

SENATE FINANCE COMMITTEE
February 24, 2017
8:38 a.m.

[8:38:55 AM](#)

CALL TO ORDER

Co-Chair Hoffman called the Senate Finance Committee meeting to order at 8:38 a.m.

MEMBERS PRESENT

Senator Lyman Hoffman, Co-Chair
Senator Click Bishop, Vice-Chair
Senator Mike Dunleavy
Senator Peter Micciche
Senator Donny Olson

MEMBERS ABSENT

Senator Anna MacKinnon, Co-Chair
Senator Natasha von Imhof

ALSO PRESENT

Steve Center, CFA, Senior Vice President, Callan Associates; Greg Allen, President and Director of Research, Callan Associates.

SUMMARY

^PROJECTIONS AND FORECASTING ALASKA PERMANENT FUND

[8:39:54 AM](#)

STEVE CENTER, CFA, SENIOR VICE PRESIDENT, CALLAN ASSOCIATES, introduced himself.

[8:40:14 AM](#)

GREG ALLEN, PRESIDENT AND DIRECTOR OF RESEARCH, CALLAN ASSOCIATES, introduced himself. He explained the functions of Callan Associates. He discussed the PowerPoint, "Callan's Return Projection Methodology for the Alaska Permanent Fund; Capital Market Expectations, Total Return, and Statutory Return" (copy on file).

Mr. Allen addressed slide 2, "Projected Returns for the Alaska Permanent Fund; Background":

- Callan has maintained a financial model of the Alaska Permanent Fund for the past 15 years, and provides projections to assist the Board and Staff in the management of the Fund.
- The model employs capital market projections maintained by Callan, Fund specific information provided by APFC Staff, and a sophisticated and flexible model of the accounting framework to allow us to test various spending and asset allocation proposals.
- The model uses Monte Carlo simulation to generate a full range of potential outcomes from best-case to worst-case, with associated probabilities.
- The model provides projections for many key financial variables including
 - Total Return
 - Statutory Return
 - Market Value
 - Earnings Reserve Balance
 - Distributions
- The model has been used many times over the years to analyze various proposals related to the Permanent Fund, including three legislative proposals in February of 2016.

[8:44:15 AM](#)

Mr. Allen looked at slide 3, "Return Projections FY 2017; Latest Projections for Total and Statutory Return":

- Return projection period was assumed to begin July 1, 2016.
- Market values and cost-basis inputs were as of June 30, 2016.
- 1-year returns for FY 2017 do not take into account performance in the first half of the fiscal year.
- Median 10-year total real return expectation is 4.70 percent, below the 5 percent real return expectation that has been employed as a target by the APFC.
- The mid-point of these distributions is just one potential outcome. It is important to recognized that

the Fund takes on risk therefore there can be significant variance relative to the mid-point projections.

[8:48:05 AM](#)

Co-Chair Hoffman noted that Callan advised trillions of assets for other entities. He wondered how the recommendations differed from the current breakdown. Mr. Allen explained that the calculations were created using the different assets that made up the Permanent Fund portfolio. He stressed that the numbers should be considered "consensus numbers." He remarked that Callan was not necessarily different than their peers. He explained that the difference with the Permanent Fund model, was based on the specific investment strategy. He referred to slide 6, which was the asset allocation of the Permanent Fund.

[8:50:52 AM](#)

Co-Chair Hoffman wondered whether Mr. Allen was familiar with SB 128 from the previous session. He wondered whether that would significantly alter the allocations. Mr. Allen replied that he would discuss what might alter the Permanent Fund.

[8:57:10 AM](#)

Co-Chair Hoffman wondered whether there were steps to forego the drastic problems with two bad years in a row. Mr. Allen replied that the Permanent Fund was in a better position than 15 years prior, because the Earnings Reserve was currently very large. The ending value of the Earnings Reserve was the largest that it had ever been at the end of a fiscal year.

