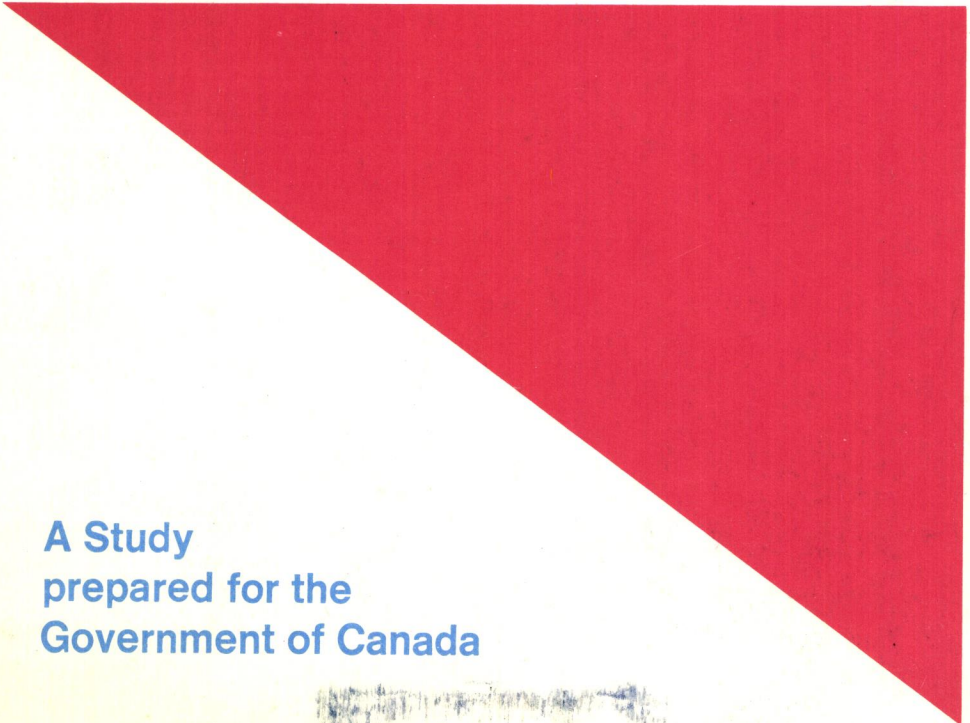


**AN INSTITUTE FOR RESEARCH
ON PUBLIC POLICY** Ronald S. Ritchie



**A Study
prepared for the
Government of Canada**

**AN INSTITUTE FOR RESEARCH
ON PUBLIC POLICY**

A Study and Recommendations

by

Ronald S. Ritchie

**Toronto, Canada
December 1969**

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FOREWORD

As indicated in the Speech from the Throne on the opening of Parliament on September 12, 1968, a study was commissioned to look into the feasibility of setting up an institute "where long-term research and thinking can be carried out into governmental matters of all kinds."

At the request of the Prime Minister, Mr. Ronald S. Ritchie of Toronto kindly accepted the task of bringing together whatever information was available pertinent to this matter and of putting forward proposals for setting up such an institute in Canada.

Mr. Ritchie is well known in public affairs in Canada and has an impressive background. He was Gold Medallist in Economics and Political Science on graduation from The University of Western Ontario; he obtained an M.A. from Queen's University in Economics. During World War II, he served with the Wartime Prices and Trade Board. He joined Imperial Oil Limited in 1947 as Economist and subsequently rose to Director and Vice-President. He served as Executive Director of the Royal Commission on Government Organization (Glassco Commission) in 1960-62 on loan from Imperial Oil Limited. He is Chairman of the Board of Governors of the University of Guelph and has been active in such organizations as the Canadian Institute on Public Affairs, the Social Science Research Council of Canada, and The Canadian Economics Association. He has written articles on educational and international affairs. His viewpoint is considered of the most objective kind.

This study is the result of Mr. Ritchie's work and represents a detailed summary of his visits to many organizations and of his talks with many individuals engaged in various phases of research on public policy. The views expressed by Mr. Ritchie are his own, and his recommendations have been submitted for consideration. These do not necessarily represent the views of the federal government.

Privy Council Office
May 1971

PREFACE

In the Speech from the Throne of September 12, 1968, the following words appear: "... it would be useful to have available to all governments an institute where long-term research and thinking can be carried out into governmental matters of all kinds. At the present time there is no such facility available in this country and it is the intention of my Ministers to bring before you in the near future legislation that will fill this most important gap in our governmental apparatus."

During the subsequent debate on the Speech, Prime Minister Trudeau on September 16, 1968, referred to the proposal as follows, "In the case of new programs and expenditures it is not sufficient that they be desirable in themselves. They must be justified in relation to all competitive claims on the limited supply of resources. For example, the undeniable need for public investment in scientific research cannot be considered in isolation from the ever-rising costs of social welfare.

"That is why it is an essential and continuous responsibility of government to choose, to plan and to set out priorities. As people demand more services of their governments this task becomes ever more complex. Valid choices can only be based on a thorough knowledge of the alternatives and on an estimate of the comparative costs and benefits of such alternatives. For this reason, we attach particular importance to the establishment of a research institute to assist government in its long-term planning, similar to those already operating in other countries. This institute would conduct fundamental research both for the federal government and for those provincial governments who wish to avail themselves of its services. While initially it would be in part publicly financed, it would be an independent and autonomous institution. It would work closely with the proposed international development centre and should provide an important data and information bank which would be readily available to universities throughout the country."

In November of 1968, at the request of the Prime Minister, I undertook to put forward detailed proposals for the creation in Canada of a public policy research institute which would be appropriate to Canada's special needs and circumstances.

To provide a sound and informed basis for such proposals, I have completed an assessment which includes the following:

1. Studies of existing institutions for which public policy research is a major purpose and activity. I visited 11 such institutions in the United States, 4 in the United Kingdom and Western Europe. I talked to present and past members of their staffs and of their boards of directors, as well as to those who have been especially concerned with use of their work. I have sought to obtain accurate understandings of the history of each of these institutions, their organization and internal management, their financing, the form and quality of their relationship with governments, the nature and extent of their fields of inquiry, their manning and personnel practices, problems they have had and solutions they have found to them, and the degree of effectiveness and of success or failure which each has had as judged both from the inside and the outside. The aim has been to ensure that a Canadian public policy research institute should, so far as possible, avoid repeating past errors of others and should, instead, profit from such experiences of external models as have transfer value to the Canadian scene. Appendix IV lists the public policy research institutions studied, together with the names of those associated with them with whom conversations were held.

2. Discussions with a substantial number of academics, public servants, political figures, and other informed persons whose experience and interests suggested they might have worthwhile knowledge and opinions about the feasibility and the value of a public policy research institute in Canada, or about the strengths, the weaknesses, and the effectiveness of such institutions elsewhere. The names of the persons with whom such discussions have been held are also listed in Appendix IV.

3. Discussions with nine of Canada's provincial premiers and with key advisers to the premiers in eight provincial capitals. The aim of these discussions was to assess in a preliminary fashion the potential values of a public policy research institute from the point of view of the provincial governments, and to consider arrangements which might be most conducive to such an institute serving the public interest at the provincial as well as at the national level.

The Prime Minister and the federal government had committed themselves to an institution for public policy research being created in Canada. It did not seem to me, however, that detailed proposals for it could be put forward without preliminary evaluation of the contribution such a body might make to the formation of public policy in Canada. Are we going to need public policy research? If we do, must we do it ourselves or can we take advantage of what is already being done elsewhere? If we should do a good deal of it ourselves, does the policy research institute have special virtue as a tool or can we rely on other resources already available—universities for instance? The answers to such questions must be qualitative, but on them depend conclusions about the purposes to which such an institution should address itself, the kinds of skill it should encompass, and its appropriate relationship to all those involved in the policy-making process.

This report owes a great deal to the generosity and helpfulness of the many individuals whose names are listed in Appendix IV. Their experience,

their views, and their advice have influenced it at countless points. In the final analysis, however, the assessments and the conclusions set forth have had to be my own. Full responsibility for the judgments expressed or implied and for the adequacy and accuracy of the report's statements is mine alone.

Special thanks are owed to a number of persons not listed in Appendix IV. Michael Shoemaker of the Privy Council Office, Ottawa, has throughout the study facilitated many parts of the investigation and in numerous conversations helped to clarify many thoughts. Among the staffs of some of Canada's Embassies, Frank Stone in Washington, Wilfrid Lavoie in Paris, Clifford Garrard in The Hague, Ian Robertson in Copenhagen, Miss Dorothy Armstrong in Bonn, and Miss M. McKay in Stockholm helped with advice about institutions in the countries concerned and with arrangements for meetings with their personnel and others. Without such help, this task would have been longer and its coverage less adequate.

Toronto, Canada
December 1969

Ronald S. Ritchie

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CHAPTER I

POLICY CHOICES IN THE MODERN STATE

Policy formation is a principal task of government. It is, and must be, a central concern of all citizens, in their general capacity as members of the electorate, in their particular capacities as members of legitimate interest groups. Despite a growing level of knowledge and sophistication among citizens and a wider array of expertise in government, policy choice has become more difficult rather than easier in the modern state.

The policy task of government has become many times more complex in the past century, even in the past three decades. Evidence abounds in the intent of those who wrote the *British North America Act*. The Fathers of Confederation could not have guessed at the size, the range, and the complexity of the role of the federal government in the whole life of the nation today. Even had their vision been superhuman, they would have been more surprised by what had happened a hundred years later to the relatively local and simple tasks they had allocated to the provincial governments. They did not foresee an era when nearly ten percent of our national income would be considered inadequate for the needs of education and when the kind and quality of the educational results achieved would be crucial to both our economic and our social well-being. They did not foresee a day when the welfare or the housing responsibilities of provincial and municipal governments would far outrun their means and would become national issues.

We expect much more of governments these days and face them with much more difficult tasks. It may not be of critical importance whether a government is capable of operating a postal service efficiently—it can, if it chooses, buy performance of good service in such operating areas from other organizations well suited to providing it. It does matter very much whether government decides to underwrite a particular atomic energy programme, a particular goal for education, or a particular formula for industrialization in slow growth areas. It does matter whether it gives priority to economic

growth or to economic equality, whether its choices contribute to a dynamic, flexible and innovative society, or to the opposite.

Over the past one hundred years, our society has become much more interdependent. We have had no choice but to turn to government as a focal point for resolving many questions of co-ordination and priority. These questions are often wide ranging in their geographic and other implications. They require difficult identification and balancing of costs and benefits. Some require, first of all, time and thought to permit the working out of sufficient consensus on the value judgments which must shape the interpretation of both costs and benefits. Policy choice has become an immensely more difficult task for governments, at the same time that it has become their most crucially important task. It is equally difficult, and crucial, for electorates.

Neither governments nor the public in Canada are well equipped for the major difficulties of this task. There is wide consensus on this among politicians, senior government officials, scholars, and all who have thought seriously about the needs of public policy decision-making for today and the future. Our lack is in knowledge, in methodology, and in the organized provision of expertise for the task.

The knowledge lacks are glaring. What do we really know, for instance, about the relation between patterns of urban organization and the quality of life in a highly urbanized society such as we are becoming? To set goals and to measure results may appear easier when it comes to something like controlling the quality of our physical environment. Yet how far can we go even here, without more knowledge and analysis, in relating the net economic effects of various methods and degrees of control to standards of mental, physiological, or aesthetic advantage.

Along with other advanced nations, we have learned a good deal about guides to economic policy—but not enough to provide adequate answers to Canada's particular circumstances. For instance, in theory and in practice we have extensive knowledge about the "big levers" of monetary and fiscal policy but, in fact, our knowledge is not adequate to our needs. In actual application, there is seldom informed consensus, even among professionals, about when or how far to pull them; whether, for instance, a change in a tax rate will act quickly enough to be helpful or will, instead, undesirably accentuate a future swing; whether a change in the money supply and in interest rates will go too far or not far enough. Of fundamental importance in Canada's situation, we are not certain of the suitability of monetary and fiscal restraint in a situation where structural disparities are such that a taut economy in one region co-exists with distressing unemployment and low incomes in another.

The list could be extended indefinitely. There is some disillusion with the net effect of our multitude of welfare programmes, but uncertainty about the implications, in social and in economic terms, of a guaranteed annual income approach which might replace most of them. Poverty and regional

disparities are a central focus of concern, but when it comes to solutions, we really do not know by what means, over what time period, and at what cost the victims can be helped to become productive enough in their own right to remove the problem. Science and technology are perceived to be important to the growth performance of our economy and to its ability to compete internationally; but when it comes to methods of bringing science and technology to bear for such purposes, we find ourselves guided mostly by intuition and hope.

Like many other advanced nations Canada finds itself in this age of scientific sophistication and technological wonders still making critical decisions on the basis of good will, intuition, and hope. Effective democracy implies the opportunity to make informed choices. It is rarely that the electorate has such a happy privilege, nor do policy makers themselves find the opportunity much more frequent. The common pattern is for information to be inadequate, alternatives to be unidentified or unappraised. More often than not, we appear to drift into solutions, or expedients, forced by circumstance to take action even before having obtained any clear picture of the complexities of the problem. A pessimist might say that we react to crisis by sowing the seeds of new crises as yet unforeseen.

There is, then, an urgent need to seek out more data and to bring it more effectively to bear on important policy questions. There is a need to provide policy makers and the electorate with improved tools and knowledge to apply to the inescapable task of making policy choices. What this suggests is a form of research oriented to the making of public policy—research aimed—specifically at illuminating the bases for the choices to be made by public policy makers. Rather little research so focused now goes on in academic settings, and what there is tends to be sporadic and incidental to other purposes. Rather little goes on in government settings, and what there is tends to be oriented to short-term needs and departmental horizons.

What are the possibilities for organizing effective public policy research? Among the many who recognize the need today—and in Canada those who do are to be found in Ottawa, in the provincial capitals, in bodies like the Science Council of Canada and the Economic Council of Canada and scattered through the physical science, the life science, and the social science faculties of universities—there are a number who are enthusiastic about certain new approaches to this need. They talk of new techniques for forecasting, not the future but “futures”, and of planning “backwards” to bring the preferred “futures” into effect. They point to the scenarios of Herman Kahn and the Hudson Institute and their forecasts of the year 2000, to the Delphi techniques of the Rand Corporation and the Institute for the Future, to systems analysis and techniques for technological forecasting. There are some who argue that the social scientists are lagging the physical and the life scientists, and that the methods of the latter can be adapted to the kinds of

social forecasting and social analysis which must lie at the heart of public policy research.

Others, equally convinced of the need for organized research and analysis of public policy questions, have somewhat less fervor for the new techniques. They stress that the assumptions of public policy are more important than the mechanics of forecasting. They agree that these assumptions are too often unidentified or unexpressed. They accept the need for performance indicators, explicit identification of goals and measurement of progress towards them, imaginative identification of alternate solutions to complex problems, objective assessment of the various implications of such alternatives, and more serious attempts to weight costs and benefits. They do not decry systems analysis nor, on the other hand, do they underrate its difficulties and limitations. They do not minimize the need for looking ahead at alternative futures. Indeed, they emphasize that this is very much what is needed. On the other hand, they emphasize how much uncertainty multiplies as distance into the future grows even by a few years, how much it multiplies, too, as the complexity of the problem and the range of its implications are extended. They point, too, to the serious limitations of our knowledge and conclude that we should urgently begin work to fill the gaps.

Whatever the inherent promise of research and analysis effort in areas of public policy concern, do time factors make it feasible? It is argued on occasion that science and technology are racing ahead so fast that we can only react to change. We can neither control it nor influence it significantly. Such an assertion scarcely stands up to the available evidence. It would be idle to deny that there is rapid change in our society, that in fact we live in what appears to be a ferment of change at many levels. Perhaps, however, we tend to overstate the speed of change because we are overwhelmed by the number of things that are changing. If we look closely at the actual speed, even on the technological front, it is not so overwhelming as we sometimes assume. Peter Drucker, in his recent book *The Age of Discontinuity*, has effectively demonstrated the degree to which our economic development on both national and international scales has been largely determined up to about the present time by technology developed at the turn of the century, and before. We are probably now witnessing developments which will have equally long-run impacts on the future.

Current examples of a less than overwhelming pace of change are readily available. It is more than twenty years since the computer began to come into regular scientific and commercial use. It was widely predicted all through the decade of the fifties that it would revolutionize our world. The computer has made many difficult tasks feasible, but it has scarcely created either the workless world for many or the scientific revolution for management which some predicted. The general purpose credit card was introduced nearly two decades ago and has grown rapidly in numbers of uses and users. Yet, the day of "electronic money" must surely be at least another decade

away. It was only in 1961 that the first satellite transmission of a television programme was seen simultaneously in Europe and North America. In the intervening eight years this has become commonplace and the quality of transmission has become equal to what we expect from domestic transmission. Some of the best forecasts, however, are that it will be another decade and a half before there is anything like a world-wide capacity for direct reception from satellites into the individual television set or, more probable, into local receivers to which individual sets are tuned.

Even in the field of technology, therefore, where we are conditioned to accept startling and rapid change, the evidence is that change takes place in decades rather than in years or in months. There are solid reasons for this. Scientific discoveries may have little or nothing to do with economics or with social patterns, but the application of technology always does. The introduction of any new technology on a wide scale is always based on economic decisions. Usually important decisions about capital are involved. These are influenced not only by the difficulty of raising capital for new uses but also by the competitive influence of "sunk" capital. The economic decisions required are often influenced by the need to provide new training and new understanding at all levels from the plant to the board room. As in the case of satellite communication, there may be difficult political and organizational problems involved at either domestic or international levels. Often a whole society has to get used to new ideas or come to develop a taste for new ways of living and thinking.

The pace of change, then, is not so great that we need surrender limply to its demands, always reacting rather than anticipating and influencing. In fact, each of the examples above demonstrates to some degree the complex implications of changes we typically face, even where the stimulus is primarily technological and, therefore, presumably simpler than those for which the stimulus is primarily social. It is because implications are so diverse and so far-reaching that we do need to equip ourselves as well as we can to make choices at the level of public policy. What we do today in education may not have its real effects in our society before thirty years from now, just as what we have been doing to our environment for fifty years and more is only now beginning to suggest what its final effects could be. When what we do today affects such distant futures, common prudence calls for efforts to look ahead in advance of decision and action.

There is both time and need for public policy research if we visualize its purposes as being to understand the implications of what we are now doing, to foresee problems we are likely to face five years hence and ten years hence, and to substitute objective appraisal now for policy making by crisis later. Public policy research, then, is aimed not at making or proposing policies but at adding to the information and the tools of analysis of those who do make them and of the public who accept and are subject to them.

Public policy research does go on in a variety of organized fashions in modern states today. The most numerous and the widest range of experiments in this field exist in the United States. Very little which could be so described exists as yet in Canada. It is apparent that our needs, both general and particular, are not less than those of others. It is incumbent on us, therefore, to see what we can learn from experience elsewhere, and from assessment of our particular social, economic, and political situation. In doing so, we should not be searching for miracles but merely for a means of gradually improving and informing our processes of public policy choice.

CHAPTER II

THE CANADIAN SCENE

The questions of policy which face the public and governments in Canada are as involved, as difficult, as changing, and as continuing as those facing any other modern society. Both decision-makers and the public at large, therefore, stand in need of the kinds of skilled analysis in depth that clarify the problems, make the range of their implications clear, and illumine the alternatives for choice. Recognition of need is not new but awareness of the need is much more widespread today, and more attention has been given recently at official and other levels as to how the need might best be met. This chapter will be devoted to a review of the mechanisms which have been used in Canada, including the beginnings of some new approaches. It will ask whether something more is desirable.

A traditional source of research-based advice on public policy in Canada has been the Royal Commission. The last dozen years have seen very frequent resort to this mechanism by the federal and by provincial governments. Such large questions as education policy, taxation policy, transportation policy, monetary policy, linguistic and cultural policy, health care policy, and broadcasting policy have been turned over to Royal commissions for assessment and proposal. Task forces, which in many cases are Royal commissions under another name, have bloomed in similar profusion, frequently tackling equally difficult and complicated questions of public policy. The task forces which have recently completed their assignments in the fields of labour relations and government information services are good examples, as is the Special Study Group on Maritime Union which is supported by Nova Scotia, New Brunswick, and Prince Edward Island.

Royal commissions and task forces have usually been directed to inquire into some specified area of public policy concern and to produce recommended courses of action for the government concerned. Irreverent critics have been known to suggest that the real purposes of Royal commissions have

sometimes been to evade decisions rather than to prepare for them, to take the heat off a politically touchy problem rather than to seek a more adequate understanding of it. Even where such comment has been perceptive, its implied criticism may still have been misplaced. Institutionalized delay may have its merits where no adequate consensus for action exists. Grasping a nettle firmly is a fairly reliable formula for experiencing pain, but not necessarily for making progress. In any event, it is clear that in the case of a large majority of Royal commissions and task forces of recent years the object has been enlightenment, not evasion. Their aim has been to achieve more widespread public understanding of questions at issue and a more informed basis for policy choices by the decision-makers.

Public policy research is central to the role of Royal commissions and task forces. It frequently takes two forms. Royal commissions usually, and task forces occasionally, seek the views of the public, inviting submissions from interested individuals, groups, and organizations. They hold public hearings at which such submissions are supported and examined and they take testimony from various experts. Both types of bodies usually undertake programmes of directed and commissioned research. They create their own ad hoc research staffs and supplement these resources by contracts for particular studies by outside academics and other experts.

