

HOUSE FINANCE COMMITTEE
February 14, 2024
1:36 p.m.

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CALL TO ORDER

Co-Chair Johnson called the House Finance Committee meeting to order at 1:36 p.m.

MEMBERS PRESENT

Representative Bryce Edgmon, Co-Chair
Representative Neal Foster, Co-Chair*
Representative DeLena Johnson, Co-Chair
Representative Julie Coulombe
Representative Mike Cronk
Representative Alyse Galvin
Representative Sara Hannan
Representative Andy Josephson
Representative Dan Ortiz
Representative Will Stapp
Representative Frank Tomaszewski

MEMBERS ABSENT

None

ALSO PRESENT

Greg Allen, Chief Executive Officer, Chief Research Officer, Callan and Associates; Steve Center, Senior Vice President, Investment Consultant, Callan and Associates.

SUMMARY

PRESENTATION: ALASKA PERMANENT FUND; CAPITAL MARKET FORECAST

Co-Chair Johnson reviewed the meeting agenda.

^PRESENTATION: ALASKA PERMANENT FUND; CAPITAL MARKET FORECAST

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GREG ALLEN, CHIEF EXECUTIVE OFFICER, CHIEF RESEARCH OFFICER, CALLAN AND ASSOCIATES, introduced himself and noted that he had been working for Callan and Associates since 1988. He had consulted for the Permanent Fund (PF) on capital markets since 1996 and was a co-consultant for the fund for two years.

STEVE CENTER, SENIOR VICE PRESIDENT, INVESTMENT CONSULTANT, CALLAN AND ASSOCIATES, introduced himself and relayed that he had worked for Callan for almost 14 years and had worked with the Permanent Fund for the last nine years.

Co-Chair Johnson indicated that Representative Cronk, Representative Stapp, and Co-Chair Edgmon joined the meeting.

Mr. Allen introduced the PowerPoint presentation "Callan Market Outlook, APFC Asset Allocation and Performance Update" dated February 14, 2024 (copy on file). He continued on slide 2 and offered an outline of the presentation:

Outline

- 2023 year-end capital market review
- Callan's capital market projection process
- Current economic and capital market environment
- Full-set Callan 2024 capital market projections
- APFC Update
 - 2024 Policy Target Portfolio
 - Recent Performance Review
- Concluding observations

Mr. Allen skipped to slide 4 titled "Callan Capital Market Projection Process:"

Process Overview:

- Callan updates long term capital market projections each year in January and uses them for the full year with all clients for strategic planning purposes.
- Projections take into account long term relationships balanced with current market conditions.

- Consensus expectations (central banks, economists, asset managers, consultants, etc.) are carefully considered as an integral part of the process.

- Each number - return, risk, correlation - for every asset class must be individually defensible, and the numbers collectively need to work together as a set to generate reasonable portfolios during strategic planning exercises.

- Projections change slowly over time and are not designed to provide tactical insights.

- Process is executed by Callan's Capital Markets Research group and projections are peer reviewed by Callan's Client Policy Review Committee as well as the hundreds of clients that use them every year.

- Process is battle proven - it has evolved and improved but hasn't fundamentally changed over the last four decades.

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Mr. Allen continued to slide 5 titled "US Equity Rolling 10-Year Returns:"

Historical Perspective - US Large Cap Equity

- Historical 10-year return for US large cap has averaged 10.55%.
- 2024 projected return for large cap US equities is 7.50%.
- Historically there have been very few periods of negative 10-year returns for US equities.
- Current outlook is in lower third of historical distribution, driven by relatively high valuations, concentration, and secular decline in equity risk premium

Mr. Allen elaborated that the chart showed the rolling ten-year returns for the S&P 500. The fund received its highest return ever at 20 percent in 1958. In 2008 the market experienced a negative 10-year return due to the dot com

bubble collapse and the global financial crisis; two major financial crises in a ten-year period.

Mr. Allen advanced to slide 6 titled "Stock Market Returns by Calendar Year - Performance in perspective: History of the U.S. stock market (233 years of returns)." The graphic broke down returns on the stock market by calendar year. He pointed out that there had only been two years that were worse than a negative 40 percent since the market's inception.

