

SCOMM

#9:107

MEMORANDUM

TO: [The Honorable Clark Gruening
The Honorable Terry Gardiner

DATE : May 6, 1977

FROM: Dona Lehr, Acting Director *Dona* SUBJECT: Permanent Fund Work
Bill Luria, Principal Planner *Bill* Program
Policy Development and Planning
Office of the Governor

At your request, we have taken a look at the various work efforts you and your staff people have identified as being needed to develop the enabling legislation for the Permanent Fund. We have tried to organize the efforts involved in a logical order, as well as to include some of our own thoughts and recommendations. Attached is a breakdown of the range of suggested research/consultant efforts geared toward generation of enabling legislation for the Permanent Fund. Included are specific task suggestions, rationale for each task, end products and possible areas of responsibility. (Except for certain elements of the Fiscal Planning effort, we have not taken a hard look at how the Renewable Resources Revolving Fund will be integrated into the Permanent Fund work effort.)

It should be noted that an exact delineation of each task effort, and who should do what, is not necessary at this time. More specific requirements - in-house vs. consultants for example - will evolve as the program proceeds. The important point is that the program get started immediately. Not attached, but available, is a flow chart depicting what we think should be accomplished and when, as well as highlighting critical milestones/decision points and public input and internal review points. The chart can serve as a tool for monitoring the progress of the effort.

Our initial recommendations are:

1. Pool the collective knowledge and back-up material of your staff people, SIAC, DPDP and the Public Forum so that a refined set of goals, objectives and areas of concern can be identified. This will then form the basis for refining the attached as well as: (a) generating a detailed outline of what will go into the Legislative Report and the Public Forum Document; and (b) defining and assigning specific research/consultant efforts that should start soon;

2. The following research efforts should be started immediately in order to provide back-up for the Legislative Report and the Public Forum Document:
 - * overview of the general implications/impacts of the Permanent Fund on Alaska;
 - * preliminary investigations of alternative fund management strategies;
 - * continuation of the legal analyses; and
 - * initial State fiscal planning, looking at the strengths and weaknesses of existing fiscal tools.
3. Delegate (or hire) one person who's responsibility will include monitoring the progress of the work effort as well as coordinating the various legislative, executive and consultant inputs; and
4. Clarify the relationship between the Executive (DPDP, Revenue and the SIAC) and the Legislative (House and Senate) branches regarding the overall work effort.

DPDP can provide the following: 1) coordinate State agency participation; 2) assist in monitoring program progress; 3) assist in defining and monitoring consultant efforts; and 4) participating directly in research efforts (particularly fiscal planning), goals formulation and Public Forum workshops.

DKL/BL/ljs

Attachments

cc: Fran Ulmer
Brian Rogers

PERMANENT FUND WORK ELEMENTS
(Excluding Public Input)

EFFORT	TASK REQUIREMENTS	RATIONALE	END PRODUCTS	SUGGESTED RESPONSIBILITY
<u>Summary of Background Information</u>				
.Public Forum	What has been said; what directions were given; what can't be determined; what problems were highlighted (comprehensive, absence of back-up material); what can back-up material provide?	Provides basic input for formulating refined set of goals and for generating Legislative Report and Public Forum Document.	Preliminary list of goals, objectives and priorities, and areas of concern.	Legislative staff, DPDP, Jack Kruse. <i>Growth Policy Council Public Forum 6/17</i>
.SIAC	Summary of SIAC consultant inputs, future plans, coordination possibilities.	Same as above plus input to developing fund management strategies.	Summary memo of information.	SIAC, Revenue.
.Misc.	Prior consultant advice; legislative/staff points of view and information; types of investments, management, results, performance of other major investment efforts in Alaska (e.g. Native Corporations).	Same as above plus provides some guidance for individual investment investigations.	Summary memo.	Legislative staff.
<u>General Implications</u>				
.Broadbrush	Think piece on potential impact of fund on Alaska, in-state vs. out-of-state investments; efficiency of capital markets, loan vs. direct expenditures.	Provides back-up information for Legislative Report and Public Forum Document as well as helping to define more specific areas of investigation.	Memo-type report.	Legislative staff, ISER (<u>Arlon Tussing</u>). <i>6/30</i>
.Analytics	Analytical evaluation of above-impacts on population, per capita income, and growth.	Same as above.	MAP-model Report.	ISER. <i>Ongoing; begins in July</i>

PERMANENT FUND WORK ELEMENTS
(Excluding Public Input)

EFFORT	TASK REQUIREMENTS	RATIONALE	END PRODUCTS	SUGGESTED RESPONSIBILITY
<u>Legal Analysis</u>	<i>Summary of legal issues</i>		<i>portion of report</i>	<i>Doug, Law 6/30</i>
.Preliminary	Define "permanent" and "income producing" (market ROI? over-all vs. project? income to fund or individuals?).	Provide back-up information for Legislative Report.	Internal memo with recommendations.	Legislative staff, Law.
.Final	Refine above plus defining "prudent person," inflation, reserve accounts, % put into fund (greater than 25% - can it be withdrawn, interest (can it be withdrawn)?	Highlights constraints to fund management strategies and individual investments.	Same as above.	Same as above.
<u>Fiscal Planning</u>				
.Initial	Definition of fiscal tools (loans, bonds, CIP, Renewable Resources Revolving Fund, general fund, etc.) strengths and weaknesses.	Back-up input to legislative Report.	Internal memo.	~~DDPP BCM Revenue~~ <i>Legislative staff. 6/30</i> <i>John, Doug</i>
.Preliminary	Short- and long-term possible expenditure patterns combined with alternative revenue projections. Investigate size of "surplus" in general fund, implications for Permanent Fund contribution, context for evaluating alternative uses of earnings moving the financing of government expenditures to a recurring basis.	Provides input to interim goals formulation and Public Forum Report.	Same as above.	Same as above and ISER. <i>Dick Haggart</i> <i>Revenue</i> <i>DDPP</i> <i>BCM</i>
.Final	Continuation of above.	Provides input to selecting optional fund management approach(es).	Same as above, but effort is on-going beyond Permanent Fund effort.	Same as above.

PERMANENT FUND WORK ELEMENTS
(Excluding Public Input)

EFFORT	TASK REQUIREMENTS	RATIONALE	END PRODUCTS	SUGGESTED RESPONSIBILITY
<u>Legislative Report</u> - <u>Public Forum</u> <u>Report</u>	Generate reports including back-up information and tabloid-ready questions.	Forms basis for public information/public input process.	*	Legislative staff, Public Forum staff.
<u>Fund Management Activities</u>				
.General	Critique of present enabling legislation overview of CDC, Development Banks, State Banks, credit unions, consumer coops, etc. - traditional goals.	Background information for Legislative Report, Public Forum Document and interim goals formulation.	Memo-type report.	<i>Price-Waterhouse 6/30</i> Legislative staff, <i>Daniel</i> consultant mix (straights, <i>6/30</i> freaks, ISER, Tom <u>Singer</u>). <i>6/30</i>
.Interim	Refinement of above including a comparative evaluation, pros & cons, implications, relationships to State goals, general selection criteria, test strategy with types of investments.	Part of decision-making process to narrow down management funds to a select few.	Report(s) with recommendations for selected management strategies.	Same as above.
.Final	More detailed and analytical evaluation of selected management fund strategies including analysis of practicality, conflicts, with existing legislation, implications, political considerations (special interest groups).	Part of decision-making process to select optional management strategy(ies), input to fund structures and legislative decisions.	Report(s) with recommendations for optional management strategies.	Same as above.
<i>Legis report</i>	<i>compile, outline, research, draft, edit, produce</i>	<i>Common ground for committee members, public, press</i>	<i>publication (report)</i>	<i>Clark, Terry, Brian, Judy, Doug, John, et al</i> <i>7/15</i>

PERMANENT FUND WORK ELEMENTS
(Excluding Public Input)

Page 4 of 5

EFFORT	TASK REQUIREMENTS	RATIONALE	END PRODUCTS	SUGGESTED RESPONSIBILITY
<u>Fund Management Structure</u>				
.Preliminary	For selected management alternatives, investigate structural make-up potentials-control, organization, operating procedures, accountability, performance evaluation, flexibility to change, safety and maintenance of fund	input to final structure decision	memo-type report highlighting strengths and weaknesses and initial recommendations	SIAC, legislative staff, consultants <i>8/15</i> ~~Arthur Daniels~~ ~~Arthur Tussing~~ ~~John, Doug, SIAC~~
.Final	Refinement of above, including investment criteria, staffing, funding, location (centralized or regional), pilot projects requirements, sunset concept	basis of enabling legislation	report with final organizational recommendations	Same as above
<u>Investment Studies</u>				
.General	Overview of investment opportunities, sectoral and regional analyses, State programs, evaluation (in terms of market return/viability)	general background information, back-up input to Public Forum Document	report outlining investment potentials and relationship to fund management alternatives	Same as above plus various State agencies <i>Senate Comm. Hear</i> <i>SIAC</i>
.Interim	Refinement of above, including rationale, criteria for project selection, measures of success-long-term implications, sensitivity analyses, specific investments comparative evaluations	provides input to enabling legislation, as well as to the alternate fund managers	report detailing initial investment opportunities	Same as above
.Final	Effort is an on-going responsibility of fund managers	--	--	--

PERMANENT FUND WORK ELEMENTS
(Excluding Public Input)

EFFORT	TASK REQUIREMENTS	RATIONALE	END PRODUCTS	SUGGESTED RESPONSIBILITY
<u>Enabling Legislation</u>	Bringing together all the above into formal legislation	--	--	legislative staff

MEMORANDUM

*Jim - This is
my response to
the issue paper.*

TO: Barry Quinn
Executive Director
Alaska Growth Policy Council
Office of the Governor

*Please consider these
responses "internal"
in nature.*

DATE: September 3, 1976

FROM: *Dona Lehr*
Dona Lehr
Economic Policy Analyst
Policy Development and Planning
Office of the Governor

SUBJECT: Alaska Forum Issue
Development

Since you are addressing the general tone and emphasis of the introductory section of the Policy Issues paper, I will confine my comments to a few (and relatively minor) specific wording concerns on that portion (i.e. the first 9 pages). Following that, I have more substantive comments on the framing of the "oil and wealth" issue. That discussion attempts to include the thoughts of Tom Singer, in addition to my own.

INTRODUCTORY SECTION

1. Page 6, line 5 ff. Perhaps a wider list of alternative values, including some of the range of recreational experience beyond wilderness and wildlife protection, might appear more balanced. For instance, many who put high stock in hunting and fishing may not identify with either the "protection" or "subsistence" value.
2. Page 6, line 14 ff. Might a "single generation" (20 years) be an overstatement, especially if, as the next sentence suggests, all non-renewable resources are under consideration? Specifically, much of mineral development has been projected to occur 20-25 years in the future.

Although resource exploitation is the correct phrase, given the negative connotations of exploitation it might be desirable to use "extraction" instead.

3. Page 6, line 17 ff. When speaking of investing revenues to promote industries, some ventures other than resource based industries should be mentioned. Manufacturing? (If what we're talking about is subsidizing industry, we can probably have whatever type we want!) Also, I might mention small business investment.
4. Page 7, line 2 ff. The exact reverse of this statement may be true. That is, long-time Alaskans may resent the newcomers' fear of the passing of familiar community and life-styles. If the original sentence is to be included, other possible alternative views should be mentioned.
5. Page 8, line 5 ff. The line of causation in this paragraph is somewhat unclear. The impression is that expenditures yield revenues, which in turn expand expenditures, and so on. It is true

that to the extent that government spending increases the level of income, etc., the tax base expands and more revenues are collected. However, in Alaska the spending emphasis seems to come from resource development dollars which are not essentially caused by government expenditures per se. Thus the causation is resource revenues (e.g. the \$900 million) yield expenditures which in turn yield increases in economic activity (and improved levels of services) which may attract additional population and induce additional expenditures. The primary impetus is resource based revenues, not those induced by spending. Further, the paragraph implies a cumulative (perhaps even accelerating) process, which is not the case. I think the growth of government should be viewed as one resulting from the exogenous shock of resource revenue injection, rather than a process endogenous to the public sector itself.