The directed and commissioned research programmes of Royal commissions and task forces are sometimes very large. This was true, for instance, in the cases of the Rowell-Sirois Commission, the Royal Commission on Canada's Economic Prospects, the Royal Commission on Banking and Finance, and the recent Task Force on Labour Relations. The results are undoubtedly useful. They help to clarify the problems and to identify their implications. They provide a basis for the conclusions reached and the recommendations made. They are usually available to the government concerned and frequently also to the public at large, thereby improving the basis for assessment of the proposals. In rare cases, some or all of the research product may not be made available to the general public. In fact, governments are not legally bound to release the reports of Royal commissions, although it is usually expedient politically for them to do so. One of the slight distinctions made between Royal commissions and task forces may be that it should be easier for a government to withhold the report of a task force than the report of a Royal commission.

The extensive resort by governments to Royal commissions and task forces in recent years for the illumination of important and complex public policy issues is highly significant. It must be seen as a response to a need for research and analysis not being adequately provided from other sources. There can be little debate about the need. The methods for meeting it do need assessment. Royal commissions and task forces are not cheap. It is a safe estimate that their cost to the federal and the provincial governments of Canada has averaged several million dollars annually over the past decade.

The important question is not whether such sums should be spent, but whether spending so much on Royal commissions and task forces is the most productive way of applying them. There are compelling reasons for believing that it is not.

The research efforts of Royal commissions and task forces suffer the defects of the situation which creates them. Almost always, the appointment of a Royal commission or task force is an ad hoc response to a situation which is already urgent, if not critical. The whole research process is, therefore, under stringent, perhaps unreasonable, time pressures. The members of the commission or task force are likely to be under pressure from the government, from opposition politicians, or from the public at large to produce recommendations in the minimum possible time. They may be tempted to arrive at conclusions before all of the research evidence is in or, in any event, before there has been time for adequate objective identification and evaluation of major policy alternatives. For proper policy research results to be achieved, it is almost always evident that the research should have been undertaken much earlier and in circumstances where the pressure for policy answers was less acute.

Another defect of the situation is the ad hoc character of the organization. Public policy research, as will become evident in later parts of this report, depends to an important degree for its success on a combination of organizational and planning skills, on an appropriate mix of expertises, and on policy-oriented attitudes on the part of the researchers. The research effort of Royal commissions and task forces is likely to be less than optimum on each of these counts. The director of the research programme is usually a scholar of high professional standing, but he is unlikely to have had much experience in organizing and directing an integrated, multidisciplinary research team. He may, in fact, not be persuaded of the merits of a multidisciplinary approach to complicated questions of public policy. The members of his research staff, whether full-time or part-time, may also be highly competent scholars individually, but in their normal setting, often a university, they are unlikely to have had much opportunity to participate in centrally directed, team research projects. Their more normal experience will have been as individual entrepreneurs in research. In some cases, they may even have little interest in policy-oriented research itself. For some academics, these assignments represent welcome opportunities for additional income and guaranteed publication. With the recent profusion of Royal commissions and task forces, such opportunities, particularly for economists, have been so numerous that recruiting the desired level of talent and insisting on desired levels of performance have been equally difficult on occasion.

By any measure, impressive contributions to the making of public policy have come from the research programmes of Royal commissions and task forces. It is clear, however, that regardless of the individual merits of those engaged in such research under the conditions provided by a Royal commis-

sion or a task force, the odds are that the end result will suffer somewhat from the defects inherent in the situation. Those who say, therefore, that Canada has not had good results for its money from the wide profusion of policy research efforts of its recent Royal commissions and task forces undoubtedly have some justification. Whatever their merits for other public purposes, Royal commissions and task forces are only imperfect vehicles for public policy research and, therefore, in this respect, are for occasional rather than regular use.

Governments in Canada have established certain permanent bodies whose purpose is to study public policy questions and to give advice on them. Two examples at the federal level are the Economic Council of Canada and the Science Council of Canada. An example at the provincial level is the recently founded Alberta Human Resources Research Council. It is worth considering the present and potential contributions which these three examples can make to the general needs of governments and electors for public policy research and analysis.

The Economic Council of Canada is a Crown corporation created by Act of Parliament in 1963. It is charged basically with advising and recommending to the government "how Canada can achieve the highest possible levels of employment and efficient production in order that the country may enjoy a high and consistent rate of economic growth and that all Canadians may share in rising living standards; . . ."

Its interests are specifically directed towards the medium-term and long-term prospects of the economy. It is specifically directed to publish an annual report on these prospects and on economic problems it foresees for the country in the medium and longer term. From time to time, the Council may be requested by the government to make special studies, one example in the period to date having been on combines, mergers, monopolies, and restraint of trade policy.

To discharge its responsibilities, the Council must engage in economic and social research. The chairman and the other two full-time members of the Council are well equipped professionally to do so. In addition, the Council has a staff of approximately 120, of whom half are professionals. It is empowered, as well, to commission outside scholars and specialists to undertake particular studies on its behalf. The area of public policy in which its mandate runs encompasses a wide range of public policy questions for both the present and the future. Its resources for tackling them are substantial. It has done much valuable work to date. What can one say in broad terms about its likely research contribution to the inputs required for effective public policy formation over the longer term?

First, it should be said that the Economic Council stands in an anomalous position. It is a part of Government and yet may find itself at any given time opposed to government policy. When it is so opposed, its position may be much more resented at both official and political levels than if it were not

a part of Government. Great care was taken in its organization and its prerogatives to give it independence which would permit it to make objective judgments. Yet, this independence is, in the final analysis, vulnerable to its yearly financial dependence on the Treasury Board and to the appointment of its members by the Governor in Council.

A number of features are intended to protect the independence of the Council. The chairman and its two directors are appointed for terms of seven years. Its other members, who serve part-time, are appointed from the public at large after consultation with "appropriate representative organizations." Most of them are unlikely to be particularly beholden to the government. The Council has full freedom to undertake studies of its own choice in the wide field of policy concern to which it has been assigned. It has unrestricted freedom to publish as it wishes. On the other hand, as a practical matter, the Council must be concerned about any excessively strained relations between it and the government and between it and those individuals and agencies in the public service whose good will and co-operation can be important to its daily work.

In the circumstances, the effectiveness of the Economic Council must depend to a significant degree both on the independence of mind and the wisdom of its chairman and on the understanding and the wisdom of the government at the political and at certain official levels. There can be no long-term guarantee that these requisite qualities will at all times exist to an adequate degree on both sides.

A number of other factors bear on the extent of the prospective public policy research contribution of the Economic Council. The first is the Council's obligation to produce an annual report on economic prospects and problems. From the beginning the annual report has been a sizable undertaking and the Council's chief product. It would appear to require throughout most of the year much of the time and much of the best talent of both the full-time members of the Council and its staff. The obligation to produce the annual report may make it difficult for the Council to bring balanced attention and resources to research on other important questions of economic policy.

The evidence to date suggests, too, that the annual report, even though it is intended to be directed to the relatively "safe" area of medium- and longer-term questions, is likely on occasion to catapult the Council into the midst of heated debates about current government policy. This seems unavoidable for at least two reasons. In the first place, economic prospects for the medium and longer term must depend on decisions and actions taken in the short term. The Council, therefore, cannot ignore them. In the second, the Council's duties call on it not only to make the kinds of assessment required as inputs for policy decisions, but also to make policy recommendations. As the Chairman of the Council has pointed out, it is unusual to assign this dual responsibility to a single national economic council or planning

body. The case of The Netherlands is more typical. There, detailed economic forecasts, and research to support them, are undertaken by the Central Planning Bureau, in part upon the basis of assumptions provided by the Minister. The Planning Bureau's output then goes to the Minister and to the Economic and Social Council (a body representative of labour unions, business, and universities), which draws its own conclusions and offers policy advice to the Government.

The representative character of Canada's Economic Council membership also has a bearing on the prospects for its research activities. Its 25 public members reflect a wide spectrum of interests from the private sector of the economy and the various regions of the country. They provide roughly equal representation for labour unions, manufacturing industry, commerce and finance, the primary industries and the general public. Such sector and sectional representation may be entirely appropriate to the processes of policy choice and policy recommendations. It is of doubtful value for the approval and direction of a research programme on public policy questions, for which a highly desirable ingredient is the opportunity and the desire to identify and assess not only all of the significant elements of the problem but also all of the worthwhile alternatives for its solution. It would seem likely that a consensus body, many of whose members have established positions to protect, would frequently find reasons to discourage avenues of research which, on broader grounds of national and regional interest, might be well worth undertaking.

Still another aspect of the Economic Council's position should be raised because of its significance for any public policy research programme in Canada. This is its relation, or lack of it, to the provincial governments. While there may be times when the federal government will take no great satisfaction in claiming title, it is clear that for the provincial governments the Economic Council is both a federal creation and a federal creature. The record of independence it has established so far would have to continue for a much longer period before a number of provincial governments would be prepared to alter this view. In fact, the basis for its appointment and financing might have to change. As will be discussed in more detail later, such provincial government doubts would be an important limitation to the overall contribution which any research body can make to public policy formation in Canada.

The Science Council of Canada was established by Act of Parliament in 1966. Three years later it was given formal status as a Crown corporation by the *Government Reorganization Act*. At about the same time, it ceased to depend on the Science Secretariat of the Privy Council Office for staff support and began to create its own small but separate staff.

The duties of the Science Council parallel in many respects those of the Economic Council. It is directed to "assess in a comprehensive manner Canada's scientific and technological resources, requirements and potentialities and to make recommendations thereon to the Minister." It is free to

initiate studies in the wide field allocated to it, and may from time to time receive requests from the Minister to undertake particular studies on his behalf. There has been some debate about the boundaries of the word "science." The Chairman of the Council takes it to mean "man's accumulated and organized knowledge about himself and his world", a definition which would evidently include the social sciences as well as the natural sciences. It seems clear that the Government's original intention was to limit the Council's concern to the natural sciences and technology—a conclusion substantially borne out by the type of university, industry, and official representation in the present membership of the Council.

The Science Council is not, its Chairman has stressed, a research body. Its task is to evaluate the adequacy and directions of scientific research and technological development in Canada, to draw conclusions about appropriate priorities, and to make recommendations to the federal government accordingly. The question is largely one of definition. The Science Council does not undertake laboratory research, but it does support its policy recommendations by surveys, analyses, and evaluations which include what this report would call public policy research. As the Council itself is very much aware, it continuously comes up against a need for defined national goals and priorities—questions which are basically political in nature but which can be at least partially illuminated by appropriate economic and social analyses. It is doubtless partly for this reason that the Chairman of the Science Council has indicated that he would welcome extension of the Council's field of interest to include the social sciences and, at the same time, of course, would welcome appropriate representation of social scientists in the Council's membership. It is doubtless partly for the same reason that the Social Science Research Council of Canada has proposed that it might fill a role somewhat similar to that of the Science Council as an advisory body to the federal government.

Both the Economic Council of Canada and the Science Council of Canada are designed in part to contribute to public policy research needs of the country. A serious attempt has been made in each case to provide enough genuine independence to permit objectivity in the assessment of problems and the proposing of policy. Yet, both bodies seem likely to encounter certain constraints occasioned by their somewhat anomalous position as parts of the federal government structure which are obligated from time to time to be critical of government policies. Also, despite their nominally wide areas of assigned interest, each is likely to feel some limitation on the subjects it can tackle. In the case of the Economic Council, one such limitation is that imposed by its obligation to produce an extensive annual review in an assigned area. In the case of the Science Council, there is the fact that recommendations on science and technology policy must be based in large part on economic and social assessments while the Council has been provided with no assured access to competence in these fields. Both councils suffer the probable handicap from a policy research point of view that they are policy advisory bodies, with the likelihood, therefore, that their policy proposals

may from time to time become the subject of public controversy with, in turn, possible detrimental effects upon their policy research activities as such. In the special circumstances of Canada, too, they may suffer somewhat in overall effectiveness because of their exclusive identification with the federal government in the eyes of the provincial governments. All in all, therefore, these two bodies, much as they may contribute otherwise, can scarcely be relied upon as substantial long-term centres of research on broad ranges of public policy questions.

The Human Resources Research Council of Alberta is an example, at the provincial level, of a form of public policy research organization which is new to Canada. In some respects, such as its multidisciplinary character, it promises to be very similar to some of the best of the public policy research institutions in the United States and elsewhere. In other respects, such as its particular relationship to the Government of Alberta, it seems likely to follow a special pattern of its own. It had its origins in The Honorable E. C. Manning's "White Paper on Human Resources Development" of 1967, and was created in that year by an Act of the provincial legislature. It is described as a "quasi-nongovernmental" agency whose function is "to undertake educational, social, economic and other research related to and affecting the development and conservation of human resources in Alberta." Although described as a "quasi-nongovernmental" institution, the Council has close links with the government, which provides its finances, audits its books, and names its board, of whom two are cabinet ministers. It is evident, too, that the provincial government looks to the Council to provide in due course a substantial input to its policy considerations, but that it recognizes the need of the Council for reasonable freedom and independence. It is, for instance, free to publish. The Council's initial staffing was completed only in September of 1968. It is deliberately multidisciplinary, including economists, statisticians, sociologists, psychologists, educators, and, in prospect, geographers and urban planners. While the Council has chosen its initial areas of study and undertaken its first projects, it is still much too early to have any measure of its likely performance beyond that indicated by the energy, perspective, and clarity of view its director brings to his task.

There are in the private sector in Canada a number of organizations which, in some degree, undertake planned programmes of public policy research. These include the Canadian Tax Foundation, the Private Planning Association of Canada, the Agricultural Economics Research Council of Canada and the Canadian Institute of International Affairs. Each of these organizations has its own special area of interest and in most cases research on public policy questions is not the sole objective. Their staffs and budgets for policy research purposes are small and usually much of their output is in the form of sponsored projects undertaken by individual academics. Collectively and separately they add measurably to the quantity of knowledge, analysis, and evaluation of alternatives open to policy makers and the public

at large. In no case is their work the product of multidisciplinary research teams.

In Canada's universities there are scattered evidences of increasing interest in research on public policy questions and some attempts at special organization to work on such projects. The Institute on Inter-Governmental Relations at Queen's University is one example, but perhaps the one which seeks most ambitiously to emulate some of the policy research institutes to be found in the United States is the Institute for Quantitative Analysis of Social and Economic Policy at the University of Toronto. It seems clear that the latter institute has, in its relatively brief history, suffered most of the frustrations and constraints which go with mounting in a university a programme which crosses department and discipline boundaries, and which must depend on persuasion and co-operation rather than on any power to direct.

More will be said in the next chapter about the role and the limitations of universities and academics in continuing research programmes on public policy. For the moment, the position in Canada can probably best be summed up by recent quotations from two sources. Professor Y. Dubé, President of the Social Science Research Council told the Special Committee on Science Policy of the Senate in June of this year that "One thing we seem to lack now is the machinery for bringing scholars together to initiate larger projects. We tend still to be mainly in the era of the initiative of the individual scholar." In commenting on university research projects sponsored by departments of government, he stated, "... our interest in that piece of research is a special one. We want to develop new knowledge or new methodology, whereas they are interested in using this piece of research in policy formulation. . . . Very often, they would think that we can produce a finished piece of research readily for policy formulation, but this is not our interest."

The recent Report of the Science Council of Canada and the Canada Council on "The Role of the Federal Government in Support of Research in Canadian Universities" advocates more involvement by universities in research projects funded by government to aid in public policy formation. It stipulates some important caveats, however. It suggests, for instance, that "The university should ask itself (1) is the proposal consistent with its overall goals? (2) is the proposal one that can be undertaken without interfering with the university's teaching and research commitments? (3) is the programme suitable for the training of graduate students?" It points to the need for change in some aspects of university organization and practice if university policies in respect to appointment, tenure, and freedom to pursue one's own line of investigation are not to handicap organized large-scale research missions. The heart of the matter is put in these words; "Those wishing to use the university need to be reminded constantly that teaching and research are the primary responsibilities of the university. Service is secondary. The talent is available in the first instance for the internal pur-

poses of the university and only if proposals are consistent with the university's primary responsibilities should they be considered by the university. Government departments should look upon the possibility of making use of the university as a privilege, not a right."

This review has suggested something of the character and the general extent of the public policy research resources available in Canada. It does not purport to be a complete inventory. A major resource not touched on as yet consists of the various research groups and research programmes in government departments at both the federal and the provincial levels. Their role in public policy research will be partly assessed in the following chapter.

In light of the urgent and expanding need of both governments and electors for more knowledge, more thorough analysis and more objective identification and evaluation of alternatives as a basis for public policy choices, it is clear that the resources available in Canada are adequate neither in quantity nor in type to the requirements of the future. The stage is set, then, for an assessment of the public policy research institute as a supplement and, perhaps, as a partial replacement for what now exists.

CHAPTER III

PUBLIC POLICY RESEARCH INSTITUTES

There are doubtless some who would be inclined to challenge the title of this chapter on the ground that there is no clear-cut category of organization to which such a term might be applied. The even more forceful challenge might be launched that the term "public policy research" is, itself, so vague and so broad as to indicate no range of activities which could be precisely specified. Both points would have some validity. Certainly the gulf in activity, atmosphere, and purpose between the Brookings Institution and the New York City branch of the Rand Corporation is sufficiently wide to be noticeable. Equally, technological forecasting and the creation of "futures" are some degrees removed from an assessment of public service staffing policy.

The area of public policy research can be as wide as the present and the potential concerns of governments. For any developed nation of the modern world, the subject is so broad as to encompass a very large number of fields of inquiry and so complex as to suggest that varied approaches may be fruitful. It is not surprising, then, that the institutions which have been created for the organized study of public policy questions do display considerable diversity in their activities, their methods, and their relationships with other public bodies.

As the term is used in this report, a public policy research institute fits somewhere between government on the one hand and universities on the other. It may be closely linked to government by the powerful tie of grants or fees, but it is not a formal part of any government department or agency. It may be academic in its atmosphere and in its personnel, but its policy orientation and its research focus set it apart from the university. It owes its existence to recognition of the need to bring organized intellectual effort to bear in a timely fashion on complicated questions which are likely to become the subjects of public policy decision.

The United States has been the most prolific creator of organizations which fit these purposes and this description. A number exist also in the United Kingdom and various countries of Western Europe, many of them inspired by or partly modeled on some of those in the United States. An important part of the work undertaken for this report has been a study of a representative group of these public policy research institutions. In each case the aim has been to become acquainted with the history and the present status of the institution's structure, its work, its staffing, its operating methods, its financing, its relationships to governments and to the public, its problems and its accomplishments. The knowledge and the impressions gathered have been gained by study of the written record, visits to the institutions, discussions with their presidents or directors, members of their staffs, and members of their boards, and discussions with academics, public servants, and others having knowledge and opinions about such institutions. The ultimate purpose has been to derive from the varying characters, circumstances, and experiences of these institutions conclusions about the usefulness of such an institute in the Canadian scene and guidelines which might be helpful should one be set up here.

Appendix III sets out in summary form an analytical description of 15 of the institutions studied, 11 in the United States, 2 in the United Kingdom, 1 in Denmark, and 1 in West Germany. A number of other bodies concerned with public policy research and analysis were studied in equal or lesser degree, including some like the Central Planning Bureau of The Netherlands which are really part of government. But these 15, while differing widely in important respects, have been judged best illustrative of the kinds of consideration which should inform any Canadian decision to undertake creation of a public policy research institute. This chapter attempts to highlight their similarities and their differences, and to suggest some conclusions from experience about factors which make for strength or weakness. It reviews their origins, the scope and nature of their research programmes, their other activities, their structure and status, their staffing and working methods, their financing, and their geographic location. It then makes an assessment of their role and their effectiveness, paying particular attention to the possibilities of their intended function being adequately discharged in universities and in government departments and agencies.

THEIR ORIGINS

As with most institutions, there is something to be learned about public policy research bodies from the timing and the circumstances of the first appearance of representative members of the group. Any impression that they are solely a post-World War II phenomenon would be erroneous. The National Academy of Science, which has some of the attributes of such an institution, was founded at the instigation of President Lincoln in 1863. The Brookings Institution, one of the supreme examples of a public policy research institute, celebrated its 50th anniversary more than three years ago,

while the National Bureau of Economic Research, long a distinguished contributor to the field of public policy making in the economic sphere, will celebrate its 50th anniversary in 1970.

What has distinguished the post-World War II years in this field is that the number of such institutions has multiplied and that new concepts and new techniques of public policy research have been evolved. Much the best known of these post-war bodies, and the most influential as a pattern setter, is the Rand Corporation. It was the first of several institutes created to meet the needs of the United States armed forces and defense planners. The Urban Institute, the Hudson Institute, and the Institute for the Future are newer bodies still and have not yet had time to establish what their ultimate influence may be. In Europe, too, many of the public policy research institutes are of post-war origin, although the United Kingdom's National Institute of Economic and Social Research dates back to 1938.

The oldest institution studied, the National Academy of Science, was established to act as a source of advice to the federal government of the United States at a time more than 100 years ago when modern governments were just beginning to sense the potential importance of science to society as a whole. Created by Congress during the Civil War, it received its second large impetus to growth and activity during World War I. Impressed by practical demonstrations of its value to government at that time, President Wilson directed that it continue on an expanded basis in the post-war period. The National Academy of Science is in many respects much more than a public policy research institute. It has a major concern for the advancement of science and of scientific research. A significant proportion of its work is, however, directly concerned with the implications of progress in the physical, the behavioural and the social sciences for a wide range of public policy questions.