Mr. Allen scrolled to slide 7 titled "U.S. Equity Market: Key Metrics - S&P 500 Valuation Measures." He explained that the chart depicted the long-term average market valuation of price over earnings at 16 percent (16 times earnings) over 30 years. Currently, the market (December 31, 2023) was at the high end of one standard deviation, which meant the market was "pricey" and was one reason the forecasted growth was 7.5 percent.

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Mr. Allen examined slide 8 titled "U.S. Equity Market: Price Relative to History - S&P 500 Index at Inflection Points" and quickly moved to Slide 9 titled "2024 Equity Market Projections:"

- Projected 10-year annualized geometric returns for public equity markets are in the 7.5% to 7.7% range.
- APFC portfolio employs all of the underlying equity markets.
- Diversification results in higher projected return than any single building block (7.85%).
- Higher standard deviation for non-US markets is partially due to currency volatility

Mr. Allen summarized that the graph demonstrated that a diversified portfolio "paid off" with better returns and lower risk. The PF had a very diversified global equity portfolio.

Mr. Allen discussed slide 10 titled "Range of Projected Equity Returns for APFC - 10th through 90th Percentile:"

- Projected mid-point of range of 10-year annualized returns for APFC Public Equity portfolio increased from 7.60% in 2023 to 7.85%
- Projected mid-point for Private Equity portfolio increased from 8.50% to 8.60%
- Valuation lags for private equity resulted in a modestly smaller increase in return expectations.

Mr. Allen elucidated that there was a ten percent chance that returns could be as high as 15.7 percent annualized over the next 10-years or as low as .23 percent per year, which was essentially zero. He added that the PF invested in private equity, which had a higher expected return than public equity. The PF was gradually moving from public equity to private equity over the last 10 to 15 years. The fund could afford the illiquidity of private equity due to its longevity and in turn it gained higher returns.

Mr. Allen continued on slide 11 titled "US Bonds Rolling 10-Year Returns - Historical Perspective - US Fixed Income:"

- Historical 10-year return for US bonds has averaged 5.35%.
- 2024 Projection is 5.25%.
- Still no periods historically of negative 10-year return for US bonds.
- Current outlook is in line with long term historical average.
- Rising interest rates have created higher return expectations going forward.
- Consistent cyclical decline in bond returns since 1990.

Mr. Allen pointed to the chart showing the rolling ten-Year returns on the bond market since its inception. He noted that the bond market returns peaked at 14 percent in 1990.

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Co-Chair Johnson referred to slide 10. She wondered what was happening when public funds were invested in private equities. Mr. Allen responded that public funds, particularly large public funds had been moving into private equity. He advanced to slide 27 to delineate his response to the question. He pointed to the gray bar on the chart showing the range of over 100 large public funds the and the range of public equity allocations. He expounded that the public fund with the most public equity had 65 percent of public equity versus the least at 25 percent. The PF had 34 percent; therefore, relative to large public funds the PF had a low amount of public equity; 75 percent of public funds had more public equity. The Permanent Fund had more in private markets at 42 percent than 72 percent of public funds. The PF had a high public equity market exposure because the fund had a longer term time horizon and was not taking a high percentage of assets each year unlike most public funds that were paying benefits. Therefore, the PF could afford illiquidity better than most other public funds. He turned to slide 28 that contained the same chart regarding large endowments. He noted that the endowment funds had moved into private markets much more than public funds with a median range of over of 60 percent in the private market. He thought of the PF as existing in between the two roles of a public institution and an endowment. He concluded that the PF was "relatively underweight in private markets versus endowments and relatively overweight in private markets versus public funds.

Representative Hannan asked if the other public funds were primarily pension and retirement funds, which was why the PF was more like an endowment. Mr. Allen answered in the affirmative.

Mr. Allen concluded slide 11 and highlighted slide 12 titled "Starting Yield Strongly Predicts Forward Returns." He mentioned that bond markets were easier to predict than the equity market. The bond market was relatively steady over a 10-year return. The graph depicted a strong relationship between starting yields and subsequent 10-Year returns.

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Mr. Allen continued on slide 13 titled "History of Equity and Bond Yields since 1980 - History of Yield (Income

Return).” He reported that the chart showed that bond yields consistently declined since 1981 through the end of 2021.