6. Page 9. It is doubtful that such a chart would be helpful or explanatory to the general public. I would hate to have to explain it to anyone!

OIL WEALTH

Tom Singer and I have been giving substantial thought to the framing and importance of this issue since our initial discussions with those involved in drafting the Policy Issues paper. One major source of input to the development of our ideas, was the first meeting of the State Investment Advisory Committee, the official group which will be considering management and uses of the Permanent Fund. The concerns, approaches and misunderstandings which surfaced at that meeting were helpful in our efforts at delineation of the crucial issues within this large topic. The issue is complex and attempting to reduce it to a form which is accessible to the general public yet still contains the essential elements of the choices that are to be made, leaves one feeling uncomfortable with what must be left out.

 A primary distinction which needs to be made is the difference in the basis or rationale of a private market decision versus a public sector decision regarding the allocation of capital. The market decision is based on "profitability" of investment opportunities—profitability in the sense of returns which accrue to the private individuals making a given investment. There are, however, profits (or benefits) which result from various types of investments or expenditures, which are not regainable by the specific investors but rather accrue to other members of society as well. These benefits are real but not exclusive (i.e. limited to the investor). This type of investment or activity therefore, is not as likely to be undertaken by the private sector, but may be validly in the province of public sector. The existence of externalities and their role in defining the returns or profitability of an investment is basic to understanding the allocation decisions involved with the portion of oil wealth which funnels through State government. The opportunity exists to decide on the allocation of these resources in terms of public policy, which can include a broader range of values than

does the private sector. Public policy in turn is (or should be) a function of the goals and objectives of Alaskans for the State. Here is where the role of the Public Forum is vital. The information we need to provide in order to assure informed input from Forum participants relates essentially to the growth implications of alternative uses of royalty gas and oil and Permanent Fund dollars. Perhaps a pertinent consideration is the reality that Alaska can probably attract any desired type of industry, if we are willing to subsidize it at a high enough rate. Nearly all alternative uses, be they in the renewable resource sector, extractive resource processing, low cost power generation or home building, imply subsidization. Thus the question is what are we getting for that subsidy? The type and extent of growth (both in terms of output and population) can be largely determined by the uses to which State controlled resources are devoted. If industrialization and growth are the desired goals then emphasis should probably be placed on infrastructure and other investments which lower the cost of doing business in Alaska. If a more diverse economy composed of localized business enterprises is the goal, then small business loans might be an effective vehicle. So perhaps the questions reduce to the more general type: What type of economy do you want to see? What type of growth? There are costs and benefits to various types of investment alternatives, how do you weight (value) the tradeoffs which must be made? (Some of these tradeoffs are detailed in comments by Tom, attached.)

Most of the questions contained on page 11 are relevant to the underlying issue. It is more the context of the choice actually being made and the implications of that choice that need more emphasis. The two sections that I feel should be eliminated are paragraphs 2 and 5, page 12. The riskiness question is of much less importance than the others. Devil's Canyon is a specific example of subsidization that can be subsumed within the other questions. Paragraphs 6 and 7 on page 12 are inter-related and also could be discussed as specific examples, rather than separate concerns. Paragraphs 1, 3 and 4 are contingent upon the nature and speed of growth desired. These are really techniques for controlling growth rather than separate issues. Evaluation of such alternatives must logically follow determination of growth objectives.

In Tom's comments (attached) he mentions the interrelated question as to whether public policy objectives should be pursued in the short run (i.e. included in criteria for evaluating alternative uses of oil wealth) or whether these objectives be considered later, after a tax base has been developed. This issue may be an important element of the discussion, but I don't feel that it should be stated as a separate question. The question assumes that a substantial tax base will occur. Given that there may be substantial subsidization of industry in order to facilitate development, the eventual tax base expansion is not certain. For example, will revenues increase enough to cover increased expenditures associated with population growth and the pursuit of policy objectives? I don't think the answer to this is obvious.

Mr. Barry Quinn

-4-

September 3, 1976

One last consideration is the relationship between the timing of Forum workshops and the November balloting on the constitutional amendment on the establishment of the Permanent Fund. Will any difficulties (political or others) result from this?

I would be happy to discuss with members of the Alaska Public Forum staff any of the points raised above.

DL/ljs

Attachment

cc: Bob LaResche

Oil Wealth Section

1. Should there be reference to specific dollar amounts?
2. I like the first two paragraphs, but on p. 11 ;

"The general question is:" I would like to see something like the following.

Concerning the Permanent Fund (and really the in-state use of oil and gas and other mineral resources).... Private capital markets allocate capital according to the profitability of competing alternatives given different risk classes. The state has control of a vast amount of capital in the form of oil and gas or the dollars they receive for them. Instead of the state allocating this capital on the basis of maximum dollar returns, the state has an opportunity to allocate this capital according to public policy. What investments would Alaskans like to make to shape their future? What are the opportunity costs of any particular investment. Some would like to see investment to attract primary industries based on Alaska's resources and comparative advantages. Their belief is that these industries will form the base for a stable, diversified economy through which will trickle down resources available for social needs. Others would like to see investments in those areas which reinforce Alaskan lifestyles, in other words paying the premium at the front end (in lower dollar returns on investment) rather than applying the net product of more profitable investments at the rear end to reinforce those lifestyles. More specific questions include:

Should the state attempt to slow growth by restricting the sale or leasing of its oil and gas resources, and keep them in the ground for future use?

Should the oil and gas wealth (Permanent Fund) be used for social infrastructure investments (power plants, dams, ports, roads, etc.) or be made available to business and industry at market interest rates (or lower) to change the economics of doing business in Alaska to attract development?

What will be the tradeoffs (such as immigration vs. employment, competition for recreation resources, economies of scale for social and cultural activities) presented by business and industrial development and their impacts on traditional lifestyles, renewable resources, and the quality of life in Alaska?

Should the earnings of the Permanent Fund be reinvested in the fund to build up more earnings, or should they be transferred to the general fund for-

- reduction of the state's debt.
- reserves to reduce the cost of borrowing to the state
- distribution to the public as dividends
- operating costs to reduce personal taxes

MEMORANDUM

TO: The Honorable Jay S. Hammond
Governor
Office of the Governor

DATE: August 4, 1976

FROM: Bob LeResche, Director 
Policy Development and Planning
Office of the Governor

SUBJECT: Involvement in Permanent
Fund Legislation

You have mentioned to me several times that the permanent fund, its investment and use are central factors in many of the projects I am now working on ("Alaskan's, Inc." is a good example). It is important that we clarify as soon as possible Policy and Planning's role in the joint legislative-executive work currently underway regarding the permanent fund. This memorandum suggests that we become prominently involved in the "goals" side of the "...interim study and development of alternative investment goals and structures for the fund..." (language from fiscal note of CSSS HJR39). I propose to do this through 1) seeking my appointment to the State Investment Advisory Committee (which is currently being expanded), and 2) involving my staff in contract review and actual analysis of elements of the issue.

Our goals in serving as your office's representative on the Investment Advisory Committee and in being significantly involved in the staff work would be to insure that the following are considered or required in the process:

1. A wide range of goals and alternative strategies. (Some narrowly interpret economic diversification to mean industrial subsidization, while others interpret investment to mean financial securities.)
2. A clear statement and understanding of benefits to be obtained from Fund activities; i.e. careful project evaluation in terms of net social benefit rather than vague assertions of the public good or of private profitability.
3. A determination of the distributive implications of each plan; i.e. who benefits from the activities directly and indirectly? (Are plans couched in terms of the general good really for the specific good or benefit of a particular group or segment of society?)
4. An interpretation and integration of various alternatives in terms of short- and long-run policy goals of this Administration.

August 4, 1976

Commissioner Gallagher and Deputy Commissioner Edenso are playing key administration roles in this process, and I have neither the intent nor the competence to replace their vital contributions on the investment side of the issue. Rather, I feel that my involvement will complement their efforts by helping the entire committee deal with the broader public policy aspects of this crucial task.

For the above reasons I solicit:

1. Your appointment of the Director of DPDP to the State Investment Advisory Committee; and
2. Your instructions to me to involve my staff significantly in the "goals" side of the permanent fund, as outlined above.

REL/ljs

cc: Commissioner Gallagher
Commissioner Motley
Commissioner Warwick
Fran Ulmer

bcc: Kent Dawson
Commissioner Martin
Dona Lehr/Tom Singer
Avrum Gross
Jim Rhode

STATE OF ALASKA

OFFICE OF THE GOVERNOR

STATE POLICY DEVELOPMENT AND PLANNING

JAY S. HAMMOND, GOVERNOR

POUCH AD - JUNEAU 99811
PHONE 465-3512

NEWS RELEASE

DPDP DIRECTOR LERESCHE RELEASES STATEWIDE SURVEY RESULTS
January 1 1977

The Division of Policy Development and Planning today released the results of a Citizen Feedback System survey, intended to gain input and opinion from the Alaskan people about the major issues facing state government today. The survey was conducted for the Alaska Public Forum and was coordinated by Policy Development and Planning.

Major findings were reviewed by Dr. Robert LeResche, Director of Policy Development and Planning in the Office of the Governor, who said: "The survey results indicate some clear trends of what the residents of Alaska want. When asked what are "the two or three major problems facing Alaska today?", the first listed was influx of people. Their second concern was fast-uncontrolled growth. Alaskans also indicated these are the first problems they want the State government to solve. 69% thought the State should not sell our state-owned natural gas more cheaply to get the gas industry to come to Alaska. 79% thought the state should make a profit in developing the resources we own. 75% thought new industry should be introduced only if it can pay its own way. 32% thought last year's budget was too high, compared to 24% who thought it was about right and 40% who did not know. 75% thought alcohol should be taxed high enough to pay for alcoholism services. 58% thought North Slope haul road users should pay the whole cost for its maintenance. On the capital move issue, Juneau was the top choice in each of five areas

polled across the State. These are just some of the survey results. Rowan Group, the Anchorage firm which took the survey said the results are accurate within 3%."

The background on those surveyed: 314 personal interviews were conducted in the homes of the respondents. They took from 20 to 35 minutes to complete and were conducted by Alaskans. The interviews were proportional so each section of the State received its fair population share of the responses. Interviews were conducted in Ketchikan, Sitka, Juneau, Palmer, Wasilla, Matanuska Valley, Anchorage, Kenai, Soldotna, Fairbanks, Kodiak, Dillingham, Bethel, Nome and surrounding rural villages.

LeResche said, "This survey is another tool being used by The Alaska Public Forum to help bring the people of Alaska into the decision-making process of State government. The questions asked dealt with issues upon which the Administration and the Legislature must make decisions. I think the efforts of the Alaska Public Forum hearing process around the State is a similarly valuable tool. These and other efforts of public participation are particularly helpful to governmental leaders in the executive and legislative branches.

There were a number of different categories in the survey:

STATE PROBLEMS: "The major problem facing Alaska" was listed as influx of people (17%), fast-uncontrolled growth (11%), and inflation/cost of living (8%). When first, second and third choices were totaled the major problems listed were: influx of people (27%), inflation/cost of living (24%), crime/police/courts (19%), fast/uncontrolled growth (17%), and wise use of

resources (17%).

When asked which problems the State government should work on first and hardest, growth/population influx was first (11%), state spending/budgeting was second (10%) and third was crime/police/courts (9%).

When first, second and third choices were totaled for "what will be the major problems in two or three years," unemployment/jobs lead with 25%, followed by population influx (23%), and inflation/cost of living (22%).

LeResche said, "It is clear the people of Alaska are concerned about the effects of the influx of new people and the new inflation spurred by the rapid growth associated with such projects as the oil pipeline."

