EDMONTON

Canora: meets all program criteria; strong community association is developing

Westmound: area generally meets criteria as outlined.

1. Information supplied by Social Development Division, Head office, CMHC.

WINNIPEG

North Pt. Douglas: two citizen groups in this area.
Ideal for rehabilitation program.

Urban Renewal Area No. 2: variety of community groups at work in this area. Ideal area for community assistance. This is area of greatest need in Winnipeg.

TORONTO

East of Don River - South of Danforth: present citizens group is the Riverdale Community Organization with representation from several smaller groups.

Hamilton - Broadview - Gerrard - Queen St.: East Toronto Social Planning Council is interested in promoting community involvement in planning in this area.

Don Vale: Don Vale Residents Association and Don Vale Property Owners Association are two area citizen groups.

Sherbourne - Dundas - Queen St.: In this area, Don West Neighbours Housing is a group interested in purchasing existing houses for rehabilitation and rent on a non-profit basis.

The Beaches Area: citizen group is Forward Nine interested in rehabilitation and stabilization of area.

Centre City: Holy Trinity Church has an organized citizens group.

Grange Area: Grange Park Residents Association is local citizen group.

Beverly and McCaul: Chinese Community Group is active.

West of Spadina - Kensington Market Area: citizens group is the Kensington Area Residents Association.

West of Bathurst at Queen St.: Citizens group is Niagara Residents Association.

Queen St. and Lansdowne: Lansdowne Save Our Neighbourhood Association.

Parkdale Area: three citizen groups active here

Quebec and Gothic: Quebec-Gothic Residents Association.
Area under high redevelopment pressures.

South of St. Clair: Italian community development group
interested in promoting rehabilitation.

LONDON

Wellington - Horton St. to Thames River: Rehabilitation
planning well under way in this area. Community is
organized and working with the city on proposals.

North Central District: also has active citizens group.

OSHAWA

Area Adjacent to C.B.D.:

Area Immediately South of Hwy. 401: both above areas
have been identified in urban renewal studies as
deteriorating neighbourhoods. No active citizen groups
as yet.

THUNDER BAY

Fort William Ward: May and Cumings St.: residents group
is East End Neighbourhood Association. Has gained
some experience through Opportunities for Youth Program.

SAULT STE. MARIE

One mile from C.B.D. in West End: an older residen-
tial and commercial area suitable for a community assis-
tance program. No organized community group at present.

Bridge Plaza: 6-8 blocks of older residential sites.
No organized group as yet.

HAMILTON

Former Urban Renewal Area North East of C.B.D.:
Citizen group is the Victoria Park Community Organization.
City has recently initiated a series of six neighbourhood
improvement studies.

HESPELER

Area Adjacent to C.B.D.: some residents have already under-
taken rehabilitaiton. This interest would likely revive
with program such as Community Assistance.

ST. CATHARINES

Several Areas designated by urban renewal study could also be used for rehabilitation aid. Citizens Advisory committee formed during urban renewal era.

NIAGARA FALLS

Older residential area designated in urban renewal scheme. No organized citizens group exists as yet but municipal officials have expressed interest in promoting citizen interest and involvement.

WINDSOR

Large, mixed commercial-residential area surrounding C.B.D.

Drouillard Road Area: There are three organized citizens groups in Windsor who might form the nucleus of a community assistance program; the Downtown Citizens Association; the East Windsor Citizens Association; and the West Windsor Citizens Association.

OTTAWA

Lower Town East: Urban renewal area - some citizen action

Mechanicville: A survey of the area for improvement purposes has been done

Dalhousie Ward

The city is conducting a series of public involvement sessions to develop neighbourhood plans with area residents across central city, beginning with Sandy Hill.

For the following cities and neighbourhoods, the preliminary assessment of the situation was not available.

MONTREAL

District of Hochelaga-Maisonneuve

Centre-Sud (Terrasse Ontario)

