

ALASKA LEGISLATURE SPECIAL COMMITTEE / SUBJECT FILES 8672

120 SCOMM 9: HOUSE SPEC. COMM. ON PERMANENT FUND 1977-78

INTRODUCTION

QUESTION SEVEN

The intriguing element about this question is that when people had the opportunity to discuss topics of their own choosing, many of the same issues of the first six questions resurfaced.

Both renewable resources and the land issue were once again strongly reinforced here. They were first and third priorities state-wide.

Throughout Alaska, the ten most popular areas of concern included the following broad categories. The lists under each category reflect the more specific topics voiced by Public Forum participants.

## Question 7

What other important State problems do you feel should be considered?

1. Renewable Resources

Fisheries; forestry; agriculture; recreational lands; subsistence; Fish and Game management; and wildlife management.

2. Government

Size/growth/cost; inefficiency; local control; accountability; decentralization; improvement of utilities (rural Alaska)

3. Land

For community expansion; individual homesites; subsistence; parks and recreation.

4. Transportation

Improvement of ferry services and schedules; Need for competitive air service, better equipment and airstrip work in rural Alaska; Commuter service by rail; improvement of road system .

5. Economic and Population Growth

Population and growth concerns; taxes; cost of government; new wealth; unemployment.

6. Alternate Energy Sources

Exploration and research into wind, solar, tidal, hydro, geothermal energy alternatives.

7. Health and Social Services

Problems of alcoholism, the elderly, housing and employment; need for welfare reform.

8. OCS

Fears of adverse impacts to communities and environment.

9. Crime

Stricter penalties for criminals; more police protection; election of judges; reform of judicial system; law enforcement in the Bush.

10. Capitol Move

Pro and Con

SCOMM

#9: 22



*THIS SHOULD WAIT  
UNTIL BANK IS CREATED.*

**Arthur D. Little, Inc.** ONE MARITIME PLAZA · SAN FRANCISCO CALIFORNIA 94111 · (415) 981-2500

July 7, 1977

Mr. Jim Edenso, Deputy Commissioner  
State of Alaska, Department of Revenue  
Pouch SBL  
Juneau, Alaska 99801

Dear Mr. Edenso:

*They're offering org. planning  
function - why not just have P.F.  
avail. for growing sectors. As then  
inexp. or pub. policy Board will  
implement? Who decides which will  
to penetrate.*

1-8883 (Revised)

Arthur D. Little, Inc., is pleased to submit this proposal to provide economic development advice to the Department of Revenue and the State Investment Advisory Committee. We view this as an exciting opportunity to be "present at the creation" of what could emerge as one of the more momentous economic development mechanisms so far conceived. We appreciate having had the opportunity to participate in a number of State Investment Advisory Committee meetings and to meet with interested parties within the Administration and the Legislature regarding the possible scope of our services and the need for assistance in defining economic development analyses appropriate to the Permanent Fund.

We have prepared this proposal on the basis of: meetings and discussions with various people in Alaska; an examination of previous as well as current studies focused on the compilation of data and the analysis of economic activity and industrial development in Alaska; and our knowledge in the broad area of economic development, both domestic and international. We believe we have the necessary combination of experience and professional skills to assist you in developing the necessary economic information and analysis required for initiation of the Permanent Fund.

Our proposal is divided into the following sections, reflecting our understanding of your requirements:

- Background
- Sectoral Analysis
- The State of the Alaskan Economy
- Purpose and Scope of the Study
- Methodology
- Work Program
- Management Organization and Staffing
- Cost, Duration, and Billing Procedures

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We have made a diligent effort to respond to your needs on the basis of our professional judgment as to the appropriate manner in which to conduct this project. Should you wish modifications of our work program, we hope that we will have the opportunity to jointly review your needs in order to make the necessary changes in our response.

We believe that Arthur D. Little is unusually well qualified to meet the needs of Alaska in the area of economic development, including analysis and development of recommendations. We base this belief on the following factors:

- Members of the Arthur D. Little staff who will be assigned to this project have recently conducted or are completing assignments of a similar nature. Such studies provide us with a good background for evaluating the suitability and appropriateness of potential economic sectors.
- Staff assigned to this project have operational as well as consulting experience with public agencies and public entities which have as their primary concern appropriate economic development and facilitation of this development through various financial mechanisms. We are experienced both in the area of public policy and of industrial and economic analysis.
- Our Western Regional office in San Francisco specializes in regional planning and industrial development projects. We have assigned to this project senior personnel with excellent credentials in the area of industrial development.

## BACKGROUND

Based on existing best estimates, between now and 1985 Alaska's share of North Slope, Prudhoe Bay, and other Outer Continental Shelf (OCS) oil and gas production can be expected to exceed \$7 billion. In addition, the possibility exists for additional state income from the extraction of coal, iron ore, and other minerals. With this large potential revenue from non-renewable resources flowing in at an increasing rate over the coming period, it becomes necessary to determine from a public standpoint the optimal ways to best utilize this income.

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Until now, the majority of the oil-related revenues have gone into the state's General Fund. While these revenues have provided for much-needed improvement in services and facilities provided by the state, a saturation point has probably been reached in terms of the ability of state government to absorb much additional revenue on a current operating basis. This will be underscored by the significant increase in state revenues following the start of the flow of oil through the pipeline.

Last November the Alaskan voters overwhelmingly approved the concept and the creation of the "Alaska Permanent Fund." Simply put, the concept was to provide a means of collecting at least a portion of the ongoing non-renewable resource revenues and placing these revenues in a permanent fund where the revenue capital would be maintained (the concept of permanence) while the income from the fund could be utilized for various purposes. This action was taken in anticipation of the fund's providing a sound basis for ongoing economic development beyond the period of non-renewable resource extraction.

Along with the passage of the referendum on the Alaska Permanent Fund, the ongoing State Investment Advisory Committee was expanded with additional citizen members reflecting a wide range of viewpoints to consider the questions of the structure and organization of the proposed Permanent Fund. Over the past few months, the investment committee, in association with its consultants, has developed draft legislation detailing the proposed management and organization for the Alaska Permanent Fund.

Quoting from Section 37.13.020, "Purpose of the Permanent Fund," House Bill 298, one version of the proposed legislation, provides an indication of the thrust of the goals of the Permanent Fund:

- "(a) The purpose of the Permanent Fund is to provide a means of conserving a portion of the state's revenues from mineral resources to the ultimate benefit of present and future generations of Alaskans. The revenues so conserved shall be invested in income-producing investment which will provide further benefits to present and future generations of Alaskans.
- "(b) Further benefits may be derived from the use of the Permanent Fund to:

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- “(1) Assist the diversification of the economy of Alaska by making sound investments in Alaska’s renewable and non-renewable resources.
- “(2) Seek to smooth the cyclical pattern of growth of the Alaska economy.
- “(3) Encourage and assist the participation of private capital from both within and outside Alaska in private enterprises of benefit to Alaskans . . . .”

The Permanent Fund, at least as envisioned in the legislation under consideration, will be both a savings bank as well as a development bank. The draft bill provides that:

- Half the revenues derived by Alaska from its mineral resources will be put into the Permanent Fund. At a minimum 40% of the fund’s balances must be put into “investment grade securities.”
- As much as 30% of the remainder of the Permanent Fund will go to providing long-term investment capital for expansion of private sector economic activity in Alaska when sufficient capital is not available from other sources.
- No more than 30% can go to public works for community development projects for municipalities and public entities within Alaska.

Thus, a significant amount of revenue will be available to the Permanent Fund for purposes of providing investment capital for existing and potential economic activity within the state.

Having agreed upon the concept of the Permanent Fund, it becomes important to determine on what basis and through what set of criteria will financial assistance by the Permanent Fund in economic development projects be determined. As in any capital budgeting decision, typically, the fund will be faced with a set of proposed projects whose cumulative financial requirements exceed the Permanent Fund’s financing capability at that point in time. Given this budget constraint, the question is then how to allocate scarce investment resources among a set of proposed projects.

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In addition, the State of Alaska has historically been utilized as a resource base for the rest of the United States and to some extent Japan. Today it remains an economy primarily devoted to the extraction of both renewable and non-renewable resources with little value added from the processing of such resources. Pipeline activity has been a significant short-term boost to the state economy over the last several years, but it may well leave behind little residual long-term economic activity because of the relative "thinness" of the Alaskan economy. This would once again confirm the "boom and bust" characterization of the Alaskan economy.

#### SECTORAL ANALYSIS

At least in concept, the creation of the Permanent Fund, with its ability to supplement and complement the existing commercial banking activity in Alaska with the capacity to provide long-term loans and/or equity participation on a development basis, could well be an important mechanism for diversifying the economy and providing for greater utilization of Alaska's resources within Alaska.

One way of establishing a mechanism for budgeting and allocating scarce investment resources among alternative opportunities is to prepare a sectoral analysis of the Alaska economy to identify those sectors, industries, or portions of economic activity that appear to have the greatest payoff in the long run for Alaska in terms of diversification, income distribution, and the various other economic goals the state might develop. This sectoral analysis would provide an overview of the economy, linking both the existing sectors and those that might exist in the future to the overall markets within the U.S. economy as well as the international one, particularly the Pacific Rim economies. By focusing investments in those sectors of the economy that are likely to have long-term markets and meet state economic goals, it is most likely that the investments will provide long-term gain for the Alaskan economy.

Referring again to the proposed legislation to establish the Permanent Fund, "sectoral analysis" has been identified as one important means for the fund to determine what projects it will finance and in what manner. Included in the section "Duties of the Policy Board" is an element relating to the annual review and approval of long-range operating plans based on sectoral analysis of the Alaskan economy.

Further, in the section entitled "Operational Principles," various guidelines are provided for the operation of the public corporation. In addition to establishing the "prudent person rule of investment," this section requires that the particular project or investment being considered be able to stand on its own in terms of financial productivity. Should the Permanent

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The relative thinness of the Alaskan economy reflects the fact that so much of the consumer goods as well as a good portion of the industrial requirements are imported, indicating tremendous leakage of Alaskan income to the lower 48 and elsewhere. Recently in Alaska, the distribution of wage and salary employment, a measure of economic activity, has been roughly in the following proportions (this excludes self-employed workers, which exclusion would tend to understate, among other things, the fishing component of the Alaskan economy):

● Mining (including oil and gas extraction)	3%
● Contract construction	17%
● Manufacturing	5%
● Transportation, communication, public utilities	10%
● Trade	16%
● Finance, insurance, and real estate	5%
● Services	16%
● Government	29%

The above figures indicate the dependence of the economy on government — federal, state, and local. Contract construction representing 17% of recent total wage and salary employment is obviously distorted because of pipeline construction and related activities. Mining, even including oil and gas activity, provides only a modest proportion of the wage and salary employment in the Alaskan economy. Thus, even with recent pipeline activity, sectors important to increasing the amount of income retained within the Alaskan economy remain small. In fact, in the period from 1970-1975 manufacturing employment actually grew very modestly and stands at no more than 9000-10,000, primarily in fish processing and forest product activities.

