

ALASKA LEGISLATURE COMMITTEE FILES 1991-1992 8672
7303 HOUSE STATE AFFAIRS

Although SB 5 passed the legislature, it was vetoed by the Governor who failed to understand the issues.

Once again, the pioneers are supporting the enactment of the annuity program which the voters overwhelmingly approved in 1986.

Senate Bill 8 is an updated version of the legislation which the Senate passed in 1988. This legislation represents years of work by many Alaskans. Its enactment will reduce call on the state treasury and is necessary to save the program. However, more critical than even the economics of the proposal is the fact that the annuity proposal ensures that the state will continue to provide a program for pioneer Alaskans.

Since 1984, there have been several actuaries who have worked on the annuity proposal to ensure the actuarial soundness of the legislation and its tax status: Aetna Life, Kidder Peabody Corporation, Benefits Concepts, Morrison and Forrester (Tax attorneys), New York Life Insurance Company, Metropolitan Life Insurance Company, to name a few.

The projections for Senate Bill 8 are based on information from the Department of Labor, the

Department of Administration, and the Permanent Fund Corporation. On the advice of the Department of Administration, we have assumed an interest rate of 7% for the annuity program which is conservative; the state's deferred compensation program earned 9.25% interest in the last quarter.

Under the provisions of Senate Bill 8, Alaska's seniors who are currently receiving the longevity bonus and those who turn 65 between now and January 1, 1994 will qualify for the current longevity bonus program and they will also receive the full permanent fund dividend. These individuals would not participate in the annuity program.

Individuals who turn 65 after January 1, 1994 would participate in a program consisting of a declining longevity bonus payment, and an option to participate in the annuity program; the combination would equal \$250 per month.

To participate in the annuity program, an individual must contribute all or a portion of their permanent fund dividend into an annuity account. Those who choose to contribute 100 percent of their permanent fund dividends (or the cash equivalent) into the annuity

program, will receive a combined longevity bonus payment and annuity payment totalling at least \$250 per month;

Individuals who are 50 or younger at the time of the legislation's effective date may receive over \$250 per month.

However, if an individual never contributes his permanent fund dividend into the annuity program, the amount of his bonus will keep decreasing until he will receive a \$3 bonus in 2007 plus his permanent fund dividend; In 2008, his longevity bonus would be zero (based on certain assumptions)

There are three provisions of Senate Bill 8 which are worth noting and which contribute to the flexibility of the annuity program:

1) Section 4 provides for an eligible individual to make cash contributions to his annuity account but the total amount of any annuity credit plus a cash contribution may not exceed the permanent fund dividend for that year. The individual must also make the contribution within a certain time frame;

2) Section 7 provides for the designation of beneficiaries to an annuity account. should an individual die before reaching age 65.

3) Section 8 provides for a one-time only emergency withdrawal from an individual's annuity account to meet an "unforeseeable emergency." The Commissioner of Administration will define this term in regulation. The language in this section of the bill is similar to the state's deferred compensation statutes. For the deferred compensation program, the IRS has provided a skeletal statement as to what is allowable as an unforeseen catastrophic emergency.

An individual may pay back the money into the annuity with interest.

Alaska's seniors have accepted the need for a change to the present longevity bonus program; however, they have spoken overwhelmingly in opposition to any needs-based proposal.

It is unacceptable to force our senior citizens to live in poverty after they have given their energy, their youth, and their good will to build our state; their efforts have made our own lives better. The Alaskan senior is

justifiably a proud individual and should not be put through the degradation of a welfare program in their later years when their presence is so necessary to the well-being of future generations.

I believe that enacting the annuity program is the best way to ensure that Alaska seniors can continue to rely on a monthly check of at least \$250. The annuity will enable us to legally secure the Alaska longevity bonus program at a relatively low cost to the state. By the year 2010, it is estimated that the State will save \$533.7 million if Senate Bill 8 passes.

Alaska State Legislature

Sen. Jay Kerttula, Co-Chairman

Sen. Pat Pourchot, Co-Chairman

Sen. Al Adams

Sen. Jim Duncan

Sen. Lyman F. Hoffman

Sen. Dick Shultz

Sen. Rick Uehling

Senate Finance Committee

SECTIONAL ANALYSIS

State Capitol
Juneau, AK 99801-1182
(907) 465-1200
(907) 463-3066 Fax

Box 1009
Palmer, AK 99645
(907) 376-2675
(907) 376-0325 Fax

CS SENATE BILL 8(State Affairs) am

Sec. 1 Amends Ch. 99 SLA 85 which has never taken effect to provide that a person 65 years of age on or before January 1, 1994 will receive a longevity bonus of \$250 per month. Ch. 99 SLA 85 set this date at January 1, 1988.

Sec. 2 Amends Ch. 99 SLA 85 to include cash contributions permitted under section 4 of this bill.

Sec. 3. Provides for the investment of funds in the annuity investment fund and adds a reference to the annuity reserve account established in section 6 of this bill.

Sec. 4. Adds a new provision allowing certain individuals to make cash contributions to annuity accounts if they do not elect to receive permanent fund dividends as annuity credits. Sets up the annual window of time during which such a cash contribution may be made.

Sec. 5 Amends Ch. 99 SLA 85. Conforming language to allow for cash contributions.

Sec.6. Amends Ch. 99 SLA 85 to require that annuities be paid from the annuity reserve account.

Sec. 7 Amends Ch. 99 SLA 85 65. Sets up beneficiary succession for death benefits.

Sec. 8. Permits a one-time emergency withdrawal to meet an unforeseeable emergency, as defined in regulation.

Sec. 9. Amends Ch. 99 SLA 85 by adding a description of "maximum possible straight life annuity" to to be used for determining the amount of the monthly longevity bonus. A person who is 65 on or before January 1, 1994 is entitled to the full longevity bonus payment without reduction.

Sec. 10. Repeals the stairstepping provision in Ch. 99 SLA 85.

Sec. 11. The annuity credit selection applies only to permanent fund dividends beginning after December 31, 1992

Sec. 12. The bill has an immediate effective date.

Alaska State Legislature

Legislative Research Agency



130 Seward Street, Suite 218
Juneau, Alaska 99801-2196

Phone: (907) 465-3991
Fax: (907) 463-3351

March 6, 1992

MEMORANDUM

TO: House State Affairs Committee Members

FROM: Paula d. Scavera *PAS*
Legislative Analyst

RE: Alternatives for Funding the Longevity Bonus by Daniel Carpenter

Attached are materials which Daniel Carpenter did for the State Special Committee on Alaska Longevity Bonus in 1984 and 1985. Some materials are dated due to changes in the tax laws.

I hope this material is useful.

Attachments



benefit concepts

101 Park Avenue
28th Floor
New York, N.Y. 10178

(212) 557-6500

M E M O R A N D U M

TO: ALASKAN LONGEVITY BONUS PROGRAM COMMITTEE

FROM: DANIEL E. CARPENTER, J.D., BENEFIT CONCEPTS, INC.
OTTO LOWE, LLB, KIDDER, PEABODY & COMPANY, INC.

IN RE: ALTERNATIVES FOR THE FUNDING OF THE LONGEVITY BONUS

DATE: SEPTEMBER, 1984

The purpose of this memorandum is to outline a proposed course of investigation for the Committee in regard to the Longevity Bonus Program and to suggest that Benefit Concepts, Inc. be retained to conduct the study.

Now that the Supreme Court has ruled that the Longevity Bonus will be available to all Alaskans who apply, who are over age 65, with one year's residence, and assuming that the State wishes to continue the program to aid its elderly, we have formed a 3 point program that will help to fund the Longevity Bonus and permit its funding long into the future, even after the oil revenues decline substantially.

PART I of the program involves putting together a consortium of insurance companies that will allow funds invested by the State to fund the Longevity Bonus to earn high interest rates for a long period of time. The interest rate earned will be higher than Bank CDs (Certificates of Deposit) or government securities, and will be guaranteed for a longer period of time. The principal will be just as secure as a Bank CD or government backed securities as we will institute rigid financial standards that will allow only the most financially sound companies to become part of this group. Such criteria would include: being over seven billion dollars in assets, policyholder surpluses of over one hundred million dollars, unassigned surplus of over one hundred million dollars, New York licensed (due to strict financial reporting and guaranteed reserve requirements) Class XV and A+ rating in BEST'S REVIEW, and a company diverse in its assets and earning enough on its investments so as to guarantee its promised rate of return.



PART II of our program will allow Alaskan residents to voluntarily defer their Permanent Fund dividend check to retirement to allow them to receive substantial income then, rather than giving up 20-30% of the dividend and future interest to Federal Taxation. This is an excellent deal for the Alaskan citizen, but the State of Alaska will also benefit from keeping 2-3% on the rate of return that it receives versus what it credits to the individual. This will help the State to defray any expenses that it might have in managing the program. For instance, if Alaska could earn 13% on its money and credited only 11% to the individual deferring, there would certainly be no complaints since few, if any investors, could earn 11% on their money after tax - especially on a small amount of money that was deferred from taxes. Though this is a small difference for the individual, this 2-3% difference will amount to a tremendous reserve for the State which can help in funding this program as well as others.

PART III of this program is perhaps the most visionary, but is certainly the most complex of the three parts. This part calls for funding a specially designed life insurance product that will act as a cost recovery vehicle allowing for the total recovery of funds paid out to participants under the Longevity Bonus Program as well as for the costs of funding.

Put as simply as possible, Alaskans applying for the Longevity Bonus will apply simultaneously for a unique type of investment policy that will have the State of Alaska be the owner and beneficiary. There will be no medicals or questionnaires required. It will be the same process used now for applying for the Bonus. However, now when people die, not only will payment of the Bonus cease but the State will receive an amount of money actuarially calculated to equal the sum of the LONGEVITY BONUS paid plus all premiums paid for the cost recovery vehicle and a small amount of interest for the cost of money. The State will not be making a "profit" here, but it will be replenishing funds far into the future on an ongoing basis, without having to rely on the General Fund, the Permanent Fund, or oil revenues. Even with an escalating retired population, the fund should be able to replenish itself after the first generation (10-12 years based on mortality).



benefit concepts

Of course, there are many technical problems to be worked out such as what to do with people who leave Alaska for Florida when they are 68 or locating people who are in nursing homes, etc. These problems and others will all be accounted for in the actuarial design of the product which will have little or no commission or expense loading, and will be geared to produce a high rate of return on death no matter when the individual dies (obviously an earlier death will create a greater return). Also, we envision that this product will be placed with many companies, and it will be necessary that we have full control in the design of the product and its application as it is sure to entail a lot of actuarial work and commitments on the part of the insurance company; work and commitments that they will not provide unless they know that they are speaking with the "decision maker". Obviously, an insurance product on people Age 65 and older will mean that the insurance company will surely pay the claim. This program can only be made to work with careful actuarial, legal, and investment planning.

The inevitable gain and cost recovery of this program is assured in the fact that legally Alaska, as an entity, is "eternal" whereas all people are mortal - so eventually there will be a gain and return of capital. It is this gain that will provide the funds for the future and continue the cycle.



COMMENTS ON PARTS I, II, & III

If funding of the LONGEVITY BONUS continues as is done presently from the General Fund and there is no concern given for replacing these funds, then it is easy to see that eventually the funds will expire or the benefit will cease.

Our proposal's PARTS I, II, & III, contemplate avoiding that result with loans to be made from the PERMANENT FUND which will be paid back at specific times in the future with little or no interest but with full principal. It is this initial loan which allows the Longevity Bonus Program to become self sufficient, but the entire loan amount will be paid back. For example, of the \$300,000,000 that is currently due to the PERMANENT FUND from the GENERAL FUND, a small portion of this account, just the interest on the money, could make the LONGEVITY BONUS self-perpetuating.

Assuming 16,000 participants with no growth receiving \$3,000 with no additional amounts and assuming a cost recovery program of \$2,000 a year and assuming death in 10 years for all participants (mortality Age 75-76) the program would have the following results:

| | |
|--------------------------------------|----------------------|
| LONGEVITY BONUS PAID | \$480,000,000 |
| FUNDING COST RECOVERY | <u>\$320,000,000</u> |
| TOTAL EXPENDITURE | \$800,000,000 |
| | |
| TOTAL RECOVERY UPON DEATH | \$1,366,048,000 |
| OUTSTANDING LOAN FROM PERMANENT FUND | \$300,000,000 |



benefit concepts

ALLOCATION OF RECOVERED FUNDS

| | |
|--|-----------------------------------|
| NEW BENEFITS TO BE PAID | \$480,000,000 |
| NEW COST RECOVERY PLAN | \$320,000,000 |
| PAID BACK TO PERMANENT FUND | \$300,000,000 |
| NEW FUNDS AVAILABLE (CAPITAL CREATED) TO PROVIDE HIGHER BENEFITS TO MORE PEOPLE AS WELL AS COST RECOVERY | \$566,000,000 |

Obviously, we can assume higher numbers as the amount of people covered and the amount paid out increases, but the general principal remains unchanged. Due to the fact that we all must die some day, Alaska can creatively arrange its oil bounty in such a way that all Alaskans will help in a small and painless way to help insure this endowment into the future so that Alaska's wealth can be shared for many generations and not just a few. All that is required is a complex arrangement of interest rates and actuarial guarantees that our firm can help the State of Alaska negotiate.



benefit concepts

OUR REQUIREMENTS

In order to properly conduct the studies and to make the arrangements necessary for the creation of this program, we will need the following:

1. A retainer fee of \$15,000 to offset our charges for time and expenses. We bill on a time and charges basis of \$150 per hour for principal consultants' time and \$50 per hour for staff time, plus all necessary charges such as travel, etc.

As an estimate, though not binding, we would foresee the following expenses:

| | |
|---|--------------|
| Actuarial Studies | \$15,000 |
| Legal | 5,000 |
| Accounting | 1,500 |
| Insurance Company Studies | 5,000 |
| Insurance Company Contact and Negotiation | 7,500 |
| General Consulting Work | 10,000 |
| Travel and Miscellaneous Expenses | <u>5,000</u> |

Estimated Total \$49,000

2. In addition to the above for the arrangements under PARTS I and II, for keeping the consortium of insurance carriers together and updating their information and performance, securing their guarantees, and general administrative and managerial services, we will charge a fee of 30 basis points annually that will be paid by the insurance carriers selected to belong. The State of Alaska will not need to pay this fee.
3. Under PART III, and in addition to the amounts above, we will negotiate with the carriers selected for the new cost recovery product a service fee of 5% of premium paid the first year and 2% of premiums paid for the design work done initially and the service work that will be done in the future, as well as giving us a royalty on the use of this product by other individuals, firms, or insurance companies.