Mille-End

Pointe St-Charles

Plateau Mont-Royal

Villeray

VERDUN

LACHINE

QUEBEC

Aire #10

Paroisse St-Jean Baptiste

TROIS RIVIERES

Secteur St.-Francois

HULL

Ile de Hull

ST-JEROME

ST-HYACINTHE

SOREL

GRANBY

LACHUTE

MANIWAKI

SHAWINIGAN

CAMPBELLTON

St. Albert

ST. JOHN

South End

HALIFAX

Kline Heights

North End

SYDNEY

Whitney Pier

YARMOUTH

South Renewal

CHARLOTTETOWN

Downtown Area

CORNERBROOK

West

ST. JOHN'S

Blackhead Road

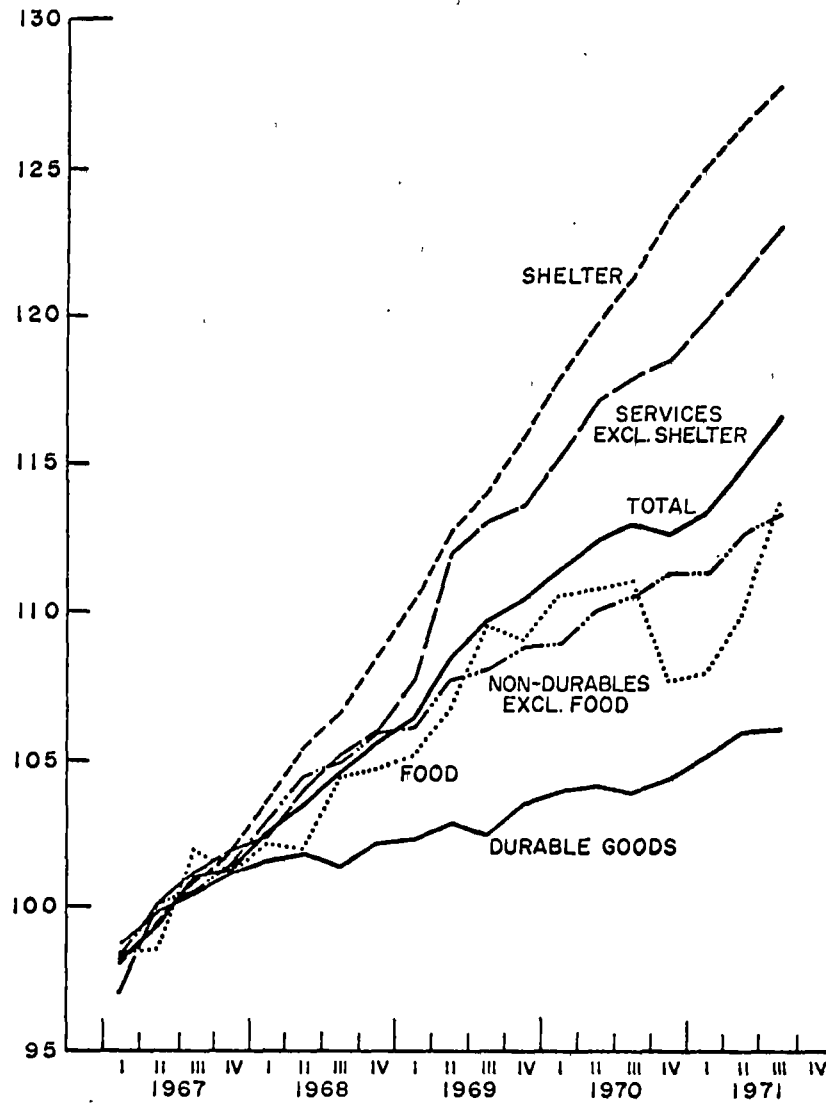
Mundy Pond

C. LAND AND INFRASTRUCTURE

As was the case with the urban assistance measures, the substantial requirements for public intervention to control urban growth can be inferred from the forecasts of the decade. Indeed land requirements and cost projections are included among them. But land and servicing are also a "collector" of the kinds of low income housing investments envisaged in point A of this Chapter.

Here we have reproduced only the recent Consumer Price Index which suggests that shelter costs top the list of items subject to inflationary pressures.

CONSUMER PRICE INDEXES
(Quarterly, 1967=100)



Source: Based on data from Statistics Canada.

D. SOCIAL DEVELOPMENT: DAY CARE

THE MAGNITUDE OF THE PROBLEM

In 1967, 167,000 of the 1,075,000 children of working mothers did not require arrangements for their care as their mothers either were able to work only while their children were in school, or were able to have their children with them by the nature of their employment as boarding or lodging housekeepers, babysitters or foster mothers, usually within their own homes.¹ In 1967, there were 908,000 children of full and part-time working mothers requiring child care.

A. Child-Care Arrangements¹

The arrangements for the 908,000 children requiring Day Care broke down as follows:

- ten percent had no regular arrangements for their care
- sixty-four percent were cared for in their own home.
- fifteen percent were cared for outside their home.¹

There are no statistics on children of non-working

¹Source: Canada. Department of Labour Women's Bureau, "Working Mothers and their Child Care Arrangements, Ottawa, Queen's Printer, 1970, from table 23 p. 4.

mothers requiring care.

B. Type of Arrangement

The majority of arrangements fall in the "baby-sitting" category. Only one percent of children are cared for in the day nurseries or nursery schools; some of them have programs geared to developmental needs.

- the arrangements made for child care vary with the age and school attendance of the child.
- twenty-eight percent of children under three were cared for outside the home compared to eight percent of children aged six to thirteen.
- one percent of children under three were cared for in day nurseries or nursery schools compared to three percent of children aged three to five.
- fifteen percent of children under six were cared for by a non-relative outside the home compared to five percent of children aged six to thirteen.

C. Cost of Arrangements

- Sixty-nine percent of working mothers had their children in unpaid care arrangements. These are often informal arrangements, eg. with a neighbour or relative.
- Twenty percent paid less than \$15. per week.
- Twelve percent paid over \$15. per week.

There is some association between paid and unpaid care and mothers' earnings.

- In 1967, the median annual incomes of working mothers was \$1,783 where the husband was

present and \$2,856 where he was absent.¹

- eighty-one percent of children whose mothers earned under \$1,000 were in unpaid care situations compared to sixty-four percent of children with mothers earning \$4,000 and over.
- care by a non-relative in or outside the home was used more often for children with higher income mothers (twenty-nine percent of those earning over \$4,000) than for children with lower income mothers (thirteen percent of those earning under \$1,000).

This information points out that the limited supply of paid care arrangements puts their price out of the range of many low income mothers.

- there is a positive association between cost of child care and mothers' weekly earnings.
- eight percent of mothers earning under \$25 a week pay for care compared to forty-five percent of mothers earning over \$55 a week.

D. Conclusion

The limited supply of existing day nurseries and the cost of alternative arrangements restricts the availability of day care for low income users. Child care facilities are required for children of low income parents, both in terms of existing and projected need. It is estimated that preschool child care arrangements for all income groups are required in the near future for 450,000 children; 130,000 places for the under three age group and 325,000 for those aged 3 - 6.¹

¹ Source: Canada. Department of Labour, Women's Bureau, Working Mothers and Their Child Care Arrangements. Ottawa, Queen's Printer 1970, from tables 23 and 28.

E. REGIONAL DEVELOPMENT

The housing programs sponsored under the National Housing Act make both direct and indirect contributions to Canada's five major regions - directly by supporting conscious attempts to build up certain areas and indirectly by providing an "attraction" factor for migrants and in other ways.