Senator Micciche noted the five-year running average, resulted in a lower effective rate. He wondered whether the FY 18 rate of 4.56 percent the referred to the effective amount or the POMV. Mr. Allen replied that he was referring to the actual POMV amount, assuming that it was applied to five out of six. That would translate into an effective rate of 4.6 or 4.7 percent over time. He stated that the expected real return over ten years was 4.7 percent. He counseled that the committee choose an effective POMV, which was close to the expected real return.

Mr. Allen highlighted slide 4, "Capital Market Assumptions; Projected Return and Standard Deviation":

- Employed Callan's 2016 10-year capital market expectations for all models.
- Expectations are developed annually and used for strategic planning work for all client types.
- Represent long-term consensus expectations.
- Designed to work as a set in optimization and simulation analysis.
- Generally these expectations evolve slowly with only modest year-to-year changes.

Mr. Allen addressed slide 5, "Capital Market Assumptions; Projected Correlation Matrix":

- Projected correlations between asset classes are the third dimension of capital market expectations.
- Historical trending behavior is evaluated for each pair in the matrix.
- Correlations must be consistent (positive semi-definite) as a set in order to work properly in optimization and simulation analysis.

Mr. Allen looked at slide 6, "Assumed Asset Allocation; Used 2017 Target Allocation Adopted by Board in September, 2016":

- Assumed constant target asset allocation across entire 10-year projection period.
- Target asset allocation was very close to actual asset allocation as of June 30, 2016.
- Quarterly rebalancing was assumed which yields more comparable results across the models.
- Rebalancing assumptions are important because they impact turnover in the portfolio which results in gains realization.

Expected Return: 6.95 percent
Standard Deviation: 12.38 percent
Expected Real Return: 4.70 percent

Mr. Allen addressed slide 7, "Statutory Net Income and Permanent Fund Mechanics":

- Understanding the mechanics of the Permanent Fund can lend some insight into the expectations for Statutory Net Income which determines Statutory Net Return.
- Statutory Net Return is the total of realized income and realized capital gains in each fiscal year.
- The asset allocation determines the Fund's exposure to a number of factors which, in turn, will influence the Statutory Net Return over time.
 - Ratio of income producing assets to capital gains oriented assets;
 - Turnover;
 - Active versus passive management;
 - The use of illiquid asset classes such as real estate, private equity, infrastructure;
- We review the mechanics of the Fund, and look at the history of a number of important variables to help put Statutory Net Income into context.
 - Fund Market Value;
 - Oil revenue;
 - Statutory Net Income (realized income);
 - Earnings reserve balance;

[9:01:01 AM](#)

Mr. Allen recalled slide 4, with the projected return of 3 percent for fixed income for the following ten years. That was one of the lowest fixed income return projection that he had seen, which reflected the low-income rates.

Vice-Chair Bishop remarked that wondered if there was an anticipated change in asset allocations. Mr. Allen replied that the new chief investment officer laid out a five-year plan for the asset allocation of the Permanent Fund. That plan did not involve big changes. He stated that the mixture between income producing assets and growth producing assets would not change in the five-year plan. The change was that there would be more allocated toward the private investments.

Mr. Allen continued to discuss slide 7. He discussed the concept of statutory net return or "realized return" and its relationship to total return. He stated that the statutory return would sometimes be negative. He shared that the statutory return was the ratio of income-producing stocks versus growth-producing assets. He announced that bonds generated coupons, which represented income and was

reliable. The Permanent Fund began as a bond portfolio, so the entire return was income. He stated that, over the years, there was less income and more growth-producing assets in pursuit of the higher rate of return. The growth assets did not earn the return until the stock was sold. The earnings were not realized until the turnover occurred, or the percentage of the buying and selling within the portfolio.

[9:06:37 AM](#)

Mr. Allen discussed slide 8, "Mechanics of the Permanent Fund; Market Value over Time":

- The market value of the Fund has fluctuated from year to year based on market performance.
- The trend has generally been upward since 1999 with downturns in 2001-2002, and 2009-2009.
- As of FYE 2016 the market value of the Fund was roughly \$53 Billion.
- Market value is impacted by market return, distributions, and to a limited extent, oil revenue.