4. Due to the speculative nature of this product and its complexity, we would need to have the State of Alaska's full blessing to negotiate this program on its behalf with the various insurance carriers. This is necessary because no major insurance company is going to commit the time, personnel, money, and effort that is necessary to develop this product without some guarantees that their services will not be plagiarized or stolen and that they will receive at least a portion of the business to be placed. If we are to design the product, design the specifications, and the work, then we must handle the negotiations with the carriers as well. In this regard we are similar to the architects on a building project. Once we are selected as the ones to do the project, we should also handle and supervise the negotiations with the subcontractors such as plumbers or electricians. The consultant has the same responsibilities and obligations to the client as the architect and needs to have the same control and flexibility. Of course, the State has the final say, but we should handle all negotiations, company contact, and bidding.



benefit concepts

INFORMATION ABOUT BENEFIT CONCEPTS, INC.

Benefit Concepts, Inc. is a nationally based firm that specializes in the design, installation, and administration of all types of Benefit Plans for large companies throughout America.

Benefit Concepts has 26 offices across the country and was founded over 20 years ago. In 1983, the New York office merged with the firm of Lambert M. Huppeler and Company, a large and well known actuarial firm, which enhanced the firm's ability to service any type of benefit plan large or small. Benefit Concepts, Inc. of New York numbers 137 in staff and has substantial in-house computer resources.

BCI is now in its second year working on a joint venture with Kidder, Peabody & Company, Inc. to provide high quality services to their clients.



benefit concepts

Daniel E. Carpenter, J.D., is a principal of Benefit Concepts, Inc. in New York City, a nationally based consulting firm specializing in the design, installation, and administration of all types of benefit plans. As a tax attorney, Dan is a member of the New York, Connecticut, and American Bar Association's Section on Taxation and a charter member of the ESOP Association of America. As a consultant, he has worked with numerous closely-held and public companies in designing innovative benefit plans to reduce a company's benefit costs and corporate taxes while increasing the overall benefits for employees. He has also worked with several insurance companies and financial institutions as a consultant in the development of new products that are designed to be responsive to the current investment and tax climate as they relate to benefit plans. He has also worked extensively with Oberholtzer Computer Engineering, a California based firm, which creates specially designed computer programs for executive benefit programs. He is currently licensed with many different insurance companies and has won several industry awards. He is currently licensed with the NASD/SEC Equities Licensing. Dan is an author and frequent lecturer at various seminars across the country.



benefit concepts

STUDY OF FUNDING ALTERNATIVES
FOR THE
ALASKA LONGEVITY BONUS

Nov 9, 1984

Presented By:

Otto Lowe
Kidder, Peabody & Co.

Daniel E. Carpenter, J.D.
Benefit Concepts, Inc.



TABLE OF CONTENTS

I. Abstract.....

II. Introduction.....

III. The Reasons for Utilizing an Insurance Consortium.....

IV. The Neutralization of Market Devaluation Cause by Short Term Market Swings.....

V. Ways of Utilizing the Permanent Fund Dividend to Help Fund the Longevity Bonus...

VI. A Special Cost Recovery Program for Funding the Longevity Bonus.....



INTRODUCTION

This study is being undertaken with the knowledge that the Federal Government is benefiting more from Alaska's Longevity Bonus (ALB) and Permanent Fund Dividend (PFD) Programs than any Alaskan or the State as a whole. In distributing \$48,000,000 through the ALB and another \$200,000,000 through the PFD, the State of Alaska has transferred over \$50,000,000 from its coffers to the United States Treasury in an attempt to benefit the residents of the State of Alaska (assuming a 20% marginal tax bracket). This tremendous drain of Alaskan wealth comes in the wake of declining oil revenues and the prospect that some day the oil reserves will be fully depleted.

Had this same \$250,000,000 been spent on building projects or not spent at all, but saved, the people as represented by the State of Alaska would have been able to increase their consolidated wealth by the \$50,000,000 that has been sent to Washington in the form of individual tax payments.



The second part of the program entails a deferral of the Permanent Fund dividend check on an annual voluntary basis to provide for an increased Longevity Bonus at retirement.

The third part of the program is to provide the State with a method of cost recovery that will allow the Longevity Bonus to be paid to Alaskans for generations into the future even in the event of a decline in oil revenues. This cost recovery program utilizes a specially designed insurance policy that will allow that State of Alaska to recover upon the death of each Longevity Bonus recipient an amount of money equal to the premiums paid, as well as the total amount of Longevity Bonus paid to the recipient.



THE REASONS FOR UTILIZING
AN INSURANCE CONSORTIUM

In our attempt to find a higher rate of return without compromising investment security, we recommend utilizing a consortium of insurance companies which will be able to provide a higher rate of return than money market funds and government securities without jeopardizing the funds.

Normally, insurance companies will be able to credit up to 200 basis points more than short term government securities. In order to protect the State of Alaska's investment, we recommend that the state only invest funds within the guidelines that we have structured:

1. The company must be an admitted carrier (licensed to do business in New York). In the absence of Federal Insurance Regulations, it is important to realize that New York has the strictest financial reporting and compliance procedures. It also has a guarantee on New York



benefit concepts

licensed companies, that if one company has a problem meeting its requirements, all of the New York Licensed companies will come in to subsidize those requirements.

2. The company must have an A+ rating (not just A) and be in Financial Category XV in Best's Review (Standard and Poor's of the Insurance Industry).

3. The company must have \$1,000,000,000 (One Billion Dollars) in admitted assets.

4. The companies will be reviewed frequently to monitor any changes in financial strength or investment policies.

We have compiled a list of the companies that meet our criteria, and we have contacted most of these companies to see what interest rates and what amounts of money the insurance companies would be willing to accept from the State of Alaska. This list is found on the following page.



benefit concepts

LIFE INSURANCE COMPANIES
LICENSED IN NEW YORK STATE*

| Rank | Company | Assets in 1983 | Rating** |
|------|-----------------------|-------------------|----------|
| 1 | Prudential | 72,248,810,458 | A+ |
| 2 | Metropolitan Life | 60,598,562,458 | A+ |
| 3 | Equitable Life, NY | 43,305,559,346 | A+ |
| 4 | Aetna Life | 31,414,087,598 | A+ |
| 5 | New York Life | 24,228,095,122 | A+ |
| 6 | John Hancock | 23,458,537,093 | A+ |
| 7 | Travelers Ins. | 20,741,506,782 | A+ |
| 8 | Connecticut General | 17,425,832,921 | A+ |
| 9 | Teachers Ins & Ann. | 16,143,856,345 | A+ |
| 10 | Northwestern Mutual | 14,480,689,175 | A+ |
| 11 | Mass. Mutual Life | 12,172,745,351 | A+ |
| 12 | Bankers Life Co. | 11,358,455,911 | A+ |
| 13 | Mutual of New York | 9,284,181,519 | A+ |
| 14 | New England Life | 8,487,637,844 | A+ |
| 15 | Mutual Benefit | 7,898,157,388 | A+ |
| 16 | Connecticut Mutual | 6,753,954,380 | A+ |
| 17 | Continental Assurance | 4,077,317,201 | A+ |
| 18 | Penn Mutual Life | 3,960,275,302 | A+ |
| 19 | Nationwide Life | 3,938,288,809 | A+ |
| 20 | Phoenix Mutual | 3,808,291,405 | A+ |
| 21 | State Mutual Life | 2,921,537,485 | A+ |
| 22 | National Life, VT | 2,792,598,575 | A+ |
| 23 | Union Mutual Life | 2,737,203,070 | A+ |
| 24 | Guardian Life | 2,524,209,228 | A+ |
| 25 | Home Life, NY | 2,228,200,247 | A+ |
| 26 | Provident Mutual | 2,204,791,729 | A+ |
| 27 | Allstate Life | 1,761,633,904 | A+ |
| 28 | Union Central | 1,605,785,732 | A+ |
| 29 | Hartford Life | 1,293,868,550 | A+ |
| 30 | Equitable Life, Iowa | 1,288,472,882 | A+ |
| 31 | Executive Life, NY | 1,187,273,871 | A+ |

*Directory of Insurance Companies Licensed in New York State,
January 1, 1983

**Best's Insurance Reports Life-Heath, 1984



benefit concepts

Many companies would not be willing to take more than several million dollars from a single source. Many of the companies have set limits of 5 million dollars. Only the largest companies such as Metropolitan and Prudential feel comfortable taking in 30-40 million for a GIC (Guaranteed Investment Contract). One company, New York Life, will probably go up to 100 million dollars. But there are two factors that affect an insurance company's willingness to take large sums of money. One is the timing of the transaction, since the company might have already received large sums of money for investment and is no longer hungry for funds. The other factor is the investment earnings of the company and its ability or willingness to give a certain guaranteed interest rate. For both of these reasons, it is crucial to have an independent firm monitor these insurance companies and to continually negotiate better investment deals for the State of Alaska based on the change of interest rates and the company's mood.



THE NEUTRALIZATION OF MARKET DEVALUATION
CAUSED BY SHORT TERM MARKET SWINGS

There are only two types of products that can neutralize market risk or sharp swings in interest rates. One is a short term money market fund comprised of government securities or short term commercial instruments. The other is the type of insurance products that we have developed where the principal and interest are guaranteed. Market value risk is caused by investing in long term fixed income instruments at a certain rate and then having the value of principal decline as interest rates increase. The classic example of this is a bond where the principal value or the market value of the bond is directly affected by swings in interest rates. Stocks and other equity investments are also greatly dependent on market conditions. Commodities such as gold, for example, are probably the riskiest in terms of market swing. To prevent this reduction in principal, investors often choose to insulate themselves by investing only in short term commitments such as money market



benefit concepts

instruments. The cost of this decision is as much as 200 basis points. For instance, during this past week, October 29 - November 2, 1984, money market funds were at 10.6% and Prudential's Guaranteed Investment Contract (GIC) rate was 12.8%. The only exception to this historical relationship between money market and longer term investments such as GIC's was during the Carter Administration when short term rates exceeded long term rates.

Thus, if the State of Alaska continues a policy of short term investment, it will forsake the higher rates of return that can be derived from long term instruments. Yet, the nature of most long term investments is such that an expected swing in interest rates can cause a severe reduction in principal.

It is for these reasons that a specially designed insurance product can act as a perfect vehicle to allow the State of Alaska to enjoy a higher rate of return while not compromising market value security. The insurance company can credit to the



benefit concepts

policy the rate of interest that it is earning based on its long term investments (mortgages, bond, etc.). Due to its financial strength and diversity of investments, the insurance company can insulate its policy holders from market value adjustments that occur on most equity and bond instruments. The insurance company can guarantee principal and interest at rates higher than money market funds.

The advantage of the product that we have designed over traditional insurance company instruments is that the product will be able to follow an upswing in interest rates as a variable interest rate policy, but it will have as a base guarantee the portfolio rate of the company (normally 12%) which is based on the company's overall investment experience.

Also, the advantage of a life insurance policy over a GIC account is that the mortality factor of the policy, which has an initial cost, will eventually create a profit in excess of the GIC rate. Thus,



benefit concepts

when mortality returns are taken into account, it is probable that our insurance policy will have a higher rate of return than an annuity with the same company, all other factors being equal.



benefit concepts

WAYS OF UTILIZING
THE PERMANENT FUND
DIVIDEND TO HELP
FUND THE LONGEVITY BONUS



benefit concepts

HOW A VOLUNTARY DEFERRAL OF THE
PERMANENT FUND DIVIDEND (PFD)
CAN HELP TO FUND THE
ALASKAN LONGEVITY BONUS (ALB)

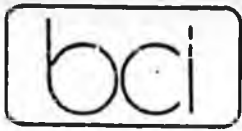
In the past there has been considerable resistance to having the PFD used to subsidize the ALB in any way, whether it be on a mandatory or voluntary basis. The reasons for this being politically unfeasible or unpopular is clear:

1. The people who really need the PFD and the ALB are the poor and less well-to-do people. They, of course, would not opt for any type of deferral program.
2. Those who are in a higher tax bracket but younger, will not opt to defer if they feel that they might lose their money by leaving Alaska or dying before Age 65. They will choose to take the money now and wait to see about receiving the ALB in the future, if the program is still viable.



benefit concepts

However, an exciting alternative can be developed that will achieve several goals. Our plan would allow everyone to voluntarily defer and to have their money accumulate at 7% tax free and to be paid out in the form of an additional annuity at Age 65 if they remain in Alaska. If they should decide to leave they can apply for their money in a lump sum, but this amount will be the amount of money deferred plus 5% compound interest. The money that they deferred, of course, would be earning a much higher rate of interest under our program, e.g. 12-13%. This excess investment amount would be enough in many cases to help fund the Longevity Bonus for someone who was not as well off and could not afford to defer. Yet, the ability to defer money and earn a substantial rate of return offers an exciting rate of return opportunity for someone even in a low tax bracket. As long as the individual makes his decision prior to receipt of the money and remains an unsecured creditor of the State of Alaska, he should not be taxed on his deferral. The ability to defer money and earn even a 5% tax free rate of return will be



benefit concepts

an inducement to the high bracket tax payer. More importantly, however, the difference in the interest spread will help substantially to defray the costs of the ALB for those who cannot afford to defer. Under this program, no one will be deprived of their PFD deferrals, but the interest-spread on the deferrals will help the State to fund the Longevity Bonus into the future.



benefit concepts

PERMANENT FUND DIVIDEND OPTIONAL
DEFERRAL (BASED ON 12% RATE OF RETURN)

INDIVIDUAL AGE 40
25 YEAR DEFERRAL
\$400 PFD

| <u>Deferror</u> | | <u>Subsidizes Non Deferror</u> |
|---|-----------------|---|
| \$400 at 7% 25 years | Deferred Amount | \$400 at 5% 25 years |
| \$27,000 | Lump Sum | \$20,000 |
| Produces Annuity \$3780 + \$3000 (ALB) | Annuity | Produces Annuity of \$2800 a year for life Almost equal to ALB of \$3,000 |
| <hr/> | | <hr/> |
| \$6,780 | Total ALB | \$3000 |

This illustration does not take into account early deaths.



benefit concepts

ELIMINATING THE PERMANENT FUND
DIVIDEND FOR THOSE RECEIVING THE
LONGEVITY BONUS

The major problems with a PFD deferral annuity supplementing or replacing the Longevity Bonus program are:

1. The poor and needy cannot be expected to defer.
2. Those uncertain that they will stay in the State will take the money and chance losing the ALB.