Mr. Allen briefly advanced to slide 14 titled “History of Equity and Bond Yields since 1926 - History of Yield (Income Return) on Stocks and Bonds.” He summarized slide 15 titled “Yield Curve Rose and Inverted in 2022 and 2023 - Level and Shape of the Yield Curve Drives Fixed Income Return Projections:”

- After a historic rise in 2022, the Treasury yield curve continued to rise through the third quarter of 2023.
- Yield curve has been inverted since the middle of 2022.
- Callan’s forecasts assume a reversion to an upward sloping yield curve and a long-term equilibrium across the curve.
- We expect a large and swift decline for intermediate- and short-term rates. This drop leads to capital appreciation for sectors with exposure to these areas of the curve.

Mr. Allen commented that the yield curve (the yield on bonds at various maturities) had risen since 2021 and inverted in 2022; the worst year in the history of bonds.

Mr. Allen moved to slide 16 titled “Spreads Remained Off 2021 Lows but Divergence Emerges:”

- Spreads widened in 2023 for short-dated credits but tightened in other sectors.
- Callan forecasts assume spreads revert to long term medians over time.
- Wider spreads on the short end contribute to higher return projections as spreads fall toward equilibrium.
- Tighter spreads in other sectors, particularly long credit, detract from return projections as spreads rise toward equilibrium.

Mr. Allen explained that spreads were how much was earned on a corporate bond versus a treasury bond. The widened spreads were positive for forward projections on bonds. He continued to slide 17 titled "Fixed Income Forecasts." He communicated that the chart showed the forecast for the various areas of the bond market. He pointed to the aggregate showing that longer term bonds had a higher return along with higher yield bonds. The chart also showed that the bond market expectations had risen from the prior year and had risen substantially since 2022.

Mr. Allen examined slide 18 titled " Range of Projected Fixed Income Returns for APFC - 10th through 90th Percentile:"

- Projected mid-point of range of 10-year annualized returns for APFC Public Fixed Income portfolio increased from 4.35% in 2023 to 5.25%
- Projected mid-point for Private Credit/Infrastructure portfolio increased from 6.90% to 7.25%
- Changes in yields had a larger impact on the outlook for public fixed income than for private credit and infrastructure

Mr. Allen offered that the PF had been moving into private credit at a similar rate as private equity.

Mr. Allen moved to slide 19 titled "Highlights of 2024 Capital Market Projections:"

Changes and Observations

- 10-year annualized inflation expectation remained constant at 2.50%.
- Public equity 10-year annualized return projection increased from 7.60% to 7.85%. Projected standard deviation (volatility) decreased from 18.50% to 18.15%.
- Public fixed income 10-year annualized return projection increased from 4.35% to 5.25%. Projected standard deviation decreased modestly from 4.20% to 4.15%.

- Private real estate projection increased from 5.75% to 6.00%.

- The projected premium of private equity over public markets equity declined year-over-year due to the public markets more fully absorbing valuation adjustments.

- The projected premium of private credit and infrastructure over public fixed income also declined due to similar dynamics in those two asset classes.

- Projected Total Fund return for APFC policy portfolio increased from 7.25% to 7.60% (more on that next).

Mr. Allen spoke to slide 19 titled "Highlights of 2024 Capital Market Projections - Changes and Observations:"

- 10-year annualized inflation expectation remained constant at 2.50%.

- Public equity 10-year annualized return projection increased from 7.60% to 7.85%. Projected standard deviation (volatility) decreased from 18.50% to 18.15%.

- Public fixed income 10-year annualized return projection increased from 4.35% to 5.25%. Projected standard deviation decreased modestly from 4.20% to 4.15%.

- Private real estate projection increased from 5.75% to 6.00%.

- The projected premium of private equity over public markets equity declined year-over-year due to the public markets more fully absorbing valuation adjustments.

- The projected premium of private credit and infrastructure over public fixed income also declined due to similar dynamics in those two asset classes.

- Projected Total Fund return for APFC policy portfolio increased from 7.25% to 7.60% (more on that next).

Mr. Allen noted that with inflation constant and the better outlook for equities and fixed income, the outlook for the PF to meet its 5 percent real return (actual return minus inflation) goal was better (higher than the prior years).