GROWTH: 66% compared to 24% thought we should encourage a petrochemical industry in Alaska. But at the same time, 69% compared to 21% thought the State should not sell its state-owned natural gas cheaper to get the gas industry to come to Alaska. 79% thought the State should make a profit in developing the resources it owns; 15% thought the State should break even. In addition, 66% thought there were places in the State that should not be developed for oil and gas. In another question, 75% thought new industry should be encouraged only if it pays its own way. 9% thought new industry should be subsidized by other taxpayers. LeResche said, "It is clear there are some contradictions in regards to the public attitude toward our oil and gas industry. There appears however to be some agreement that the State should end the subsidy given to various

industries and they must pay their way for all residents of the State for the privilege of developing our resources."

BUDGET: This year's State budget was about \$700 million. Alaskans were asked if that was too high, too low, or about right - 32% said too high, 24% thought it was about right, and 40% did not know. When asked where the budget should be cut, the largest percentage was social services/welfare (17%), next was duplication/bureaucracy (15%), followed by State payroll (11%). An overwhelming 75% thought alcohol should be taxed high enough to pay for alcoholism services, 58% thought the users of the haul road from Fairbanks to Prudhow should pay the whole cost for its maintenance. To further emphasize the point, 73% said they would not pay a 2¢ per gallon extra gas tax to keep the haul road open to public traffic. In a related question, 49% said they did not think oil lease bonus money paid by the State should be used to pay State employees.

LeResche said, "For two years Governor Hammond has been bringing the message to the people of Alaska that we must start making reductions in the cost of government; we must start ensuring that those who propose new programs provide, at the same time, a means of paying for them. I think the Governor's cost efficiency has been one major effort toward helping to reduce those costs. It appears the message is being understood and accepted by a large number of Alaskans.

CAPITAL MOVE: When asked where the capital should be located, the statewide results indicated 41% picked Juneau. Anchorage was the second choice with 15%, followed by Willow 13%.

Preface

The Division of Policy Development and Planning is required by statute to make an annual report to the Governor of the activities of the Division. In addition, both the House Finance Committee and the Free Conference Committee on the Budget of the 1975 State Legislature requested that the Division report to the Legislature early in the 1976 session on program objectives, activities, and accomplishments of the Division in 1975. We therefore respectfully submit this report on 1975 activities of the Division to the Governor and the Legislature.

Apart from these formal reporting requirements, however, we are pleased to have this opportunity to share widely with others this review of our activities and goals. Although the Division has existed for several years, its scope and purposes were significantly revised during the past year, and in many respects it is a new organization. Because of these changes, which are still underway, this report provides more background information on the general role and directions of the Division than would normally be the case. The report covers the new developments in the Division and its activities during the 1975 calendar year.

THE DIVISION OF POLICY DEVELOPMENT AND PLANNING

OFFICE OF THE GOVERNOR

1975 ANNUAL REPORT

Introduction

At the beginning of 1975, the State of Alaska was in the midst of a series of major developments that were testing the capacities of public and private institutions to cope with the causes and consequences of rapid and unevenly distributed growth -- Prudhoe Bay, the Native land claims settlement, construction of the Alyeska pipeline, the prospect of major State fiscal deficits before North Slope oil would begin to flow, impending Outer Continental Shelf oil and gas leasing program of the Federal Government, and the multiplicity of social, economic, and environmental problems and opportunities associated with these developments. Within the executive branch of State government, the pressures for responses and actions converged on the Office of the Governor. To achieve the necessary degree of consistency in State government planning and policy making, and to mobilize and direct the many departments and agencies of State government toward the immediate and longer term courses of action required, the Governor needed help.

The Division of Policy Development and Planning was thus created to assist the Governor in assessing problems and consequences of the rapid and uneven distribution of growth, identifying alternative State policy responses, ensuring that policy decisions are reflected in State programs, and, as a result, achieving more rational management of change in Alaska. The Division was conceived to help the Governor formulate a strategic perspective on change, to bring greater coherence to State policy-making and action, and to seek an optimum balance and equitable distribution of the costs and benefits of change to the people of Alaska. The Division, in short, exists to help the Governor do his work.

The Division: Purposes, Structure and Functions

Overview

The Division of Policy Development and Planning was established by the Governor early in 1975 as a successor agency, within his immediate office, to the Division of Planning and Research. The new Division was given substantially broadened responsibilities by the Governor for statewide policy analysis, program coordination, and planning in several critical areas of State concern, including land and resources, energy, environment, community development, and economic and population growth guidance. It was charged with the responsibility not only of providing policy advice to the Governor, but also of helping to assure responsiveness of departmental planning and policy making to the Governor's policy positions and directions.

The Division is not a line operating, administrative, or regulatory agency; it has no authority to direct or supercede the decisions and activities of the departments. The Division is strictly a staff arm of the Governor that works with and through the established executive departments and agencies of State government. A similar organization in the legislative branch is the newly reconstituted and expanded Legislative Affairs Agency. The research, technical support, and policy advisory functions performed by the Division for the Governor parallel in many respects similar functions that the Agency performs for the Legislature.

1975 Expansion of the Division

The Division experienced a major expansion of program responsibility and related staff and budget levels during the past year. This expansion was in response to the Governor's charge to the Division, discussed above, assumption of responsibility for two major federally funded programs for coastal management planning and state economic planning, and staff support requirements for the Governor's Alaska Growth Policy Council and Public Forum.

On January 1, 1975, Division staff consisted of seven professional and five technical-secretarial-clerical support personnel for a total staff of twelve. All of these positions were carryovers from the old Division of Planning and Research. Total budgeted funds for fiscal 1975 were \$598,400, of which \$257,400, or 43 percent, was federal money and \$341,000, or 57 percent, was State general fund money.

On December 31, 1975, the Division had 19 professional level positions (only 10 of which were filled due to turnover and new position vacancies), and 6 technical-secretarial-clerical support positions, for a total staff authorization of 25. Total budgeted funds for fiscal 1976 were \$2,767,000, of which \$1,688,400, or 61 percent, was federal money, and \$1,028,600, or 39 percent, was State general fund money.

It should be noted that the great bulk of the federal and State matching funds available under the Coastal Management Program were not expended by the Division, but were passed through to other State agencies and to local governments. Of a total of \$1,285,400 in coastal management and OCS supplemental funds for fiscal 1976, about \$726,000 will be transferred to other State agencies and \$113,000 to local governments. Approximately \$300,000 of the coastal management funds will be contracted for studies by private consultants. Further, about \$322,000 in other federal and state funds are also earmarked for consultant work under other Division programs. Thus, less than half (about \$1.3 million) of the Division's fiscal 1976 budget (\$2.8 million) is retained within the Division.

Thirteen new positions were added to the Division staff in fiscal 1976. Ten of these positions are funded primarily through federal programs:

six through the Coastal Management Program and four through the Economic Development Administration's State economic planning program. Thus, only three of the new positions are supported exclusively by State general funds. One of these positions was designated to provide full-time staff support to the Governor's Growth Policy Council and its Public Forum.

Corresponding to the expansion and new directions, the Division's administrative structure was reorganized as shown on the organizational chart on the next page. The chart shows existing positions in the Division and reflects its major functional responsibilities in the areas of policy analysis and coordination, general and economic planning, Coastal Management Program development, federal-State program coordination, and Growth Policy Council support.

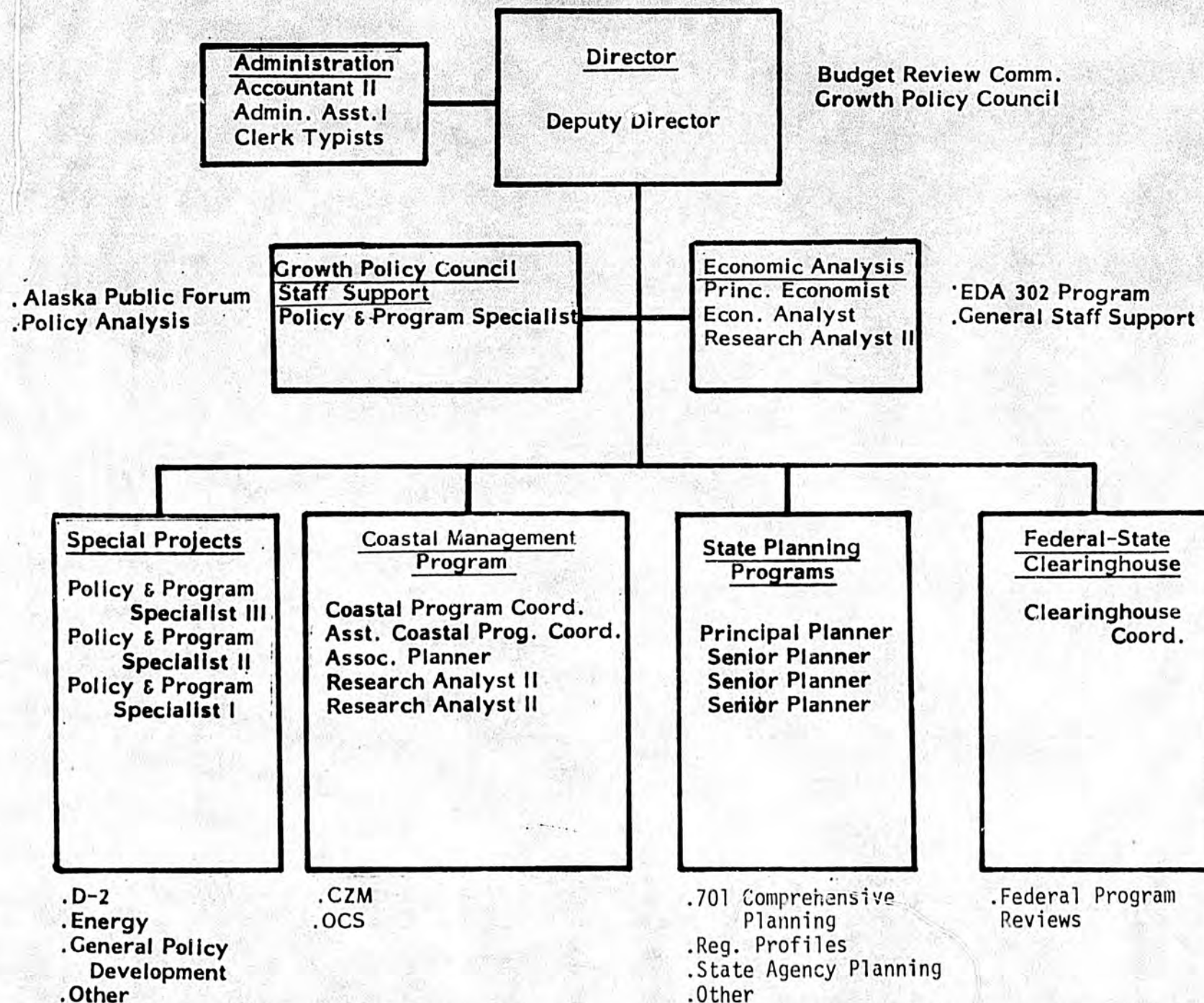
Division Roles and Relationships

The Division's tasks fall into three major areas: policy development, program planning and coordination, and data development and special studies. Objectives, activities, and accomplishments during 1975 in each of these areas are discussed below. In carrying out all of these tasks, Division effectiveness depends on several factors:

- 1) Internal staff capacities -- the number and quality of people who can respond and initiate with respect to a wide range of critical policy issues and program requirements;
- 2) Access to outside resources -- the ability to identify and use the talents of people in State agencies, at the University, in consulting firms, and elsewhere for specialized, ad hoc, and continuing tasks;
- 3) Relationships with State agencies -- the ability to work closely and cooperatively with policy-makers, planners, and analysts throughout the administration;
- 4) "Lead agency" assignments -- specific assignments from the Governor to lead interagency task forces and working groups, and to undertake specific policy studies and reviews of proposals developed elsewhere in the administration;
- 5) Relationship to Governor -- identification with the immediate Office of the Governor, which is probably the major resource and strength of the Division in maintaining its effectiveness in all of its responsibilities and relationships.