However, in order to save money, the State can begin by not paying the PFD to those who receive the Longevity Bonus. This is not as great a hardship as it might seem however since the program can be changed from a taxable entitlement to a loan program. This will save everyone substantial dollars. Even a low bracket tax payer will end up in as good or better a position.

Expected: $(400 + 3000) \times .80 = \2720 After Tax*

Proposed: $3000 \times 1.00 = \$3000$ After Tax**

* Assume 20% tax bracket

** No tax due to loan



benefit concepts

Thus, with the introduction of the Longevity Bonus Loan Program, the average Alaskan taxpayer is almost \$300 better off even without receiving the Permanent Fund Dividend check.



CHANGING THE LONGEVITY BONUS TO A LOAN

The current Longevity Bonus is taxable as income when received. There are a number of advantages to redefining the Longevity Bonus from a taxable entitlement payment to a tax free loan. If \$3,000 is paid to 16,000 Alaskan residents and one assumes an average 20% tax bracket, then it is clear that the U.S. Government will receive directly \$9,600,000 of the \$48,000,000 paid out by the State of Alaska. This does not include the money that will reach Washington indirectly when the monies are spent on consumer goods and services.

Some of the benefits of changing the ALB to a Loan Program are the following:

1. A loan is not taxable presently and should not be taxable in the future under the Internal Revenue Code. Even with the new rules on interest free loans, there should not be taxation. Loans offered as assistance to the elderly by a State were not contemplated or included in the interest free loan



legislation. Should they be included at a later date, the loans plus deferred interest can be payable at death.

2. A loan should not be included as a resource for Federal Health Program assistance. If it is, for some strange reason, the person just declines the loan assistance.

3. The loan plus interest is paid back at death so the program is renewable. The payback comes from the tax free insurance proceeds of the specially designed policy that will be insuring each Longevity Bonus recipient.

The proposed Longevity Bonus loan program would not be taxable for the following reasons:

1. The loan interest is deferred, so it is not interest free, but will have the same effect to the participant.

2. Even under the new tax laws for interest free loans, it is the lender in most cases, not the lendeer who is taxed.

3. It is a fundamental premise of Constitutional Law that the States cannot tax the Federal



Government and that the Federal Government cannot tax the States.

4. The loan debt is not being "forgiven".

Forgiving debt has sometimes been a trigger to income tax liability.

5. The loan is made conditionally on the life insurance coverage which secures the loan as collateral; the loan then becomes payable with interest upon death. The insurance proceeds secure the payment of the debt.

6. The State of Alaska is the owner and beneficiary of the policy so there will be no imputed income tax (P.S. 58 Cost Rev. Rul. 55-747) as occurs with Corporate life insurance programs such as "Split Dollar". (Rev. Rul. 64-328).

We have no doubt that this program is a viable one, but it may behoove the state to have the Longevity Bonus Committee's legal counsel review the idea due to the magnitude of tax savings involved. It would most probably be unwise to get an IRS ruling on this matter as this might prompt Congress to issue new legislation that would in effect thwart this program.



benefit concepts

A SPECIAL COST
RECOVERY PROGRAM
FOR FUNDING THE LONGEVITY BONUS

LONG TERM SOLUTIONS FOR FUNDING
THE ALASKAN LONGEVITY BONUS

The use of a specially designed single premium life policy will allow the State of Alaska to recover all of the benefits and premiums paid under the program as well as help to fund benefits into the future.

The cost of this program on a one time premium basis would be \$233,711,000. The State would continue paying the bonuses from the General Fund for probably 8-9 years. The payback of this program would probably be within 15 but not later than 20 years based on mortality. This would mean that all benefits and the original premium would have been recovered by the State in addition to the cost of money for the program. As an alternative to paying the \$233,711,000 in advance, the State could pay \$55,867,00 a year for 15 years, with similar results. The premium payments can be increased or reduced by the number of people entering or leaving the plan each year.

The funding for these amounts can come from several possible sources:

- A. An appropriation from the General Fund;
- B. A fixed rate loan from the Permanent Fund at 10% interest for example;
- C. An annual addition to the States' General Obligation municipal bond offering at rates of 8-10%.

These proposed alternatives would entail research and investigation by counsel and financial advisors to determine their feasibility.

To the extent that the State of Alaska can arrange for lower interest rates through tax advantageous financing, the numbers and this concept of funding the ALB look that much better. Furthermore, we have only illustrated the cash values here. With 2-3% of the group receiving the ALB dying each year, there will be a higher rate of return to the State of Alaska. For this reason, the State can reasonably expect that their cost of funding the ALB will be less and their gains from this program more.

Also, the reasons for keeping the amount paid on the Longevity Bonus constant rather than factoring in a 3% inflation factor or a factor for an increasing population are the following:

1. If the numbers work for 16,000 people at \$3,000 per person, they will work for 16,500 or 17,000 people and at \$3,100 or \$3,200 per year. All of the numbers and amounts can be handled proportionately. Our firm can monitor the number of people entering and leaving the program and adjust the premium payments accordingly.

2. Offsetting the increase in the number of people entering the plan and the 3% inflation factor is the fact that people will die in

the plan at the rate of 2-3% each year. A death means that money will come into the plan and that money will not be going out to that person. Thus, the expected rate of death should more than compensate for any reasonable population or payment increase.

3. Although there are 16,500 people in the plan, we can assume that 3% or about 500 people will die in the first year of the plan. Rather than inflate the figures by factoring in those 500 early deaths, it is more conservative to just use the 16,000 figure throughout the illustration.

4. In any event, the 3% inflation factor is not a fixed figure and the population increase cannot be precisely known. For that reason, they shall be monitored each year; but they are not significant in understanding the concept that we have developed for funding the Alaskan Longevity Bonus.



benefit concepts

THE PRODUCT

The insurance coverage for the Cost Recovery Program will be provided by a product specially designed for the State of Alaska and this program.

It will be a guaranteed issue product with a fixed amount of coverage and premium for every age. It will have unisex rates, so there will be no discrimination issues or difference between male and female coverage.

The coverage will be provided through a Multiple Employer Trust which will allow for experience ratings (based on unfavorable mortality) and for dividends (good claim experience and better than average investment performance). Like a group program the Multiple Employer Trust will allow coverage to be provided on a group basis without application, without signature, and without medical exam.

The Multiple Employer Trust arrangement is also very easy to file and gain acceptance under state



benefit concepts

insurance regulations. The coverage need not have anything to do with an employer - employee relationships.

The product will be a variation of a Single Premium Whole Life product where one premium payment buys a paid up policy that will have cash value and death benefit increase each year based on a 12% rate of return. The rate of return on death to the State of Alaska will be 12.8%. As funds are reinvested within the plan (that is as death benefits are received, they are reinvested), the rate of return based on early deaths will be in excess of 13%.

The entire program can be funded at once or piecemeal over time; for example over a 10 year period. We recommend that the program be financed up front by borrowing money where the state pays a lower interest rate than is being credited to the State's insurance policy. Alaska can probably "borrow" money at 10% by issuing commercial paper.



benefit concepts

The death benefit is level for the first 5 years to qualify the product as an insurance product under the new regulations which define the "corridors" that must be maintained between cash value amounts and death benefit.



benefit concepts

THE APPLICATION PROCESS

AND

UNDERWRITING

There will be no formal application for insurance and coverage will be offered on a guaranteed issue basis. By applying for the Longevity Bonus a person will become registered automatically for this insurance coverage. This process does not violate any of the insurable interest provisions found in most state's insurance statutes.

Once an individual begins receiving the bonus, he or she will be covered automatically. The insurance company will charge a premium and offer coverage based on that person's age and a pre-arranged optimum amount of insurance based on interest assumptions and actuarial factors such as life expectancy.

Deaths will be recorded each month by having each town forward a list of deaths to the State Department of Vital Statistics or similar



benefit concepts

agency. Based on that record, the Insurance companies will pay the death claim immediately. Since there will be a set premium and claim amount for each age, the record keeping would resemble the following:

| <u>Age</u> | <u>Insured</u> | <u>Premium Due</u> | <u>Deaths</u> | <u>Insurance Proceeds Received</u> |
|------------|----------------|--------------------|---------------|------------------------------------|
| 65 | 2,000 | \$4,000,000 | 150 | \$4,500,000 |
| 66 | 1,500 | \$3,000,000 | 200 | \$6,000,000 |
| 67 | 1,700 | \$3,400,000 | 250 | \$7,500,000 |

In other words, the numbers of those covered and dying are of greater importance than keeping records on individual people as would be necessary with individual policies.

Also, some people can be expected to leave Alaska after receiving the bonus, the coverage on these people can be shifted to other lives with no administrative problems at all. There would be no loss of premium, and the bonus paid out on the individual who left can be recovered.



IF SOMEONE LEAVES THE STATE

There is no penalty in this program to the State if someone leaves since the coverage on their life can be shifted to the other individuals in that age group without any administrative problems. The amount of coverage in force on that person who leaves is allocated equally as a percentage amongst the members of his age bracket that are remaining. It is, in practice, a "tontine effect" whereby if everyone left the program, all of the insurance would come down to one person. If that person left, the State of Alaska could transfer the coverage to individuals in other age brackets or it could surrender the policy for its cash value.

Example:

Age 65; 10 people in program @ \$30,000 = \$300,000

Age 70; 5 people remain @ \$60,000 = \$300,000

Age 75; 1 person remains @ \$300,000 = \$300,000

Not factored in the above is that the death benefit on the group as a whole will always be increasing and, of course, there will be deaths occurring.



benefit concepts

FUNDING THE ALASKAN LONGEVITY BONUS

10% COST OF MONEY

| | <u>20 Year Program</u> |
|-----------------------------------|------------------------|
| Initial Premium | 233,711 |
| Longevity Bonuses Paid Out | 960,000 |
| Bond Interest At 10% | 467,422 |
| Bond Principal | 233,711 |
| Cash Value Amount At Maturity | 2,254,445 |
| Total Costs to State of Alaska | 1,661,133 |
| Net Gain to State | 593,312 |
| Annual Income From Gain | 71,197 |

(All figures in thousands--000 eliminated)

SINGLE PREMIUM MODIFIED WHOLE LIFE
 PREPARED FOR ALASKAN LONGEVITY BONUS PROGRAM
 16,500 INDIVIDUALS
 \$233,711 SINGLE PREMIUM
 000'S OMITTED

ISSUE AGE 65
 DECLARED INTEREST RATE ON UNBORROWED MONEY 12.00%

| POLICY YEAR | ATT AGE | BEFORE LOAN | | | | AFTER LOAN | | | RATE OF RETURN | |
|-------------|---------|-------------------------|----------------------|---------------|--------------|-------------------------|----------------------|---------------|----------------|-------------|
| | | CASH ACCUMULATION VALUE | CASH SURRENDER VALUE | DEATH BENEFIT | LOAN BALANCE | CASH ACCUMULATION VALUE | CASH SURRENDER VALUE | DEATH BENEFIT | e DEATH | e SURRENDER |
| 1 | 65 | 261,756 | 261,756 | 495,000 | 0 | 261,756 | 261,756 | 495,000 | 111.80% | 12.00% |
| 2 | 66 | 293,167 | 293,167 | 495,000 | 0 | 293,167 | 293,167 | 495,000 | 45.54% | 12.01% |
| 3 | 67 | 328,347 | 328,347 | 495,000 | 0 | 328,347 | 328,347 | 495,000 | 28.43% | 12.00% |
| 4 | 68 | 367,748 | 367,749 | 495,000 | 0 | 367,748 | 367,749 | 495,000 | 20.64% | 12.00% |
| 5 | 69 | 411,878 | 411,879 | 495,000 | 0 | 411,878 | 411,879 | 495,000 | 16.19% | 12.00% |
| 6 | 70 | 461,304 | 461,304 | 530,500 | 0 | 461,304 | 461,304 | 530,500 | 14.64% | 12.00% |
| 7 | 71 | 516,660 | 516,661 | 583,827 | 0 | 516,660 | 516,661 | 583,827 | 13.97% | 12.00% |
| 8 | 72 | 578,659 | 578,660 | 642,313 | 0 | 578,659 | 578,660 | 642,313 | 13.47% | 12.00% |
| 9 | 73 | 648,099 | 648,099 | 706,428 | 0 | 648,099 | 648,099 | 706,428 | 13.08% | 12.01% |
| 10 | 74 | 725,871 | 725,871 | 776,682 | 0 | 725,871 | 725,871 | 776,682 | 12.77% | 12.01% |
| 11 | 75 | 812,975 | 812,976 | 853,625 | 0 | 812,975 | 812,976 | 853,625 | 12.50% | 12.00% |
| 12 | 76 | 910,532 | 910,533 | 956,060 | 0 | 910,532 | 910,533 | 956,060 | 12.46% | 12.00% |
| 13 | 77 | 1,019,796 | 1,019,797 | 1,070,787 | 0 | 1,019,796 | 1,019,797 | 1,070,787 | 12.42% | 12.00% |
| 14 | 78 | 1,142,172 | 1,142,172 | 1,199,281 | 0 | 1,142,172 | 1,142,172 | 1,199,281 | 12.39% | 12.00% |
| 15 | 79 | 1,279,232 | 1,279,233 | 1,343,195 | 0 | 1,279,232 | 1,279,233 | 1,343,195 | 12.37% | 12.00% |
| 16 | 80 | 1,432,740 | 1,432,741 | 1,504,378 | 0 | 1,432,740 | 1,432,741 | 1,504,378 | 12.34% | 12.00% |
| 17 | 81 | 1,604,669 | 1,604,670 | 1,684,904 | 0 | 1,604,669 | 1,604,670 | 1,684,904 | 12.32% | 12.00% |
| 18 | 82 | 1,797,229 | 1,797,230 | 1,887,092 | 0 | 1,797,229 | 1,797,230 | 1,887,092 | 12.30% | 12.00% |
| 19 | 83 | 2,012,897 | 2,012,898 | 2,113,543 | 0 | 2,012,897 | 2,012,898 | 2,113,543 | 12.29% | 12.00% |
| 20 | 84 | 2,254,445 | 2,254,445 | 2,367,167 | 0 | 2,254,445 | 2,254,445 | 2,367,167 | 12.27% | 12.00% |
| 21 | 85 | 2,524,978 | 2,524,979 | 2,651,228 | 0 | 2,524,978 | 2,524,979 | 2,651,228 | 12.26% | 12.00% |
| 22 | 86 | 2,827,976 | 2,827,976 | 2,969,375 | 0 | 2,827,976 | 2,827,976 | 2,969,375 | 12.25% | 12.00% |
| 23 | 87 | 3,167,333 | 3,167,333 | 3,325,700 | 0 | 3,167,333 | 3,167,333 | 3,325,700 | 12.24% | 12.00% |
| 24 | 88 | 3,547,413 | 3,547,413 | 3,724,784 | 0 | 3,547,413 | 3,547,413 | 3,724,784 | 12.23% | 12.00% |
| 25 | 89 | 3,973,102 | 3,973,103 | 4,171,758 | 0 | 3,973,102 | 3,973,103 | 4,171,758 | 12.22% | 12.00% |
| 26 | 90 | 4,449,875 | 4,449,875 | 4,672,369 | 0 | 4,449,875 | 4,449,875 | 4,672,369 | 12.21% | 12.00% |
| 27 | 91 | 4,983,860 | 4,983,860 | 5,183,214 | 0 | 4,983,860 | 4,983,860 | 5,183,214 | 12.16% | 12.00% |
| 28 | 92 | 5,581,923 | 5,581,923 | 5,749,381 | 0 | 5,581,923 | 5,581,923 | 5,749,381 | 12.12% | 12.00% |
| 29 | 93 | 6,251,754 | 6,251,754 | 6,376,789 | 0 | 6,251,754 | 6,251,754 | 6,376,789 | 12.08% | 12.00% |
| 30 | 94 | 7,001,964 | 7,001,965 | 7,071,985 | 0 | 7,001,964 | 7,001,965 | 7,071,985 | 12.04% | 12.00% |
| 31 | 95 | 7,842,200 | 7,842,201 | 7,842,201 | 0 | 7,842,200 | 7,842,201 | 7,842,201 | 12.00% | 12.00% |
| 32 | 96 | 8,783,264 | 8,783,265 | 8,783,265 | 0 | 8,783,264 | 8,783,265 | 8,783,265 | 12.00% | 12.00% |
| 33 | 97 | 9,837,256 | 9,837,256 | 9,837,256 | 0 | 9,837,256 | 9,837,256 | 9,837,256 | 12.00% | 12.00% |
| 34 | 98 | 11,017,727 | 11,017,727 | 11,017,727 | 0 | 11,017,727 | 11,017,727 | 11,017,727 | 12.00% | 12.00% |
| 35 | 99 | 12,339,854 | 12,339,854 | 12,339,854 | 0 | 12,339,854 | 12,339,854 | 12,339,854 | 12.00% | 12.00% |