To place housing in the broadest regional development context, the following tables have been provided:

1. Private and Public Investment by Region 1952 to 1971
2. New Private and Public Investment Expenditures
Excluding Housing, By Region
3. Changes in Private and Public Investment, Canada
and by Region
4. Value of Retail Trade, Canada and by Region, 1947 to 1971
5. Proportion of Housing Investment to total investment
(Provincial)
6. Proportion of Provincial Housing Investment to total
National Investment in Housing
7. Indication of Financial Impact: NHA Provision in
Urban Areas 1970-1971
8. Single detached dwelling starts financed under NHA
9. Per capital dollar value of NHA financing

PRIVATE AND PUBLIC INVESTMENT BY REGION
1952 to 1971

| Years | Newfoundland | Prince Edward Island | Nova Scotia | New Brunswick | Atlantic Region | Quebec |
|-----------------------|--------------|-------------------------|--------------|------------------|--------------------|------------------------------------|
| (Millions of dollars) | | | | | | |
| 1952..... | 86 | 17 | 133 | 104 | 310 | 1,282 |
| 1953..... | 80 | 18 | 167 | 108 | 363 | 1,374 |
| 1954..... | 73 | 19 | 156 | 119 | 367 | 1,362 |
| 1955..... | 89 | 21 | 164 | 168 | 442 | 1,546 |
| 1956..... | 94 | 24 | 183 | 186 | 487 | 1,651 |
| 1957..... | 100 | 22 | 183 | 159 | 469 | 2,029 |
| 1958..... | 107 | 30 | 185 | 182 | 504 | 2,054 |
| 1959..... | 115 | 37 | 226 | 203 | 531 | 2,091 |
| 1960..... | 146 | 37 | 234 | 180 | 597 | 2,007 |
| 1961..... | 181 | 38 | 224 | 171 | 617 | 2,068 |
| 1962..... | 261 | 44 | 223 | 179 | 706 | 2,154 |
| 1963..... | 236 | 43 | 234 | 189 | 702 | 2,301 |
| 1964..... | 231 | 39 | 270 | 257 | 797 | 2,828 |
| 1965..... | 228 | 57 | 318 | 334 | 937 | 3,206 |
| 1966..... | 341 | 57 | 412 | 391 | 1,201 | 3,416 |
| 1967..... | 359 | 45 | 463 | 377 | 1,214 | 3,214 |
| 1968..... | 387 | 41 | 461 | 336 | 1,219 | 3,175 |
| 1969..... | 395 | 44 | 552 | 392 | 1,383 | 3,376 |
| 1970..... | 512 | 54 | 575 | 451 | 1,595 | 3,388 |
| 1971..... | 565 | 64 | 585 | 477 | 1,691 | 2,833 |
| | | | | | | |
| | Ontario | Manitoba | Saskatchewan | Alberta | Prairie Region | British Columbia ⁽¹⁾ |
| (Millions of dollars) | | | | | | |
| 1952..... | 1,899 | 242 | 313 | 602 | 1,157 | 604 |
| 1953..... | 2,106 | 286 | 357 | 730 | 1,373 | 626 |
| 1954..... | 2,089 | 270 | 377 | 627 | 1,274 | 533 |
| 1955..... | 2,271 | 301 | 349 | 735 | 1,385 | 707 |
| 1956..... | 2,842 | 364 | 465 | 981 | 1,750 | 1,089 |
| 1957..... | 3,266 | 371 | 455 | 834 | 1,660 | 1,293 |
| 1958..... | 3,104 | 409 | 477 | 890 | 1,776 | 925 |
| 1959..... | 2,900 | 484 | 467 | 947 | 1,898 | 944 |
| 1960..... | 2,856 | 487 | 474 | 916 | 1,907 | 835 |
| 1961..... | 2,734 | 417 | 451 | 981 | 1,832 | 901 |
| 1962..... | 3,051 | 424 | 513 | 937 | 1,874 | 927 |
| 1963..... | 3,282 | 491 | 603 | 995 | 2,089 | 1,019 |
| 1964..... | 3,747 | 528 | 648 | 1,100 | 2,276 | 1,296 |
| 1965..... | 4,379 | 537 | 773 | 1,320 | 2,630 | 1,712 |
| 1966..... | 5,261 | 656 | 928 | 1,564 | 3,118 | 2,034 |
| 1967..... | 5,357 | 719 | 961 | 1,675 | 3,353 | 2,149 |
| 1968..... | 5,579 | 820 | 943 | 1,723 | 3,456 | 1,996 |
| 1969..... | 6,307 | 901 | 755 | 1,914 | 3,570 | 2,291 |
| 1970..... | 6,857 | 893 | 623 | 1,954 | 3,470 | 2,330 |
| 1971..... | 7,462 | 862 | 649 | 1,997 | 3,508 | 2,827 |

NOTE: 1969 figures are actual, 1970 figures are preliminary actual and 1971 figures are intentions.

(1) Includes Yukon and Northwest Territories.

SOURCE: DBS and Department of Industry, Trade and Commerce *Private and Public Investment in Canada*.