In building its staff, the Division is not attempting to duplicate the expertise and skills that exist in the departments; this would be both impractical and undesirable. Rather, it is seeking a core staff and

STATE OF ALASKA
OFFICE OF THE GOVERNOR
DIVISION OF POLICY DEVELOPMENT AND PLANNING
FUNCTIONAL ORGANIZATION



critical mass of generalists and specialists who can work with and draw upon key agency personnel as it identifies and deals with issues that cut across or transcend individual agency jurisdictions and program responsibilities. Further, Division staff depend for additional support on organizations and individuals outside State government, such as the University, and it hopes to develop mutually supportive relationships with research staff of the Legislative Affairs Agency during the coming year.

A very critical element of the Division's method of operations is its regular communications with the Governor. The Division provides reports to the Governor on significant policy developments, "issue alerts," recommendations for decisions and actions, and results of specific policy review and study assignments. These reports are presented to the Governor as part of periodic special briefings and regular meetings to determine the Governor's wishes and needed follow-up activities by the Division.

Policy Development

"Policy development" refers to the Division's role in identifying critical State issues and problems, analyzing alternative policy responses, assessing consequences of the alternatives, and making recommendations for executive decisions, administrative actions, and legislation. In carrying out these tasks, Division staff have worked primarily with interagency task forces and committees, which focus on defined problem areas and issues. Other elements of policy development work have been accomplished through staff support to the Alaska Growth Policy Council.

Task Forces and Committees

Several interdepartmental task forces and committees were established during the year to conduct studies and make recommendations to the Governor on critical resource development, environmental, fiscal, social and economic, and other issues facing the State. The Division had a lead policy role in some cases, and contributed staff support at the working group level in those as well as several others. The following are the task force and committee activities in which the Division participated during the year.

1. (d)(2) Task Force -- This task force was formed early in the year with the Division Director as its chairman. In addition, a working group consisting of selected departmental staff was housed within the Division to provide staff support to the task force. Intensive work by the task force and staff resulted in development of proposed areas and boundaries for national interest land withdrawals in Alaska and of new management concepts concerning an Alaska Land Commission, Alaska Resource Lands, and Cooperative Management Areas. At the end of the year, a comprehensive program of public information and meetings throughout the State on the Governor's preliminary (d)(2) proposal was planned and is being conducted.

2. Coastal Management Policy Committee -- This group, also chaired by the Division Director, consists of several Commissioners who provide administration-wide policy direction for the Alaska Coastal Management Program. Within the Division, the Alaska Coastal Management Program Office serves centralized staff functions (discussed under "Planning and Coordination" below), and several departmental units have specific administrative and operational responsibilities. Under the Division's leadership, the Policy Committee and staff continued planning for Alaska's Coastal Management Program, which will be subject to federal review and approval in 1977, and developed a program proposal for submission to the Legislature during the current session.
3. OCS Task Force -- The Division is represented on this task force, which is chaired by the Commissioner of Natural Resources, and contributes to its staff support. The major effort in which the Division participated was the formulation of State policy on the federal government's proposed Outer Continental Shelf oil and gas leasing program, with the objectives of obtaining a delay in and modifications of the program, and adequate compensation to the State for anticipated impacts.
4. Financial Options Task Force -- The Division provided assistance to this group, chaired by the Commissioner of Revenue, in defining alternatives open to the State in meeting anticipated revenue shortfalls during the next two years, analyzing alternatives, and making recommendations to the Governor.
5. Gasline Task Force -- Through this group, chaired by the Attorney General, the Division has participated at both policy and staff levels in reviews and analyses of federal environmental impact statements, State analysis of effects of alternative gasline routes, and preparation of testimony by State officials before the Federal Power Commission.
6. Devil Canyon Hydroelectric Task Force -- This group, chaired by the Commissioner of Commerce and Economic Development, was formed to develop an initial State position on the Corps of Engineer's proposal for a hydroelectric dam complex on the upper Susitna River. At both policy and staff levels, the Division has participated in evaluating preliminary data provided by the Corps and defining social, economic, and environmental issues that will require further study by the Corps, the State of Alaska, and other affected interests.
7. DOT Task Force -- The Division participated on the task force formed to develop and evaluate alternative proposals for a Department of Transportation.

8. Other Policy Development -- At policy and staff levels, the Division has participated with various informal interdepartmental working groups to develop or review plans and policy proposals for fisheries restoration, energy facilities siting, forest practices, and others. The degree of Division involvement has varied from reviewing departmental proposals, to initiating studies and proposals carried out by others, to taking a lead role in policy formulation on the particular issue.

Alaska Growth Policy Council/Public Forum

Chaired by the Lieutenant Governor, the Alaska Growth Policy Council is a group of citizens appointed by the Governor to conduct studies and public communications programs and to make policy recommendations to the Governor and the Legislature. The Council was established in January 1975 to assist in defining and assessing issues related to energy and other resource development, land and environment, economic and population growth, and other areas of State concern. Policy issues of specific concern have included oil and gas leasing, transportation systems, coastal management, fiscal policies, and community development.

The Alaska Public Forum, an ongoing "process" rather than a body, is the Council's public communications program. The purpose of the Forum program is to widen and deepen public participation in the Council's policy analysis and advisory functions. Although the Public Forum program had not been activated by the end of the year, the Council had investigated means of doing so and plans were being made to initiate the program in early 1976.

The Division of Policy Development and Planning provides staff support to the Growth Policy Council. This is a logical function of the Division, given the close relationship of the Council's policy concerns and the policy development responsibilities of the Division. The Division has assisted the Council in selecting topics for study, planning agendas, arranging for officials and experts to make presentations to the Council, preparing memoranda and reports, answering public inquiries, and similar activities.

Program Planning and Coordination

There is no clear line between the Division's "policy development" tasks and its program planning and coordination functions. The latter require techniques and processes of issue analysis, data collection, assessment of alternatives, etc., inherent in policy development work. However, the program planning and coordination activities described in this section can be distinguished from "policy development" as discussed above in two ways: First, they are organized into continuing program responsibilities of the Division, often with explicit budgetary and other authorizations; second, they often involve the translation and

coordination of higher level policy decisions into more specific program plans and policies at operating levels of State government. This may be seen most clearly in the case of the Alaska Coastal Management Program, whose broad policy development dimension was discussed above in relation to the functions of the Coastal Management Policy Committee.

Coastal Management Program

The Alaska Coastal Management Program (ACMP) Office within the Division of Policy Development and Planning is a centralized staff coordinating unit for the development of a Coastal Management Program. Program development activities, with federal funding on a two-thirds/one-third matching basis, are carried out within several departments of State government. Regular communications are being established with local governments, private organizations, and federal agencies as well. The role of the ACMP Office is to orchestrate these ongoing program development activities into a coherent planning process which will ultimately be approved for implementation funding by the federal government, and will provide a vehicle for bringing federal agency actions affecting Alaska's coast into closer accord with State and local objectives and needs.

Initiation of Program: Alaska began receiving federal funds and technical assistance in July, 1974, for the purpose of developing a program to provide for the wise use and protection of Alaska's coastal resources. These federal funds are available to coastal states for up to three years, under the terms of the Coastal Zone Management Act of 1972. Each state has the flexibility to choose its own approach to management. A state may choose to institute a new and separate management system for the coast, or it may choose to better utilize and coordinate existing resource management programs.

The process of coastal program development began in the Department of Environmental Conservation with emphasis on uses of scientific information for decision-making. This work was to (1) aid the formulation of resource plans within departments, (2) assist permit review processes, (3) provide a basis for decisions on allocation of State resources, and (4) serve as a foundation for resource management policy.

As the work proceeded, it became clear that many additional activities were needed for the program formulation process. Principal among these was the need to identify decision-makers at the local, federal, and State levels; determine how these individuals and agencies work together; and assess authorities available to them in managing coastal resources. With these and similar broad considerations in mind, in February, 1975, the Governor transferred the coastal program development responsibility to the Division.

Activities to Date: The Division is charged with the responsibility to develop policies for coordination and improvement of existing management programs in the coastal area, and for proposing new legislative programs if and when necessary. To date, efforts of the ACMP Office have concentrated on preparing a basis for obtaining the fullest possible participation of State agencies, the Legislature, local governments, federal agencies, and private groups and individuals in the program. Identification of existing Alaska statutes and regulatory authorities relevant to coastal management was completed in December. Assessment of the various ways local governments have chosen to manage their resources through local ordinances and plans is to be completed in 1976. Further, completed and pending studies will point out legal and institutional gaps that will need to be filled by legislation and local action. Information is continuing to be assimilated and interpreted for use in management decision-making. Studies completed to date under contracts (largely to State agencies) include resource and social inventories, impact studies, and facilities inventories.

Staff in the Division and State operating agencies have been exploring the options available through the federal act, and how other states have fared in handling coastal management responsibilities. They have also begun to assess Alaska's coastal problems, such as fisheries depletion, impacts of offshore oil development, and administration of permits. In addition, the relationship between coastal resource decisions and social impacts is being addressed. Finally, to prepare for the development of a state policy approach to coastal management, the Division is exploring the means by which interests outside of State government can be fully informed of issues regarding management of Alaska's coastal resources, and methods for incorporating citizen views. Two films on coastal area problems have been developed as a first stage of this process, and arrangements are now being made for their distribution.

Federal OCS Supplemental Impact Funds: Special note should be made of federal OCS Impact Funds received by the Division in fiscal 1976. The Division received \$225 thousand from the federal government as a supplement to Coastal Management Program development funds, which were matched with \$75 thousand in State funds, for a total of \$300 thousand. These funds are being administered through the Department of Community and Regional Affairs. \$113 thousand is being passed through to local governments in the Gulf of Alaska area to supplement planning and preparation for OCS impacts. \$50 thousand will be used by State agencies for a broad regional planning effort in the Gulf addressing issues of State concern. The rest is used to provide communities with technical assistance from the Department of Community and Regional Affairs and to conduct State agency and consultant studies of OCS impact problems.

State Economic Planning Program

The Division received a \$150,000 federal grant, matched with \$50,000 in State funds, for the fiscal year 1976 from the Economic Development

Administration for the purpose of establishing a state-wide economic planning process. This grant was made under Section 302 of the Public Works and Economic Development Act and is expected to be continued on a trial basis for several more years. The placement of the state-wide economic planning program within the Office of the Governor, Division of Policy Development and Planning, was in accordance with EDA's concept of supporting programs that would have direct influence upon the Governor's policy and budget decisions.

The terms under which the funds were granted are quite flexible, partially reflecting the newness of the program. Each state may build a program that will fit its own needs within a general framework outlined by EDA requirements. That framework provides that the state-wide economic program will be coordinated with other programs, particularly with public works grants and with local planning efforts also funded through EDA. The terms of the grant include the following program criteria:

- 1) The economic planning process will be incorporated into the on-going executive decision-making process.
- 2) The planning process will be conducted cooperatively by the State, by cities and other political sub-divisions, and by economic development organizations, and will contain channels through which private concerns are communicated.
- 3) The economic planning process will be directed toward the reduction of chronic unemployment and the enhancement of low income levels. Problem areas will be identified and a strategy will be developed to help resolve those problems.
- 4) Development of the State economic planning process will include the following tasks:
 - a. Collection of information from other state, sub-state, and local agencies concerning economic development needs, opportunities and goals, and environmental impacts resulting from economic development.
 - b. Analysis of the information to determine gaps and to formulate State economic development policy and goals which incorporate local government and Economic Development District goals and objectives.
 - c. Development and implementation of a planning process to coordinate State agency activities and citizen input with regard to economic development.
 - d. Provision of information to the Governor which will aid and influence policy and budget decisions concerned with economic development.

At the end of the year, Alaska's state-wide economic planning process was in its initial stages. Recruitment of qualified economists to plan and manage the program has been difficult due to their shortage within the State. The Principal Economist who will direct the program was hired at the end of the year, and his first major task was to develop a detailed work program for the coming year.