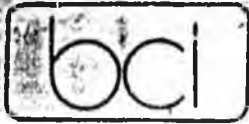
WEIGHTED AVERAGE RATE OF RETURN AT DEATH 12.50%



SAMPLE MORTALITY STUDY*

| <u>AGE</u> | <u>DEAD</u> | <u>ALIVE</u> |
|------------|-------------|--------------|
| 65 | 511 | 15,989 |
| 66 | 543 | 15,446 |
| 67 | 586 | 14,860 |
| 68 | 609 | 14,251 |
| 69 | 641 | 13,610 |
| 70 | 666 | 12,944 |
| 71 | 698 | 12,246 |
| 72 | 710 | 11,536 |
| 73 | 726 | 10,810 |
| 74 | 735 | 10,075 |
| 75 | 735 | 9,340 |
| 76 | 737 | 8,603 |
| 77 | 731 | 7,872 |
| 78 | 732 | 7,140 |
| 79 | 721 | 6,419 |
| 80 | 699 | 5,720 |
| 81 | 680 | 5,040 |
| 82 | 650 | 4,390 |
| 83 | 610 | 3,780 |
| 84 | 567 | 3,213 |
| 85 | 517 | 2,696 |
| 86 | 463 | 2,233 |
| 87 | 413 | 1,820 |
| 88 | 360 | 1,460 |
| 89 | 309 | 1,151 |
| 90 | 262 | 889 |
| 91 | 217 | 672 |
| 92 | 178 | 494 |
| 93 | 142 | 352 |
| 94 | 111 | 241 |
| 95 | 84 | 157 |
| 96 | 62 | 95 |
| 97 | 46 | 49 |
| 98 | 33 | 16 |
| 99 | 16 | 0 |

*BASED ON ESTIMATES FROM COMMISSIONER'S 1958 STANDARD ORDINARY (CSO) MORTALITY TABLE



benefit concepts

PREPARED FOR:

THE ALASKAN LONGEVITY BONUS COMMITTEE

Prepared by:

Daniel E. Carpenter, J.D.
Benefit Concepts, Inc.

Otto Lowe
Kidder, Peabody & Co.

December 3, 1984



Use of the Permanent Fund Dividend Annuity to Fund the Cost Recovery Plan of the Longevity Bonus Program.

In reviewing most of the suggestions and proposals that have already been made to the Longevity Bonus Committee, it has become clear to us that some form of annuity program will probably be adopted. Also clear are the problems caused by the deferral element of the proposed annuity programs:

1. The tax problem of constructive receipt.
2. The inability of poorer Alaskan residents to defer their Permanent Fund Dividend.

Our program, as outlined by our previous study, allowed for both programs, the ALB and the PFD, to continue in their present form, but only if we could fund the Cost Recovery Insurance Program. To be able to fund both programs in the face of declining oil revenues would certainly be attractive, but is it possible? And if it is possible, what effect will it have on the poor and on the future budget of the State of Alaska?

We have tailored the Cost Recovery Program so that it will now be based on a small outlay every year for several years rather than one up front outlay. Instead of \$233,000,000 in one lump sum, we could have the State of Alaska pay \$44,000,000 for 30 years. This amount would also include the expected increase in the future Alaskan population.

Although this may seem to be a substantial expenditure, it is not if one considers that it will allow the State to recover all payments plus make a profit. The funding of the program can now come from the voluntary, not mandatory, deferral of the Permanent Fund Dividend, so that it will not encumber the Permanent Fund itself or burden the legislature's budget. More importantly, however, it will not handicap the poor by forcing them to defer money that they cannot spare, nor force them to lose either their PFD or ALB, because the State runs out of oil revenues in the future.

It has also been proposed that to deal with the constructive receipt issue under the tax law that the PFD be recharacterized as an annuity credit and that some amount of "seed money" be added in the form of an annuity fund.



benefit concepts

By doing this, in the opinion of counsel, the State will be able to allow its residents to defer receipt of the money without taxation even though they had the opportunity to receive it (constructive receipt). The recommended amount of pre-funding for the annuity program was approximately \$50,000,000. Thus, the State would ante up \$50,000,000 in addition to whatever was to be distributed as a Permanent Fund Dividend. However, those people asking for their PFD in cash would lose the benefit of the annuity program and the additional "seed money". The annuity program would be an amount in excess of the Alaskan Longevity Bonus. Those who did not defer their PFD would receive their dividend in cash as well as their ALB at age 65. Those who deferred their PFD now would receive a much greater ALB at retirement.

Since the State is already adding funds to the Annuity Deferral program and since the ability to defer and have one's deferrals accumulate tax free is a tremendous benefit, there is no need to promise more than a 7-8% rate of return on the deferred amounts to have a significant number of people deferring. The savings option for most people would be a 5½% bank account or 9% money market fund, both of which are taxable and would net a rate of return of less than 7%. Under our proposed program they would preserve the full amount of their PFD and have it accumulate at 7% tax free. This would be a better option for everyone that could afford to defer. Those who could not afford to defer would not be deprived of their PFD or ALB at any time, even if the oil revenues began to decline. This is due to the Cost Recovery Plan's ability to fund the ALB, the premiums for the Cost Recovery Plan, and the payment of interest on the source of funds--which in this case could be the PFD deferrals.

The PFD deferrals could amount to over \$50,000,000 a year used on 20% of the population deferring their portion of the \$250,000,000 that is to be paid out in Permanent Fund Dividends. This \$50,000,000 in deferrals every year could be the perfect funding source for the Cost Recovery Plan. And since the Cost Recovery Plan will be a safe investment with a high rate of return, and the PFD deferrals will be paid as increased ALBs (Longevity Bonuses), the Cost Recovery Plan is a good place to invest the deferrals until they are paid out in the future. Most important, however, is that by utilizing this approach both the PFD and the ALB can be maintained for years to come in their present format.

Benefits Concepts

Keurlee Hopper

12-3184

ALASKAN LONGEVITY BONUS PROGRAM

(CUMULATIVE)
PRESENT VALUE @ 0.002

| | PRES VAL OF OUTLAY | CASH VALUE | NET DEATH BENEFIT | EXPECTED NET DEATH BENEFIT | BENEFIT COSTS | GAIN | BAL. SHEET AFTER BENEFIT |
|------|--------------------------|------------|-------------------------|----------------------------------|------------------|-----------|--------------------------------|
| 1983 | 177,655 | 188,466 | 13,188 | 13,187 | 0 | 23,997 | 23,996 |
| 1986 | 184,511 | 206,862 | 27,623 | 27,623 | 2 | 49,754 | 69,752 |
| 1987 | 188,167 | 222,397 | 43,255 | 43,252 | 0 | 77,463 | 77,463 |
| 1988 | 195,743 | 242,303 | 60,277 | 60,275 | 0 | 105,842 | 136,842 |
| 1989 | 196,203 | 258,057 | 79,127 | 79,125 | 0 | 138,981 | 136,930 |
| 1990 | 205,149 | 281,416 | 100,644 | 100,645 | 0 | 174,113 | 174,112 |
| 1991 | 203,340 | 296,127 | 125,394 | 125,392 | 1 | 213,161 | 213,130 |
| 1992 | 213,010 | 320,097 | 153,451 | 153,453 | 0 | 255,538 | 255,538 |
| 1993 | 216,491 | 334,345 | 184,930 | 184,933 | -0 | 302,755 | 332,755 |
| 1994 | 227,955 | 361,112 | 220,652 | 220,455 | 94,196 | 353,809 | 259,612 |
| 1995 | 227,145 | 378,237 | 260,737 | 65,835 | 194,918 | 411,949 | 217,030 |
| 1996 | 250,646 | 419,407 | 337,351 | 5,401 | 331,959 | 476,162 | 174,233 |
| 1997 | 254,202 | 443,066 | 359,855 | -35,134 | 414,989 | 548,719 | 153,729 |
| 1998 | 280,941 | 489,243 | 420,916 | -113,921 | 534,837 | 629,215 | 94,377 |
| 1999 | 285,913 | 516,371 | 489,972 | -171,553 | 651,546 | 720,854 | 59,338 |
| 2000 | 315,569 | 568,156 | 570,463 | -225,167 | 795,652 | 823,030 | 27,377 |
| 2001 | 319,193 | 597,473 | 601,476 | -276,057 | 937,463 | 939,584 | 2,220 |
| 2002 | 352,819 | 655,422 | 767,112 | -320,434 | 1,057,530 | 1,069,713 | -17,835 |
| 2003 | 357,330 | 688,927 | 856,076 | -360,372 | 1,246,448 | 1,217,673 | -28,774 |
| 2004 | 394,944 | 753,542 | 1,023,671 | -391,073 | 1,414,744 | 1,362,269 | -52,474 |
| 2005 | 435,947 | 822,911 | 1,182,769 | -411,225 | 1,594,015 | 1,569,753 | -24,262 |
| 2006 | 479,962 | 895,593 | 1,366,564 | -419,201 | 1,755,735 | 1,783,192 | -2,573 |
| 2007 | 524,145 | 971,353 | 1,577,562 | -412,844 | 1,970,436 | 2,024,767 | 34,331 |
| 2008 | 575,224 | 1,054,163 | 1,820,977 | -380,277 | 2,211,254 | 2,299,941 | 66,630 |
| 2009 | 628,103 | 1,140,133 | 2,100,639 | -346,716 | 2,445,353 | 2,612,869 | 133,315 |
| 2010 | 681,037 | 1,226,548 | 2,420,929 | -284,815 | 2,705,747 | 2,969,443 | 260,693 |
| 2011 | 733,697 | 1,313,277 | 2,766,052 | -194,023 | 2,930,052 | 3,365,642 | 335,369 |
| 2012 | 800,509 | 1,415,499 | 3,209,243 | -70,604 | 3,230,047 | 3,824,233 | 564,183 |
| 2013 | 801,133 | 1,447,653 | 3,664,353 | 92,432 | 3,571,950 | 4,310,898 | 738,948 |
| 2014 | 801,631 | 1,475,217 | 4,157,092 | 301,974 | 3,855,117 | 4,830,683 | 975,562 |
| 2015 | 802,002 | 1,497,506 | 4,694,355 | 565,454 | 4,128,930 | 5,389,859 | 1,289,939 |
| 2016 | 802,266 | 1,514,272 | 5,286,737 | 896,032 | 4,392,674 | 5,000,713 | 1,608,038 |
| 2017 | 802,441 | 1,525,711 | 5,935,775 | 1,319,916 | 4,645,858 | 6,689,045 | 2,043,186 |
| 2018 | 802,539 | 1,532,754 | 6,790,354 | 1,902,451 | 4,887,902 | 7,523,567 | 2,635,667 |
| 2019 | 802,579 | 1,597,883 | 7,869,716 | 2,751,393 | 5,112,322 | 8,665,023 | 3,552,697 |