The Brookings Institution had its origins some 53 years later in the belief of a group of businessmen and educators that a non-partisan, private research agency could contribute to efficiency in government organization and administration by scientific study of the best methods of administrative organization and encouragement of active public interest in administrative efficiency. From a concern with improving the way in which the public service worked, it moved in due course to an even greater concern with the policies which the public service was designed to administer.

Like Brookings, The National Bureau of Economic Research was also the result of private initiative, in this case by a group of economists and statisticians, with some business support. Again, experience during World War I was a prime mover. Economists who had served in wartime posts in Washington faced the fact that there were no adequate statistics on national income. They felt the need for objective determination of the facts bearing upon economic problems and their interpretation in an impartial manner. Like the National Academy of Science, the interests of the Bureau are not exclusively oriented to public policy. Part of its aim has always been to serve

the profession by improving the tools of the trade, for instance, but a major result of its research effort over the years has been an improved foundation for government policy decisions in the economic sphere.

The National Planning Association, now 35 years old, is yet another example of a strictly privately initiated organization which seeks to contribute to improved public policy making, partly by policy-oriented research efforts. The individuals who formed it were largely supporters of the New Deal who saw a need for organized thinking outside government about planning in a democracy. The concern grew during World War II and was reinforced by the need for planning perceived in the post-war period. While the N.P.A. is an ardent exponent of the view that planning in a democracy is only partly for governments, an important area of its concern is for those policy-making activities of government which more and more need to be grounded on public policy research.

The post-war decades have seen a somewhat new type of public policy research institute spring up in some numbers in the United States. Rand Corporation was the first and the most successful of these new institutes, but despite its success and its influence on the style of several other institutions, it remains unique. Rand is a non-profit advisory corporation formed after the end of World War II to continue in peacetime the kind of relationship which had been established during the War between the military and scientists. Cushioned by an unusual degree of freedom provided in its contract with its major client, the United States Air Force, it demonstrated what can be accomplished by a multidisciplinary research and analysis effort carefully protected from operational pressures and by the techniques of systems analysis which Rand played a major part in developing.

While Rand has been the best known and the most broadly influential of the non-profit advisory and research corporations working on military and defense problems in the United States, it has been only one of several. Each of the three military services has had a number of bodies serving on a contract basis. In addition to Rand, the Air Force has had Analytic Services Inc. (ANSER), also with a research mission, plus other non-profits such as Systems Development Corporation (which has recently gone commercial) and MITRE, which have provided technical and managerial support services. The Army has the Research Analysis Corporation and a contract-research group furnished by the Stanford Research Institute. The Navy has the Centre for Naval Analysis, and the Department of Defense has the Institute for Defense Analyses (described in Appendix III). Some of these bodies do no work which could properly be called policy research but, under direction of their clients, put their efforts essentially into technical and operational questions. With the ramifications of defense and defense procurement in the post-war period, this orientation has sometimes led to research and analysis at the policy level. The Institute for Defense Analyses, for example, began as a technical support agency but has extended its scope to become the principal

advisory organization serving the Office of the Secretary of Defense as a whole.

The Hudson Institute, the Urban Institute, the Institute for the Future, and Resources for the Future represent a new generation of public policy research institutes. They reflect, each in somewhat unique ways, the belief that some of the most complex problems facing North American society today and over the next several decades will yield to multidisciplinary research effort and a systems approach. The Urban Institute had its impetus from the 1964 White House Task Force on the Cities, which emphasized the need to focus research on urban problems. President Johnson agreed that his new Department of Housing and Urban Development needed its own equivalent of a Rand Corporation and asked a group of distinguished citizens to create one.

The Hudson Institute and the Institute for the Future have even closer founding links to Rand. It would not be inaccurate to describe the Hudson Institute in its origins some eight years ago as the personal creation of Herman Kahn, and as an attempt by him to take some of the techniques and philosophies of Rand into wider fields. In place of Rand's major involvement in weapons and weapons systems, he wished to look at larger, long-run social and political issues. The Institute for the Future, established even more recently, was initiated by businessmen (The National Industrial Conference Board) who wished to use research to provide better forecasts of the future as inputs to major policy decisions to be taken by business leaders. Having turned to the Rand Corporation for advice, they, in the end, aided in the creation of a body which focuses its research and analysis on the medium- and long-term future to support both public and private policy making.

Resources for the Future is the oldest of these four. It was founded in 1952, chiefly by the Ford Foundation, as an outgrowth of the studies and conclusions of the Paley Commission. Originally concerned with resources in the narrower, conventional sense, it has by this time broadened its horizons to take in both the physical and some social aspects of the quality of the environment.

The National Institute of Economic and Social Research in the United Kingdom has the longest history of any of the Western European bodies looked at in this study, having begun just over 30 years ago. It had its origins in the feeling among some senior economists that the existing emphasis on theory should be balanced by increased applied research. Over the years, a gradually growing effort on the macro-economic level, particularly in terms of its highly esteemed, short-term forecasts of the economy, has been complemented by a growing number of projects directed at particular economic and social problems (e.g., urban studies).

The Institute for Strategic Studies, also based in London and now 11 years old, grew out of the conviction of a number of defense specialists and interested academics that the strategic policies of the West were too impor-

tant as public policy questions to be left to governments alone. They sought, too, some effort to close the gap between Western Europe's and the United States' intellectual resources in this field. It is the only truly internationally oriented institution appraised in this study, although others (e.g., Rand and Resources for the Future) have undertaken external projects, and still others (e.g., the American Academy of Science and the National Bureau of Economic Research) have non-nationals as members or in their governing bodies.

The Danish National Institute of Social Research, also established 11 years ago, is a model of the pure public policy research institute, but of a special breed. It grew out of a need of the Danish Government, particularly the Ministry of Social Welfare, for information and analysis to aid policy decisions, plus experience which suggested that a body wholly within the Ministry could not adequately meet the need. Its creator, and the only director it has had, left the Ministry to found it. Like the Air Force for Rand, the Ministry has been its principal client.

The factors which led to the creation of the Research Institute for International Politics and Security at Munich were similar. The need was felt for a body which could bring to bear interdisciplinary knowledge and skills on questions of foreign policy and strategy, chiefly for the benefit of the Federal Government of West Germany. The Institute was conceived by a group of individuals acting in their personal capacities who urged the creation of the Institute on the Federal Government. An interesting parallel to the Danish National Institute is that the Research Institute's director is a former member of the Chancellor's Office and that the Institute is funded through that office.

The common theme which runs through the origins of all of these bodies is a recognition, either within governments or among private citizens, of the need for a substantial input of organized knowledge and analysis to the understanding of the complex problems which face modern governments and electorates. In each case there has been, as well, a recognition, implicit or explicit, that the policy-oriented research and analysis required can best be accomplished by special purpose bodies embodying the necessary range of skills and separated on one side from too close links with operational problems and on the other from the frequent bias in usual academic settings against policy oriented research.

THEIR RESEARCH WORK

Public policy today touches in fact or in potential almost every facet of man's relationship with the society of which he is a member, as well as of his relationship with his physical environment. Public policy research does not, then, suggest a field with either precise or narrow bounds. It is not surprising that the range of the activities of the institutions looked at in this study is wide, or that each of them has directed its efforts to something less than the whole possible field of activity.

Even sub-divided areas of the total field are likely to be broad and to have ramifications which make adherence to carefully defined bounds difficult. As a result, such special purpose bodies as the Urban Institute, Resources for the Future, the National Bureau of Economic Research, the Institute for Defense Analyses, the National Academy of Sciences, and the Research Institute for International Politics and Security range over widely varied fields. It is not really surprising to see the Urban Institute's domain carrying it into questions of employment and income, housing, the financing problems of cities, law enforcement, education policy, and analysis and evaluation of national urban policies. Similarly, the purposes of Resources for the Future carry it naturally enough into questions of the management of water resources, of energy resources, and of land use, beyond these into the many ramifications of control of the quality of the physical environment, and from there into urban economics.

Among the institutions surveyed in this study, Brookings, Rand, Hudson, and the Institute for the Future are least confined in their fields of interest. Brookings currently divides its research work into three areas—economic studies, governmental studies, and foreign policy studies. The largest of these in terms of resources applied, and of output, is economic studies. Some recent examples of its economic projects are the mammoth series on public finance and fiscal policy (which aimed at clarifying issues in federal, state, and local government finance); a series on social economics (which began with an analysis of the doctor shortage); studies in urban economics, labour economics, and labour markets; and a research programme on transportation policy. Governmental and public administration studies had, as has been indicated earlier, a very large role in the origin and in the early years of Brookings. Although relatively less important now in its total output, they are still significant. Its recent output includes studies of the legislative process; of leadership and management in the public service; of the courts and the administration of justice; and of political parties, the public and public policy. Much of Brookings' recent work in foreign policy studies has been concerned with United States foreign aid and relations with developing countries. The record shows that the pattern of research by Brookings has shifted radically over time in response to its conclusions about the most probable areas of policy-making concern in the medium and longer term, the interests and capacities of its staff, and the availability of financial support for particular areas of study.

Because of its origins and its primary source of funds, the contract with the United States Air Force, Rand Corporation has historically made its most significant contribution in the area of national security. National security has, appropriately, been defined in such broad terms that over the years Rand has worked in such diverse areas as economic theory, organization theory, measures of attitude to social welfare, and relations between social choice and individual values. More recent studies, financed by the Corporation's own funds, have examined such questions as water resource development, urban

transportation, salary structure and teacher shortages, and data processing systems for State and local governments. Today, Rand is moving strongly into the field of domestic problems, where it sees important contributions to be made by applying its special techniques (such as systems analysis) to complex, inadequately understood, strongly interactive problem areas where authority is dispersed among many government jurisdictions.

Under contract with New York City, it has created a large staff specifically for the purpose of a major research programme on health, housing, public order, and fire protection. It has studied air transportation planning for the Port of New York Authority; manpower training programmes for the Office of Economic Opportunity; housing, transportation, and urban problems generally; health care systems; and the evaluation of educational programmes. Over the years, its national security goals have led it, as they have the Institute of Defense Analyses, into studies of economic and political forces in foreign countries and into foreign policy studies as well. Rand sees its areas of interest and contribution defined less by subject matter than by the opportunity to bring to bear on public policy questions a multidisciplinary, systems analysis, alternatives-weighting approach with which it has had notable success over two decades in studying many complicated areas of uncertainty.

In their aims, their techniques, and the types of work they have undertaken, the Hudson Institute and the Institute for the Future are similar to Rand, with which they have family links through their origins. Like Rand, Hudson has had a major proportion of its work on political-military projects related to national security issues. It has, in addition, undertaken studies in the fields of education, antipoverty programmes, and regional economic development, the last largely abroad. Its studies of the future, publicized by the book, *The Year 2000: A Framework for Speculation*, have attracted a great deal of attention and are expected to continue.

THEIR OTHER ACTIVITIES

While research is the central and primary activity of most of the institutions studied in this survey, all engage in other important activities. The most common, of course, is publication. For many, (e.g., Brookings, Resources for the Future, National Bureau of Economic Research, National Institute of Economic and Social Research) publication is a chief avenue to effective influence. Brookings may publish 15 to 20 books in a year, Resources for the Future almost as many, and Rand up to a dozen in addition to several hundred reports, memoranda, and papers. The National Institute of Economic and Social Research has averaged about one major book a year plus a series of occasional papers and reprints of articles by members of its staff, in addition to its own quarterly, the "Economic Review." The Institute for Strategic Studies owes much of its reputation to the quality of its regular and its special publications.

In certain cases, (e.g., the Research Institute for International Politics and Security and the Danish National Institute of Social Research) publication appears to have lesser emphasis. This tends to be true of bodies which have particularly close financing and working ties with one or more government departments. Bodies like Stanford Research Institute and the Institute for the Future, which rely to a significant extent on contracts with the private sector, also face certain restrictions on publishing.

Publication has more than one purpose. It is first of all, of course, a way of getting the results of the research programme before decision makers, the public, and its opinion leaders. It serves to prepare the ground for public policy decisions which will be taken later. In this way, it provides a valuable input to a desirable dialogue. Publication has important secondary values. For the members of the research staffs, it is as important in terms of career and professional standing as it is for those in the regular academic world. From the standpoints of both institute and staff, it is a desirable test of the quality of the work produced and a continuing stimulus to rigorous analysis.

A number of the institutes surveyed hold workshops, seminars, and conferences. The purposes vary and multiple motives are often involved. In some cases, such undertakings may simply be stages in the planning of a project or the evaluation of its results. In others, they may be a means of communicating with interested parts of the academic world or with public servants. Recruiting needs and the opportunity to evaluate or to interest potential staff members and academic consultants may be at least a part of the purpose. In its early days, Rand undertook seminars for the specific purpose of building its credentials with the academic world and of conveying an understanding of its mission and its approach. Whatever the mix of motives involved, it is clear that these activities have as a by-product a role like that of publication in giving the work of the institute more impact on policy making.

A few of these public policy research bodies engage in still broader programmes of education and support for the research of others. As befits an institution that once had the status of a university, Brookings has a more extensive programme of this kind than any of the other institutions surveyed. It brings individuals from the private sector to its headquarters to improve their understanding of the workings of the machinery of the public service. It organizes visits for members of the public service in which they hear firsthand reports on private sector activities, problems, and attitudes. It has made arrangements which permit outside researchers, under its sponsorship, to carry forward specific research projects within the public service and, conversely, arrangements which bring public servants to Brookings on short or longer term leaves to carry forward research of interest to themselves or to their departments. Like Rand, Resources for the Future, and the Urban Institute, it has a fellowship programme. The Hudson Institute also has an

active programme of seminars for business and community leaders, as well as for professionals in the field of research.

THEIR ORGANIZATION

The typical public policy research-oriented body in the United States is a non-profit corporation organized by private citizens and incorporated under the laws of a state or of the District of Columbia. This is true even of those, like Rand, the Urban Institute, and the Institute for Defence Analyses, which grew out of government initiatives and have been wholly or largely financed by government contracts. Of those studied, only the National Academy of Sciences (which is not wholly a public policy research body and which dates back to the last century) was incorporated by Act of Congress. In Europe, the Danish National Institute of Social Research was created by Act of the Danish Parliament, but both the National Institute of Economic and Social Research and the Institute for Strategic Studies are non-profit corporations under the Companies Act.

Typically, ultimate authority and responsibility for these incorporated bodies lie with their boards, most frequently in the United States called Boards of Trustees. As the full board meets only infrequently during the year, often twice, in some cases up to four times, there is usually an executive committee which carries its authority and responsibility in the intervals between meetings and is available to the permanent staff head as a source of advice and authority either in formal sessions or by telephone. In some cases, such as Brookings and Rand, where there are substantial funds to administer, there may also be a finance committee.

Only a minority of the institutions studied are membership corporations, e.g., the Hudson Institute, the National Academy of Sciences, and the Institute for Strategic Studies. In other cases, the members of the board constitute the membership of the corporation and the boards are, therefore, self-perpetuating. Simple scanning of the lists of board members shows that in the United States these bodies have attracted to their ranks many distinguished and public-spirited citizens. Although membership on such boards involves responsibility and considerable effort without remuneration, it offers a distinctive method of public service, along with prestige. In several instances, rules have been established, either by provision in the by-laws or by practice, to ensure a desired balance of representation on the boards. For instance, Rand Corporation typically selects board members on the basis of one-third leading businessmen, one-third leading academics and scientists, and one-third other distinguished, public-spirited citizens. Resources for the Future follows a somewhat similar pattern, while the Urban Institute includes on its board, as well, representatives of the judiciary, of international organizations, and of other public policy research institutions such as Brookings. The Institute for the Future aims ultimately at a board comprised of five members from business, five from universities, five from labour, five from government service, and five from the public at large.

Brookings, which guards with care both the fact and the appearance of its independence and objectivity, is precluded by its by-laws from having a board member who is at the same time a public servant. Both the National Bureau of Economic Research and the National Planning Association are more broadly representative citizens' bodies and their boards reflect this character. The board of the National Bureau includes representatives named by specific universities and other organizations, including labour. The N.P.A. board is widely representative geographically and also by sectoral interests.

Both the Danish and the Munich institutions have close direct relations with government. This is reflected in their governing bodies which, in the case of the Danish Institute, includes a majority of public servants combined with university representatives and, in the case of Munich, includes not only members of departments of the federal government but also representatives of each of the major parties. The National Institute of Economic and Social Research, whose links with government are of a more subtle kind, has a large board—118 distinguished members of the Establishment, governmental, academic, professional, and business.

The chief executive officer of each institute, known usually as the president in the United States and as the director in Western Europe, has the key role in most of the institutions surveyed. While boards have final authority for budgets, for approval in a broad sense of the areas of the institute's research efforts, and for personnel policies and selection of senior staff members, it is the president or the director who, by his powers of initiation, his daily involvement in administration, his recruiting and his determination of standards of performance, really determines the direction, the tone, and, to a large extent, the level of effectiveness of the institution. In most of the institutions surveyed, members of the board are not involved in the planning or the execution of individual research projects, nor do they review their results prior to publication. An exception is the National Bureau of Economic Research, whose board appoints subcommittees of its members to read each report carefully in advance of approval for publication. Its work has a more professional orientation, of course, and its board has a larger scholarly component than most. In the case of the Danish Institute, where the governing social research board is made up entirely of academics and public servants, it approves projects but the director has full scientific and administrative responsibility for organizing and carrying out the work.

The role of the board of trustees or directors of most public policy institutes—perhaps of all that expect to have long and useful lives—is an important one. It is their responsibility to protect the status and the worth of the institute by wise selection of its directing head and by judicious support and guidance for him. It is their responsibility, too, to stand as a buffer against any threat to the desirable independence and objectivity of the institute's work. These aspects of its role may be more crucial than anything it does directly in obtaining financial support or setting detailed policy.

THEIR STAFFS

The prevailing characteristic of the professional staffs of the public policy research institutions surveyed is that they are composed of academics who have, at least for the time being, chosen to devote their energies to policy-oriented research. This may be a lifetime preference or a stage in their career. In the latter case, they are likely to be in the earlier years of their careers and counting on returning to the normal academic atmosphere of a university. Some of them are, consciously or not, in transit to public service, while a few are former public servants. Brookings, more than most, has a two-way flow with the public service, particularly at senior levels. Rand, too, has been a training ground for many public servants.

For many such staff members, retaining their links and their standing in the academic world is of great importance whether or not they have any intention of returning to it. Professional standing and recognition is valued even by those who do not wish to return to university life. They are no less professional in their orientation because they prefer policy-centred research, in an atmosphere conducive to it, to research in methodology and pure theory in the atmosphere of a university.

Some prefer to have no teaching responsibilities, but others wish to combine some teaching with policy research. For Rand's Santa Monica staff, part-time teaching assignments are permitted. In the Danish National Institute, they are general and are counted upon as a source of additional income which will make posts with the Institute more attractive financially than either university appointments or public service. The United Kingdom's National Institute pay scales are not adequate to attract senior researchers, who must, therefore, either hold university teaching posts or be seconded from the public service. In most of the other institutions surveyed, there is little or no part-time university teaching by members of the permanent staffs, although the value of formal and informal contacts with the academic community is often emphasized. For such reasons, location near a university campus is often stressed as an advantage. This factor specifically influenced the location of the Institute for the Future (which works closely with Wesleyan University), the Institute at Munich, Rand, and Stanford Research.

Like his academic confrere, the institute professional often feels the need to "publish or perish." Most of the institutions surveyed see the opportunity for publication as a requirement for attracting and retaining high calibre staff. Publication of project results in the names of staff members responsible, or of consultants or academics under specific contract, may have the additional advantage of not committing the institute to positions. Brookings, for instance, specifies that each study it publishes is "offered as a competent, scholarly treatment of a subject worthy of public consideration; the Institution itself does not take positions on policy issues." In addition to publishing their research results in the names of staff members, a number of the institutions surveyed encourage staff members to contribute articles to learned

journals. Several, including Brookings, Rand, and the National Institute, frequently distribute reprints of such papers.

Rigorous standards of research are vital both to staff members, who wish to maintain or to build their reputations in the academic world, and to the institute, which is likely to be more effective if it has the respect of academic and other professionals. For this reason, Brookings, Rand, and several other institutes lay considerable stress on the procedures they have developed for ensuring high standards and testing the rigour of approach. Brookings subjects all of its intended publications to reading committees composed of members of its own staff and outside consultants. Rand emphasizes its referee process which subjects each study and report to critical review by selected staff members not themselves involved in the project. The referees, in effect, decide whether a report is worthy of being published or submitted to the client. Competence as a referee is one of the tests of performance applied to staff members in decisions about their remuneration.

This emphasis on the quality of professional work is well placed. The effectiveness of both Rand and Brookings in attracting staff and consultants, and in influencing policy decisions, has depended significantly on the respect which is accorded them in the academic world. Rand has deliberately sought this respect both through the quality of its work and through becoming well and favourably known to the academic community by summer appointments to its staff, conferences and seminars, consultant arrangements, and publication of unclassified reports.

Closely allied to the desire to be able to publish is the demand on the part of many staff members to be able to choose at least some of their research projects and to influence the research programme of the institute. Even such a market-oriented body as Stanford Research Institute offers its professionals some time and resources for research pursuits of their own choosing. In most institutes (Rand and Brookings are clear examples) choice of the research programme is substantially affected by staff suggestions.