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Representative Stapp asked what the annualized inflation target was 4 years prior. Mr. Allen replied that it was 2 percent. He wondered if Callan was using the federal inflationary target. Mr. Allen answered that they looked at the federal rate as well as many other indicators and factors. Representative Stapp asked what a 50 basis point increase in inflation would do to the projections. Mr. Allen responded that there was about a 54 percent chance that the Permanent Fund would exceed what it needed to earn to make the payout on a real basis. A 50 basis point increase would decrease the chance to 47 percent. Representative Stapp wanted to highlight the impact of inflation.

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Mr. Allen continued to slide 20 "Capital Market Projections - Summary of Callan's Long-Term Capital Market Projections for APFC Asset Allocation Model." He offered that the chart represented the framework for the PF. It showed how the portfolio had been invested by asset classes. He listed the asset classes: APFC Public Equities, APFC Public Fixed Income, Private Equity Private Real Estate, Private Infrastructure/Credit, Absolute Return (Hedge Funds), Tactical Opportunities, and Cash Equivalents. The midpoint of all of the assets projected returns was 7.6 percent.

Representative Ortiz cited absolute return and hedge funds. He surmised that the two terms did not match up. He asked for clarity. Mr. Allen answered that hedge funds had a reputation of being risky but there were different types. He explained that absolute returns were hedge funds that attempted to not be overly influenced by the equity markets. They try to balance their investments by a long/short equity strategy. He related that the permanent fund intentionally invested in hedge funds that were hedged. He pointed out that the hedge fund returns were projected to be lower than equities. He elaborated that the PF was looking for a portfolio that included investments uncorrelated with equity market strategies and strategies

uncorrelated with the bond market. The absolute return meant that if the market dropped the investment did not and conversely if it rose the investment did not. These investments were performing better than bonds but not as good as equities and the uncorrelated strategy meant it reduced the overall portfolio risk.

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Mr. Allen underlined slide 21 titled "Relationship Between Expected Return and Volatility:"

Expected Return Increases with Increased Expected Risk

- For example, investors demand a greater return from private equity than public equity as compensation for higher implementation risk and lower liquidity
- Lower correlation asset classes can fall below the capital markets line and still be efficient components of a diversified portfolio (e.g. Global ex-US Fixed, Emerging Market Equity)

Mr. Allen explained that the risk return chart was included to show that investments that had higher returns were more volatile or risky and it offered a visual of market assumptions. The diversified PF portfolio was ranked in the middle.

Mr. Allen addressed slide 22 titled "Five Percent Expected Real Returns Over Past 30 Years." He indicated that the chart showed the increasing PF portfolio complexity and risk involved to earn a 5 percent real return over time due to the bond market.

Representative Stapp asked about the drop-off on large cap equities. Mr. Allen replied that the large cap equity allocation remained relatively the same between 25 to 35 percent. However, the projections for large cap equities decreased. He voiced that in the current year the valuations were high relative to the long term average, but not too high. He summarized that to the extent that valuations were high their expectations would be low. Callan deduced that valuations were one standard deviation above normal therefore, the expectations were lower than the long-term average.

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Representative Hannan asked what the likelihood was that the APFC board would accept Callan's recommendations and direct changes in its investments. Mr. Allen responded that Callan's clients were not reacting every year to their projections. He delineated that clients were observing the general trends and making small changes in the margins. He summarized that the slide showed that bonds were more attractive than they used to be, which could alter and slow down the headlong charge into the risky asset classes like private equity, private credit, etc. He indicated that the PF staff did other investigations into market projections besides Callan's. He noted that the PF staff was in constant dialogue with the board regarding the appropriate asset class allocation. The Chief Investment Office (CIO) made suggestions every year regarding asset class allocation and changes were usually small. The board had a five year plan in place and in the prior year they modestly reduced the allocation of private equity and modestly increased the allocation of fixed income. He deduced that it was in recognition of the fact that fixed income yields were higher and higher risk was unnecessary to earn the same return. Representative Hannan asked if any of Callan's guidance to the PF affected any decisions that the legislature made for things like a bond package or was it unrelated. Mr. Allen answered that the market was currently not good for borrowers and would impact different people in the economy in different ways. Rising interest rates were good for long-term investors. It was more attractive to investors and much less attractive to borrowers. Public finance was involved in both sides of the market in loaning and borrowing money.