ALASKAN LONGEVITY BONDS PROGRAM

(DOLLARS OMITTED)

| YEAR | AFTER CASH VALUE | LOAN FACE AMT | EXPECTED ACCUM. GAIN | ALASKAN BENEFIT PAYABLE | EXPECTED NET DEATH BENEFIT TO STATE | GAIN/LOSS B DEATH | EXPECTED GAIN/LOSS & DEATH | TOTAL PAYOUT | AGE OF REVRN @ DEATH |
|------|------------------|---------------|----------------------|-------------------------|-------------------------------------|-------------------|----------------------------|--------------|----------------------|
| 1985 | 155,464 | 338,532 | 13,187 | 0 | 13,167 | 351,723 | 12,167 | 177,655 | -92.6% |
| 1986 | 206,642 | 357,724 | 27,620 | 0 | 27,623 | 372,043 | 16,435 | 184,511 | -59.7% |
| 1987 | 222,397 | 371,715 | 43,252 | 0 | 43,252 | 385,972 | 15,631 | 185,167 | -49.7% |
| 1988 | 242,332 | 347,371 | 60,276 | 0 | 60,275 | 403,589 | 17,024 | 195,743 | -37.0% |
| 1989 | 258,057 | 404,225 | 79,126 | 0 | 79,125 | 421,605 | 18,649 | 193,203 | -25.6% |
| 1990 | 281,416 | 438,122 | 100,645 | 0 | 100,645 | 457,645 | 21,716 | 205,149 | -19.2% |
| 1991 | 296,127 | 453,225 | 125,392 | 0 | 125,392 | 464,216 | 24,547 | 203,343 | -11.7% |
| 1992 | 320,097 | 490,625 | 153,450 | 0 | 153,450 | 517,703 | 26,056 | 215,313 | -7.7% |
| 1993 | 334,346 | 521,218 | 134,930 | 0 | 184,903 | 543,902 | 31,649 | 215,461 | -3.1% |
| 1994 | 361,112 | 556,975 | 220,652 | 94,197 | 125,455 | 489,715 | 29,103 | 227,755 | -6.6% |
| 1995 | 378,337 | 585,817 | 260,756 | 196,826 | 65,835 | 513,713 | 32,713 | 227,143 | 2.3% |
| 1996 | 419,447 | 636,638 | 307,359 | 301,637 | 5,401 | 561,613 | 36,394 | 250,645 | 3.5% |
| 1997 | 443,066 | 657,777 | 359,832 | 414,325 | -55,134 | 583,993 | 43,397 | 254,262 | 5.5% |
| 1998 | 459,240 | 723,574 | 420,917 | 533,565 | -113,921 | 641,761 | 50,932 | 283,741 | 6.5% |
| 1999 | 516,371 | 759,156 | 439,997 | 659,543 | -171,553 | 672,677 | 57,651 | 265,595 | 6.0% |
| 2000 | 568,156 | 820,267 | 570,485 | 792,392 | -225,169 | 733,534 | 67,651 | 315,587 | 8.9% |
| 2001 | 597,473 | 856,758 | 651,439 | 932,319 | -275,057 | 763,173 | 76,453 | 319,195 | 10.0% |
| 2002 | 655,422 | 926,075 | 767,114 | 1,080,395 | -323,439 | 823,933 | 89,350 | 352,577 | 10.7% |
| 2003 | 668,927 | 958,831 | 866,677 | 1,236,498 | -363,372 | 862,633 | 100,430 | 357,333 | 11.6% |
| 2004 | 753,542 | 1,042,967 | 1,023,672 | 1,431,442 | -393,073 | 932,317 | 116,614 | 390,746 | 12.2% |
| 2005 | 822,911 | 1,124,451 | 1,152,789 | 1,576,640 | -411,225 | 1,004,517 | 135,241 | 435,947 | 12.7% |
| 2006 | 896,590 | 1,212,355 | 1,366,584 | 1,763,753 | -419,231 | 1,091,713 | 156,510 | 479,982 | 13.2% |
| 2007 | 971,350 | 1,299,656 | 1,577,554 | 1,943,339 | -412,344 | 1,173,663 | 179,876 | 524,143 | 13.7% |
| 2008 | 1,054,158 | 1,421,739 | 1,820,975 | 2,175,244 | -393,277 | 1,267,536 | 207,553 | 575,226 | 14.1% |
| 2009 | 1,140,136 | 1,506,421 | 2,100,842 | 2,457,967 | -345,716 | 1,363,207 | 236,504 | 623,103 | 14.5% |
| 2010 | 1,226,546 | 1,609,271 | 2,420,932 | 2,652,521 | -284,913 | 1,457,085 | 272,490 | 661,037 | 14.8% |
| 2011 | 1,313,277 | 1,710,135 | 2,786,066 | 2,922,898 | -194,023 | 1,549,239 | 310,447 | 733,697 | 15.1% |
| 2012 | 1,415,499 | 1,840,925 | 3,209,250 | 3,210,508 | -73,804 | 1,663,313 | 358,802 | 803,507 | 15.4% |
| 2013 | 1,447,653 | 1,823,412 | 3,604,390 | 3,428,037 | 92,432 | 1,662,913 | 387,361 | 801,133 | 15.8% |
| 2014 | 1,475,219 | 1,837,763 | 4,157,079 | 3,753,259 | 301,974 | 1,663,533 | 421,190 | 801,531 | 16.0% |
| 2015 | 1,497,536 | 1,793,639 | 4,694,360 | 4,053,235 | 565,454 | 1,663,741 | 461,575 | 802,002 | 16.2% |
| 2016 | 1,514,272 | 1,751,416 | 5,268,713 | 4,235,406 | 693,032 | 1,672,458 | 513,666 | 802,263 | 16.4% |
| 2017 | 1,525,711 | 1,772,277 | 5,965,730 | 4,462,265 | 1,319,916 | 1,681,424 | 588,513 | 802,441 | 16.6% |
| 2018 | 1,532,754 | 1,754,312 | 6,790,360 | 4,664,973 | 1,902,451 | 1,693,583 | 721,330 | 802,537 | 16.8% |
| 2019 | 1,597,833 | 1,833,811 | 7,859,721 | 4,851,485 | 2,751,393 | 1,693,156 | 850,231 | 802,577 | 17.0% |

ALABAMA LONGEVITY BONUS PROGRAM

AL43-1001

PROGRAM SUMMARY
(33)

1960 & 1965 BASIC GROUP TABLE

| YEAR | CASH VALUE | BEFORE LOAN ANNUAL PREMIUM | FACE AMT | POLICY LOAN | POLICY LOAN INTEREST | LOAN REPAYMENT DUE TO DEATH | END OF FP LOAN BALANCE | NET DEATH BEN TO STATE |
|--------|------------|----------------------------------|-----------|----------------|----------------------------|--------------------------------------|------------------------------|---------------------------------|
| 1985 | 188,465 | 177,653 | 338,532 | 0 | 0 | 0 | 0 | 13,188 |
| 1986 | 223,545 | 22,533 | 376,830 | 17,838 | 1,986 | 737 | 16,906 | 14,635 |
| 1987 | 260,986 | 23,256 | 410,324 | 23,432 | 4,015 | 1,747 | 32,567 | 15,533 |
| 1988 | 300,376 | 23,509 | 443,437 | 22,237 | 6,573 | 2,355 | 50,369 | 17,324 |
| 1989 | 342,775 | 24,993 | 458,941 | 31,050 | 8,945 | 4,627 | 86,718 | 18,353 |
| TOTALS | | 273,375 | | 90,463 | 21,539 | 9,747 | | |
| 1990 | 327,719 | 26,013 | 544,429 | 27,534 | 12,113 | 5,793 | 105,306 | 21,719 |
| 1991 | 433,485 | 25,523 | 630,535 | 39,290 | 14,743 | 8,240 | 137,358 | 24,548 |
| 1992 | 490,350 | 25,463 | 656,828 | 33,244 | 18,451 | 10,403 | 160,206 | 25,357 |
| 1993 | 529,702 | 27,113 | 716,574 | 48,644 | 21,290 | 13,493 | 193,353 | 31,449 |
| 1994 | 579,510 | 26,848 | 775,390 | 37,327 | 23,546 | 16,281 | 218,400 | 33,752 |
| TOTALS | | 403,356 | | 222,552 | 113,592 | 64,162 | | |
| 1995 | 634,884 | 24,576 | 847,350 | 52,425 | 30,142 | 20,329 | 256,546 | 43,105 |
| 1996 | 690,059 | 28,761 | 937,259 | 37,151 | 34,203 | 23,273 | 270,524 | 46,554 |
| 1997 | 746,345 | 27,682 | 969,050 | 57,983 | 38,595 | 27,328 | 301,279 | 52,494 |
| 1998 | 801,121 | 30,172 | 1,035,436 | 41,137 | 40,871 | 30,330 | 311,362 | 61,361 |
| 1999 | 857,434 | 30,000 | 1,100,240 | 64,939 | 42,948 | 33,730 | 341,362 | 69,080 |
| TOTALS | | 547,335 | | 542,217 | 295,531 | 201,165 | | |
| 2000 | 914,602 | 31,536 | 1,166,713 | 44,710 | 47,278 | 39,323 | 346,446 | 80,487 |
| 2001 | 971,496 | 32,212 | 1,232,762 | 73,140 | 48,957 | 45,365 | 374,022 | 90,223 |
| 2002 | 1,028,364 | 33,417 | 1,299,010 | 69,166 | 53,346 | 49,245 | 372,940 | 103,706 |
| 2003 | 1,054,906 | 34,555 | 1,364,855 | 79,170 | 54,529 | 56,155 | 395,972 | 110,764 |
| 2004 | 1,140,885 | 35,739 | 1,430,259 | 50,816 | 56,632 | 59,430 | 387,344 | 137,593 |
| TOTALS | | 716,765 | | 833,235 | 501,323 | 450,291 | | |
| 2005 | 1,198,090 | 39,205 | 1,500,239 | 50,751 | 56,905 | 62,314 | 375,779 | 159,115 |
| 2006 | 1,257,902 | 42,356 | 1,573,726 | 50,227 | 56,722 | 64,733 | 361,372 | 183,755 |
| 2007 | 1,315,033 | 42,622 | 1,644,134 | 49,526 | 58,115 | 66,517 | 344,261 | 210,978 |
| 2008 | 1,372,872 | 49,662 | 1,728,423 | 48,330 | 57,065 | 67,235 | 324,664 | 243,415 |
| 2009 | 1,443,446 | 51,629 | 1,809,740 | 46,796 | 55,580 | 68,150 | 302,522 | 279,662 |
| TOTALS | | 942,261 | | 1,083,942 | 849,710 | 781,120 | | |
| 2010 | 1,506,049 | 51,854 | 1,886,773 | 44,750 | 53,534 | 62,302 | 278,913 | 320,090 |
| 2011 | 1,567,519 | 51,735 | 1,964,426 | 42,479 | 51,116 | 67,359 | 253,575 | 365,133 |
| 2012 | 1,643,338 | 66,040 | 2,068,765 | 39,904 | 46,349 | 65,835 | 227,122 | 423,181 |
| 2013 | 1,646,350 | 0 | 2,024,140 | 37,071 | 45,286 | 63,754 | 199,897 | 453,140 |
| 2014 | 1,646,536 | 0 | 1,991,050 | 34,056 | 41,956 | 61,243 | 172,281 | 492,709 |
| TOTALS | | 1,111,890 | | 1,222,262 | 1,029,951 | 1,107,615 | | |
| 2015 | 1,643,412 | 0 | 1,939,596 | 30,927 | 36,398 | 57,523 | 144,772 | 537,263 |
| 2016 | 1,633,161 | 0 | 1,900,305 | 27,698 | 34,711 | 53,372 | 117,709 | 590,352 |
| 2017 | 1,618,136 | 0 | 1,864,723 | 24,447 | 30,967 | 50,269 | 60,961 | 577,068 |
| 2018 | 1,597,618 | 0 | 1,829,174 | 21,212 | 27,172 | 47,730 | 63,294 | 324,579 |
| 2019 | 1,769,786 | 0 | 2,005,712 | 18,070 | 23,449 | 44,922 | 35,219 | 1,379,362 |
| TOTALS | | 1,111,890 | | 1,404,662 | 1,244,543 | 1,361,534 | | |

JAN 1 1 1985

THE USE OF A SINGLE PREMIUM WHOLE LIFE
CONTRACT FOR FUNDING THE STATE OF ALASKA
LONGEVITY BONUS PROGRAM

PURPOSE OF THE REPORT

The purpose of this report is to present the benefits of using a specially designed single premium whole life product to fund the State of Alaska's obligations under the Longevity Bonus Program. This report will discuss the probable policy provisions and investment rates of return that can be guaranteed as well as show the types of products that currently exist. In addition, this report will discuss the significant changes in the statutory, regulatory and investment climates that will impact this product and how these changes will affect the product's viability in funding the Longevity Bonus Program.

Our goal has been to create a product that will provide the State with a secure high rate of return investment that will allow the Longevity Bonus to continue without a severe drain on economic resources in the face of declining oil revenues. Our conclusions are that the funding of the program with a Single Premium Whole Life program will save the State millions of dollars over such funding alternatives as Guaranteed Investment contracts, Government Securities, or Corporate Investments. The Single Premium Life Plan (SPL) will provide the highest rate of return, with a high degree of security, and the most flexibility and liquidity.

There is no doubt that the long term commitment to the Longevity Bonus Program is an expensive one, but whatever the ultimate cost is, the best means for funding that cost will be a Single Premium Whole Life Policy issued on a group basis.

STATUS OF THE PROJECT

Since our last presentation in December there have been three significant events that have impacted greatly on the original product design that we contemplated in the late summer and fall:

- (1) The precipitous decline of interest rates to the surprise of the nation's leading economists.
- (2) The Washington meeting of the National Association of Insurance Commissioners to discuss the Sarnoff proposals.
- (3) The earthshattering Treasury Proposals for changing the tax code, which will affect virtually every industry, including the insurance industry.

When we first began our original design of the program, the financial advisors and economists felt very confident in promising a long term guarantee of 12 - 13% while accruing a profit of 50 - 100 basis points for the insurance company.

This would certainly be attractive for the State on a long term basis as well as the insurance companies involved. However, as can be seen from the enclosed Wall Street Journal article, the nation's leading economists and financial forecasters are singing a different tune. Indeed, it now appears very unlikely that any major institution will commit itself to a long term interest rate guarantee when all of the nation's leading economists were so far off the mark. This article and others like it has had an incredible chilling effect on what major financial institutions and especially insurance companies are willing to commit to on a long term basis. This was definitely not the case even several months ago.

To compensate for this, we are now being overly conservative in our projection of guarantees; though we believe that, ultimately, the product will perform at a higher rate of return due to excess interest credits and/or mortality experience credits. Also, as will be discussed

Outlook for the Year

Interest Rates to Rise in '85 as Economy Emerges From Doldrums, According to Poll of Economists

By TOM HERMAN
And EDWARD P. FULDESKY

Staff Reporters of THE WALL STREET JOURNAL

NEW YORK—After a sharp drop in the past seven months, interest rates will rise in 1985 as the economy snaps out of the doldrums.

That, at least, is the outlook that emerges from a survey of 24 economists by The Wall Street Journal. Some expect further small declines in the next few weeks, but most expect rates to be higher at year-end than at midyear.

Only a few analysts foresee big changes, either up or down. Most predict that short-term rates will rise more than long-term rates, and that the yield on 30-year Treasury bonds will wind up the year within a percentage point of Monday's close of 11.53%.

Many forecasters say they are approaching 1985 with much less confidence than before. That's certainly understandable in view of their 1984 records. One year ago, most experts were predicting that rates would drop in the first half of 1984 and then bounce back later in the year. Rates promptly soared. By midyear, the conventional wisdom had changed. In a survey in late June, most of the 24 economists predicted that rates would increase because of the economy's torrid growth. Rates quickly tumbled.

"Of all the biblical teachings, the one that remains the most appropriate for interest-rate forecasters is humility," says Francis Schott, senior vice president of Equitable Life Assurance Society of the U.S.

White House's Record

Few of the experts came close to the forecasting record rung up over the past six months by two figures better known for their political expertise: President Reagan and Treasury Secretary Donald Regan.