Excluding government employment, the Alaskan economy relies in greater or lesser amount on the following activities:

*Mineral exploration, development, and production*, including fuels and metallic and nonmetallic materials. Here the possibility exists for expansion in a number of areas. It appears that the coal potential along with petroleum natural gas can provide an ongoing thrust to economic activity.

*Fisheries*. With the passage of Public Law 94-264 extending the U.S. Conservation and Management zone to 200 nautical miles, fishing is still in a period of flux. It can be anticipated that at least some portion of the yield of groundfish currently going to Russian and Japanese

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ships, will go to Alaska either through actual participation in the fishing or some payment mechanism. In addition, the traditional catches of the Alaskan fishing industry – salmon, king crab, snow crab, shrimp, and halibut – will continue to provide a basis for possible expansion of this sector.

*Forest products.* This sector, in which the current demand is primarily for pulp for both the lower 48 as well as Japan, reflects the sensitivity of the industrialized economies to materials competition. With the recent rise in oil prices, pulp has been substituted to some extent for petroleum-based fiber. The balance to be struck in the forest products industry in the future is unknown.

*Tourism.* Certainly in large measure a renewable resource, tourism has emerged recently as an important component of the Alaskan economy. Because its impact covers numerous sectors in a typical economy, it is difficult to measure. Whatever the combination of cruise ship, highway, ferry, liner, plane, and motor coach modes of travel, tourism will continue to grow over the next 10 years. Ways of insuring maximum returns to Alaska of tourism activity are still to be determined.

*Agriculture.* Agriculture – mainly eggs, potatoes, and milk – provides a modest contribution to Alaska's domestic needs. Similarly, truck farming surrounding the urban areas meets a modest part of the increasing demand in the urban population. Importation of food products from the lower 48 continues to be an important "leakage" out of the economy, and it can be anticipated that opportunities in this sector will emerge over time.

Where does the economy go in the future? Are there take-off possibilities based on capitalizing on resources, especially the renewable resources, of Alaska? Can this tremendous storehouse of resources and energy potential be developed with sensitivity to the compatibility of maximum utilization of renewable resources with the unavoidable use of non-renewable resources? These are the types of questions which a sectoral analysis of the Alaskan economy will begin to examine.

#### PURPOSE, SCOPE, AND APPROACH

As a beginning point for the ongoing economic analysis that will be required for proper project assessment by the Permanent Fund, this proposal is directed toward developing a structure and/or framework for evaluating proposed projects for investment. We have termed this a sectoral analysis – an examination of the Alaskan economy from a macro viewpoint, linking its current and potential outputs with those of the rest of the U.S. economy as well as

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Pacific Rim areas, to identify those long-term markets in which Alaska can most probably compete. Our work would also include an assessment of the internal Alaskan demand for various outputs, to identify areas where there is a possibility for "import substitution." In other words, given certain investment potential among various sectors of the Alaskan economy, what areas will have the greatest payoff to the Fund, balancing risk and return.

Our proposed work would identify the assets that would foster growth and the liabilities that constrain or inhibit development of particular activities in Alaska, and the mechanisms that might be used to remove or at least mitigate impediments in various sectors. To the extent that long-term capital will assist in removing impediments to development, clearly the Permanent Fund can well become an important mitigating measure.

The crux of our approach is to build upon existing studies, data compilations, and investigations of current activity in a manner which will maximize the involvement of the private sector as well as the public sector. This will assist in the identification of appropriate sectors in the evolution of economic diversity and stability within the Alaskan economy.

Specifically, our analysis would include:

1. An assessment of the long-term outlook for the U.S. economy as well as Japan.
2. An assessment of growth prospects for individual industries.
3. An assessment of the outlook for the Alaskan economy and industry:
  - a. Identification of influence of national, international, and state trends.
  - b. Identification of factors contributing to or inhibiting growth in Alaska-based industry.
4. Evaluation of major sectors of the Alaskan economy:
  - a. Resource extraction, such as petroleum and natural gas, other minerals, forestry, fisheries, and agriculture.
  - b. Manufacturing and processing, such as fish processing, other food processing, petroleum- and natural gas-related processing, and wood products.
  - c. Tourism

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- d. International and domestic trade linkages
- e. Energy
5. Identification of candidate industries for possible establishment in Alaska.
6. Preparation of sectoral analyses
  - a. Characterization of industry at national level.
    - Size
    - Location
    - Concentration
  - b. Historical development.
    - Major growth influences
  - c. Long-term growth prospects.
    - Macro economy
    - New products
    - New markets
    - Other considerations
  - d. Industry in Alaska.
    - Contributing factors
    - Inhibiting factors
  - e. Industry development and the Permanent Fund.
    - Consistency of goals
    - Recommendations for further action
7. Suggested project financial productivity measures.
  - a. Fund investment criteria.
  - b. Sector financial measures.
  - c. Initial sector priorities

The underlying goal of the above analysis is to utilize the revenues derived from non-renewable resources to achieve maximum use of renewable resources within the state.

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## METHODOLOGY

The development of a sectoral analysis emphasizing identification of possibilities for vertical integration within the Alaskan economy to capitalize on existing renewable and non-renewable resources as well as expanding the availability of goods and services for the internal Alaskan economy requires a broad approach and a wide array of methodologies. The product of this proposed study is not just the output of a macroeconomic model; rather, it is the results of several flows of analyses coming together, leading to the identification of sectors appropriate for consideration by the Permanent Fund for project investment – sectors that are either represented currently in the Alaskan economy or are likely candidates for inclusion in the economy over the next few years. This would include vertical integration in terms of the processing of both renewable and non-renewable natural resources, as well as consideration of ways to reduce the leakage out of the domestic economy. For instance, over the next few years certain thresholds may well be reached within the economy, permitting the establishment of business activity that heretofore could not viably compete because of such factors as lack of economies of scale, sufficient domestic market, etc.

An important aspect of our approach and methodology is the utilization of our ongoing economic advisory service. Over the past several years Arthur D. Little has offered a variety of programs to both public and private clients focusing on the growth prospects for the U.S. economy and, most importantly, individual industries within the sectors. Currently a team of analysts is charged with assessing the performance of the U.S. and international economies and the implications for industry growth. Prominent in this ongoing effort is Arthur D. Little's large-scale input-output model of the U.S. economy, which characterizes the interface between the macroeconomy and individual industries, incorporating technological changes, new products, material substitutions, etc. As part of this effort we closely monitor the economy and developments in areas such as:

- Consumer spending.
- Business capital spending.
- New building activity.
- Fiscal and monetary policies.
- International trade activities.
- Worldwide economic conditions.

Through these activities, Arthur D. Little maintains close awareness of developments in more than 220 individual industries (see Appendix A). This provides us with a large, comprehensive, consistent, and detailed (four digit industrial classification) industry information system for

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problem solving – in particular, identification of likely sectors of growth in the Alaskan economy. This information system, embodying the analyses and insights of a large body of Arthur D. Little expertise, is carefully managed and continually updated.

## WORK PROGRAM

To achieve the purposes of the project, we propose to undertake the following tasks:

1. Characterization of existing conditions,
2. Assessment of the present Alaskan economy,
3. Determination of the domestic/international markets related to outputs of key sectors of the Alaskan economy,
4. Preliminary analysis of the comparative locational advantage for Alaska by major sector,
5. Intersectoral cost/benefit comparison and development of investment criteria, and
6. Suggested sectoral priorities for the Permanent Fund.

### *Task 1 – Characterization of Existing Conditions in Alaska*

To establish a consistent set of baseline information for determining suitable sectoral investment focuses and developing economic development strategies, we will first initiate a reconnaissance program to bring together relevant information on the existing situation within Alaska. This will cover existing studies and ongoing research including relevant data and analysis from the numerous affected public agencies in Alaska as well as private sector sources.

To complement the review of existing published data and analyses, we will conduct a structured interview program with appropriate persons primarily in the private sector in the major areas of activity in the state. This program will provide additional background on issues we consider it necessary to address and on the current nature of economic activity, and will also provide a preliminary assessment of the ability of existing Alaskan industry to compete in expanded markets.

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There are a number of studies in progress that provide information on the current state of the Alaskan economy; this includes both statistical information and "models of the economy." Among these basic sources of information are the following:

- Alaska Department of Commerce and Economic Development.
- Alaska Department of Revenue.
- Alaska Department of Labor.
- Governor's office, Policy Development and Planning.
- University of Alaska, particularly the Institute for Social, Economic and Government Research related to their "Main in the Arctic Program."
- Bureau of Land Management, quantitative models developed for assessing impact on the Alaskan economy of oil and natural gas development.
- Trade flow models developed both in the State of Washington and in Alaska linking the Alaskan economy to the Northwest portion of the lower 48.
- Other public agency information.
- The set of Regional Profiles prepared by the University of Alaska for the state and the Joint Federal-State Land Use Planning Commission for Alaska.

Our analysis of the availability of infrastructure and level of community development will be based upon information provided by the Alaska Department of Highways, the Alaska Department of Public Works, the U.S. Bureau of Land Management, and the U.S. Bureau of Indian Affairs, supplemented by local area information from the Alaskan Department of Community and Regional Affairs.

For specific sectoral information – i.e., historical measures of economic activity – we would utilize information from such entities as the Alaska Department of Natural Resources, Alaska Department of Fish and Game, the Division of Economic Enterprise of the Department of Commerce and Economic Development, the National Marine Fisheries Service, the Bureau of Indian Affairs, the U.S. Forest Service, and the Bureau of Mines.

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*Task 2 – Assessment of the Present Alaskan Economy*

To place Alaska in perspective, we will utilize the baseline information developed in Task 1 to prepare an assessment of the present Alaskan economy. This will include:

- Trends in economic indicators,
- Identification of structural relationships within the Alaskan economy,
- Delineation of regional economic activity in Alaska,
- Nature of economic development factors,
- Characteristics of the major sectors of the current economy,
- Level of infrastructure development, and
- Preliminary identification of constraints and impediments to future economic growth.

This assessment will be utilized later in this work program to compare Alaska's potential as well as development constraints with likely emerging markets within Alaska, elsewhere in the United States, and abroad. Labor supply and wage structure, transportation and communications, capital availability, utilities, tax structure, and existing markets will be included in our examination of development-related factors.