A multidisciplinary staff is the hallmark of most of the post-World War II institutions surveyed. Building on the experience of operations research teams during World War II, Rand led the way with its interdisciplinary approach, but it is emphasized also by the Urban Institute, the Institute for the Future, Stanford, the Hudson Institute, the Institute for Defense Analyses, the Munich Institute, and, to a slightly lesser degree, Resources for the Future. Multidisciplinary staffs usually combine economists and statisticians with lesser numbers of political scientists, sociologists, historians, and mathematicians, plus, on occasion, specialists in law, public administration, physical and life scientists, engineers, town planners, and architects. Rand began with physical scientists, engineers, and mathematicians but very early began to add a qualified staff of social scientists together with a few specialists in the humanities.

Except in those bodies which, like the National Bureau, have a rather specialized professional interest, any extensive programme of public policy

research seems likely to benefit from the application of a fairly wide range of expertise. Even those who have tried hardest, however, agree that the interdisciplinary approach is difficult to bring to the desired level of effectiveness. Despite its own major stress on the interdisciplinary approach to its projects, even Rand has found it more acceptable to organize its staff according to traditional discipline groupings. This does not prevent a physicist, a mathematician, or a philosopher being found in the economics department, nor does it defeat the conscious effort to have the walls between disciplines lower on the institute campus than they are on the typical university campus. Nor does it impede an interdisciplinary approach to the referee process, which often has staff members acting as referees for reports even when their own disciplines have been entirely unrepresented in the projects.

Closely related to the question of a multidisciplinary staff is the question of whether there is such a thing as a "critical mass" in terms of staff size. If so, it seems likely that Rand, with its 550 professionals, and Stanford Research, with more than twice as many, are well beyond it. On the other hand, the National Bureau, with its full-time complement of only four professionals, would appear to be far below the critical mass level were its approach interdisciplinary. Those who have had experience with the interdisciplinary approach, and regard it as essential for modern public policy research, agree that the critical mass concept does apply, but they vary widely in their opinions as to its absolute level. At the Urban Institute it was suggested that the critical mass for optimum cross-fertilization might be 100 professionals. Brookings has 95 professionals and feels that it is safely beyond the critical mass level. The Munich Institute feels that the optimum number would be perhaps twice the 35 professionals it now has. On the other hand, Resources for the Future, with a record of demonstrated productivity over more than 15 years, appears satisfied with its staff level of 20 professionals. There is some evidence that Rand, in growing to more than 500 professionals, has become so large that interdisciplinary contacts are somewhat impeded and that, despite attempts to overcome the handicap, size forces some bureaucratic approaches which would otherwise be undesirable. The author's tentative conclusion is that with a truly multidisciplinary staff it would be unwise to expect genuine interdisciplinary benefits with a core group of less than 25 professionals.

Most of the institutions surveyed do not attempt to staff on an "in house" basis to meet all of their anticipated needs for skills and knowledge, or in numbers sufficient to meet their full manning needs at the planned levels of their research programmes. At one extreme, professionally specialized bodies like the National Bureau can work with very small permanent staffs, assigning much of their research programme on a contract or support basis to outside academics whose competence is especially suited to the task for which they have been selected. At the other extreme, Rand, with its 550 profession-

als, and the Urban Institute, with its aspirations for 200, are exceptional in their desire to handle most of their projects on a wholly "in house" basis.

Most of the other institutes surveyed combine a fairly wide array of internal staff talents with the recruitment of part-time or temporary outside staff from university campuses to supplement internal efforts and to provide missing expertise or authority. Brookings, for instance, counts on making approximately half of its staff expenditure in its economic and government divisions for outside personnel, some of whom may do part of their work at Brookings. Because most public policy research programmes require planned team effort, sometimes spanning lengthy time periods, the institute "in house" staff must at least be large enough to combine planning and directing skills with knowledge of where to find outside expertise as needed. In addition, it must have the competence to work with the specialists whose skills are required. Without an adequately large "in house" research staff, it seems highly unlikely that a public policy research institute could shape and carry through a successful, continuing programme of research in broad areas of public policy.

THEIR FINANCING

The institutions studied in this survey have annual operating budgets ranging from the \$65 million of Stanford Research Institute to the less than \$250,000 of the Institute for Strategic Studies. Their sources of revenue range from wholly governmental to wholly private and from 100 percent dependence on contracts to reliance on a mixture of endowment income and individual, corporate, and foundation support which may largely or entirely exclude contract income.

Stanford Research Institute is, of course, only partly a public policy research institution and some of its huge annual budget goes to technical and scientific studies and to contract projects for private corporations. Rand, however, spends almost all of its nearly \$25 million budget on public policy research.

One might expect an institute's sources of revenue and degree of financial security to have considerable bearing on its choice of projects, its attractiveness as a place of work for competent researchers, and even its effectiveness. The evidence is that this is so. The freest institution among those surveyed, from the standpoint of the reliability of its revenues and the neutrality of their sources, is Brookings. It has a substantial endowment which has provided it with attractive working quarters and produces more than one-quarter of its current annual revenues. It obtains nearly one-half of its required present level of revenues from grants and contributions by foundations, corporations, and individuals. It produces some 15 percent of its revenues from sales of its publications, seminar fees, and other charges, relying on government contracts up to 10 percent only. In this position it can afford to be highly selective in taking on contract studies.

This happy financial position is, of course, highly dependent on Brookings continuing to achieve a level of effectiveness which its voluntary supporters consider worthwhile. So long as it can do so, its revenue position allows it to be independent in several important respects.

Brookings has a very large measure of independence in its choice of fields in which to work. This, of course, means considerable effort in making such choices. Management and staff work at keeping in close, informal touch with political and official figures in Washington. This effort serves a communications purpose, but it also helps to ensure that the Institution's work remains relevant. Not having to depend on contracts, however, Brookings does not have to accept the views of departments or agencies as to what areas it should study or what projects it should undertake. The opinions of foundation officials and their accompanying willingness to support particular projects undoubtedly have some influence on choice of subject, but at least the foundations have no operational axes to grind and no defensive unease about the results of studies. The president and his senior advisers, who have the principal voices in shaping Brookings' research programmes, can consider in their assessment the ideas of staff members, foundations, academics, public servants, and others. This is a useful process for an institute that wishes to be as certain as it can be that it has identified those policy areas in which clarification of the problems and identification of the alternatives and their implications will make a significant contribution.

Brookings' degree of financial independence bolsters its freedom in publication policy as well. It regards publication as the natural end product of all of its studies and will not compromise its right to publish. It turns down (or is not considered for) government-sponsored studies in cases where classified information is involved or the department wishes a veto right on publication. Brookings often allows a sponsoring government agency 60 days to comment on a proposed text and will even give the agency the right to publish the report. On the other hand, it does not commit itself to accept proposed changes, and it reserves in such cases the right to publish should the agency not do so. Brookings' emphasis on publication is central to its view of its role, which it defines as "that of independent analyst and critic, committed to publishing its findings for the information of the public."

At the other end of the spectrum, Rand Corporation depends almost entirely on contracts for its revenues, and has throughout its 23-year life. In fact, for a number of years it had only one employer (or client) and it still receives its major revenues from that single source, the United States Air Force. Yet, Rand has enjoyed, and its work has reflected, a degree of independence unusual in such a situation. It has been said that another Rand could never be created because the same conjuncture of personalities and circumstances, which launched it under a contract giving it a high degree of freedom, would be unlikely to recur. The statement is probably true. Certainly, no other policy research institute has emerged which, while being wholly

or largely dependent on government financing, has had as large resources and an equal measure of independence.

Part of Rand's independence has been based on contract, part on practice. Its contract with the Air Force gave it from the beginning substantial initiative in choosing subjects under the general rubric of national security. Rand has been able to define national security in such a broad way as to permit it to undertake more challenging and more fundamental studies than would have been possible under the usual, more narrowly-defined government agency contract. Its contract has allowed it also to include in its fees a six percent loading from which it has been able to finance research programmes entirely of its own choosing. This has been an invaluable attraction to staff and a development tool for competence to meet future needs. Paradoxically, as Rand has broadened its list of clients, it has probably become somewhat less free. Its newer clients, most of them departments of the federal government, have not had the same latitude the Air Force had when it signed its original contract with Rand. Rand, itself, has had to become more sales-minded as it sought to obtain and retain new clients.

For a number of other institutes which depend primarily on government financing, impediments to freedom of initiative and pressures on objectivity appear somewhat greater than for Rand to date. The Urban Institute, one of the newest, received at its origin generous three-year contracts from the Housing and Urban Development Department and the Department of Health, Education and Welfare. Because such contracts are cost-reimbursable, it had to seek financing for working capital and office furniture and equipment through a grant from the Ford Foundation. Now that the time for renewal of its contracts is approaching, the departments concerned are having to give serious thought to what they have obtained for their money so that they can justify further contracts. It is difficult to judge how much weight they will be able to give to the fact that in the first two to three years of development for a new institute, the measurable useful output is likely to be small, even though excellent foundations may have been laid for future productivity.

There appears to be widespread agreement that the work of several of the non-profit advisory corporations which have served the Pentagon has been of less general value than that of Rand because they have been more constrained by their "clients." One can scarcely dispute that the power to veto by withholding contracts is very great if an institution has no alternative sources of revenue. So long as it can attract and keep staff of standing and competence—very difficult where serious constraints on independence are perceived—an institute may hope for some success over time in persuading agencies with which it deals to approve projects which they would not originally have favoured, or to broaden terms of reference on occasion to permit a more useful study to be made. It may even hope to influence its client to accept freer or more extensive publication than it might otherwise have chosen. Overt constraints may be the less dangerous part of the situa-

tion. The greater danger may be that the institute, itself, will be led to a subtle, even an unconscious, self-censorship, sensing without deliberate analysis what questions it would be unprofitable to raise, what answers would be hard to sell.

Whether or not they always come to the fore, the limiting tendencies in a contract-dependent situation should be recognized. Current operating responsibilities and current commitments to policy positions and programmes do tend to narrow perspectives on future possibilities, to limit willingness to pay for objective assessment of all of the alternatives which probably should be considered. They shorten the attention span so far as future needs are concerned. They instil a certain bias in favour of confidential rather than published reports. Few government departments or agencies can avoid some such effects, because they are necessarily involved in present programmes and policies. An established influence and record of accomplishment will enhance an institute's capacity for independence in the face of such natural pressures, but for that record to be established, there must have been over some considerable time sufficient freedom in choice of research project, in the opportunity to draw objective conclusions, and in the right to publish them.

THEIR LOCATION

The Brookings Institution is located in Washington, D.C., and would not have it otherwise. As a truly independent institution, it regards its informal and personal contacts through its staff members with the political and official figures of Washington as an essential ingredient in the success of its work. From its standpoint, Washington is an excellent communications centre via the media for publicizing its work throughout the nation. It is almost fully occupied with issues affecting the federal government and is, therefore, very little influenced by any concern for contacts with state governments. Even if it were, Washington, where state and local governments often have their own representatives, might still be the preferred location.

This has been the view also of the Urban Institute, which does have substantial interest in state and local government activities. It considers the dialogue with Washington officials so important to its purposes as to offset the accompanying intensity of pressure which goes with proximity to decision makers. While it assessed seriously the wisdom of establishing a number of permanent regional operating groups, it concluded for the time being that it would be more effective to develop an adequate headquarters group in Washington. This would not preclude setting up ad hoc groups in other cities for particular projects.

The Rand Corporation established itself in Santa Monica, California, 23 years ago for reasons which it might be prepared to admit are less powerful today than they seemed at that time. Rand's motive was, in part at least, to obtain the protection afforded by geography in a situation where it expected to be wholly dependent on a single client located in Washington. It correctly saw that it needed to be insulated from operational concerns and protected

from having the resources it was creating diverted to unintended short-term purposes. Over the years, it has reaped undoubted advantages in manning because of the attractions, intellectual and climatic, of the West Coast location. (Brookings, too, has given some thought to establishing a West Coast branch to gain the benefits of added intellectual contacts and attractiveness to potential staff.)

Whether the protection of geography is as real in the day of the jet aeroplane is a pertinent question. Whether, also, a different location would serve Rand better in terms of readier and more frequent contacts with its now more numerous clients is also a question. It must be said that Stanford Research, with its West Coast location and its much more dispersed clientele, does not appear to have suffered a location disadvantage. For the new and different client relationship which Rand has established with the City of New York, it has created a new organization located in that city and living daily with its client.

Like Rand at an earlier date, the West German Research Institute for International Politics and Security deliberately chose a location removed from the federal capital and from the Chancellery which it expected to be its primary client and supporter. It wanted to separate its research staff from the pressures of the capital city and sought the opportunity to maintain more easily the academic environment it believes to be desirable for its work. On the other hand, the Danish Research Institute, living in a small country, feels no disadvantage to its independence arising from its Copenhagen location, even though it is in many respects almost a part of government.

The value which some institutions see in being located adjacent to a university community has already been mentioned. Particularly for a new institution, access to library resources and computer facilities, frequent and easy contacts with academic personnel, and readier availability of outside sources of expertise may be as important advantages as the opportunity for staff members to engage in part-time teaching.

For a research institution and a research atmosphere, one might envision certain attractions in relative isolation. This may well have influenced the Hudson Institute in its choice of a slightly remote location at Croton-on-Hudson, although a particularly attractive real estate opportunity may have been a factor as well. For a policy-oriented research body which must have countless and continuous contacts with the outside world, whether clients, consultants, or leaders of public opinion, even a small degree of remoteness can become a burden, more of a burden perhaps for the institution's own staff and budget than for its outside visitors.

THEIR ROLE

There can be ready agreement on the crying need to inform many important public policy decisions with an improved understanding of the implications of the physical and the social environments, with better analysis of the problems involved, and with more thorough identification and assess-

ment of alternative solutions. Why, though, should a new and distinctive institution be required? Why do we not turn to our rapidly multiplying universities and to the growing capacity for university-based academic research? Alternatively, why do we not rely on the research and advisory units located in departments and agencies of governments?

The author has found a significant measure of agreement on the answers to these questions among university academics, present and former public servants, and those experienced in public policy research institutes. The nature of public policy research, the traditions, the resources, the aims of academics, and the position of government-based social science research are all combined in the answer.

Most public policy questions, whether wide in their implications, like the guaranteed annual income, or smaller, like control of the quality of water in a given lake-river system, have many facets and involve a multitude of intricate relationships. They can scarcely be adequately understood through the insights of a single discipline, or resolved by the skills of one form of expertise. An adequate understanding of what is involved frequently requires purposive investigation and analysis over a considerable period of time in the course of which a number of important avenues may have to be researched before integrated findings and conclusions are possible. Such activity calls for a multidisciplinary approach, often involving knowledge of the physical sciences and skills of the engineer, as well as the expertise of various branches of the social sciences. It requires a team approach. For best results, it must be carefully planned in advance and managed on a continuing basis. Management and organization of public policy research projects call for special skills. They require forms of expertise which, on the evidence, are most likely to be developed and applied on a professional basis in public policy research institutes.

Public policy research on a mission-oriented, continuing basis is not likely to find a happy home in most universities. Part of the problem lies in academic attitudes to policy research as such, part in the multidisciplinary requirement, and part in the limited resources of professional expertise available in any one university. Research is an important product of good universities and of most good academic careers. It contributes to the university's teaching and learning role as well as to the pursuit of knowledge and the enhancement of professional careers. Only by chance and infrequently does it have the purpose of contributing directly to the resolution of public policy questions. A policy orientation will, in fact, often be discouraged, and perhaps nowhere more so than in the social sciences. Many social scientists in universities are, for valid professional reasons, more interested in methodology and esoteric dialogue with their peers. To the extent that their work has policy implications, it needs translation and interpretation to be of direct value to policy makers or to the public at large. It is not inaccurate to suggest, then, that most research by university academicians is undertaken

because of its particular appeal to the academic himself, and that it is more in the nature of individual entrepreneurship and rarely of mission-oriented team effort.

Although a team approach to research in the social sciences has been rare on the campus, it is becoming somewhat less so. Canada Council grants, foundation support, and other sources of funding are, from time to time, used to finance the efforts of several academics and graduate students working on a single subject. The initiative for such projects almost always comes from the academics themselves and the choice of subject is, therefore, theirs. Public policy orientation is infrequent.

In most universities, the walls between disciplines are still high, if not very nearly impregnable. There is no accepted focus of authority which can readily organize and co-ordinate a mission-oriented research project requiring skills from several departments. Were this limitation less real, university-based policy research would face still another which is real. For any significant public policy project, it is unlikely that the faculty of a single university will include enough of the talents required in each of the disciplines relevant to the project. A university may have the right economist, the right historian, and the right engineering talent, but the best sociologist for the study may be part of the faculty of another university. Often the talents of two, three, or four specialists in a particular field may be needed for a project, for instance authorities in the field of education economics, when no single campus would be likely to have more than one of the desired competence and standing. When it comes to team projects, the only barriers more difficult to scale than those between departments in a given university are those between universities themselves. Only rarely has it been possible to mount a mission-oriented research project which was manned from several universities but directed from one.

In sum, then, university-based research does not usually have public policy resolution as a primary purpose or focus, it tends to be the product of individual choice rather than mission-oriented team effort, it is difficult for it to be multidisciplinary, and it is perhaps even more difficult for it to combine talents from several campuses.

The public policy research institute, by contrast, does have public policy resolution as its primary purpose and focus. It can provide a congenial atmosphere and appropriate working conditions for those scholars and others who wish to relate their research activity directly to the problems of the society in which they live. It can assume for such scholars the often burdensome necessity of finding financing for such work. It can be organized to reduce the institutional barriers to multidisciplinary effort and it can provide the planning, organizing, and administrative skills required for large projects which span more than one year. It can also deliberately build into its staff the relatively large number of good, solid, technically skilled performers which

large-scale research projects require to support academic stars and innovators.

The public policy research institute is little more likely than the university to have on its staff all of the talents needed for each of the projects it undertakes. Unlike the university, however, it is in an excellent position to enlist those who are located elsewhere. As a continuing research project manager, the institute will make it a point to know where the top talent in each field of expertise can be located. It will be able to enlist and to integrate with the work of its own staff the efforts of experts from universities across the country without encountering problems of parochial campus loyalty.

If more can be expected from the public policy research institute than from universities in effective public policy research, what can be said of it in relation to the research groups of government departments and agencies? First of all, most policy-making departments and agencies of government, if they are of any size, do today need the support of research and analysis activity. This often takes the form of an economics division. Such groups make important contributions by keeping policy makers and administrators adequately informed about the environment and by providing valuable input to short-term planning and to operational decisions.

The opportunity for groups so located to cope with research of longer term import is, on the evidence, as limited as the logic of the situation would suggest. An obvious hazard is the ease with which the organization, under the pressure of daily crisis, can divert them to shorter term problems. With such a resource at hand it takes extraordinary understanding and self-discipline not to involve it extensively in the current operating problems which press so continuously on those directing the department or agency. To quote a particularly felicitous phrase, the normal pattern is for "the urgent to displace the important."

Involvement in the short-term operational situation seriously limits the capacity for effective medium- and longer-term research and analysis. Involvement in current policy positions, even organizational dependence on those who are so involved, inhibits objective searching out and assessment of policy alternatives for the future. Within any agency it may be difficult to say things which might be unpopular politically. Terms of reference may be unduly narrowed by the desire to avoid challenging existing commitments, programmes and machinery.

For these and other reasons, it is not easy for the government department or agency to secure and retain first class talent for policy research. Most top social scientists outside government do not envy their confreres in government departments and agencies. A competent physicist might be impossible to lure to the staff of the State Department in Washington, but he might be quite happy to serve on a foreign policy project of Rand.

Properly guided, the public policy research institute can escape the limitations and hazards of operational involvement, commitment to present positions, and lack of attraction to qualified personnel. As an organization

outside government, it should be able to resist involvement in operational problems and short-term decision making, even though it may encounter some pressure from client departments. Successfully resisting such involvement does not, of course, completely free it from the inhibiting influence of present policy commitments by decision makers to whom its work is addressed. Whether its freedom in this respect will be impeded depends, in the first instance, on the degree of real autonomy it can preserve, which may depend substantially on its revenue sources. The most insidious restraints are those which are self-imposed, the conscious or unconscious filtering out of subjects, alternatives, implications, or conclusions which, if raised or published, might make future communications or future financing more difficult.

The public policy research institute has, then, no automatic assurance of being protected in the degree of independence and objectivity its role demands. It must organize for it and work at it. If it succeeds, it can capitalize on a functional competence which neither universities nor government agencies can be expected to equal. In the process it can stimulate and increase the public policy contribution of university personnel and engage in constructive interaction with public servants as well as the public at large.

THEIR EFFECTIVENESS

To measure the contribution which the public policy research institutes surveyed have made and are making in their respective countries is not possible in any verifiable, quantified fashion. Indeed, if it were, some of those included in the survey, such as the Urban Institute, the Institute for the Future, and the Research Institute for International Politics and Security, have not really had yet long enough lives to demonstrate their potential worth. The value of the work of certain others cannot be gauged adequately because much of it has been done on a confidential basis, with the results known only to the institute and its clients.