In June, despite widespread gloom on Wall Street, the White House said Mr. Regan was sticking with his forecast of lower rates for 1984's second half. The president didn't say how much lower. Mr. Regan, whose disdain for Wall Street forecasts dates back to his days as head of Merrill Lynch & Co., predicted in June that rates would "shade down" over the coming months as economic growth slowed—which it did.

White House officials naturally are pleased. "In many ways, they (Messrs. Regan and Regan) are more realistic" than Wall Streeters, said Marlin Fitzwater, White House deputy press secretary. "Wall Street people take such a short-term view of everything."

Recession Seen by Some

Right or wrong, Wall Streeters last year spent a lot of time worrying. In the first half, many experts warned that the economy was growing too rapidly, that it was in danger of "overheating," and that inflation would surge. Lately, some experts worry that the economy has slowed too much, that

A Sampling of Interest-Rate Forecasts

(In percent)

| | JUNE SURVEY | | NEW FORECASTS | | | |
|--|--|--|--------------------------|-------------|------------------------|--------------|
| | 3-MONTH TREASURY BILLS 12/31/84 | 30-YEAR TREASURY BONDS 12/31/84 | BILLS 6/30 - 12/31/85 | | BONDS 6/30 12/31/85 | |
| Paul Boltz, T. Rowe Price | 11.50 | 14.13 | 9.00 | 11.50 | 11.75 | 13.50 |
| Philip Braverman, Briggs Schaedle | 12.00 | 14.75 | 8.00 | 9.25 | 11.00 | 12.00 |
| Kathleen Cooper, Security Pacific | 10.75 | 14.25 | 8.00 | 9.25 | 11.25 | 12.00 |
| William Gibson, RepublicBank | 10.50 | 14.00 | 8.80 | 9.80 | 11.50 | 11.60 |
| Robert Giordano, Goldman Sachs | 10.50 | 13.50 | 8.50 | 10.00 | 11.50 | 12.50 |
| Alan Greenspan | 10.75 | 14.05 | 8.00 | 9.00 | 11.00 | 11.60 |
| Richard Hoey, Drexel Burnham | 10.00 | 12.75 | 9.25 | 10.00 | 12.25 | 12.75 |
| Timothy Howard, FNMA | 10.50 | 13.75 | 8.00 | 9.25 | 11.00 | 12.00 |
| Lacy Hunt, Carroll McEntee | 11.10 | 14.60 | 9.65 | 10.80 | 13.10 | 14.00 |
| Edward Hyman, C.J. Lawrence | 8.50 | 11.00 | 7.50 | 7.50 | 10.50 | 10.50 |
| David Jones, A.G. Janston | 11.50 | 14.50 | 9.00 | 8.00 | 11.50 | 10.50 |
| Alan Lerner, Bankers Trust Co. | 11.38 | 14.50 | 8.25 | 9.00 | 11.65 | 12.00 |
| Irwin Kellner, Manufacturers Hanover | N.A. | N.A. | 8.15 | 8.85 | 11.00 | 11.30 |
| Bernard Markstein III, Chase Econometrics | N.A. | N.A. | 8.80 | 9.90 | 11.50 | 12.00 |
| William Melton, IDS | 9.60 | 12.90 | 10.60 | 8.60 | 12.60 | 10.70 |
| A.X. Moskowitz, Dean Witter | 9.50 | 12.50 | 10.20 | 9.60 | 13.25 | 12.50 |
| Lelf Olsen, Citibank | 10.65 | 14.35 | 10.25 | 10.50 | 12.50 | 13.50 |
| David Resler, First Chicago | 10.50 | 14.10 | 8.50 | 8.75 | 11.75 | 11.75 |
| Norman Robertson, Mellon Bank | 11.00 | 14.10 | 8.40 | 9.80 | 11.90 | 12.40 |
| Francis Schott, Equitable Life | 10.50 | 14.00 | 8.00 | 8.75 | 12.00 | 12.50 |
| A. Gary Shilling | 10.00 | 13.00 | 6.50 | 5.50 | 10.00 | 8.00 |
| Allen Sinai, Shearson Lehman | 11.20 | 14.00 | 9.25 | 9.25 | 12.25 | 12.00 |
| John Wilson, Bank of America | 11.25 | 14.40 | 7.50 | 9.00 | 11.00 | 11.50 |
| David Wynn, Data Resources | 10.90 | 14.00 | 7.30 | 8.50 | 10.60 | 10.70 |
| Average | 10.64 | 13.78 | 8.56 | 9.18 | 11.60 | 11.83 |
| Closing rates, Dec. 31, 1984 | 7.84 | 11.53 | | | | |

N.A. = Not available because these economists weren't polled in last June's survey

of the economic recovery. Still, Mr. Hyman adds: "If you took my advice and bought bonds at the beginning of 1984, you would have done very well this year."

Short-Term Rates

The two economists who came up with the most accurate predictions for the first half were less fortunate in the second half. Lacy Hunt of Carroll McEntee & McGinney Inc. and Robert Giordano of Goldman, Sachs & Co. came remarkably close with their forecasts of short-term rates in the first half. But both, especially Mr. Hunt, were too pessimistic about the second half.

The most pessimistic forecast last June came from Philip Braverman, chief economist of Briggs Schaedle & Co. He predicted that 30-year Treasury bonds by year-end would yield 14.75%, which is about 3.25 percentage points off the mark.

Mr. Braverman said his interest-rate forecast went astray when business activity suddenly turned soft last summer. "The

down from 102 1/8 last Friday. That boosted the yield to 11.53% from 11.49%. The government's 11 3/4% notes due 1994 closed at 100 19/32, down from 100 29/32, raising the yield to 11.52% from 11.47%.

Today, the Treasury is planning to sell about \$5.75 billion of new seven-year notes. It plans tomorrow to sell \$4.25 billion of new 19-year, 10-month bonds.

Interest rates on short-term Treasury bills were little changed. The latest 13-week bill closed at 7.84% bid, down slightly from an average of 7.86% set at an auction last Friday. The latest 26-week bill closed at 8.19% bid, the same as the auction average.

Credit markets were closed yesterday for the New Year's Day holiday.

If so many experts were so badly fooled by interest rates last year, why bother forecasting at all? "The answer is that virtually every decision that a businessman makes presupposes a forecast," replies Alan Greenspan, a frequent adviser to the Reagan administration. "There is no way to

later, whatever the long term interest rate performance happens to be, it is the intention of the design of this product to produce the highest rate of return.

While interest rates were declining, another problem arose in December for the insurance industry, and that was the new surplus and reserve requirements proposed by Paul Sarnoff, an actuary at Prudential Life and John Montgomery, the Insurance Commissioner of the State of California. These proposals, which are designed to make the promise of high rates of return by under-capitalized insurance companies impossible (this is a fear in California after the Baldwin-United collapse, since California has a preponderance of young, undercapitalized, and aggressive companies), will, unfortunately, also effect the reserves and surplus accounting of the major insurance carriers, which would be the candidates for writing the Alaskan Longevity Bonus Program. Insurance carriers are petrified of surplus drain and the Sarnoff proposals would cause carriers to set aside substantial sums in reserve for any guaranteed products such as GIC's (Guaranteed Issue Contracts) or annuities. Depending on the outcome of the Sarnoff proposals at the next meeting of the NAIC (National Association of Insurance Commissioners), it may cause many carriers to shy away from handling the large GIC type case

(\$5,000,000 plus in premium) because of the surplus drain, which would leave only a handful of carriers like Prudential, Metropolitan, Equitable, and New York Life that could handle the Alaskan program.

And as if that was not bad enough, Secretary of the Treasury Donald Regan left his farewell gift to the business community in the form of the most comprehensive recommendations for change ever written by the Treasury Department. The three volume work has recommendations for tax changes that affect every aspect of the current taxation of insurance companies. Though most of these recommended changes will not go through, and those that are passed will probably not affect the State of Alaska, these Treasury recommendations are just one more factor that will tend to keep the insurance industry from making any long term, high interest rate guarantees.

Despite this general predicament we still have a few substantial companies that are willing to give high guarantees that will allow the State of Alaska to fund the Longevity Bonus Program with substantial savings due to a higher rate of return, and we should still be able to achieve a 12% rate of return for the entire program.

Even more important is the fact that whatever the interest rate guarantees, the SPL policy will out perform GIC's, Government Securities, and Corporate investments of the same duration, while providing the State with investment security from market value adjustments.

WHY USE SINGLE PREMIUM LIFE

The Insurance Industry as a whole has the unique ability to structure its investment performance in the form of guarantees. Insurance companies can utilize mortgages and private placements as investments that Wall Street investment firms do not have access to or would not work with because the companies and deals are too small. In this way, the Insurance Industry can provide a higher rate of return than corporate bonds or government securities.

Normally, an Insurance Company would write an investment contract as a GIC (Guaranteed Investment Contract), but GIC's are used exclusively for qualified plans (e.g. Pension Plans). To use a GIC for non-qualified plans, such

as the State of Alaska Longevity Bonus Program, would cause severe IRS, SEC, and State Insurance Department regulatory problems for the insurance companies.

In order to allow the State of Alaska to enjoy the benefits of the high rate of return promised by the Insurance Industry without the disadvantages normally associated with GIC's and Government Bonds, we have developed a special type of group single premium Whole Life policy that will allow the State of Alaska full flexibility and liquidity with no market value adjustment risks (as with bonds). In addition because of the tax breaks given to insurance companies on insurance policies (but not GIC's) the rate of return enjoyed by the State will be higher than corresponding durations of bonds, Government Securities, or GIC's.

However, should there be a period of economic uncertainty and high interest rates, the principal value of the Single Premium Life plan will not decrease as will the value of bonds, Government Securities, or a GIC because of market value adjustments.

ANALYSIS OF RATES OF RETURN

| | <u>GIC</u> | <u>Change</u> | <u>SPL</u> | <u>Change</u> |
|----------------------------------|------------|---------------|------------|---------------|
| Underlying Investment Rate | 12.50% | | 12.50% | |
| Premium Tax | 12.50 | 0 | 12.25 | - .25 |
| 10 Year Guarantee | 12.00 | - .50 | 12.25 | 0 |
| Tax Write-Off | 12.25 | + .25 | 14.25 | +2.00 |
| Cost of Insurance Corridor | 12.25 | 0 | 13.50 | - .75 |
| Insurance Supplement To Yield | 12.25 | 0 | 14.25 | + .75 |
| Total Effective Yield | 12.25 | | 14.25 | |

SPL PRODUCTS AVAILABLE

Currently, some 15-20 insurance companies have started to offer single premium whole life products. The only company in our original consortium of the largest New York licensed companies that currently offers a SPL product is Executive Life. We do have a commitment from the major companies, however, that they will offer this product through a Multiemployer Trust (MET) if the State of Alaska decides to go with this type of program. The reasons why we need the major companies behind this program are threefold:

- (1) Security of Investment;
- (2) Taxable Income (many small companies have no taxable income so tax subsidies of the SPL are meaningless);
- (3) Surplus and Reserve Strength (in the event that the Sarnoff Proposals or new tax regulations are passed).

FUNDING THE SPL POLICY FOR
THE LONGEVITY BONUS PROGRAM (ALB)

We have illustrated both a GIC and SPL policy to fund the ALB. The SPL has a higher rate of return and more investment flexibility than the GIC, but there is still a substantial funding shortfall.

In order to fund the benefits to be paid out as Longevity Bonuses, we have used funding of \$120,000,000 for 3 years of \$360,000,000. When all of the bonuses complete with the 3% escalator were paid out, there was over \$2 billion paid to Alaskan residents. There was, however, a short fall of about \$300,000,000.

If we assume that some of the monies to fund this program came from the earnings on the undistributed income of the Permanent Fund and from the loans outstanding that are owed the State but would not have a major impact on the State's balance sheet, as pointed out by Dave Rose's report (see Appendix), then we can probably fund \$200,000,000 a year from these loans and \$50,000,000 a year for 4 years from the earnings of the undistributed income.

A more important step and one that would have tremendous savings would be to use the insurance consortium to guarantee a higher rate on the Target Annuity. Since the Target Annuity is used as an offset to the Longevity Bonus paid out to recipients, the higher the guaranteed interest, the higher the annuity; and the higher the Target Annuity, the lower the ALB that needs to be paid and the lower the funding that needs to be done. The current annuity purchase rate appears to be \$10 for every \$1 of annuity purchased. This assumes only a 6% interest rate. By using the insurance consortium we can guarantee a much higher interest rate which means an annuity purchase rate of \$7 rather than \$10 - or in other words a 30% cost savings to the State of Alaska on its ALB funding program.

This combination of approaches should achieve a funding of the ALB without any funds coming from the legislature or general fund revenues.

APPENDICES

APPENDIX A

COMPUTER RUNS WITH PRESENT VALUE

Included in these runs are the following:

- 1.(a) Funding the ALB Bonus after 10 years with GIC funding.
- (b) Present Value.

- 2.(a) Funding the ALB Bonus after 10 years with the Single Premium Whole Life.
- (b) Present Value.

- 3.(a) Funding the entire bonus plan with the Single Premium Whole Life.
- (b) Present Value

The runs assume a net product rate of 11% made up of mortality at 1.25% and a declared interest rate of 9.75% on cash values. The declared net rate on the GIC is 9.00%. The difference in the two rates is due to the tax savings enjoyed by the Single Premium Whole Life.