701 Planning Program

This continuing program responsibility of the Division is funded on a two-thirds federal, one-third State matching basis under Section 701 of the Housing Act of 1954, as amended. In fiscal 1976, the federal Department of Housing and Urban Development contributed \$253,000 to the support of this program, which has consisted of the following elements during the past year:

1. Land Use Planning -- In order to maintain HUD funding for state-wide planning programs, the State is required to develop a land use element for its planning process by August 1977. Toward meeting that deadline, the Division prepared a work program which divides the task into two fiscal years, FY76 and FY77. The scheduled land use program provides for coordination of land planning activities of State, federal and local agencies. An important accomplishment of the 1975 phase of the land use program was a definition of the respective roles of the various State agencies which carry statutory responsibilities for various aspects of land use planning.
2. Housing Study -- The main purposes of the housing study are to define the State's role in housing and to recommend State housing policies and federal and State legislation. Phase I, completed in 1975, was a study of what has happened in the housing field in Alaska since 1971 -- federal and State programs, legislative actions impacting on housing, and accomplishments, in terms of number of housing units constructed. Work also included analysis of the effects of discrimination and of current opportunities and constraints (e.g. new HUD programs, pipeline impact) on providing decent housing for all Alaskans. Phase I work in 1975 has provided the background necessary for formulation of recommended policies and actions, which will be developed in phase II.
3. Sub-state District Study -- This year the Division has been studying the various sub-state districts used by State agencies for data collection, planning, and delivery of services. Multiple systems of districting have created problems in the past with transferability of data and unnecessary overlap in program planning and services. The objective of this study is to determine which, if any, set of districts can satisfy the needs of all or most agencies. The 1980 Census is being planned concurrently, and decisions on the Census district boundaries for the 1980 Census

will be made based on this study. The study group is coordinating its efforts with the legislative task force on administrative districting.

4. State Agency Planning -- One of the statutory responsibilities of the Division is to advise and assist State agencies in their functional or program planning. A great deal of this assistance has been provided as part of the Division's responsibilities for the Coastal Management Program, and through its broader policy development functions in conjunction with interagency groups as described above. In 1975, other assistance was provided primarily in response to specific agency requests. Examples include development of background materials for the Department of Public Safety to help in determining manpower and equipment needs, and program design assistance to the Division of Lands for the Delta Area Planning Team.

State A-95 Clearinghouse

The Alaska State Clearinghouse was formed in 1969 in response to the federal Office of Management and Budget Circular A-95. The circular was written to comply with the Intergovernmental Cooperation Act of 1968, which sets forth national policy on intergovernmental relations. The Act directs the close coordination of federal and federally assisted plans and programs for development of the nation's physical, natural, economic, and human resources with State and local plans and programs. The A-95 review process allows the State and local governments an opportunity to express their views on federal and federally assisted programs. The Act states that "to the maximum extent possible, consistent with national objectives, all Federal aid for development purposes shall be consistent with and further the objectives of State, regional and local planning."

An example of the benefits of the review process occurred recently when the U.S. Forest Service submitted a draft Environmental Impact Statement on a proposed land use plan for the Tongass National Forest. The Departments of Fish and Game, Law, Environmental Conservation, and Community and Regional Affairs strenuously objected to the draft plan. A meeting was called by the Clearinghouse that resulted in the Forest Service agreeing to consider several amendments presented by the State. The final plan has not been completed; however, it is anticipated that most of the State's concerns will be incorporated into the final plan.

An example of what happens when the A-95 process is not used was the Air Force's Blair Lake Bombing Range. The Air Force circumvented requirements to notify this office of their plans. However, we now have signed agreements with the Air Force, the Forest Service, the Coast Guard, and the Federal Aviation Administration. We are currently negotiating with the Bureau of Land Management, the Corps of Engineers, the Army, the Bureau of Indian Affairs, and the Navy. All but the Navy are now complying with Circular A-95.

Currently, over 200 grant-in-aid programs and almost all direct federal development projects require review. The monthly average of projects reviewed by the State clearinghouse has increased from 12 in 1971 to 46 in 1975. The dollar volume of projects reviewed since July 1, 1975 is \$134 million, and the complete fiscal 1976 volume is expected to double that amount. We expect that within the next few years all federal grant-in-aid programs will require State and local review by the A-95 Clearinghouses. During fiscal 1976, it is anticipated that around 275 State, and 225 local grant programs will be reviewed by the Clearinghouse. In addition, around 50 federal projects will be reviewed.

Budget Planning and Coordination

The Division participates directly in administration-wide budget planning and coordination through annual preparation of budget planning assumptions and through membership on the Governor's Budget Review Committee.

Each year, early in the budget planning cycle, the Division both draws on its own resources and canvases State agencies for data and projections on key demographic and economic factors likely to shape the State's fiscal outlook during the next fiscal year. The information and analysis is brought together in a budget planning assumptions document which is then used by State agencies as a common base of reference and guide for departmental budget planning.

The Division Director is a member of the Budget Review Committee. A key objective of his participation on the committee is to assist in translating the Governor's policy positions into budget decisions, and to question budget requests apparently inconsistent with such positions.

Other Planning and Coordination Activities

In addition to activities in the above formally organized program areas, Division staff have assisted in a variety of other planning and coordination efforts based in other organizations both inside and outside State government. Examples include service on (1) an interagency advisory committee for the design phase of the Corps of Engineers' Metropolitan Anchorage Urban Study, (2) a review panel for a federally funded Alaska Native Housing Study, (3) a rural electrification study group, (4) the Rural Alaska Development Council, (5) the Barrow Coordinating Committee, and similar activities.

Data Development and Special Studies

This third major category of Division activities, like the preceding one, is not necessarily independent of the other areas of Division responsibility. Data development and special studies tasks are, of course, often inherent in all policy development and program planning and coordination functions. However, during the past year, important work tasks were completed or initiated which took the form of several distinct projects.

1. Beaufort Environmental Assessment -- A State sale of petroleum leases in the Beaufort Sea became evident as a feasible and relatively immediate source of needed State revenues, and Governor Hammond directed the Division to prepare an analysis of the potential regional and state-wide environmental impacts of Beaufort Sea petroleum development before a leasing decision was made. Work began in January and initially focussed on a determination of the likely scope of development which could be anticipated, as well as an assessment of existing baseline biological and geophysical data for the nearshore Beaufort Sea. After estimates of Beaufort Sea petroleum reserves were prepared by the Divisions of Oil and Gas and Geophysical Survey, several other State agencies were able to estimate the probable long and short range effects of developing the potential field. This work was coordinated by Division staff, who assembled a draft report in mid-March. After an intensive review process which involved several State agencies as well as University of Alaska scientists, the report was submitted to the Governor and released to the public in April.

2. Kachemak Bay Environmental Assessment -- In response to growing public concern over the 1973 lease sale and prospective petroleum development in Kachemak Bay, Governor Hammond directed the Division to prepare an environmental assessment for the Kachemak Bay area. The objective of the report was to analyse a great deal of biological and cultural information on the Kachemak Bay environment in a manner useful for decision making. Research staff in the Division contacted relevant State and local agencies, as well as library and other sources, and produced a draft report in October. The report was reviewed by several State agencies, some revisions made, and it is now being put in final form for distribution to all interested parties.

3. Regional Profiles -- Work continued throughout the year on the six-volume Alaska Regional Profiles; a joint effort of the Division, the Arctic Environmental Information Data Center of the University of Alaska, and the Federal-State Land Use Planning Commission. This Division prepared this year the man-made environmental information for Volumes 3 and 4, covering the Southwestern and Southeastern regions. Printed and distributed during 1975 was Volume 2, Arctic. Volume 3, Southwestern was completed for early 1976 release and major sections of the three remaining volumes were made ready for printing.

4. Special Census -- Due to serious flaws in the 1970 Census and the tremendous growth that has occurred in Alaska since 1970, the State has contracted with the U.S. Bureau of the Census for a special statewide official census conducted in 1976. The special census will aid the State in realistic planning for the future. Many services offered to residents by the State and municipalities are based on needs measured in part by their population and anticipated growth. In addition, Federal grants-in-aid are often allocated on a formula utilizing population. Thus, increased Federal

fund levels are expected to come into Alaska as a result of the special census. This program is a coordinated effort of all State agencies under the leadership of the Division and the Department of Labor.

5. 1980 Census -- Division staff in 1975 began working with other State agencies and local governments to assure that the 1980 census will provide Alaska with accurate information in the most usable forms possible, and meetings have been held with census users and representatives of the Census Bureau to discuss Alaska's concerns. The sub-state districting study is being coordinated with the census planning so that the census districts selected for 1980 will be relevant to the widest possible range of census data users.

6. Community Bibliography -- The Division first published the Bibliography of Community Planning in Alaska Since Statehood in 1973. This year a supplement covering related documents published between 1973 and 1975 was printed. The updating of this research tool is being done continually, and another supplement is expected to be printed in 1977.

7. Tourism Study -- During 1975, at the request of the 1974 Legislature, the Division prepared a report entitled Tourism in the Bush. The study examined social, economic, and environmental costs and benefits of tourism in rural areas of the State.

1976 Directions

The past year has been one of planning and building the Division into an effective staff arm of the Governor. It began with the Governor's original concept of what the Division should be, and his charge that it should expand and strengthen its capacity for policy development and planning in several critical areas of State concern. This process of developing the Division was reinforced and accelerated by legislative action to increase Division staff and budget. Also, it has continued with the recruitment of high quality staff and the further clarification and refinement of Division directions. These efforts must continue into 1976. The Division will thus strive to build its staff capacity to that provided by the Legislature and thereby strengthen its ability to respond to the Governor's and the State's needs.

The organizational model toward which the Division has been working during the past year and expects to realize more completely and effectively during the next may be summarized as follows: The Division assists in the identification of critical issues, development of policy alternatives, assessment of consequences, and consistent follow-through in decision and action. It does not have direct administrative, regulatory, or operational responsibilities. Rather, it concentrates on assisting the Governor to establish the broader policy directions and organizational framework for such activities. Its director and staff work with other members of the administration as representatives of the Governor in attempting to realize more consistent policy and action across the administration.

STATE
of ALASKA

MEMORANDUM

TO: State Investment Advisory
Committee
House Special Committee on
Permanent Fund

DATE : March 8, 1977

FROM: Robert E. LeResche 
Director
Policy Development and
Planning
Office of the Governor

SUBJECT: Attached "Thought
Paper" on Permanent
Fund Investments

There has been much discussion regarding the relationships between goals for the Permanent Fund and the types of investments the Fund eventually makes. I asked Tom Singer, a talented temporary employee of this Division, to consider these relationships conceptually and practically during his tenure here and as a special project during this past semester at the Stanford Graduate School of Business.

I think you will find the attached draft result, "Structuring Decisions for the Alaska Permanent Fund: A Conceptual approach to the Allocation of a Public Capital Resource" of interest. In it, Mr. Singer explores practical ways in which individual investment proposals can be measured against stated fund objectives, considering non-market, or "social", benefits and costs as well as market factors.

Upon final publication of the report, I will be sure to make "clean copies" available to you.

REL/bll

Attachment

STRUCTURING DECISIONS FOR
THE ALASKA PERMANENT FUND:

A CONCEPTUAL APPROACH TO THE
ALLOCATION OF A PUBLIC
CAPITAL RESOURCE

THE ALASKA PERMANENT FUND

1. Background

The idea of a permanent fund is based on two related concepts:

- 1) that natural resources (primarily oil and gas) are a non-renewable resource and that a portion of the wealth they represent to the people of Alaska should be saved for future generations, and
- 2) that, given the likelihood of rapid development of these resources and the accumulation of dollars by the State, this money should be kept out of the State's operating budget; * retained as an asset, and put to some long-term beneficial use.

These concepts, and the creation of a permanent fund, create a profound public policy problem: How can a public capital asset, estimated to reach \$2.5 billion by 1985, be allocated to achieve the competing and sometimes conflicting goals which are valued by Alaskans?