One basis for judgment, of course, might be that a few of these public policy, research institutes have been in operation for considerable periods and appear to be flourishing, and that in the past 15 years a number of new institutes have been created both in the United States and in Western Europe. Certainly, the author found that many public officials, academics, and other public-spirited citizens feel that there is a role for such institutions, and that formulae for their effective functioning are known. While there is no way in which to quantify the influence of any one of these institutions, one can see, hear, and even feel evidence of the respect in which bodies such as Brookings, Rand, the National Bureau, and the National Institute have come to be held over the years. One can see and judge the quality of their written output. One can even reduce with some confidence causal links between their work and certain public policy positions and decisions. It is hard to resist the conclusion that public policy research institutes, operating on one or other of certain tested patterns, have proved their worth to the policy formation processes of modern, democratic states.

These institutes help to fill a very evident need of a modern society and do so better in important respects than alternative forms of organization. There can be little doubt that in our modern, complex societies public policy effectiveness is frequently hampered by incomplete understanding of the underlying causes of problems, by lack of awareness of the full range of alternative solutions and their implications. Unless we address ourselves in a competent and objective fashion to a fundamental understanding of the relationships involved and to expand an imaginative search for alternative solutions, each properly appraised, and unless we do this sufficiently far ahead of the problems becoming acute, it is evident that both public opinion and policy makers will be quite incapable of dealing constructively with the circumstances we shall have to face. For valid reasons inherent in their own roles, neither the research facilities of the academic world nor those of government are likely to contribute to this need as adequately as those of a research institution whose whole purpose lies in this kind of enquiry and all of whose skills are developed for effective performance of it.

CHAPTER IV

A PROPOSAL FOR A PUBLIC POLICY RESEARCH INSTITUTE FOR CANADA

As Canada approaches the last three decades of the turbulent Twentieth Century, its leaders and its citizens face a future whose only certainty is the size and the complexity of the demands to be met. These demands will require decisions, a few major decisions which will shape Canada's destiny to the extent that Canadians can shape it, a multitude of lesser decisions which will have major consequences for specific groups of Canadians and specific areas of Canada. The decisions made will determine Canada's constitutional position, the pace and continuity of its economic growth, the distribution of its economic product among its citizens, the relative ability of its various natural regions to produce wealth, the degree to which its citizens are able to develop their economic, their social, and their cultural potentials, the quality of the environment in which they will live, and the economic and political status and influence of Canada and Canadians in the world of nations. In sum, these decisions will determine what Canada is to be all about. Most of them will be public policy decisions.

Consider the circumstances and some of the probable demands. Canada is a rich, rapidly urbanizing nation with serious regional economic disparities. Like most of the developed nations, we have not yet found the means of combining a satisfactory rate of economic growth with satisfactory price stability. As high as our per capita income is by world standards, we must still wrestle with persistently frustrating problems of productivity of both capital and human resources, and particularly with our continuing lag behind our large next door neighbour. Like other industrialized nations, we have reached the point at which we must henceforth give serious and organized attention to preventing further deterioration in the quality of our physical environment. For us, this is in important aspects an international question. It is part, too, of a whole complex of questions posed by our highly urbanized future. As for other peoples, the increasing sophistication and variety of

communications and transportation possibilities will demand their own array of decisions, some of them intertwining with basic questions already mentioned, many of them having significance for Canadian identity and for the growth and interaction of our national cultures.

In its external relations, Canada is moving into a new phase. The certainties which guided us for nearly two decades in economic, defense, diplomatic, and cultural relations with the rest of the world have been challenged, perhaps removed. No simple guidelines are yet accepted in their place. Indeed, uncertainties about the resolution of external forces for change may delay the appearance of such new guidelines for some time. Colouring the whole of Canada's view of the external world and of its own economic and political future, is the future of its intricate pattern of relationships with the United States. Where are these relationships taking us and how does the likely destination square with our desired destination?

Even this broad sweep does not exhaust the range of questions with which Canadians will have to wrestle during the next decades. Each broad question subsumes a longer list of specific problems, many of them of great complexity and importance in their own right. For few if any of these questions could any sober observer suggest that we have today, or clearly will have at the time of future need, enough organized knowledge to put the situations in perspective, let alone sufficient identification of the range of choices open to us and adequate appraisal of the consequences of each. The demands of public policy choice in the next decades will evidently be both constant and heavy for Canadians and their political leaders. More than at any time in the past, there is need for effort to improve the understanding brought to the process. To the extent possible, Canadians should plan to choose and chart their future, and not simply be swept into it by forces and contingencies insufficiently foreseen.

ROLE FOR A CANADIAN INSTITUTE

It is as a contributor to better informed and better assessed choices in problem areas of these kinds that a public policy research institute must find its justification. Almost without exception the major questions which face Canadian makers of public policy at the federal, provincial, regional, and local levels cry out for multidisciplinary systems analysis, for studies which attempt to identify desired "futures" and to chart the paths to them. They call for orderly study by skilled professionals in effort which is oriented towards providing ingredients for policy appraisal and decision. They call for study in an environment which is free from the distractions of immediate operational responsibilities and from the constraints on thinking imposed by present commitments to policies, programmes, and machinery. The evidence is that, properly organized and manned, a public policy research institute can contribute in just these ways; that it can consistently fill needs which are unlikely to be sufficiently met by the public policy research output of either universities

or government departments and agencies. With the experience of institutes and governments in the United States and Western Europe as a guide, there is every reason to believe that the time is now ripe for creation in Canada of a public policy research institute which can be expected to make a substantial and useful contribution to the processes of public policy decision making in this country over the next decades, and probably long into the future.

It should be clear that no prospect of miracles is being claimed. The number and complexity of problems to be dealt with even during the next decade is such that no single institute of this kind could hope to make more than a marginal contribution. In practical fact, it will take a number of months to organize and establish such an institute. Thereafter, a period of three or more years must almost certainly elapse before the first substantial results of its work might be expected to appear.

Moreover, one institute could never hope to address itself to the whole range of possible public policy questions. It is easy to imagine that some years hence Canada will possess several such institutes, probably with some degree of specialization among them. Initially, the institute which might now be created would probably be wise to undertake a narrower range of activities than would be appropriate at a later stage. At all times a Canadian institute would presumably wish to take as much advantage as possible of work done outside Canada, concentrating its own efforts on the peculiarly Canadian dimensions of the problems to which it addressed itself.

There is little doubt in the author's mind that the benefits to Canada of an organized research and analysis effort on questions of public policy should be many times larger than the relatively modest cost of such an institute. It is, therefore, proposed that **there should be established in Canada an institute which will have as its mission research and analysis designed to improve the basis for informed choice and decisions by the public of Canada and its leaders on questions of public policy.**

CONSTITUTIONAL IMPLICATIONS

One of the most important contemporary facts about public policy making in Canada is the federal structure of government and, more particularly, the ways in which responsibilities, authorities, and revenue-raising powers are shared between the provinces and the federal government. So much is this the case that the dialogue among provinces and between the provinces and the federal government has become almost continuous at both political and official levels. There is no sign that this will cease to be the case in the future. The consequence is that, as is the case today, a preponderance of the urgent and difficult questions of public policy will, unless our Constitution is profoundly modified, concern both the provinces and the federal government. In many cases where they do not concern both they will concern the provinces collectively, or groups of them.

The implications for a public policy research institute in Canada need scarcely be urged upon a Prime Minister who is as firmly committed to the

federal pattern for Canada as he to whom this report is addressed. Clearly, a public policy research institute which aims at real contribution and genuine influence can bring to its task no predisposition to favour the federal government, the provinces, a particular region, or one of Canada's national languages and cultures. If it is to be effective, it can be neither a federal nor a provincial instrument. It must be a resource for better policy making by both the provinces and the federal government, acting singly, jointly, or co-operatively as the needs of the situation and constitutional positions may determine. This will not preclude the institution from undertaking some studies which are of particular, or even exclusive, concern to one level of government, to a particular region, or to a particular provincial or local government.

To protect its ability to contribute usefully to some of Canada's most urgent and complex areas of public policy decision, it is proposed that **the institute should dedicate itself to impartial service of the national cultures, the various regions, and the various governments of the people of Canada in its research and analysis on public policy questions.**

For the reasons indicated immediately above, it was agreed with the Prime Minister in advance of this task being undertaken that an important part of the study should be directed to obtaining initial reactions from the premiers of the provinces of Canada and from some of their key advisers to an institute of the kind now proposed. The premiers were asked in individual discussions whether they would be likely to view such an institute as a useful resource for them in the kind of setting in which they expected the governments of their provinces to be working in future. They were asked, too, whether they could foresee any special usefulness for such a resource in fields of joint enquiry, co-operation, and consultation among the provinces and between them and the federal government. They were asked for any suggestions they might have as to how such an institute could best ensure the continuing confidence of the governments of their own provinces while not sacrificing that of the federal government.

Most of the premiers and most of their advisers seemed to feel that a public policy research institute of demonstrated competence and integrity would be a valuable resource to their provinces. They made it clear in almost every instance, however, that questions of form as well as of substance would influence the acceptability of such an institute to them and the degree of confidence they would be likely to have in it. These discussions, preliminary as they were, made it evident that there would be an inherent distrust of any institute which would appear in form, or could be seen in fact, to be a creature of the federal government. There is no doubt that the federal government would feel similarly about any institute which appeared to be a creature of the provinces, or of some of them.

Apart from the feelings of the provinces, it would be easy to visualize the federal government creating the proposed institute by Act of Parliament or otherwise, giving it the status of a Crown corporation. It might, of course,

still follow this route, attempting to meet the views of the provinces by providing, through legislation, by-law, or practice that only a minority of the directors would be named by the federal government, the balance being named in some agreed ratio by provincial governments. Complicated questions about appropriate ratios of representation could easily arise with such an approach. From time to time there might also be suspicion on the part of some provinces that their interests were being slighted by some combination of the federal government and other provinces. Such suspicion could, of course, be magnified if the federal government were, by grants or contracts, a primary source of the institute's funds.

A board of directors constituted along these lines would also pose potential dangers for the work of the institute. In every effective institute surveyed in this study, the board of directors plays an important but a restricted role. The board bears ultimate responsibility for the programme and performance of the institute, for the broad allocation of its funds and its efforts, for its personnel policies and for ensuring that it has effective administration and good direction. Usually, however, it does not exercise the primary initiative in selecting projects, securing staff, or directing studies. Above all, it usually makes no attempt to interfere with its director and his staff in the presentation of their conclusions from any study. Members of a board who were appointed by the federal and provincial governments, especially if any of them were officials or politicians, might find it difficult to avoid going beyond such limits. In that event, the work of the institute would be likely to suffer.

If there are serious drawbacks, then, to the proposed institute being a Crown corporation created by the federal government, even with the protection of broad representation for the provincial governments, what form can the institute best take to hold the confidence of the provinces, the federal government, the various regions, and the two language groups of the country? To the author, an appropriate solution seems to be the incorporation of a non-profit company by letters patent under Part II of the *Canada Corporations Act*, with this initiative being taken neither by the Government of Canada nor by the governments of the provinces but by a group of private citizens who would be prepared to be the first directors of the new corporation. The institute would be incorporated by private citizens acting in their individual capacities for the public good. The members of the corporation would be its board of directors and would in the ordinary way define the purposes of the corporation, provide for their own succession, and accept responsibility for the management and direction of the affairs of the institute.

It will be recalled that a number of the successful institutes studied in this survey have exactly this status, including a number whose sole or principal source of revenue is government contracts. Provided the board adopts practices which clearly ensure that its own membership will be of high-calibre, public-spirited citizens with a range of relevant backgrounds and

interests (a tradition well established in other public policy research institutes), such a "private" corporation offers by far the best chance of establishing and maintaining with all the governments of Canada, and in all regions of Canada, its credentials as a truly objective and competent organization, worthy of being listened to and of being used. Because it is not representative of any government, such an institute will best be able to ensure, and to demonstrate, that its objectivity is compromised by no special allegiance. With no special protector, it will find it necessary to fulfill its purposes by continuous striving for the kind of contribution which will earn it respect and influence.

It is, therefore, proposed that **the Prime Minister of Canada ask a small number of distinguished citizens, whose competence and disinterested desire to serve the public good are widely accepted, to seek incorporation of the proposed institute as a non-profit corporation under the *Canada Corporations Act*, to serve on its first permanent board of directors, to select and employ a president who should be its chief executive officer and, with his help, to establish the institute as a functioning organization.**

FINANCING

The sources and the adequacy of financing for the institute will be crucial to its effectiveness and to its viability.

The level of expenditure required is likely to be closely linked to staff size. The concept of "critical mass" for a multidisciplinary policy research institute has already been mentioned. It should, in the author's opinion, influence decision about the minimum size of the professional staff at which the institute should aim. As has been reported earlier, the survey yielded widely ranging opinions as to the size of the critical mass, from a low of 20 to a high of upwards of 100 professionals. To arrive at one's own estimate, a useful first step is to consider the balance of disciplines likely to be sought. The major component of the institute's staff is likely to be social scientists—economists, political scientists, historians, sociologists, psychologists, a range of specialties being desirable within some of these groups. The social scientists would need to be complemented in the core group by mathematicians, statisticians, physical and life scientists, and perhaps some expertise in engineering, law, and other specialties. With such a range of professional skills, it seems hardly likely that an effectively multidisciplinary group could be smaller than 25 professionals. At current levels, this would mean salary and benefit costs of the order of \$600,000 a year for the professional and directing staff.

The professional staff would have to be backed up, of course, by secretarial, stenographic, clerical, accounting, and other support personnel. They would need access to library and computer facilities. They would have to travel fairly extensively. It is likely, too, that the institute could aim at no more than one-third to one-half of its total research effort being the product of its own in-house staff. It would, therefore, have to seek out and pay for research work done by outside scholars as integrated contributions to the

institute's research projects. These scholars, too, would have to travel, in some cases as part of their research effort, in every case to participate in planning, reporting and evaluation conferences with institute personnel. The institute's total staff would have to be housed in facilities suitable for its daily work and providing adequate conference space for a variety of contacts with outsiders. Beyond this there would, of course, be reproduction and publishing costs. It is easy to see that the annual operating budget for an institute which had no more than reached the "critical mass" suggested here would be of the order of \$2 million at present day prices.

The critical mass size would be the objective which the institute would strive to achieve as early as possible in its history. Many experienced persons would consider the suggested minimum level to be low, especially for a body with serious aspirations to sophisticated, multidisciplinary, systems analysis approaches. It seems unlikely, therefore, that the institute, once functioning at its suggested minimum level, would be content to stay at that level.

Part of the problem in Canada, however, will be the scarcity of the professionals required. Universities, governments, and the private sector are still competing for resources of this kind. Bodies like the Economic Council of Canada and the Prices and Incomes Commission have not found it easy to obtain the professional staff they need. It does seem likely that the staffing demands of the universities will shortly be somewhat reduced, as their break-neck expansion in numbers and size decelerates. At the same time, their output of Ph.D's is beginning to multiply. The manning problem for the proposed institute is intensified by two factors—its early need for a number of highly regarded scholars and the relative scarcity of those who prefer to concentrate on policy-oriented research.

Despite such difficulties, one can forecast that a Canadian institute will not remain at the critical mass size once it has achieved it. The variety of problem areas calling for the kind of input which the institute will be created to contribute is just too great. If the institute is successful, the human resources will be found over a reasonable time. Canada cannot afford, in money or in personnel, more than a small fraction of what the United States lavishes on the field of public policy research; but if it can have only one institute, that institute should surely be, within a reasonable time, of approximately the present scale of the Brookings Institution, i.e., 80 to 100 professional personnel and an annual budget of the order of \$5 million.

Neither \$2 million nor \$5 million can be considered huge annual costs for any institute which serves the various governments of Canada and the public at large in policy formation as effectively and as extensively as should be possible. This does not mean that an institute can easily be assured of such sums. Even if it could be, the sources of revenue, the balance among those sources, and the basis for the revenues are all likely to bear on the character and the value of the institute's work. Several considerations need to be taken into account.

The importance of the institute being able to maintain its objectivity has been stressed throughout this report—objectivity in the choice of areas to be studied, in the analysis brought to bear on them, in the conclusions reached, and in their communication. The degree of objectivity achieved is likely to be influenced by the degree of the institute's financial independence. One could easily conclude, therefore, that the ideal situation would be one in which the institute was so handsomely endowed that it could depend solely on its own investment earnings for its operating funds. Apart from the fact that such a development is highly unlikely, the author would not be prepared to recommend it as the ideal in any event. It does not seem probable that an institution so placed would for long maintain adequately high standards of performance or be sufficiently concerned to ensure that its work was relevant and understood.

On the other hand, some measure of endowment would strengthen rather than weaken the institute. An assurance of certain revenues is highly desirable to tide the institute over periods of reduced support from outside, to give it the necessary courage to stand its ground when necessary, and to undertake studies which it believes to be important even though no outside support can be found for them. Particularly in its earliest years, the institute will require such assurance. The advice of those experienced in the field is that nothing of real value should be expected from a new institute before at least three years. When one considers the time required to find quarters, recruit staff, weld that early staff into a team, assess potential fields of study, arrive at priorities, and, finally, complete relevant research in one or more of these fields, one can readily see that three years before significant output is only a reasonable expectation. The institute must, then, have enough assured resources to live through and beyond this initial period of development.

Equally, once it is established, the institute is likely to face occasional periods when revenues from governments fall off. If it is not to face the need periodically to disband its staff or to cut it so drastically as to hurt its future and if it is to avoid excessive temptation to undertake unworthy projects or to sacrifice its objectivity, the institute will need some degree of revenue assurance to cover such periods. In all these circumstances a measure of endowment underpinning would be valuable.

Multisource financing is equally desirable. It would reduce the likelihood of painful variations in the scale of its research programme. It will enhance its opportunity to protect a desirable independence of approach. There are a number of possible sources: the federal government, the provincial governments, metropolitan governments, foundations, private sector corporations, and individuals. Federal government support could take the form of conditional or unconditional grants, or of contracts entered into by a department or agency. Provincial government financing could follow either or both of these same channels. Revenues from a metropolitan government would usually be in payment for studies performed under contract. Foundation monies would usually be received as grants, but such grants might be in support of

particular projects. The most likely form of corporate support would be by annual contribution, although, here too, grants in aid of particular projects might be given. Although some individuals might make recurring contributions, the best hope here would seem to be for a significant endowment by gift or legacy from an individual who wished to have a part in the major contribution which the institute can be expected to make to Canada over a long period of time.

If the institute were to be supported from a single source, the only likely candidate is the Government of Canada. Its interests are as wide as the nation which the institute would serve. Its own machinery is large and sophisticated enough to be able to make effective use of the kinds of input such an institute could make to the problems of public policy making. Perhaps the key evidence is that the federal government has already taken the initiative of committing itself to seeing such an institute created.

Assuming that the federal government could justify the full annual cost of the institute by its estimate of the worth of its work, would it be wise for the institute to have the federal government as its sole financial support? The author's judgment is that this would not be in the interest of the long-term health and vitality of the institute. It would, too, be absolutely fatal to any hope of the institute being a body in which the provincial governments will have confidence. For the institute itself, effectiveness will depend on combining reasonable assurance of income with a degree of independence which is incompatible with reliance on a single source of revenue. For the provinces, the institute must not be overwhelmingly dependent upon the federal government for its revenues and the provinces themselves must have some financial role in it.

In addition, private sector support is desirable. It should be sought on an annual basis from corporations and individuals, contributions being deductible for income tax purposes as in the case of support for educational institutions, hospitals, welfare and cultural organizations. Apart from the possibility of a large endowment gift or bequest from an individual, private sector support should probably not be counted upon to provide a major part of the institute's annual operating funds. On the other hand, should government support not be forthcoming, there are powerful arguments for an institute being created and financed by the private sector alone.

The role of contracts in the institute's revenue structure, as well as in its research programme, is a crucial question. A number of the institutes surveyed are wholly dependent upon contracts for their revenues. Apart from Rand, it can scarcely be said that this form of full dependence has worked particularly well. It does have the advantage of keeping the institute in direct touch with makers and influencers of policy. The question is whether it is the right kind of relationship with them.

One key to maintaining the right kind of relationship with contract clients is the attitude of the institute itself. If it has the courage to say no

when it feels the assignment offered is not of sufficiently high priority, does not fit its available competences, or is too narrowly hedged about, it can often work effectively with departments and agencies to achieve agreed wording and useful choices. Such courage tends to have its foundation in a well-established reputation for competent, useful work and in assurance that reasonable income will continue to be available even if a contract is not obtained. Partial dependence on contracts can be a healthy situation. It means that the institute must, in a sense, meet the test of the market place. It would be unfortunate if the institute had to rely on contracts for more than 50 percent of its revenues, or if it had to rely for all contract revenues on a single source such as the federal government.

Contracts are, of course, appropriate only for government support. The institute would accept no contracts from the private sector because none of its appropriate projects would issue in proprietary or private benefits. On the other hand, it is easy to conceive of organizations in the private sector, including foundations, being willing to make grants in support of particular studies. Here again, the institute would have to be resolute in not allowing the prospect of funds to lead it into relatively worthless projects or to undermine its objectivity.

Even though it is buttressed by several sources of revenue, the institute will need an assured source of income to underpin its annual budget, say, at least 25 percent. The only completely assured source is endowment. Without assured financial resources in the beginning years when it has little to offer except potential, the qualified professionals whom it must recruit to be able to demonstrate results later may be very hesitant about committing their futures to it. It is possible that some private support for this period can be secured on faith in the potential of the institute, particularly from foundations. The principal reliance, however, will almost certainly have to be on governments, doubtless the federal government, if the whole project is to take off. If it wishes to back the project seriously, the federal government should be prepared at this stage to commit itself to a substantial grant, at least \$10 million, payable in a lump sum or, alternatively, spread over not more than five firmly committed annual payments.