GIC FUNDING
BONUS AFTER 10 YEARS
WITH PRESENT VALUE

ALASKA LONGEVITY BONUS PROGRAM

(000'S OMITTED)

| YEAR | CASH VALUE | AFTER LOAN | FACE AMT | EXPECTED ACCUM. GAIN | ALASKA DEFERRED PAYABLE | NET GAIN TO STATE |
|------|------------|------------|----------|----------------------|-------------------------|-------------------|
| 1985 | 125,895 | 125,895 | 259,144 | 4,904 | 0 | 4,904 |
| 1986 | 259,144 | 259,144 | 389,921 | 13,786 | 0 | 13,786 |
| 1987 | 389,921 | 389,921 | 420,435 | 27,231 | 0 | 27,231 |
| 1988 | 420,435 | 420,435 | 440,745 | 42,601 | 0 | 42,601 |
| 1989 | 440,745 | 440,745 | 460,476 | 60,130 | 0 | 60,130 |
| 1990 | 460,476 | 460,476 | 479,325 | 80,066 | 0 | 80,066 |
| 1991 | 479,325 | 479,325 | 496,975 | 102,661 | 0 | 102,661 |
| 1992 | 496,975 | 496,975 | 513,110 | 128,150 | 0 | 128,150 |
| 1993 | 513,110 | 513,110 | 527,124 | 156,742 | 0 | 156,742 |
| 1994 | 527,124 | 527,124 | 539,623 | 188,608 | 0 | 188,608 |
| 1995 | 539,623 | 539,623 | 549,410 | 223,827 | 83,077 | 140,800 |
| 1996 | 549,410 | 549,410 | 556,461 | 262,656 | 166,959 | 95,697 |
| 1997 | 556,461 | 556,461 | 560,426 | 305,952 | 350,294 | 94,258 |
| 1998 | 560,426 | 560,426 | 560,930 | 351,168 | 416,544 | 16,926 |
| 1999 | 560,930 | 560,930 | 557,599 | 401,193 | 416,544 | -15,440 |
| 2000 | 557,599 | 557,599 | 550,123 | 454,717 | 521,139 | -66,222 |
| 2001 | 550,123 | 550,123 | 538,320 | 512,576 | 624,572 | -111,996 |
| 2002 | 538,320 | 538,320 | 522,156 | 573,891 | 726,052 | -152,160 |
| 2003 | 522,156 | 522,156 | 501,760 | 638,504 | 824,692 | -186,187 |
| 2004 | 501,760 | 501,760 | 477,420 | 705,894 | 919,527 | -213,632 |
| 2005 | 477,420 | 477,420 | 449,548 | 775,373 | 1,009,604 | -234,210 |
| 2006 | 449,548 | 449,548 | 418,645 | 846,234 | 1,093,716 | -247,482 |
| 2007 | 418,645 | 418,645 | 385,280 | 917,556 | 1,204,688 | -287,092 |
| 2008 | 385,280 | 385,280 | 350,400 | 988,639 | 1,308,438 | -319,799 |
| 2009 | 350,400 | 350,400 | 314,095 | 1,058,503 | 1,404,346 | -345,842 |
| 2010 | 314,095 | 314,095 | 277,480 | 1,126,109 | 1,492,598 | -366,489 |
| 2011 | 277,480 | 277,480 | 241,179 | 1,190,498 | 1,573,420 | -387,721 |
| 2012 | 241,179 | 241,179 | 205,847 | 1,251,611 | 1,647,074 | -393,462 |
| 2013 | 205,847 | 205,847 | 172,045 | 1,308,300 | 1,713,201 | -434,901 |
| 2014 | 172,045 | 172,045 | 146,187 | 1,360,265 | 1,770,775 | -470,510 |
| 2015 | 146,187 | 146,187 | 110,853 | 1,407,051 | 1,810,158 | -503,107 |
| 2016 | 110,853 | 110,853 | 84,588 | 1,448,358 | 1,841,747 | -533,389 |
| 2017 | 84,588 | 84,588 | 61,227 | 1,484,072 | 2,072,842 | -588,769 |
| 2018 | 61,227 | 61,227 | 40,878 | 1,514,229 | 2,154,898 | -640,668 |
| 2019 | 40,878 | 40,878 | 31,114 | 1,539,326 | 2,228,416 | -689,090 |
| 2020 | 31,114 | 31,114 | 16,227 | 1,559,494 | 2,228,416 | -689,921 |
| 2021 | 16,227 | 16,227 | 0 | 1,568,590 | 2,228,416 | -659,826 |
| 2022 | 0 | 0 | 0 | 1,568,590 | 2,228,416 | -659,826 |
| 2023 | 0 | 0 | 0 | 1,568,590 | 2,228,416 | -659,826 |
| 2024 | 0 | 0 | 0 | 1,568,590 | 2,228,416 | -659,826 |

ALASKAN LONGEVITY BONUS PROGRAM

TOTAL COSTS
(000'S OMITTED)
PRESENT VALUE @ 10.00%

| | PRES VAL OF OUTLAY | CASH VALUE | NET DEATH BENEFIT | EXPECTED NET DEATH BENEFIT | BENEFIT COSTS | GAIN | BAL. SHEET AFTER BENEFIT |
|------|--------------------------|------------|-------------------------|----------------------------------|------------------|---------|--------------------------------|
| 1985 | 120,002 | 114,450 | 4,459 | 4,458 | 0 | -1,092 | -1,092 |
| 1986 | 229,092 | 214,168 | 11,800 | 11,799 | 1 | -3,123 | -3,125 |
| 1987 | 328,266 | 300,392 | 21,901 | 21,900 | 0 | -5,972 | -5,973 |
| 1988 | 328,266 | 287,163 | 32,400 | 32,398 | 1 | -8,702 | -8,704 |
| 1989 | 328,266 | 273,668 | 43,285 | 43,282 | 2 | -11,312 | -11,315 |
| 1990 | 328,266 | 259,927 | 54,536 | 54,536 | 0 | -13,802 | -13,803 |
| 1991 | 328,266 | 245,969 | 66,130 | 66,130 | -0 | -16,266 | -16,166 |
| 1992 | 328,266 | 231,842 | 78,921 | 78,921 | 0 | -18,402 | -18,402 |
| 1993 | 328,266 | 217,609 | 90,147 | 90,147 | -0 | -20,510 | -20,509 |
| 1994 | 328,266 | 203,345 | 102,433 | 102,432 | 0 | -22,488 | -22,488 |
| 1995 | 328,266 | 189,134 | 114,794 | 85,678 | 29,117 | -24,337 | -53,455 |
| 1996 | 328,266 | 175,059 | 127,151 | 71,305 | 55,845 | -26,056 | -81,991 |
| 1997 | 328,266 | 161,187 | 139,431 | 59,301 | 80,129 | -27,647 | -107,777 |
| 1998 | 328,266 | 147,577 | 151,575 | 49,471 | 102,104 | -29,112 | -131,217 |
| 1999 | 328,266 | 134,282 | 163,530 | 41,722 | 121,807 | -30,453 | -152,261 |
| 2000 | 328,266 | 121,350 | 175,241 | 30,671 | 144,570 | -31,674 | -176,245 |
| 2001 | 328,266 | 108,839 | 186,649 | 21,615 | 165,033 | -32,778 | -197,812 |
| 2002 | 328,266 | 96,821 | 197,677 | 14,391 | 183,285 | -33,767 | -217,053 |
| 2003 | 328,266 | 85,376 | 208,241 | 8,827 | 199,414 | -34,647 | -234,061 |
| 2004 | 328,266 | 74,583 | 218,258 | 4,748 | 213,510 | -35,424 | -248,934 |
| 2005 | 328,266 | 64,514 | 227,650 | 1,967 | 225,682 | -36,102 | -261,784 |
| 2006 | 328,266 | 55,225 | 236,352 | 337 | 236,015 | -36,688 | -272,704 |
| 2007 | 328,266 | 46,753 | 244,322 | -4,086 | 248,408 | -37,190 | -285,599 |
| 2008 | 328,266 | 39,115 | 251,534 | -7,407 | 258,941 | -37,615 | -296,557 |
| 2009 | 328,266 | 32,210 | 257,582 | -9,810 | 267,793 | -37,942 | -305,736 |
| 2010 | 328,266 | 26,354 | 263,655 | -11,543 | 275,198 | -38,256 | -313,455 |
| 2011 | 328,266 | 21,165 | 268,582 | -12,781 | 281,363 | -38,518 | -319,882 |
| 2012 | 328,266 | 16,724 | 272,805 | -13,664 | 286,470 | -38,736 | -325,207 |
| 2013 | 328,266 | 12,976 | 276,379 | -16,151 | 292,530 | -38,910 | -331,440 |
| 2014 | 328,266 | 9,859 | 279,357 | -18,191 | 297,549 | -39,049 | -336,598 |
| 2015 | 328,266 | 7,303 | 281,795 | -19,889 | 301,685 | -39,167 | -340,852 |
| 2016 | 328,266 | 5,250 | 283,751 | -21,324 | 305,075 | -39,264 | -344,340 |
| 2017 | 328,266 | 3,642 | 285,289 | -23,708 | 308,997 | -39,335 | -348,333 |
| 2018 | 328,266 | 2,396 | 286,469 | -25,740 | 312,209 | -39,400 | -351,610 |
| 2019 | 328,266 | 1,454 | 287,362 | -27,463 | 314,825 | -39,449 | -354,275 |
| 2020 | 328,266 | 1,006 | 288,015 | -26,810 | 314,825 | -39,244 | -354,070 |
| 2021 | 328,266 | 477 | 288,282 | -26,543 | 314,825 | -39,506 | -354,332 |
| 2022 | 328,266 | 0 | 288,282 | -26,543 | 314,825 | -39,983 | -354,809 |
| 2023 | 328,266 | 0 | 288,282 | -26,543 | 314,825 | -39,983 | -354,809 |
| 2024 | 328,266 | 0 | 288,282 | -26,543 | 314,825 | -39,983 | -354,809 |

SPL FUNDING
BONUS AFTER 10 YEARS
WITH PRESENT VALUE

ALASKAN LONGEVITY BONDS PROGRAM

(000'S OMITTED)

| YEAR | ----- AFTER LOAN CASH VALUE FACE AMT ----- | EXPECTED ACCU. GAIN | ALASKAN BENEFIT PAYABLE | NET GAIN TO STATE | |
|------|--|---------------------------|-------------------------------|-------------------------|----------|
| 1985 | 126,762 | 223,705 | 0,496 | 0 | 0,496 |
| 1986 | 261,839 | 470,870 | 24,011 | 0 | 24,011 |
| 1987 | 405,417 | 710,631 | 46,930 | 0 | 46,930 |
| 1988 | 429,233 | 686,539 | 71,021 | 0 | 71,021 |
| 1989 | 453,041 | 662,488 | 96,386 | 0 | 96,386 |
| 1990 | 476,554 | 642,445 | 123,379 | 0 | 123,379 |
| 1991 | 499,446 | 627,276 | 152,349 | 0 | 152,349 |
| 1992 | 521,368 | 620,814 | 183,786 | 0 | 183,786 |
| 1993 | 541,966 | 630,362 | 218,569 | 0 | 218,569 |
| 1994 | 560,880 | 646,674 | 257,269 | 0 | 257,269 |
| 1995 | 577,759 | 660,242 | 300,031 | 83,077 | 216,954 |
| 1996 | 592,239 | 670,797 | 346,978 | 166,959 | 180,018 |
| 1997 | 603,918 | 676,038 | 398,103 | 250,794 | 147,309 |
| 1998 | 612,353 | 675,494 | 453,376 | 334,242 | 119,133 |
| 1999 | 617,065 | 670,980 | 512,882 | 416,544 | 96,338 |
| 2000 | 617,563 | 662,112 | 576,660 | 521,139 | 55,521 |
| 2001 | 613,414 | 648,664 | 644,641 | 624,572 | 20,068 |
| 2002 | 604,321 | 634,538 | 716,989 | 726,052 | -9,063 |
| 2003 | 590,147 | 619,672 | 793,741 | 824,692 | -30,950 |
| 2004 | 570,935 | 599,499 | 874,332 | 919,527 | -45,194 |
| 2005 | 546,917 | 574,275 | 958,003 | 1,009,604 | -51,600 |
| 2006 | 518,472 | 544,412 | 1,043,863 | 1,093,716 | -49,853 |
| 2007 | 486,097 | 510,411 | 1,130,937 | 1,204,688 | -73,750 |
| 2008 | 450,380 | 472,907 | 1,213,206 | 1,308,438 | -90,231 |
| 2009 | 412,375 | 433,002 | 1,304,605 | 1,404,346 | -99,740 |
| 2010 | 372,142 | 390,746 | 1,388,771 | 1,492,598 | -103,827 |
| 2011 | 330,976 | 347,512 | 1,469,718 | 1,573,420 | -103,701 |
| 2012 | 289,612 | 304,087 | 1,546,573 | 1,647,074 | -100,500 |
| 2013 | 248,848 | 261,290 | 1,618,577 | 1,743,201 | -124,623 |
| 2014 | 209,381 | 219,854 | 1,685,025 | 1,830,775 | -145,749 |
| 2015 | 171,752 | 180,341 | 1,745,250 | 1,910,158 | -164,908 |
| 2016 | 136,720 | 143,557 | 1,798,774 | 1,981,747 | -182,972 |
| 2017 | 105,022 | 110,275 | 1,845,360 | 2,072,842 | -227,481 |
| 2018 | 76,521 | 80,348 | 1,884,956 | 2,154,898 | -269,941 |
| 2019 | 51,425 | 53,996 | 1,918,122 | 2,228,416 | -310,294 |
| 2020 | 39,425 | 41,396 | 1,944,942 | 2,228,416 | -283,474 |
| 2021 | 20,628 | 21,660 | 1,957,084 | 2,228,416 | -271,332 |
| 2022 | 0 | 0 | 1,957,084 | 2,228,416 | -271,332 |
| 2023 | 0 | 0 | 1,957,084 | 2,228,416 | -271,332 |
| 2024 | 0 | 0 | 1,957,084 | 2,228,416 | -271,332 |