A partial answer to this question is presently unfolding through the activities of the State Investment Advisory Committee, ~~which~~ charged ~~by~~ ~~the State~~ to explore alternative uses and management structures for the permanent fund. This group has focused attention on development banks as the most promising type of organization to manage a capital asset to achieve both economic and social goals. Two major questions raised by a development bank are: 1) how public policies concerning the uses of the

* This sentiment is the result of the shock felt by many Alaskans over how quickly the \$900 million from the Prudhoe Bay oil lease sales was spent by government. Little rational discussion has occurred concerning what this money was spent on, i.e., the extent to which it has financed government services desired by the voters.

permanent fund will be formulated, and 2) how these policies can be implemented by the managers of a development bank. Concern has been expressed by many interested Alaskans about the need to combine public control over the fund with sound business-like management practices. The first part of this report is a brief discussion of the public choice process necessary for the rational, systematic allocation of a public capital resource. The second part borrows from the theories of public sector economics, and focuses on the conceptual difficulties faced by the fund's managers in choosing among competing projects according to their non-financial as well as their financial returns (that is, how their economic, social, environmental, and distribution impacts can be considered in addition to the financial yield). The final part of the report offers some guidelines concerning how elected officials can retain control over the actual allocation decisions.

2. A Word on Objectives

The establishment of the permanent fund creates a difficult problem concerning the allocation of public resources. In the United States, public funds are usually allocated through the budgetary process, a political process theoretically designed as a mechanism for the expression of voter preferences through their elected representatives (public sector "market" demand). Removing from the budgetary process some of the money the State receives through the sale of public natural resources creates a vacuum for allocation. Who is to decide how and where the money should be spent? At some point, objectives must be established and weighted to guide the allocation of the fund. This will occur either through the political process, or by fiat by those who finally control the fund.

Indeed, because we are allocating public wealth, the traditional private criterion of profitability (and the means for measuring it) should be just one input to the loan proposal evaluation calculus. An argument can be made that projects which pass the market test should be turned out into the market, and the permanent fund should be used only for those projects whose spillovers are valued by society but not by the market.

One of the justifications offered for a development bank is the existence of a medium and long term "capital shortage" in Alaska. What does capital shortage really mean? The capital markets respond to investment opportunities according to both financial yield and risk class. Thus many borrowers willing to pay the going rate or even a premium may still find capital unavailable because lenders can find less risky investments elsewhere. This appears to be the case in Alaska. If the private market found investment opportunities acceptable in Alaska, the money would be there (for example, the Trans-Alaska pipeline).

What does this mean for the permanent fund? By making capital available to projects which cannot find financing in the private market, the State will in essence be assuming risks unacceptable to the private market. This is clearly a justifiable use for public money; since the fund is a public capital resource, it can respond to a "social" market demand rather than private market demand. Thus spillovers from investments to Alaska may be worth the higher risk levels assumed. This brings us back to the problem of public sector capital allocation and the need for the active participation of the legislature. ~~_____~~

~~_____~~ Thus, if the Bank operates like a strict private market bank, it will be subsidizing private market developments by whatever risk premium would ultimately be required to attract

private capital. On the other hand, if the bank operates to implement various State policies determined by the legislature, it will be seeking to offset that subsidy by gaining market and non-market, social returns on fund investments. Thus there is a need for legislative objectives, measures for objective achievement, and project analysis to identify both positive and negative spillovers.

There are a number of ways in which the values and desires of the citizens of Alaska can be translated into objectives and criteria for the use of the fund. Although this is a difficult, even painful, process of conflict to concensus, we are, after all, speaking about a major determinant of the future of Alaska. A unique public hearings program, the Alaska Public Forum, is currently under way and will hopefully produce information useful to elected officials about how Alaskans feel toward the rate and kind of growth they desire for Alaska. The legislature has considerable control over the allocation of the fund through its power to specify the types of income producing investments which are eligible for loans. After the determination of objectives has been accomplished (an on-going process), the legislature will be able to specify the types of investments it feels will serve best to achieve these objectives. Oversight of the Fund management to insure implementation of the Legislature's goals might best be achieved through the creation of a new legislative committee on the Permanent Fund. The Governor will presumably exercise some control and balance if he is given power over the appointment of the Board of Directors or the management.

Thus we have reason to hope that our elected officials will be able to formulate and implement specific policies concerning the objectives they, as representatives of the public, hope to achieve with the permanent fund.

Indeed, a statement of objectives must be forthcoming before the management of the fund begins operation to serve as a guide for those operations. Otherwise, the legislature may be faced with a powerful entrepreneurial institution deluging them with investment schemes, without any objective-based criteria for choosing among them. The problem of establishing uniform evaluation criteria based on multiple objectives is the focus of the remainder of this report. It is up to elected officials and the public to provide goals and objectives. The analyst can merely point the way to translating these objectives into criteria designed to identify and implement an optimal investment policy for the permanent fund.

3. Analysis

Some sort of analysis will be required to judge the degree to which loan proposals contribute to the achievement of the goals for the permanent fund. In this sense, analysis denotes a systematic evaluation of the attributes of proposed uses of the fund to facilitate comparison and selection among them. As we have seen above, there are a wide variety of factors which the development bank should be required to identify and consider beyond private financial considerations.

A common and widespread technique for evaluating project proposals in the public sector is cost/benefit analysis. This is a simple analytic technique in concept: the analyst (or loan officer) adds up all of the benefits a project is expected to produce, and adds up all of the costs required to produce the benefits. He then discounts these costs and benefits to their present value, and those projects with the greatest net benefit are chosen until resources are exhausted (see Analysis for Public Decisions

by E.S. Quade; Cost Benefit Analysis by E.J. Mishan; and "Benefit-Cost Analysis: A Criterion for Social Investment" by R.C. Lind, in Water Resources Management and Public Policy, ed. by T.H. Campbell).

However, cost/benefit analysis is not so simple in practice. The choice of the discount rate and the measurement of non-market costs and benefits are well known problems. Also, the choice of which spillovers are analyzed can create controversy. In Alaska, spillovers such as environmental impacts, immigration, long-term boom-bust cycles, the distribution of in-state vs. out-of-state ownership, and the distribution of project costs and benefits are extremely important. Returning to the problem of measurement, how are these spillovers to be valued to permit the comparison of alternatives? These problems are explored below.

a. The Discount Rate

The problem of choosing the proper discount rate has received a great deal of attention among economists and can only be outlined here. It is a problem because different discount rates can result in very different present values, and thus discount rates have been widely used to manipulate the results of analysis. In essence, the social discount rate should reflect two components, the social opportunity cost of capital and the social rate of time preference. The former is determined by what the same resources could earn in their next best investment, while the latter is determined by how much today's generation values tomorrow's consumption. The former is usually higher than the latter. The discount rate can have a major impact on project evaluation depending on the expected life of a project and the timing of the costs and benefits. The higher the discount rate, the less value is placed on future costs or benefits. The choice of a discount rate

is a fairly technical question and guidance is readily available in the economics and public policy literature. Let it suffice to say that: 1) the legislature may want to consider the implications of using a low discount rate to reflect concern for future generations; and 2) the development bank should be monitored for consistency in its application of the chosen rate or rates.

b. Uncertainty

In attempting to assess the impacts of future activities, analysis is necessarily fraught with uncertainty. Much of the data produced by analysts will simply be estimates or reasoned guesses as to the likelihood of future events. It is crucial that uncertainty in the analysis performed by the bank be made as explicit as possible so as not to misrepresent the information. One way to convey uncertainty is to provide a range of estimates rather than a single value. Single values often possess an aura of accuracy and precision even when it is clear that they are estimates. Thus it has become common practice to provide ranges of estimates such as high/medium/low or optimistic/status quo/pessimistic. Although more numbers or words are often more confusing, this practice flags the uncertainty surrounding estimation and reminds decision-makers that they are considering expert opinion and not hard facts. Explicit treatment of assumptions and uncertainty help the decision maker to utilize analysis as a decision tool and not as a source of easy answers.

Another way of uncovering uncertainty is through sensitivity analysis. This is the process of repeating an analysis with slight modifications in one or more of the factors under analysis. If the results vary significantly with only minor changes in a factor, the analysis is said to be

highly sensitive with respect to that factor. The decision maker should be aware of all uncertainty, but particularly in important factors which might warrant further study to achieve a reduction in uncertainty.

c. Measurement

Measurement and valuation is an enormous and continuing problem which has received ample attention in the economics and public policy literature. How does one measure or value the desire for solitude, the pleasure of catching a salmon, life styles, etc.? Yet aren't many people Alaskans simply because they could not "purchase" such things elsewhere? Measurement and valuation of non-market factors and spillovers may indeed be the greatest challenge in the allocation of the permanent fund, because without the means for measurement and comparison, it is all too easy to rely solely on dollars in analysis. If the permanent fund will be used to satisfy non-market (public goods) demand as well as market demand, systematic measurement and comparison of spillovers will be required to identify the real social return from fund investments. This will also be needed if project selection criteria are to be based on both financial and non-financial costs and benefits. Particularly in Alaska, where non-market goods and services are so important, the difficulty of this task should not deter those responsible from attacking it.

By measurement, economists mean the estimation of values for costs and benefits, and, in the ideal, with those values expressed in a single unit of measurement (dollars). The problem of measurement arises because many factors of interest to public sector analysts, such as the four listed above, are non-market factors; they have not received dollar values in the marketplace. Even dollars are sometimes criticized as units of measure

because in imperfect markets they do not represent true social costs and benefits.

The development of measures of value for non-market factors cannot be addressed in the abstract because of the lack of any theoretical framework to structure our thoughts about values. Markets and prices are so central to our economic system that non-market, non-price valuations are usually passed over as individual value-judgments with no overall societal validity. Thus, the usual approach has been to attack this problem on a situational basis and rely on creative innovation to solve the measurement problem (such as the various techniques for demand estimation).

The first step must be a statement of goals and objectives to provide some direction, or value, to measurement itself. Measurement is a relative concept, and here we seek to measure project impacts in terms of their contribution to or detracting from goals and objectives. Thus analysis is geared to the measurement and evaluation of both direct and indirect factors expected to result from projects as they relate to goals and objectives.

A well known example of the measurement problem involves a nail factory in the Soviet Union. Because profitability (i.e., markets and prices) is not the measure of achievement in that society, other measures had to be devised. First, the total weight of output was selected, but had to be abandoned when only huge railroad spikes were produced. Then the total number of nails was tried, but this resulted in the over-production of tacks and staples. Many such examples exist, and demonstrate that measures must be rationally tied to clearly stated goals.

An often mentioned goal for the Permanent Fund is the "Alaskanization" and diversification of the Alaskan economy. A possible measure is the dollars of assets owned by Alaska residents in a specified set

of enterprises. But such a measure does only a partial job, for it ignores the distribution both of ownership among Alaskans and of assets among the enterprises, and does not place a value on degrees of achievement. A more complex measure is required which 1) specifies a minimum acceptable distribution of assets and owners among enterprises, and 2) assigns greater weight to both different asset levels and to assets in more highly valued enterprises. Thus more complex and specific goals will require more complex and specific measures (as opposed to a lower unemployment rate as a measure of the goal reduced unemployment). Other goals, such as freedom to choose from a variety of lifestyles, present considerable difficulties for the design of adequate measures of achievement. What are the parameters (social indicators) which constitute a lifestyle, and how can we measure or estimate the impact of projects on them?

That task is difficult, but by no means hopeless. Indeed, the frontiers of many academic disciplines such as economics, anthropology, sociology, and ecology are in this very area. In economics, several techniques have evolved for estimating the value of spillovers. One method relies on the analyst's judgment based on expertise and experience. Another is called contingency calculations and identifies relative values by comparison with the opportunity costs of foregone alternatives (is this worth as much as ...?). A third technique is to ask people through surveys and questionnaires how much non-market factors are worth to them, and many pitfalls with this method have been overcome through ingenuity. A final technique, called "throwing up our hands," relies on physical description and explanation and leaves valuation to the decision-maker.

In policy analysis, a revolutionary contribution has been the rejection of the need to reduce everything to dollars (measurement without

valuation). The scorecard technique (discussed below) has been hailed as a method which permits decision makers to confront their values directly rather than have the analyst hide value judgments behind tortuous economic estimation techniques and a veil of dollars. Thus impact assessment can proceed through the measurement of physical impacts or through qualitative descriptions of impacts without forcing the analyst to place dollar values on them. This, in turn, does force the final decision makers to place values on them, for the approval or disapproval of his electorate or constituency.