With such an undertaking from the federal government, the provinces might well be prepared to commit themselves to annual operating grants for a period of three to five years. Thereafter, both the provincial governments and the federal government might well limit their financial contribution to payments against contract studies. It should be understood that the initial substantial contribution by the federal government would be treated by the institute essentially as a capital endowment, with only the income to be used for current purposes. The institute might be wise, however, to allocate a part of this capital grant to acquiring or creating a suitable headquarters building.

There will be many to object to the thought of the federal government contributing a substantial untied capital grant to an organization of private

individuals, even though it is a non-profit organization whose sole purpose is to improve the means for making public policy decisions. The basic questions are whether the public value of the institute's work will be substantial and whether a body guided by private individuals is better designed to answer that need in Canada's circumstances than would be one directed by governments. Given positive answers to these questions, it should be difficult to object strongly to the appropriateness of government financing at a time when the federal government and several of the provinces are, as matters of deliberate policy, granting sums to private profit-making corporations for such public interest reasons as regional economic development and the advancement of scientific research and technology.

In light of all these considerations it is, therefore, proposed that **the Government of Canada commit not less than \$10 million in the form of a capital grant to the institute; that the directors of the institute seek additional grant support for the early years of the institute's life from the various provincial governments; that they seek to add to the capital endowment of the institute from the private sector; and that, once fully established, the institute rely for up to 50 percent of its annual operating budgets on contracts from governments, such revenues to be supplemented by foundation, corporation, and individual grants and contributions, revenues from its own capital, conference fees, sales of its publications, and similar sources.**

CONCLUSION

The Government of Canada has seen the need for a public policy research institute in Canada. It has committed itself to its creation and asked that this study be undertaken to provide sound recommendations as to its form, its relationships with governments at all levels in Canada, its financing, and the significant aspects of its manning and methods of operation. An extensive survey in considerable depth has been undertaken in response to that request. The major conclusion and proposals resulting have been set down above, together with the evidence and the rationale in support of them. Appendices I and II make further detailed suggestions, addressing them to the first board of directors and to the first president of the proposed institute. It now falls upon the Prime Minister and the Government of Canada to take the next steps towards creation of such an institute.

SUMMARY OF PROPOSALS

It is proposed that:

1. **There should be established in Canada an institute which will have as its mission research and analysis designed to improve the basis for informed choice and decision by the public of Canada and its leaders on questions of public policy.**
2. **The institute should dedicate itself to impartial service of the national cultures, the various regions and the various governments of the people of Canada in its research and analysis on public policy questions.**

- 3. The Prime Minister of Canada ask a small number of distinguished citizens, whose competence and disinterested desire to serve the public good are widely accepted, to seek incorporation of the proposed institute as a non-profit corporation under the *Canada Corporations Act*, to serve on its first permanent board of directors, to select and employ a president who should be its chief executive officer, and, with his help, to establish the institute as a functioning organization.**
- 4. The Government of Canada commit not less than \$10 million in the form of a capital grant to the institute; that the directors of the institute seek additional grant support for the early years of the institute's life from the various Provincial Governments; that they seek to add to the capital endowment of the institute from the private sector; and that, once fully established, the institute rely for up to 50 percent of its annual operating budgets on contracts from governments, such revenues to be supplemented by foundation, corporation, and individual grants and contributions, revenues from its own capital, conference fees, sales of its publications, and similar sources.**

APPENDIX I

Thoughts for Consideration by the Governing Body of an Institute for Research on Public Policy in Canada

1. The Letters Patent of the Institute should define its purposes broadly, regardless of the initial breadth and number of the fields in which it may operate. The areas of concern to public policy cannot be narrowly confined nor clearly foreseen even for the near-term future. They are likely to touch on all fields of human knowledge. The Institute's future should not be circumscribed by too limited terms of reference.
2. Two general observations should be made about the Institute's choice of policy areas in which to work. First, the time focus of the Institute's research programmes will be of critical importance to its long-run success. The Institute must focus its attention on the next five to ten years and beyond, not on this year, next year, or the year after. For decisions which must be made immediately or in the very short term, it is already too late for the kind of policy-oriented research which the Institute should have as its purpose. Should it be tempted into such fields regardless, it can be almost certain of weakening or destroying itself by uncalled for involvement in politically controversial situations in which its real contribution can be only minimal. Self discipline on this score will not limit its choice of projects unduly. Most of the policy areas which will be critical in the period five to ten years hence are already being actively discussed. The role of the Institute is to provide information and analyses which will improve the calibre of that discussion, thereby stimulating dialogue which will be helpful to eventual policy choices. Second, the Institute should ensure that its studies have particular relevance to Canadian situations and Canadian needs. Its purpose will not be to add to the general fund of theoretical knowledge, but rather to improve understanding by Canadians and their governments of particular Canadian economic, social, and political problems, domestic or international. Additions

to the sum total of theoretical knowledge will almost certainly come from the Institute's efforts, but usually as a by-product of its basic purposes.

Within these basic constraints, there are a number of broad areas of public policy concern to which the Institute could direct its efforts, and countless projects within each which it could undertake. The Institute will have to make choices, guided both by its judgment of the value of the contribution it might make in particular areas and the very important need during its early years to build its reputation on a solid foundation. It might, for instance, decide initially against foreign policy studies, both because other bodies, such as the Canadian Institute of International Affairs, are contributing in this field and because it might see little early hope of making a substantial contribution itself. Even in its early years, it would seem wise for the Institute to build up its competence in areas such as regional economic disparity, the quality of the environment, the problems of native peoples, the determinants of productivity and growth (research, technology, education, and investment), and the complex of problems involved in urbanization, all of these in specifically Canadian terms. These topics and others are bound to be of continuing importance in Canada for at least the next decade, most of them far beyond that. The Institute could obviously not spread itself over all these fields initially, but once it has assembled a competent, truly multidisciplinary professional staff, whose efforts can be complemented by the work of outside consultants from the universities and elsewhere, it will have considerable flexibility to move among such policy fields.

There is one point which deserves special mention. In its Third Annual Review, the Economic Council of Canada pointed to the need for a body which would regularly deal with short-term developments in the Canadian economy. There has been general agreement among economists on the value of such a function and on the kind of contribution which short-term forecasts such as those of the National Institute in the United Kingdom or the National Planning Bureau in The Netherlands can make. While agreeing with the need, I believe that this would not be an appropriate task for the Institute to undertake. In its time focus and in its nature and requirements, this activity would differ substantially from the basic function of the Institute as proposed here. To be well done, it would require a sizeable group with highly specialized skills and interests, a group large enough to make some difference to the whole working atmosphere. It would also require continuing attention from the president and other directing staff of the Institute, diverting an important part of their efforts from the longer-term policy areas of the Institute's work. There is the added danger, as well, of unnecessary embroilment in current controversy over actions of the monetary authorities or the fiscal, monetary, and other policies of government affecting the short-term economic outlook. I would suggest that this whole activity might be better performed by another body. It is not an activity which is particularly compatible with the Institute's basic purposes.

3. The Institute may find it appropriate to aim at an in-house staff large enough to produce one-third to one-half of its research output. If its professional staff is smaller, it will provide an insufficient core to support a truly multidisciplinary research programme. If it is too small, it will not be able to provide the orientation and the management skills upon which effective policy-oriented research programmes must be built. These skills and interests must be provided from within the Institute. The kind of research management required must be learned. It is not likely to be provided by academics who participate in the Institute's research studies through part-time contributions to project efforts. The experience of the Rand Corporation has been that effective project directors are scarce and difficult to develop, but absolutely essential to the pace and the quality of the total research effort.

4. The most important determinant of the standing of the Institute and its staff with governments at all levels and with the academic, business, and professional communities will be the calibre of its work. While the Institute will probably only rarely take policy positions or accept responsibility for the conclusions of its studies, it must accept responsibility for the competence of the work, the analysis, and the writing. For this purpose, Brookings, Rand, and others have found essential the practice of having review committees or referees who study each manuscript carefully, pass judgments on it, and make suggestions. Such readers may come from outside or from the Institute's own staff (Rand stresses referee competence among its staff members and selects referees with an eye to promoting the multidisciplinary approach).

5. To the extent that there has been public policy research in Canada of a type which the Institute will undertake, it has largely been performed by university personnel, although seldom on a broad, organized, and sustained basis. Canada has not yet developed the kind of flow of personnel between the public service and the universities which exists in the United States. The supply of talent with both academic and public service backgrounds is, therefore, rather small in Canada at this time. In fact, the total supply of those interested in working full-time at policy-oriented research and equipped with some of the desired skills may be small. The Institute is likely to have to develop some of its own expertise.

It may be desirable for the Institute to embark deliberately on a long-term programme for increasing the pool of talent oriented to and skilled in the techniques of policy research. For university personnel, some appointments to the Institute's staff, contract assignments as outside members of its project teams, post-doctoral research grants to be held at the Institute, and other forms of fellowship would all contribute to this end. For public service, business, and professional personnel, the Institute might serve as a base for the equivalent of sabbaticals or for particular research projects in which the individual or his employer share an interest with the Institute. The various programmes undertaken by Brookings for both academic and public service

personnel, as well as for business and professional groups, suggest a number of models.

6. To serve governments at all levels in Canada and to serve all the people of Canada, the Institute must have the capacity to work in both of Canada's official languages. This means that its published work will be in English or in French, depending on the subject or the author. It means that its research staff, its administrators, and its governing body will as a matter of course include both those whose mother tongue is English and those whose mother tongue is French. It would, however, be unfortunate if its bilingual character were to become a matter of formula representation rather than an unforced, natural reflection of Canada's two founding cultures.

7. Choosing the best location for the Institute may not be an easy task. To meet regional needs, it was suggested to me that the Institute might have two or more branches. Despite the relative ease and speed of travel and communication now, this would seem unwise, at least for several years. Apart from questions of cost, which might not be decisive, there is the need for any multidisciplinary group to achieve a useful level of interaction and dialogue. This is likely to be difficult enough in the early stages and, as previously suggested, essentially impossible without a staff of minimum size in one place. Rather than have branches, it would seem preferable for the Institute to meet the need for regional links and knowledge by other means, including staffing policies, local consultation, local advisory groups, conferences and seminars, and the awarding of research fellowships to be held at the Institute.

There are a number of important factors to be taken into account in selecting a location for the Institute. As already mentioned in the report, there are sound reasons for locating close to a good university. In the early stages, before the Institute has been able to build up a library of its own, it will be important to have a location which gives relatively easy access to adequate library resources. Because there should be a constant flow of visitors to the Institute, and a good deal of travel by members of the Institute's own staff, easy access to good airline connections is desirable. From the standpoint of attracting the kinds of staff desired, location in or adjacent to a metropolitan centre may be preferable to location in a small and somewhat isolated community. From this standpoint, even climate and geography may be factors to be considered.

8. On the basis of what I saw and heard during the survey, I became impressed with the importance to the Institute of having suitable quarters planned for its use and owned by it. The Institute is intended to be permanent. It can be given the stamp of permanence, and an identity at the same time, by early provision of a suitable headquarters building. I would suggest that this might be an appropriate use (even on grounds of financial judgment) for a part of its endowment.

Rand Corporation provided itself with a headquarters building very early. Because of its contract relations with the Air Force and because of the

standing of its board of directors, it was able to finance the major part of the original cost by a mortgage. The judgment of those concerned is that the early acquisition of its own headquarters facilities was an important and valuable step. Brookings owns its handsome and well-planned headquarters building on Massachusetts Avenue in Washington, D.C. It makes extremely effective working use of it, more so than would be possible in rented, general purpose office space. It has been able to finance it from the endowment it has built up over the years. Both the Hudson Institute and the Munich Institute have their own appropriate headquarters, although, in the case of the latter, title to the large, formerly private house which serves the Institute is held by West Germany's federal government.

In all these cases, the fact of having their own distinctive working quarters contributes greatly, I became convinced, to establishing both the specialized working atmosphere appropriate to a public policy research institute and a desirable feeling of identity in the minds of staff and public alike. A public policy research institute is not a university, but its working atmosphere should be closer to that of a university than of a bureaucracy. It can gain in effectiveness as well as in attraction to professional staff if it is housed in such a way as to contribute to at least a semi-academic environment.

9. The channels of communication which the Institute establishes will have much to do with its actual influence, and, therefore, with its success. Publication will undoubtedly be a major vehicle. While the calibre of the Institute's published research must gain the respect of the academic world, it will not, I trust, be directed primarily to academics. Its intended audience should rather be opinion leaders, public servants, and political leaders. If this is the audience, what the Institute publishes must appear, not in the esoteric language of scholars, but in language which speaks to decision makers, those who influence them, and those who influence public opinion.

The Institute will need to develop methods and forms of communication to reinforce the messages of its publications and to help keep its research activities related to actual needs. As Brookings has demonstrated, a deliberate, continuous effort at informal communications by its president and his supporting staff with public servants and political leaders can be mutually advantageous.

Seminars and conferences which bring public servants, academics, business, labour, and professional leaders into closer contact with the Institute's work and with its purposes can be equally useful. Only if the Institute's work is competent, relevant, and understood can it be valuable.

APPENDIX II

DESCRIPTIVE ANALYSIS IN SUMMARY FORM OF PUBLIC POLICY RESEARCH INSTITUTES SURVEYED FOR THIS REPORT

THE BROOKINGS INSTITUTION

Date of Origin

1916—The Institute for Government Research, out of which The Brookings Institution grew in 1927.

Location

Washington, D.C.

Statement of Role

“Research, education, and publication in economics, government, foreign policy and the social sciences generally . . . independent analyst and critic . . . bridge between scholarship and public policy”

Organization and Management

A District of Columbia corporation.

Board of Trustees—

24 leading citizens selected for 3-year terms and eligible for re-election. No board member may hold a full-time position in government. The board approves programmes and projects and the budgets for them, and sets policy on salaries and benefits. Meets twice a year.

Executive Committee—

Meets monthly and acts on behalf of the board.

Finance Committee—

Manages the endowment funds.

President—

The chief executive. Submits programme proposals, budgets, and other policy recommendations to the Board of Trustees for approval. Thereaf-

ter assumes responsibility for implementation, including appointment of staff, direction of the research programme and other activities, decisions on publication.

Research Programme

Policy research in three broad sectors: economic studies (e.g., a massive study of public finance recently completed), governmental studies (some on the political level, e.g., an assessment of Presidential nominating conventions, others on the administrative level, and now some in the field of urban and social policies), and foreign policy studies (e.g., relations with developing countries and, in prospect, national security studies).

Selection of research projects depends upon the timeliness and significance of the topic, the feasibility of the project in terms of data availability and techniques of investigation, staff competence, the availability of funds, and the interests of the division directors and staffs.

Identification of appropriate issues aided by discussions with government officials, members of Congress, businessmen, foundation officers, and outside scholars.

Research programme has less technological and less multidisciplinary input than that of Rand. Few projects focused on the state or local level of government.

Other Activities

Advanced Study Programme—Conferences and seminars for middle management from private sector on public policy, for senior public servants on the rest of government and on society at large, and for special groups such as clergymen.

Federal Executive Fellows—12 to 20 at a time working in Brookings, usually for a period of one year on research of interest to their own agencies. They remain on the government's payroll.

Economic Policy Fellows—post-doctoral scholars within 5 years of their degree who evaluate government programmes, after brief orientation at Brookings spending 11 months in departments or agencies on government payroll. May return to Brookings to complete their project on a part-salary basis.

Guest Scholars—usually 40 to 50 each year for periods ranging from one to twelve months. Brookings provides only facilities and an environment.

Staffing, Personnel Policies and Work Methods

Resident staff of 160, of which 95 are professional research personnel. Outside scholars account for as much as one-half of the research output.

Salaries competitive with those of government and the best universities. Turnover of those under 35 is rapid while those over 45 are likely to be on career basis.

Proportion of senior people is higher than in universities. Those with some government experience are preferred.

Staff members encouraged to help government departments and are often involved for from a day to a week, occasionally for much longer, in which case formal leave may be given. No outside compensation may be accepted without approval, apart from fees for speeches or teaching.

Most projects have advisory committees of five or six to discuss the research plan, the sources of expertise, and perhaps the conclusions and the report.

Reading committees give critical appraisals of each manuscript, making textual suggestions to the authors, plus a confidential appraisal for the president.

Studies appear in the names of the staff responsible, although Brookings holds the copyrights. Staff members are encouraged to produce scholarly articles for outside publication.

Financing

Capital funds and reserves of approximately \$40 million.

Current operating budget of approximately \$5 million a year from the following sources: income from endowment, sale of publications, and conference fees 40%; project grants from foundations, contributions from corporations and individuals 40%; government grants and contracts 10%.

Corporate contributions not accepted for projects in which the corporation has an interest. No proprietary research undertaken.

Contracts with government give Brookings equal rights with the government to terminate, give Brookings the exclusive right to select staff for the project, and protect Brookings right to publish.

Avenues of Influence

“Committed to publish its findings for the information of the public . . . each study offered as a competent scholarly treatment of a subject.”

Publication in language aimed at decision makers. Active programme of formal and informal contacts with public officials and political leaders.

Influence on scholarly community and other opinion leaders, both through publications and through conferences of specialists from inside and outside government to explore emerging research needs.

Comment

The dean of public policy research institutes. At one extreme of the spectrum in terms of independence. Oriented to national policy issues.

THE RAND CORPORATION

Date of Origin

1946—Project Rand, out of which The Rand Corporation grew in 1948.

Location

Headquarters—Santa Monica, Cal. Representation Office—Washington, D.C. Project Field Office—New York City (since January 1968)

Statement of Role

“To further and promote scientific, educational and charitable purposes, all for the public welfare and security of the United States of America” (from the Articles of Incorporation).

Has been chiefly concerned with national security problems but recently has also been seeking to apply its techniques and its multidisciplinary style to important non-military problems.

Organization and Management

A non-profit corporation under the laws of the State of California.

Board of Trustees—

21 business, professional, academic, and research leaders who constitute the membership of the Corporation. Trustees serve no more than two 5-year terms. It is the practice for the Trustees to represent in approximately equal proportions three categories: the industrial, the academic and scientific, and the public interest.

Meets twice yearly for 2 1/2 days on each occasion. Responsible for broad policy, for protecting the independence of the Corporation, and perhaps in future for raising money.

Executive Committee—

Meets four to five times a year.

Finance Committee—

President—

Chief executive with final decision-making authority on programme and operating matters. Assisted by a management committee (composed of department heads), a research council (composed of 5 senior researchers and 2 associates), and a salary review board.

Research Programme

No specific mission but a research milieu which includes basic research, systems analysis, and miscellaneous assignments.

Concerned with broad issues of public policy and with the choices society makes. Seeks to improve the understanding of the physical and the social environments so as to facilitate the best policy choices. Historically has been concerned almost entirely with national security questions under

contract with United States Air Force. Major research programme under contract with New York City.

Other Activities

Student fellowships awarded from own funds to graduate students in various educational institutions (e.g., 8 such fellowships in 1965).

Staffing, Personnel Policies and Work Methods

Total staff of approximately 1200, of which 555 are professionals (515 at Santa Monica 40 in New York City). A multidisciplinary staff of physical and social scientists.

Consultants used where necessary to obtain expertise but prefer to use "in house" staff from which Rand feels it obtains more for its money than from consultants and outside staff.

Many staff members teach part-time at U.C.L.A.

Quality of work and reports strengthened by referee system, an internal review process of judgment by peers, including those whose expertise lies entirely outside the specific field of the project.

Staff largely organized in traditional academic discipline groupings because academics prefer it this way. A slight additional obstacle to the desired inter-disciplinary approach.

Systems analysis a hallmark of the Rand style.

Freedom to publish and use study results insisted upon by Rand, except where national security is involved.

Staff members are permitted to publish books and articles, subject to proper security limitations.

Financing

Through most of its history has depended almost entirely on its contract with the United States Air Force for its assignments and its revenues; now trying to broaden out.

As of 1967, capital amounted to \$9 million, (\$8 million from Rand's own operations, \$1 million from Ford Foundation grants). Of this, property, plant, and equipment net of debt amounted to \$5.3 million, working capital and contingency funds to \$3.6 million.

Annual fee income in 1967 amounted to \$23 million. This covered contract project costs of \$22 million and left \$1 million for Rand. Out of the latter, Rand absorbed operating expenses of \$250,000, spent \$575,000 on research of its own choosing, \$20,000 on publications, and \$30,000 on fellowships.

The New York City project is financed by \$900,000 from the Ford Foundation on a 3-year basis and \$2.5 million a year from the City.

Avenues of Influence

Relationships with clients and sponsors.

Books and articles in professional journals. Rand publications are available in a chain of depository libraries in the United States and Canada.

“Brookings aims at the top group around the President, Rand at a slightly lower level of government policy makers and managers” (statement by a senior member of the staff of Rand).

Comment

The outstanding example of a public policy research institute which, despite being largely dependent on contracts for its income, has been able to date to establish a high degree of independence in its work and to use part of its fee income for research of its own choosing—protection of this independence perhaps being somewhat more difficult as it has had to seek a variety of new clients.