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Mr. Center addressed Representative Stapp question regarding the projected decline in large cap equities. He reminded the committee that the data was based on a hypothetical portfolio optimized for a 5 percent real return. He noted that in the current higher interest environment it was possible to invest in fixed income and achieve the 5 percent real return at less risk declining from 17 percent to 11 percent.

Mr. Allen added that bonds were more attractive currently than large cap equities.

Representative Stapp wondered how asset allocation changes affected the statutory net income and the balance of the fund. Mr. Allen responded that he had built a model of the PF in 1998 that Callan had been using ever since. He explained that as the PF had moved increasingly into private market investments and out of bonds, there was less yield. The money was locked up longer and it took longer to realize returns, which diminished statutory net income as a percent of the size of the fund. As bond yields increase, statutory net income will rise; fixed income was 20 percent of the fund and therefore, the yield will rise on 20 percent of the portfolio. He expounded that private equity (16 percent of the portfolio) realized returns by selling investments and the realized gains became statutory net income. Beginning in 2023, private equity gains realization decreased. He concluded that private equity gains moving into statutory net income was cyclical. Statutory net income had become less predictable for the reasons he outlined.

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Co-Chair Johnson referred to slide 22 and inflation rates. She wondered why inflation kept rising. Mr. Allen answered that Callan had a team of economists analyzing the situation. He believed that the major news outlets were inflammatory in regard to inflation. He elaborated that in periods of high inflation the goal of the PF was to try to maintain the purchasing power of the corpus. There was an inflation proofing appropriation from the Earnings Reserve Account each year to cover the prior year's inflation. He shared that Callan's prediction for inflation was 2.5 percent on average for the next 10-years based on a variety of factors.

Mr. Allen continued on slide 23 titled "Actual Returns versus Callan Projections - Historical Comparison: Actual Returns vs. Callan Capital Markets Projections Portfolio (60% Equity, 30% Fixed, 10% Real Estate):"

- Our projections have generally been within one standard deviation of the future actual return.
- The glaring exceptions are the 10-year periods ended in 2008 and 2009 which contained not one but two major collapses in the equity market: the Dot-Com Bubble in 2001-02 and the Global Financial Crisis in 2008.

Mr. Allen pointed to the chart and the orange line that showed the prediction of what would happen over ten year intervals, the blue line was what actually happened, and the green lines represented plus or minus one standard deviation.

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Mr. Allen turned to slide 26 titled "APFC FY 2024 Total Fund Policy Target - Target Asset Allocation:"

- The Alaska Permanent Fund remains broadly diversified across all major public and private institutional asset classes
- Roughly 58% allocated to public market investments (publicly traded equities and fixed income) and 42% to private markets
- Exposures to private equity, private infrastructure and private credit have been methodically increasing over the last decade at the expense of public equity, fixed income and real assets

Co-Chair Johnson asked why the uptick in inflation from 2.25 percent to 2.5 percent was predicted between 2022 to 2024. Mr. Center confirmed the question and replied that Callan was projecting inflation over a ten year period on average. He believed that the Federal Reserve was committed to achieving its 10-year target of 2 percent inflation. However, given it was currently over 3 percent it would be difficult to achieve. He reported that inflation was declining but not rapidly.

Mr. Allen continued on slide 26. He discussed the target asset allocation for the PF. He recalled that private markets were comprised of Private Equity 16 percent; Real Estate 10 percent; Private Infrastructure/Credit 9 percent; and Absolute Return 7 percent and were the illiquid markets. The APFC Public Fixed Income was 20 percent; Public Equities 34 percent; Cash 2 percent; Tactical Opportunities 2 percent (S&P 500); were the liquid assets.

Mr. Allen advanced to slide 27 titled "APFC FY 2024 Target versus Large Public Funds - Target Asset Allocation Comparison:"

- Low Public Equity - Lower allocation to public equities than 76% of Public Funds. - Median is 45%, APFC is 34%.
- Median Public Fixed Income - Slightly below median allocation to public fixed income. - Median is 22%, APFC is 20%.
- High Private Markets - Higher allocation to private markets than 72% of Public Funds. - Median is 31%, APFC is 42%
- Low Growth Assets - Slightly below median allocation to Growth Assets - Median is 69%, APFC is 65%

Mr. Allen noted that he spoke to the slide earlier in the presentation. He reiterated that the PF's allocation to growth assets was close to the average of other public funds and when compared to endowments it was conservative with a lower allocation to growth assets and private markets and a higher allocation of public equity.