The managers of the fund will undoubtedly explore these frontiers and identify useful measurement techniques to meet their analytic needs. They may even have to invent some of their own. It is premature to explore these techniques in great detail until we know what needs to be measured, and that depends on the objectives for the fund. Let it suffice that measures, if not comparative values, have been and can be devised for almost any public policy objective. The measures may never be as precise an indication of relative value as the dollar, but, as Robert Dorfman says, "At the very least, such a process enables attention to be focused on the question of whether the unmeasurable benefits are deemed impressive enough to justify sustaining the measurable costs that they entail."

4. The Search for Relevant Information

According to Governor Hammond:

What most Alaskans ask for is: Freedom to choose a life-style designed to one's own blueprint: a natural environment that facilitates this life-style and inspires rather than immerses one's sense of life and spirit. Yet also, most want an economic environment which is rewarding but under the control of the people it most affects ...

This balancing of environmental, social, and economic goals can only be achieved through careful, thorough analysis in which all relevant questions are asked. The purpose of analysis is to develop information, not just data. In order to be relevant, analytic techniques must focus on the important direct and indirect effects of each project as they relate to the objectives of the fund.

It would be premature at this point to present in great detail the specific analytic techniques available for evaluating competing uses of the Permanent Fund.* Appropriate techniques depend on the management structure, the uses contemplated, and the resources available for analysis. They also are conditioned on the goals specified by the legislature, i.e., what to look at depends on what your goals are. This section introduces a number of issues and analytic techniques which the managers of the fund may want to consider when they eventually address this task. The following list can also serve as a preliminary outline of questions to which Alaskans should demand answers regarding the impact of the uses of the Permanent Fund on the future of Alaska. The list is not exhaustive, and overlap will be evident.

Financial Analysis

Internal Rate of Return¹
Net Present Value¹
Total Dollars Required for Investment
Credit Worthiness of Applicant
Time Frame and Cash Flow of Project

Business Analysis

Risk: Financial Strength of Applicant
Market Situation of Project Output

*A number of useful techniques are cited in the bibliography.

*type footnotes on
same page as
number. (see following
pages).*

Environmental Analysis (continued)

- Impact on Endangered or Indicator Species
- Impact on Areas of Critical Concern
- Impact on Species Populations
- Compliance with State and Local Regulations

Socio-Cultural Analysis

- Impact on Lifestyles¹¹
- Subsistence¹¹
- Pressures Toward Urbanization
- Cross-Cultural Effects¹²
- Population Distribution Changes
- Immigration¹³
- Impact on Local Self-Determination

Infrastructure Analysis (Schools, Hospitals, Police, Fire, etc.)

- Impact on Demand for Public Services
- Cost (and Burden of Cost) of Incremental Public Services Required
- Demands on Existing Communications System
- Demands on Existing Transportation System
- Demands on Existing Energy Distribution System

Technical Analysis

- Technological Risks
- Engineering Analysis
- Technological Development Geared to Alaska

Business Analysis (continued)

Marketing²

Management Capability

Management Motivation³

Accounting System

Availability of Infrastructure and Human Resources

Economic Analysis

Long-Term Commitments of Resources/Long-Term Flexibility

Contribution to Gross State Product

Balance of Payments⁴

Employment Effects: Total Number of Jobs

Number of Jobs Filled by Alaskan Labor Force

Duration of Jobs

Labor Mix⁵

Alaskan Ownership⁶

Diversification⁷

Inflation Effects⁸

Income Distribution Effects

Project Benefit Distribution⁹

Direct Contribution of Project (Wages, Taxes)

Impact of Competition in In-State Markets

Impact on Savings

Recreation and Leisure: Supply

Demand

Environmental Analysis

Effluents and Residuals Modeling¹⁰

FOOTNOTES

¹ These are measures of the return on investment after discounting, and provide an estimate of the ultimate profitability of a project.

² Marketing includes analysis of the demand for the loan project output (both in-state and export markets), the timing of that output, and the way in which the output is offered to the public.

³ The intentions of the loan applicant regarding both Alaska and the goals specified for the Permanent Fund should be a matter of concern to the Fund's managers.

⁴ Balance of payments refers to the impact of projects on the types and amounts of goods and services imported and exported by Alaskans. This trade framework extends into impacts on ownership, competition, and employment and has implications for Alaskan control and self-sufficiency in its economy. Project analysis should look at both comparative advantage and import substitution depending on the goals specified for the Fund. Analysts should also pay careful attention to the extent to which benefits from export industries (employment income, profits, multiplier effects) remain in Alaska, and to the impact of these industries on the non-export sectors of the economy.

⁵ Labor mix refers to both the number of white and blue collar jobs created and to the various types of skills required for the project.

⁶ Increased Alaskan ownership and control of business operating in the State has been frequently mentioned by elected officials as an important goal for State economic policy.

⁷ Diversification addresses the problem of both boom and bust and seasonal cycles which have plagued the Alaskan economy. Analysis is required to determine the extent to which proposed projects will broaden the economic base of the State and therefore stabilize the economy by insulating it from seasonal and external market fluctuations.

⁸ Analysis of the timing, coordination, and design of projects can help prevent unwanted inflationary effects caused by tight labor markets, bottle-necks in supply, or other factors. Indexing is useful here.

⁹ A critical and often overlooked area in project analysis is the distribution of project costs and benefits. The target group for benefits should be analyzed and specified, as well as groups who will pay any external costs. This must be done for both direct costs and benefits and for spillovers. In specifying objectives, the legislature may want to address the question of distribution (between demographic groups, sectors of the economy, geographical regions) and place more weight on some groups than others. This would enable the loan officer to take the distributional implications of alternative proposals into account and weight those projects with a more highly valued distribution of costs and benefits. The legislature may also want to address equity questions and investigate schemes whereby those who gain from funded projects are forced to compensate those who lose.

¹⁰ Modeling techniques have been developed to estimate the quantities of both air and water pollutants produced by various industrial processes. Estimates of these "pollution loadings" can then be translated into actual impacts on the ambient environment.

¹¹ Recognizing that the Permanent Fund will be a major tool of State economic policy, the central question of growth and lifestyles may well become critical to the managers of the Fund. Analytic techniques utilizing "social indicators" will need to be identified or developed to measure the impact of proposed projects on life-styles and communities. The difficulty of this task should not be allowed to undermine its importance.

¹² Cross-cultural effects refers to the impacts from sudden contact between different cultures which could result from a project located in the bush.

¹³ Accelerated immigration is often perceived as one of the greatest negative benefits of development in Alaska. Estimates of the impact of projects on immigration, linked to employment and labor mix, may prove to be a major decision factor for loan requests.

¹⁴ Impact on local self-determination refers to the extent to which proposed projects conform to the local land use and development plans and community goals in the project area.

5. Project Screening

Analysis is not free. A thorough project analysis in each of the areas discussed above could cost millions of dollars. Therefore it may be wise for the legislature or the bank management to develop some sort of screening process, similar to the maximization, constraint technique discussed below. This could involve a two stage project analysis system.

As a first step, each loan applicant would be required to evaluate his project against a preliminary checklist of minimum or maximum standards. This checklist could be developed by the Bank or the legislature to incorporate maximum or minimum acceptable impacts or levels of contribution toward goals. This process assumes that there ~~does~~ exist limits to certain tradeoffs or impacts of concern to the legislature. Such a screening process would ease the analytic burden of the Bank, and force loan applicants to bear the cost of project impact assessment. Loans or grants for feasibility and impact studies could be made available to needy applicants. If a loan proposal passes this screening process, it could then be subjected to the more rigorous types of analysis discussed above. Such in-depth analysis would focus on the dominant attributes of the proposal, defined by comparing the attributes of the proposal against the objectives of the fund. This system would remove all clearly unacceptable proposals from further consideration, and would free the Bank's staff to pursue the more promising proposals in detail.

6. Information Transfer

Sometimes too much information can be as unproductive for decision makers as not enough information. At higher levels of management and

government, top decision makers deliberating many issues need only information critical to their decisions. For decisions concerning alternative project proposals, such information includes only data revealing the significant differences among projects. Presented below is a matrix of the various analyses discussed above. This type of matrix is well adapted to the scorecard technique and can be used to convey only the critical information required by final decision makers.

All of the information presented in the matrix will not be in the same units of measurement. Indeed, much of the information may be qualitative and verbal. Thus one of the analysts' tasks will be to translate the various units of impact measurement into terms understandable to decision makers (such as the deposition of so many tons of suspended solids results in so much reduction in salmon spawning sites or the construction of a project may result in so much secondary economic activity). This will enable the decision makers to compare impacts directly against the various objectives for the fund, and to make the necessary tradeoffs according to the legislative guidelines or his own values (more on this below).

It is unlikely that this sort of project analysis will result in projects which are clearly objectively (i.e., net present dollar value) superior to competing projects. Although this may be a cause of concern for some, in the author's opinion herein lies the value of this decision-making process. Project selection will ultimately reflect a value judgment, for neither preference revelation nor information will ever be perfect or objective. The process outlined in this report recognizes that there is great latitude in the public sector for considering values, both market and non-market. It thus seeks to:

- (1) recognize the strengths and weaknesses of analysis and the need for ^{public} ~~public~~ participation;
- (2) identify the sorts of information which will be relevant in the allocation of the permanent fund; and
- (3) insure that the information is presented to decision makers with a minimum of distortion so that decisions (tradeoffs among goals) can be held accountable to the owners of the fund, the Alaskan people.

7. Tradeoffs Among Objectives

Even after direct and indirect project costs and benefits have been identified, a problem still remains for the project (loan) analyst who must choose among projects with different degrees of contribution towards the various goals. Indeed, all of the goals of the fund may not be equally desirable. Should the legislature or the executive leave the decision concerning tradeoffs to the analyst? Or is there a means by which elected officials can transmit their preferences among goals to the analyst along with goals themselves? Presented below are three promising theoretical approaches to the problem.

a. Scorecard Technique

This technique can be just part of the following methods, or it can stand alone. Essentially, the scorecard technique involves the presentation of all data by the analyst in their natural units instead of converting them into one measure (such as dollars).*

*An example is provided in Appendix 1.

					Financial Analysis			Business Analysis					Economic Analysis							Environmental Analysis					Socio-Cultural Analysis						Infrastructure Analysis					Technical Analysis																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
					Internal ROR or Net Present Value	Total Dollars Invested	Other	Risk	Marketing	Timing	Management Capability	Accounting and Credit Worth	Other	Contrib. to Gross State Product	Jobs Created	Alaskan Ownership	Diversification	Inflation	Labor Mix, New Skills	Direct Contrib.= Wages, Taxes	Savings	Recreation and Leisure	Other	Effluents and Residuals	Endangered or Indicator Species	Areas of Critical Concern	Change in Species Populations	Compliance with State and Federal Regulations	Other	Impacts on Life Styles	Impact on Subsistence	Urbanization Pressures	Changes in Population Location	Immigration	Cross-Cultural Effects	Other	Demand for Public Services	Cost of Public Services Demanded	Impact on Communication System	Impact on Transportation System	Other	Technological Risks	Soundness of Engineering	Other																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
Project A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

transmission of the maximum amount of information to participants in decision making. By leaving the data in natural units (such as numbers of jobs, numbers of eagles, dollars of income, or pounds of sulfur dioxide); the tradeoffs made by the decision-maker can be readily perceived by all. For example, if two potential projects produce the following hypothetical benefits, it will be clear from the analyst's choice what his values are.