The major basic sectors of the economy, including resource extraction (e.g., petroleum and natural gas, other minerals), forestry, fisheries, and agriculture, plus the currently limited manufacturing and processing areas, will be characterized in terms of their long-term potential. Tourism – an activity that cuts across a number of sectors of the regional economy – will be quantified to the extent possible, and the sensitive factors in it will be identified. Energy development, including utilization of coal and hydro, the potential of geothermal, and the utilization of oil and natural gas, will be defined.

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*Task 3 – Determination of Domestic/International Markets Related to Outputs of Key Sectors of the Alaskan Economy*

We will utilize the Arthur D. Little economic analysis model which provides information (among other things) on the output from 220 industry sectors. (See Appendix A for discussion of the industry indicators and industry sectors included in this assessment.) This will be used as a take-off point for estimating 10-year demand for outputs of various industrial sectors and, in combination with the results of Task 2, will enable us to screen down to those sectors that represent possible expansion potential.

We note that, in addition to the utilization of information on the U.S. economy, along with information on trends in the Japanese economy, we will examine (again based on the information from Task 2) possibilities in non-basic sectors of the Alaskan economy such as the service, trade, and other areas that might represent important growth prospects. It is our feeling that there is a need for a blend of quantitative analysis with qualitative judgments regarding possibilities for expansion of some of the smaller sectors in the Alaskan economy for which local manpower and local resources can be utilized. To the extent possible, utilization of renewable resources will be stressed to enable the economy to reach a sustainable level of activity.

*Task 4 – Preliminary Analysis of Comparative Locationa\* Advantage for Alaska by Major Sectors*

The results of Task 3 will identify on a preliminary basis those sectors both existing and potential that may offer the opportunity for expanded economic activity in Alaska. In this task we will utilize industry (or sector) specialists to determine on a pre-feasibility study basis the ability of Alaska to compete with other areas providing similar outputs or products. Having previously identified growth sectors, we will evaluate which of Alaska's characteristics operate to its advantage as an industrial location and which operate to its disadvantage. This will require knowledge of the sectors' resource input requirements, labor and capital requirements, and market distribution.

The key factors in the determination of the locational requirements of the potential sectors addressed will include proximity to suppliers and markets, availability of labor force, sensitivity to other input costs, taxes, infrastructure requirements, and related industrial factors. Ranking of the relevant importance of each of the above will be made for sector and industry types.

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The candidate industries would be those whose locational requirements would be most closely met by Alaska as compared to other potential areas.

## *Task 5 – Intersectoral Comparison and Development of Investment Criteria*

The results of Task 4 will provide an estimate of the likely ability of Alaska to compete in the identified sectors on a statewide basis. While the economics of a particular establishment might indicate potential for Alaska, for example, lack of development of infrastructure and related factors may hinder economic development in a given sector or industry. In this task we will examine on a subregional basis the likely distribution of future economic activity related to major sectors with the goal of identifying problems associated with, for example, infrastructure that would provide access or supply water or energy to the particular economic activity. This will enable us to make a preliminary ranking of appropriate sectors in terms of viability of a particular enterprise or establishment, and of the types of investment in infrastructure that probably would be required to facilitate development.

The results of this intersectoral comparison will be a preliminary set of investment criteria for establishing on a project-by-project basis the necessary types of information that will be required when a proposed investment comes before the Permanent Fund.

The project analysis based on certain investment criteria will differ from financing decisions in degree of complexity and in the breadth of its scope. The financing of projects requires an examination of the several methods of financing, such as debt, equity or combinations thereof and the terms and conditions of the financing instruments, and the project's ability, operating as well as financial, to provide a return on an investment made in it. Typically this procedure will include an analysis of operating performance, return on capital ratios, and other financial ratios. On the other hand, to select investment opportunities, the Permanent Fund will view the particular financing decision as only one part of an overall strategy. An investment analysis requires the design of a methodology for measuring various projects, the use of sensitivity analyses, and the development of risk/return profiles on each project under consideration.

In this task, we will consider the following aspects of developing investment criteria for projects within various sectors:

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- The fund strategy is initially determined. This includes identifying the mix of projects desired in the fund, and their risk, return, and capital requirements. The choice of various projects will determine the financial structure of the fund and will define the overall level of risk the fund will be able to support. A "hurdle rate" refers to this risk level whenever a project is considered as a potential investment.

In the evaluation process of choosing among projects one key assumption is that investment decisions will most likely be made under a capital rationing situation. This means that the fund itself will be limited in size and that if presented with several "attractive" investment opportunities, the selected process must decide upon only a subgroup of the total array of possibilities.

- For evaluation purposes, each project must be analyzed according to such criteria as the net present values (NPV) of earnings it proposes to achieve within a specific timetable. The fund will value this proposed stream of earnings according to the amount, timing, and opportunity costs it is likely to incur. These costs represent the opportunity foregone on the next most profitable investment.

Other measurements of projects exist, such as the payback method which analyzes the number of years required to return the original investment — the far simplest method. Payback criteria, however, do not consider income beyond the payback period. Therefore, if the fund portfolio is to be viewed as an ongoing source of cash, attention must be given to events beyond the one project's payback period. This necessitates a long-term fund strategy.

Thus, an objective of the fund strategy will be to select the combination of investment proposals that provides the highest net present value subject to any constraints for the period. To determine the NPV of a project, the appropriate discount rate will have to be selected. The discount rate must be in line with the hurdle rate, must consider an opportunity rate, should include an inflation factor, and most importantly must reflect a risk factor. For a project within a particular sector, its financial productivity should bear a relationship to the long-run characteristics of the industry in which the project is located.

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- Once the rate is set, and the NPV computed, a sensitivity analysis should be undertaken to examine how volatile the variables are that determined the projected stream of earnings. If a company has a performance history against which variables can be verified and adjusted, this task is much simpler. If, on the other hand, the fund is presented a proposal for a new project with untested characteristics, the exercise of assigning probabilities to the variables becomes more difficult. The sensitivity analysis provides another tool of measurement and helps define more clearly the risk level of the project.
- The risk analysis of an investment decision does not simply entail measuring the risk of a project relative to its potential return. A particular project's risk must also be judged against that of other investment opportunities and most importantly against the overall risk of the fund itself. This means that the project should at best complement the fund's risk level. This can be accomplished, for example, by fitting the project's risk level against other fund projects such as having the risk of a high risk/return balanced against a low risk/return project.

## *Task 6 – Suggested Sectoral Priorities for the Permanent Fund*

To provide the decision-makers within the Permanent Fund with useful sectoral information against which to evaluate proposed projects, this task will focus on assigning priorities to sectors and/or industries that appear to justify possible public investment. We will suggest short-term as well as long-term priorities, based on not only market and resource use criteria but the state of development of the associated infrastructure necessary for the establishment of certain industries. For example, it might be that in the immediate future, certain projects that might be proposed within particular sectors may be in existing, developed areas where access to available labor and infrastructure is relatively easy. These projects may have more immediate public returns.

For long-term projects, it may be that investment might be required not only in the enterprise itself but in the infrastructure such as roads, utilities, etc., necessary to make it feasible. Thus investment in these projects, even though within promising sectors, may require greater investments over longer periods of time.

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State of Alaska, Department of Revenue

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In establishing these priorities we would anticipate the involvement of the committee to insure an understanding of the procedures that we would have gone through in arriving at these priorities.

#### MANAGEMENT ORGANIZATION AND STAFFING

I will be project administrator and maintain day-to-day administration of this case. My professional experience includes 10 years as a regional economist and industrial development specialist with Arthur D. Little, Inc., in a wide range of public and private projects. I will have major responsibilities in the assessment of the current Alaskan economy, in linking the long-term demands in the overall U.S. economy, and that of Japan, with the appropriate sectors of the Alaskan economy, and in developing investment criteria and ranking sectors for possible investment.

I have extensive experience in the development of criteria for location of industrial activity in metropolitan and rural areas both in the United States and in developing countries; much of my work has also involved identification of specific economic activities appropriate for particular areas. Domestically, my work in industrial development has included identification of target industries for regions in Kansas, Nevada, Pennsylvania, Oregon, Washington, and California.

Internationally, I have examined the prospects for expansion of particular economic sectors in the countries of Senegal, West Africa; Republic of South Korea; and in the developing economies of the South Pacific, specifically the Kingdom of Tonga and the island of Truk, in Micronesia. These studies have also assessed the benefits and costs associated with the development of the specific sectors.

Closely associated with me in this project will be senior Arthur D. Little staff members with extensive experience in the broad areas of regional economics and industrial development:

*Cyril C. Herrmann* — Dr. Herrmann will assume primary project management and implement overall contract and study policy. Dr. Herrmann has been a consultant with Arthur D. Little for 22 years, and has worked on many economic development projects. His domestic work has included studies in New England, Florida, and California. For several years he was manager of the Arthur D. Little "Operation Bootstrap" program in Puerto Rico,

# Arthur D Little, Inc

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one of the most successful industrial development action programs ever established. He had similar responsibilities for industrial development programs in Egypt, Iraq, Honduras, the Phillipines, and several provinces in Canada. He is Vice President of the Urban Land Institute and Chairman of the Research Committee.

*Harry Foden* – Mr. Foden will join with Dr. Herrmann in providing policy guidance and project review. Mr. Foden's experience in economic development work for Arthur D. Little extends over a 20-year period. Within the United States he has directed studies for states, municipalities, and public utilities, including New York, Pennsylvania, Mississippi, Massachusetts, Illinois, Indiana, and South Carolina. Overseas he has been involved in economic development work for Iraq and currently is engaged in such studies in Saudi Arabia. He is an Executive Group Member of the Industrial Council of the Urban Land Institute and a member of the American Industrial Development Council.

*Vincent Ficcaglia* – Mr. Ficcaglia is a senior staff economist whose work is concentrated in the areas of industrial and regional development and applied quantitative economics. Over the past several years he has directed numerous studies employing econometric and other quantitative techniques. In particular, he has utilized Arthur D. Little's input/output model of the U.S. economy to address questions related to the impact of various public policy measures and new industrial developments upon national, regional, and local economies.

*Donald Tatzin* – Mr. Tatzin is a regional planner and economist specializing in the identification of economic sectors for regional and local economies. He is presently evaluating the type and magnitude of new industrial and related activities associated with the effects of Alaskan Outer Continental Shelf development on Puget Sound and the State of Washington.

*Richard Goodale* – Mr. Goodale is a financial specialist with Arthur D. Little, concentrating on investment opportunities and financial analyses.