Mr. Allen continued to slide 28 titled "APFC FY 2024 Target versus Large Endowment/Foundations - Target Asset Allocation Comparison:"

- High Public Equity - Higher allocation to public equities than 68% of E&F's. - Median is 30%, APFC is 34%.
- High Public Fixed Income - Higher allocation to public fixed income than 70% of E&F's. - Median is 11%, APFC is 20%.
- Low Private Markets - Lower allocation to private markets than 72% of E&F's. - Median is 63%, APFC is 42%
- Low Growth Assets - Slightly below median allocation to Growth Assets - Median is 68%, APFC is 65%

Mr. Allen moved to slide 29 titled "APFC FY 2024 Total Fund Policy Target - Projected Return and Standard Deviation:"

- Projected median 10-year annualized return of 7.60% is roughly 35 basis points higher than last year.

- Inflation expectation remained the same at 2.50%.
- Projected median 10-year annualized real return of 5.10% is an increase of roughly 35 basis points relative to last year.
- Projected standard deviation of 12.65% is 50 basis points lower than last year.
- Percent probability of exceeding 7.5% annualized return over 10-year horizon is estimated to be 51%.
- Percent probability of exceeding 7.1% (median effective real payout) is estimated to be roughly 54%.

Mr. Allen briefly introduced slide 30 titled "Constrained Efficient Frontier Analysis (50% Private Assets):"

- Efficient frontier with 50% private markets constraint.
- Strategic Policy target portfolio is slightly below the constrained efficient frontier due to 2% cash allocation and private markets allocation of 42%.
- 75/25 Equity/Fixed portfolio is pure public markets portfolio with slightly lower expected return and higher risk.
- APFC Policy Target has a roughly 35 basis point projected return premium over 66/34 public markets (portfolio with same projected risk).

Mr. Allen advanced to slide 31 titled "Range of Projected Returns - 10th through 90th Percentile:"

- Projections are ranges not point estimates
- Point estimates are impossible to forecast
- Forecasting ranges is a more realistic goal
- Range forecasts can supply reasonable estimates for probabilities of exceeding a threshold return
- Projected probability of 2023 Target Mix exceeding 7.5% annualized return over 10-years is roughly 48%

Mr. Allen summarized that the slide showed that diversification took the good and bad extremes out of the equation to help realize the targeted returns.

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Mr. Allen continued to slide 32 titled "Range of Projected Returns over Various Time Periods - 10th through 90th Percentile:"

- POMV spending rule is equal to 5% of the average ending market value for the first five of the trailing six years
- Given expected positive returns, this translates to an effective payout (relative to the most recent market value) of roughly 4.6%
- Adding 2.5% inflation to 4.6% yields a target threshold return of 7.1%
- Projected probability of 2024 Target Mix exceeding 7.1% annualized return over 10-years is roughly 54%

Mr. Allen moved to slide 33 titled "Concluding Observations - Callan's 2023 Capital Market Projections:"

- No change in inflation expectation of 2.50%
- Public equity return projections were increased modestly
- Public fixed income return projections increased significantly
- Yield expectations up across the board
- Private market return expectations also increased but by smaller percentage
- APFC Policy Target is well diversified and lies close to the efficient frontier for portfolios with a target of 50% private markets
- Expected nominal and real return for APFC portfolio increased relative to last year

- APFC Policy Target has lower projected risk and higher expected return relative to a public markets portfolio with a 75% allocation to Global Equity and 25% allocation to US Fixed Income.

- The projected probability of exceeding the effective POMV annual payout of 4.6% (of current market value, 5% of trailing average) increased to over 54%.

Representative Coulombe asked for the definition of a geometric return. Mr. Allen answered that the geometric return was the best measure of the actual return on a portfolio. He delineated that there were two types of returns; arithmetic return (average), and geometric return (a different way of calculating an average that took volatility into account.) He exemplified that if \$100 was invested and 50 percent was lost \$50 was left. Therefore, 100 percent on \$50.00 must be earned to return to the \$100.00 amount. Volatility or losses lowers the average return because the losses decrease the investment more than a similar gain returns the initial investment amount. He concluded that the more volatility the larger the difference between an arithmetic average and geometric average. Callan always used the geometric average.