TABLE 2

- 120 -

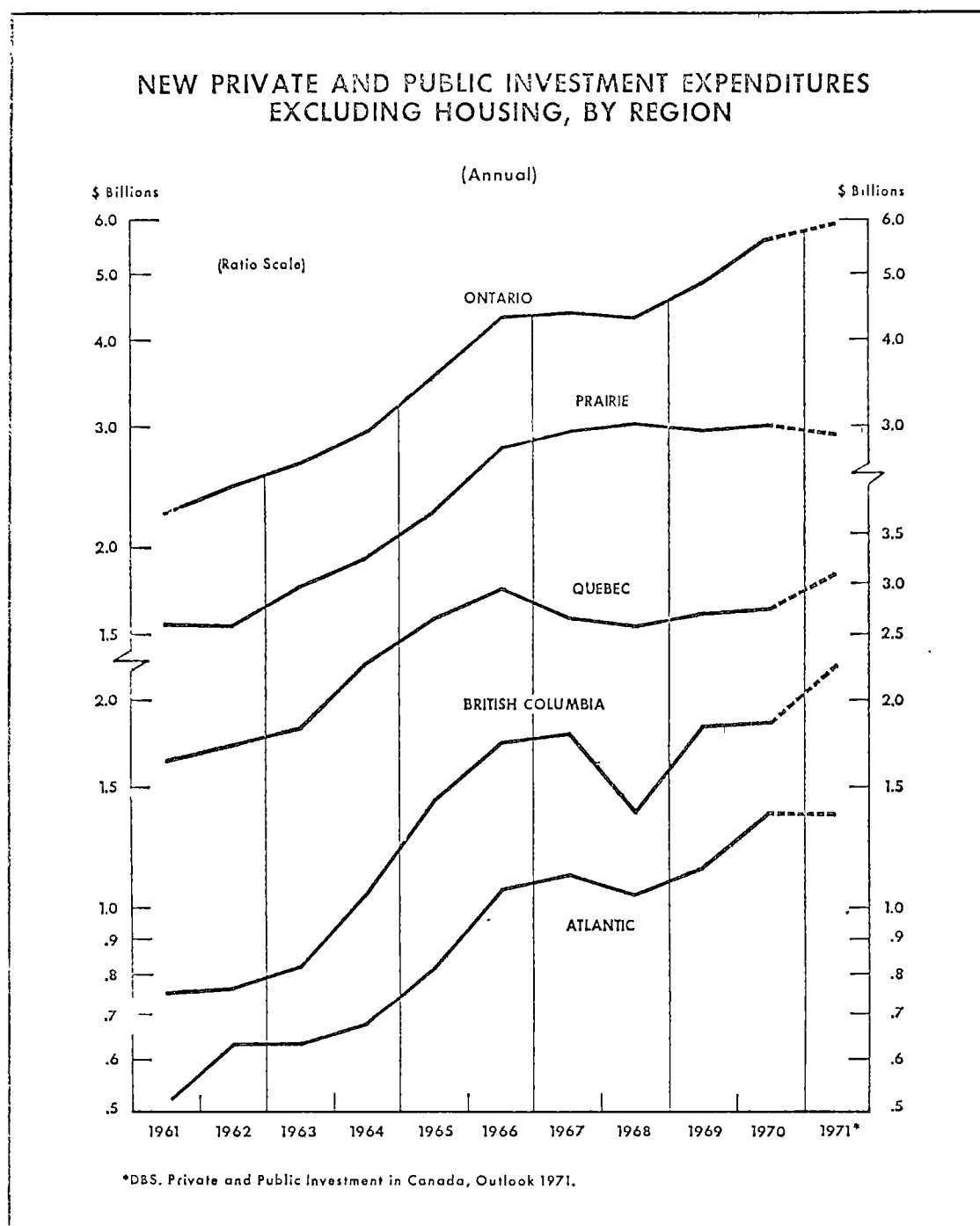


TABLE 3

CHANGES IN PRIVATE AND PUBLIC INVESTMENT, CANADA AND BY REGION

1953 to 1971

| Years | Canada | Atlantic Region | Quebec | Ontario | Prairie Region | British Columbia ⁽¹⁾ |
|--------------------------------------|--------|--------------------|--------|---------|-------------------|------------------------------------|
| (Per cent change from previous year) | | | | | | |
| 1953..... | 10.6 | 0.8 | 7.0 | 10.9 | 18.7 | 3.6 |
| 1954..... | -3.7 | 1.1 | -0.9 | -0.8 | -7.2 | -14.9 |
| 1955..... | 12.9 | 20.4 | 13.5 | 8.7 | 8.7 | 32.6 |
| 1956..... | 26.3 | 10.2 | 19.7 | 25.1 | 26.4 | 51.0 |
| 1957..... | 8.7 | -3.7 | 9.6 | 14.9 | -5.1 | 18.7 |
| 1958..... | -4.1 | 7.5 | 1.2 | -5.0 | 7.0 | -25.5 |
| 1959..... | 0.6 | 15.3 | 1.9 | -6.6 | 6.9 | 2.1 |
| 1960..... | -1.8 | 2.8 | -4.2 | -1.5 | 0.5 | -5.2 |
| 1961..... | -1.1 | 3.4 | - | -2.2 | -2.9 | 0.7 |
| 1962..... | 6.6 | 11.4 | 7.3 | 9.3 | 1.2 | 2.9 |
| 1963..... | 7.8 | -0.6 | 6.8 | 7.5 | 11.5 | 9.9 |
| 1964..... | 16.5 | 13.5 | 22.9 | 14.2 | 9.9 | 27.2 |
| 1965..... | 17.6 | 17.6 | 13.4 | 16.9 | 15.6 | 32.2 |
| 1966..... | 17.3 | 28.2 | 7.5 | 20.1 | 19.7 | 18.7 |
| 1967..... | 1.5 | 3.6 | -6.7 | 1.8 | 6.7 | 5.7 |
| 1968..... | 0.9 | -2.0 | -1.2 | 4.1 | 3.8 | -7.7 |
| 1969..... | 9.5 | 13.5 | 6.3 | 13.0 | 2.4 | 14.8 |
| 1970..... | 4.2 | 15.3 | 0.4 | 8.7 | -2.8 | 1.7 |
| 1971..... | 9.5 | 6.0 | 13.1 | 5.8 | 1.1 | 21.3 |

Note: 1969 figures are actual, 1970 figures are preliminary actual and 1971 figures are intentions.

⁽¹⁾See footnote (1) on reference table 16.

Source: DBS and Department of Industry, Trade and Commerce *Private and Public Investment in Canada*.