*Christopher Krebs* – Mr. Krebs is an economist and social analyst with special interest in community and regional economic development and public policy formulation. Of particular relevance to this project is his recent work for a major U.S. air carrier regarding the trade linkages and communities of interest between the United States and Japan, focusing particularly on the impacts on the Pacific Northwest economy.

In addition, as appropriate, technical specialists knowledgeable in particular sectors will be called on to provide in-depth assessments of markets and competitive positions within these sectors. Their resumes and those of the project team members are attached.

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## COST AND DURATION

It is our understanding that this work is to be completed within six months. Assuming an early August start, work could be completed by the first of February during the next legislative session. By early October we would be able to provide an interim report to you and the committee relative to the preliminary sectoral analysis. We will also submit monthly informal progress reports indicating work done to that time.

The final report could be presented in January, with the final report in 20 copies and a reproducible master copy provided at the beginning of February.

For the work outlined we propose that you authorize a fixed price of \$98,000 to cover professional services and expenses. We have estimated that the following levels of effort by task will be required:

Task	Professional Service and Expense
1	\$ 6,500
2	8,000
3	18,000
4	41,000
5	14,500
6	10,000

Invoices will be submitted monthly according to the following schedule and will be payable upon receipt:

# Arthur D Little, Inc.

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Invoice Date	Amount
End of Month 1	\$15,000
End of Month 2	15,000
End of Month 3	15,000
End of Month 4	15,000
End of Month 5	15,000
End of Month 6	15,000
Submittal of Final Report	8,000

## GENERAL PROVISIONS

Our work for clients is conducted on a confidential basis, and we will treat information developed hereunder in accordance with our established professional standards.

Since announcement to the public of our working relationship, either while it is in progress or afterward, might be mutually beneficial, we will discuss with you any opportunities we see in this area. Of course, the details of any such announcement would be confirmed in writing by both parties.

Our work will be on a best efforts basis. We trust the results will meet the objectives sought, and we have assigned to the work professional personnel having the required skills, experience and competence. In any event, our liability for damages direct or consequential resulting from this work will be limited to the amount paid us hereunder.

Any change in this agreement shall be confirmed in writing. This agreement shall be interpreted according to the laws of the State of California.

Our agreement may be terminated on 30 days' written notice by either party, or within such lesser time as we may find necessary to conclude the work currently under way and summarize our findings for you. In that event, you will be responsible only for the professional services and expenses which have been committed to that time.

Arthur D Little, Inc

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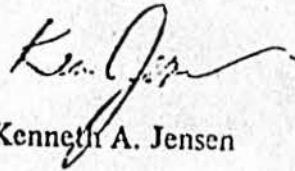
Mr. Jim Edenso, Deputy Commissioner  
State of Alaska, Department of Revenue

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ACCEPTANCE

We look forward with great interest to working with you on this project. If this proposal meets with your approval and you would like us to proceed, please sign and return the enclosed copy within thirty days. Should you have any questions or wish more time to consider our proposal, please let me know.

Sincerely yours,



Kenneth A. Jensen

KAJ:gac

Approved for Arthur D. Little, Inc.

By *Ed C. De Budey*  
Authorized Contracting Officer

Accepted for State of Alaska, Department  
of Revenue

By \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

OVERALL ANALYSIS TO BE  
PREPARED FOR EACH SEPARATE  
PROGRAM RELATED TO COMMUNITY  
DEVELOPMENT

What should be the relationship between your agency or program and the Permanent Fund? In your narrative discussion your analysis should address, but should not be limited to answering the following questions:

Do you believe that the availability of capital from the public sector is critical to the continuance of your program? Can capital be provided by the private sector? If private sector financing is not available, why not? What is the economic and/or social advantage (if any) of public rather than private sector financing?

Considering that 25 percent of oil revenue may be placed in the Permanent Fund and 75 percent may be placed in the General Fund (thereby making the General Fund potentially three times as large as the Permanent Fund), is it more or less advantageous from the state's point of view to meet your capital needs from the Permanent Fund?

Do you believe that the existence of the Permanent Fund will enlarge or diminish the scope of your program? Explain. Do you envision consolidation of your program with another? Do you foresee the potential for your program to absorb others?

If you believe that the Permanent Fund should participate in financing your program, should it do so as a lender or as an equity partner? As a lender what are the probable risks involved and the probable earnings (rate of return)? As an equity partner, what are the risks and the probable rate of return on investment.

Do you have a 15 year operating and/or capital funding plan? (If you do, please attach a copy to this report.) If you do not have one, when will you have one?

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ADDITIONAL SPECIFIC QUESTIONS DIRECTED  
TO CERTAIN STATE OFFICES/AGENCIES

TO BE ANSWERED BY:

ALASKA STATE HOUSING AUTHORITY

ALASKA HOUSING FINANCE CORPORATION

OFFICES RESPONSIBLE FOR GOVERNMENTAL HOUSING  
(REAA - PUBLIC SAFETY - OTHERS)

OFFICE RESPONSIBLE FOR HOUSING FOR THE ELDERLY

OFFICE RESPONSIBLE FOR PIONEER HOMES

OFFICE RESPONSIBLE FOR VETERANS LOANS FOR HOUSING

1. What is your projection of total need, to be satisfied by your program in terms of housing units and dollars, for the following time frames:

FY 1979-1983

FY 1984-1988

FY 1989-1993

If possible, stratify the answer to the above by types of housing and geographical area. What percentage of the total need will be met by your program or activity?

2. What do you estimate or propose the source of the capital dollars required to fund your program to be? In what amounts?

General Fund appropriations?

General Fund capital appropriations for leveraging?

Leverage loan dollars borrowed from Permanent Fund?

Other borrowed funds from Permanent Fund?

Sale of investments to Permanent Fund?

Other Funds (specify)?

(Indicate amounts required by type of funding source in year groups FY 1979-1983, FY 1984-1988, FY 1989-1993.)

TO BE ANSWERED BY:

ALASKA POWER COMMISSION

1. What is your projection of capital dollar needs over the next fifteen years, to fulfill the needs for power in Alaska? Structure your analysis in terms of five year increments (FY 1979-1983, FY 1984-1988, FY 1989-1993). Indicate the need for regional power, rural (bush) power, municipal and private power generation within organized units of government. What percentage of total statewide need will the Commission satisfy?
  
2. Where should the capital funding for these projects come from:
  - General Fund appropriations?
  - General Fund capital appropriations for leveraging?
  - Leverage loan dollars borrowed from Permanent Fund?
  - Other borrowed funds from Permanent Fund?
  - Sale of investments to Permanent Fund?
  - Other funds (specify)?

TO BE ANSWERED BY:

DEPARTMENT OF TRANSPORTATION

1. What is your projection of capital dollar needs over the next fifteen years to fulfill the following needs:

Ports & Docks

Small Boat Harbors

Airfields

Municipal Mass Transit

Local Roads & Trails

Major Highways

Ferries & related facilities

(Indicate other capital dollar needs by five year time blocks --  
FY 1979-1984, FY 1984-1988, FY 1989-1993.)

2. Where should the capital financing for these projects come from?

General Fund appropriations?

General Fund debt (G.O. Bonds)?

Loans from the Permanent Fund?

Equity investment by the Permanent Fund?

Federal Funds?

Municipal Government Funds?

Other funds (specify)?

BACKGROUND INFORMATION

ALASKA PERMANENT FUND INTERIM ACTIVITY

Alaska  
State  
Legislature

Governor

Comm. of Revenue  
and  
State Investment  
Advisory Committee

Administrative  
Working Group  
Alaska  
Permanent Fund

Economic  
Diversifi-  
cation

- . Dept. of Commerce & Economic Development
- . Dept. of Revenue
- . Dept. of Labor
- . Governor's Office
- . Dept. of Natural Resources
- . Div. of Policy Development & Policy
- . Dept. of Fish & Game

Savings  
Account

- . Dept. of Revenue
- . Dept. of Commerce & Economic Development
- . Div. of Budget & Management
- . Dept. of Administration

Community  
Development  
Investments

- . Municipal Bond Bank Authority
- . Dept. of Community & Regional Affairs
- . Dept. of Revenue
- . Dept. of Transportation
- . Dept. of Administration
- . Div. of Budget & Management
- . Div. of Policy Development & Planning
- . Dept. of Commerce & Economic Development

Public  
Information  
and Input

- . Div. of Policy Development & Planning
- . Dept. of Revenue
- . Dept. of Community & Regional Affairs
- . Governor's Office
- . Dept. of Commerce & Economic Development
- . ~~Dept. of Fish & Game~~

*- Dept. of Justice*

## ALASKA PERMANENT FUND WORKING GROUP

The Governor appointed the Department of Revenue as the lead agency for the administration in the development of the Alaska Permanent Fund. Further, the Governor appointed the State Investment Advisory Committee to aid the State in the development of the Alaska Permanent Fund (the S.I.A.C. is statutorily mandated to advise the State on investment policy). It is the recommendation of the Department of Revenue that the proposed administrative Alaska Permanent Fund Working Group report to the State Investment Advisory Committee in order to continue the rapport already established with Alaska's various interest groups. The purpose of the Working Group will be to develop recommendations on policy for the S.I.A.C. based on public input and State agency programs.

The Division of Policy Development and Planning will be responsible for coordinating the efforts of the Working Group. It will monitor report preparation and distribution to all agencies. Each agency will be responsible for the preparation of reports and subsequent presentation to the Working Group. The Division of Policy Development and Planning and the Department of Revenue will be responsible for jointly preparing a final report to the State Investment Advisory Committee.

The membership of the proposed Working Group be comprised of the following:

Department of Revenue/Commissioner's Office

Department of Commerce & Economic Development/Commissioner's Office

Department of Community & Regional Affairs/Commissioner's Office

Department of Transportation/Commissioner's Office

Department of Administration/Commissioner's Office

Department of Labor/Commissioner's Office

Department of Natural Resources/Commissioner's Office

Department of Law/Attorney General's Office

Department of Fish & Game/Commissioner's Office

Governor's Office/Kent Dawson

Office of Budget & Management/Ron Lind

Division of Policy Development & Planning/Director's Office

Alaska Municipal Bond Bank Authority/Dave Rose

The Working Group should be sub-divided into the following categories for participation purposes:

- a. Public information and input
- b. Community development investments
- c. Savings account
- d. Economic diversification

Task assignments will be made at the first meeting of the Working Group. Each assignment should take into consideration each agency's major area of activity and expertise, e.g., Community and Regional Affairs be assigned in the community development area; Division of Policy Development and Planning for agency coordination (circulating reports for comments, deadlines, etc.), and so on.