Representative Ortiz asked that if the fund would transfer to a single endowment structure, would it impact the performance of the fund overall. Mr. Allen responded that it was a significant issue. He relayed that the APFC was managing the fund for the highest return per unit of risk and did not pay attention to the two account structure. He indicated that returns would be sacrificed if investments were made just to generate income for the ERA. However, with the new structure of withdrawing the 5 percent of the previous five year average market value (percent of market value POMV), the ERA was likely to come under some pressure over the next ten years especially if large inflation proofing adjustments were made. He summarized that anything withdrawn from the ERA had the dual effect of making the principle larger and the ERA smaller and unrealized gains were allocated between the ERA and the principal based on the ratio of the two. He predicted that the issue would become a "big deal".

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Mr. Allen continued that a pure endowment model could easily afford the 5 percent POMV. In a real endowment model, the 5 percent would decrease more gradually if the market was down in some years of the five year average. He characterized the two account structure as a cliff structure. He relayed a personal antidote regarding the issue. He currently felt that getting rid of the two account system would stabilize the revenue source. Representative Ortiz asked if there would be any downside to getting rid of the two structure system. Mr. Allen responded that there was a concern that the ERA protected the principal. He exemplified that the legislature could increase the POMV to 10 percent or more in a one structure model because the POMV was not in the Constitution. He pointed out that it would take a Constitutional Amendment to change the two account structure. He would also recommend constitutionalizing the 5 percent spending limit and eliminating the two account structure. He did not see any downside with the 5 percent/5 year average withdrawal in a one account structure. He viewed that the downside would be if the two account structure was eliminated was if the spending limit was not also constitutionalized.

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Representative Tomaszewski asked what the fund would do if the United States dollar lost its reserve currency status. Mr. Allen was unable to answer the question.

Representative Coulombe cited slide 29 and referenced the projected standard deviation of 12.65 percent. She thought that the projections were around 6 percent. She asked for clarity. Mr. Allen answered that 12.65 percent was the standard deviation for the portfolio. He recalled that it had decreased from approximately 13.1 percent in the prior year. The decrease came from the fact that some funds were moved out of private equity and fixed income increased. He noted that generally speaking, it was a lower risk portfolio than in the prior year.

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Mr. Center returned to slide 3 to remind the committee of how things ended up in 2023. Slide 3 was titled "Public Markets Surge in 4Q, Following Decline in 3Q:"

Stocks have recovered losses of 2022; bonds still have ground to make up.

S&P 500 soared 11.7% in 4Q23

- Loss through first three quarters of 2022 was 23.9%; the rebound in the following five quarters brought the index back to a positive return of 1.7% over the past two years.

Fixed income recovered in 4Q, up 6.8% after a sharp loss of 3.2% in 3Q

- The Bloomberg Aggregate was on track for another negative year through 3Q; softening Fed language on rates and a dot plot that showed cuts on the horizon in 4Q turned the market around.
- CPI-U declined in 4Q compared to 3Q, though up 3.4% year-over-year; the index is still 10% higher than it was at the start of 2022.

Economic data defied expectations of recession in 2023

- GDP growth came in at 2.1% in 1Q, 2.2% in 2Q, and jumped to a stunning 4.9% in 3Q. Preliminary 4Q forecasts have GDP over 2%.
- Job market remains solid, providing support to Fed efforts to fight inflation.

Mr. Center interpreted the data from the chart on the slide. He elaborated that the US equity markets were positive and had increased by 4 percent. The global equity markets were also positive and developed market stocks were up about 18 percent while emerging markets had increased by 10 percent in the prior year. The fixed income markets had the best fourth quarter since 1989, an increase of over 6 percent. He shared some concerns in the private markets; private equity had slowed. However, the final numbers were not available until mid-April of 2024. It was anticipated that the numbers would be flat to negative. In addition, the real estate market had decreased by 9 percent in the third quarter. He concluded that the private market was "suffering." He noted that the PF had a significant amount of investment in the private markets, which would drive the

performance differences depicted in the following slides for large public funds and endowments.