<u>PROJECT A</u>	<u>PROJECT B</u>
100,000 Acres of Wilderness	\$20,000,000 income to Individuals
50 Brown Bear Dens	200 Permanent Jobs
1,000,000 Visitor Days/Year	700,000 KW/hrs. electricity/year

If the benefit figures simply appeared in aggregate dollar figures, the true tradeoffs would be much more difficult to uncover (and the estimates a great deal more tenuous). Regardless of which, if any, of the other techniques are adopted, the scorecard technique for data collection and presentation should be used. Although the analyst initially makes the tradeoff, subsequent decision makers will be able to understand exactly what the tradeoff was.

b. Maximize One Goal, Set the Rest as Constraints

This technique arises from the structure of many programming techniques, such as linear and goal programming. Instead of trying to make difficult tradeoffs, the decision maker with this method simply chooses one goal (the over-riding one if one exists) to maximize and sets minimum acceptable levels for all the others to serve as constraints. These minimum levels could be designed as minimum annual goal achievement levels required of the Bank's project mix.

For example, assume the legislature chooses economic diversification and "Alaskanization" as the over-riding goal, and a measure of achievement, dollars of assets owned by Alaska residents in a specified set of enterprises, is designed. Assume the legislature also chooses job creation, recreation and tourism enhancement, wildlife rehabilitation, and industrial expansion as the other goals. Measures for each of these other goals must be designed, and then minimum acceptable levels of each must be established for achievement by the management for a given period of time. By setting these constraints, the legislature will have insured at least minimum acceptable tradeoffs or levels of achievement among goals and given the managers a more structured, constrained, and operational task. Unlike the pure scorecard technique, with this method the decision about tradeoffs among goals is not left entirely to the analyst.

c. Explicit Weighting or Ranking of Goals

The final technique offers the greatest control, and the greatest challenge to elected officials. It is based on the desire for values to determine choice, rather than for choice to determine values. If one agrees that the legislature can best represent the values of Alaskans, then perhaps the legislature should specify not only the types of investments which will contribute towards goals, but also the allocation of the fund among investments. Indeed, it would be far better for the legislature to identify explicitly the values which determine tradeoffs among goals, than to leave such value judgments to the managers of the fund. Consider the following simple hypothetical example:

An analyst is faced with choosing between two competing loan requests producing the following benefits:

PROJECT A

\$10,000 Revenue to Construction
Workers
Capacity for 51 Additional
Salmon Boats

PROJECT B

\$12,000 Revenue to Construction
Workers
Capacity for 50 Additional
Salmon Boats*

If the analyst chooses Project B, he is implicitly determining that one additional salmon boat is worth less than \$2,000. Thus the choice has determined value. On the other hand, if the legislature had stated that the survival and stability of the salmon industry is an important goal for the fund (and said nothing about income to construction workers), the analyst would have been constrained to choose Project A (assuming that one additional boat contributed to that goal). However, weighting is not quite that simple. Is a small increment in stability of the salmon industry worth a large foregone amount of income to the construction workers? Some limits and perhaps actual weights must be specified, to guide with the relative magnitude of the tradeoffs. Thus the legislature must consider all of their goals in relation to each other, and determine how much gains in each one are worth in losses to all of the others. This task could be accomplished by a task force or committee which could develop a goal weighting scheme for consideration by the legislature.

One way to establish the preferences or weighting by decision makers among competing goals or investments is to review past allocation decisions as a guide to future allocation. This method is usually rejected because preferences change and because the range of past decisions is usually inconsistent or contradictory. Another method involves the use of gaming or

*This example assumes that the social value of an additional salmon boat is not merely the present value of the dollar value of the expected catch over the boat's useful life.

simulation techniques, whereby the legislature engages in a "trial run" allocation. The spectrum of choices (and a range of quality and quantity for each choice) within eligible investment categories are enumerated, and each legislator is given a fixed number of points or dollars to allocate among them. This technique is valuable because it forces each legislator to consider the whole range of choices within a fixed resource constraint, and to reveal his preferences among the choices. More of some means less of others although with \$3 billion to allocate there should be more than less! This is indeed the very process that unfolds through the budgetary process. The creation of such a "trial run" in a gaming situation would permit a systematic consideration of tradeoffs by each decision maker, and could result in an overall identification of tradeoff weights for the entire legislature.

A detailed plan for the implementation of goal ranking or weighting must await the identification of objectives by the legislature. This section is merely intended to point out that such procedure is possible and perhaps desirable. If goals are specified and measures for them designed, the legislature can rank or weight them to guide the tradeoffs required in making choices among competing project proposals. Tradeoffs will thus reflect the values of the legislature, not the project analyst.

These three approaches to tradeoffs require varying commitments of resources. Unfortunately, greater control can only be obtained through greater effort. The scorecard approach is the easiest to implement, but its usefulness depends upon the active oversight of loan decisions by legislators to insure that the Bank is making acceptable tradeoffs. The

maximization, constraint method is useful if one overriding goal is determined, and if minimum acceptable levels of other goals can be established. If this is possible, more automatic legislative control of tradeoffs is possible. The most difficult and time-consuming technique is the weighting of goals, yet this technique also offers the greatest flexibility and control. Weights provide the fund's managers with specific legislative guidelines to tradeoffs among all of the goals for the fund and they can be adjusted over time. Unfortunately, for legislators, safety often lies in ambiguity. To "fight it out" to identify tradeoffs acceptable to the entire legislature is much more difficult and revealing than the preparation of a simple list of eligible investments.

Regardless of which method is actually implemented, it is important to recognize that someone is going to have to make tradeoffs among goals. Each project which is chosen will contribute toward different goals, and to different degrees, than the rejected alternatives. It is up to the legislature and the Governor as to what extent they want to leave these choices to the managers of the fund. The above techniques offer ways to help elected officials either make the choices themselves, or constrain those to whom authority has been delegated.

8. Conclusion

It is useful, and often essential, to place public policy problems in some sort of theoretical framework to provide a structure for thinking about them. This report has attempted to utilize theories from public sector economics in order to formulate an approach to what to do with the permanent fund.

As we have seen, the first necessary step is the revelation of voter preferences through a variety of mechanisms such as the legislature, the governor, and the Public Forum. The need for this should be clear: the citizens of Alaska own the permanent fund, and in the United States we rely on the political process as the surest way for citizens to exercise control and accountability over the allocation of government resources. Once voter preferences have been clarified, the legislature and the Governor can refine them into goals and objectives to serve as investment policy for the fund. In turn, measures of effectiveness in achieving the goals and objectives must be identified or invented to serve as criteria for selection among alternative uses of the fund.

7 Once the goals and objectives for the fund have been identified, the role of the analyst begins. Competing uses of the fund will contribute to different degrees to the different goals, and will result in various indirect costs and benefits which in the public sector not only can be but must be considered. Thus, the task of the analyst is to identify both the market and non-market attributes (costs and benefits) of the alternatives and present this information in a manner useful to both decision makers and the interested public. Finally, the report introduced three techniques for insuring that elected officials retain control over the tradeoffs among goals, and recommended that some effort be expended towards the most powerful technique, the systematic weighting of goals.

In sum, the report has sought to clarify and partially illustrate the opportunity presented to the state of Alaska to identify, and then seek, a publically defined social return on its investment of the permanent fund.

APPENDIX 1

EXAMPLE OF SCORECARD

TABLE 4.1.
Impact Summary for the 1977 Reference Cases^a

Item	Case					
	Nominal	A	B	C	D	E
Strategy components						
Fixed source	Nominal	Nominal	Maximal	Medium	Maximal	Medium
Retrofit ^b	D ^c	R	L	M	L	M
Mileage surcharge, ¢/mi	0	0	0	0	0	0
Bus-eligible population, % ^d	70	70	70	70	80	80
Bus headways, peak/off-peak, min	40/40	40/40	20/40	20/40	20/40	20/40
Bus fare, ¢/trip	25	Free	Free	Free	Free	Free
Environmental Impacts						
Worst-day oxidant concentration, ppm	0.13‡	0.08*	0.08*	0.08*	0.08*	0.08*
Number of days oxidant above standard	15‡	1*	1*	1*	1*	1*
Lead standard achieved?	No‡	Yes	Yes	Yes	Yes	Yes
Annual gasoline consumption, million gal	615	618	609	607	604	603
Annual diesel-fuel consumption, million gal	2.4	2.4	3.4	3.4	4.8	4.8
Transportation-Service Impacts						
LDMV mileage reduction, % of uncontrolled	0.0	2.9	4.3	4.3	5.0	5.0
Trips forgone, % of uncontrolled	0.1*	1.0‡	0.9§	0.9§	0.9§	0.9§
Trips by bus, % of all trips	1.1	1.4	2.6	2.6	3.1	3.1
Carpooling, % of home-work trips	5	5	5	5	5	5
Economic Impacts						
Annual strategy expenditures, \$ millions						
Fixed source control	2.8	2.8	5.1	3.2	5.1	3.2
Retrofit	7.7	67.6	51.5	55.2	51.3	55.0
Mileage surcharge	0	0	0	0	0	0
Bus	10.0	10.0	15.0	15.0	23.0	23.0
Net expenditures after transfers, \$ millions ^e	20.5*	80.4§	71.6‡	73.4‡	79.4§	81.2‡
Unallocated income from surcharge, \$ millions	0	0	0	0	0	0
Incremental recurring employment	77‡	815§	1011‡	1018‡	1536*	1543*
Incremental nonrecurring employment	212*	2071‡	1144*	1483§	1144*	1483§
Number of buses	175*	175*	348	348§	490‡	490‡
Distributional Impacts						
General aviation annual cost, \$/aircraft	0*	0*	500‡	0*	500‡	0*
Retrofit procurement cost per household, % of income ^f						
Under \$5000						
User-pays financing	0.8*	8.9‡	5.4‡	6.5§	5.4‡	6.5§
Income-proportional financing	0.2	2.6	1.6	1.9	1.6	1.9
Over \$15,000						
User-pays financing	0.1	1.2	0.8	0.9	0.8	0.9
Income-proportional financing	0.2	2.6	1.6	1.9	1.2	1.9

^a Coding: * = best; ‡ = next best; † = worst; and § = next worst.

^b See Appendix D for detailed composition.

^c Strategy currently mandated by CARR.

^d As percent of total county population.

^e Surcharge income used to offset bus subsidy to whatever extent possible.

^f Percent of average annual income for income group; retrofit procurement expenditure made in a single year.

SELECTED BIBLIOGRAPHY

Goals and Objectives:

The Navaho Nation: Overall Economic Development Program; Office of Program Development, the Navajo Tribe, Window Rock, Arizona, July 1974.

"Capital Budgeting at ERDA," unpublished paper by App Wiltsee, Stanford Graduate School of Business.

Program Budgeting: Program Analysis and the Federal Budget; by David Novick, Cambridge, Massachusetts, Harvard University Press, 1965.

Analysis:

The Budget's New Clothes: A Critique of Planning-Programming-Budgeting and Benefit Cost Analysis, by Leonard Merewitz and Stephen Susnick, Markham Publishing Co., Chicago, 1972.

"Secondary Effects and Project Appraisal," by Marcel Masse, Economics Department, Working Paper No. 58, International Bank for Reconstruction and Development, January 19, 1970.

Environmental, Health, and Human Ecologic Considerations in Economic Development Projects, World Bank, May 1974.

An Environmental Assessment of Project Independence, Federal Energy Administration, Washington, D.C.

Economic Analysis of Projects [Distribution and Equity], by Lyn Squire and Herman Vandertak, Johns Hopkins University Press, Baltimore, 1975.

The Economics of Natural Environments, by A.C. Fisher and J.V. Krutilla, Johns Hopkins University Press, Baltimore, 1975.

Social Cost-Benefit Analysis, World Bank Staff Working Paper No. 239, August, 1976.

"Ten Practical Principles for Policy and Program Analysis," Unpublished paper by Professor Alain Enthoven, Stanford Graduate School of Business.

Goal Weighting:

"A Consumer Preference Approach to the Planning of Rural Primary Health Care Facilities," by Barnett Parker and V. Srinivasan, Operations Research, Vol. 24, No. 5, September/October, 1976.

"Project Design and Evaluation with Multiple Objectives," by A. Myrick Freeman, III, in Public Expenditures and Policy Analysis, by R. Haveman and J. Margolis (eds.), Markham Publishing Company, Chicago, 1970.