Specific Questions to be Addressed by the Alaska Permanent Fund Working Group:

I. Public Comment and Information Input

How should the Alaska Permanent Fund monies be invested?

A. Investments in the private sector.

If the Alaska Permanent Fund is used to stimulate development in the private sector, a number of questions should be asked of the public. The following are questions which may be presented to the public for consideration:

1. Investments in capital intensive sectors versus investments in labor intensive sectors.
2. Investments which subsidize project development through interest rates lower than market rates of interest.
3. Investments at market rates of interest.

4. Investments to diversify the economy in order to eliminate seasonal effects of certain industries, implement new industries, and to broaden the State's recurring tax base.

5. Investments which minimize environmental impact.

B. Community development investments.

Some types of community development projects which need to be considered by the public include:

1. Housing.

2. Infra-structure development (to include utilities, transportation, communications, power development, etc.).

3. Financial assistance to communities through providing trust, guarantee, and other types of agreements for municipal securities.

Questions which need to be asked pertinent to community development include:

1. What kind of housing: single family, multiple, large housing development projects (condominium development)?

2. Would there be a limitation on infra-structure development assistance?

3. Should there be a specific amount allocated for community development projects?

C. Savings account.

The savings account concept means that the Alaska Permanent Fund could be either partially or wholly invested in the financial securities markets. This concept implies investments of the Alaska Permanent Fund monies in U. S. government securities, Baa securities, and other securities of a similar rating. The objective is to earn the greatest amount of income while minimizing the amount of risk in order to insure the preservation of the Permanent Fund. Questions to be presented to the public include:

1. What percentage of the Alaska Permanent Fund should be allocated to the savings account concept?

D. Alaska, Inc.

## II. State Agency Data and Study.

### A. Investments in the private sector.

Information concerning Alaska's economy may be useful in evaluating investment proposals submitted to the Alaska Permanent Fund. The development of a sectorial analysis of the State's economy to provide information to be used for evaluating investment proposals is an important aspect of the State agency and data area. Such questions as the following may be asked:

1. What sectors of the State's economy are more attractive for investment purposes?
2. What sectors of the State's economy should be considered for purposes of prioritizing investments from the Alaska Permanent Fund in the State's economy?
3. Should there be an allocated amount of Alaska Permanent Fund monies designated for investment purposes into a particular sector of the Alaska economy?

### B. Community development investments.

1. Regional growth rates (actual, projected, limitations).
2. Projected housing needs.
3. Mutual options for community investments in the categories of electric power, utilities, transportation facilities, and communication.
4. An inventory of community investment opportunities.
5. An inventory of community credit characteristics.

### C. Savings account (financial management and investments).

1. The State's investment management experience in the security market.
2. Investment management experience of other investment managers.

D. Other technical questions.

1. Legal meaning of "permanent" and "income producing".
2. Comparison of cost of administration of other State investment funds.

E. Alaska, Inc.

MODELS AND OPTIONS  
FOR THE  
ALASKA PERMANENT FUND:  
FUNCTIONS, REGIONALIZATION AND ACCOUNTABILITY

Report Number Two  
September 14, 1977

Belden Hull Daniels  
Department of City and Regional Planning  
Harvard University

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MODELS AND OPTIONS FOR THE ALASKA PERMANENT FUND:  
FUNCTIONS, REGIONALIZATION AND ACCOUNTABILITY

September 14, 1977

INTRODUCTION: Some Models and Options

My first report of July 11, 1977 raised many questions concerning the purposes, functions, sources and uses of funds, management and accountability of the proposed Alaska Permanent Fund, based on the accumulated experience of several hundred development banks over the last one hundred years.

This second report takes the next step, and provides a beginning look at a number of development banks whose experience and functions seem particularly relevant to potential public purposes of the Permanent Fund. In selecting development banks to analyze in detail, I have been guided by two factors: first, institutions which would compliment reports already prepared for the State Investment Advisory Committee by Price Waterhouse and White, Weld; second, institutions whose purposes and functions seem particularly relevant to key potential Fund goals.

Each of these institutions have been analyzed and compared in terms of: I. Purposes; II. Sources of Funds/Capitalization; III. Uses of Funds/Operations; IV. Management; V. Accountability; VI. Evaluation; and VII. Relevance to the Alaska Permanent Fund.

In addition to this look at functional models for the Fund, two key structural issues are outlined in some detail, based on domestic and international experience: regionalization; and accountability to the taxpayers, legislature, and executive. In both instances, a conceptual approach is developed out of a range of

domestic and international experiences. This experience and the conceptual framework will probably raise more questions for your further consideration.

Again I would like to note that as an outsider, I feel competent to suggest detailed operating experience which may be relevant to the Permanent Fund's purposes, but not competent to suggest what those purposes should be. There is an old Asian proverb which says that after one trip to India foreigners write a book, after two they talk in quiet whispers, after three, they say nothing at all. This is my second trip to Alaska.

It is with special gratitude that I thank my research associate, Mitchell Rosenberg, for his extraordinary care in helping to prepare this report. One of the pleasures of teaching and working is witnessing younger colleagues and friends grow in competence to encompass their vision. I wish Mitchell well in his year in Germany.

My sense is that this second report, like the first, will raise more questions than it answers. For this reason, I have noted it a "discussion draft", and look forward to responding to the further issues it raises.

## I. FUNCTIONS

### A. ALASKA OWNERSHIP OF LARGE SCALE ALASKA ENTERPRISE

1. CANADA DEVELOPMENT CORPORATION  
Discussion Draft

September 14, 1977  
Page 3

#### 1. PURPOSES

The CDC is an investment bank operating in the private sector of the Canadian economy. Created in 1971 by an act of Parliament, its initial capitalization was provided by the Canadian treasury in the form of a purchase of over \$250 million in common stock. Such an institution had been proposed by government officials as early as 1958 in response to concern over the high level of foreign ownership and control of Canadian business. This condition, they felt, discouraged the development of native entrepreneurial talent necessary for economic growth and job creation. The proposed use of financial mechanisms to achieve such goals met with strong opposition from the Canadian business sector and allied politicians. When the CDC bill was passed after 15 years of debate, none of these social objectives were included in the institution's statutory agenda.

#### Legislative Goals

The three main objectives of the CDC summarized in the act are:

- 1) to help develop and maintain strong, Canadian-controlled and managed corporations in the private sector of the economy;
- 2) to widen the investment opportunities open to Canadians; and

3) to operate profitably, in the best interests of all its shareholders, public and private.

The investment policies by which these goals are to be achieved were left purposefully broad in the act in order to accommodate conflicting views of the proper role for the institution in passing the legislation and to provide maximum managerial discretion. This is similar in concept and language to the draft of the Permanent Fund developed by the Investment Advisory Committee. However, the "Objects" section of the act, various documents of the debate prior to its passage, and statements of company officials provide a clear picture of the CDC's investment criteria and their rationale.

#### Management Interpretation of Goals

CDC management interprets its role as a provider of the equity capital necessary to mobilize Canada's material, human and capital resources to bring domestic industry up to internationally competitive scale in the long run. The management's investment policies following from this view are:

1) emphasis on large, longer-range development projects, particularly those involving upgrading of resources, a high technological base or good potential for building a Canadian-controlled presence in international markets.

2) Profit potentials must be commensurate with perceived risk. This is the one criterion mandated in the act, similar to the current draft of the Permanent Fund. As a rule of thumb, the Board proposed targeting investment to sectors in which predicted growth exceed twice that of GNP. Acknowledging the long-term nature of their mode of investment, the directors declare, "CDC is prepared to be patient, recognizing that some of its opportunities will exist because others are unwilling or unable to wait through the years of earnings buildup."

3) CDC in a manner again similar to the current Permanent Fund draft, does not seek to duplicate or preempt activities in the private capital market. Thus it does not lend, debt capital, presumably being readily available to large-scale enterprises in the Canadian private market. It is, however, prepared to play a catalytic role in joint ventures with foreign or domestic investors.

4) CDC seeks controlling positions, through the purchase of voting stock, in the companies in which it invests--this in order "to take measures necessary to protect and increase the value of its holdings." Such measures connote input into top-level strategic and corporate planning decisions, not day-to-day management. The Permanent Fund draft is unclear on this point.

5) CDC seeks to concentrate its activities in sectors where Canada holds competitive advantage on an international

scale or can achieve such position through consolidation of markets.

6) Roles the CDC specifically rejects include buyer-of-last-resort for faltering firms, buy-back agency for foreign-controlled firms or high bidder in take-over contests where foreign firms are involved.

In order to pursue these policies, CDC has been granted a very broad range of powers. It may invest in any asset or security, promote companies, lend or guarantee funds. It may even invest in firms not carrying on any part of their business in Canada when, in the opinion of the Board of Directors, such investment would further the aims of the company.

## II. SOURCES OF FUNDS/CAPITALIZATION

Authorized - CDC is authorized to issue 200 million common shares without nominal or par value, of which the first 30 million were subscribed by the Canadian government from 1971 to 1975 at prices averaging slightly over \$10 a share. The company is further authorized to issue up to \$1 billion in preferred stock with such convertibility, voting and interest features as the Board determines. CDC is under no statutory debt limit. Management has chosen a target level of 40 percent of paid-in capital, a conservative policy designed to compliment CDC's risk-oriented

investment policies. This scheme indicates a potential capitalization of \$5 billion.

### Capitalization Goals

CDC wishes to finance further investment through the public issue of shares. Its aims in so doing are:

- 1) to decrease the government share of ownership to 10 percent within 10 years. The government currently holds 65 percent of all CDC stock outstanding.
- 2) to offer opportunities for equity investment in Canadian industries to Canadian investors. Political support is an expected by-product of such a policy.

Reliance on public support reinforces the profit criteria for investment, since continued growth will depend on investors' perception of CDC as a safe and profitable investment.

### Actual History of Capitalization

1971 - CDC was originally capitalized by the Canadian government's purchase of 25 million shares for a price of slightly more than \$250 million. The government increased its holding incrementally over the subsequent four years until it held about 30 million shares valued at slightly more than \$300 million in 1975.

1974 - CDC placed 10 million non-voting redeemable preferred

shares with institutional investors. These preferred shares sold for \$10 and carried a dividend of 5 3/4 percent. The proceeds of this issue were used, in part, to pay off bank debt incurred to finance start-up operating costs. The shares are redeemable at the option of the holder or CDC after five years.

1975 - CDC marketed 1.5 million preferred voting shares to some 20,000 individual, institutional and governmental investors. These shares sold for \$100 and carried an 8 percent dividend. They were convertible for 10 shares of common stock with further share bonuses for early conversion. They are redeemable at the option of the holder or CDC after five years. This was the largest public stock offering in Canadian capital market history.