TABLE 4

VALUE OF RETAIL TRADE, CANADA AND BY REGION

1947 to 1971

| Years and Months | Canada | Atlantic Region | Quebec | Ontario | Prairie Region | British Columbia |
|---------------------------|------------------------|----------------------|---------|----------|----------------|------------------|
| (Millions of dollars) | | | | | | |
| 1947..... | 6,963.4 ⁽¹⁾ | 563.6 ⁽¹⁾ | 1,621.1 | 2,721.1 | 1,320.8 | 736.9 |
| 1948..... | 7,835.0 ⁽¹⁾ | 607.3 ⁽¹⁾ | 1,792.0 | 3,067.2 | 1,550.7 | 817.8 |
| 1949..... | 8,532.0 | 731.2 | 1,872.0 | 3,293.6 | 1,758.1 | 874.1 |
| 1950..... | 9,617.2 | 822.2 | 2,183.0 | 3,715.4 | 1,914.4 | 992.1 |
| 1951..... | 10,693.1 | 898.5 | 2,412.6 | 4,129.8 | 2,122.3 | 1,099.8 |
| 1952..... | 11,567.2 | 970.7 | 2,657.8 | 4,409.2 | 2,339.9 | 1,199.6 |
| 1953..... | 12,189.4 | 1,001.4 | 2,793.1 | 4,663.6 | 2,453.3 | 1,211.0 |
| 1954..... | 12,317.2 | 1,023.6 | 2,867.7 | 4,761.7 | 2,399.4 | 1,273.6 |
| 1955..... | 13,472.8 | 1,121.7 | 3,109.3 | 5,293.7 | 2,496.1 | 1,447.0 |
| 1956..... | 14,773.7 | 1,208.6 | 3,463.0 | 5,734.3 | 2,727.8 | 1,610.0 |
| 1957..... | 15,423.3 | 1,233.0 | 3,709.6 | 5,913.1 | 2,811.5 | 1,683.2 |
| 1958..... | 16,139.1 | 1,286.7 | 3,851.4 | 6,271.1 | 3,021.3 | 1,705.5 |
| 1959..... | 17,087.1 | 1,356.5 | 4,114.2 | 6,614.9 | 3,293.1 | 1,793.4 |
| 1960..... | 17,390.5 | 1,421.0 | 4,213.1 | 6,759.7 | 3,259.3 | 1,735.3 |
| 1961..... | 17,752.3 | 1,455.6 | 4,490.1 | 6,898.0 | 3,238.1 | 1,769.5 |
| 1961 ⁽²⁾ | 16,073.0 | 1,380.5 | 4,108.0 | 6,204.7 | 2,773.6 | 1,601.2 |
| 1962..... | 17,137.2 | 1,436.1 | 4,455.6 | 6,326.3 | 2,914.0 | 1,751.1 |
| 1963..... | 18,207.1 | 1,511.0 | 4,770.3 | 6,917.8 | 3,097.6 | 1,890.3 |
| 1964..... | 19,492.9 | 1,616.2 | 5,119.7 | 7,366.1 | 3,301.5 | 2,086.5 |
| 1965..... | 21,151.6 | 1,761.9 | 5,533.9 | 8,034.4 | 3,599.2 | 2,306.9 |
| 1966..... | 22,656.4 | 1,861.0 | 5,882.1 | 8,625.1 | 3,811.2 | 2,506.6 |
| 1967..... | 21,151.8 | 1,979.1 | 6,379.2 | 9,071.0 | 4,037.6 | 2,618.0 |
| 1968..... | 25,710.8 | 2,135.4 | 6,564.9 | 9,881.7 | 4,269.5 | 2,859.3 |
| 1969..... | 27,321.7 | 2,193.7 | 6,937.8 | 10,639.2 | 4,418.6 | 3,105.3 |
| 1970..... | 27,793.2 | 2,292.3 | 7,090.8 | 10,811.6 | 4,425.4 | 3,113.1 |
| (Seasonally adjusted) | | | | | | |
| 1970 J..... | 2,319.0 | 187.5 | 588.3 | 891.3 | 379.3 | 268.4 |
| F..... | 2,287.0 | 186.6 | 582.8 | 881.8 | 361.5 | 262.2 |
| M..... | 2,280.1 | 181.3 | 585.9 | 897.7 | 382.2 | 263.0 |
| A..... | 2,311.5 | 189.6 | 583.9 | 911.7 | 361.1 | 261.8 |
| M..... | 2,305.0 | 190.4 | 587.5 | 910.8 | 359.4 | 260.8 |
| J..... | 2,297.7 | 191.5 | 580.9 | 901.7 | 357.1 | 259.7 |
| J..... | 2,352.8 | 193.4 | 596.9 | 920.3 | 383.1 | 259.5 |
| A..... | 2,301.2 | 190.5 | 585.5 | 907.0 | 367.2 | 259.7 |
| S..... | 2,310.0 | 191.4 | 596.6 | 913.4 | 372.4 | 263.6 |
| O..... | 2,318.8 | 191.2 | 589.5 | 895.6 | 372.8 | 261.9 |
| N..... | 2,322.2 | 192.5 | 587.6 | 903.3 | 371.9 | 266.1 |
| D..... | 2,361.3 | 196.8 | 618.9 | 909.9 | 380.6 | 270.1 |
| 1971 J..... | 2,318.4 | 188.0 | 592.3 | 899.7 | 373.0 | 263.4 |
| F..... | 2,401.4 | 202.0 | 598.1 | 941.4 | 383.2 | 267.0 |
| M..... | 2,408.0 | 192.5 | 588.5 | 946.5 | 381.5 | 269.5 |

Note: Figures may not cross-add due to rounding.

(1) Excludes Newfoundland.

(2) Figures from 1961 are based on 1966 intercensal estimates.

Source: DBS Retail Trade, Monthly, Cat. 63-005.

TABLE 5.

PROPORTION OF HOUSING INVESTMENT TO TOTAL INVESTMENT (PROVINCIAL)

| | NFLD. | P.E.I. | N.S. | N.B. | QUE. | ONT. | MAN. | SASK. | ALTA. | B.C. |
|--------------------------|-------|--------|------|------|------|------|------|-------|-------|------|
| % of Capital Expenditure | | | | | | | | | | |
| 1969 | 13.4 | 25.1 | 18.2 | 16.9 | 20.7 | 22.9 | 16.1 | 13.8 | 17.3 | 21.0 |
| 1970 | 9.1 | 23.3 | 17.8 | 13.5 | 19.7 | 18.5 | 15.3 | 8.1 | 13.9 | 19.9 |
| 1971 | 12.7 | 23.5 | 20.1 | 17.6 | 21.5 | 20.4 | 19.2 | 8.3 | 19.1 | 18.2 |