RESOURCES FOR THE FUTURE, INC.

Date of Origin

1952

Location

Washington, D.C.

Statement of Role

Research “to advance the development, conservation and use of natural resources through programs of research and education . . . an intellectual loyal opposition . . . source of independent professional advice.”

Organization and Management

A corporation chartered under the laws of the State of New York.

Board of Trustees—

16 businessmen, academics, and other public-spirited persons, who constitute the membership of the corporation and appoint their successors. Approves the research programme, decides operating policy, and approves grants of over \$10,000.

President—

Chief executive, responsible to the Board for conduct of the research programme and all operations of the corporation.

Research Programme

Brings the social sciences to bear on policies for natural resources, e.g., water management, energy and minerals policy, land use policy, regional and urban studies, environmental control.

Originally supply and demand oriented, but now more concerned with the quality of the environment and the governance of resources (e.g., the

functional adequacy of institutions and legislation, questions of multiple use, and the application of psychology and sociology to urban environmental problems).

Its focus is on problems of the next 5 to 10 years.

Chooses its own research areas but considers a wide variety of requests emanating from departments of the federal government.

Other Activities

Offers fellowships to encourage doctoral dissertations in the areas of its interest and grants to support expanded programmes of teaching and research in universities in such areas. Less emphasis on this now than earlier because universities have developed their own interest in such fields.

Organizes conferences.

Publishes books and papers.

Staffing, Personnel Policies and Work Methods

Some 20 permanent professional staff members plus several temporaries and a few visiting scholars.

An academic environment. Staff recruited from both the public service and the academic community. Low turnover.

Staff organized into research groups by broad programme areas (e.g., quality of the environment, water resources) with a project director for each group.

Part of research programme handled by central staff, part obtained by grants to other non-profit institutions and to individual academics. Research results must stand the test of professional review. Publication decisions are made by the Publications Committee (the President, Vice-President, and Editorial Director).

More of a multidisciplinary approach than in the normal university setting.

Excellent access to primary data in government departments.

Pays slightly above university salaries but permits no consulting.

Financing

Founded with the support of the Ford Foundation which finances it by 5-year grants, the most recent being \$8 million committed in October 1968 for the five years beginning October 1969.

Annual budget of approximately \$1.7 million, of which \$900,000 covers staff costs, \$500,000 grants, and \$260,000 administration.

Avenues of Influence

In its books and other publications is less concerned to achieve language most acceptable to policy makers than it is with standards of scholarships. "No policy polemics."

Maintains close working relations with policy makers in the federal departments and agencies.

Comment

Concerned with a more narrowly defined (although still broad) field of interest than either Brookings or Rand. Policy oriented, but with a strong emphasis of traditional academic approaches and standards. A substantial measure of independence, as the Ford Foundation takes a general interest in the research programme without involving itself directly.

THE HUDSON INSTITUTE

Date of Origin

1961

Location

Croton-on-Hudson, New York.

Statement of Role

“Studying policy issues, especially those related to long-range perspectives, to United States’ national security and world order, and to social and economic development . . . emphasis on providing a broad, workable conceptual framework within which successful policy more likely to be developed.” Seeks to identify the issues which are important and those which are likely to become urgent.

Organization and Management

A State of New York corporation consisting of public members (45 community leaders of various backgrounds holding membership for 7-year periods), fellow members (58 academic, scientific, and professional leaders holding membership for 5-year periods), and employee members (10 senior members of the research staff holding membership on a continuing basis).

Board of Trustees—

Now 10 trustees, each class of membership in the corporation electing 1 trustee each year for a four-year term. The board concerns itself with the financial position of the Institute and with its overall directions and progress, but not with the research projects. The President and the Director (Herman Kahn) are ex officio members of the Board of Trustees.

Executive Committee—

Research Programme

Wide ranging national security analyses. Studies for Colombia, New York City Planning Commission and the United States Offices of Education and

of Equal Opportunity suggest the broader range which the Institute would like to achieve.

Emphasis on future studies and long-range planning, e.g., *The Year 2000*.

Emphasis on an effort of synthesis to organize background information by policy issues for policy makers.

Other Activities

Seminars for business and community leaders and for professionals from the research community.

Staffing, Personnel Policies and Work Methods

Full-time research staff of some 30 professionals includes specialists in the physical sciences and technology, the social sciences, mathematics, philosophy, and law. Supplemented by some part-time staff and by numerous consultants in universities, government, and industry.

High turnover among junior staff, some of whom tend to move to the public service. Pay is higher than in universities but less than in business. There is no tenure and no staff member is on contract.

High degree of internal mobility in small full-time staff. Staff members tend to become generalists as narrow specialties are difficult to support financially at times when contracts are scarce.

Aims at a degree of time and detachment rarely possible in an agency of government and a degree of policy focus not usual in universities. Relatively small size and highly individualistic atmosphere tend to work against long-term attention to any single subject and large team efforts.

Reports are signed by their authors, the Institute accepting responsibility for their quality and objectivity.

Financing

Annual operating budget of \$1,350,000 depends almost entirely on contract revenues, although some income from grants is now beginning. Contracts with the Department of Defense currently account for 70 percent of these revenues; those with the United States federal government as a whole, 73 percent. The Institute had aimed at a 50-50 ratio between government and private contracts.

The Institute has purchased for \$360,000 the estate which serves as its headquarters. Its net working capital is of the order of \$300,000.

Avenues of Influence

Relationships with clients and with business, professional, government, and academic leaders through its seminars and conferences.

Its publications and the system of depository libraries which it has established on the Rand model.

The powerful personal role of its Director, Herman Kahn.

THE URBAN INSTITUTE

Date of Origin
1968

Location

Washington, D.C.

Statement of Role

“Study of urban problems . . . singleness of purpose and detachment from direct responsibility for action programmes . . . broad programme of research, experimentation and evaluation.”

Organization and Management

A private non-profit research corporation chartered under the laws of The State of Delaware.

Board of Trustees—

15 leaders from business, universities, the bench, international organizations, and other public policy research institutes. Meets quarterly. Is responsible for approving programme priorities, research contracts, purchases above \$100,000, and salaries above \$25,000.

Executive Committee—

5 members of the board.

President—

Chief executive officer responsible for recommending programmes and priorities and for directing operating activities.

Research Programme

Undertakes basic and applied research in areas in which effective public policy is hampered by ignorance of underlying causes of problems. Where causes are better understood, attempts to facilitate the application of research knowledge to policy formation and programme development. Where experimentation is desirable, evaluates, supports, guides, and initiates experimental projects. Provides analytical assistance to local communities.

Responds to specific research needs of its supporting agencies. Research priorities, which are influenced by the president, his senior staff, and the board, take into account the following: 1. What scholars and public administrators say are the principal problems. 2. Sources of financing. 3. Possibilities of recruiting necessary expertise. 4. Likelihood that the task will be undertaken elsewhere.

Other Activities

Offers fellowships to recognized scholars, outstanding pre-doctoral students, action-oriented minority group leaders, and others.

Staffing, Personnel Policies and Work Methods

Because of the need to achieve a critical mass for effective cross-fertilization, aims at a largely in-house effort, with no more than one-third of its programme sub-contracted in the Institute's early years, less later. In 1969 was in stage of rapid staff growth, having reached a level of 65 professionals by July. Aiming at perhaps 150 and views 100 as the critical mass.

Aim is to be multidisciplinary, with staff including economists, sociologists, political scientists, systems analysts, city planners, lawyers and some physical scientists. Staff organized in project groups rather than on a discipline basis. Not intended to be as much an academic atmosphere as, say, Brookings but staff dialogue is encouraged.

Initial recruitment has been largely from the public service, but in future a larger proportion expected to come from universities. Senior staff has been relatively hard to obtain. Prefers to have necessary scarce types of expertise on staff, but in some cases will have to rely on outside consultants.

Feels compelled to stay within government salary scales.

Seeks advice on research programme priorities from federal, state, and municipal government personnel, from business, from universities, and from the research community.

Will not engage in competitive bidding for projects.

Aims at freedom to publish, but is prepared to give interested government agencies 30 days in which to comment first. In the case of some projects, is prepared to give the results to executive agencies or legislative groups for their use without publication.

Apart from Ford Foundation grant for working capital purposes (at first \$250,000, then raised to \$1 million, and subsequently supplemented by a further \$1 million), has been dependent on government contracts totalling \$8 million for its first three years. Of this, an initial \$6.3 million contract from the Department of Housing and Urban Development attempted to provide an unusual degree of freedom for the Institute, two-thirds of this total being made available to the Institute on a mission basis, i.e., for programmes selected and shaped by the Institute. Other smaller contracts have given the Institute somewhat less flexibility. As the time now approaches for renewal of its initial major contracts there is some suggestion that they will offer the Institute less freedom in future.

Avenue of Influence

Reports to clients and published material.

Comment

Still in the early stages of development but facing some possibility that the complete dependence on contracts from government departments may become unduly restraining.

THE INSTITUTE FOR THE FUTURE

Date of Origin

1968

Location

Research offices: Middletown, Connecticut.

Executive Office: New York City.

Liaison Office: Washington, D.C.

Statement of Role

“To enlarge existing understanding concerning technological, environmental and societal changes and their long range consequences; to develop new methodology to carry on such tasks; to make available without discrimination the results of such research and scientific advances to the public; and to serve as an educational and training centre for selected persons from business, government, foundations, and universities with respect to such research activities.”

Organization and Management

A State of California corporation.

Board of Trustees —

17 leading citizens from business, labour, the universities, and the public service, including two senior research staff members elected by the staff.

The board exercises general control but is not involved in detailed decision about projects to be undertaken.

President —

Chief executive officer.

Research Programme

The primary research programme is aimed at the development of forecasting methods and other tools for the analysis and synthesis of potential futures, and the application of study techniques to the problems of society. Its orientation is toward the long-range future, rarely less than 5 years or more than 50 years, and primarily on the national non-military level, although not excluding urban, regional, and international problems or the prevention or containment of military conflict through non-military means.

Other Activities

Planning support services for governmental and private agencies including, in future, use of the facilities of the Institute's stimulation laboratory.

Intern training (in future) for executives from business, government, the foundations, and universities in long-term research and planning programmes on an interdisciplinary basis.

Similar training during the summer months for outstanding post-graduate students.

A developing publications programme, including shared responsibility for the publication of "Futures", an international quarterly journal presenting articles and original papers on long-term trends in science, technology, economics, politics, and social conditions.

Staffing, Personnel Policies and Work Methods

Full-time staff of less than 30 but in rapid early growth stage. Aiming at a professional staff of several hundred for Connecticut base as well as a future group in California.

Staff to be multidisciplinary. At this stage supplemented by 60 consultants of high calibre from a wide range of disciplines.

Emphasizes a systems and interdisciplinary approach akin to that of Rand, with special emphasis on the Delphi technique and on the development and use of large-scale simulation and analytic models.

Concentrates on the clarification and formulation of basic problems and the exploration of alternatives for their solution, not on policy formation.

Financing

Grants for the planning stage of the Institute came from several foundations and included \$52,000 from the Ford Foundation. The National Industrial Conference Board furnished administrative support and leadership.

Basic operating support now comes from contracts and grants from business corporations (e.g., Uniroyal, U.S. Steel, I.B.M., DuPont, and A.T. & T.), governments (contract with the State of Connecticut), and educational institutions.

Avenues of Influence

Planning a publications programme. Will consent to time restrictions requested by clients.

Comment

Much too early a stage to forecast level of effectiveness. Lack of adequate assured financing may prove limiting for a time.

INSTITUTE FOR DEFENSE ANALYSES

Date of Origin

1956

Location

Washington, D.C.

Statement of Role

Originally created by a consortium of universities to serve as a research institute for the Department of Defense, it being considered that the civilian component of the effort could not satisfactorily be subjected to

civil service rules. Now an independent body almost wholly oriented to the Department of Defense.

Organization and Management

A State of Delaware non-profit, membership corporation.

Board of Trustees—

24 members of whom at least one-third are leaders in the academic world and at least one-third leaders from the general public. Meets twice annually. Not much involved in details of the programme but the standing of its members contributes to the independence and objectivity of the Institute's work.

Executive Committee—

7 members. Meets every second month. Reviews all new studies and approves all new contracts.

Financial Advisory Committee—

President—

Chief executive officer.

Vice-President for Research—

Responsible for assigning work to the divisions, seeing that staffing is adequate, monitoring, and deciding on the release of studies.

Research Programme

Other than Rand, is the only defense research institute concerned with broad strategic issues. Probably less freedom to define terms of reference of studies because of its close ties with top echelons of the Department of Defence.

Something less than 10 percent of its research programme is undertaken for civilian agencies of the federal government, e.g., the Departments of State, Transport, Housing and Urban Development, Health, Education, and Welfare. Takes on such assignments when they appear interesting and likely to be done better in the Institute than elsewhere.

Other Activities

Seminars involving senior government personnel and its own academic consultants. Conferences from time to time with outside authorities, e.g., one in joint sponsorship with Chatham House.

Staffing, Personnel Policies and Work Methods

Staff of the four divisions (Science and Technology, Systems Evaluation, Program Analysis, and International and Social) slightly exceeds 600 of whom approximately half are professional, the balance support staff. The International and Social Division accounts for one-tenth of the total. Some 40 young scientists act as academic consultants on a continuing basis. Some staff are on loan from industry.

The interdisciplinary approach is stressed and the staff is multidisciplinary: 35 percent analytical scientists (mathematics, statistics, operating research, and economics), 30 percent engineers, 15 percent political and other social scientists, 15 percent physical scientists, 5 percent life scientists.

Seeks good balance of government and teaching experience in recruiting staff. Recognizes the importance of the right to publish as an attraction to staff and attempts to provide it where possible.

Financing

Annual operating budget of approximately \$14 million.

Almost completely dependent on cost-reimbursable government contracts. Ford Foundation originally provided \$50,000 for operating capital.

Each division must meet its own payroll costs and therefore personnel not on any project must be charged to division overhead, thereby raising the billing on other projects. The problem of turn-around time for staff between projects often proves difficult financially.

Each contract allows the Institute 5 to 7 percent of the fee to devote to work of its own choice. This centrally directed research programme usually aims at developing competence for the future.

Avenue of Influence

Some access to academic and other outside personnel through conferences and seminars.

Comments

Despite the tight constraints of its Department of Defense relationship, has been able to attract competent staff by the challenge of the work, the working conditions provided and the levels of pay offered. Not a broad public policy research institute and no outside influence comparable to that of Rand.

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

Date of Origin

1920

Location

New York City.

Statement of Role

"... organized ... in response to a growing demand for objective determination of the facts bearing upon economic problems, and for their interpretation in an impartial manner ... issuing its findings in the form of scientific reports, entirely divorced from recommendations on policy."

Organization and Management

A corporation chartered under the laws of the State of New York.

Board of Directors—

approximately 50 of whom nearly half are directors at large (business, academic, and labour leaders), the balance appointed by other organizations and universities. Meets twice yearly.

Executive Committee—

14 members. Meets 4 to 6 times a year.

Finance Committee—**President—**

As chief executive has a dominant role but all research proposals must be submitted to the board or executive committee for approval and each manuscript must be submitted to board members and approved for publication by a specific committee of the board.

Research Programme

Major work has been on quantitative economic analyses in areas where improved knowledge and understanding would be likely to contribute to improved public policy (e.g., business cycles, economic indicators, distribution of G.N.P. and, more recently, the economics of health and of urban problems).

Avoids policy recommendations and makes no relatively quick studies on immediate policy problems.

Now engaged with several European institutes on evaluation of process of technological diffusion.

In choice of projects takes account of likely service to the economics profession (i.e., by improving sources and analyses of data), availability of financial support, and suitability in terms of the particular competence of the Bureau.

Other Activities

Service to the academic community—e.g., through conferences organized for the exchange of information and the evaluation of research findings; through providing a location and facilities for good university researchers to devote full time for limited periods to research as fellows or professional staff members of the Bureau.

Staffing, Personnel Policies and Work Method

Approximately 30 senior research personnel of whom only a few are full-time.

Bureau relies heavily on university economists, supplementing their incomes and supplying research assistance. Professional quality of manuscripts ensured by review both inside and outside the Bureau. Publication also involves board review and approval as noted above.

Financing

Capital fund now in excess of \$10 million and aiming at \$15 million for 50th anniversary.

Annual operating budget now slightly in excess of \$2 million, for which the significant revenue sources are approximately as follows: income from capital 25 percent, grants from foundations 30 percent, contributions and subscriptions from corporations, labour organizations, individuals, and libraries 25 percent, contract fees or grants from government and business for specific studies 15 percent, sale of publications 5 percent.

Bureau resolutely protects its independence (e.g., to publish, to control findings) when it works under contract with government or business.

Avenues of Influence

Organized effort to communicate its findings to the public at large but with a heavy emphasis on professional economics as the audience. Substantial book publication programme plus publication of the periodical "The National Bureau Report." Significant effort put into organizing research conferences.

Comment

Like Brookings, a long established, prestigious body. Highly professionally oriented and not at all multidisciplinary in its aims or approach. Board approval for each manuscript is a special characteristic. Rigorous standards maintained for some policy decisions even at the expense of delay in publishing project results.

NATIONAL PLANNING ASSOCIATION

Date of Origin

1934

Location

Washington, D.C.

Statement of Role

Founded because of a belief in the need for both public and private planning and because of a concern about the relative lack of the former, it supports pluralistic, decentralized planning.

Organization and Management

A corporation chartered under the laws of the District of Columbia, and with a membership of 3,000 individuals, corporations, organizations, and groups, representing all sectors of the American economy.

Board of Trustees —

30 business, labour, academic, press, professional, and agricultural leaders.

Executive Committee—

composed of 7 members of the board. Concerns itself with administrative questions.

Steering Committee—

4 members. Concerns itself regularly with Association programmes. Aided by 4 standing committees (agriculture, labour, business, international), originates and approves Association policy statements and reports.

Research Programme

Through its centres for economic projections, for priority analysis, for development planning, and for economic programming, engages in a permanent research programme which includes the making of long-range projections and the improvement of techniques for doing so, the analysis of national goals and priorities among them, studies of the nature of the growth process, and creation of models of the national economy and of the interacting regional economies.

Additional research projects are carried out by special policy committees and research advisory committees.

Other Activities

Through its National Council, the Association expands, fosters and encourages the joint approach of the major economic groups in looking ahead and planning for the future. The present membership represents each of the states and includes persons from every sector of the economy and from government.

A monthly publication, "Looking Ahead", containing timely and informative articles on a variety of public issues.

Staffing, Personnel Policies and Work Methods

A staff of approximately 100, of which 60 are professionals (economists, statisticians, and systems analysts), the balance editorial, secretarial, and administrative.

The permanent staff is largely administrative, editorial and research supervisory. Other professional staff tend to come in for the duration of one or more projects. They are recruited from government, business, consulting organizations and, occasionally, universities.

All publications are examined and authorized under board approved policies, but publication does not imply agreement unless specifically stated.

Staff members publish in their own names, participate in outside conferences, and act as consultants to government.

Financing

No endowment

Annual operating budget of slightly in excess of \$1.5 million financed by contributions from members, business firms, trade unions, and farm organizations; by grants for particular research projects from private foundations; and by contacts with government agencies and international organizations. Grants and contracts tied to particular projects account for approximately 90% of the total. Government contracts chiefly at the federal level. Efforts made to avoid undertaking projects under government contract in sensitive areas.

Avenues of Influence

Seeks to influence opinion leaders and decision makers both in government and in all functional groups in the private economy. Seeks to achieve widest possible consensus on national policy among sectors of the private enterprise economy.

“Looking Ahead” widely used by press and journalists as a source of background information and analysis.

Published reports (only a few in book form) plus officially approved statements of policy.

Comment

A less academic atmosphere and approach than in the case of most other public research institutes. Committed to a point of view, although not to a narrowly confining one.

NATIONAL ACADEMY OF SCIENCES

Date of Origin

1863

Location

Washington, D.C.

Statement of Role

Created to serve as a focus for the development of science and as an adviser on science questions to the federal government.

Organization and Management

Created by Act of Congress which named its first 50 members and empowered it to create its own organization and by-laws. Appoints 50 members a year on the basis of their “continued productivity in research.” As of July 1, 1968, had 806 regular members, 6 members Emeriti, and 94 foreign associates.

National Research Council—The principal operating arm of the Academy, it numbers some 300 members appointed by the president to one of eight divisions. These, in turn, have numerous committees which include a membership of more than 7000 scientists.

Council of the National Academy of Sciences—a body of 17 members constituting the governing authority of the Academy. It meets five times yearly. Approves the budget.

Executive Committee—
also meets five times yearly.

President—

The first spokesman for science in the private sector and therefore obligated to spend approximately 50 percent of his time away on speaking tours and similar activities. Supported by an executive officer and other assistants.

Research Programme

Its field of activity is as broad as the physical, the life, and the behavioural sciences in their relation to public policy and has grown steadily wider.

It reacts to requests for advice from The White House, Congress, and federal departments and agencies of which the chief have been the National Science Foundation, the National Institutes of Health, NASA, Atomic Energy, the Departments of Agriculture, Interior, Defense, and Commerce, and the Federal Communications Commission.

Other Activities

Seeks to stimulate and further the work of individual scientists and engineers and to co-ordinate investigations dealing with broad problems in research, both nationally and internationally, carrying out these purposes through a wide variety of conferences and symposia, committee deliberations, surveys, collection and collation of scientific publications, and the administration of public and private funds for research projects and fellowships.