Vice-Chair Bishop surmised that the statutory returns were real money. Mr. Allen replied in the affirmative.

Vice-Chair Bishop stressed that using statutory returns dealt with real money, so they were less apt to "get the fund in trouble." Mr. Allen replied that he "would not take that leap." He stated that examining statutory returns was important, because until the return was realized it did not get moved into the earnings reserve. If the money was not in the earnings reserve, the money could not be spent.

Vice-Chair Bishop announced that the state would be realistic in the multiplier to avoid the negative situation. Mr. Allen agreed.

[9:10:09 AM](#)

Senator Micciche looked at slide 8, and wondered what an overlay of a similar sovereign fund would look like as a comparison. Mr. Allen replied that it would be similar.

Senator Micciche wondered whether the other funds would have a similar slope. Mr. Allen replied that there was a measure called "maximum draw down" that measured how much

the fund lost. He ranked the maximum draw down of the Permanent Fund versus all the other institutional investors. The Permanent Fund ranked in the top tenth percentile in avoiding the losses.

Mr. Allen addressed slide 9, "Statutory Net Income; Statutory Net Income over Time":

- Statutory Net Income is the total of realized income and realized capital gains.
- It is impacted by asset allocation and turnover.
- As the fund has moved away from bonds (and bond yields have declined) Statutory Net Income has become increasingly dominated by realized gains and losses.
- Statutory Net Income reacts with a lag to changes in market value.
- This can be seen in 2002 and 2009, both of which had positive total fund returns but very low to negative Statutory Net Income.

[9:16:23 AM](#)

Mr. Allen highlighted slide 10, "Statutory Net Income Projection; Conclusions":

- Statutory Net Income is influenced by a number of different dynamic factors besides the total return on the portfolio.
- The ratio of income producing investments to capital appreciation focused investments will have a significant impact.
- The amount of turnover in the capital appreciation focused investments will also have an impact.
- Rebalancing frequency between asset classes will also have a meaningful impact.
- Cash raised for distributions can accelerate the realization of gains or losses in the portfolio and will have an impact.
- Callan's projections for statutory net income are probably on the high side due to the assumption of quarterly rebalancing. APFC Investment Staff employs a much more efficient and sensible rebalancing approach in practice.

Co-Chair Hoffman noted that the legislature gave the board the authority to invest on the international market. He queried the last major investment guideline change to the

board from the legislature. He wondered whether there were any other changes that other major funds had considered. Mr. Allen responded that there was a point approximately ten years prior at which the fund was given a "prudent person perspective." He stated the fund could invest in almost anything, as long as a "prudent person in a similar position would also invest in that."

[9:19:47 AM](#)

Senator Dunleavy wondered whether the demand to sustain a draw to lead the corporation to sell prematurely to reach a goal. Mr. Allen replied that he did not believe so. He felt that sensible choices in terms of POMV.

Senator Micciche surmised that the max payout was known, but not the subtracted amount. Mr. Allen replied that certainty helps.

[9:26:19 AM](#)

Senator Micciche wondered whether the revenue limit could be a diversification method. Mr. Allen replied that there would be more in the fund at higher oil revenue.

[9:27:27 AM](#)

Vice-Chair Bishop wondered whether birth rate projections should be factored into the model of the percentage. Mr. Callan did not have an opinion on the impact of birth rate on the cost of government.

Vice-Chair Bishop stressed that the newly born would be given a dividend. Mr. Allen replied that the dividend would be a fixed dollar amount under the new formula.

Senator Micciche noted that the proposal was a fixed payout for three years, then was adjusted to a formula that would be the total amount divided by the number of qualified Alaskans. Mr. Allen replied that the model showed that the population did not change significantly year to year.

Co-Chair Hoffman queried closing comments.

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ADJOURNMENT

[9:31:38 AM](#)

The meeting was adjourned at 9:31 a.m.