| | | | | | | | | | | |
|-------------------------|------|------|------|------|------|------|------|------|------|------|
| % of Repair Expenditure | | | | | | | | | | |
| 1969 | 11.8 | 18.9 | 16.7 | 15.7 | 17.5 | 16.7 | 17.0 | 16.3 | 14.3 | 15.5 |
| 1970 | 12.3 | 24.1 | 19.5 | 17.2 | 15.3 | 16.0 | 17.3 | 16.9 | 13.7 | 15.3 |
| 1971 | 12.1 | 23.8 | 19.1 | 16.8 | 14.9 | 15.8 | 17.1 | 16.5 | 13.7 | 14.8 |

| | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|
| % of Total Cap. and Repair Expenditures | | | | | | | | | | |
| | | | | | | | | | | |
| 1969 | 13.0 | 23.4 | 17.9 | 16.6 | 19.9 | 21.4 | 16.3 | 14.4 | 16.7 | 19.8 |
| 1970 | 9.8 | 23.5 | 18.2 | 14.3 | 18.5 | 17.9 | 15.7 | 10.7 | 13.8 | 18.9 |
| 1971 | 12.6 | 23.6 | 19.9 | 17.4 | 19.8 | 19.4 | 18.7 | 10.7 | 18.1 | 17.5 |

TABLE 6.

PROPORTION OF PROVINCIAL HOUSING INVESTMENT TO
TOTAL NATIONAL INVESTMENT IN HOUSING
(MILLIONS \$)

| | NFLD. | P.E.I. | N.S. | N.B. | QUE. | ONT. | MAN. | SASK. | ALTA. | B.C. |
|---------------------------|-------|--------|------|------|------|------|------|-------|-------|------|
| % of Capital Expenditures | | | | | | | | | | |
| 1969 | 1.5 | 0.3 | 2.8 | 2.0 | 20.0 | 42.1 | 4.3 | 3.0 | 9.8 | 14.1 |
| 1970 | 1.5 | 0.4 | 3.3 | 2.0 | 21.7 | 41.1 | 4.4 | 1.6 | 8.8 | 15.1 |
| 1971 | 2.0 | 0.4 | 3.2 | 2.1 | 21.8 | 40.1 | 4.2 | 1.4 | 10.8 | 14.1 |

% of Repair Expenditures

| | | | | | | | | | | |
|------|-----|-----|-----|-----|------|------|-----|-----|-----|------|
| 1969 | 1.7 | 0.4 | 2.6 | 2.1 | 24.9 | 38.6 | 5.0 | 4.9 | 8.0 | 11.7 |
| 1970 | 1.9 | 0.5 | 3.4 | 2.6 | 22.0 | 39.3 | 5.1 | 5.2 | 8.1 | 11.8 |
| 1971 | 1.9 | 0.5 | 3.4 | 2.6 | 21.9 | 39.4 | 5.1 | 5.1 | 8.2 | 11.9 |

% of Total Capital and Repair Expenditures

| | | | | | | | | | | |
|------|-----|-----|-----|-----|------|------|-----|-----|------|------|
| 1969 | 1.6 | 0.3 | 2.8 | 2.0 | 21.0 | 41.4 | 4.4 | 3.4 | 9.5 | 13.6 |
| 1970 | 1.6 | 0.4 | 3.4 | 2.1 | 21.7 | 40.7 | 4.6 | 2.4 | 8.7 | 14.3 |
| 1971 | 2.0 | 0.4 | 3.2 | 2.2 | 21.8 | 39.9 | 4.4 | 2.1 | 10.3 | 13.7 |

TABLE 7. INDICATION OF FINANCIAL IMPACT: ¹
NHA PROVISION IN URBAN AREAS
1970-1971

| | <u>Total Commitments</u> <u>All Sections</u> | <u>% TOTAL</u> <u>CMA POP.</u> | <u>% TOTAL CMA</u> <u>TO CASH</u> |
|------------------------|---|-----------------------------------|--------------------------------------|
| METRO AREAS | | | |
| Calgary | 83,527,594 | 3.4 | 8.6 |
| Edmonton | 67,671,316 | 4.2 | 7.0 |
| Halifax | 33,452,850 | 2.1 | 3.4 |
| Hamilton | 27,409,910 | 4.7 | 2.8 |
| Kitchener | 18,995,858 | 2.0 | 2.0 |
| London | 14,039,520 | 2.2 | 1.4 |
| Montreal | 175,873,287 | 25.3 | 18.1 |
| Ottawa-Hull | 69,963,953 | 5.1 | 7.2 |
| Quebec | 56,162,502 | 4.3 | 5.8 |
| Regina | 9,287,078 | 1.4 | 1.0 |
| Saint John | 8,141,533 | 1.1 | 0.8 |
| St. John's | 12,666,592 | 1.1 | 1.3 |
| Saskatoon | 7,991,600 | 1.2 | 0.8 |
| Sudbury | 20,731,298 | 1.2 | 2.1 |
| Toronto | 215,932,137 | 22.4 | 22.2 |
| Vancouver | 58,935,255 | 9.3 | 6.1 |
| Victoria | 11,502,785 | 1.8 | 1.2 |
| Windsor | 24,061,795 | 2.2 | 2.5 |
| Winnipeg | 55,601,373 | 5.3 | 5.7 |
| MAJOR URBAN AREAS | | | |
| | | <u>% TOTAL</u> <u>MUA POP.</u> | <u>% TOTAL</u> <u>MUA TO CASH</u> |
| Brampton | 3,697,000 | 2.9 | 3.6 |
| Brantford | 2,343,600 | 4.0 | 2.3 |
| Chicoutimi-Jonquières | 10,011,200 | 6.8 | 9.7 |
| Drummondville | 2,495,000 | 2.7 | 2.4 |
| Ft. William-Pt. Arthur | 9,283,531 | 3.3 | 9.0 |
| Guelph | 7,352,200 | 4.6 | 7.1 |
| Kingston | 10,368,331 | 3.8 | 10.0 |
| Moncton | 5,275,259 | 3.7 | 5.1 |
| Niagara Falls | 4,531,950 | 5.3 | 4.4 |
| Oshawa | 5,553,000 | 3.6 | 5.4 |
| Peterborough | 4,674,000 | 6.8 | 4.5 |
| St. Catharines | 8,616,500 | 2.6 | 8.3 |
| St. Jean | 453,762 | 2.1 | 0.4 |
| St. Jerome | 2,965,000 | 4.3 | 2.9 |
| Sarnia | 2,778,527 | 4.8 | 2.7 |
| Sault St. Marie | 3,613,713 | 4.2 | 3.5 |
| Shawinigan | 481,000 | 5.1 | 0.4 |
| Sherbrooke | 5,482,315 | 5.6 | 5.3 |
| Sydney-Glace Bay | 2,579,324 | 9.2 | 2.5 |
| Timmins | 1,168,200 | 2.6 | 1.1 |
| Trois Rivières | 6,092,000 | 6.1 | 5.9 |
| Valleyfield | 413,100 | 2.2 | 0.4 |
| Welland | 3,426,200 | 3.7 | 3.3 |

1. Including Insured Loans

TABLE 8.