Despite CDC's profit orientation, its performance has not yet inspired sufficient investor confidence to support the subscription of common stock on the basis of capital gains alone.

In 1975 CDC also issued about 950,000 shares of common stock to the Canadian government as the final \$10 million payment for the Crown Corporation, Polysar.

Outstanding debt of wholly-owned subsidiaries stood at \$250 million at the end of 1975.

### III. USES OF FUNDS/INVESTMENT OPERATIONS

CDC has used its funds primarily to invest in established

businesses either through buying the enterprise outright or through purchase of a significant portion of its outstanding securities. CDC's holdings in 1975, by industrial sector, were as follows:

Petrochemicals - CDC acquired Polysar Ltd., a manufacturer of rubber and petrochemical products, from the Canadian government. The negotiated price for the Crown corporation was \$62 million plus \$10 million if certain profit targets were met. As of year-end 1975, Polysar's assets were \$602 million. In 1975, CDC, through Polysar, joint-ventured with Canadian banks to finance the construction of the Petrosar naphtha cracking plant, a \$575 million, world-scale facility.

Mining - In 1973, CDC acquired, through tender, 30.2 percent of the stock of Texasgulf, Inc., the American-based energy and mining firm. At the time of this acquisition, 68 percent of Texasgulf's earnings were generated by enterprises located in Canada.

Oil and Gas - In 1975, CDC acquired 60 percent of the Canadian assets of Tenneco. These assets include gas and oil processing plants and vast areas of oil, gas and bituminous tar producing properties. These assets are valued at \$135.0 million.

Health Care - CDC has purchased several drug companies and research facilities in an effort to build a consolidated Canadian-

owned complex in the health care field. The flagship firm of Connlab Holdings Ltd. is Connaught Laboratories, a research facility formerly attached to the University of Toronto. Since the consolidation of these companies in 1974, Connlab has shown steady losses.

Venture Capital - CDC's directors have acknowledged the crucial role of financial support for technological innovation in economic development. They have not found it appropriate, however, to undertake the complex and time consuming services of venture capitalists themselves. Instead, CDC has purchased large amounts of stock in three existing venture capital firms, leaving their management free to administer the newly expanded funds. These firms invest in a wide variety of enterprises at the conceptual or early development phase.

Pipelines - CDC has advanced \$3.8 million to a consortium planning the construction of a North-South natural gas pipeline.

Looking over CDC's investments, it is apparent that they meet the institution's criteria of being in sectors where Canada holds a comparative advantage (natural resource extraction and processing) or which have experienced high growth (medical supplies and equipment). Unfortunately, statistics which would permit an estimate of CDC subsidiaries' presence in their respective sectors are not available. We can, however, get some idea of the

impact of these investments on the extent of Canadian control of these sectors by comparing 1968 statistics on total assets, Canadian and foreign held, in major sectors which appear in a 1973 government report on foreign investment in Canada to CDC's current holdings.

In 1968, assets employed in the petroleum/natural gas sector totaled \$9.2 billion, of which Canadians held \$3.7 billion (38 percent). Even given growth in this sector between 1968 and 1973, CDC's Petrosar undertaking is a sizable net addition to Canadian holdings in this sector. None of CDC's other undertakings have nearly so large a quantitative impact.

#### IV. MANAGEMENT

The Corporation is managed by a Board of 21 Directors drawn mostly from the business community. While the government holds over 50 percent of the stock, two Deputy Ministers are ex officio Board members with no voting power. The government may choose to appoint four Directors rather than casting its ballots at Shareholders' Meetings. Such power has not been exercised to date. The government has stated both publicly and privately that it does not intend to interfere with the affairs and management of the Corporation.

The Board's policies are administered by a highly profes-

sional central staff of twenty. Subsidiaries' production decisions are to be made independent of CDC input. The staff was kept small to encourage flexible response to problems. Specialized matters are often referred to consultants.

#### V. ACCOUNTABILITY

The CDC act, elements of Canadian corporate law and the political climate in which the Corporation was implemented combine to leave the CDC Board and staff in virtual total control of company operations and investment.

##### Legislative Accountability

By statute, CDC is not subject to Parliamentary oversight. Parliament's latitude for intervention is restricted to voting changes in capital authorization and certain exceptional by-laws concerning CDC's objectives. Given the Corporation's immense initial capitalization, it is unlikely that Parliament will have the opportunity to exercise any constraints on CDC short of closing it down.

CDC is not a Crown Corporation, i.e., a public corporation formed under the Canadian Financial Administration Act "that is ultimately accountable, through a Minister, to Parliament for the conduct of its affairs." Although it is publicly capitalized, it

is subject to no ministerial oversight or control. Rules governing disclosure for Canadian corporations have been widely attacked for being unduly lax; these are the accountability standards to which CDC is being held.

#### Executive Accountability

The federal government does hold a certain amount of de facto power through rules governing the distribution of shares. No association, a term defined operationally by the Board, may hold more than 3 percent of the outstanding voting stock. The federal government may hold 10 percent. Therefore, its voting position may always be dominant, given an absence of block coalitions. However, the government has chosen to maintain a hands-off stance towards CDC operations. Investment policies and priorities, for example, were set by the Board with no government input. With its current holdings, the government could exercise control through the removal of Board members, but has chosen not to do so.

The government has eschewed other control mechanisms which have been applied to mixed enterprises in Europe, where this kind of structure has a longer history. These mechanisms include having government officials as voting members of the Board of Directors, actively exercising voting shares, statutory regulation of investment operations and maintaining a permanent or intermittent

public body to audit the activities and reports of the public financial institution. The CDC act provides for none of these supervisory measures. According to most observers, such lack of government input and control eliminates CDC from use as a tool in any centrally planned economic development effort.

## VI. EVALUATION

Recalling the three purposes of the institution (p. 3), how has CDC performed? Before attempting an answer, we must recognize that evidence is limited to skimpy annual reports covering only four years of operating experience.

Regarding the creation and maintenance of strong, Canadian-controlled industries, CDC has followed a policy of expansion and consolidation of existing firms. CDC's equity presence in Polysar allowed the company to incur debt to finance capital expansion at a much quicker rate than was realized under government ownership. In assembling Connlab Holdings, CDC seems to be creating a vertically-integrated drug complex covering research, production and distribution. What these policies will mean in terms of rationalization, investment and employment remains to be seen.

CDC has increased investment opportunities open to Canadians only marginally. Its one public stock issue was in the fairly large denomination of \$100/share and was apparently bought in

blocks averaging 75 shares. Clearly, this kind of marketing will not broaden participation in equity ownership. Quantitatively, however, this was a very big issue: During the decade previous to the issue, gross new issues of Canadian preferred stock averaged only \$132 million, compared to the \$150 million sold in one shot by CDC.

CDC has shown some profit in terms of earnings per share every year.

CANADA DEVELOPMENT CORPORATION

<u>Year</u>	<u>Capitalization</u> <sup>1</sup>	<u>Value of Holdings</u> <sup>2</sup>	<u>Earnings/Share</u>
1975	708	857	\$0.31
1974	548	549	\$0.81
1973	344	465	\$1.89
1972	138	200	\$0.57

<sup>1</sup>Capitalization = Capital stock plus retained earnings, in \$000's.

<sup>2</sup>Value of Holdings = Investments plus fixed assets of wholly-owned subsidiaries, in \$000's.

Given the \$10+ price of shares, earnings have been modest. They have fluctuated with the general conditions of the Canadian economy and have been well below the CDC Board's stated profit target of 15 percent.

CONSOLIDATED BALANCE SHEET  
December 31, 1975  
Canada Development Corporation

	1975	1974
	(thousands of dollars)	
<b>ASSETS</b>		
Current Assets	\$ 378,430	\$ 321,811
Investments	354,581	332,354
Fixed Assets of Subsidiaries	502,792	216,271
Other Assets	41,73	29,155
TOTAL	<u>\$1,277,537</u>	<u>\$899,591</u>
<b>LIABILITIES</b>		
Current Liabilities		
Short-term loans	\$ 95,198	\$ 97,484
Accounts payable and accrued liabilities	95,674	74,752
Dividends payable	4,280	1,437
Income and other taxes payable	15,222	3,575
Long-term debt due within one year	10,416	15,672
Total	220,790	192,920
Long-Term Debt	250,358	137,439
Deferred Income Taxes	25,337	9,744
Interest of Minority Shareholders in Subsidiaries	73,218	11,172
Total	569,703	351,275
<b>SHAREHOLDERS' EQUITY</b>		
Capital Stock	564,563	422,000
Retained Earnings	91,699	74,744
Excess of Book Value over Cost at Date of Acquisition of Subsidiary	51,572	51,572
Total	707,834	548,316
TOTAL	<u>\$1,277,537</u>	<u>\$899,591</u>

VII. RELEVANCE TO THE ALASKA PERMANENT FUND

In analyzing the relevance of the Canada Development Corporation to the Alaska Permanent Fund we will review the major headings in this memorandum in order: Purposes, Sources and Uses of Funds, Management, and Accountability.

Purposes: The purposes of the Canada Development Corporation appropriate for consideration by the Permanent Fund are:

- 1) to encourage the establishment and maintenance of strong Canadian controlled enterprises;
- 2) to widen investment opportunities for Canadian investors; and
- 3) to operate for a profit.

The achievement of the first two goals is conditioned by and dependent on the third. Profit is the operational goal most frequently and explicitly mentioned by management in its official reports. They attempt to make a case for their pursuit of profit by claiming that the partially public benefits of the first two goals will never be realized unless a rate of profit and growth higher than that enjoyed by foreign controlled elements of the Canadian economy are achieved. In the first annual report, management stated,

If we as a nation are to increase the Canadian content of our economy, it must be essentially by encouraging the sound growth of Canadian-controlled enterprises at a pace which exceeds that of their non-resident-owned competitors.

In the case of altering the balance of Canadian/Foreign control of Canadian industry, the statement above amounts to a tautology. In terms of providing wider investment opportunities in Canadian enterprise to Canadians, the statement is true to the extent that CDC issues must out-perform competitive securities in order to be attractive to investors. Canadian investors have access to international capital markets, and, in 1970, 40% of the securities held by institutions and individuals in Canada were of foreign issue.

The achievement of extraordinary profits by an investment holding company like CDC is unlikely. Recent work in investment portfolio theory and the experience of the securities industry in the past decade have demonstrated the futility of attempting to "out-perform" the market in the long run.