Co-Chair Johnson asked about leases expiring on open real estate and what to expect in the future. Mr. Center replied that "there was a wave coming over the next three years on both expiring leases and refinancing on institutional real estate." He reported that "a lot" of debt on institutional real estate debt was coming due that was financed by private debt and banks and it would need to be refinanced at 7 percent to 8 percent interest versus the original 2 percent interest. That would change the valuation of the real estate that was also experiencing high vacancy and soon to be higher borrowing costs. Co-Chair Johnson wondered how long it would take for the situation to develop. Mr. Center ascertained that it would take approximately 3 years before the bottom would happen. He discussed some upsides to the real estate market.

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Mr. Center continued on slide 35 titled : APFC Total Fund Historical Returns - Total Fund versus Total Fund Targets:"

Total Fund is ahead of benchmark (APFC Total Fund Target) for all time periods other than the most recent year

- Total Fund trails the CPI + 5% objective over the last three years over the 10 and period

- While the Total Fund protected well on the downside in 2022, it failed to capture the market snap-back in 2023

Mr. Center indicated that the benchmark index was designed to closely mimic the way that the PF was being invested. He characterized it as a strong way to track the overall performance of the PF relative to how it was invested over time. He cautioned that it should not be expected to get CPI (Consumer Price Index) plus five percent each year. However, it should over a 5 to 10-year time horizon. The fund lagged its total fund target by about 2.2 percent for the calendar year that was driven by it being "underweight" in the public equity market and slightly "overweight" to the private equity market relative to its target. The two asset classes slightly underperformed its benchmarks for the

calendar year. However, the PF had outperformed its benchmark over the twenty year time period by between .5 percent and .7 percent and performed at 7.3 percent over the time period.

Mr. Allen interjected that in the early part of the 20 year period the fund was heavily invested in bonds and gradually diversified which increased the probability of reaching its benchmarks. Mr. Center added that the fund outperformed its benchmark even when the markets were negative.

Mr. Center continued to slide 36 titled "APFC Total Fund Cumulative Return vs CPI + 5% - Total Fund versus Return Objective:"

- Chart shows the path of Total Fund returns versus the long-term return objective of CPIU + 5%
 - Over the long term the Total Fund has fallen slightly behind the objective
 - The volatility of an investment strategy that can keep pace with this objective over the long term will result in periods underperformance

Mr. Center summarized the chart depicting that the PF had generally kept pace with the CPI plus 5 percent "fairly well."

[2:54:35 PM](#)

Mr. Center advanced to slide 37 titled "APFC Total Fund Ranking versus Large Public Funds - Total Fund versus Large Public Fund Peer Group:"

- Total Fund ranks very competitively versus large public funds over longer time periods
- Underperformance over the last year was significant due to higher public equity allocations in larger public funds
- Over the last year, the APFC public and private equity portfolios have underperformed their respective benchmarks

Mr. Center delineated that the median large public funds plan returned roughly 12.3 percent while the PF returned about 8.4 percent in the prior year driven by public equity market increases. However, the PF performed above median than the average large public fund and was ahead of its benchmark over any time period over the last 20 years.

Mr. Center continued to slide 38 titled "APFC Total Fund Ranking versus Large Endowment Funds - Total Fund versus Large Endowment/Foundation Fund Peer Group:"

- Total Fund ranks closer to median versus Large Endowment and Foundation universe
- This is because the APFC asset allocation target has evolved to look increasingly like that of a large endowment
- Endowments typically employ large allocations to private markets investments that have not experienced the same price appreciation in 2023 of public markets investments

Mr. Center noted that the PF portfolio had looked more like an endowment for the last 8 to 9 years.

Mr. Center continued on slide 39 titled "Concluding Observations - Performance Review:"

- Total Fund has outperformed performance benchmark over most long-term periods ended December 31, 2023.
- Total Fund has underperformed the long-term performance objective of CPI +5% over short-term periods, but modestly outperformed over longer-term periods.
- Total Fund performance has been competitive with that of large public pension funds and large endowments and foundations over most longer-term time periods ended December 31, 2023.
- Asset allocation of Total Fund looked more like that of a large public fund up until about 7 years ago.

●Asset allocation of Total Fund has evolved to look more like a large endowment and should perform increasingly in line with that peer group over time.

Mr. Center concluded the presentation.

[2:58:47 PM](#)

Co-Chair Johnson reviewed the following day's agenda.

ADJOURNMENT

[2:59:29 PM](#)

The meeting was adjourned at 2:59 p.m.