SINGLE DETACHED DWELLING STARTS
FINANCED UNDER NHA

CENSUS METROPOLITAN AREAS

| | |
|-------------|-----|
| Calgary | 76% |
| Saskatoon | 75% |
| Montreal | 73% |
| Edmonton | 72% |
| Quebec | 68% |
| Regina | 67% |
| Winnipeg | 67% |
| London | 55% |
| Kitchener | 44% |
| Ottawa-Hull | 43% |
| Hamilton | 40% |
| Sudbury | 38% |
| St. John's | 33% |
| Windsor | 30% |
| Halifax | 26% |
| Saint John | 26% |
| Toronto | 20% |
| Vancouver | 18% |
| Victoria | 17% |

MAJOR URBAN AREAS

| | |
|-------------------------|-----|
| Chicoutimi-Jonquière | 84% |
| Brampton | 73% |
| Peterborough | 72% |
| Ft. William- Pt. Arthur | 70% |
| St. Catharines | 70% |
| Sherbrooke | 69% |
| Moncton | 68% |
| Niagara Falls | 66% |
| Trois-Rivières | 66% |
| Valleyfield | 66% |
| Sault Ste Marie | 63% |
| Drummondville | 62% |
| Oshawa | 53% |
| St. Jerome | 47% |
| Guelph | 44% |
| Welland | 43% |
| Timmins | 36% |
| St. Jean | 30% |
| Kingston | 29% |
| Brantford | 27% |
| Shawinigan | 20% |
| Sarnia | 15% |
| Sydney-Glace Bay | 8% |

TABLE 9.

PER CAPITA DOLLAR VALUE
OF NHA FINANCING

CENSUS METROPOLITAN AREAS

| | |
|-------------|-----|
| Calgary | 253 |
| Sudbury | 177 |
| Edmonton | 169 |
| Halifax | 169 |
| Ottawa-Hull | 141 |
| Quebec | 136 |
| St. John's | 125 |
| Windsor | 114 |
| Winnipeg | 109 |
| Toronto | 100 |
| Kitchener | 99 |
| Saint John | 80 |
| Montreal | 72 |
| Regina | 71 |
| Saskatoon | 69 |
| London | 68 |
| Victoria | 66 |
| Vancouver | 66 |
| Hamilton | 61 |

MAJOR URBAN AREAS

| | |
|--------------------------|-----|
| Kingston | 145 |
| Guelph | 143 |
| Chicoutimi-Jonquière | 94 |
| St. Jerome | 89 |
| St. Jean | 89 |
| Moncton | 86 |
| Peterborough | 83 |
| Brampton | 82 |
| St. Catharines | 81 |
| Niagara Falls | 80 |
| Sherbrooke | 69 |
| Oshawa | 68 |
| Ft. William - Pt. Arthur | 65 |
| Trois-Rivières | 65 |
| Drummondville | 62 |
| Welland | 59 |
| Sault Ste Marie | 48 |
| Sarnia | 41 |
| Brantford | 37 |
| Sydney-Glace Bay | 30 |
| Timmins | 29 |
| Valleyfield | 12 |
| Shawinigan | 7 |

CHAPTER VI

CONCLUSIONS: THE NATURE OF THE PROPOSED POLICIES' IMPACTS

In summary, these are anticipated impacts of the proposals set out in the various policy sectors. They are judged in terms of a limited number of significant, and presumably desirable possible effects.

Low Income Housing

The overall tendency of the near-term recommendations is to rationalize present activities in this sector. There are some shifts but they are restrained in order not to preclude any longer-term substantive changes which might arise out of a more thorough analysis of the Low Income Housing Task Force Report.

There is no shift away from making low income housing primarily a federal responsibility; the capital funds needed to provide this housing continue to come only from the federal government through CMHC. For this reason, the number of units produced is directly related to how much the federal government can lend; no steps are proposed to encourage private sector mortgage investment in this area.

Access by low-income people to home-ownership and rental accommodation is governed by the volume of federal funds allocated to this sector and by borrowing conditions and subsidy levels. The present proposals tend to improve

access for low income people by improving borrowing conditions for both tenants and prospective home-purchasers.

The only subsidy for home-ownership proposed is in the Assisted Home-Ownership program. Proposed subsidies in the Entrepreneur and Limited Dividend section, although they might encourage ownership after the "mortgage out" is completed, serve only as an inducement to build better quality rental units. For Non-Profit housing programs the subsidy serves as an inducement to get other groups to provide social housing.

The use of subsidy in Entrepreneur and Limited Dividend and Non-Profit programs, together with the easier borrowing in the Non-Profit and Cooperative programs, is the beginning of a potential longer term shift out of public housing into other institutional forms of low income housing.

A shift away from public housing is advocated not only because of the social stigma associated with these institutions but primarily because of the level of subsidy commitment can be more effectively controlled through other programs. It is a reaction to the present projected subsidy commitments implicit in continued high level production of public housing.

Although there is a tendency to encourage home ownership through the Cooperative Assisted Home Ownership and Rural Housing programs, in budget terms the strength still remains

in the "rental" categories, due to the assumption that subsidy funds will be limited.