CDC may even be compounding its difficulties by investing in as few enterprises as it does. This investment strategy may lead, and in CDC's case has led, to unstable earnings and cash flow. Such a situation may inhibit the planning of future operations.

CDC's investment operations raise issues of control over the exploitation of natural resources, operations of the Canadian capital market and ownership structure of major industries, all of which are legitimate concerns of the Federal government and the Canadian people. The proponents of CDC in its present form

convinced Parliament that it was necessary to give up control over these matters in order to achieve the more limited goals in the statute. However, what the government got for relinquishing such controls is of questionable value. Lack of government input into CDC operations is the major weakness of the institution.

Sources and Uses of Funds: The management of the Canada Development Corporation has intentionally developed a strong equity base with only 40 percent debt in order to undertake the kinds of long-range, high-risk strong ownership positions which are essential to carry out its purposes.

On the other hand, the Canada Development Corporation must maintain a very strong return on its invested capital in order to attract the substantial private investment in the Canada Development Corporation which it is seeking. The Permanent Fund will not have such a constraint, which has both negative and positive aspects. From a positive standpoint, it will not be forced to get such a market return; from a negative standpoint, it will not have the correction of the marketplace monitoring its investments quite so carefully.

Management: The Canada Development Corporation has the kind of strong, independent, professional staff necessary to any successful development bank. The Canada Development Corporation follows the wise course of only overseeing the major strategic

planning decisions of its subsidiaries and affiliates, and not involving itself in day to day decision making.

Also, the Canada Development Corporation management has been given the very broad managerial discretion to make investment decisions which is contemplated in the current draft of the Permanent Fund.

Accountability: On the other hand, the Canada Development Corporation is a preeminent example of a development bank which does not have sufficient accountability to either the executive or the legislature.

### INTRODUCTION

The National Enterprise Board, established under the Industry Act of 1975, is a public financial and promotional institution whose principal objectives are to assist the economy of the U.K., to promote industrial efficiency and international competitiveness and to expand opportunities for productive employment.

From 1968 to 1971, the British government operated a public financial institution with a similar purpose--the Industrial Reorganization Corporation (IRC). IRC's functions were limited to promoting and providing finance for mergers which the directors felt would help effect the rationalization of an industry. (Many of Britain's manufacturing sectors are characterized by firms too small to compete on an international scale.) IRC generated a great deal of opposition from private financial interests which felt that they were being subjected to unfair competition. The institution was disbanded by the newly elected Tory government in 1971. NEB, which incorporates the functions of IRC into the comprehensive program described below, began operations in November 1975.

#### I. PURPOSES

In order to meet these broad objectives the NEB carries out several different functions. Some observers feel these functions

are not consistent with each other. In planning its investments, the Board is to apply standard commercial criteria of profitability. On the other hand, it is viewed by government and its own directors as an instrument of national industrial policy and is therefore responsible for meeting various public policy criteria in its operations. The implications of NEB's mixed agenda will be examined in the detailed enumeration of the institution's purposes below.

NEB's operations fall into four conceptually separable classifications:

a) Finance for Industrial Investment - NEB acts essentially as an investment banker, purchasing the equities of private firms where it feels the investment will show a reasonable return, will help effect the purposes of the Act and will not displace private investment. NEB also makes loans on commercial terms.

b) Industrial Holding Company - NEB is responsible for the strategic management and financial monitoring of several large nationalized firms.

c) Assistance to Companies in Financial Difficulty - NEB administers capital assistance to firms in temporary financial difficulties. Funds for this activity are provided by the Secretary of State for Industry who is also responsible for deciding which firms will be considered for such assistance.

d) Promotional Activity--NEB offers assistance in procuring foreign contracts for British firms or groups of firms and in coordinating the activity of regional development authorities.

Each of these four purposes is analyzed below.

a. Finance For Industrial Investment

NEB's main function is the provision of finance for industrial investment, particularly for the expansion and modernization of productive facilities in manufacturing. In addition, finance or advisory services may be provided to promote industrial restructuring. Finance is normally provided in the form of equity, but loans at commercial rates of interest may also be provided.

NEB's investment policies are shaped by an interim statement of guidance from the Secretary of State for Industry, which is now pending statutory enactment. Except for those investments made at the direction of the Secretary\* (see Section c), profitability, defined as the projected discounted rate of return to capital, is to be the main investment criterion. Subsidiary to this are certain public policy considerations, including:

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\*Note: In this profile, "Secretary" denotes the office of the Secretary of State for Industry.

- i. preparing for growth by action to increase longer-term capacity in key sectors of manufacturing industry;
- ii. increasing exports or savings imports; and
- iii. where there is a choice of location, creating new jobs in areas of high unemployment.

NEB devoted considerable time to identifying sectors where its assistance would be most beneficial in terms of promoting efficiency. They incorporated data and analysis from the White Paper accompanying the Industry Act and a 39-sector industry study by the National Economic Development Councils into their annual investment plans. NEB intends to use these studies and other analysis provided by the Secretary to guide future investment policy.

→ b. Industrial Holding Company

The NEB acts as a holding company for a number of shareholdings previously held directly by the government. The portfolio will be added to from time to time as a consequence of the NEB's role as a provider to new equity finance and through the purchase of existing shares in companies. In addition, the NEB has power under the Act to set up new enterprises or to participate in joint ventures with the private sector.

The basic job of the NEB as shareholder is to ensure a proper

return is secured to the taxpayers who provide capital through the Consolidated Fund, the general tax revenues of the British government. In so doing, the Board does not intend to participate in day to day management. Their oversight consists in most cases of making arrangements for the provision of regular monthly information to the NEB on performance and financial prospects, for the provision of annual and long-range plans for the approval by the NEB and for the submission (in the case of subsidiaries-- wholly-owned companies) of major capital investment proposals, acquisitions and disposals for approval.

Many of the "transferred companies'" problems have arisen from unstable industrial relations resulting from the inability of management and labor to work out satisfactory wage and productivity provisions. There are three high union officials on the NEB's ten-member Board of Directors. Their presence may be interpreted as a move to force some rapprochement between labor and management, given the Board's responsibility for strategic management and oversight of the troubled enterprise.

c. Assistance to Companies in Financial Difficulty

The NEB may be directed by the Secretary to assist a company in financial difficulties which needs to be restored to a sound state for reasons of employment or industrial policy. In some

cases, the Board will consider the provision of funds in some combination of commercial and subsidized terms. In such cases, the NEB will be reimbursed specifically for their involvement; and to ensure that their financial discipline is not undermined, these activities will be accounted for separately.

d. Promotional Activities

Foreign Contracts - In keeping with its policy to expand exports, the NEB attempts to use its central organizing and financial capabilities to help British industries compete for large foreign contracts. According to the Directors' analysis, "Overseas contracts are becoming so large in value, and the conditions attached to them so onerous, that many UK companies do not have a big enough asset base to undertake the risks; in addition there is a tendency among developing countries to favour tenderers with some form of government backing." NEB has announced that it is willing to joint venture with firms or groups of firms competing for such contracts. In 1976, it assisted in two such projects. The contracts were, however, awarded to other bidders.

Regional Activities - The Secretary's interim policy statement directed NEB to give particular weight to creating jobs in areas of high unemployment. In accordance with this direction, NEB has set up offices in Liverpool and Newcastle. The Regional

Directors' initial task has been to establish their offices, to build up close relations with public and other bodies concerned with regional development and industrial investment in their regions, and to seek out companies with potential which might require finance from the NEB to fulfill their modernization and expansion plans.

## II. SOURCES OF FUNDS/CAPITALIZATION

NEB's investments are financed wholly by the national government. NEB may draw on two sources within the government: the National Loans Fund, and "public dividend capital" appropriated annually by Parliament to the Secretary of State by the Treasury for use in industrial investment. The National Loans Fund is a revolving fund to be used to make loans to private firms. The amount of money in the fund and the annual volume of loan activity is set by Parliament; it is administered by the Secretary. NEB may borrow from the Fund at private commercial rates and lend this money to the firms in which it invests. NEB must repay these loans on a fixed schedule set in advance in consultation with the Secretary. NEB may charge a small interest rate differential to its borrowers to cover its costs in originating and monitoring the loan.

Public dividend capital is another pool of investment funds

made available to the Secretary by Parliament, with controls similar to those exercised over the National Loans Fund. Repayment of these advances are flexible. Dividends and recovery of capital are set by the Secretary in consultation with NEB on a yearly basis. In 1976, NEB paid no dividends on the public dividend capital it received and subsequently invested in the firms it financed. Returns on public dividend capital are to be paid into the Consolidated Fund.

The Secretary and the Treasury must approve all advances from both the National Loans Fund and public dividend capital. The Board must supply accounts of the application of these funds to both offices.

The Treasury may authorize the use of general tax revenues to guarantee repayment of loans undertaken by NEB. The Treasury must notify Parliament of all such guarantees.

As of December 31, 1976, the breakdown of funds received by NEB was:

Public Dividend Capital

Debt assumed from the government upon transfer of investments; Directed by Secretary of State to be treated as public dividend capital:	Subsidiaries	418.4
	Associates	6.2
	Others	1.2
		<hr/> 425.8
<u>Issued to NEB during 1976</u>		54.0
<u>Total</u>		<hr/> 479.8

Loans

Capital debt assumed from transferred companies:	77.8
New loans issued to NEB during 1976	21.3
<u>Total</u>	<u>99.1</u>

(All figures in £ million.)

Since NEB does not market securities, debt/equity ratios are not material to its success in obtaining further funds for investment. More important will be its return on capital and the performance of its subsidiaries. These factors will figure prominently in the Secretary's decision to continue providing investment funds to NEB.

III. USES OF FUNDS/INVESTMENT OPERATIONS

NEB's assets consist largely of investments and loans to five large public corporations transferred to it by the government. All of these companies have suffered financial, managerial and labor problems in the last few years. They have been only marginally profitable or have shown losses. The book value of these companies' assets was £624.1 million at the time of transfer. Their negotiated price, discounted for their market problems and used for calculating returns to NEB, was £495.7 million. During 1976, NEB made £40.41 million in new equity investments and £20.13 million in loans to these companies.

The operating status of NEB's major industrial holdings as of the date of transfer from the government was as follows:

British Leyland Ltd.

	<u>12 months to Sept. 1975</u>	<u>15 months to Dec. 1976</u>
Sales	£1,868 mill.	£2,692 mill.
Profit (Loss), Before Tax	(76.1)	70.5
U.K. Employment	191,000	183,000

British Leyland is a major manufacturer of motor vehicles and allied products. The companies comprising this conglomerate had shown steady losses during the Sixties. They were consolidated and nationalized in 1973. British Leyland's small profit in 1976 is attributed to higher export margins resulting from the decline of the pound. The firm's major problem is that it has been unable to produce enough vehicles to meet demand. This is due mainly to disrupted labor relations. During the 15 months ended December 1976, 7.1 million man-hours were lost due to strikes and subsequent layoffs.