ALASKAN LONGEVITY BONUS PROGRAM

TOTAL COSTS
(000'S OMITTED)
PRESENT VALUE @ 10.00%

| | PRES VAL OF OUTLAY | CASH VALUE | NET DEATH BENEFIT | EXPECTED NET DEATH BENEFIT | BENEFIT COSTS | GAIN | BAL. SHEET AFTER BENEFIT |
|------|--------------------------|------------|-------------------------|----------------------------------|------------------|--------|--------------------------------|
| 1985 | 120,002 | 115,238 | 7,723 | 7,724 | -0 | 2,959 | 2,960 |
| 1986 | 229,992 | 216,396 | 20,545 | 20,546 | -1 | 7,848 | 7,849 |
| 1987 | 328,266 | 304,595 | 37,764 | 37,765 | -1 | 14,094 | 14,095 |
| 1988 | 328,266 | 273,171 | 54,220 | 54,220 | -0 | 19,125 | 19,125 |
| 1989 | 328,266 | 281,303 | 69,970 | 69,970 | -0 | 23,006 | 23,006 |
| 1990 | 328,266 | 269,002 | 85,204 | 85,204 | 0 | 25,942 | 25,942 |
| 1991 | 328,266 | 256,294 | 100,072 | 100,072 | -0 | 28,100 | 28,101 |
| 1992 | 328,266 | 243,222 | 114,737 | 114,738 | -1 | 29,693 | 29,694 |
| 1993 | 328,266 | 229,846 | 129,489 | 129,490 | -0 | 31,069 | 31,070 |
| 1994 | 328,266 | 216,243 | 144,410 | 144,410 | -0 | 32,387 | 32,387 |
| 1995 | 328,266 | 202,501 | 159,398 | 130,280 | 29,118 | 33,633 | 4,515 |
| 1996 | 328,266 | 188,705 | 174,357 | 118,511 | 55,845 | 34,796 | -21,049 |
| 1997 | 328,266 | 174,933 | 189,166 | 109,036 | 80,129 | 35,833 | -44,295 |
| 1998 | 328,266 | 161,251 | 203,721 | 101,617 | 102,104 | 36,706 | -65,397 |
| 1999 | 328,266 | 147,720 | 217,966 | 96,160 | 121,806 | 37,420 | -84,385 |
| 2000 | 328,266 | 134,399 | 231,847 | 87,277 | 144,569 | 37,980 | -106,589 |
| 2001 | 328,266 | 121,360 | 245,296 | 80,263 | 165,033 | 38,391 | -126,642 |
| 2002 | 328,266 | 109,692 | 259,309 | 75,023 | 183,285 | 38,735 | -144,556 |
| 2003 | 328,266 | 96,493 | 270,858 | 71,444 | 199,414 | 39,086 | -160,327 |
| 2004 | 328,266 | 84,865 | 282,838 | 69,327 | 213,510 | 39,437 | -174,073 |
| 2005 | 328,266 | 73,905 | 294,144 | 68,461 | 225,682 | 39,783 | -185,899 |
| 2006 | 328,266 | 63,692 | 304,692 | 68,676 | 236,015 | 40,118 | -195,897 |
| 2007 | 328,266 | 54,286 | 314,416 | 66,007 | 248,408 | 40,436 | -207,972 |
| 2008 | 328,266 | 45,725 | 323,276 | 64,334 | 258,941 | 40,734 | -218,206 |
| 2009 | 328,266 | 38,066 | 331,250 | 63,456 | 267,793 | 41,044 | -226,749 |
| 2010 | 328,266 | 31,224 | 338,312 | 63,113 | 275,198 | 41,270 | -233,927 |
| 2011 | 328,266 | 25,246 | 344,486 | 63,123 | 281,363 | 41,466 | -239,896 |
| 2012 | 328,266 | 20,082 | 349,816 | 63,345 | 286,470 | 41,632 | -244,838 |
| 2013 | 328,266 | 15,687 | 354,355 | 61,824 | 292,530 | 41,776 | -250,754 |
| 2014 | 328,266 | 11,999 | 350,163 | 60,613 | 297,549 | 41,896 | -255,653 |
| 2015 | 328,266 | 8,948 | 361,300 | 59,615 | 301,685 | 41,982 | -259,702 |
| 2016 | 328,266 | 6,475 | 363,835 | 58,760 | 305,075 | 42,044 | -263,030 |
| 2017 | 328,266 | 4,521 | 365,841 | 56,843 | 308,998 | 42,097 | -266,900 |
| 2018 | 328,266 | 2,995 | 367,391 | 55,181 | 312,209 | 42,120 | -270,089 |
| 2019 | 328,266 | 1,829 | 368,571 | 53,745 | 314,825 | 42,135 | -272,650 |
| 2020 | 328,266 | 1,275 | 369,439 | 54,613 | 314,825 | 42,448 | -272,377 |
| 2021 | 328,266 | 606 | 369,796 | 54,970 | 314,825 | 42,136 | -272,689 |
| 2022 | 328,266 | 0 | 369,796 | 54,970 | 314,825 | 41,530 | -273,295 |
| 2023 | 328,266 | 0 | 369,796 | 54,970 | 314,825 | 41,530 | -273,295 |
| 2024 | 328,266 | 0 | 369,796 | 54,970 | 314,825 | 41,530 | -273,295 |

SPL FUNDING OF ENTIRE BONUS PLAN
STARTING 1985
WITH PRESENT VALUE

ALASKAN LONGEVITY BONUS PROGRAM

(00)'S OMITTED)

| YEAR | AFTER CASH VALUE | LOAN FACE AMT | EXPECTED ACCUM. GAIN | ALASKAN BENEFIT PAYABLE | NET GAIN TO STATE |
|------|---------------------|------------------|----------------------------|-------------------------------|-------------------------|
| 1985 | 126,762 | 223,705 | 8,496 | 47,124 | -38,627 |
| 1986 | 261,839 | 470,870 | 24,011 | 96,820 | -72,809 |
| 1987 | 405,417 | 710,631 | 46,930 | 150,386 | -103,455 |
| 1988 | 429,233 | 686,539 | 71,021 | 207,654 | -136,632 |
| 1989 | 453,041 | 662,488 | 96,386 | 268,687 | -172,300 |
| 1990 | 476,554 | 642,445 | 123,379 | 331,709 | -208,330 |
| 1991 | 499,446 | 627,276 | 152,349 | 396,188 | -243,839 |
| 1992 | 521,368 | 620,814 | 183,786 | 473,548 | -289,762 |
| 1993 | 541,966 | 630,362 | 218,569 | 553,283 | -334,713 |
| 1994 | 560,860 | 646,674 | 257,269 | 634,745 | -377,476 |
| 1995 | 577,759 | 660,242 | 300,031 | 717,822 | -417,791 |
| 1996 | 592,239 | 670,777 | 346,978 | 801,705 | -454,726 |
| 1997 | 603,918 | 676,038 | 398,103 | 885,539 | -487,436 |
| 1998 | 612,353 | 675,494 | 453,376 | 968,987 | -515,611 |
| 1999 | 617,065 | 670,980 | 512,882 | 1,051,289 | -538,407 |
| 2000 | 617,563 | 662,112 | 576,660 | 1,135,885 | -579,224 |
| 2001 | 613,414 | 648,664 | 644,641 | 1,229,318 | -614,676 |
| 2002 | 604,321 | 634,538 | 716,989 | 1,330,797 | -643,808 |
| 2003 | 590,147 | 619,672 | 793,741 | 1,439,437 | -665,695 |
| 2004 | 570,935 | 599,499 | 874,332 | 1,554,273 | -679,940 |
| 2005 | 546,917 | 574,275 | 958,003 | 1,674,350 | -686,346 |
| 2006 | 518,472 | 544,412 | 1,043,863 | 1,798,432 | -684,598 |
| 2007 | 486,097 | 510,411 | 1,135,937 | 1,939,433 | -708,496 |
| 2008 | 450,380 | 472,907 | 1,219,206 | 2,093,184 | -724,977 |
| 2009 | 412,375 | 433,002 | 1,304,605 | 2,239,092 | -734,486 |
| 2010 | 372,142 | 390,746 | 1,389,771 | 2,377,344 | -738,572 |
| 2011 | 330,976 | 347,512 | 1,469,718 | 2,508,166 | -738,447 |
| 2012 | 289,612 | 304,087 | 1,546,573 | 2,631,819 | -735,246 |
| 2013 | 248,848 | 261,290 | 1,619,577 | 2,747,947 | -759,369 |
| 2014 | 209,381 | 219,854 | 1,689,025 | 2,855,521 | -780,495 |
| 2015 | 171,752 | 180,341 | 1,745,250 | 2,944,904 | -799,653 |
| 2016 | 136,720 | 143,557 | 1,798,774 | 3,016,493 | -817,718 |
| 2017 | 105,022 | 110,275 | 1,845,360 | 3,077,587 | -862,227 |
| 2018 | 76,521 | 80,348 | 1,884,956 | 3,129,643 | -904,687 |
| 2019 | 51,425 | 53,996 | 1,918,122 | 3,173,162 | -945,040 |
| 2020 | 39,425 | 41,396 | 1,944,942 | 3,208,162 | -918,219 |
| 2021 | 20,628 | 21,660 | 1,957,084 | 3,233,162 | -906,078 |
| 2022 | 0 | 0 | 1,957,084 | 3,243,162 | -906,078 |
| 2023 | 0 | 0 | 1,957,084 | 3,243,162 | -906,078 |
| 2024 | 0 | 0 | 1,957,084 | 3,243,162 | -906,078 |

ALASKAN LONGEVITY BONUS PROGRAM

TOTAL COSTS
(000'S OMITTED)
PRESENT VALUE @ 10.00%

| | PRES VAL OF OUTLAY | CASH VALUE | NET DEATH BENEFIT | EXPECTED NET DEATH BENEFIT | BENEFIT COSTS | GAIN | BAL. SHEET AFTER BENEFIT |
|------|--------------------------|------------|-------------------------|----------------------------------|------------------|--------|--------------------------------|
| 1985 | 120,002 | 115,238 | 7,723 | -35,115 | 42,839 | 2,959 | -39,879 |
| 1986 | 229,092 | 216,396 | 20,345 | -63,365 | 83,910 | 7,848 | -76,062 |
| 1987 | 328,266 | 304,595 | 37,764 | -86,390 | 124,155 | 14,094 | -110,061 |
| 1988 | 328,266 | 293,171 | 54,220 | -109,050 | 163,270 | 19,125 | -144,145 |
| 1989 | 328,266 | 281,303 | 69,970 | -131,197 | 201,167 | 23,006 | -178,161 |
| 1990 | 328,266 | 269,002 | 85,206 | -151,535 | 236,742 | 25,942 | -210,799 |
| 1991 | 328,266 | 256,294 | 100,072 | -169,757 | 269,827 | 28,100 | -241,728 |
| 1992 | 328,266 | 243,222 | 114,737 | -191,189 | 305,918 | 29,693 | -276,225 |
| 1993 | 328,266 | 229,846 | 129,489 | -210,244 | 339,733 | 31,069 | -308,664 |
| 1994 | 328,266 | 216,243 | 144,610 | -226,731 | 371,141 | 32,387 | -338,754 |
| 1995 | 328,266 | 202,501 | 159,398 | -243,861 | 400,260 | 33,633 | -366,626 |
| 1996 | 328,266 | 189,705 | 174,357 | -252,630 | 426,987 | 34,796 | -392,190 |
| 1997 | 328,266 | 174,933 | 189,166 | -262,105 | 451,271 | 35,833 | -415,437 |
| 1998 | 328,266 | 161,251 | 203,721 | -269,524 | 473,246 | 36,706 | -436,539 |
| 1999 | 328,266 | 147,720 | 217,966 | -274,981 | 492,948 | 37,420 | -455,527 |
| 2000 | 328,266 | 134,399 | 231,847 | -283,864 | 515,711 | 37,980 | -477,731 |
| 2001 | 328,266 | 121,360 | 245,296 | -290,878 | 536,175 | 38,391 | -497,784 |
| 2002 | 328,266 | 108,692 | 253,309 | -296,118 | 554,427 | 38,735 | -515,692 |
| 2003 | 328,266 | 96,493 | 270,858 | -299,697 | 570,555 | 39,088 | -531,469 |
| 2004 | 328,266 | 84,865 | 287,838 | -301,814 | 584,652 | 39,437 | -545,214 |
| 2005 | 328,266 | 73,905 | 294,144 | -302,680 | 596,824 | 39,783 | -557,041 |
| 2006 | 328,266 | 63,692 | 304,692 | -302,465 | 607,157 | 40,118 | -567,039 |
| 2007 | 328,266 | 54,286 | 314,416 | -305,134 | 619,550 | 40,436 | -579,114 |
| 2008 | 328,266 | 45,725 | 323,276 | -306,807 | 630,083 | 40,734 | -589,348 |
| 2009 | 328,266 | 38,040 | 331,250 | -307,685 | 638,935 | 41,044 | -597,890 |
| 2010 | 328,266 | 31,224 | 338,312 | -308,027 | 646,340 | 41,270 | -605,069 |
| 2011 | 328,266 | 25,246 | 344,486 | -308,018 | 652,505 | 41,466 | -611,038 |
| 2012 | 328,266 | 20,082 | 349,816 | -307,796 | 657,612 | 41,632 | -615,989 |
| 2013 | 328,266 | 15,667 | 354,355 | -309,317 | 663,672 | 41,776 | -621,896 |
| 2014 | 328,266 | 11,999 | 358,163 | -310,527 | 668,691 | 41,896 | -626,794 |
| 2015 | 328,266 | 8,948 | 361,300 | -311,525 | 672,826 | 41,982 | -630,844 |
| 2016 | 328,266 | 6,475 | 363,835 | -312,381 | 676,217 | 42,044 | -634,172 |
| 2017 | 328,266 | 4,521 | 365,841 | -314,297 | 680,139 | 42,097 | -638,042 |
| 2018 | 328,266 | 2,995 | 367,391 | -315,959 | 683,351 | 42,120 | -641,231 |
| 2019 | 328,266 | 1,829 | 368,571 | -317,395 | 685,967 | 42,135 | -643,832 |
| 2020 | 328,266 | 1,275 | 369,439 | -316,528 | 685,967 | 42,448 | -643,519 |
| 2021 | 328,266 | 606 | 369,796 | -316,171 | 685,967 | 42,136 | -643,831 |
| 2022 | 328,266 | 0 | 369,796 | -316,171 | 685,967 | 41,530 | -644,437 |
| 2023 | 328,266 | 0 | 369,796 | -316,171 | 685,967 | 41,530 | -644,437 |
| 2024 | 328,266 | 0 | 369,796 | -316,171 | 685,967 | 41,530 | -644,437 |

APPENDIX B

NEW ENGLAND LIFE LETTER

HAROLD INGRAHAM



New England Mutual Life Insurance Company
501 Boylston Street, Boston, Massachusetts 02117
617-578-2931

HAROLD G. INGRAHAM, JR., F.S.A., CLU
Senior Vice President and Chief Actuary

January 8, 1985

Mr. Daniel E. Carpenter
Benefit Concepts, Inc.
101 Park Avenue, 26th Floor
New York, New York 10178

Re: Use of Life Insurance in the Alaska Longevity Bonus (ALB) Program

Dear Dan:

You have proposed to the State of Alaska a method of cost recovery that would allow the Longevity Bonus to continue to be paid to Alaskans for many years even if oil revenues decline. This cost recovery program would use a specially designed group single premium whole life insurance policy that would allow the state to fully recover upon the death of each Longevity Bonus recipient an amount of money equal to the premiums paid, as well as the total amount of Longevity Bonus paid to the recipient.

In this regard, the use of life insurance as a funding vehicle for the ALB program is eminently sound, for the following reasons:

- (1) A specially designed insurance product will allow the state to enjoy a higher rate of return without compromising market value security. The insurance company will credit to the policy the rates of interest that it is currently earning on its longer term investments - in particular private placements and mortgages. Moreover, because of its financial strength and diversity of portfolio investments, a large well-established insurance company can insulate its policyholders from the kind of market value adjustments that occur on most equity and bond instruments. And the insurance company, in a normal yield curve environment, can guarantee principal and interest at rates substantially higher than those applicable to money market funds.

-Continued on Page Two-