The Assisted Home Ownership and Cooperative Housing proposals tend to provide low-income people more choice in such matters as unit location, at least as far as that is compatible with controlled cost. The designation of cooperative as a separate form of tenure could, over the longer run, create a precedent which might be picked up by the approved lenders. Certainly the removal of the eighty percent shareholder requirement ensures that cooperatives can be more easily developed.

Some attempt is made in the Low Income Housing proposals to ensure that rental accommodation in the Entrepreneur Limited Dividend section is of better quality.

Although the proposals are primarily directed at the urban low income groups there is at least the beginnings of a recognition that the same problem exists, often in more extreme form, at the rural community level. This is particularly apparent in the Rehabilitation program. It also comes through in the proposal to find projects in smaller communities on the basis of actual and not proposed use. The Low Income Housing proposals contain no reference to the need to increase citizen participation in the rental accommodation; it assumes the present actions being taken are sufficient.

Native Peoples' Housing

The Native Peoples' Housing proposal is primarily directed at the "process" by which housing is being produced or will be produced. Consequently it stresses the need to have native peoples intimately involved in defining need, developing programs and projects and even implementing them. The proposal works from the premise that housing for natives is directly related not only to capital funds loaned but also to how much subsidy, and even principal, can be given away.

Residential Rehabilitation

The Residential Rehabilitation policy proposals are directed to serve low income people in the rural areas and in deteriorating areas of the city core. The entire thrust of the program is on upgrading and maintaining existing stock. The proposals suggest that the program should be directed at maintaining home ownership and in some cases extending it, e.g. the cooperative purchase of deteriorating dwellings. When the policy is related to the Community Assistance Program it becomes a vehicle for renewing present urban communities.

The program involves a high level of subsidy and capital funds by the federal government. To encourage the use of the loan funds the borrowing conditions are eased. The program has the effect of encouraging citizen participation in the process. It also advocates that the municipality

have a major role in monitoring housing quality and delivery of the specific program.

Urban Assistance

The Urban Assistance policy assumes that it is inappropriate to provide definitive objectives for urban Canada at this time. Consequently the policies are directed at doing what is possible and acceptable now, learning new things throughout this process and then rearticulating the objectives.

The major program thrust of the policy is toward providing an alternative to the suspended urban renewal program. The Community Assistance Program with its rehabilitation focus, the Non Residential Revitalization and the Urban Amenities programs provide this alternative. They are aimed at improving the quality of neighbourhoods and community processes in the urban centres. They are sensitive to differing needs and tend to reinforce the definition of need and project planning at the municipal and local neighbourhood level.

The Community Assistance program and the other elements strongly support citizen participation.

The Urban Assistance proposals, because they envision the initiation of a policy process out of which a national urban policy will emerge, have a strong thrust towards institution building.

This thrust is evident in the Urban Regional Planning, New Community Planning, Urban Management and Manpower program, Municipal Research and Development and the National Urban Information base. Part of this institution building thrust is directed at building a base for urban decentralization, particularly in the case of Urban Regional Planning, New Community Planning and Regional and New Community Implementation Assistance. This process tends to upgrade the roles of provincial and municipal governments in these areas.

All of these policies emphasize federal government leadership especially in regard to its acceptance of experimentation and its encouragement of experimentation at other government levels.

The Urban Assistance proposals generally, contain a limited series of hard objectives but provide programs which tend to encourage processes out of which more definitive objectives will emerge.

Day Care

The financing of capital costs for day care centres helps provide a socially oriented amenity and a community resource. It is intended that parents will have a major role in the operation and delivery of the centre; through

the non-profit preferred loans provision, parental co-operatives will be eligible for loans assistance.

Aids to Citizen Groups

The main direction of the Aid to Citizen Groups proposals is toward research and experimentation to develop ways of involving citizens in the decision-making process, and learning about citizen participation in activities relevant to the CMHC jurisdiction. The program is structured to include evaluation projects by the group as well as by CMHC. Citizen criticism is accepted as a valid feedback in the policy and planning process.

The Research and Development proposals are directed at testing new approaches to institutional support, manpower development and community planning, and at developing and upgrading municipal and local research capabilities. The proposal involves mechanisms that facilitate citizen participation. The development of a technological forecasting capability and encouragement of new technologies is also envisaged.

Infrastructure

The basic thrust of the infrastructure policy is to change the rules of the game operating in one of the key (if not the key) physical elements of urban development --

namely the process by which land is developed.

The policy suggests that the federal government develop a coordinated Land Banking and Neighbourhood Servicing policy in order to control and rationalize what has become a major high cost system, particularly by increasing the supply of serviced land and stabilizing the runaway prices.

The proposals accept that such an alternate system necessitates the strengthening of provincial and municipal planning and implementation capabilities. The emphasis is on federal government leadership in developing an alternate method to the present one and providing the capital support necessary to implement it. The provinces and municipalities have full program and implementation control, using the funds within broadly specified guidelines.

The policy proposals could be the key lever to the implementation of any urban decentralization policy.

IV. Summary Statement of Total Thrust

The combined, overall effect of the major policy proposals can be highlighted in this way:

- * They focus on a process rather than a framework of objectives. Harder objectives are seen to arise out of the process itself. Urban Assistance is the leading edge in this thrust.
- * They tend to improve institutions and create a favourable climate of information, experience and cooperation before defining longer-term urban and housing objectives.
- * They alter present institutional context or rules of the game only in the infrastructure proposal; the other proposals work within present constraints, attempting to make the best of the situation.
- * To meet their objectives the policy proposals require consistently higher levels of federal government capital and expenditure funds.
- * There is no clearly defined attempt to rationalize building industry or to encourage private lender participation in the provision of low income housing.
- * They tend to provide a base for urban decentralization but action along these lines necessitates a further range of decisions.
- * The proposals tend to be more sensitive to social consequences and accept social objectives as a legitimate component of program delivery.

It is not sufficient, however, merely to analyze the potential impacts of the proposed policies in the near term. Some appreciation of their possible longer-range effect is important. Consequently, the next sections seek to develop such a broader context and to deal with directions.