Data Recording Instrument Co. Ltd.

	<u>12 months to Sept. 1975</u>	<u>15 months to Dec. 1976</u>
Sales	£10.15 mill.	£8.50 mill.
(Loss) Before Tax	(0.14)	(0.09)
U.K. Employment	923	1,030

Data Recording is a young firm producing computer peripheral equipment. Some 60 percent of its output is sold overseas. Its management has announced expansion plans calling for a doubling of employment in the next four years. However, the sales figures above do not seem to warrant such optimism.

Ferranti Ltd.

	<u>12 months to Sept. 1975</u>	<u>15 months to Dec. 1976</u>
Sales	£86.3 mill.	£108.5 mill.
Profit (Loss) Before Tax	(0.5)	4.1
U.K. Employment	16,651	15,576

Ferranti is a conglomerate producing many lines of heavy electrical equipment and electronic instruments. Its operations are international, with subsidiaries in Canada, Brazil and Scotland. As of the end of 1976, divisional management was being decentralized in an attempt to accelerate the increase in profitability indicated above.

Herbert Ltd.

	<u>12 months to Sept. 1975</u>	<u>15 months to Dec. 1976</u>
Sales	£49.7 mill.	£49.4 mill.
Profit (Loss) Before Tax	(13.4)	(0.7)
U.K. Employment	6,716	6,017

Herbert is one of Britain's largest machine tool manufacturers. This industry had been particularly hard hit by the recession of the early Seventies, and the firm had been forced to postpone planned equipment modernization. As of the end of 1976, domestic and foreign orders were increasing. Herbert was planning to complement upgrading of its capital with wide-reaching decentralization of divisional management responsibility and worker participation in plant-level management.

Rolls Royce Ltd.

	<u>12 months to Sept. 1975</u>	<u>15 months to Dec. 1976</u>
Sales	£602.1 mill.	£620.2 mill.
Profit (Loss) Before Tax	4.5	(21.9)
U.K. Employment	62,375	59,758

Rolls Royce Ltd. produces aircraft engines and industrial turbines. The automotive division was separated from the firm upon nationalization in 1971. Recessionary declines in demand for air travel and electricity cut severely into the derived demand for Rolls Royce's products. Declining sales leading to increased unit costs forced management to close three plants and curtail subcontracting business. Despite steady international orders for military aircraft engines, RR intends to continue cut-backs in capital expenditure and production.

During 1976, NEB also invested in new and existing smaller firms, mostly in the machine tool, computer and metalworking industries. These investments amounted to £11.51 million in equity and £21.18 million in loans.

#### IV. MANAGEMENT

NEB is managed by a Board of Directors consisting of two full-time and eight part-time members. The two full-time members, Chairman and Deputy Chairman, are former senior executives of industrial enterprises. Of the eight part-time members, five are business executives and three are union officials. The Board is the ultimate authority in investment decisions except in those cases reported in the "Functions" section.

The Board is assisted by a professional staff of 47, headquartered in London with regional branches in Liverpool and Newcastle.

#### V. ACCOUNTABILITY

##### Accountability to the Executive

The NEB is subject to a great deal of oversight by the Secretary of State for Industry and the Treasury. NEB must satisfy these officers that its investments are sound by commercial criteria (except in the case of investments directed by the Secretary).

NEB STATEMENT OF SOURCE AND APPLICATION OF FUNDS  
for the period from 20 November 1975 to 31 December 1976

	<u>Note</u>		
<u>Source of Funds</u>			
From Her Majesty's Government			
Public dividend capital	14	53.97	
National Loans Fund	15	<u>21.29</u>	
			75.26
From Her Majesty's Government upon the transfer of investments and loans under Section 5 of the Industry Act 1975			
Public dividend capital	14	425.79	
Capital Debt	15	<u>77.84</u>	
			<u>503.63</u>
 <u>Application of Funds</u>			
Overall Excess of Expenditure over Income	7		1.09
Less Depreciation			<u>.05</u>
			1.04
Purchase of Fixed Assets	7		.65
Purchase of investments			
Subsidiaries	9	40.41	
Associates	11	10.70	
Others	10	<u>.81</u>	
			51.92
Loans to			
Subsidiaries	9	20.13	
Associates	11	.76	
Others	10	<u>.42</u>	
			21.31
Investments transferred by Her Majesty's Government			
Subsidiaries	9	418.36	
Associates	11	6.24	
Others	10	<u>1.19</u>	
			425.79
Loans transferred by Her Majesty's Government			
Subsidiaries	9	74.59	
Associates	11	<u>3.25</u>	

It must also make an effort to fulfill a rather long list of public policy responsibilities as well. These include:

- 1) location of new facilities in areas of high unemployment;
- 2) ensuring the furthering of democratic managerial practice;
- 3) ensuring that the use of funds is consonant with anti-inflation policy;
- 4) ensuring that public corporations maintain financial discipline;
- 5) assisting and coordinating activities with regional planning agencies; and
- 6) ensuring protection of consumer interests.

Commercial standards for investment are well understood, and there exist permanent agencies within the government to monitor NEB's performance on this account. No standards or mechanisms of oversight have been brought forth by which to judge NEB's performance on the social criteria or to hold it accountable.

In setting guidelines for NEB, the Secretary acknowledged that the institution had to be left with enough discretion to respond flexibly to quickly changing investment opportunities. Thus, government oversight is to be exercised through the review of three-year investment plans submitted annually to the Secretary. The plan is to include sections dealing with:

- a) existing NEB holdings (with particular attention to the activities of large companies);
- b) acquisitions, joint ventures and new ventures; and
- c) assistance operations;

with a discussion of the balance between these various activities.

The Secretary may enforce his decisions through two mechanisms discussed above, regulation of certain investment activities and control over the amount of investment funds available to NEB. Should the policies of the Board and the Secretary seriously diverge, these provisions could become powerful sanctions on the discretion of NEB management. At the moment, however, relationships between NEB and the government seem more collaborative than adversary.

The overall framework of the NEB's accountability to the government on matters of public policy and financial goals is given above. Here we list certain types of investment operations which require notification of or approval from the Secretary of State.

Notification of the Secretary is required when:

- 1) commitments exceed £10 million or the investment raises new or significant policy issues;
- 2) NEB acquires more than 10 percent of the voting shares of a company; and/or

3) the acquisition may require investigation under monopoly laws.

Approval is required when:

- 1) NEB wishes to dispose of securities;
- 2) commitments exceed £25 million; and/or
- 3) the costs of acquiring share capital exceed £10 million or confer upon NEB more than 30 percent of voting stock in a company.

Most of these restrictions on investment activity were enacted in order to assure the business community that NEB would not use its access to large amounts of government funds to compete at an advantage with private investors. NEB is subject to the same laws regarding ownership acquisition and disclosure that apply to private investors; it may not make use of privileged information such as planning agreements worked out between the government and private firms; it may not compell private owners to sell out.

#### Legislative Accountability

NEB is only indirectly accountable to Parliament through ministers appointed by them. Parliament also controls the amount of National Loans Funds and public dividend capital available to all recipients.

## VI. EVALUATION

The most remarkable aspect of the NEB is the array of conceptually separable functions it is to fulfill and problems it is to address. After only one year of documented activity, it is impossible to assess the Board's performance. We can, however, review NEB's functions and design to make some prognosis on its chances of success. First we must review interpretations of Britain's present industrial difficulties.

Since 1960, the post-tax rate of return on physical capital to British commercial and industrial companies has fallen from 8 percent to near zero. The cause most frequently identified by commentators on this phenomenon is lack of sufficient reinvestment to maintain capacity. However, recent studies have shown that Britain's rate of reinvestment has been stable and comparable to those of other Western industrialized countries.

Recently, attention has been focused on the low productivity of labor as the major cause of unprofitable manufacturing activity. In manufacturing and utility sectors, Britain's enterprises rank consistently lowest in international comparisons of output (sales) per unit of manpower employed. This condition is particularly acute in the nationalized industries where, for example, British Leyland uses about twice as much manpower/unit as its continental counterparts producing similar cars with similar

equipment. Frequent strikes cut further into productivity of capital. For obvious political reasons, both Labour and Tory governments have been obliged to maintain employment and have thus subsidized losses in nationalized enterprises and in larger private manufacturing companies as well. Unions, therefore, face few constraints, in terms of membership job loss, in pressing for more and more costly wage and benefit settlements. Nationalized industries have also been subject to price controls in the face of continuously rising factor costs.

These are only a few of the problems facing large-scale industry in Britain; they face conditions weighing on all import-dependent industrial economies. They do, however, have the advantages of a relatively modern industrial plant and a highly trained technical and managerial elite.

What are the prospects for NEB's various roles given the simplified analysis above? Taking them one at a time:

Provision of Investment Capital: NEB's operations are a substantial improvement over previous British systems of capital assistance to private firms. Under older programs, the Treasury had to be petitioned for virtually every disbursement of investment funds, bureaucratic response tended to be slow to the point of obstructing the completion of deals. Furthermore, most assistance was in the form of loans with inflexible repayment terms.

Recipients often had to petition for further assistance to pay off their government loans.

Within rather high per investment limits, the NEB may act on its own initiative, without executive approval. Since its own source of capital for new investments is predominantly public dividend capital (76 percent of the total funds available to it in 1976), it may advance equity to the companies it invests in. Thus, NEB can absorb long gestation periods necessary for new enterprises or new operations within existing enterprises to show profits.

Holding Company: The problems facing Britain's nationalized industries are too complex, too embedded in historical patterns of class, social and economic relations for any super-managerial authority to turn around in the foreseeable future. The NEB may provide one of many desperately needed forums in which labor and management representatives can be induced to address common problems.

Assistance to Financially Troubled Companies: This is NEB's least enviable and least-to-be-emulated function. To the extent that the analysis above holds true in individual cases, provision of additional capital under any terms is economically inefficient. It may, however, be politically necessary. NEB keeps separate accounts for such activities and is reimbursed for them. Thus,

the "subsidy" nature of these activities is acknowledged in NEB's records, allowing for the application of other-than-commercial standards in judging performance.

Promotional Activities: Both the foreign contract and regional development functions seem to be sensible approaches to creating markets and encouraging coordination, particularly in sectors dominated by small units. Coupled with NEB's financial powers, these could be particularly effective services for increasing Britain's international competitiveness.