Staffing, Personnel Policies and Work Methods

Resident staff of 800, including 250 professionals. Substantial programme contributions made by members without fee.

An attractive locale for scientists in the early stages of their careers, both because of the insight provided into national policy formation and the opportunity to associate with established scientists. Most staff are therefore either fairly young or near retirement.

All reports are anonymous.

Financing

From grant by Carnegie Corporation of \$5 million in 1920, \$1.5 million was used for the Academy's headquarters building and the balance retained as an endowment fund. A campaign is now under way to raise money for a new building and to add to the endowment, the income from which is intended for general membership activities and some operating expenses. Major gifts have been received from the Ford Foundation, the

Rockefeller Foundation, the Sloan Foundation, and the Commonwealth Fund.

Annual operating budget of \$22 million, most of it dependent on revenues from cost-reimbursable contracts. Because of vulnerability to fluctuations in contract revenues, staff has neither contracts nor tenure.

Private sources often solicited for funds to support studies which may lead to reports critical of government.

Avenues of Influence

Wide involvement of a large part of the scientific community of the nation. An active publishing programme including its own periodicals, "Proceedings" and "News Report."

Comment

A well established source of background advice to the federal government on a wide range of policy subjects. Both its influence and its independence buttressed by the prestige and traditions of the scientific community.

STANFORD RESEARCH INSTITUTE

Date of Origin

1946

Location

Menlo Park, California.

Statement of Role

Originally an "independent research organization dedicated to economic progress in the West." Has since expanded to the national and international level, serving both industry and government on a contract basis.

Organization and management

A State of California corporation.

Board of Directors—

some 30 leading citizens from business, the professions, and the academic world.

President—

Chief executive officer.

Research Programme

Combines social sciences input with technical and physical sciences input in research projects for government and business. As many as 700 contracts under way at any one time.

Many of the studies do not involve public policy oriented research but a number do, e.g., a large contract with United States Office of Education.

Character of the programme influenced substantially by the relative autonomy and high degree of market orientation of the divisions in their search for contract revenues.

Somewhat more central planning and direction of the Institute's own programme of research which, like Rand's, is financed from a small share of its fees. Aims mostly at developing a competence for the future.

Other Activities

Seminars and conferences for groups of clients, usually oriented to some aspect of the future environment.

Staffing, Personnel Policies and Work Methods

Staff strength stands (in mid-1969) at 2900, down from an earlier peak of 3250.

In recruiting, seeks particularly those with 5 to 10 years experience. Initial salaries tend to be competitive with those of government. Turnover of 10 to 12 percent a year.

A wide range of disciplines included among the professional staff. Some multidisciplinary approach is aimed at in project studies, with partial success.

Considerable group autonomy has been provided as an attraction to professional personnel of high calibre and as a stimulus to an entrepreneurial approach to obtaining contracts and achieving growth.

Financing

An operating budget of \$65 million a year, largely from contract fees and, in part, from contributions by the Institute's more than 4000 associates (mostly corporations).

Contract fees include 1 to 3 percent for the Institute's own purposes, about 1 percent going to its own research and development programmes (most of them for small projects by individuals).

During the last decade, contract revenues have been 70 to 75 percent government, 25 to 30 percent business. Originally the private sector was the principal source of contract revenues but governments moved up to a 50-50 basis in the post-Korean period and higher thereafter.

Avenues of Influence

Reports to clients, plus some more general publications.

Comment

In addition to making significant contributions to the development of the physical sciences and of technology, the Institute has been a pioneer in technological forecasting and in providing background analyses for future planning.

Currently undergoing a reappraisal of its own purposes and identity and of its need for a central mission, precipitated by the formal severance of its loose ties with Stanford University and a significant falling off of government contracts.

THE NATIONAL INSTITUTE OF ECONOMIC AND SOCIAL RESEARCH

Date of Origin

1938

Location

London, England.

Statement of Role

“To increase knowledge of the social and economic conditions of contemporary society . . . conducts research by its own staff and in co-operation with universities and other academic bodies.”

Organization and Management

Incorporated under the Companies Act and registered as an educational charity. Its members are its governors—118 distinguished academic, business, government and other public figures recruited by invitation of the executive committee of the council of management.

Council of Management—

consists of 23 governors, chiefly academic and government figures.

Executive Committee—

13 members. Meets monthly to review current proposals and senior appointments. Some concern with annual programme and budget.

Director—

The chief executive officer.

Research Programme

Research studies, chiefly economic rather than social, on various aspects of the United Kingdom economy, e.g., regional economic development, urban economics, growth prospects and problems of British industries, international comparisons of rates of technology adoption, and forecasts of economical change.

Studies are designed to improve the state of knowledge rather than to produce policy recommendations.

Other Activities

Short-term quarterly forecasts of the U.K. economy published in the National Institute “Economic Review.”

Publications of book length studies and a variety of monographs and occasional papers in the names of the authors.

The Institute library, while maintained as a specialist working resource for its staff and others working with it, is open to other readers on application.

Staffing, Personnel Policies and Work Methods

A staff of 60, including 30 professionals of whom 2 are part-time and 7 hold university appointments and act as part-time consultants. Most of the staff are economists. The "Economic Review" absorbs one-third of the staff.

Recruiting is difficult, partly because the Institute cannot pay enough to obtain full-time senior people. Much of the staff, including the director, are therefore civil servants seconded from the staffs of Treasury and the Board of Trade.

Seeks to induce senior academics to take 2-year leaves from their university posts by offering them teams of first-rate research assistants for projects in which they are interested. Staff members give lectures and write articles, some of which are reprinted by the Institute. Will not use information it cannot publish.

Financing

Annual operating budget currently \$325,000, of which much the largest part comes from special purpose term grants and annual grants-in-aid from government departments and agencies, particularly the Ministry of Economic Affairs and the Social Science Research Council.

Foundation support has been substantial in the past but is less so now. Some 65 corporate supporters.

Contracts are forbidden in its by-laws.

Avenues of Influence

Respected and influential with senior public servants. Much of the staff has close personal ties with the public service.

The "Economic Review" and its book and other publications are well regarded.

Comment

A substantial part of its energies must be devoted to the demands of its quarterly economic forecasts. Growing dependence on government financial support adds to the close involvement with government at the personnel level.

THE INSTITUTE FOR STRATEGIC STUDIES

Date of Origin

1958

Location

London, England.

Statement of Role

“To create an international centre in Europe for continuous study, discussion, and research on the problems of defense and disarmament in the nuclear-missile age.”

Organization and Management

Incorporated under the Companies Act and registered as an educational charity. A membership in excess of 1,000 from 32 countries, includes 75 corporations, plus individuals capable of making an expert or informed contribution to the Institute's work.

Executive Council —

25 persons from 15 countries. Meets twice yearly. With the vice-presidents, controls the policy of the Institute, reviewing its programmes and being informed of its publications.

Director —

The chief executive officer.

Research Programme

Book length and shorter studies on various aspects of international security, defense, and disarmament policy.

Annual estimates of the military strengths of the Western, Communist, and major non-aligned countries, and of developments in strategic policy doctrines and weapons in the major countries.

Other Activities

Frequent private lectures and discussion group meetings.

Annual conferences for its members, plus conferences at the international level organized jointly with other bodies.

Short courses for members in industry, journalism, and government.

Publication of books and articles, of the annual editions of “The Military Balance” and “Strategic Survey”, and of its monthly journal “Survival.”

The Institute's library, one of the world's most comprehensive collections of contemporary public material on national defense problems, strategic planning and weapon development, is open to members and to non-members on payment of a fee.

Staffing, Personnel Policies and Work Methods

Small international staff consisting of a core directing and support group, plus a few research associates (recruited from universities and government on a 50-50 basis) and a larger number of part-time consultants.

Pays attractive salaries and demands hard work.

Financing

Originally established with Ford Foundation support, \$50,000 annually for three years.

Annual operating budget currently \$250,000, of which a substantial amount represents grants from foundations in United States and Europe, the balance donations from industry and its general membership.

Avenues of Influence

Chiefly through its membership and its publications, the latter including authoritative information not generally available elsewhere.

Expresses no views as an organization.

Comment

Operating on a small budget and with a specialised focus of interest. Receives helpful co-operation from governments but stands entirely outside them. Makes a valuable contribution to improving the basis for public policy formation.

DANISH NATIONAL INSTITUTE
OF SOCIAL RESEARCH

Date of Origin

1958

Location

Copenhagen, Denmark.

Statement of Role

“Undertakes, promotes and co-ordinates research on social conditions, including research on social security and welfare, labour, family, youth, and social aspects of housing and health.”

Organization and Management

Created by Act of Parliament following a study commissioned in 1955 and reported upon in 1957. An independent body under the Ministry of Social Affairs, but at the disposal of all branches of the administration.

Social Research Board—

6 university representatives from the various social sciences plus 11 representatives from central and local administrative bodies interested in the field. Meets 4 or 5 times a year to make decisions on the programme and to follow developments.

Director—

Has full scientific and administrative responsibility for the work of the Institute.

Research Programme

Undertakes investigations proposed by public authorities and voluntary organizations, as well as studies of its own choice which account for approximately half of its programme.

Projects undertaken concern social problems which are expected to have current and future significance (e.g., the social welfare system, financial aid to students, structural changes in agriculture and industry, leisure vs. work) and in which research results can be expected to have a policy impact over the next 10 years both through their effects on public attitudes and on the process of policy formation.

Major emphasis in the first decade has been on the interview and sample survey approach.

Other Activities

Lectures by the Director and members of the staff and meetings with interested groups.

Continuous contact with policy-making bodies.

Staffing, Personnel Policies and Work Methods

Full-time staff of 27 research associates (economists, statisticians, psychologists, sociologists and jurists) plus 30 graduate students.

Recruits largely at the junior staff level through appointment by the Ministry of Finance under Civil Service pay and benefits.

Senior academics are attracted by research facilities normally better than those of a university. Most do part-time teaching (not more than 6 hours a week) which brings their Civil Service salaries up to those of universities.

Studies are interdisciplinary. Research results are published in the names of the researchers and with mention of all participants. The technique of internal criticism from staff members not on the particular team is used.

Consultants rarely used to date but thinking of doing so.

Prepared to hire out the services of the technical unit of the Institute, which conducts sample surveys.

Financing

Annual budget supported by the government, with some Danish and foreign foundation funds for special projects. Current revenues amount to approximately \$600,000, of which over three-quarters represents the basic government vote, nearly 20% represents grants for particular projects, the balance comes from fees for services of the technical unit (on which a 25% overhead charge is levied). In addition, the government provides

office space and facilities and computer services which might be estimated at an additional \$150,000 a year.

Budget submissions are justified in terms of broad fields of research activity rather than by particular projects and are approved on a 4-year forecast basis.

Budget allocations reflect annual increases in government pay levels.

Avenue of Influence

Considers that the most effective way to influence policy formation is through direct contacts with government committees and departments. Research results are often given in advance to the government before publication of the final report.

Reports contain no policy advice except by implication but the Director and staff members are willing to give policy advice in their individual capacities, as well as to write policy articles.

Comment

To date has concentrated on adding to the information background necessary for policy analysis of a specified range of public policy questions. Nearly complete financial dependence on annual government votes does not appear to have proved weakening in the Danish setting.

RESEARCH INSTITUTE FOR INTERNATIONAL POLITICS AND SECURITY

Date of Origin

1961

Location

Research Centre—Munich, West Germany

Liaison Office—Bonn

Statement of Role

To study the full range of international policy problems.

Organization and Management

The research arm of the Foundation for Science and Politics, a body founded by a number of interested individuals with the support of the federal government.

Board of Governors —

A body of 17 consisting of the president, 6 scientists, 6 representatives of federal government departments, representatives of each of the three major political parties and a representative of the Ministry of Bavaria. Reviews and approves the annual programme in terms of the broad allocation of research effort among fields.

President —

The Chief executive officer responsible for developing and directing the Institute's research programme.

Research Programme

Concerned with the full range of international problems but will usually consider operational situations only in cases where the problems involved are expected to be continuing.

Other Activities

Some publication.

Staffing, Personnel Policies and Work Methods

Staff of 90 of which 35 are professionals (economists, historians, political scientists, jurists, natural scientists, mathematicians, and 3 serving military officers).

Considers optimum level at double present size. Now growing at 6 to 10 percent a year.

Recruiting somewhat difficult because little tradition of mobility among academics, businessmen or members of the public service. Can attract academics and scientists who would not join the public service. Bound by law to government salary levels.

Core staff must know where outside expertise is, must be able to talk to outside experts, and must be able to translate the problems for them. For most projects which are central to the Institute's purposes, prefer no more than a 40 percent input component from outside consultants.

Organized on a project basis with shifting teams. An effort to achieve an interdisciplinary approach.

Financing

Operates on a budget from the Chancellor's Office. Was originally subject to the normal detailed control of payroll and other personnel matters applied to government departments but is now somewhat freer.

Headquarters buildings bought by the government and rented to the Institute.

Empowered to take on contract work but none as yet.

Avenues of Influence

Stress on a continuing "dialogue with the decision makers", which requires close relations with government leaders and officials.

More publication is intended as more substantive studies are produced but publication is clearly to be subject to the maintenance of close relations with the government.

Comment

Represents a very interesting effort to combine close involvement with government policy makers and retention of what is considered to be adequate independence, (e.g., by such devices as location).

APPENDIX III

THOSE WITH WHOM DISCUSSIONS WERE HELD

I CANADA

1. PROVINCIAL GOVERNMENTS

British Columbia

Hon. W. A. C. Bennett, Premier

Alberta

Hon. H. E. Strom, Premier

Hon. R. A. Speaker, Minister, Public Works

D. M. Hamilton, Special Assistant to the Premier

Eric Schmidt, Special Consultant

Saskatchewan

Hon. W. Ross Thatcher, Premier

Hon. C. L. B. Estey, Minister, Dept. of Municipal Affairs

A. T. Wakabayaski, Deputy Provincial Treasurer

Manitoba

Stuart Anderson, Deputy Minister, Finance

Gordon W. Holland, Secretary, Management Committee of the
Cabinet

R. A. Wallace, Secretary, Planning & Priorities Committee of the
Cabinet

Douglas C. Rowland, Special Assistant to the Premier

Ontario

Hon. John P. Robarts, Premier

H. Ian Macdonald, Deputy Treasurer and Deputy Minister of
Economics

Quebec

Hon. J. J. Bertrand, Premier
 M. Claude Morin, Deputy Minister, Intergovernmental Affairs
 M. Julien Chouinard, Secretary, Executive Council
 M. Leo Leblanc, Special Assistant, Premier's Office

New Brunswick

Hon. Louis J. Robichaud, Premier
 J. L. Williamson, Deputy Minister, Finance
 N. G. Mulder, Acting Economic Adviser
 P. C. Leger, Special Projects Director
 F. R. Drummie, Executive Director, Special Study on Maritime Union
 B. Toole, Assistant Secretary, Treasury
 R. Johnson, Director, Personnel Policy Division

Nova Scotia

Hon. G. I. Smith, Premier
 Hon. R. A. Donahoe, Q.C., Attorney General
 Hon. D. R. MacLeod, Minister without Portfolio
 J. A. Y. MacDonald, Deputy Attorney General

Prince Edward Island

Hon. Alexander B. Campbell, Premier

Newfoundland

Hon. J. R. Smallwood, Premier
 Hon. H. R. V. Earle, Minister of Finance
 Hon. W. N. Rowe, Minister of Community and
 Social Development
 Edward B. Power, Special Adviser to the Premier,
 Feasibility Studies

2. GOVERNMENT OF CANADA

Dr. K. A. Archibald, Systems Analyst, Treasury Board
 M. Paul Beaulieu, Ambassador of Canada, Paris, France
 Jean Boucher, Director, The Canada Council
 Dr. L. J. Cook, General Delegate, National Research Council of
 Canada
 M. A. Crowe, Deputy Secretary to the Cabinet, Operations
 J. Davey, Programme Secretary, Prime Minister's Office
 J. F. Grandy, Deputy Minister of Consumer and Corporate Affairs.
 Dr. R. D. Howland, Chairman, National Energy Board
 A. W. Johnson, Assistant Deputy Minister of Finance
 T. W. Kent, Deputy Minister of Regional Economic Expansion
 Marc Lalonde, Principal Secretary, Prime Minister's Office

- Senator M. Lamontagne, Chairman, Special Senate Committee on Science Policy
- J. D. Love, Deputy Minister of Labour
- Frank Milligan, Assistant Director, The Canada Council
- D. L. McQueen, Director, Economic Council of Canada
- Dr. P. D. McTaggart-Cowan, Executive Director, Science Council of Canada
- Bernard Ostry, Member of the Task Force on Government Information
- G. Paquet, Director of Research, (Human Science), Special Senate Committee on Science Policy
- Dr. S. S. Peters, Special Adviser, Canadian International Development Agency
- P. M. Pitfield, Deputy Secretary to the Cabinet, Plans
- P. Pocock, Director of Research, (Physical Science), Special Senate Committee on Science Policy
- Louis Rasminsky, Governor, Bank of Canada
- S. S. Reisman, Secretary of the Treasury Board
- A. E. Ritchie, Ambassador of Canada, Washington, D.C.
- R. G. Robertson, Clerk of the Privy Council, Secretary to the Cabinet
- Dr. A. J. R. Smith, Chairman, Economic Council of Canada
- Dr. O. M. Solandt, Chairman, Science Council of Canada
- O. G. Stoner, Senior Assistant Secretary to the Cabinet (now Deputy Minister, Department of Transport)
- Maurice Strong, President, Canadian International Development Agency
- Peter M. Towe, Minister, Canadian Embassy, Washington, D.C.
- J. P. I. Tyas, Director, Study Group on Scientific and Technical Information in Canada
- Dr. J. R. Weir, Chairman, Fisheries Research Board of Canada
3. OTHER INDIVIDUALS
- G. C. Andrew, Executive Director, Association of Universities and Colleges of Canada
- Dr. F. D. Barrett, Faculty of Administrative Studies, York University
- M. Jean Beetz, Dean of Law, University of Montreal
- Dr. John D. Bossons, Associate Professor, Department of Political Economy, University of Toronto
- Prof. F. Eric Burke, Department of Management Science, Faculty of Engineering, Waterloo University
- Dr. S. H. E. Clarkson, Department of Political Economy, University of Toronto
- Dr. J. J. Deutsch, Principal and Vice-Chancellor, Queen's University
- Peter C. Dobell, Director, Parliamentary Centre for Foreign Affairs and Foreign Trade

- Dr. L. W. Downie, Director, The Human Resources Research Council of Alberta
- Dr. J. S. Dupre, Department of Political Science, University of Toronto
- Dr. H. E. English, Director, School of International Affairs, Carleton University
- Robert M. Fowler, Chairman, Private Planning Association of Canada
- D. G. Hartle, Director, Institute for Quantitative Analysis of Social and Economic Policy, University of Toronto
- Prof. R. W. Judy, Department of Political Economy, University of Toronto
- M. W. Mackenzie, Member, Private Planning Association of Canada
- Hon. E. S. Manning, President, M & M Systems Research Ltd. Edmonton (formerly Premier, Province of Alberta)
- E. Preston Manning, General Manager, M & M Systems Research Ltd. Edmonton
- R. A. Matthews, Acting Executive Director, Private Planning Association of Canada
- Prof. Paul Medow, Department of Economics, York University
- A. F. W. Plumtre, Principal, Scarborough College
- Grant Reuber, Dean, Social Sciences, University of Western Ontario

II DENMARK

- *Danish National Institute of Social Research*
Henning Friis, Director

III FRANCE

- SEMA Division Enterprises*
M. Jacques Giraud, Director

IV THE NETHERLANDS

- Central Planning Bureau*
J. Koopman, Director-Secretary
- *Social-Economic Council of The Netherlands*
H. P. Engel, Assistant Secretary, Wages
R. Weemhoff, Press Secretary

V WEST GERMANY

- *Research Institute for International Politics and Security*
Dr. Klaus Ritter, Director
Herr Nerlich, Deputy Director

VI UNITED KINGDOM

**Institute for Strategic Studies*

Alastair Buchan, Director

**National Institute of Economic and Social Research*

G. D. N. Worswick, Director

Government

Sir Douglas A. V. Allen, K.C.B., Permanent Secretary to the Treasury

Sir Burke Trend, G.C.B., Secretary to the Cabinet

VII UNITED STATES

POLICY RESEARCH INSTITUTES

**Brookings Institution, Washington, D.C.*

Kermit Gordon, President

R. W. Hartley, Vice-President for Administration

W. M. Capron, Acting Director, Economic Studies

George Sadowsky, Director, Computer Center

Walter Salant, Sr. Fellow, Economic Studies

C. B. Saunders, Jr., Asst. to the President

G. Y. Steiner, Director, Governmental Studies

**Hudson Institute, Croton-on-Hudson, N.Y.*

Max Singer, President

Herman Kahn, Director

Ray Gastil, Member, Professional Staff

Johan Holst, Member Professional Staff

Michael Sherman, Member, Professional Staff

**Institute for Defense Analyses, Arlington, Va.*

Chesley Cooper, Director, Division of International and Social Studies

A. Bloomstein, Senior Analyst

Gen. John Carey, Special Assistant to the President

John Moriarty, Senior Analyst

John Street, Administration Officer, Division of International and Social Studies

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